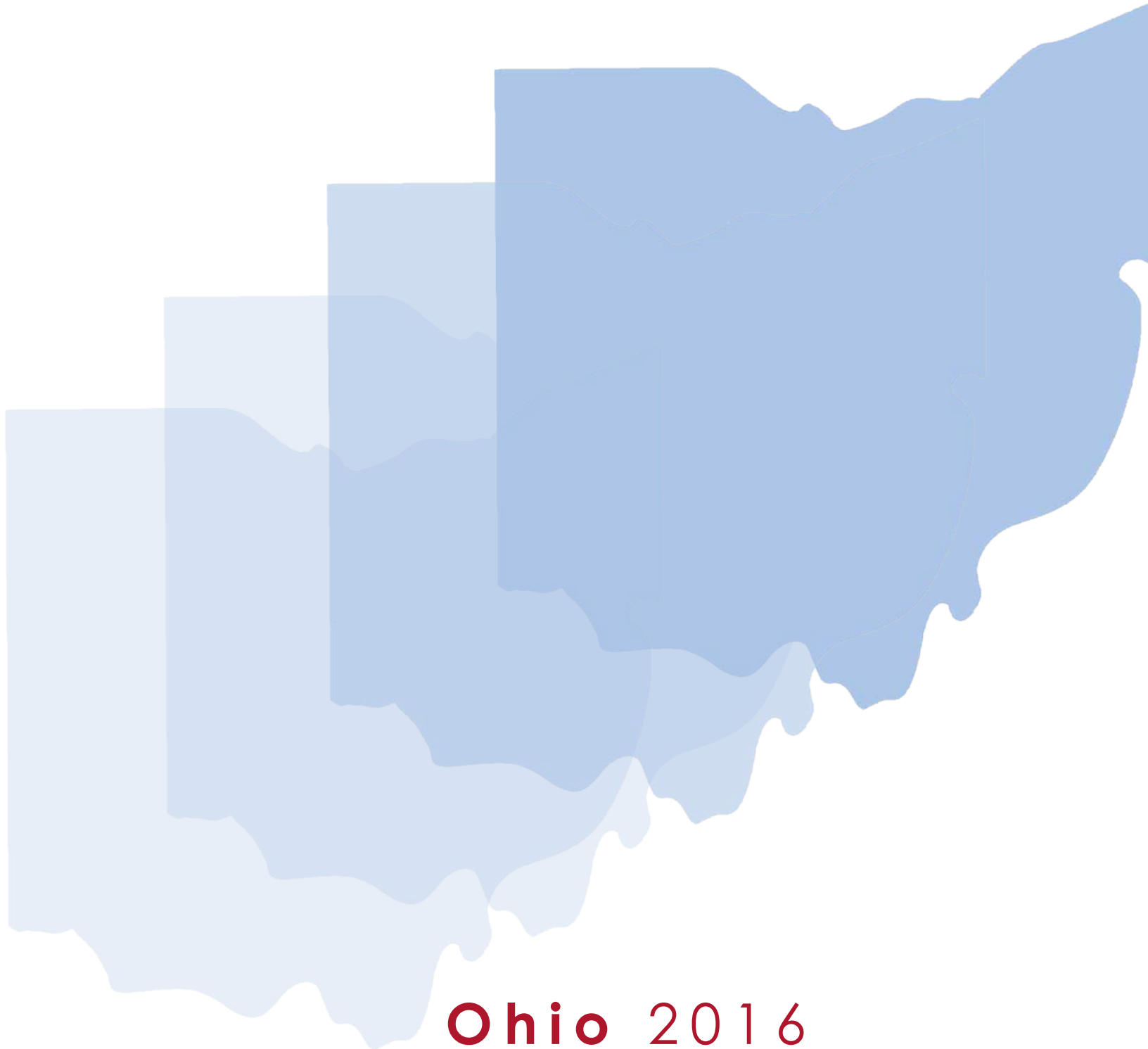


Ohio 2016 STATE HEALTH ASSESSMENT

August 2016

Acknowledgments

The Ohio Department of Health contracted with the Health Policy Institute of Ohio (HPIO) to conduct the state health assessment and subsequently prepare the state health improvement plan. The Governor's Office of Health Transformation also played a key role in convening stakeholder meetings and other health-related state agencies.

HPIO sub-contracted with several organizations. All are acknowledged below:

Health Policy Institute of Ohio

Authors

Reem Aly, JD, MHA; Sarah Bollig Dorn, MPA; Amy Rohling McGee, MSW; Amy Bush Stevens, MSW, MPH; and Rebecca Sustersic, MPA

Graphic design and layout

Nick Wiselogel, MA

Contributors

Todd Ives, MPA candidate; Lindsay Hammer, MPH candidate (intern); and Caroline Tritt (intern)

Hospital Council of Northwest Ohio

Selena Coley, MPH; Tessa Elliott, MPH; Emily Golias, MPH, CHES; Ellison Roselle, MPH candidate; Derick Sekyere, MPH; Emily Stearns, MPH, CHES; Britney Ward, MPH; Margaret Wielinski, MPH

Kirwan Institute for Race and Ethnicity Studies at the Ohio State University

David Norris, MA; Jason Reece, PhD, MCRP

OnPointe Strategic Insights

Michelle Vander Stouw, MPH

A number of state agencies are referenced in this report. Below are a list of acronyms for these agencies:

DODD — Ohio Department of Developmental Disabilities
ODA — Ohio Department of Aging
OFCF — Ohio Family and Children First
OHT — Governor's Office of Health Transformation
ODH — Ohio Department of Health
ODJFS — Ohio Department of Job and Family Services
ODM — Ohio Department of Medicaid
OMHAS — Ohio Department of Mental Health and Addiction Services
ODVS — Ohio Department of Veterans Services

Glossary

Health disparities — Differences in health status among distinct segments of the population including differences that occur by gender, race or ethnicity, education or income, disability, or living in various geographic localities.

Health equity — The absence of differences in health that are caused by social and economic factors. Achieving health equity means that all people have the opportunity to achieve their full health potential, with no one at a disadvantage because of social or economic circumstances.

Health inequity — A subset of health disparities that are a result of systemic, avoidable and unjust social and economic policies and practices that create barriers to opportunity.

Life course perspective — A multidisciplinary approach to understanding the mental, physical and social health of individuals, which incorporates both life span and life stage concepts that determine the health trajectory.

Population health — The distribution of health outcomes across a geographically-defined group that results from the interaction between individual biology and behaviors; the social, familial, cultural, economic and physical environments that support or hinder wellbeing; and the effectiveness of the public health and healthcare systems (as defined by HPIO Population Health Definition Workgroup and published in HPIO publication "What is 'Population Health?'" [2015]).

Prevalence – Prevalence is a measure of how commonly a disease or condition occurs in a population at a particular point in time, typically expressed as a percent of a population or a rate per 1,000 or 100,000 population. This differs from incidence, which is a measure of new cases of a disease or condition.

Percentage point change – The actual change between two percentage values, which is calculated using simple subtraction. (For example, if the percentage of Ohio residents with a certain medical condition increased from 10 percent to 15 percent, this would be a 5 percentage point increase.)

Percent change – The extent to which something gains or loses value. Percent change is a way to express the relative change of a variable over time, taking into account the sizes of the numerical values being compared. In this publication, percent change is calculated using the following steps:

1. Subtract the value for the previous year from the value for the most recent year
2. Divide the difference from step #1 by the value of the previous year
3. Multiply the result in step #2 by 100

(For example, if the percentage of Ohio residents with a certain medical condition increased from 10 percent to 15 percent, this would be a 50 percent change.)

Acronyms

State assessments and plans

SHA — State health assessment
SHIP — State health improvement plan

Hospital assessments and plans

CHNA — Community health needs assessment
IS — Implementation strategy

Local health department (LHD) assessments and plans

CHA — Community health assessment
CHIP — Community health improvement plan

Organizations

HCNO — Hospital Council of Northwest Ohio
HPIO — Health Policy Institute of Ohio
PHAB — Public Health Accreditation Board
RWJF — Robert Wood Johnson Foundation

Miscellaneous

MAPP — Mobilizing for Action through Planning and Partnerships (planning model)
PCMH — Patient-Centered Medical Home
CHR — County Health Rankings

Contents

Executive summary

Urgent need to improve health and wellbeing in Ohio

Ohio is a large and diverse state that faces many health challenges despite a wealth of healthcare resources. Several national scorecards and rankings place Ohio in the bottom quartile of states for health (see Figure ES.1). Even more troubling, Ohio's performance on population health outcomes has steadily declined relative to other states over the past few decades, falling from a rank of 27 in 1990 in America's Health Rankings to 39 in 2015. Ohio also has significant health disparities by race, income and geography, and spends more on health care than most other states.[1]

The Ohio 2016 state health assessment (SHA) provides data needed to inform health improvement priorities and strategies in the state.

Purpose

The SHA is a comprehensive and actionable picture of health and wellbeing in Ohio. The purpose of the SHA is to:

- Inform identification of priorities in the state health improvement plan (SHIP)
- Provide a template for state agencies and local partners, with a uniform set of categories and metrics to use in related assessments

The SHA was conducted from March to July 2016 and the SHIP will be completed by the end of 2016. The purpose of the SHIP is to:

- Provide state agency leaders, local health departments, hospitals and other state and local partners with a strategic menu of priorities, objectives and evidence-based strategies
- Signal opportunities for partnership with sectors beyond health

Conceptual framework

The SHA is guided by the conceptual framework shown in Figure ES.2 with the explicit goal of improving health value – the combination of improved population health and sustainable healthcare spending.[2] The framework incorporates the life-course perspective, which prompted consideration of all age groups throughout the SHA process.

Figure ES.1. **Ohio's rank on national scorecards**

	Overall rank	Rank for health outcomes*
America's Health Rankings, 2015 edition	39	41
Commonwealth State Scorecard, 2015 edition	33	41
Gallup-Healthways Wellbeing Index, 2014	47	45
HPIO 2014 Health Value Dashboard	47	40

Ohio ranks in the **top quartile** of states**. Ohio ranks in the **second quartile** of states**. Ohio ranks in the **third quartile** of states**. Ohio ranks in the **bottom quartile** of states**.

*Rank for specific domains: America's Health Rankings: Health Outcomes; Commonwealth: Healthy Lives; Gallup: Physical; HPIO Health Value Dashboard: Population Health
** Commonwealth and HPIO rankings include District of Columbia, other rankings do not.

Framework domains were used to guide selection of metrics included in the SHA data profile section of this report and to examine the many factors that impact health outcomes and spending, as well as disparities:

- Healthcare system effectiveness
- Access to health care
- Public health and prevention effectiveness
- Social and economic environment
- Physical environment

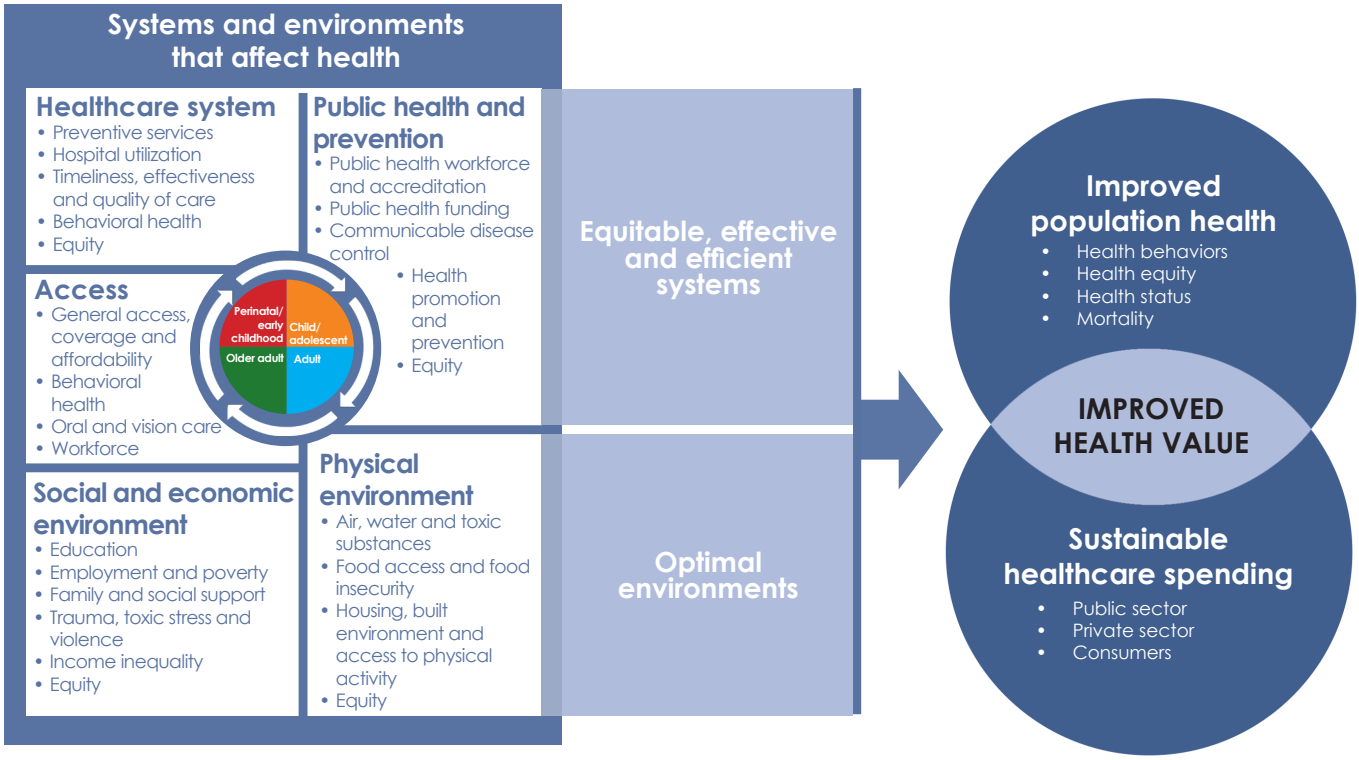
The vision statement guiding the SHA and the SHIP process (see box) acknowledges the strong two-way relationship between health and economic vitality, while the mission statement emphasizes the importance of achieving health equity.

Vision and mission

Vision
Ohio is a model of health and economic vitality.

Mission
Improve the health of Ohioans by implementing a strategic set of evidence-based population health activities at the scale needed to measurably improve population health outcomes and achieve health equity.

Figure ES.2. **State health assessment and state health improvement plan conceptual framework: Pathway to health value**

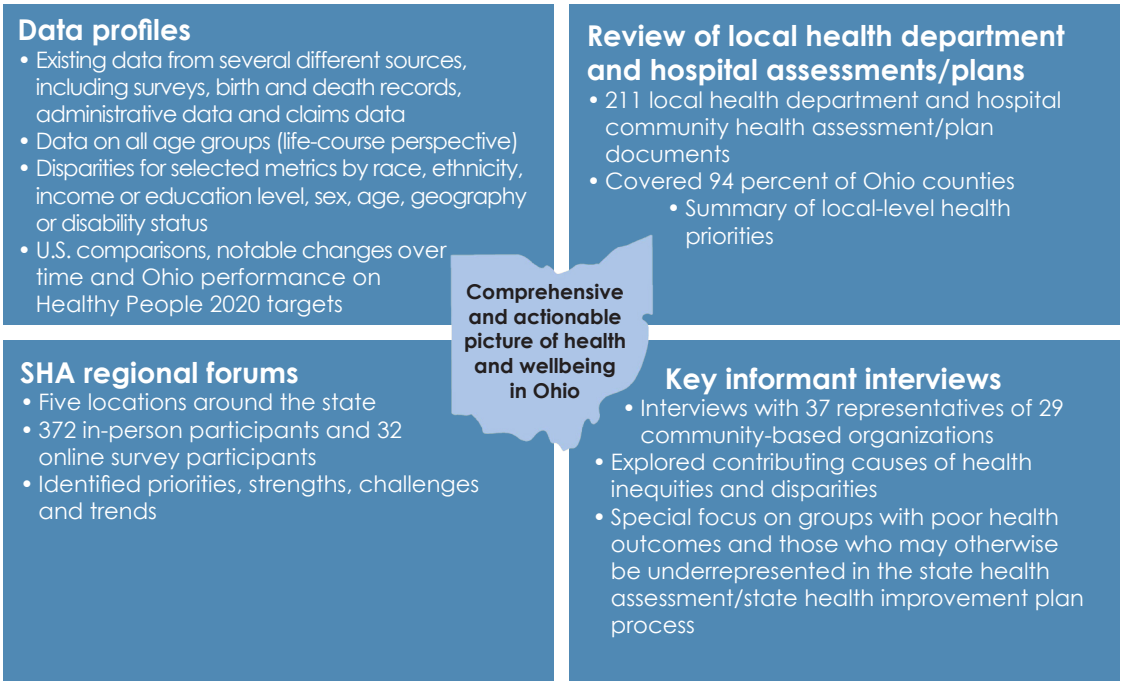


World Health Organization definition of health: Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Process

This assessment includes over 140 metrics, organized into data profiles, as well as information gathered through five regional forums, a review of local health department and hospital assessments and plans and key informant interviews (see Figure ES.3).

Figure ES.3. **State health assessment (SHA) sources of information**

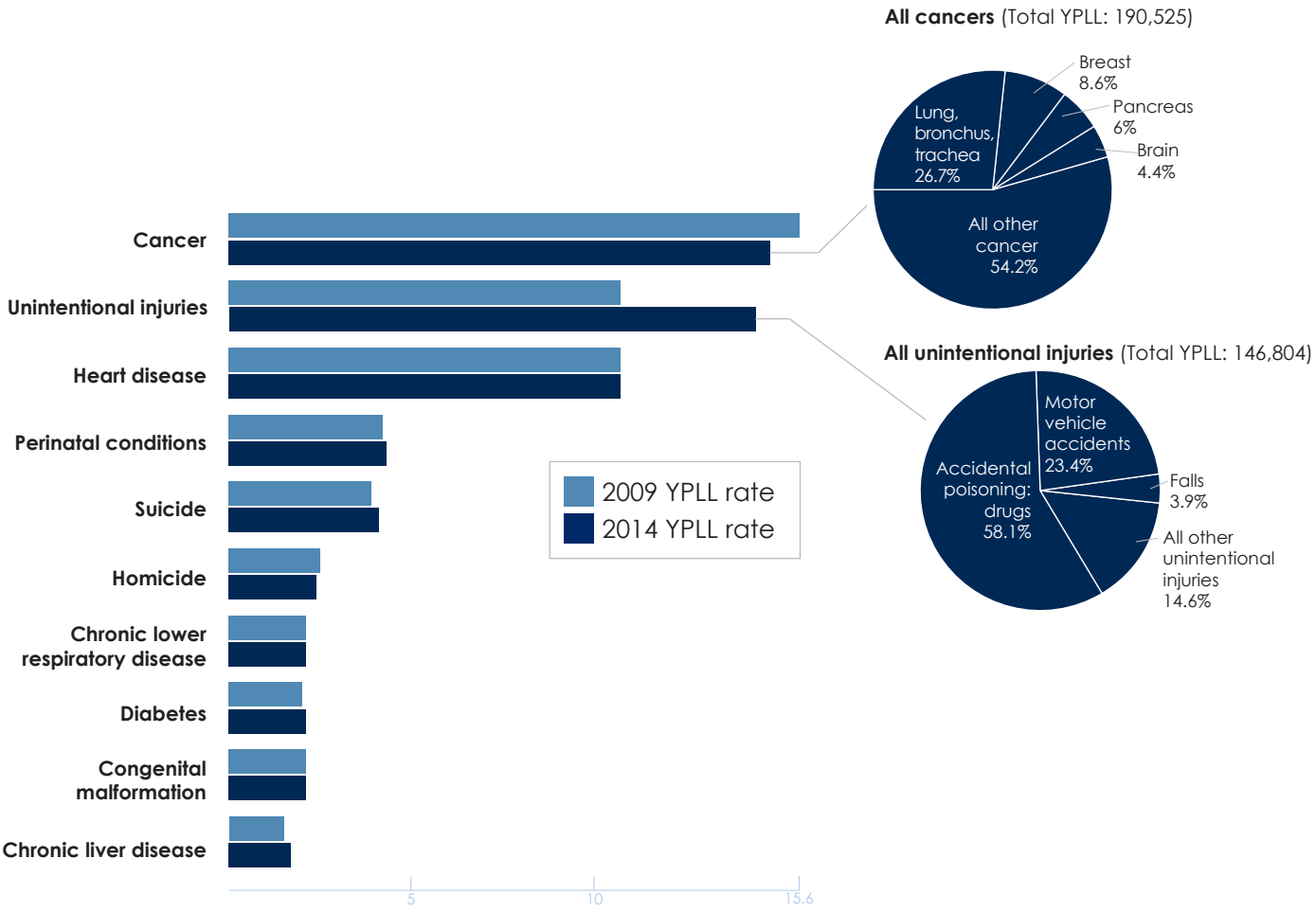


Key finding #1. Many opportunities exist to improve health outcomes

Mental health and addiction. While Ohio faces many behavioral health challenges, including poor access to care and high prevalence of depression, the rise in opiate-related drug overdose deaths stands out as an immediate threat to the wellbeing of Ohioans. Opiate-related diagnoses (heroin and prescription opioids) accounted for 37 percent of addiction treatment admissions in 2014, up from about seven percent in 2001. The unintentional injury death rate, which includes drug overdoses, increased 30 percent from 2009 to 2014 and emerged as Ohio's second highest cause of premature death (see Figure ES.4). Given that unintentional injuries (largely from drug overdoses) and cancer were the two leading causes of premature death in Ohio, addictions to opiates and nicotine (due to Ohio's high tobacco use rates) may be two of the greatest challenges to health and well-being in the state. A sharp increase in the number of babies discharged with neonatal abstinence syndrome also suggests that the consequences of the opiate epidemic are far-reaching and will have long-term effects in Ohio.

Chronic disease. Chronic diseases, including obesity, cardiovascular disease, diabetes and cancer, as well as related risk factors such as tobacco use and poor nutrition, stand out as concerns for Ohio. Obesity and hypertension, for example, are highly-prevalent conditions reported by nearly one-third of Ohio's adult population. The prevalence of adult diabetes rose from 10.4 percent in 2013 to 11.7 percent in 2014. All three of these conditions were more common among middle-aged Ohioans (ages 45-64) than younger Ohioans (ages 18-44), indicating that chronic disease will be a significant challenge for Ohio's growing aging population in the coming years.

Figure ES.4. **Premature death, by cause, Ohio.** Years of potential life lost (YPLL) before 75, per 1,000 population (2009 and 2014)



Source: Ohio Department of Health, Bureau of Vital Statistics

Maternal and infant health. Racial and ethnic disparities in infant mortality stand out as a major challenge for Ohio. In 2014, the black infant mortality rate was more than twice as high as the white rate. This black and white gap is not nearly as large in the U.S. overall, indicating that more can be done to reduce this sobering disparity.

Health behaviors. Tobacco use, poor nutrition and physical inactivity all contribute to, or are closely related to, mental illness, addiction, chronic disease and infant mortality. Compared to the U.S., Ohio has higher rates of adult smoking, youth all-tobacco use, mothers smoking during pregnancy and children being exposed to secondhand smoke at home. Ohio's 2014 adult smoking rate (21 percent) was nine percentage points above the Healthy People 2020 target (12 percent). In addition, Ohio mothers were nearly twice as likely to have smoked during pregnancy in 2014 than in the U.S. overall.

Forty-two percent of Ohioans reported that they did not consume fruits on a daily basis and 26 percent did not eat vegetables on a daily basis in 2013. Access to affordable healthy foods is a challenge for many Ohioans, with 16.8 percent of Ohioans identified as food insecure. This percent is higher than the U.S. comparison and nearly three times the Healthy People 2020 goal of six percent of households.

Physical activity helps to prevent or manage many chronic conditions and supports healthy aging and mental wellness. While more progress is needed on physical activity, this assessment finds that Ohio has some strengths in this area. Regional forum participants identified active living environments as something that made them proud of their community and all regions identified a positive active living environment as one of the most important characteristics of a healthy county or region.

Key finding #2. Many opportunities exist to decrease health disparities

Addressing health disparities is a necessary step towards improving the health of all Ohioans and achieving health equity. There were striking disparities across many metrics in the SHA, with disparities varying widely by race, ethnicity, income and education-level, disability status and other characteristics:

- African-American/black Ohioans were much more likely than any other racial and ethnic group to experience poor health outcomes.
- Diabetes, obesity, hypertension and tobacco use were all more common among lower-income Ohioans (those with household incomes less than $25,000) than among Ohioans with household incomes at $50,000 or more.
- Disparities exist and vary across age and gender. For example, diabetes and hypertension prevalence increased with age, greatly impacting those ages 65 and older.
- People with disabilities experienced substantial disparities across metrics related to health outcomes and accessing health care.
- Appalachian counties in southern and eastern Ohio tend to have poorer health outcomes, such as higher rates of premature death, although there are counties with significant health challenges in all areas of the state.

There are significant gaps in efforts to collect data for various population groups. For example, limited data is available for certain racial and ethnic groups as well as by disability status. To establish the foundation on which to improve the health of all Ohioans, there must be a concerted effort to improve data collection by race, ethnicity, income-level, disability status and across other population groups and characteristics.

Key finding #3. Access to health care has improved, but challenges remain

Ohio performs well on access to care relative to the U.S. and has seen notable improvements on a number of access metrics, including a sharp decline in the uninsured rate in recent years and a decrease in the percent of adults reporting being unable to see a doctor in the past year due to cost.

However, access to care emerged as a top priority for local health departments, hospitals and regional forum participants, possibly reflecting continued concerns about:

- Provider distribution and capacity, particularly for behavioral health and dental care
- Inadequate insurance coverage and lack of affordability that persist despite coverage expansions
- Disparities in accessing health care, including a lack of cultural competence among healthcare providers

Key finding #4. Social determinants of health present cross-cutting challenges and strengths

The social determinants of health refer to an individual's surrounding environment, or the places people live, learn, work and play and the wider set of forces and systems shaping the conditions of daily life.

The social determinants of health can have a significant impact on health risks and health outcomes at all stages of the life course, but are particularly important for children. Many high-priority health problems that surface in adulthood are shaped by conditions and experiences during childhood. Key drivers of health status and disparities by geography, race and ethnicity for Ohio include:

- Employment, poverty, income and education
- Social support
- Violence, trauma and toxic stress, including the high prevalence of intimate partner violence (rape, physical abuse, stalking) and adverse childhood experiences (such as having a parent who has died or been incarcerated)
- Physical environment, including transportation, housing, residential segregation, lead poisoning and air and water quality

Key finding #5. Opportunities exist to address health challenges at every stage of life

Many of the health problems highlighted in this assessment—such as type 2 diabetes, heart disease and addiction—are typically diagnosed during adulthood. Often these health problems are rooted in behaviors and conditions developed early in life, as well as other childhood experiences as described above.

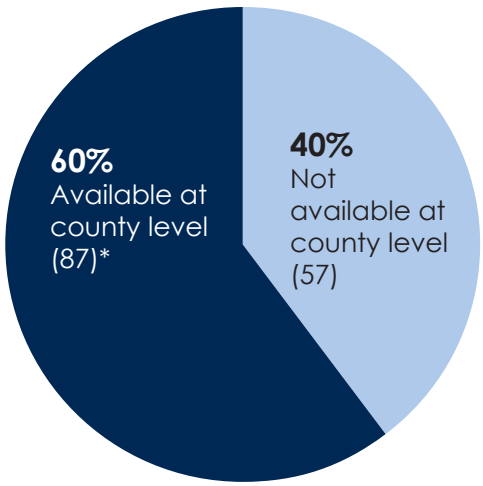
Also, Ohio will have a much larger proportion of older adults in the coming decades. Efforts to improve the wellbeing of Ohioans must also take into consideration the aging of the "baby boom" generation. Addressing Ohio's health challenges must therefore include strategies at every stage of life, as well as strategies designed to improve short-term and long-term outcomes.

Key finding #6. Improved data collection efforts are needed to assess health issues at the local level and for specific groups of Ohioans

Both the nation and Ohio need a more coordinated approach to population health data collection and reporting that makes county-level and disaggregated data (by race, ethnicity, disability status and other characteristics) available on a wider range of key metrics. Despite the existence of many different population health surveys, inadequate sample sizes for these surveys often mean that the data are not available at the local level (see Appendix B).

Greater pooling of data collection resources could increase the efficiency and quality of data available for state and local

Figure ES.5. **County-level data availability of state health assessment metrics** (n=144)



*County-level data is limited for 17 metrics (e.g., may not be available for all counties or data for smaller counties may be reported in multi-county regions).

assessments and evaluation. In addition, increased data sharing between health care and public health could greatly improve the timeliness and usefulness of existing health information.

Key finding #7. Widespread agreement on health issues identified at local, regional and state levels can be an impetus for greater collaboration

A great deal of consistency was noted in terms of prioritized health issues identified in local health department and hospital assessments and plans, as well as during the regional forums. Figure ES.6 lists the top 10 health issues from the local health department and hospital assessments and plans, as well as from the regional state health assessment forums. Mental health, alcohol and drug abuse, obesity, cardiovascular disease and diabetes all emerged as local or regional priorities. There was also a great deal of consistency in issues identified across different regions of the state, and among urban, suburban and rural counties, indicating nearly-universal agreement that these are among Ohio's greatest health challenges.

The key informant interviews with representatives of community-based organizations largely confirmed these priorities. Immigrants, refugees and people with disabilities, however, experience some unique challenges, such as language barriers and mobility issues, which are also important priorities for their communities.

Analysis of more than 140 metrics in the SHA also confirmed that these top 10 health issues are predominant challenges for the state.

The interconnectedness of Ohio's greatest health challenges, along with the overall consistency of health priorities identified in this assessment, indicates many opportunities for collaboration between a wide variety of partners at and between the state and local level, including physical and behavioral health organizations and sectors beyond health.

Key finding #8. Sustainable healthcare spending remains a concern in Ohio

Ohio's comparatively high healthcare spending is a concern for consumers, employers and policymakers, especially since this spending has not translated into improved population health outcomes. Ohio healthcare spending was higher than the U.S. for nine of 15 metrics, including metrics related to consumer out-of-pocket spending on health care and Medicare and Medicaid spending. In addition, Ohioans have seen a steady increase in premiums for employer-based health coverage.

Current public and private efforts focused on addressing this concern through payment reform

Figure ES.6. **Health issues identified by local health departments and hospitals and at regional SHA forums**

	Top 10 health issues	
	Identified in local health department and hospital assessments/ plans	Identified in SHA regional forums
Mental health and addiction		
Mental health	X	X
Drug and alcohol abuse	X	X
Chronic disease		
Obesity	X	X
Cardiovascular disease	X	X
Diabetes	X	X
Cancer	X	
Chronic disease (unspecified)	X	
Maternal and infant health		
Maternal and infant health	X	
Health behaviors		
Tobacco	X	
Nutrition		X
Access to care		
Access to health care/ medical care	X	
Access to behavioral health care		X
Access to dental care		X
Social determinants of health		
Employment, poverty and income		X
Equity/disparities		X

Note: This summary includes the top 10 health issue categories, out of 36 possible categories. See Appendix C for complete analysis.

provide the opportunity to invest resources strategically so that outcomes are improved. Evidence-based strategies can also be implemented or accelerated in Ohio to address both high healthcare spending and Ohio's performance on health outcomes.

Conclusion

Due to several recent changes in the policy landscape (including the expansion of health coverage, public and private sector value-based payment reform and legislative attention to mental health, addiction and infant mortality), as well as strong public and private sector leadership and a desire to collaborate at the state and local level, Ohio is now poised to leverage its resources in a more strategic way to achieve measurable improvements in population health outcomes, health equity and healthcare spending. This state health assessment provides the data needed to inform the next steps in Ohio's journey to improved health and wellbeing through the state health improvement plan.

About this report

The Governor's Office of Health Transformation and the Ohio Department of Health governed the preparation of the state health assessment, in partnership with other health-related state agencies.

The SHA and SHIP Advisory Committee includes state agencies and a wide array of external partners representing sectors such as public health, healthcare providers (including hospitals, primary care, and mental health and addiction services), insurers, consumers, community service agencies, employers and populations at-risk for experiencing poor health outcomes. The Advisory Committee met three times to provide input and feedback on the SHA. Additional partners from sectors beyond health will be invited to participate in the SHIP process. A draft version of the SHA was made available for public comment at the end of June 2016.

The Ohio Department of Health contracted with the Health Policy Institute of Ohio (HPIO to facilitate the state health assessment beginning in March 2016. HPIO provided overall SHA project management and prepared this document. HPIO subcontracted with three other organizations to assist with the project:

- Hospital Council of Northwest Ohio (HCNO): Facilitated regional forums and compiled existing data for data profiles
- OnPointe Strategic Insights: Conducted key informant interviews
- The Kirwan Institute for Race and Ethnicity Studies at The Ohio State University: Assisted with identification of populations for key informant interviews and compilation and display of demographic and disparities data

Executive summary notes

1. Health Policy Institute of Ohio. "2014 Health Value Dashboard." December 16, 2014.
2. The SHA and SHIP conceptual framework combines elements of the existing County Health Rankings and Roadmaps model of health factors and outcomes with the Triple Aim, a model commonly used in the healthcare sector that includes per capita cost.

1 Purpose and Overview

Ohio is a large and diverse state that faces many health challenges despite a wealth of healthcare resources. Due to several changes in the policy landscape, Ohio is now poised to leverage its resources in a more strategic way to achieve measurable improvements in population health outcomes, health equity and healthcare spending. Building from a series of reforms and planning activities conducted over the past five years, this state health assessment (SHA) provides the information needed to inform the next steps in Ohio's journey to improved health and wellbeing.

The SHA includes information from several sources in order to provide a comprehensive picture of health, wellbeing and healthcare spending in Ohio. This assessment includes more than 140 metrics organized into data profiles on health outcomes and a broad range of factors that impact health outcomes, healthcare spending and disparities. A list of metrics included in the SHA begins on page 8 and includes page numbers where each metric and related figure(s) can be found. More information about these metrics and the data profile section of the SHA is in Appendix B.

Data profiles are followed by summaries of new information collected for this assessment, including qualitative information gathered through key informant interviews and regional forums.

Urgent need to improve health and wellbeing in Ohio

Many national scorecards and rankings place Ohio in the bottom quartile of states for health (see Figure 1.1). Even more troubling, Ohio's performance on population health outcomes has steadily declined relative to other states over the past few decades (see Figure 1.2). Ohio also has significant health disparities by race, ethnicity, income, disability status and geography, and spends more on health care than most other states.

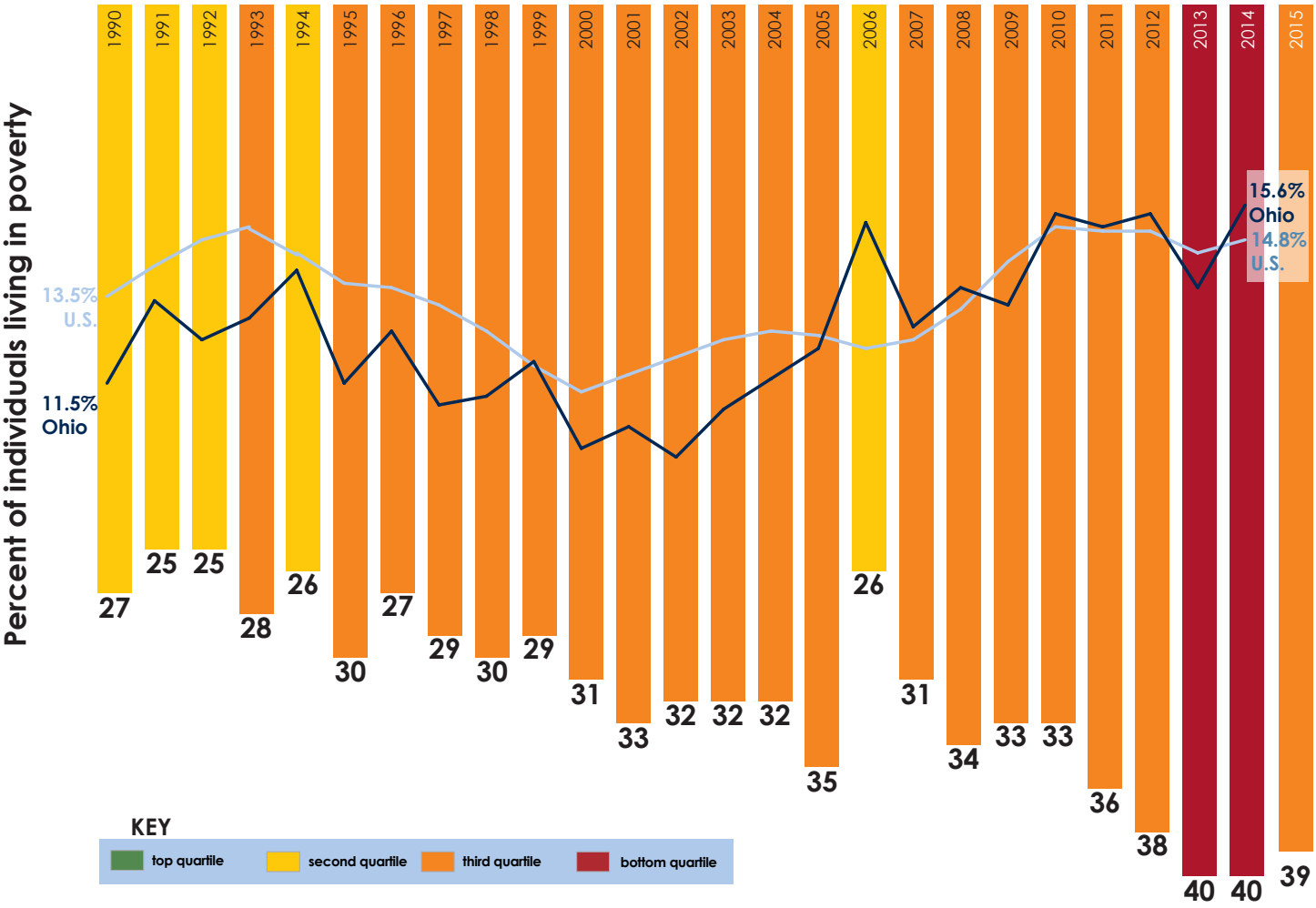
Figure 1.1. **Ohio's rank on national scorecards**

	Overall rank	Rank for health outcomes*
America's Health Rankings, 2015 edition	39	41
Commonwealth State Scorecard, 2015 edition	33	41
Gallup-Healthways Wellbeing Index, 2014	47	45
HPIO 2014 Health Value Dashboard	47	40
Specific populations		
Annie E. Casey Foundation State Trends in Child Wellbeing, 2016	26	19
America's Health Rankings, 2016 Senior Report	38	36
Commonwealth Low-Income Population 2013 Scorecard	34	40

Ohio ranks in the **top quartile** of states**. Ohio ranks in the **second quartile** of states**. Ohio ranks in the **third quartile** of states**. Ohio ranks in the **bottom quartile** of states**.

*Rank for specific domains: America's Health Rankings: Health Outcomes; Commonwealth: Healthy Lives; Gallup: Physical; HPIO Health Value Dashboard: Population Health; Annie E. Casey Foundation: Health
** Commonwealth and HPIO rankings include District of Columbia, other rankings do not.

Figure 1.2. **Ohio's rank in America's Health Rankings from 1990 to 2015**



Source for poverty rate: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements, Historical Poverty Tables -- People.

What are the state health assessment (SHA) and state health improvement plan (SHIP)?

The SHA is a comprehensive and actionable picture of health and wellbeing in Ohio. The purpose of the 2016 SHA is to:

- Inform identification of priorities in the SHIP
- Provide a template for state agencies and local partners with a uniform set of categories and metrics to use in related assessments

The SHIP, expected to be released by the end of 2016, is an actionable plan to improve health and control healthcare spending. The purpose of the SHIP is to:

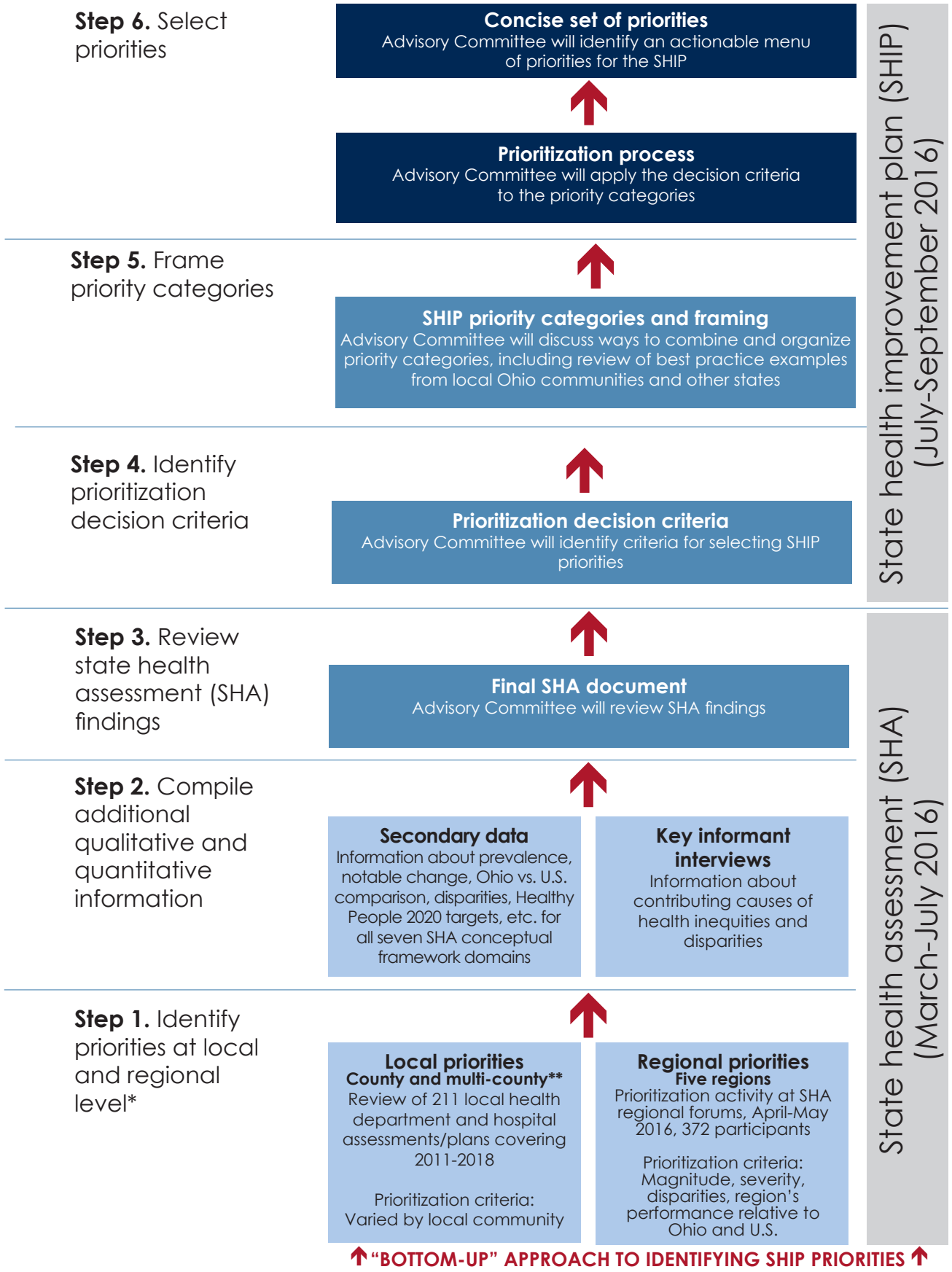
- Provide state agency leaders, local health departments, hospitals and other state and local partners with a strategic menu of priorities, objectives and evidence-based strategies
- Signal opportunities for partnership with sectors beyond health

The logic model in Appendix A provides additional detail about the intended outcomes of the SHA and SHIP.

The Ohio Department of Health (ODH) must conduct a SHA and prepare a SHIP in order to remain accredited by the Public Health Accreditation Board (PHAB). ODH contracted with the Health Policy Institute of Ohio (HPIO) to manage the SHA and SHIP processes. ODH and the Governor's Office of Health Transformation (OHT) govern this work and intend to use the SHA and the SHIP to strategically target resources and efforts led by the state and to inform policy. For related background on OHT's population health work and State Innovation Model project see Appendix A.

Figure 1.3 illustrates how the SHA will inform selection of state-level priorities to be identified in the SHIP. One of the first steps of the SHIP process will be to identify a concise set of health priorities for the state.

Figure 1.3. **Process for identifying 2016 state health improvement plan priorities**



*Using categories informed by local health department and hospital assessments and plans and SHA conceptual framework
**Reviewed documents cover 94% of Ohio counties

Vision, mission and values

The vision, mission and values for the SHA and SHIP, agreed upon by stakeholder groups advising this work, are listed in the text box.

Vision
Ohio is a model of health and economic vitality.

Mission
Improve the health of Ohioans by implementing a strategic set of evidence-based population health activities at the scale needed to measurably improve population health outcomes and achieve health equity.

Values
We value an approach to population health improvement that:

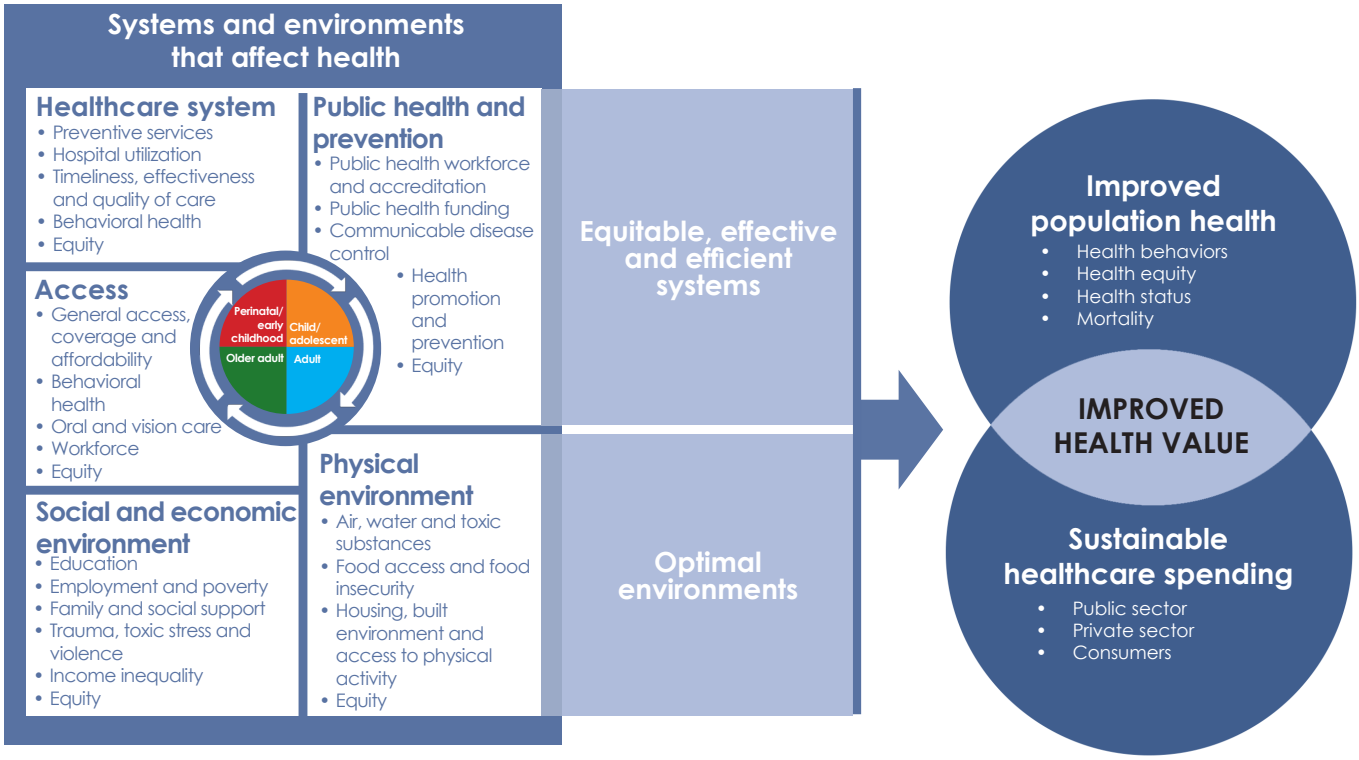
- Addresses prevention, the social determinants of health, all stages of the life course and builds upon evidence-based strategies
- Balances local needs and innovation with statewide alignment and coordination
- Fosters meaningful stakeholder engagement, collaboration across sectors and stronger connections between clinical and community-based organizations
- Promotes a culture of health that builds upon Ohio's strengths and assets
- Results in actionable recommendations, measurable outcomes and more efficient and effective allocation of state and local-level public and private resources

The SHA is guided by the conceptual framework shown in Figure 1.4, with the explicit goal of improving health value – the combination of improved population health and sustainable healthcare spending.[1] The framework domains (healthcare system, access, public health and prevention, social and economic environment, physical environment, population health and healthcare spending) were used to guide the selection of metrics included in the SHA data profile section of this report. The framework also incorporates a life-course perspective, which prompted consideration of all age groups throughout metric selection and the rest of the SHA process.

The conceptual framework is built upon the understanding that access to quality health care is necessary, but not sufficient, for good health. In addition to medical care, health is shaped by our behaviors and by the social, economic and physical environment. When combined, these non-medical factors like education, nutrition and air quality are estimated to be the most significant modifiable drivers of health outcomes (see Figure1.5).

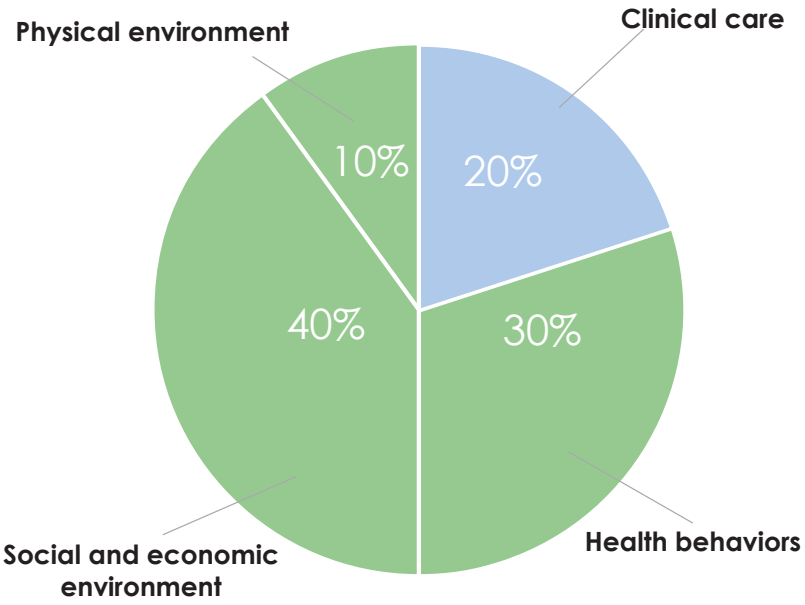
Conceptual framework

Figure 1.4. **State health assessment and state health improvement plan conceptual framework: Pathway to health value**



World Health Organization definition of health: Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Figure 1.5. **Factors that influence health**



Source: Booske, et. al, "Different perspectives for assigning weights to determinants of health," County Health Rankings working paper, February 2010.

Methods overview

The SHA includes information gathered through four methods:

- **Data profiles.** The data profiles were created by analyzing existing population-level data from diverse sources for over 140 metrics. Metrics were selected to ensure representation across the life course (all-age groups). Some metrics also are reported by race, ethnicity, income or education level, sex, age, geography or disability status. U.S. comparisons, trend data and Healthy People 2020 targets are provided when available to put the data into context.
- **Review of local health department and hospital assessments and plans.** To identify health issues prioritized at the local level, HPIO reviewed 211 local health department and hospital community health assessment and plan documents, covering 94 percent of Ohio counties.
- **SHA regional forums.** The HPIO team hosted five regional forums from late April to early May 2016 to gather information on community and regional health issues, themes and strengths. Three hundred and seventy two stakeholders participated.
- **Key informant interviews.** The HPIO team interviewed 37 representatives from 29 community-based organizations to explore contributing causes of health inequities and disparities, with a special focus on groups at risk for poor health outcomes and those who may otherwise be underrepresented throughout the SHA and SHIP process.

Additional background

A draft version of the SHA was made available for public comment at the end of June 2016. While ODH and OHT lead this work, in partnership with other state agencies, the SHA and SHIP Advisory Group also provided feedback and input. The Advisory Group is listed in Appendix A.

Appendix A provides additional information about recent initiatives that lead up to and informed this SHA, as well as more detail about the assessment process.

Purpose and overview notes

1. The SHA and SHIP conceptual framework combines elements of the existing County Health Rankings and Roadmaps model of health factors and outcomes with the Triple Aim, a model commonly used in the healthcare sector that includes per capita cost.

2 DATA PROFILES

Description and considerations

The data profiles section provides information on demographic characteristics, leading causes of death and also includes analysis of more than 140 metrics across all domains in the state health assessment (SHA) conceptual framework (see Figure 1.4) including:

- Population health
- Healthcare spending
- Healthcare system
- Access to health care
- Public health and prevention
- Social and economic environment
- Physical environment

For more information about the criteria used to select metrics for the SHA, metric descriptions, sources and other metric-related information, see Appendix B.

Data in context

The three most recent years of Ohio data are provided for each metric when available, as well as U.S. comparison. Change over time was assessed by calculating the percent change in data values from year two to the most-recent year ([data for most recent year – data for year 2]/data for year 2). "Notable changes" are highlighted for changes of 10 percent or more in the data profile tables.

Data gaps and limitations

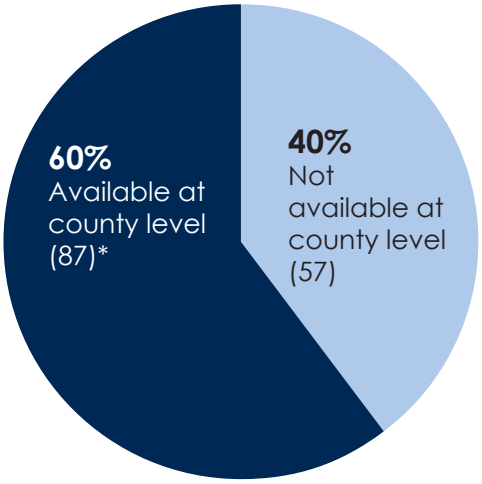
The data profiles include existing data from a variety of sources, including survey, vital statistics, administrative and claims data. While care was taken to select metrics from credible sources, it is important to keep in mind that each of these sources has its own limitations, such as reliance upon self-reported conditions or behaviors or changes in methodology from year to year.

Data gaps and limitations associated with metrics in these data profiles include:

County-level data

When selecting metrics for the data profiles, the Health Policy Institute of Ohio (HPIO) prioritized metrics for which data are available at the county level. However, some metrics that were critical to include in the state health assessment were not available at the county level (see figure 2.1). Appendix B indicates which data profile metrics are available at the county level.

Figure 2.1. **County-level data availability of state health assessment metrics** (n=144)



*County-level data is limited for 17 metrics (e.g., may not be available for all counties or data for smaller counties may be reported in multi-county regions).

Subcounty-level data

For many local assessments, particularly in urban and suburban counties, county-level data may obscure important differences between cities or neighborhoods, or between different populations. Subcounty data (such as by zip code or census tract) can be extremely valuable, but are often not available.

Survey data
Much of the information in this assessment about the population-level prevalence of health conditions and related risk factors is derived from health surveys, such as the Behavioral Risk Factor Surveillance System. The results of these surveys are estimates based upon samples of Ohioans. This document does not display confidence intervals or standard error, although this information is typically available from the primary sources listed in Appendix B.

Data lag
Most of the data in this assessment are from publicly-available sources, such as government surveys or birth and death records. There is typically a lag of one to three years between the time this information is collected and when it is finalized and released. In some cases, Ohio data is available before U.S. data or vice versa. At times, data may predate effectuation of an important policy change such as Medicaid eligibility expansion or other system and delivery reforms.

Change over time
The data profiles display change over time by calculating percent change. The "notable changes" highlighted in the data profiles section should be interpreted with caution because they have not been tested for statistical significance. Caution should also be taken in interpreting survey results with confidence intervals that may overlap across the two most recent years for which data is provided.

Healthy People 2020 targets
Healthy People 2020 targets are not available for many metrics. In some cases, this is because the Healthy People target is more specific than the metric in the data profile (e.g., a target for a narrowly-defined age group). In other cases it is because the SHA addresses an area not included in Healthy People 2020, such as healthcare spending.

Health disparities
Data collection regarding race, ethnicity, income level, disability status and across other characteristics is necessary to improve the health and well-being of all Ohioans. However, data is not consistently collected or reported across all population groups. As a result, there is more information on some groups as compared to others (e.g., data may be available for the African-American/black population but not for Asians/Pacific Islanders or by disability status).
When displaying data on racial and ethnic disparities or other population characteristics, categories used were taken from the primary source. For example, one source may use the category African-American/black while another source may use the category black (non-Hispanic). Consequently, there are inconsistencies in how racial and ethnic groups are categorized across metrics.

Improving data gaps and limitations

Efforts continue at the national level to address data gaps and limitations**.** For example, in 2015 a committee convened by the National Academy of Medicine (formerly the Institute of Medicine) recommended core metrics for better health at lower cost. A similar committee has been convened specific to pediatric care. That committee is in the process of identifying "aspirational metrics" to more comprehensively measure pediatric health outcomes. Also, the National Committee on Vital and Health Statistics has convened stakeholders and will make recommendations to the U.S. Department of Health and Human Services for improving the availability and accessibility of local data.

As measurement efforts continue to be refined, it will be necessary to re-visit metrics included in this state health assessment and update those that are included in the next assessment.

Metrics and figures

Metrics and figures (cont.)

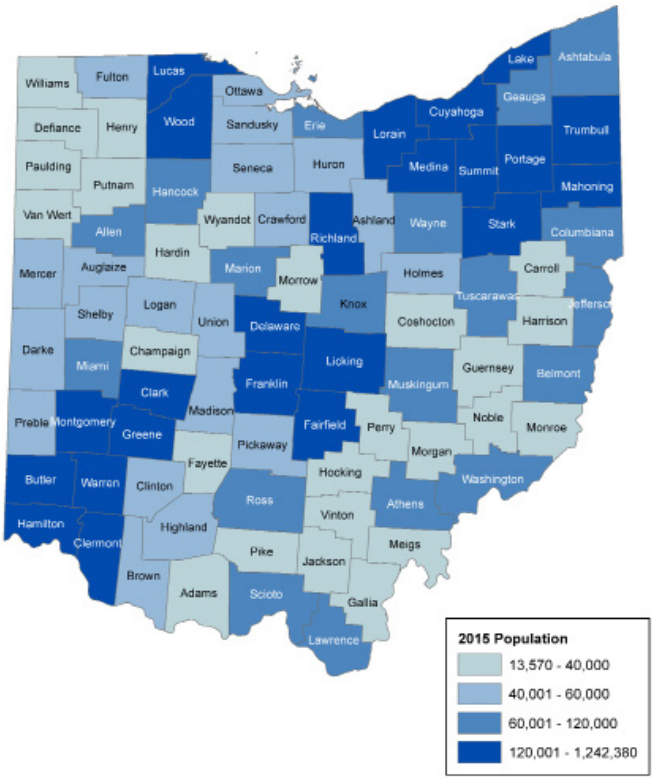
Metrics and figures (cont.)

Metrics and figures (cont.)

Population size and growth

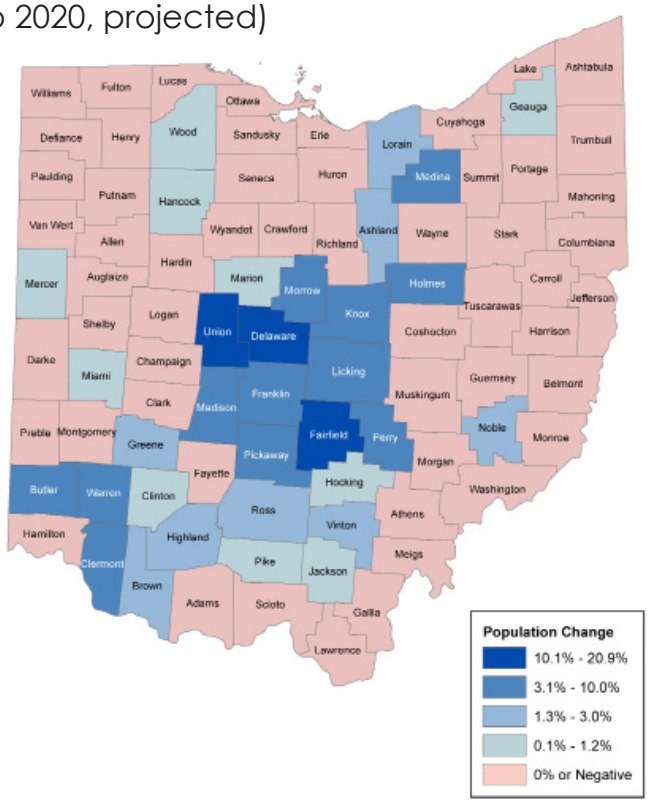
Ohio's total population was 11,536,504 in 2010 and is expected to grow a modest 0.3 percent by 2020.[1] By comparison, the U.S. population is expected to grow by approximately eight percent during this decade.[2] Most of the fastest growing counties are in the central and southwest areas of the state, within or near the Cincinnati and Columbus metropolitan areas. Several other large metropolitan counties, however, are projected to decrease in size from 2010 to 2020, including Cuyahoga, Montgomery and Lucas counties (see Figures 2.a.1and 2.a.2).

Figure 2.a.1. **Total population size of Ohio counties** (2015, projected)



Source: Analysis of U.S. Census data by Research Office, Ohio Department Services Agency, 2013

Figure 2.a.2. **Changes in population size, by Ohio county** (2010, actual to 2020, projected)



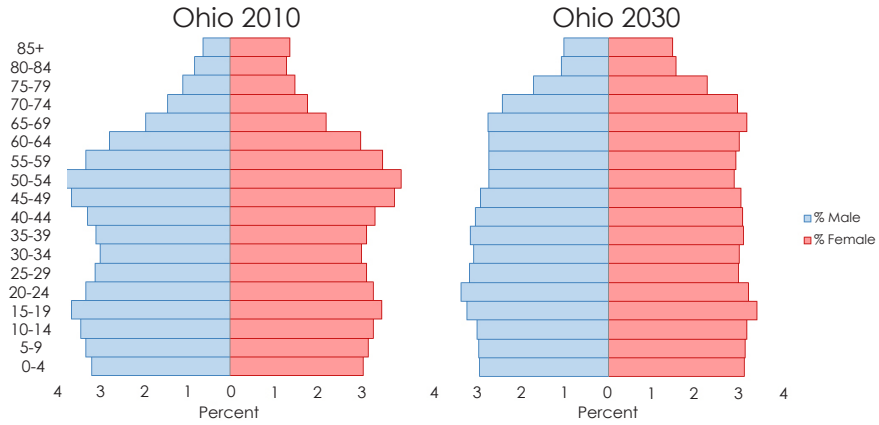
Source: Analysis of U.S. Census data by Research Office, Ohio Department Services Agency, 2013

Age, gender, race, ethnicity and immigration

Figure 2.a.3 displays the distribution of age groups by sex in 2010 (actual) and 2030 (projected). In 2010, 14.1 percent of Ohio's population was over the age of 65, slightly higher than the U.S. (13 percent). As the "baby boom" generation ages, Ohio will have a much larger proportion of older adults (ages 65+) in 2030 than it did in 2010. The cohort of older Ohioans will be more evenly distributed among males and females than it was in 2010, although there will still be more females than males in the older age groups.

In 2014, the largest racial and ethnic groups in Ohio were white non-Hispanic (80 percent) and black/African-American non-Hispanic (12.1 percent), followed by Hispanic or Latino (any race) (3.4 percent) (see Figure 2.a.4).

Figure 2.a.3. **Distribution of Ohio population, by age and sex** (2010, actual and 2030, projected)



Source: Kirwan Institute analysis of Decennial Census (2010) and projections from the Ohio Development Services Agency (2030)

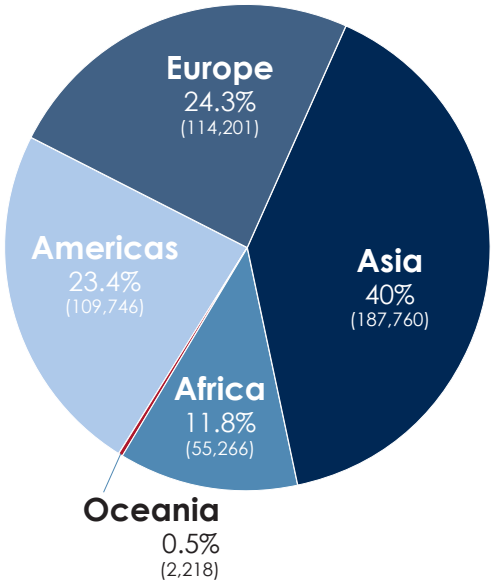
In 2014, Ohio was home to an estimated 469,191 people who were born outside the U.S. The largest number of immigrants came from Asia, followed by Europe and the Americas (see Figure 2.a.5). The northeast and central regions of the state had the largest immigrant populations, while the northwest and southeast had relatively small non-U.S.-born populations (see Figure 2.a.6).

Figure 2.a.4. **Distribution of Ohio population, by race/ethnicity** (2014)

	Ohio		U.S.
	Number	Percent	Percent
White non-Hispanic	9,277,608	80.0%	61.9%
Black or African-American non-Hispanic	1,402,190	12.1%	12.3%
American Indian and Alaska Native non-Hispanic	16,856	0.1%	0.7%
Asian non-Hispanic	223,984	1.9%	5.2%
Native Hawaiian and other Pacific Islander non-Hispanic	3,026	0.0%	0.2%
Some other race non-Hispanic	14,657	0.1%	0.2%
Two or more races non-Hispanic	257,136	2.2%	2.2%
Hispanic or Latino (Any Race)	398,706	3.4%	17.3%

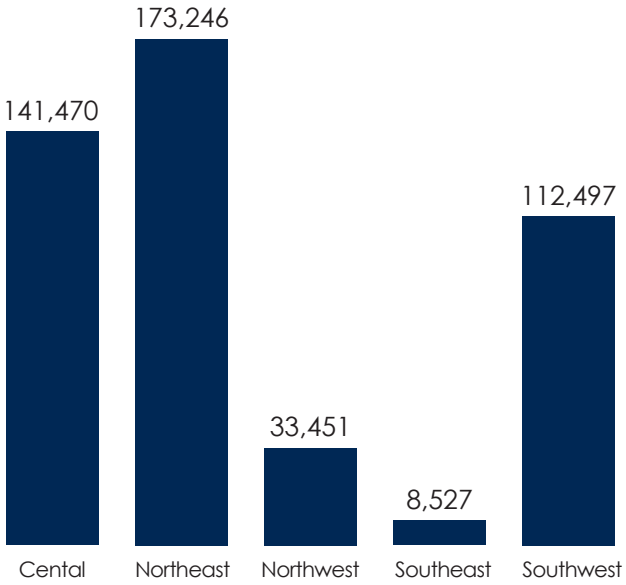
Source: 2014 American Community Survey 1-Year Estimates

Figure 2.a.5. **Immigration: Non-U.S.-born population in Ohio, by continent of origin** (2014)



Source: 2014 American Community Survey

Figure 2.a.6. **Immigration: Non-U.S.-born population, by Ohio region** (2014) (469,191 total)



Source: 2014 American Community Survey

See the key informant interview findings (page 96) for information about the health issues facing some of Ohio's immigrant population.

Income, poverty, education and marital status

Compared to the U.S., Ohio has a slightly higher proportion of residents in the bottom two income categories listed in Figure 2.a.7 (less than $25,000) and a lower proportion in the highest income category ($75,000 or more). In addition, more than one third of Ohioans are living under 200 percent of the federal poverty level (see Figure 2.a.8).

Figure 2.a.7. **Household income in the past 12 months (in 2014 inflation-adjusted dollars), Ohio and U.S.** (2014)

	Ohio		U.S.
	Number	Percent	Percent
Less than $14,999	633,858	13.8%	12.6%
$15,000 to $24,999	532,808	11.6%	10.5%
$25,000 to $34,999	496,063	10.8%	10.0%
$35,000 to $49,999	656,824	14.3%	13.5%
$50,000 to $74,999	849,737	18.5%	17.8%
$75,000 or More	1,419,290	30.9%	35.6%

Source: 2014 American Community Survey 1-Year Estimates

Figure 2.a.8. **Poverty level distribution, Ohio and U.S.** (2010-2014)

	Ohio		U.S.
	Number	Percent	Percent
Persons for whom poverty status was determined	11,243,508	--	--
Under 100%	1,790,564	15.9%	15.6%
Under 125%	2,299,400	20.5%	20.4%
Under 150%	2,812,337	25.0%	25.2%
Under 185%	3,551,627	31.6%	31.9%
Under 200%	3,859,814	34.3%	34.5%

Source: 2014 American Community Survey 5-year estimates, compiled by Office of Research, Ohio Development Services Agency, The Ohio Poverty Report, February 2016

Ohio has a smaller proportion of residents with a bachelor's degree or graduate degree compared to the U.S. However, Ohio has a lower percent of adults with less than a high school diploma (10.6 percent) compared to the U.S. (13.1 percent).

In 2014, almost half of Ohioans age 15 and over were married (47.4 percent) and about one-third had never been married (32.1 percent), similar to the overall U.S. rates.

Figure 2.a.9. **Educational attainment, adults age 25 years and older** (2014)

	Ohio		U.S.
	Number	Percent	Percent
Did Not Graduate High School	836,031	10.6%	13.1%
High School Graduate (Includes Equivalency)	2,666,563	33.9%	27.7%
Some College, No Degree	1,603,451	20.4%	21.0%
Associate's Degree	659,197	8.4%	8.2%
Bachelor's Degree	1,301,747	16.6%	18.7%
Master's or Graduate Degree	790,471	10.1%	11.4%

Source: 2014 American Community Survey 1-Year Estimates

Figure 2.a.10. **Maritial status, population 15 years and over** (2014)

	Ohio		U.S.
	Number	Percent	Percent
Now married (except separated)	4,466,310	47.4%	47.7%
Widowed	603,046	6.4%	5.9%
Divorced	1,158,979	12.3%	11.0%
Separated	160,184	1.7%	2.1%
Never married	3,024,653	32.1%	33.3%

Source: 2014 American Community Survey 1-Year Estimates

See the social and economic environment data profile (page 63) for additional information about:
- Education (fourth grade reading, high school graduation and kindergarten readiness)
- Poverty and income (child poverty, adult poverty, median household income and income inequality)
- Employment (unemployment and labor force participation)

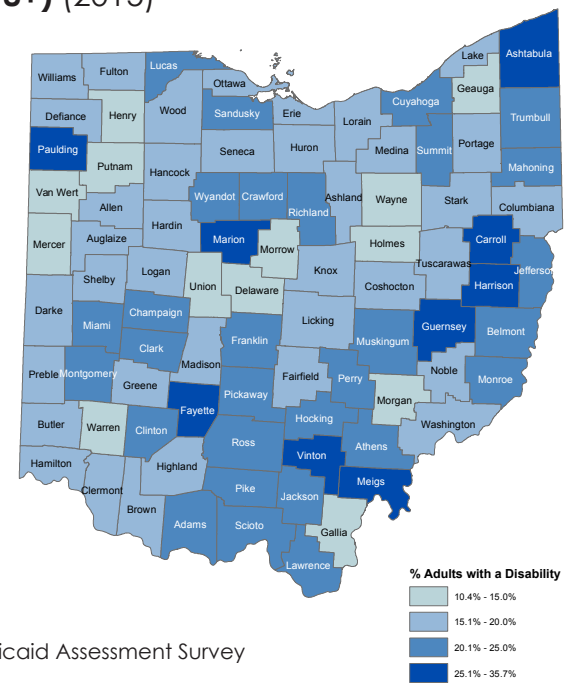
Disability status

Disability prevalance varies widely by county. In Vinton County, for example, 36 percent of adults were disabled in 2015, compared to 10 percent in Holmes County (see Figure 2.a.11).

Disability types vary widely by age. Among children with a disability, 79 percent had a cognitive impairment. Among working-age adults (ages 18-64) and older adults (ages 65 or older), however, ambulatory disabilities, such as difficulty walking or climbing stairs, were most common.

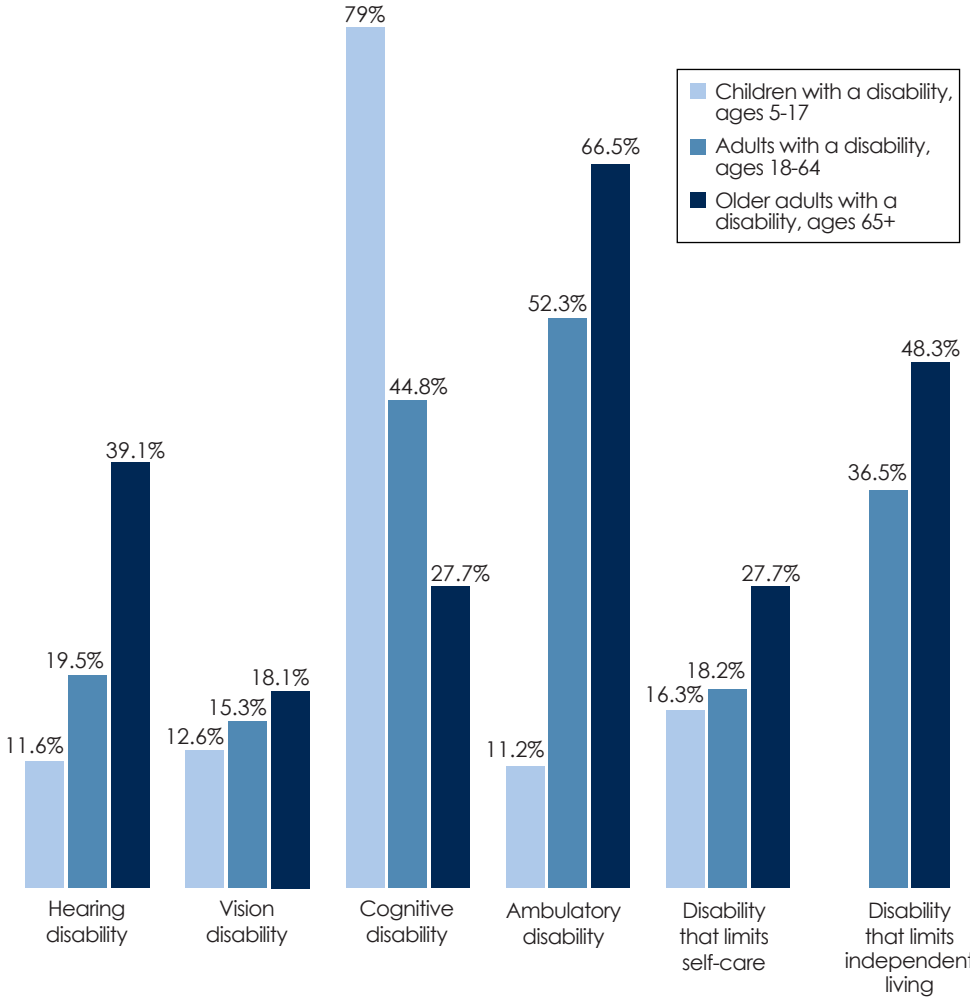
The World Health Organization defines disabilities as including "impairments, activity limitations, and participation restrictions."

Figure 2.a.11. **Disability prevalence estimates, by county for all adults (18+)** (2015)



Source: Ohio Medicaid Assessment Survey

Figure 2.a.12. **Disability type among Ohioans with disabilities** (2009-2011)



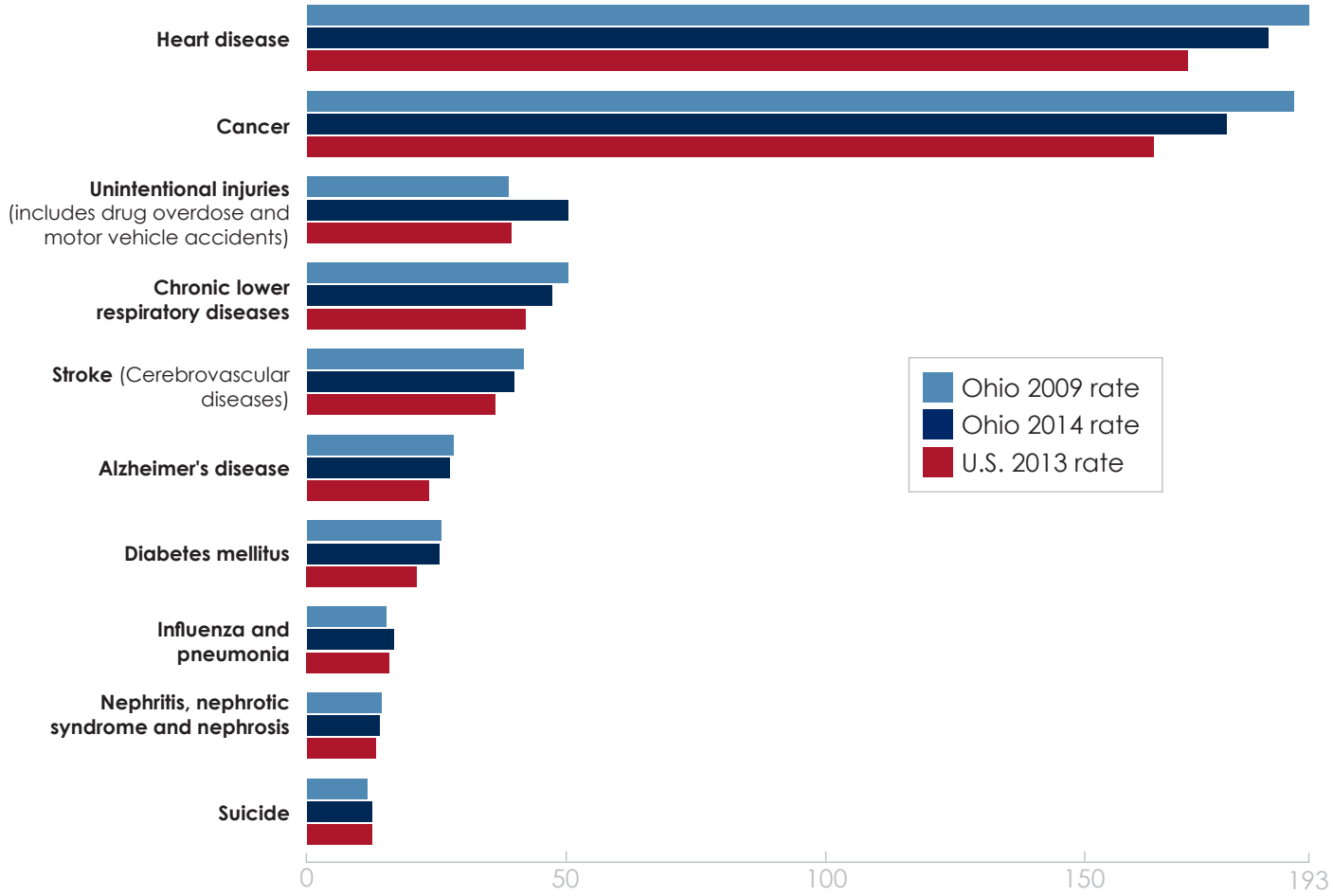
Source: 2009-2011 American Community Survey PUMS, compiled by the Ohio Disability and Health Program

Top 10 leading causes of death

Heart disease and cancer were by far the leading causes of death in Ohio in 2014, although the mortality rate for both these conditions decreased from 2009 to 2014 (see Figure 2.b.1). Lung and bronchus cancer killed more Ohioans than any other form of cancer, followed by cancers of the colon and rectum, breast and pancreas.[3]

The unintentional injury death rate, which includes drug overdoses, increased 30 percent during that time period, emerging as Ohio's third leading cause of death (also see figures 2.c.28 and 2.c.29). Chronic lower respiratory diseases (chronic obstructive pulmonary disease, emphysema, asthma, etc.), stroke, Alzheimer's disease and diabetes also claimed the lives of many Ohioans in 2014.

Figure 2.b.1. **Annual age-adjusted mortality rates for the leading causes of death, Ohio** (2009 and 2014) **and U.S.** (2013), per 100,000 population



Source: Ohio Department of Health, Bureau of Vital Statistics

Leading causes of premature death

Leading causes of premature death, as measured by years of potential life lost before age 75, provides another way to identify the diseases and conditions that are most negatively affecting a population. When calculating years of potential life lost, every death occurring before age 75 contributes to the total number of years of life lost. For example, a person dying at age 25 contributes 50 years of life lost, whereas a person who dies at age 65 contributes 10 years of life lost.

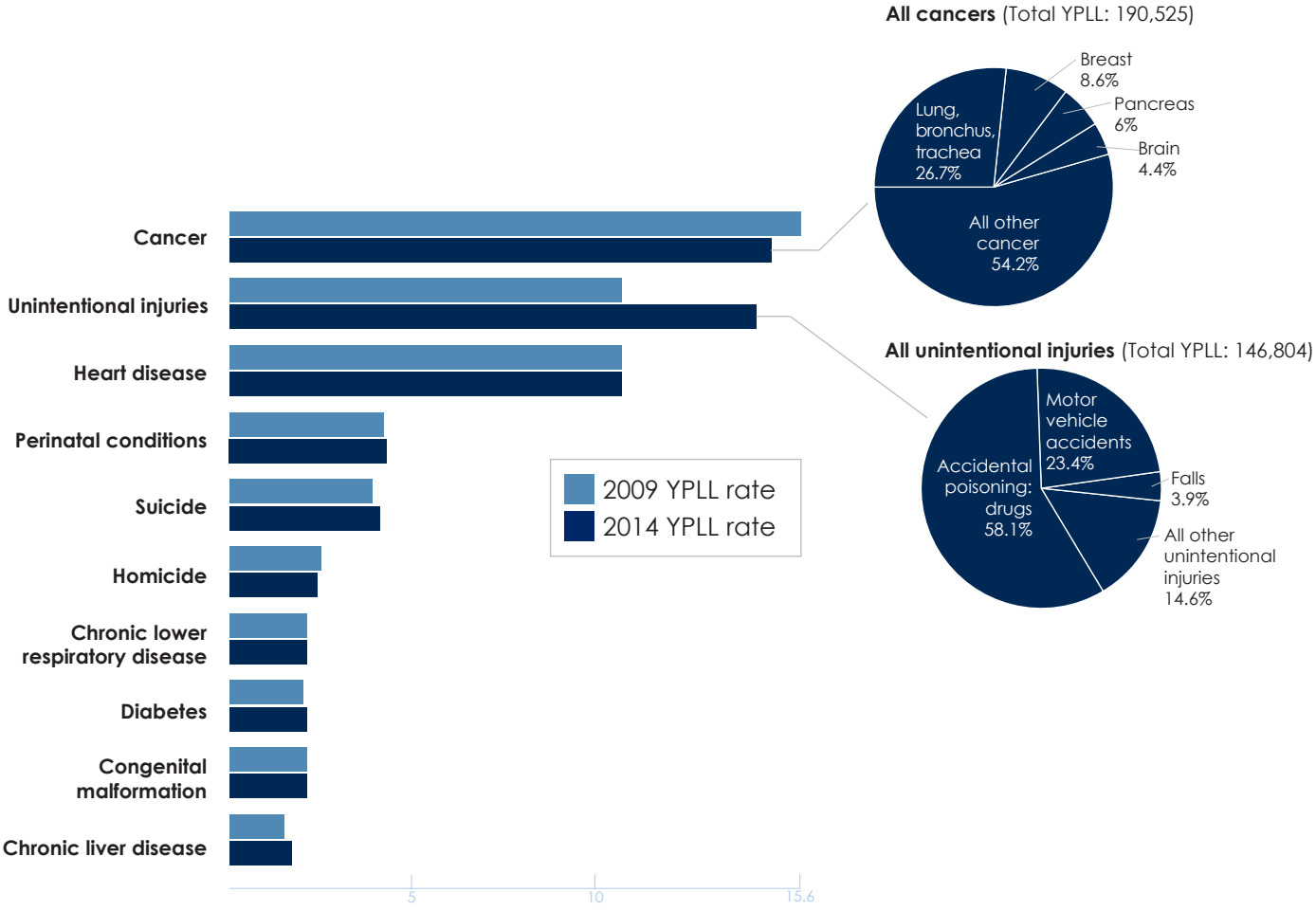
Cancer, unintentional injuries and heart disease were the most common causes of premature death in Ohio in 2014 (see Figure 2.b.2). Years of potential life lost due to unintentional injury increased 31 percent from 2009 to 2014, largely driven by opiate drug overdoses. Fifty-eight percent of the unintentional injury-related years of potential life lost in 2014 were due to drug overdoses, up from 43 percent in 2009.[4] See Figure 2.c.28 for the long-term trend in drug overdose deaths.

The following conditions were among the top 10 causes of premature death, but were not among the top 10 causes of death overall, indicating a heavier burden on Ohioans under age 75:

- Homicide
- Chronic liver disease
- Perinatal conditions (such as complications of labor and delivery, disorders related to short gestation or low birth weight, etc.)
- Congenital malformation (such as spina bifida, heart defects, etc.)

Perinatal conditions and congenital malformation are two causes of infant mortality, which is addressed in the population health data profile. Unintentional injury and homicide are also causes of infant mortality.

Figure 2.b.2. **Premature death, by cause, Ohio.** Years of potential life lost (YPLL) before 75, per 1,000 population (2009 and 2014)

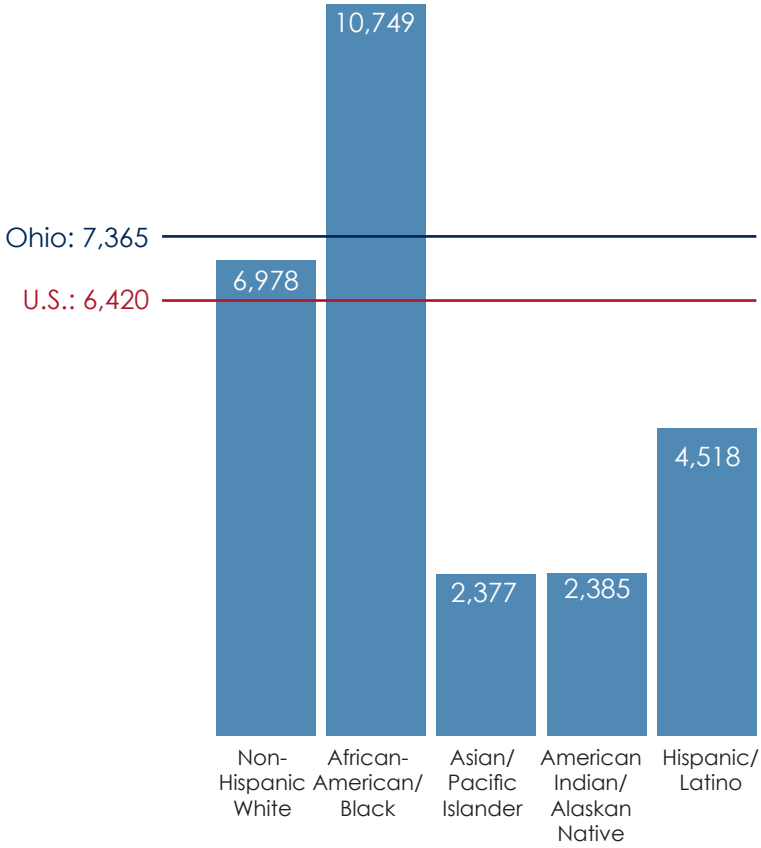


Source: Ohio Department of Health, Bureau of Vital Statistics

Disparities

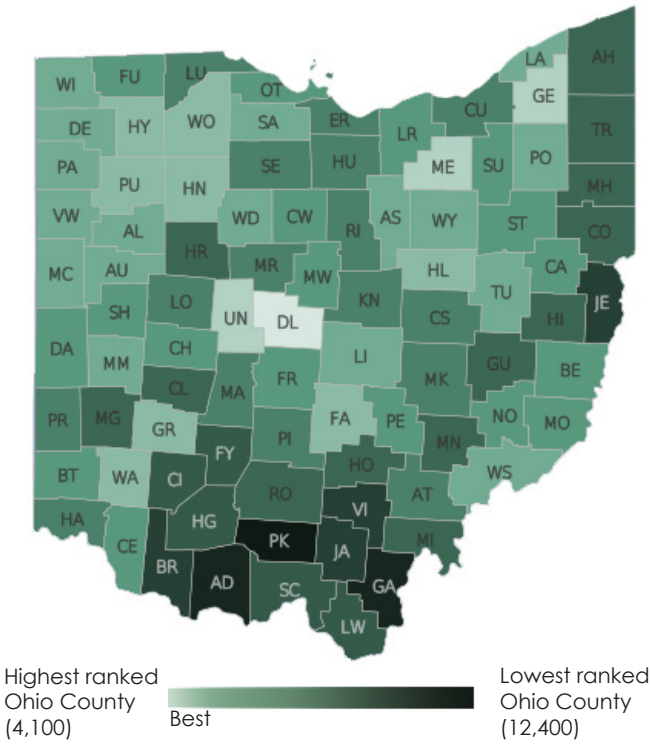
Ohio's premature death rate varied widely by race, ethnicity and geography. In 2012-2013, African-American Ohioans had 10,749 years of potential life lost before age 75, far exceeding the number for any other racial or ethnic group. In addition, the premature death rate was about three times higher in the lowest-ranked county for this metric (Pike) than in the highest-ranked county (Delaware). Many factors likely contribute to these disparities, such as the social determinants of health addressed in the social and economic environment and physical environment data profiles.

Figure 2.b.3. **Premature death, by race/ ethnicity.** Average number of years of potential life lost before age 75, per 100,000 population (2012-2013)



Source: Centers for Disease Control and Prevention Vital Statistics, as compiled by RWJF DataHub (2012-2013)

Figure 2.b.4. **Premature death, by county.** Years of potential life lost before age 75 per 100,000 population (age-adjusted) (2011-2013)



Source: 2016 County Health Rankings, based on 2011-2013 data

POPULATION HEALTH DATA PROFILE

This section describes key health outcomes for Ohioans gathered through existing population-level surveys and birth and death records for:

- Overall health and wellbeing
- Health behaviors
- Conditions and diseases
- Injuries and violence

Population health data highlights

U.S. comparison. Ohio performed worse than the U.S. overall on most measures of population health, indicating many opportunities to improve physical and mental health outcomes for Ohioans of all ages.

Healthy People 2020. Ohio met or exceeded five of the 15 Healthy People 2020 targets in this section. Set by the U.S. Department of Health and Human Services, these targets provide benchmarks for gauging progress toward improved health outcomes by the year 2020.

Notable changes. Several metrics had notable changes in recent years:

- The average number of days Ohioans reported limited activity due to mental or physical health difficulties increased 17 percent from 2013 to 2014.
- The prevalence of adult asthma and diabetes[5], and child asthma, each rose more than 10 percent from 2013 to 2014.
- Drug overdose deaths surpassed motor vehicle crash deaths for the first time in 2006 and continued to rise, increasing 18 percent from 2013 to 2014.

Disparities

- African-American/black Ohioans were much more likely than other racial and ethnic groups to experience poor health outcomes for many of the metrics reviewed, including shorter average life expectancy and a higher infant mortality rate — key indicators of the overall wellbeing of a population.
- Higher income was associated with better health outcomes. This relationship was particularly strong for adult smoking and adult diabetes, with low-income Ohioans experiencing much higher rates of smoking and diabetes than higher-income Ohioans. The relationship was less strong for obesity, with roughly one-third of adults in each income group reporting a high body mass index (BMI).
- The prevalence of diabetes and hypertension increased with age. By age 55-64, nearly one-fifth of Ohioans reported having diabetes and almost half reported hypertension.

Data gaps and limitations. There are a number of data gaps and limitations across population health metrics including:

- *Sample sizes for school-based surveys.* The Ohio Youth Risk Behavior Surveillance System (YRBSS), Ohio Healthy Youth Environments Survey (OHYES) and Ohio Youth Tobacco Survey (OYTS) have all had difficulty obtaining adequate sample sizes during their most recent data collection periods. As a result, 2013, rather than 2015, YRBSS youth obesity data is included in this data profile and OYTS data on youth all-tobacco use should be interpreted with caution.
- *Changes in tobacco products.* In recent years, hookah and e-cigarettes have emerged as commonly-used tobacco products, although they have only recently been added to OYTS. It is therefore not possible to assess change over time for youth all-tobacco use.
- *Data lag.* Recent reports have documented declines in life expectancy for specific groups at the national level as of 2014. The most recently-available life expectancy data for Ohio, however, is from 2010.

Overall health and wellbeing key findings

U.S. comparison. Ohio performed worse than the U.S. for eight of the nine overall health and wellbeing metrics.

Healthy People 2020. Ohio's 2014 overall infant mortality rate (6.8 deaths per 1,000 live births) has not yet met the Healthy People 2020 target of 6.0 deaths per 1,000 live births.

Notable change. The average number of days Ohioans reported limited activity due to mental or physical health difficulties increased 17 percent from 2013 to 2014.

Disparities. Two key indicators of the overall wellbeing of a population — life expectancy and infant mortality — varied widely by race and ethnicity:

- An African-American child born in Ohio in 2010 could expect to live to age 73.9, more than a decade less than children in other racial and ethnic groups.
- In 2014, the black infant mortality rate was more than twice as high as the white rate. The Hispanic infant mortality rate was slightly higher than the white rate.

Figure 2.c.1. **Overall health and wellbeing**

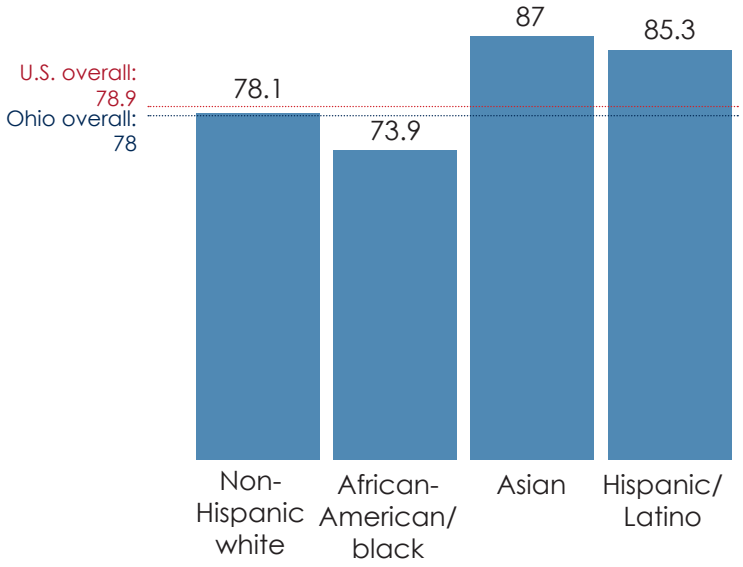
Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Overall health status, adult. Percent of adults that report fair or poor health	2012, 2013, 2014	18.4%	18.1%	17.9%		16.4% (2014)
Overall health status, child. Percent of children ages 0-17 with fair or poor health	2003, 2007, 2011-2012	2.4%	3.2%	**1.6%**	✔	3.2% (2011-2012)
Life expectancy at birth. Life expectancy at birth based on current mortality rates	2005, 2008, 2010	77	78	78		78.9 (2010)
Expected remaining years of life at age 65. Years of life expectancy at age 65 (average remaining years of life a person can expect to live on the basis of the current mortality rates for the population)	2007-2009			18.5		19.1 (2007-2009)
Child mortality. Number of deaths among children under age 18 per 100,000	2012, 2013, 2014	58.1	57.2	53.7		49.7 (2014)
Infant mortality. Number of infant deaths per 1,000 live births (within 1 year) ✘	2012, 2013, 2014	7.6	7.4	6.8		6 (2013)
Limited activity due to health problems. Average number of days in the last 30 days in which a person reports limited activity due to mental or physical health difficulties (ages 18 and older)	2012, 2013, 2014	1.7	1.5	1.7	✔	1.5 (2014)
Poor physical health days. Average number of physically unhealthy days reported in past 30 days (age-adjusted) among adults	2012, 2013, 2014	4.2	4	4.1		3.9 (2014)
Poor mental health days. Average number of days in the previous 30 days when a person indicates his/her mental health was not good (includes stress, depression, and problems with emotions; adults only)	2012, 2013, 2014	4.1	3.8	4.1		3.7 (2014)

Healthy People 2020 key
(based on most recent year)
◉ Ohio met or exceeded target
✘ Ohio did not meet target
See appendix for targets

U.S. comparison key
(based on most recent year)
Bold Ohio is better than or same as U.S.
Ohio is worse than U.S.

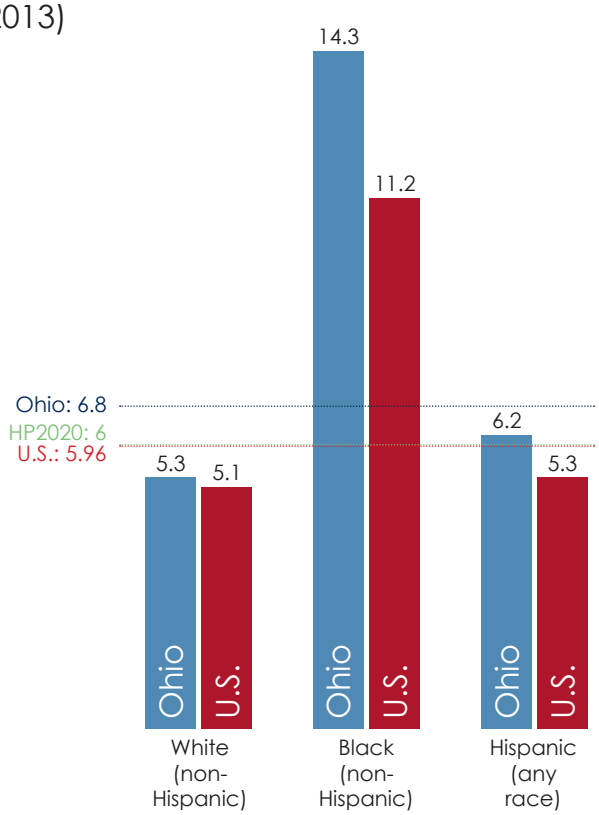
✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

Figure 2.c.2. **Life expectancy at birth, by race/ ethnicity.** Life expectancy for all Ohioans at birth based on current mortality rates (2010)



Source: Measure of America, obtained from Robert Wood Johnson Foundation Data Hub (2010)

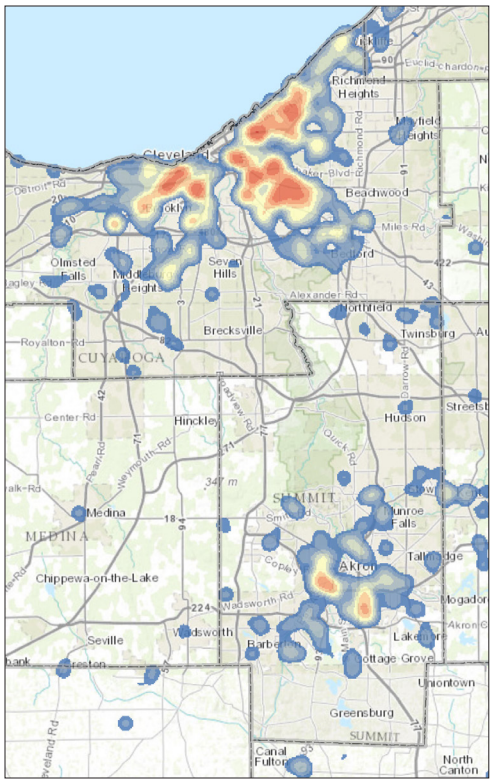
Figure 2.c.3. **Infant mortality, by race/ ethnicity.** Number of infant deaths (within 1 year), per 1,000 live births (Ohio, 2014; U.S. 2013)



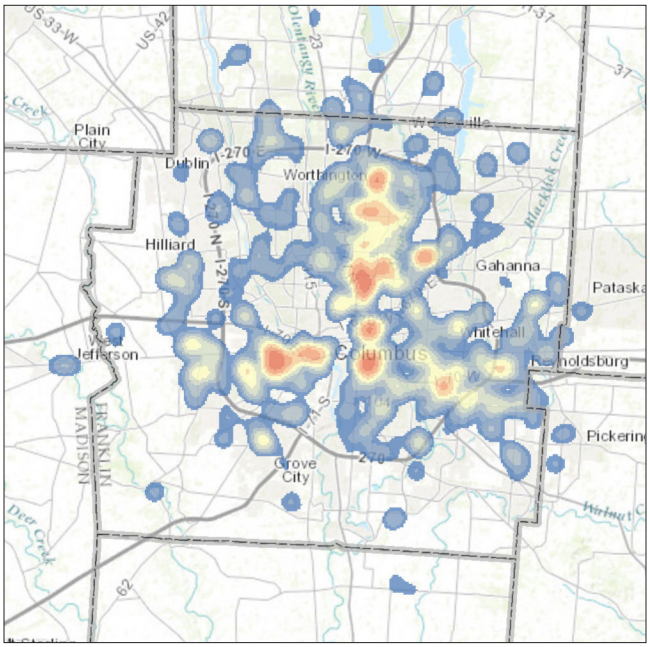
Source: ODH, Vital Statistics Birth and Mortality Files (2014)

Figure 2.c.4. **Infant mortality, areas of high concentration.** Number of infant deaths (within first year of life), per square mile (2007-2011)

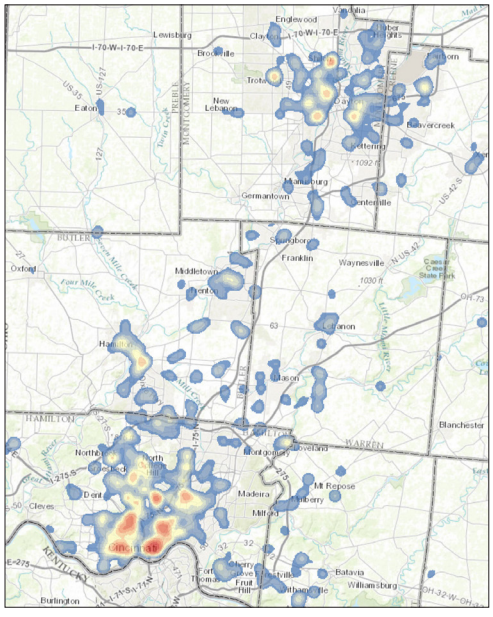
Cleveland/Akron/Canton



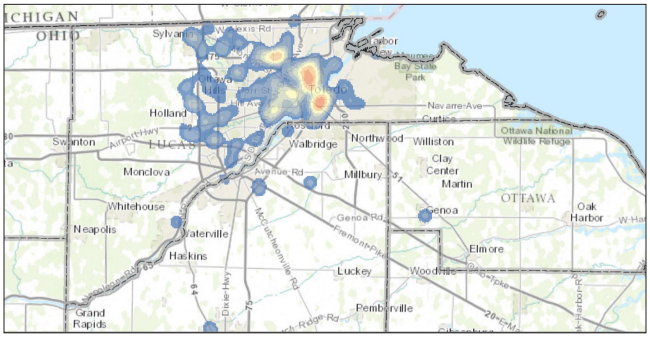
Columbus



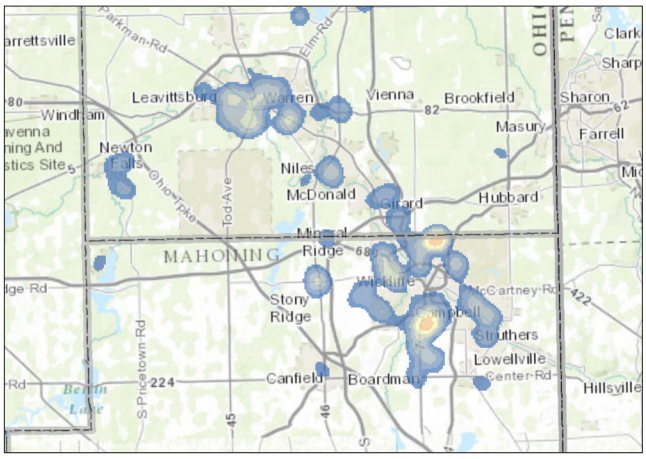
Cincinnati/Dayton



Toledo



Youngstown



Key

Fewer infant deaths — More infant deaths

Source: These maps show areas where infant deaths (within the child's first year of life) are most concentrated. Death certificate data from the Ohio Department of Health, Office of Vital Statistics, for the years 2007 to 2011 were mapped by the infant's home address. Geographic information system (GIS) software was then used to convert the resulting address points into a density plot. Density is represented on the map from low (blue shading) to high (red shading). Areas with less than one infant death per square mile are not shaded.

Health behaviors key findings

U.S. comparison. Ohio performed worse than the U.S. for 10 of the 12 health behaviors metrics. Smoking during pregnancy stands out as a behavior for which Ohio performed much worse than the U.S. overall. Ohio mothers were nearly twice as likely to have smoked during pregnancy in 2014.

Healthy People 2020. Ohio met two of the six Healthy People 2020 targets in this section (excessive drinking and physical inactivity). Ohio's 2014 adult smoking rate (21 percent) is nine percentage points above the Healthy People 2020 target (12 percent).

High prevalence. Several behaviors were prevalent among large numbers of Ohioans. Twenty percent or more of Ohio adults reported smoking, low fruit and vegetable consumption, physical inactivity and insufficient sleep.

Notable changes. Over the two most recent years, improvements were observed for some health behaviors, including adult smoking and physical inactivity.

Figure 2.c.5. **Health behaviors**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Adult smoking. Percent of population age 18 and older that are current smokers (x)	2012, 2013, 2014	23.3%	23.4%	21.0%	✔	18.1% (2014)
Youth all-tobacco use. Percent of high school students who used cigarettes, smokeless tobacco (i.e., chewing tobacco, snuff or dip), cigars, pipe tobacco, hookah, bidis, e-cigarettes or other vaping products during the past 30 days	2014-2015			28.4%*		25.3% (2015)
Smoking during pregnancy. Percent of mothers who smoked at any time during pregnancy	2012, 2013, 2014	17.3%	16.9%	16.3%		8.4% (2014)
Illicit drug use. Percent of individuals aged 12+ with illicit drug use in the past month	2011-2012, 2012-2013, 2013-2014	9.5%	9.7%	**8.7%**	✔	9.8% (2013-2014)
Excessive drinking. Percent of adults reporting binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average (o)	2012, 2013, 2014	N/A	N/A	19.1%		18.2% (2014)
Liquor sales. Total gallons of liquor sold in Ohio, in millions.	2013, 2014, 2015	12.0	12.4	12.9		N/A
Perceived risk of substance use, cigarettes. Percent of individuals aged 12-17 perceiving great risk of smoking one or more packs of cigarettes per day	2011-2012, 2012-2013, 2013-2014	64.1%	63.9%	64.7%		65.3% (2013-2014)
Perceived risk of substance use, alcohol. Percent of individuals aged 12-17 perceiving great risk of having 5 or more drinks of an alcoholic beverage once or twice a week (x)	2011-2012, 2012-2013, 2013-2014	36.7%	37.0%	37.0%		39.1% (2013-2014)
Perceived risk of substance use, marijuana. Percent of individuals aged 12-17 perceiving great risk of smoking marijuana once a month (x)	2011-2012, 2012-2013, 2013-2014	26.8%	26.3%	**24.7%**		23.5% (2013-2014)
Fruit consumption. Percent of adults who report consuming fruits less than one time daily	2013			41.7%		39.2% (2013)
Vegetable consumption. Percent of adults who report consuming vegetables less than one time daily	2013			26.3%		22.9% (2013)
Physical inactivity. Percent of adults aged 20 and over reporting no leisure-time physical activity (o)	2012, 2013, 2014	25.3%	28.5%	25.0%	✔	23.7% (2014)
Insufficient sleep. Percent of adults who report fewer than 7 hours of sleep on average (x)	2014, 2015		39.7%	37.1%		34.2% (2014)

* Preliminary estimate from ODH Tobacco Program internal analysis

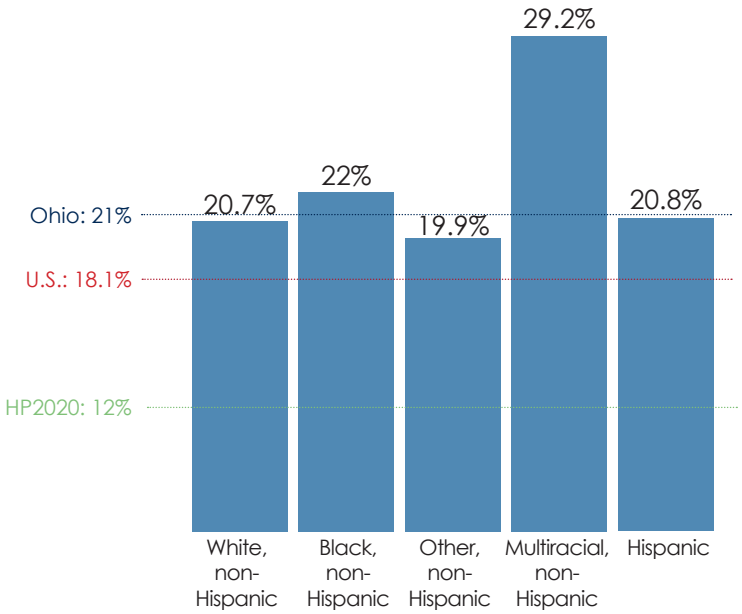
Healthy People 2020 key
(based on most recent year)
(o) Ohio met or exceeded target
(x) Ohio did not meet target
See appendix for targets

U.S. comparison key
(based on most recent year)
Bold Ohio is better than or same as U.S.
Ohio is worse than U.S.

✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

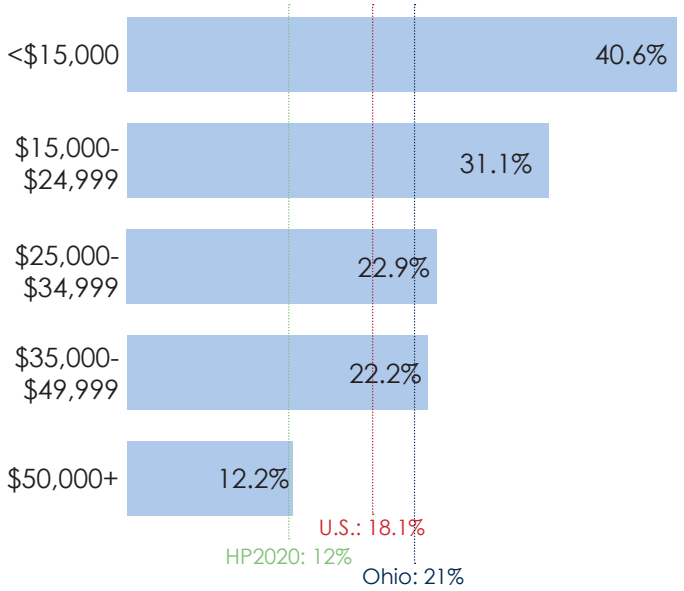
Disparities. Several disparities are described in this section, including the following:
- There was a very strong relationship between income level and adult smoking. Ohioans in the lowest income category were more than three times as likely as the highest income category to be a current smoker in 2014.
- Adult smoking varied less by race and ethnicity, with multiracial non-Hispanic Ohioans having the highest prevalence of adult smoking among all racial and ethnic groups.

Figure 2.c.6. **Adult smoking, by race/ethnicity.** Percent of population age 18 and older that are current smokers (2014)



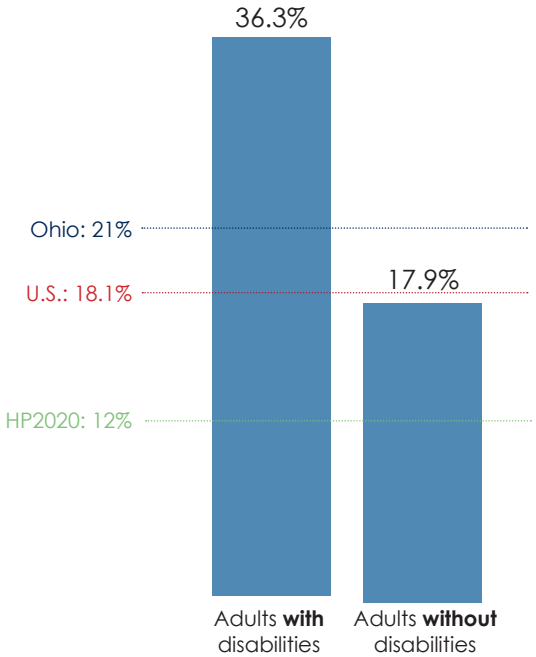
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2014)

Figure 2.c.7. **Adult smoking, by income.** Percent of population age 18 and older that are current smokers (2014)



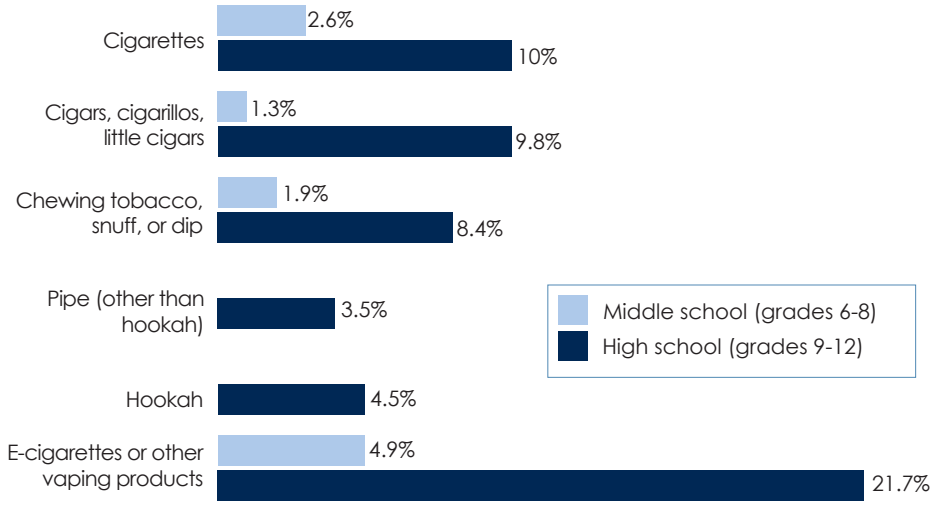
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2014)

Figure 2.c.8. **Adult smoking, by disability status.** Percent of population age 18 and older that are current smokers (2014)



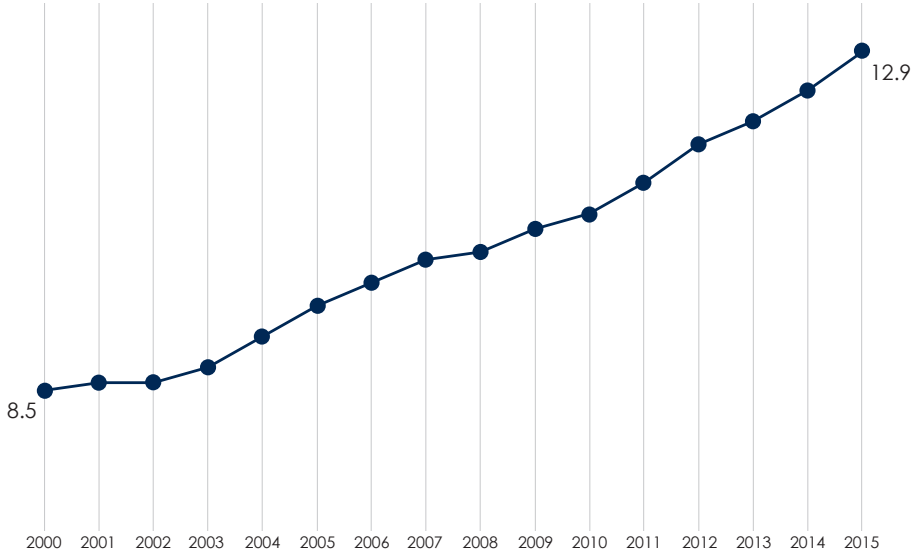
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2014)

Figure 2.c.9. **Youth tobacco use, by type of product.** Prevalence of tobacco use among Ohio youth during the past 30 days (2014-2015)



Note: Middle school estimates for pipe tobacco and hookah were not reported, due to the data not meeting criteria for statistical reliability
Source: Ohio Youth Tobacco Survey (OYTS), 2014-2015 (All values represent preliminary estimates from ODH Tobacco Program internal analyses.)

Figure 2.c.10. **Liquor sales.** Total gallons of liquor sold in Ohio, in millions (SFY 2000-2015)



Source: Ohio Department of Commerce annual reports for years 2001-2015

Conditions and diseases key findings

U.S. comparison. Ohio performed worse than the U.S. for 12 of the 14 condition and disease metrics.

High prevalence. Obesity and hypertension stand out as highly-prevalent conditions reported by nearly one-third of Ohio's adult population.

Notable changes. The prevalence of adult asthma and diabetes, and child asthma, each rose more than 10 percent over the two most-recently available years.

Disparities. There are several marked disparities for conditions and diseases:

- African-American/black Ohioans were much more likely than other racial and ethnic groups to experience worse outcomes for all of the conditions analyzed by race and ethnicity: obesity, low birth weight, diabetes, hypertension and child asthma.
- There was a strong relationship between income level and adult diabetes. Ohioans in the lowest income group were more than twice as likely than those in the highest income group to report having diabetes in 2014. Lower-income Ohioans were also more likely than those with higher incomes to report obesity or hypertension, although the differences were less pronounced.
- The prevalence of diabetes and hypertension increased with age. By age 55-64, nearly one-fifth of Ohioans reported having diabetes and almost half reported hypertension.
- Depression was much more common among Ohioans with lower incomes than those in higher income groups and was almost four times more common among people with disabilities compared to those without disabilities.

Figure 2.c.11. **Conditions and diseases**

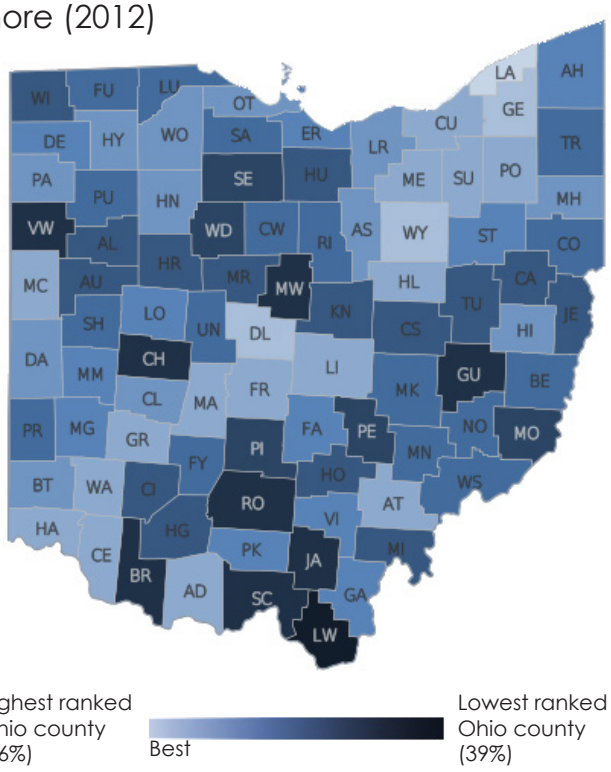
Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Youth obesity. Percent of high school students who are obese (> 95th percentile for body mass index) ◉	2007, 2011, 2013	12.3%	14.7%	**13.0%**	✔	13.7% (2013)
Adult obesity. Percent of adults who are obese (body mass index ≥ 30) x	2012, 2013, 2014	30.1%	30.4%	32.6%		29.6% (2014)
Youth depressive episodes. Percent of adolescents aged 12-17 who have had at least one major depressive episode x	2011-2012. 2012-2013, 2013-2014	8.9%	9.8%	**10.3%**		11% (2013-2014)
Adult depression prevalence. Estimated prevalence of adults ever diagnosed with depression	2012, 2013, 2014	18.9%	20.2%	20.9%		19% (2014)
Poor oral health. Percent of adults who have lost six or more teeth due to decay, infection, or disease	2012, 2014		13%	13%		10% (2014)
Preterm birth. Percent of live births that are preterm (<37 weeks of gestation) ◉	2014			10.3%		9.6% (2014)
Low birth weight. Percent of births in which the newborn weighed less than 2,500 grams x	2012, 2013, 2014	8.6%	8.5%	8.5%		8.0% (2014)
Adult diabetes. Percent of adults who have been told by a health professional that they have diabetes	2012, 2013, 2014	11.7%	10.4%	11.7%	✔	10.0% (2014)
Cancer incidence. Incidence of breast, cervical, lung and colorectal cancer per 100,000 population, age adjusted	2010, 2011, 2012	169	177	174		168 (2012)
Heart disease prevalence. Estimated prevalence of adults ever diagnosed with heart disease	2012, 2013, 2014	5.4%	4.7%	4.8%		4.2% (2014)
Hypertension prevalence. Estimated prevalence of adults ever diagnosed with hypertension x	2009, 2011, 2013	31.7%	32.7%	33.5%		31.4% (2013)
Adult asthma prevalence. Estimated prevalence of adults who currently have asthma	2012, 2013, 2014	10.5%	9.7%	10.8%	✔	8.9% (2014)
Child asthma prevalence. Estimated prevalence of children ages 0-17 ever diagnosed with asthma	2010, 2012, 2013	13.2%	12.2%	14.3%	✔	14.0% (2013)
Alzheimer's. Mortality rate per 100,000 due to Alzheimer's Disease	2013			32.8		26.8 (2013)

Healthy People 2020 key
(based on most recent year)
◉ Ohio met or exceeded target
x Ohio did not meet target
See appendix for targets

U.S. comparison key
(based on most recent year)
Bold Ohio is better than or same as U.S.
Ohio is worse than U.S.

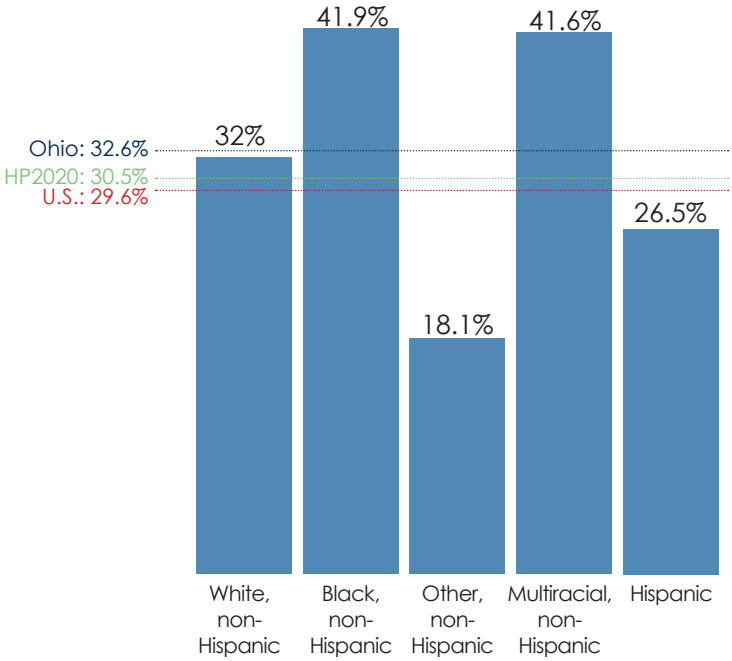
✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

Figure 2.c.12. **Adult obesity, by county.** Percent of adults that report a BMI of 30 or more (2012)



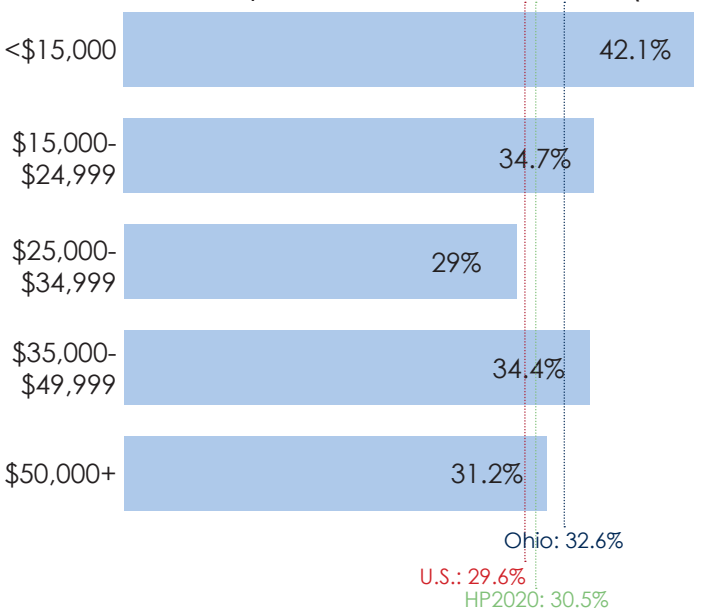
Source: 2016 County Health Rankings, based on 2012 data

Figure 2.c.13. **Adult obesity, by race/ethnicity.** Percent of adults that report a BMI of 30 or more (2014)



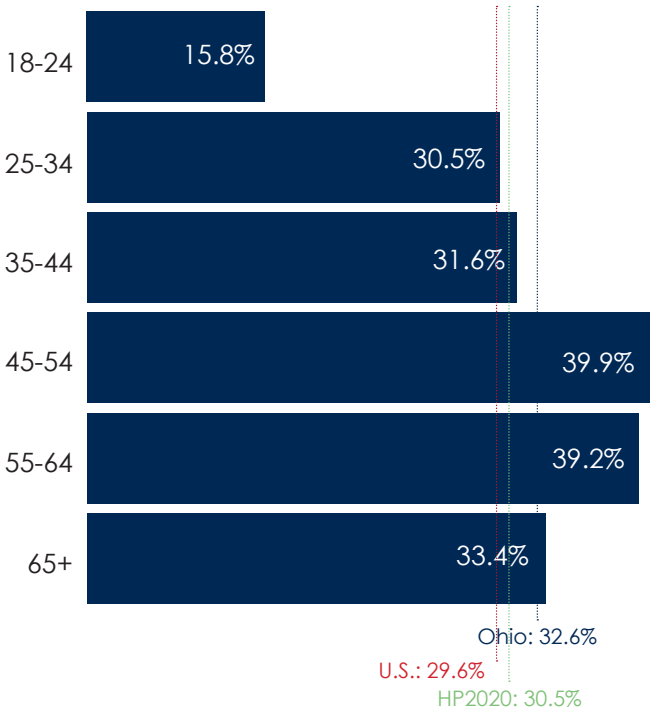
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2014)

Figure 2.c.14. **Adult obesity, by income.** Percent of adults that report a BMI of 30 or more (2014)



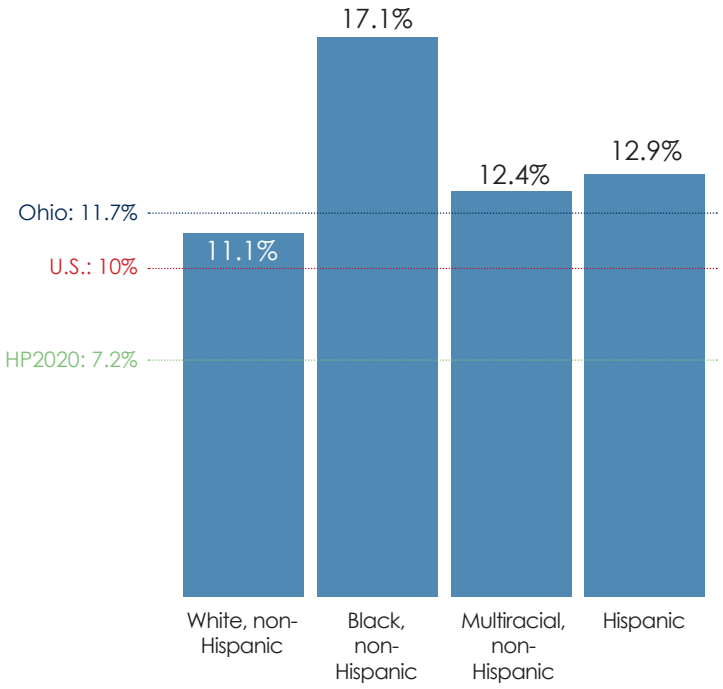
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2014)

Figure 2.c.15. **Adult obesity, by age.** Percent of adults that report a BMI of 30 or more (2014)



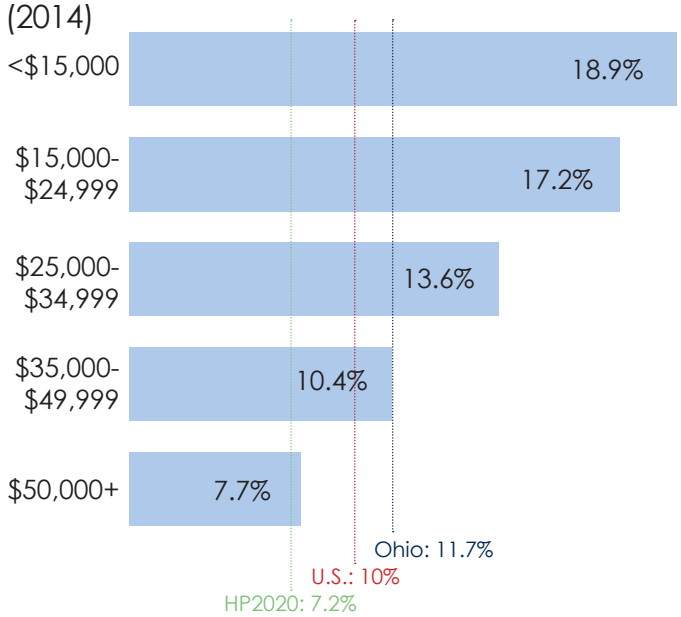
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2014)

Figure 2.c.16. **Adult diabetes, by race/ethnicity.** Percent of adults who have been told by a health professional that they have diabetes (2014)



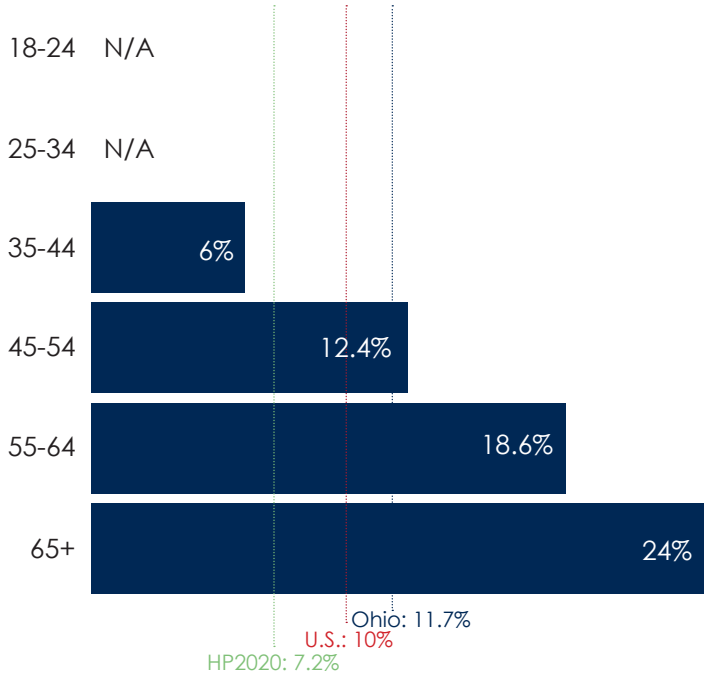
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2014)

Figure 2.c.17. **Adult diabetes, by income.** Percent of adults who have been told by a health professional that they have diabetes (2014)



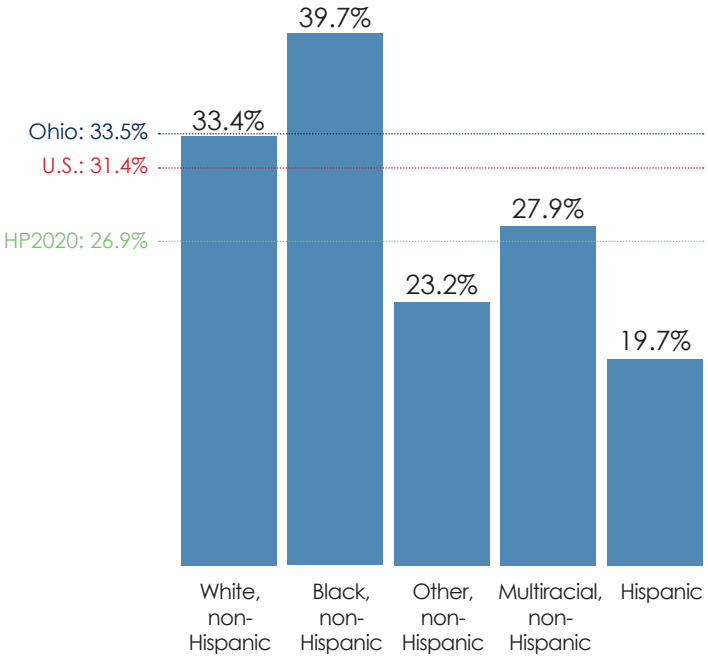
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2014)

Figure 2.c.18. **Adult diabetes, by age.** Percent of adults who have been told by a health professional that they have diabetes (2014)



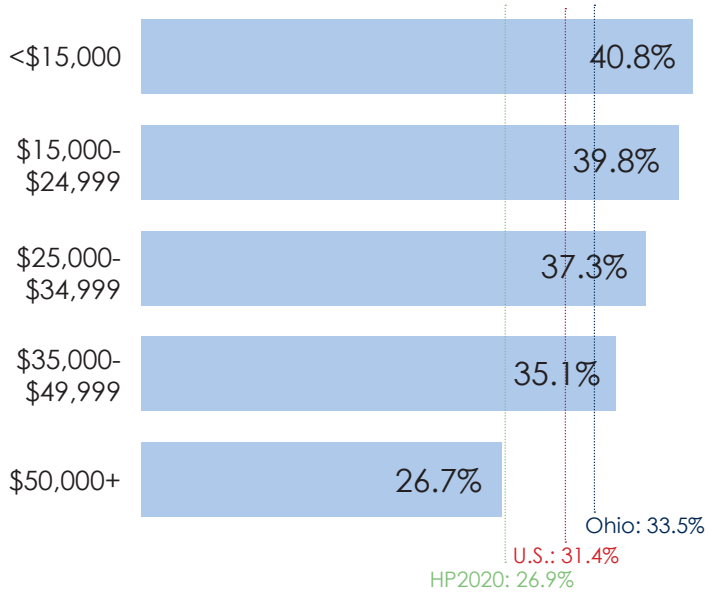
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2014)

Figure 2.c.19. **Hypertension prevalence, by race/ethnicity.** Estimated prevalence of adults ever diagnosed with hypertension (2013)



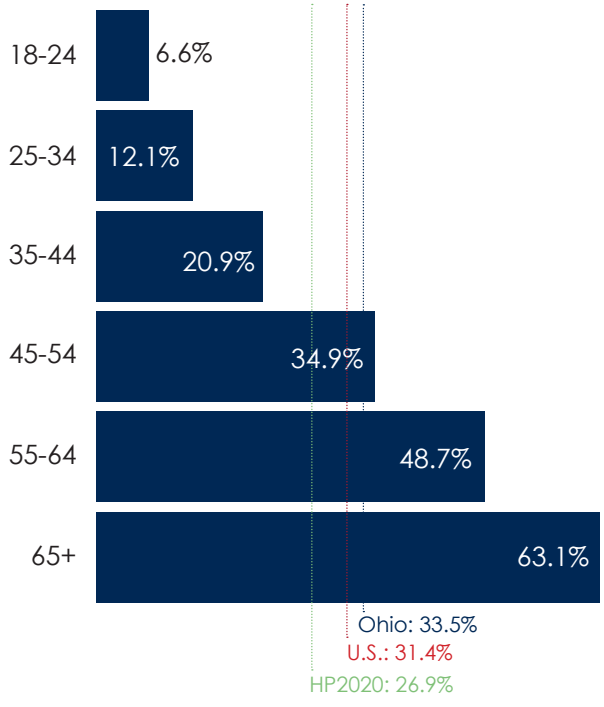
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2013)

Figure 2.c.20. **Hypertension prevalence, by income.** Estimated prevalence of adults ever diagnosed with hypertension (2013)



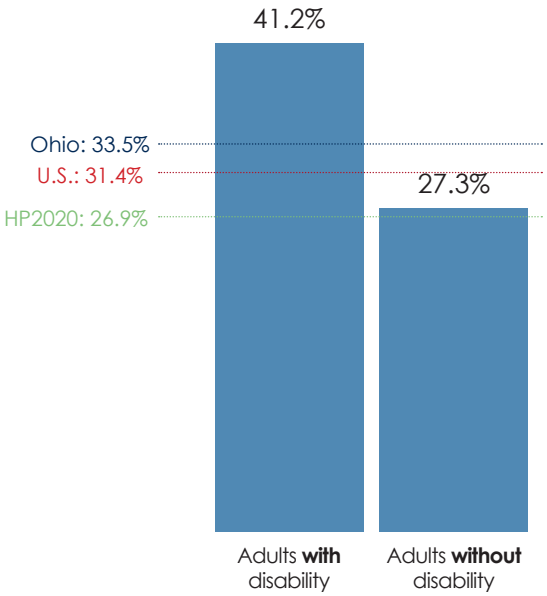
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2013)

Figure 2.c.21. **Hypertension prevalence, by age.** Estimated prevalence of adults ever diagnosed with hypertension (2013)



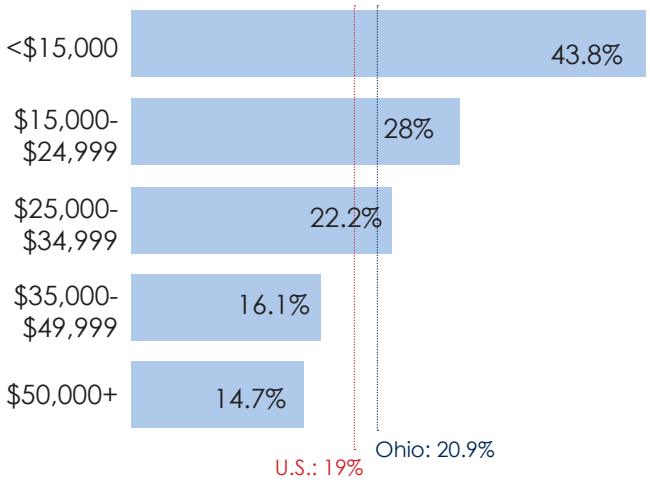
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2013)

Figure 2.c.22. **Hypertension prevalence, by disability status.** Estimated prevalence of adults ever diagnosed with hypertension (2014)



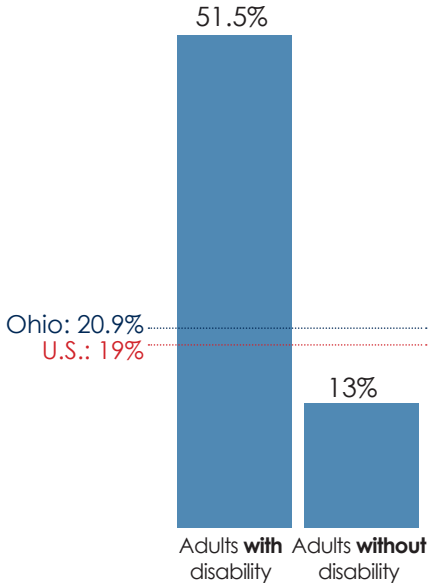
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2014)

Figure 2.c.23. **Adult depression prevalence, by income.** Estimated prevalence of adults ever diagnosed with depression (2014)



Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2014)

Figure 2.c.24. **Adult depression prevalence, by disability status.** Estimated prevalence of adults ever diagnosed with depression (2014)



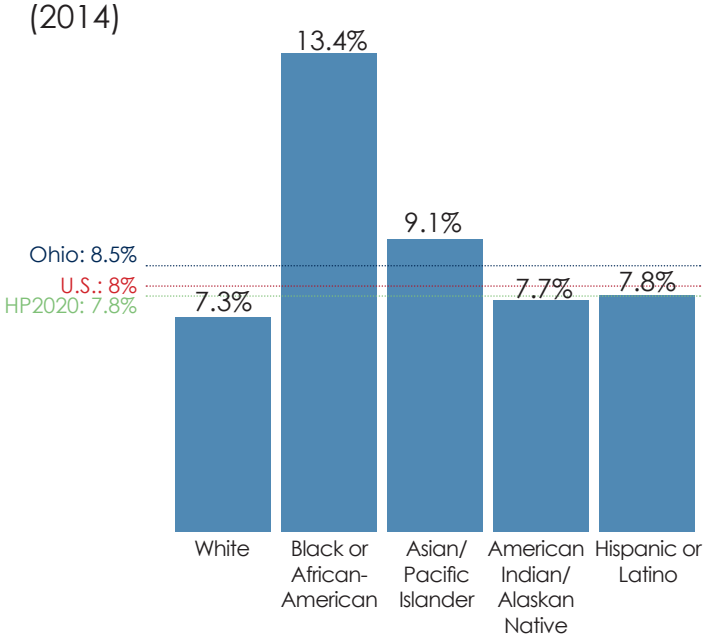
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2014)

A closer look

To learn more about the prevalence of chronic diseases and related risk factors and disparities, view these ODH reports:

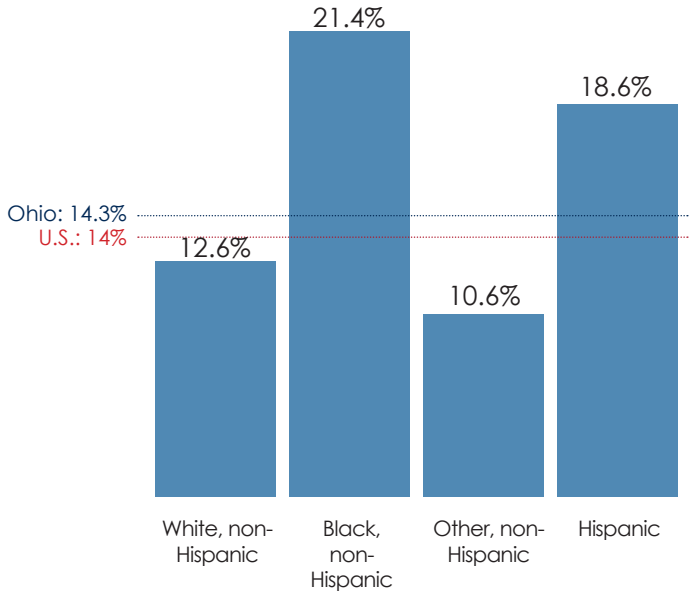
- **The impact of chronic disease in Ohio: 2015**
- **Ohio 2014 BRFSS Annual Report**

Figure 2.c.25. **Low birth weight, by race/ethnicity.** Percent of births in which the newborn weighed less than 2,500 grams (2014)



Source: National Vital Statistics System-Natality, as compiled by Health Indicators Warehouse (2014)

Figure 2.c.26. **Child asthma prevalence, by race/ethnicity.** Estimated prevalence of children ages 0-17 ever diagnosed with asthma (2013)



Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2013)

Injuries and violence key findings

U.S. comparison. Ohio performed better than the U.S. on deaths related to motor vehicle crashes and suicide, but worse than the U.S. for drug overdose deaths.

Healthy People 2020. Ohio met the target for motor vehicle crash deaths, but not for suicide deaths.

Notable changes. Drug overdose deaths surpassed motor vehicle crash deaths for the first time in 2006 and continued to rise, increasing 18 percent from 2013 to 2014. The suicide death rate remained fairly constant from 2008-2014.

Disparities. Suicide rates varied by age and sex, with middle-aged Ohioans (ages 45-54) and males being most at risk.

Figure 2.c.27. **Injuries and violence**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Motor vehicle crash deaths. Number of motor vehicle crash deaths per 100,000 population (age-adjusted) ◉	2012, 2013, 2014	10.1	8.8	**9**		10.8 (2014)
Drug overdose deaths. Number of deaths due to drug overdoses per 100,000 population (age-adjusted)	2012, 2013, 2014	19.0	20.8	24.6	✔	14.6 (2014)
Suicide deaths. Number of deaths due to suicide per 100,000 population (age-adjusted) ⓧ	2012, 2013, 2014	12.9	12.8	**12.5**		13.0 (2014)

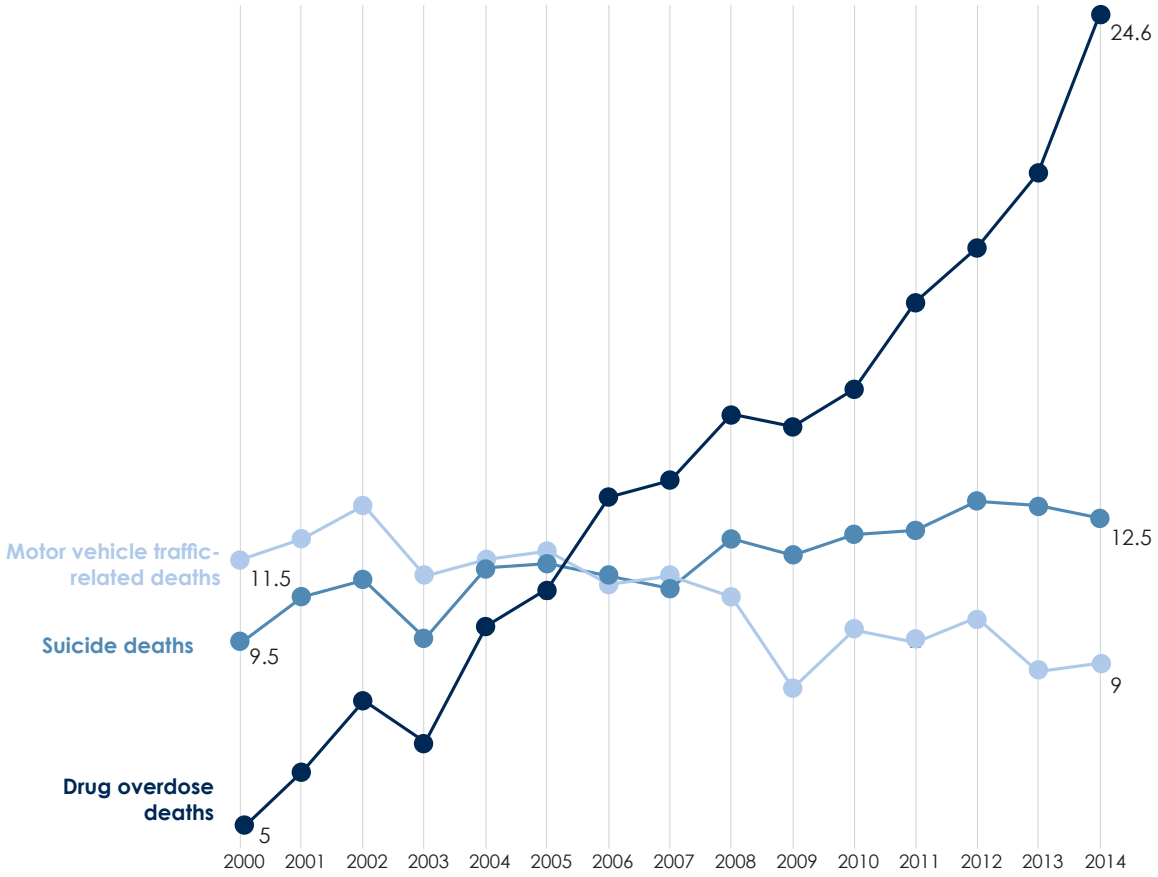
Healthy People 2020 key
(based on most recent year)
◉ Ohio met or exceeded target
ⓧ Ohio did not meet target
See appendix for targets

U.S. comparison key
(based on most recent year)
Bold Ohio is better than or same as U.S.
Ohio is worse than U.S.

✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

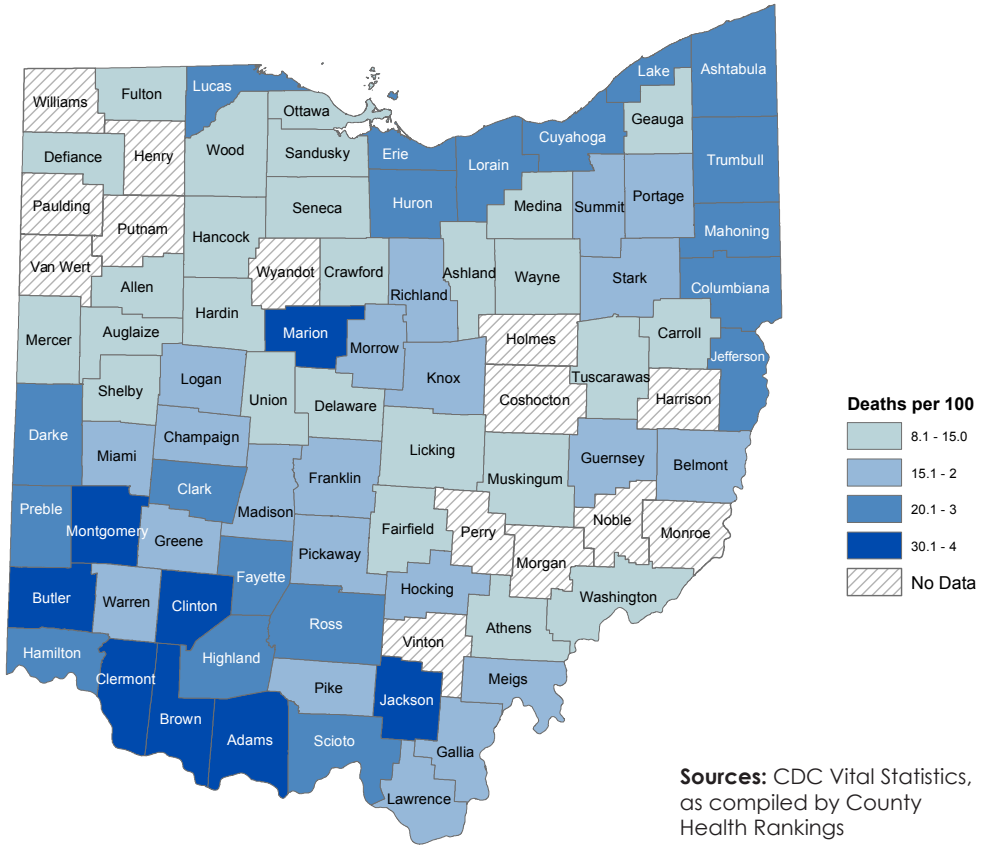
See the social and economic environment data profile (page 63) for additional information about:
- Violent crime
- Homicide mortality rate
- Intimate partner violence
- Child abuse and neglect

Figure 2.c.28. **Drug overdose, motor vehicle traffic-related and suicide death rates (age-adjusted rates per 100,000 population)** (2000-2014)



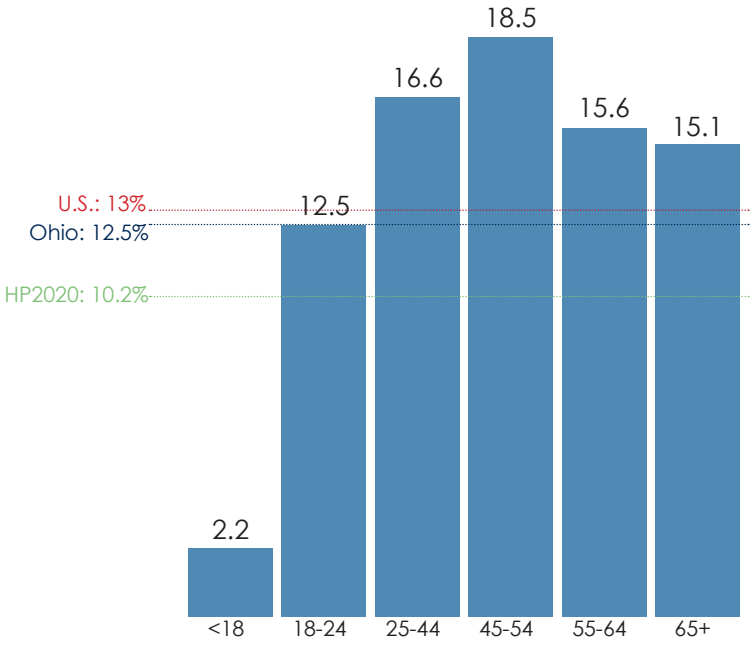
Source: Ohio Department of Health

Figure 2.c.29. **Drug overdose deaths, by county.** Number of deaths due to drug overdoses (2012-2014)



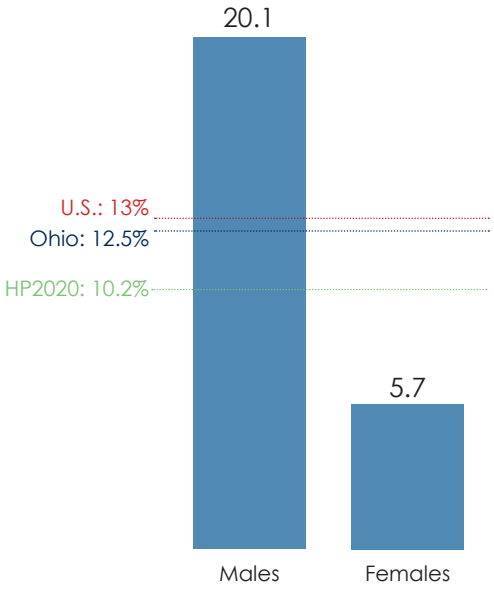
Sources: CDC Vital Statistics, as compiled by County Health Rankings

Figure 2.c.30. **Suicide deaths, by age.** Number of deaths due to suicide per 100,000 population (2014)



Source: Centers for Disease Control and Prevention, National Vital Statistics System-Mortality, as compiled by Health Indicators Warehouse

Figure 2.c.31. **Suicide deaths, by sex.** Number of deaths due to suicide per 100,000 population (2014)



Source: Centers for Disease Control and Prevention, National Vital Statistics System-Mortality, as compiled by Health Indicators Warehouse

HEALTHCARE SPENDING DATA PROFILE

This section describes healthcare spending metrics for Ohioans gathered through federal and state administrative and claims databases, as well as existing population-level surveys for:

- Total out-of-pocket spending
- Employer spending
- Marketplace spending
- Medicare spending
- Medicaid spending (duals excluded)

Healthcare spending data highlights

U.S. comparison. Ohio spending on health care was higher than the U.S. for nine of 15 metrics for which U.S. comparison data was available.

Notable changes. Several healthcare spending metrics had notable changes in recent years, meaning an increase or decrease of more than 10 percent over the two most recent years. For example:

- The employee contribution amount for an average single premium for an enrolled employee increased by more than 19 percent, from $1,053 in 2013 to $1,260 in 2014.
- Total Medicaid per member per month costs for the disabled adult population increased 11 percent from 2014 to 2015.

In addition, Ohioans have seen a steady increase in premiums for employer-based health coverage from 2006 to 2014.

Disparities. There were disparities in healthcare spending across racial and ethnic groups. These disparities may be attributed to a number of factors including access to and utilization of the healthcare system, likelihood to delay or forgo health care because of cost, as well as overall health status. For example:

- Hispanic/Latino and African-American/black Ohioans were less likely to be in families who spent more than 10 percent of their annual income on healthcare expenses relative to other racial and ethnic groups.
- Ohioans with two or more chronic conditions who are black or American Indian/Alaska Native had, on average, higher total Medicare costs than those who are white, Hispanic or Asian/Pacific Islander.

Data gaps and limitations. There are a number of data gaps and limitations across healthcare spending metrics including:

- *Data lag.* The federal government National Health Expenditure (NHE) database is the primary source of publically available data on total healthcare expenditures across both public and private payers. The most recent state-level data available from NHE is from 2009. As a result, information from NHE was not included in the SHA. Medicare and Medicaid spending is more readily available at the state-level, although there is still often a one-to-two-year lag on this data.
- *Medicaid data.* The structure of Medicaid programs varies across states with differences in the population covered (i.e. age, gender, health status), program design (including rates, utilization controls, network management) and benefits or services offered. As a result, it can be difficult to compare Medicaid spending in Ohio with spending in other states or to U.S. rates. Data on Medicaid spending in Ohio was provided by the Ohio Department of Medicaid.
- *Prevention spending.* There is little data in Ohio on prevention spending within the healthcare system. Information regarding state agency spending on prevention can be found in the Health Policy Institute of Ohio's **Prevention Basics: A Closer Look at Prevention Spending**.
- *Employer spending.* Employer and employee premium contribution amounts do not take into account the amount spent on health plan deductibles or other cost-sharing mechanisms (such as co-pays and coinsurance) which can have a significant effect on consumer behavior and overall healthcare spending.
- *Medicare data.* Medicare spending metrics included in this data profile are limited to data provided by the Centers for Medicare and Medicaid services and generally do not reflect data for Medicare Advantage.

Total out-of-pocket spending key findings

U.S. comparison. Compared to the U.S., a higher percent of Ohioans lived in families who spent more than 10 percent of their annual income on healthcare expenses, including premiums. This metric captures out-of-pocket spending for both the insured and uninsured.

Disparities. A higher percent of Ohioans who are non-Hispanic white and Asian/Pacific Islander were in families who spent more than 10 percent of their annual income on healthcare expenses, including premiums, relative to other racial and ethnic groups. Conversely, Ohioans who are Hispanic/Latino or African-American/black were less likely to be in families who spent more than 10 percent of their annual income on healthcare expenses relative to other racial groups. Disparities may be attributed to a number of factors such as access to and utilization of the healthcare system or the likelihood to delay or forgo health care because of cost.

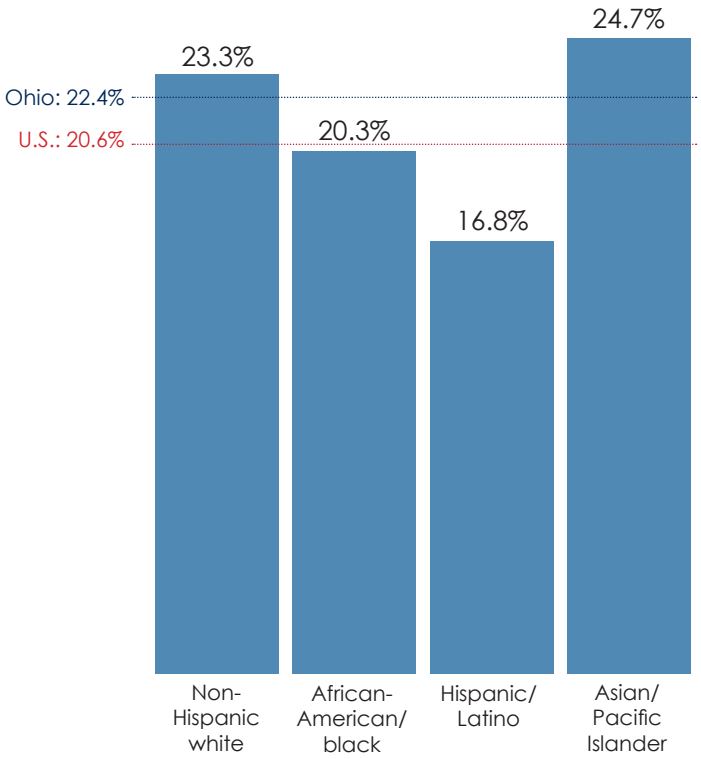
Figure 2.d.1. **Total out-of-pocket spending**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Out-of-pocket spending. Percent of individuals who are in families where out-of-pocket spending on health care, including premiums, accounted for more than 10% of annual income	2012, 2013, 2014	21.8%	22.3%	22.4%		20.6% (2014)

U.S. comparison key
(based on most recent year)
Bold Ohio spending is lower than or the same as U.S.
Ohio spending is higher than U.S.

✔ **Notable change**
Data value increased or decreased
10 percent or more from Year 2 to most recent year

Figure 2.d.2. **Out-of-pocket spending, by race/ethnicity.** Percent of individuals who are in families where out-of-pocket spending on health care, including premiums, accounted for more than 10% of annual income, by race/ethnicity (2014)



Source: State Health Access Data Assistance Center (SHADAC) analysis of the Annual Social and Economic Supplement to the Current Population Survey compiled by RWJF DataHub

Employer spending key findings

U.S. comparison. On four of seven metrics, average spending on premiums for employer-based health insurance coverage was higher in Ohio than the U.S. However, for family coverage, the average premium and the amount an employee contributes to their premium was lower than the U.S. average amounts. Notably, total spending per enrollee with employer-sponsored health insurance in Ohio was lower than the U.S. rate.

Notable changes. There were several notable changes in employer spending in recent years. For example:
- The employee contribution amount for an average single premium for an enrolled employee increased by more than 19 percent, from $1,053 in 2013 to $1,260 in 2014.
- The total amount of healthcare premiums for both single and family coverage increased from 2006 to 2014. Both employer and employee contribution amounts also increased during that time period, with employer contribution amounts increasing at a higher rate (see figures 2.d.4 and 2.d.5).

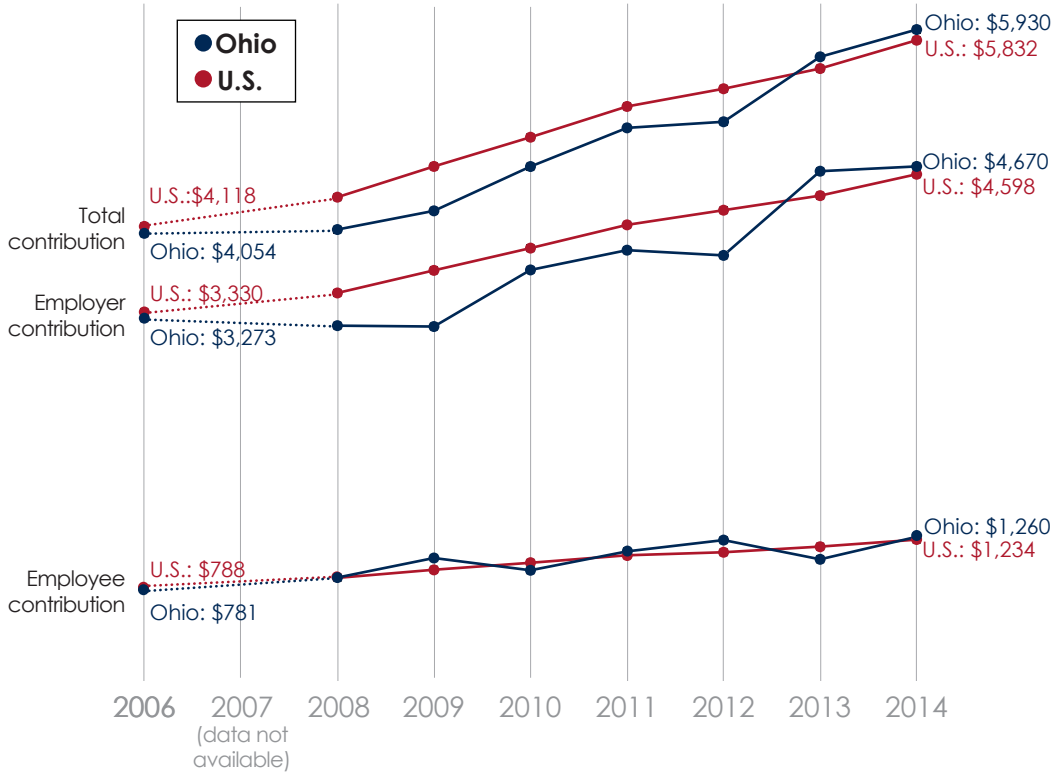
Figure 2.d.3. **Employer spending**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Total spending per enrollee (age 18-64) with employer-sponsored health insurance. Total spending per enrollee (age 18-64) with employer-sponsored health insurance. Total per enrollee spending estimates include reimbursed costs for health care services (includes health plan, enrollee, and any third-party payers). Outpatient prescription drug charges and enrollees with capitated plans and their associated claims are excluded.	2013, 2014		$4,235	**$4,333**		$4,569 (2014)
Average single premium, per enrolled employee. Average single premium per enrolled employee for employer-based health insurance, amount of total contribution	2012, 2013, 2014	$5,081	$5,679	$5,930		$5,832 (2014)
Amount of employer contribution	2012, 2013, 2014	$3,851	$4,626	$4,670		$4,598 (2014)
Amount of employee contribution	2012, 2013, 2014	$1,230	$1,053	$1,260	✔	$1,234 (2014)
Average family premium, per enrolled employee. Average family premium per enrolled employee for employer-based health insurance, amount of total contribution	2012, 2013, 2014	$15,455	$15,955	**$15,974**		$16,655 (2014)
Amount of employer contribution	2012, 2013, 2014	$11,577	$12,324	$12,402		$12,137 (2014)
Amount of employee contribution	2012, 2013, 2014	$3,878	$3,631	**$3,572**		$4,518 (2014)

U.S. comparison key
(based on most recent year)
Bold Ohio spending is lower than or the same as U.S.
Ohio spending is higher than U.S.

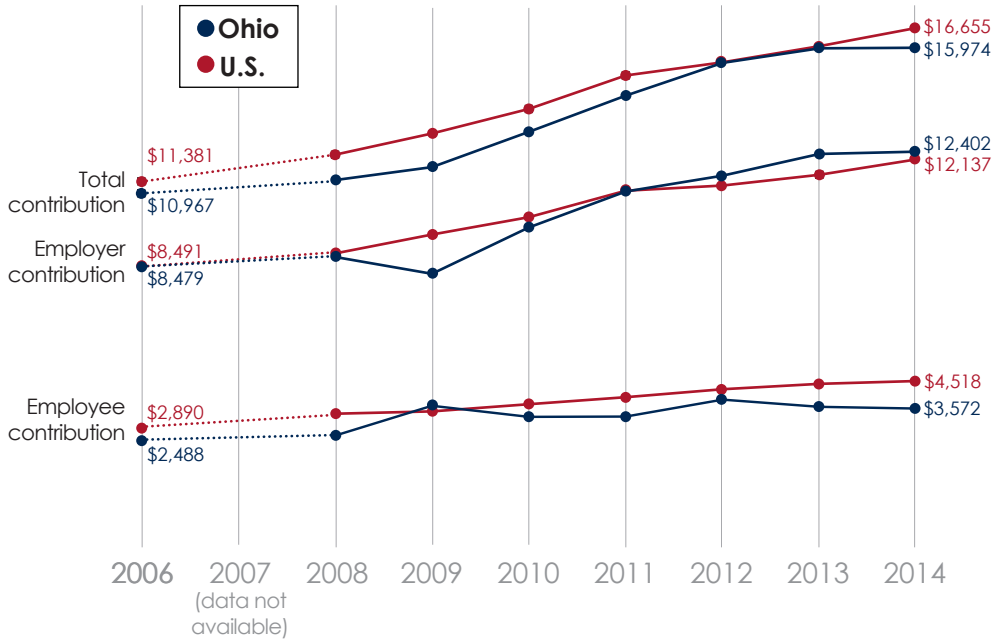
✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

Figure 2.d.4. **Average single premium, per enrolled employee.** Average single premium per enrolled employee for employer-based health insurance (2006-2014)



Source: Agency for Healthcare Research & Quality Medical Expenditure Panel Survey

Figure 2.d.5. **Average family premium, per enrolled employee.** Average family premium per enrolled employee for employer-based health insurance (2006-2014)



Source: Agency for Healthcare Research & Quality Medical Expenditure Panel Survey

Marketplace spending key findings

U.S. comparison. Without advanced premium tax credits, Ohio had lower marketplace premiums than the U.S. average premium for states with federally-facilitated marketplaces.

Figure 2.d.6. **Marketplace spending**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Average monthly marketplace premiums, 27-year-old with $25,000 annual income. Average premium for enrollees in the federal marketplace enrolled in the second lowest cost silver plan for a 27 year old with income of $25,000, *without advanced premium tax credit*	2014, 2015, 2016	$216	$218	**$221**		$240 (2016)
Average monthly marketplace premiums, family of four with $60,000 annual income. Average premium for enrollees in the federal marketplace enrolled in the second lowest cost silver plan, for a family of four with income of $60,000, *without advanced premium tax credit*	2014, 2015, 2016	$783	$789	**$801**		$869 (2016)

U.S. comparison key
(based on most recent year)
Bold Ohio spending is lower than or the same as U.S.
Ohio spending is higher than U.S.

✔ **Notable change**
Data value increased or decreased
10 percent or more from Year 2 to most recent year

Medicare spending key findings

U.S. comparison. Medicare spending in Ohio was generally higher than overall U.S. Medicare spending.

Disparities. Ohioans with two or more chronic conditions who are black or American Indian/Alaska Native had, on average, higher total Medicare costs than those who are white, Hispanic or Asian/Pacific Islander.

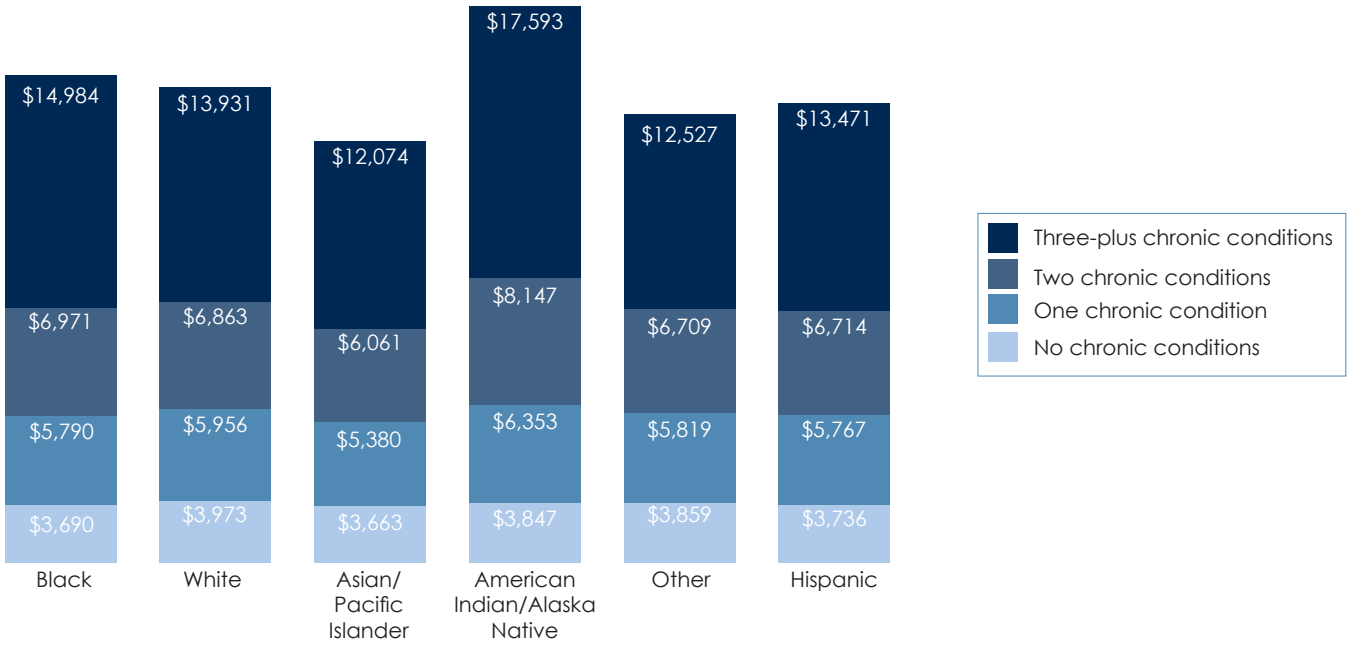
Figure 2.d.7. **Medicare spending**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Total Medicare (Parts A & B) reimbursements, per enrollee. Price-adjusted Medicare reimbursements (Parts A and B) per Medicare enrollee	2011, 2012, 2013	$10,413	$10,365	$10,177		$9,541 (2013)
Total cost, risk adjusted, for Medicare beneficiares (Medicare only enrollees). Annual averages of all costs for Medicare beneficiaries **without chronic conditions**	2012, 2013, 2014	$3,968	$3,947	**$3,943**		$4,014 (2014)
Annual averages of all costs for Medicare beneficiaries with claim(s) indicating beneficiary is receiving service or treament for **one chronic condition**	2012, 2013, 2014	$5,948	$5,930	$5,939		$5,877 (2014)
Annual averages of all costs for Medicare beneficiaries with claim(s) indicating beneficiary is receiving service or treament for **two chronic conditions**	2012, 2013, 2014	$6,824	$6,826	$6,863		$6,787 (2014)
Annual averages of all costs for Medicare beneficiaries with claim(s) indicating beneficiary is receiving service or treament for **three or more chronic conditions**	2012, 2013, 2014	$13,742	$13,847	$13,985		$13,431 (2014)

U.S. comparison key
(based on most recent year)
Bold Ohio spending is lower than or the same as U.S.
Ohio spending is higher than U.S.

✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

Figure 2.d.8. **Total cost, risk adjusted, for Medicare beneficiares (Medicare only enrollees), by race/ethnicity.** Annual averages of all costs for Medicare beneficiaries (2014)



Source: Centers for Medicare and Medicaid Services Mapping Medicare Disparities tool

Medicaid spending (duals excluded) key findings

Notable changes. There were several notable changes across Medicaid per member per month costs in the past two years for non-dual Medicaid enrollees. For example:

- Medicaid per member per month costs for the disabled aged and adult populations increased by 28 and 11 percent respectively from 2014 to 2015. However, the total number of disabled individuals that remain in the "non-dual" category after turning 65 is relatively small. Most individuals 65 and older eventually transition to the dual category, so the majority of costs for this population are not included in this analysis.
- Medicaid per member per month costs for primary care services[6] decreased for both the non-disabled and disabled populations by more than 11 and 19 percent respectively. The decrease in Medicaid costs for primary care services can be attributed, in part, to the termination of the enhanced primary care services payment rate effective beginning CY 2015. Increased Medicaid payments for primary care services were authorized by the Affordable Care Act (ACA) for CY 2013 and CY 2014.

Figure 2.d.9. **Medicaid spending**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Total Medicaid per member per month cost per calendar year, all non-disabled. Total per member per month cost for all non-disabled Medicaid enrollees. Costs are calculated from Ohio Medicaid fee-for-service claims payments and payments reported on Medicaid managed care encounter claims, dual eligibles excluded.	2013, 2014, 2015	$230	$258	$271		N/A
Aged, non-disabled (65 and older)	2013, 2014, 2015	$2,085	$1,780	$1,642		N/A
Adults, non-disabled (19-64)	2013, 2014, 2015	$324	$348	$350		N/A
Children, non-disabled (18 and younger)	2013, 2014, 2015	$166	$166	$168		N/A
Total Medicaid per member per month cost per calendar year, all disabled. Total per member per month cost for all disabled Medicaid enrollees. Costs are calculated from Ohio Medicaid fee-for-service claims payments and payments reported on Medicaid managed care encounter claims, dual eligibles excluded.	2013, 2014, 2015	$1,626	$1,591	$1,748		N/A
Aged, disabled (65 and older)	2013, 2014, 2015	$2,351	$2,319	$2,973	✔	N/A
Adults, disabled (19-64)	2013, 2014, 2015	$1,716	$1,681	$1,861	✔	N/A
Children, disabled (18 and younger)	2013, 2014, 2015	$1,254	$1,217	$1,230		N/A
Medicaid per member per month cost for primary care services, all non-disabled. Per member per month cost for primary care services for all non-disabled Medicaid enrollees. Costs are calculated from Ohio Medicaid fee-for-service claims payments and payments reported on Medicaid managed care encounter claims, dual eligibles excluded. Primary care costs include primary care services as defined by CPT, HCPS and diagnosis codes.	2013, 2014, 2015	$29	$26	$23	✔	N/A
Medicaid per member per month cost for primary care services, all disabled. Per member per month cost for primary care services for all disabled Medicaid enrollees. Costs are calculated from Ohio Medicaid fee-for-service claims payments and payments reported on Medicaid managed care encounter claims, dual eligibles excluded. Primary care costs include primary care services as defined by CPT, HCPS and diagnosis codes.	2013, 2014, 2015	$67	$56	$45	✔	N/A

U.S. comparison key
(based on most recent year)
Bold Ohio spending is lower than or the same as U.S.
Ohio spending is higher than U.S.

✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

HEALTHCARE SYSTEM DATA PROFILE

This section describes key healthcare system performance metrics for Ohioans gathered through existing population-level surveys and birth and death records (vital statistics), as well as federal and state administrative and claims databases for:

- Preventive services
- Behavioral health
- Timeliness, effectiveness and quality of care
- Hospital utilization

Healthcare system data highlights

U.S. comparison. Ohio performed worse than the U.S. overall on nine of 12 metrics (for which there was U.S. data), indicating that many opportunities exist to improve healthcare system performance in Ohio.

Healthy People 2020. Ohio was nearly five percentage points below the Healthy People 2020 target for prenatal care in the first trimester. Set by the U.S. Department of Health and Human Services, these targets provide benchmarks for gauging progress toward improved health outcomes by the year 2020.

Notable changes. Several metrics had notable changes in recent years. For example:

- Percent of cervical cancer diagnosed at an early stage increased more than 11 percent, from 41.8 percent in 2012 to 46.5 percent in 2013.
- Percent of ischemic stroke patients who received medication to break up blood clots within 3 hours of symptoms starting also improved by 14 percent, from 70 percent in 2014 to 80 percent in 2015.
- From 2011 to 2012, hospital admissions for pediatric asthma decreased by 11 percent, from 143 admissions per 100,000 children to 128 admissions.

In addition, Ohio has seen sharp increases over time in opiate admissions (heroin and prescription opioids) and babies discharged with neonatal abstinence syndrome.

Disparities. On four key measures of healthcare system performance — prenatal care, cancer early stage diagnosis, mortality amenable to healthcare and admissions for diabetes with long-term complications — performance varied widely by race and ethnicity:

- Hispanic and non-Hispanic black Ohioans were less likely to receive prenatal care in their first trimester when compared to Ohioans who are non-Hispanic white or other race.
- Black Ohioans were the least likely to have colorectal and female breast cancer diagnosed at an early stage compared to other racial and ethnic groups. Hispanic and Asian/Pacific Islander Ohioans were the least likely to have cervical and lung/bronchus cancer diagnosed at an early stage compared to other racial and ethnic groups.
- Black Ohioans were more than 1.8 times more likely to die than white Ohioans as a result of untimely and inappropriate health care.
- Medicare beneficiaries in Ohio who are American Indian/Alaska Native and black were more than two and a half and one and a half times, respectively, more likely to be admitted for diabetes with long-term complications when compared to Ohio Medicare beneficiaries overall.

Data gaps and limitations. There are a number of data gaps and limitations across healthcare system metrics including:

- *Proprietary data.* Clinical data is often proprietary and access is restricted by data use and sharing agreements as well as health information privacy laws. As a result, it can be difficult to acquire timely, publicly-available clinical data at the state-level.
- *Measuring "systemness."* Data used to measure healthcare system performance tends to focus on process versus outcome metrics and provide little information on healthcare system connectivity.
- *All payers, all patients.* A limited set of metrics provide nationally comparable, state-level data for all patients and across public and private payers as well as the uninsured. As a result, some metrics included in this data profile provide information on only a subset of the overall patient population.

Preventive services key findings

U.S. comparison. Ohio performed worse than the U.S. on four of six metrics for which there was U.S. comparison data available.

Healthy People 2020. Ohio did not meet the Healthy People 2020 target for prenatal care in the first trimester, falling nearly five percentage points below the target of 77.9 percent. Prenatal care is one of the key measures of a healthy pregnancy and birth.

Notable changes. Percent of cervical cancer diagnosed at an early stage increased more than 11 percent, from 41.8 percent in 2012 to 46.5 percent in 2013.

Disparities. There were a number of disparities across the preventive service metrics. For example:

- Ohioans who are Hispanic and non-Hispanic black were less likely to receive prenatal care in their first trimester when compared to white Ohioans and Ohioans overall.
- Women in Ohio who had higher levels of education were more likely to receive prenatal care within the first three months of pregnancy than those with lower levels of education. Generally, as a woman's education level increased, her likelihood of receiving prenatal care in the first trimester also increased.
- Disparities existed in the early stage diagnosis of female breast, colorectal, cervical and lung/bronchus cancer, varying widely by race and ethnicity. (Early stage includes tumors diagnosed at in situ and local stages.) For example:
  - Black Ohioans were the least likely to have colorectal and female breast cancer diagnosed at an early stage compared to other racial and ethnic groups.
  - Hispanic Ohioans were the least likely to have cervical cancer diagnosed at an early stage compared to other racial and ethnic groups, falling more than 20 percentage points below the Ohio rate.
  - Asian/Pacific Islander Ohioans were the least likely to have lung and bronchus cancer diagnosed at an early stage.

Figure 2.e.1. **Preventive services**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Flu vaccination. Percent of population ≥ 6 months old vaccinated for flu within the past year	2012-2013, 2013-2014, 2014-2015	44.8%	44.7%	46.1%		47.1% (2014-2015)
Prenatal care. Percent of women who completed a pregnancy in the last 12 months who received prenatal care in the first trimester (x)	2012, 2013, 2014	68.5%	68.3%	**73%**		70.8% (2014)
Female breast cancer early stage diagnosis. Percent of female breast cancer cases diagnosed at an early stage	2011, 2012, 2013	68.8%	69.2%	70%		71.3%
Colon and rectal cancer early stage diagnosis. Percent of colorectal cancer cases diagnosed at an early stage	2011, 2012, 2013	38.2%	39.1%	38.3%		41.6%
Cervical cancer early stage diagnosis. Percent of cervical cancer cases diagnosed at an early stage	2011, 2012, 2013	42.4%	41.8%	**46.5%**	✔	42.7%
Lung and bronchus cancer early stage diagnosis. Percent of lung cancer cases diagnosed at an early stage	2011, 2012, 2013	16.5%	17.9%	19.1%		19.6%

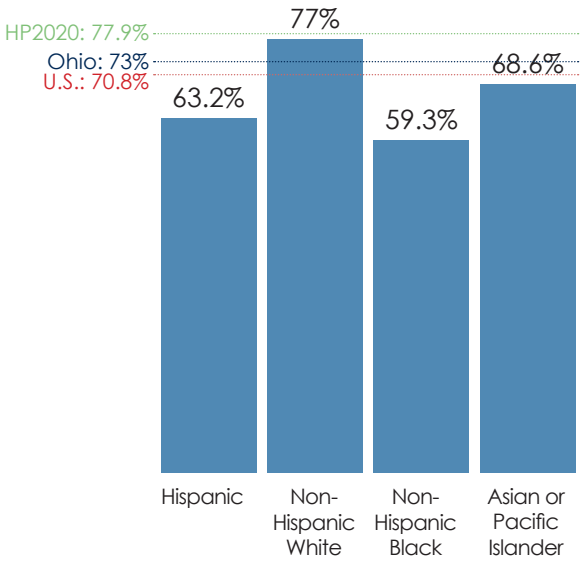
Healthy People 2020 key
(based on most recent year)
- (◉) Ohio met or exceeded target
- (x) Ohio did not meet target

See appendix for targets

U.S. comparison key
(based on most recent year)
- Bold Ohio is better than or same as U.S.
- Ohio is worse than U.S.

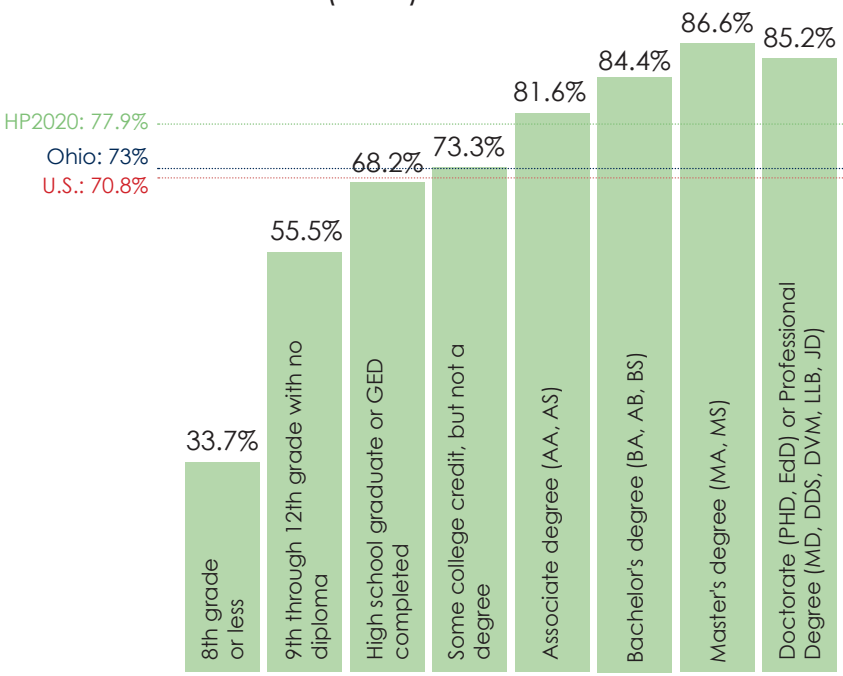
✔ Notable change
Data value increased or decreased 10 percent or more from Year 2 to most recent year

Figure 2.e.2. **Prenatal care, by race/ethnicity.** Percent of women who completed a pregnancy in the last 12 months who received prenatal care in the first trimester (2014)



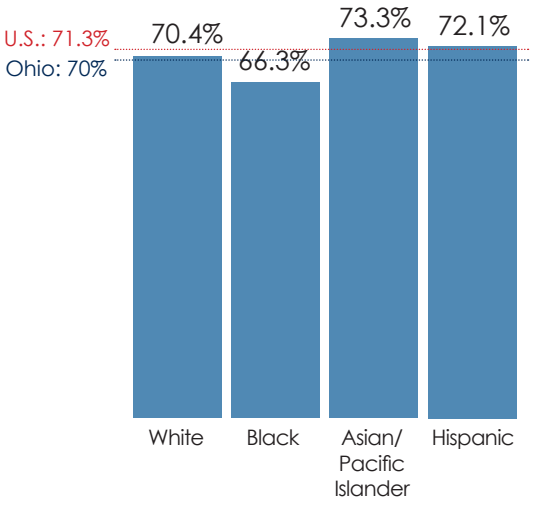
Source: Centers for Disease Control and Prevention, National Vital Statistics System, as compiled by CDC Wonder Data, Natality

Figure 2.e.3. **Prenatal care, by education level.** Percent of women who completed a pregnancy in the last 12 months who received prenatal care in the first trimester (2014)



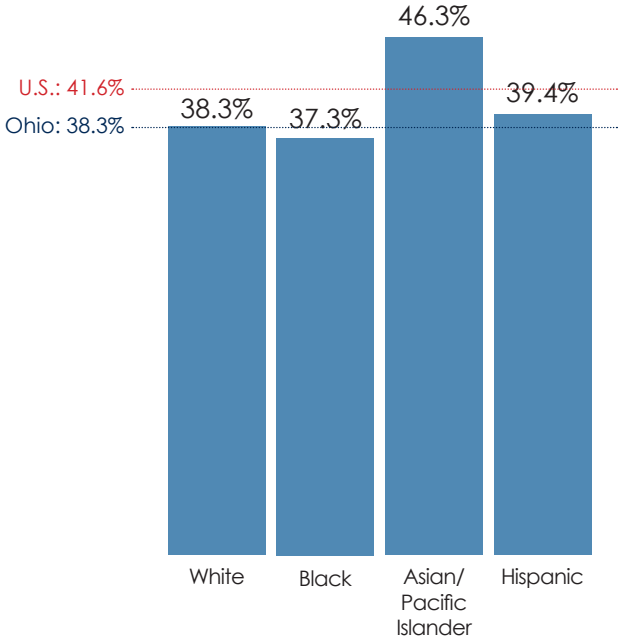
Source: Centers for Disease Control and Prevention, National Vital Statistics System, as compiled by CDC Wonder Data, Natality

Figure 2.e.4. **Female breast cancer early stage diagnosis, by race/ethnicity.** Percent of female breast cancer cases diagnosed at an early stage(2013)



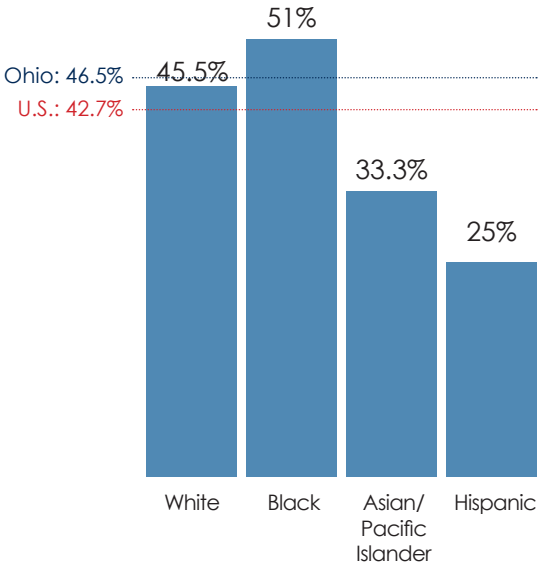
Source: Ohio Cancer Incidence Surveillance System, data compiled and analyzed by the Ohio Department of Health

Figure 2.e.5. **Colon and rectal cancer early stage diagnosis, by race/ethnicity.** Percent of colorectal cancer cases diagnosed at an early stage(2013)



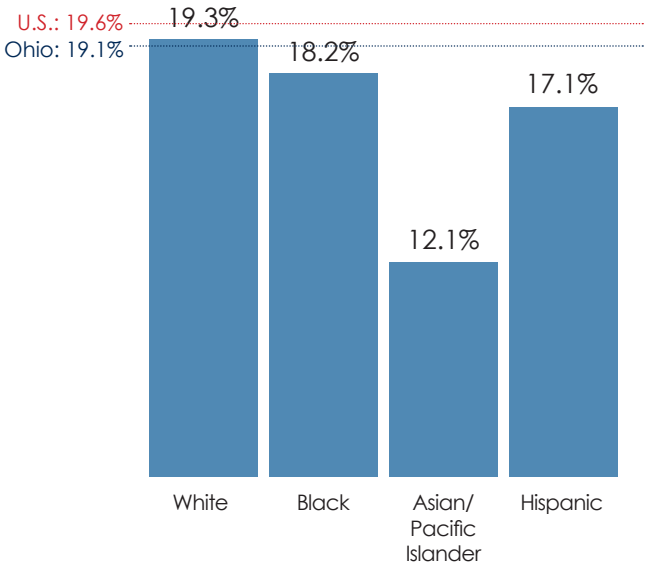
Source: Ohio Cancer Incidence Surveillance System, data compiled and analyzed by the Ohio Department of Health

Figure 2.e.6. **Cervical cancer early stage diagnosis, by race/ethnicity.** Percent of cervical cancer cases diagnosed at an early stage(2013)



Source: Ohio Cancer Incidence Surveillance System, data compiled and analyzed by the Ohio Department of Health

Figure 2.e.7. **Lung and bronchus cancer early stage diagnosis, by race/ethnicity.** Percent of lung and bronchus cancer cases diagnosed at an early stage(2013)



Source: Ohio Cancer Incidence Surveillance System, data compiled and analyzed by the Ohio Department of Health

Behavioral health key findings

Notable changes. Ohio has seen sharp increases over time in opiate admissions and babies discharged with neonatal abstinence syndrome. Data on opiate admissions captures the number of unique clients admitted with a primary diagnosis of opiate abuse or dependence (includes heroin and prescription opioids) divided by the total number of unique clients as reported by state agencies. Opiate admission information reflects treatment provided via public dollars and does not include private insurance and self-pay patients.

Figure 2.e.8. **Behavioral health**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Mental illness hospitalization follow-up. Percent of Medicaid enrollees ages 6 and older who received follow-up after hospitalization for mental illness within 30 days of discharge	2013, 2014, 2015	64.8%	64.9%	63.5%		N/A
Substance use disorder treatment retention. Percent of individuals ages 12 and older with an intake assessment who received one outpatient index service within a week and two additional outpatient index services within 30 days of intake	2013, 2014, 2015	36.4%	37.4%	39.8%		N/A
Opiate admissions. Percentage of clients in treatment with a primary diagnosis of opiate abuse or dependence (heroin and prescription opioid)	2012, 2013, 2014	25.2%	30.4%	37%	✔	N/A
Neonatal abstinence syndrome discharges. Total number of inpatient discharges for Neonatal Abstinence Syndrome	2012, 2013, 2014	1,461	1,691	1,875	✔	N/A

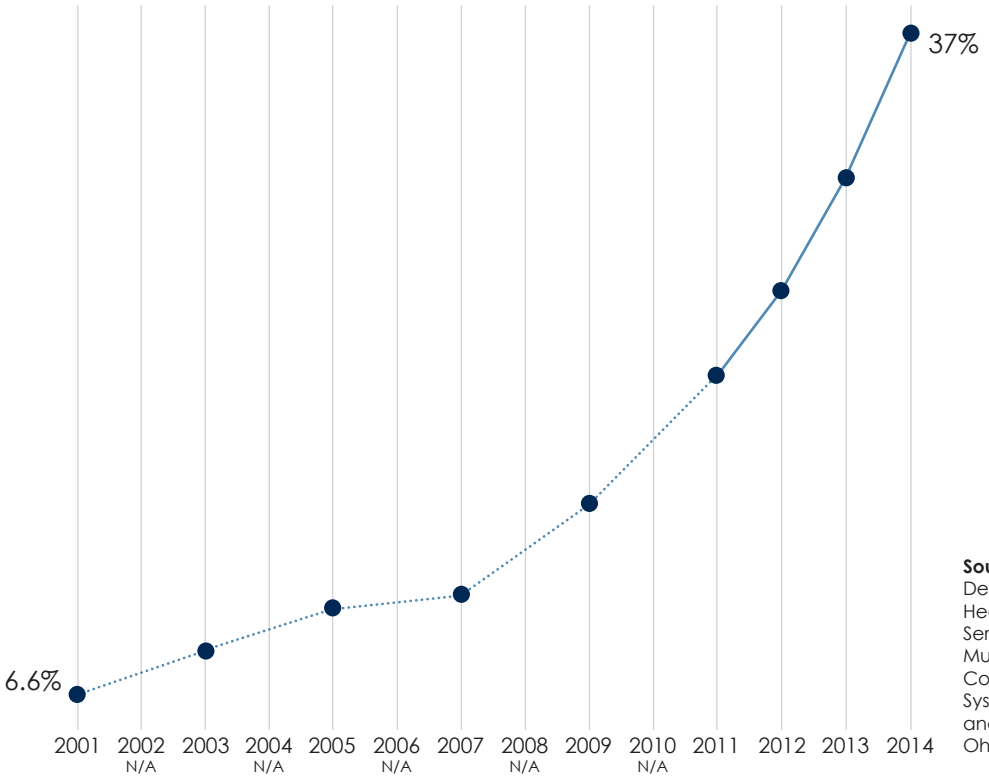
Healthy People 2020 key
(based on most recent year)
- Ohio met or exceeded target
- Ohio did not meet target

See appendix for targets

U.S. comparison key
(based on most recent year)
- Bold: Ohio is better than or same as U.S.
- Ohio is worse than U.S.

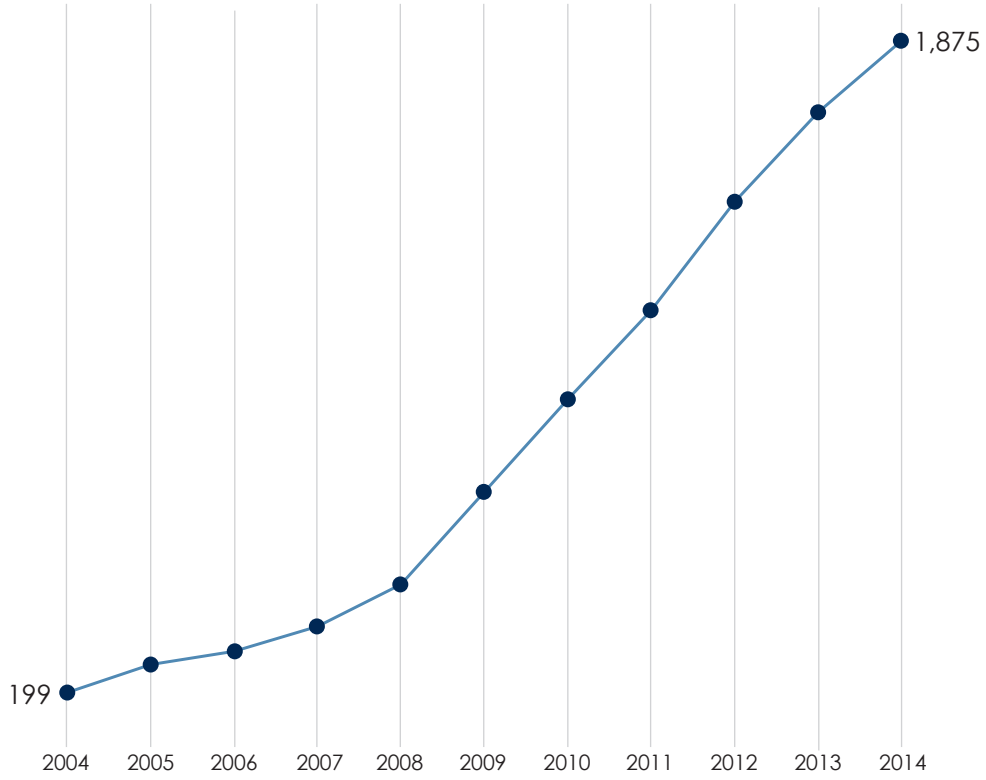
✔ Notable change
Data value increased or decreased 10 percent or more from Year 2 to most recent year

Figure 2.e.9. **Opiate admissions.** Percentage of clients in treatment with a primary diagnosis of opiate abuse or dependence (heroin and prescription opioid) (2001-2014)



Source: Data from Ohio Department of Mental Health and Addiction Services (OhioMHAS) Multi Agency Community Information System as compiled and analyzed by OhioMHAS

Figure 2.e.10. **Neonatal abstinence syndrome discharges.** Number of inpatient discharges for neonatal abstinence syndrome (2004-2014)



Source: Ohio Department of Health

Timeliness, effectiveness and quality of care key findings

U.S. comparison. Ohio performed worse than the U.S. on both metrics of timeliness, effectiveness and quality of care.

Notable changes. Percent of ischemic stroke patients who received medication to break up blood clots within three hours of symptoms starting improved, by 14 percent from 70 percent in 2014 to 80 percent in 2015.

Disparities. The racial disparity around mortality amenable to health care in Ohio was striking. Mortality amenable to health care measures deaths before age 75 from a set of causes that are at least partially preventable and treatable with timely and appropriate medical care.[7] Black Ohioans were more than 1.8 times more likely to die than white Ohioans as a result of untimely and inappropriate health care.

Figure 2.e.11. **Timeliness, effectiveness and quality of care**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Mortality amenable to healthcare. Mortality amenable to healthcare, deaths per 100,000 population	2009-2010, 2010-2011, 2012-2013	94	96	94		83 (2012-2013)
Stroke care. Percent of ischemic stroke patients who got medicine to break up a blood clot within three hours after symptoms started	2013-2014, 2014-2015		70%	80%	✔	81% (2014-2015)

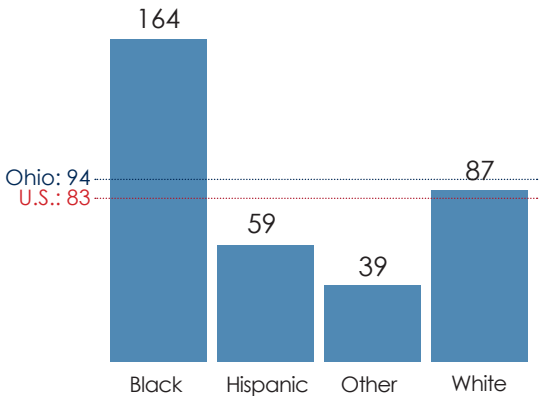
Healthy People 2020 key
(based on most recent year)
- Ohio met or exceeded target
- Ohio did not meet target

See appendix for targets

U.S. comparison key
(based on most recent year)
- Bold: Ohio is better than or same as U.S.
- Ohio is worse than U.S.

✔ Notable change
Data value increased or decreased 10 percent or more from Year 2 to most recent year

Figure 2.e.12. **Mortality amenable to health care, by race/ethnicity.** Mortality amenable to health care, deaths per 100,000 (2012-2013)



Source: Centers for Disease Control National Vital Statistics System and U.S. Census Bureau data as analyzed and compiled by the Commonwealth Fund Scorecard on State Health System Performance, 2015 edition.

Hospital utilization key findings

U.S. comparison. Ohio performed worse than the U.S. on three of the four metrics for which there was U.S. comparison data available.

Notable changes. From 2011 to 2012, hospital admissions for pediatric asthma decreased by 11 percent, from 143 admissions per 100,000 children to 128 admissions.

Disparities. Medicare beneficiaries in Ohio who are American Indian/Alaska Native, black, Hispanic or identify as "other" race were more likely to be admitted to a hospital for diabetes with long-term complications when compared to the total rate for Ohio beneficiaries. Those who are American Indian/Alaska Native and black were more than two and a half and one and a half times, respectively, more likely to be admitted for diabetes with long-term complications when compared to other racial and ethnic groups.

2.e.13. **Hospital utilization**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Diabetes with long-term complications. Admissions for Medicare beneficiaries with a principal diagnosis of diabetes with long-term complications, per 100,000 population	2012, 2013, 2014	350	338	331		295 (2014)
All-payer, all-cause, all-hospital readmissions. This report uses the Ohio Hospital Association all-payer database to create all-cause, all-age, all-payer, all-hospital readmission rates. Subsequent admissions to other hospitals during the 30 days post discharge from an index admission within the collaborative are tracked using a deterministic model matching patient on date of birth, gender and zip code of residence	2012, 2013, 2014	9.6%	9.3%	9.1%		N/A
Heart failure readmissions for Medicare beneficiaries. Rate of Medicare beneficiaries discharged from the hospital with a principal diagnosis of heart failure who were readmitted for any cause within 30 days after the index admission date, per 100 admissions. This metric is risk-standardized and all-cause	2012, 2013, 2014	21	20	**20**		20 (2014)
Avoidable emergency department visits for Medicare beneficiaries. Potentially avoidable emergency department visits among Medicare beneficiaries, per 1,000 beneficiaries	2011, 2012, 2013	215	219	214		181 (2013)
Hospital admissions for pediatric asthma. Hospital admissions for pediatric asthma, per 100,000 children ages 2-17 (excludes patients with cystic fibrosis or anomalies of the respiratory system, and transfers from other institutions)	2010, 2011, 2012	136	143	128	✔	113 (2012)

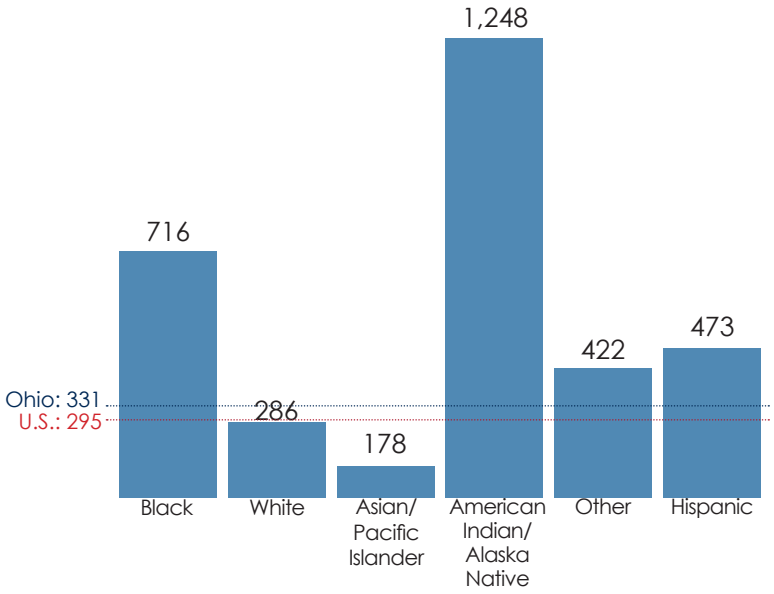
Healthy People 2020 key
(based on most recent year)
- Ohio met or exceeded target
- Ohio did not meet target

See appendix for targets

U.S. comparison key
(based on most recent year)
- **Bold** Ohio is better than or same as U.S.
- Ohio is worse than U.S.

✔ Notable change
Data value increased or decreased 10 percent or more from Year 2 to most recent year

Figure 2.e.14. **Diabetes with long-term complications, by race/ethnicity.** Admissions for Medicare beneficiaries with a principal diagnosis of diabetes with long-term complications per 100,000 population (2014)



Source: Centers for Medicare and Medicaid Services Mapping Medicare Disparities tool

ACCESS TO HEALTH CARE DATA PROFILE

This section describes key access metrics for Ohioans gathered through census and other population-level surveys and federal provider databases for:

- General access, coverage and affordability
- Behavioral health
- Oral and vision care
- Workforce

Access to health care data highlights

U.S. comparison. Ohio performed better than the U.S. on 11 out of 14 access metrics for which U.S. data was available. Ohio performed worse than the U.S. on metrics related to unmet needs for mental health and illicit drug use treatment and the percent of Ohioans who live in areas underserved by dentists.

Healthy People 2020. Ohio, along with all other states, has not met the Healthy People 2020 target of 0 percent uninsured. Set by the U.S. Department of Health and Human Services, Healthy People 2020 targets provide benchmarks for gauging progress toward improved health outcomes by the year 2020.

Notable changes. Notable changes in access include:

- Long-term uninsured rates declined over time, with the most notable decrease from 2013 to 2015.
- The percent of adults that reported not seeing a doctor in the past 12 months because of cost declined.
- The percent of children ages 3 to 17 with unmet dental-care needs decreased.
- The percent of adults with unmet vision-care needs decreased.
- The percent of Ohioans who live in areas underserved for primary care increased in recent years.
- The ratios of population to mental health providers and primary care providers other than physicians improved in recent years.

Disparities. On two metrics related to access — unable to see a doctor due to cost and unmet dental care needs for children — performance varied widely by race and ethnicity:

- A higher percent of Ohioans who identified as multiracial, black/non-Hispanic and Hispanic reported that they were unable to see a doctor due to cost in the past 12 months when compared to other racial and ethnic groups.
- Hispanic and African-American children were more likely to experience unmet dental-care needs.

Data gaps and limitations. There are number of data gaps and limitations across healthcare access metrics including:

- *Uninsured rates.* There are a variety of sources for state and county-level estimates of the adult uninsured rate. Each source has its benefits, as well as its challenges and limitations. For more information regarding these benefits and limitations, see the health insurance source table in Appendix B. This data profile uses the U.S. Census Bureau American Community Survey, one year estimates for state-level coverage and the Small Area Health Insurance Estimates for county-level breakouts.
- *Coverage vs. access.* While Medicaid eligibility extension and other insurance-related policy changes resulted in more people having health insurance coverage, this coverage may not translate into access. For example, there is no consistent way to measure at the national, state and local levels how many providers are accepting Medicaid and Medicare patients.
- *Workforce.* There is currently no comprehensive way to measure workforce capacity. Health Professional Shortage Area data compiled by the Health Resources Services Administration provide information on the percent of individuals living in areas that are underserved and the ratio of providers to population. However, these metrics do not provide a full picture of workforce capacity, distribution or a patient's actual ability to access a healthcare provider.

General access, coverage and affordability key findings

U.S. comparison. Ohio performed better than the U.S. on all four metrics of general access, coverage and affordability.

Healthy People 2020. Ohio has seen a substantial decline in its uninsured rate. However Ohio, along with all other states, has not met the Healthy People 2020 target of 0 percent uninsured. Set by the U.S. Department of Health and Human Services, Healthy People 2020 targets provide benchmarks for gauging progress toward improved health outcomes by the year 2020.

Notable changes. Notable changes for access, coverage and affordability include:
- Several sources of data providing estimates of working-age adult uninsured rates in Ohio were analyzed. All demonstrated a decline in the working-age adult uninsured rate since 2011, with the most notable decline in 2014 and 2015.
- The percent of adults that reported not seeing a doctor in the past 12 months due to cost decreased 12.7 percent, from 15 percent in 2013 to 13.1 percent in 2014.
- Uninsured rates for children have also seen a steady decline from 2009 to 2014.

Disparities. Highlighted disparities include:
- County-level estimates of working-age adult uninsured rates are available through the U.S. Census Bureau, Small Area Health Insurance Estimates. Due to a lag in the availability of these estimates, the most recently available year is 2014. The county with the highest uninsured rate was Holmes (22.9 percent). The next highest were Wayne (12.9 percent), Adams (12.7 percent), Coshocton (12.3 percent) and Ashland (12.3 percent). The counties with the lowest uninsured rates were Delaware (5.3 percent), Union (6.6 percent) and Warren (6.9 percent).
- Ohioans who identified as multiracial were two and a half times more likely than white Ohioans to forgo seeing a doctor due to cost in the past 12 months. Black/non-Hispanic and Hispanic Ohioans were also less likely to see a doctor due to cost when compared to white Ohioans or people who identified as other, non-Hispanic.
- When compared to individuals without a disability, adults with a disability were more than three times as likely to forgo seeing a doctor due to cost.

Figure 2.f.1. **General access, coverage and affordability**

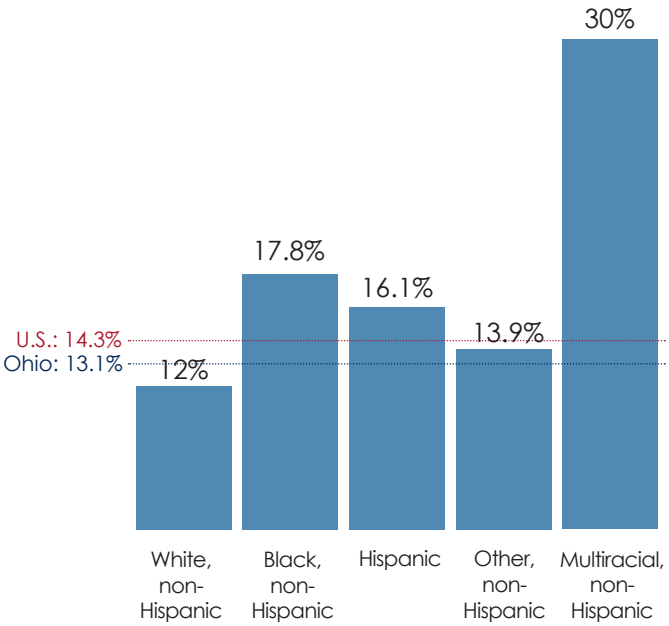
Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Uninsured, adults (18-64). Percent of 19 - 64 year olds uninsured (health insurance) ✗	2012, 2013, 2014	16.3%	15.7%	**11.6%**	✔	16.3% (2014)
Uninsured, children (0-17). Percent of 0-18 year olds uninsured (health insurance) ✗	2012, 2013, 2014	5.3%	5.3%	**4.8%**		6% (2014)
Unable to see doctor due to cost. Percent of adults reported not seeing a doctor in the past 12 months because of cost	2013, 2014		15%	**13.1%**	✔	14.3% (2014)
Routine checkup. Percent of at-risk adults who have visited a doctor for a routine checkup in the past two years	2013, 2014		87%	**88%**		86% (2014)

Healthy People 2020 key
(based on most recent year)
◉ Ohio met or exceeded target
✗ Ohio did not meet target
See appendix for targets

U.S. comparison key
(based on most recent year)
Bold Ohio is better than or same as U.S.
Ohio is worse than U.S.

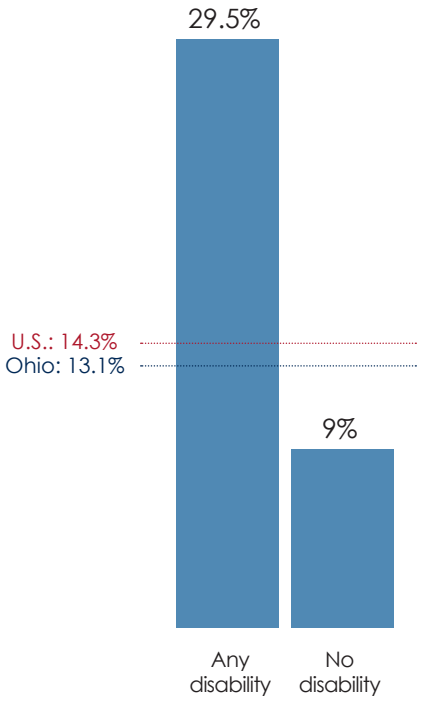
✔ Notable change
Data value increased or decreased 10 percent or more from Year 2 to most recent year

Figure 2.f.2. **Unable to see doctor due to cost, by race/ethnicity.** Percent of adults reported not seeing a doctor in the past 12 months because of cost (2014)



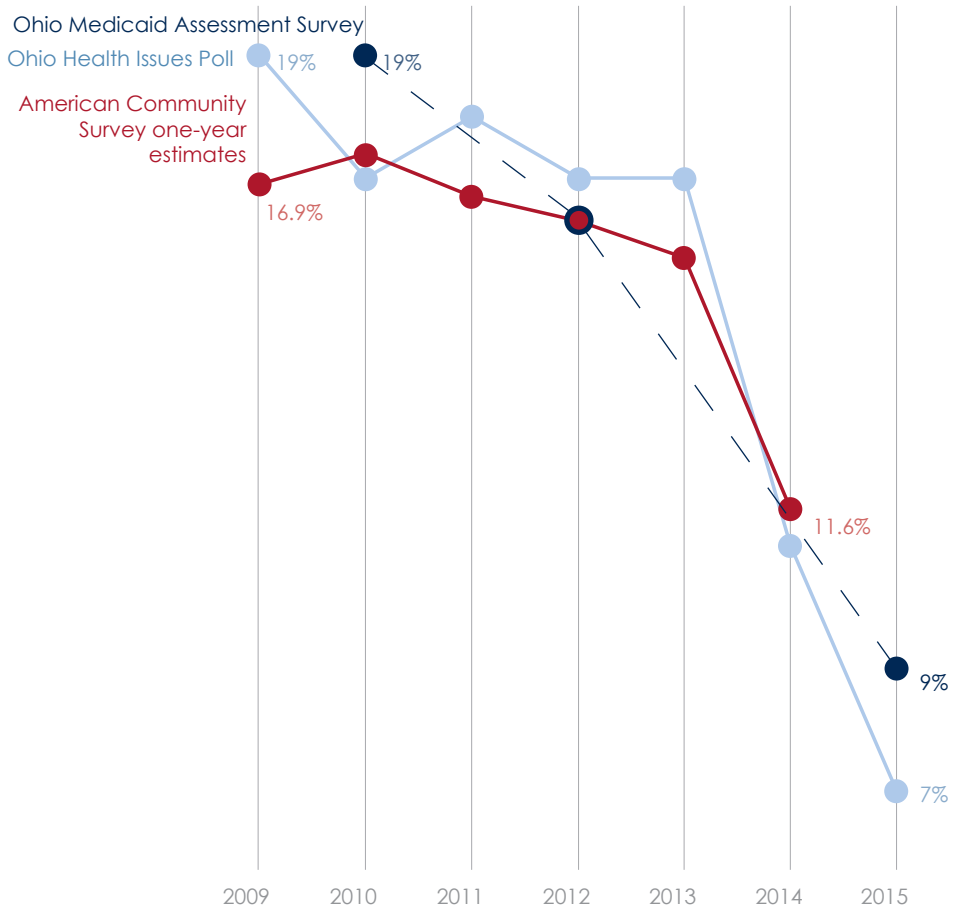
Source: CDC, Behavioral Risk Factor Surveillance System (2014)

Figure 2.f.3. **Unable to see doctor due to cost, by disability status.** Percent of adults reported not seeing a doctor in the past 12 months because of cost (2014)



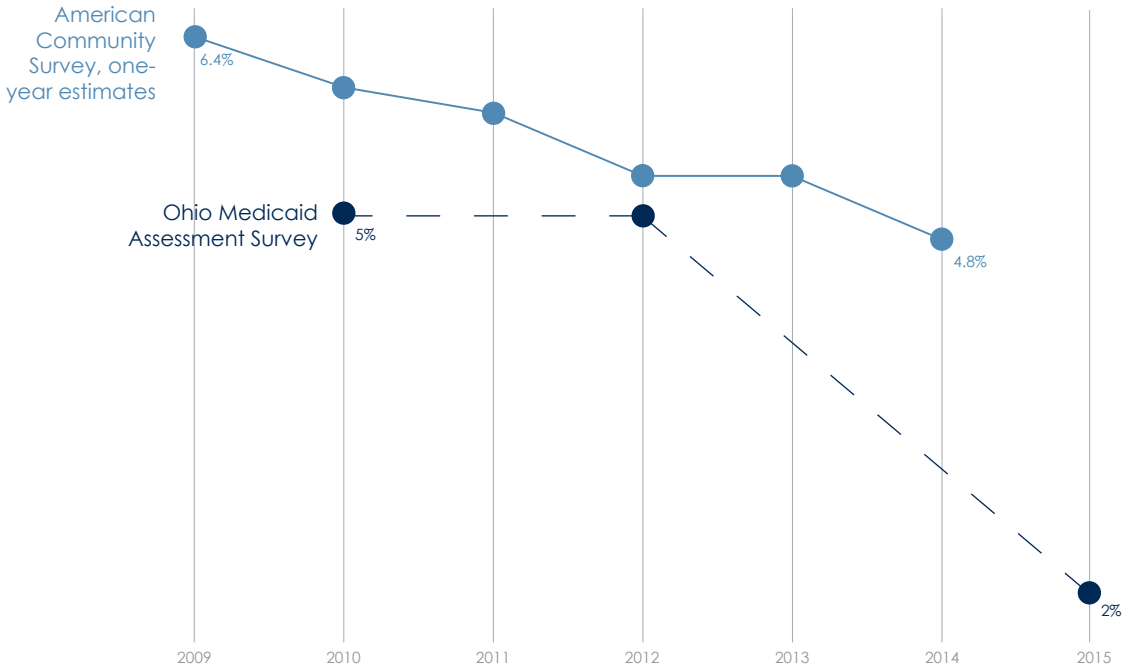
Source: CDC, Behavioral Risk Factor Surveillance System (2014)

Figure 2.f.4. **Uninsured, adults.** Percent of 18-64 year olds uninsured (health insurance) (2009-2015)



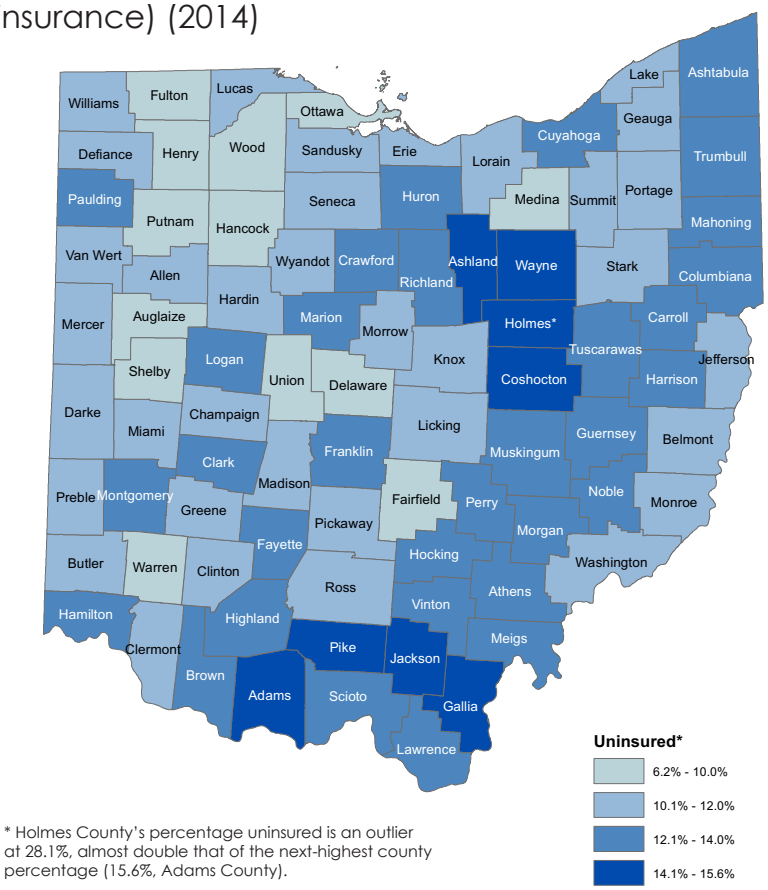
Source: U.S. Census Bureau, American Community Survey one-year estimates; OMAS Adult Dashboard; Ohio Health Issues Poll

Figure 2.f.5. **Uninsured, children.** Percent of children uninsured (health insurance) (2009-2015)



Source: U.S. Census Bureau, American Community Survey one-year estimates (ages 0-17); Ohio Medicaid Assessment Survey (ages 0-17)

Figure 2.f.6. **Uninsured adults, by county**. Percent of adults ages 18-64 uninsured (health insurance) (2014)



* Holmes County's percentage uninsured is an outlier at 28.1%, almost double that of the next-highest county percentage (15.6%, Adams County).

Source Small Area Health Insurance Estimates, U.S. Census Bureau

Access to behavioral health key findings

U.S. comparison. Ohio performed worse than the U.S. on two of the three behavioral health metrics — percent of adults ages 18 and older with past year mental illness who reported unmet need and percent ages 12 and older needing but not receiving treatment for illicit drug use in the past year.

Figure 2.f.7. **Access to behavioral health**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Unmet need, mental health. Percent of adults ages 18 and older with past year mental illness who reported perceived need for treatment/counseling was not received	2009-2011, 2012-2014		20.4%	21.3%		20.3% (2012-2014)
Youth with depression who did not receive mental health services. Percent of youth with major depressive episode who did not receive any mental health treatment	2010-2011, 2012-2013		66.1%	**64%**		64.1% (2014)
Unmet need, illicit drug use treatment. Percent ages 12 and older needing but not receiving treatment for illicit drug use in the past year *	2011-2012, 2012-2013		2.6%	2.7%		2.4% (2012-2013)

Healthy People 2020 key
(based on most recent year)
- Ohio met or exceeded target
- Ohio did not meet target

See appendix for targets

U.S. comparison key
(based on most recent year)
- Bold — Ohio is better than or same as U.S.
- Ohio is worse than U.S.

✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

* Note that for unmet need for mental health treatment and youth with depression who did not receive mental health services, the denominator is those with an identified mental health need, while the numerator is those with a need who did not receive services. Therefore, these data convey the percent of individuals with an identified mental health need who needed but did not receive treatment. On the other hand, unmet need for illicit drug use treatment uses all survey respondents as the denominator and those needing treatment for illicit drugs but not receiving treatment as the numerator (the percent of all survey respondents who needed but did not receive treatment).

Oral and vision care key findings

U.S. comparison. The metric for adults receiving dental care in the past 12 months was the only oral and vision care metric for which there was U.S. comparison data. Ohio performed better than the U.S. on this metric.

Notable changes. Notable changes for oral and vision care include:
- The percent of children ages three to 17 with unmet dental care needs decreased from 5.4 percent in 2012 to 4.6 percent in 2015, a 14.8 percent decrease.
- The percent of adults ages 19 years and older with unmet vision care needs decreased from 12.8 percent in 2012 to 11 percent in 2015, a 14.1 percent decrease.

Disparities. Highlighted disparities include:
- Children who are Hispanic or black/African-American were more likely to experience unmet dental care needs when compared to Ohioans who identified as white or other.
- Children living in suburban areas were least likely to experience unmet dental care needs, while children living in rural non-Appalachian and metropolitan areas were most likely to experience unmet dental care needs.

Figure 2.f.8. **Oral and vision care**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Received dental care in past year, adults. Percent of adults who visited a dentist or dental clinic within the past 12 months	2010, 2012, 2014	71.5%	67.6%	**65.3%**		64.4% (2014)
Unmet dental care needs, children. Percent of children ages 3 to 17 with unmet dental care needs	2010, 2012, 2015	6.8%	5.4%	4.6%	✔	N/A
Unmet vision care needs, adults. Percent of adults ages 19 years and older with unmet vision care needs	2010, 2012, 2015	12.8%	12.8%	11.0%	✔	N/A
Unmet vision care needs, children. Percent of children ages 5 to 17 with unmet vision care needs	2012, 2015		2.8%	3.0%		N/A

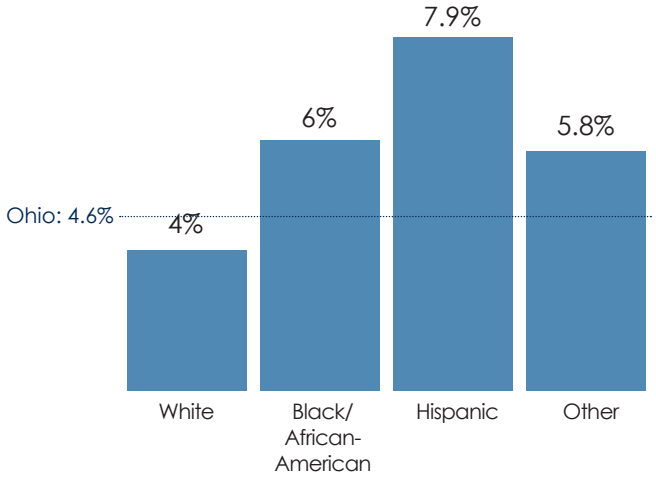
Healthy People 2020 key
(based on most recent year)
- Ohio met or exceeded target
- Ohio did not meet target

See appendix for targets

U.S. comparison key
(based on most recent year)
- **Bold** Ohio is better than or same as U.S.
- Ohio is worse than U.S.

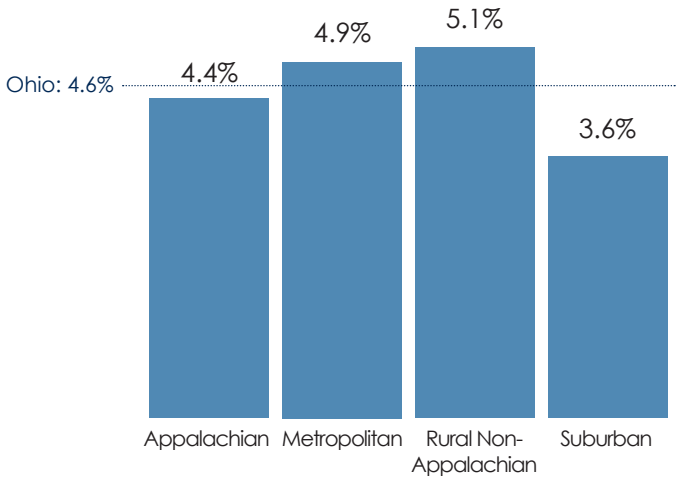
✔ Notable change
Data value increased or decreased 10 percent or more from Year 2 to most recent year

Figure 2.f.9. **Unmet dental care needs, children, by race/ethnicity.** Percent of children ages three and older with unmet dental care needs (2015)



Source: Ohio Medicaid Assessment Survey

Figure 2.f.10. **Unmet dental care needs, children, by county type.** Percent of children ages three and older with unmet dental care needs (2015)



Source: Ohio Medicaid Assessment Survey

Healthcare workforce key findings

U.S. comparison. Ohio performed better than the U.S. on almost all workforce metrics, with the exception of the percent of Ohioans who live in areas underserved for dental care.

Notable changes. Notable changes for workforce include:
- The percent of Ohioans who live in areas underserved for primary care as defined by the ratio of population to primary care physicians increased 13.4 percent, from 28.3 percent in 2014 to 32.1 percent in 2016.
- The ratio of population to mental health providers decreased from 716:1 in 2014 to 640:1 in 2015, a 10.6 percent improvement.
- The ratio of population to primary care providers other than physicians decreased from 1,888:1 in 2014 to 1,665:1 in 2015, an 11.8 percent improvement.

Disparities. Highlighted disparities include:
- Appalachian and rural, non-Appalachian counties had the highest ratios of the population to primary care physicians, dentists and mental health providers indicating potential for greater access challenges in these counties.
- Top performing counties with the lowest ratios included:
  - Delaware, Cuyahoga, Gallia and Hamilton counties for ratio of the population to primary care physicians
  - Cuyahoga, Franklin, Greene and Mahoning counties for ratio of the population to dentists
  - Cuyahoga, Wayne, Athens and Hamilton counties for ratio of the population to mental health providers
- Counties with the highest ratios included:
  - Morgan, Vinton, Monroe and Meigs for ratio of the population to primary care physicians
  - Morrow, Harrison, Morgan and Brown counties for ratio of the population to dentists
  - Vinton, Holmes, Hardin and Monroe counties for ratio of the population to mental health providers

Figure 2.f.11. **Healthcare workforce**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Underserved by primary care physicians. Percent of Ohioans who live in areas underserved for primary care as defined by ratio of population to primary care physicians	2014, 2016		28.3%	**32.1%**	✔	41.8% (2016)
Underserved by dentists. Percent of Ohioans who live in areas underserved for dental care as defined by ratio of population to dentists	2014, 2016		61%	61.8%		60.6% (2016)
Underserved by psychiatrists. Percent of Ohioans who live in areas underserved for mental health care as defined by ratio of population to psychiatrists	2014, 2016		43.4%	**47.1%**		52.3% (2016)
Primary care physicians. Ratio of population to primary care physicians	2011, 2012, 2013	1,332:1	1,336:1	**1,300:1**		1,990:1 (2013)
Dentists. Ratio of population to dentists	2012, 2013, 2014	1,789:1	1,746:1	**1,710:1**		2,590:1 (2014)
Mental health providers. Ratio of population to mental health providers including psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health care	2013, 2014, 2015	1,023:1	716:1	**640:1**	✔	1,060:1 (2015)
Other primary care providers. Ratio of population to primary care providers other than physicians. Other primary care providers include nurse practitioners (NPs), physician assistants (PAs), and clinical nurse specialists	2013, 2014, 2015	2,141:1	1,888:1	1,665:1	✔	N/A

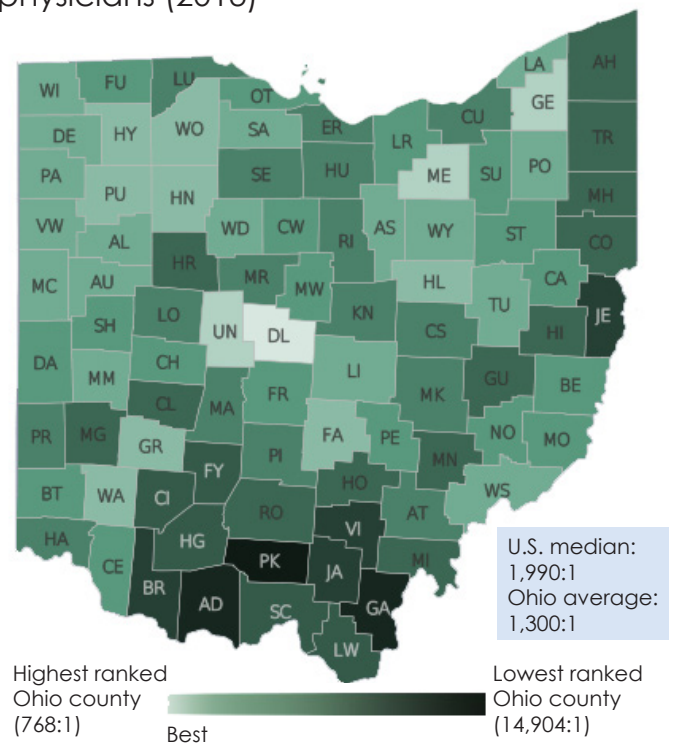
Healthy People 2020 key
(based on most recent year)
- Ohio met or exceeded target
- Ohio did not meet target

See appendix for targets

U.S. comparison key
(based on most recent year)
- **Bold** Ohio is better than or same as U.S.
- Ohio is worse than U.S.

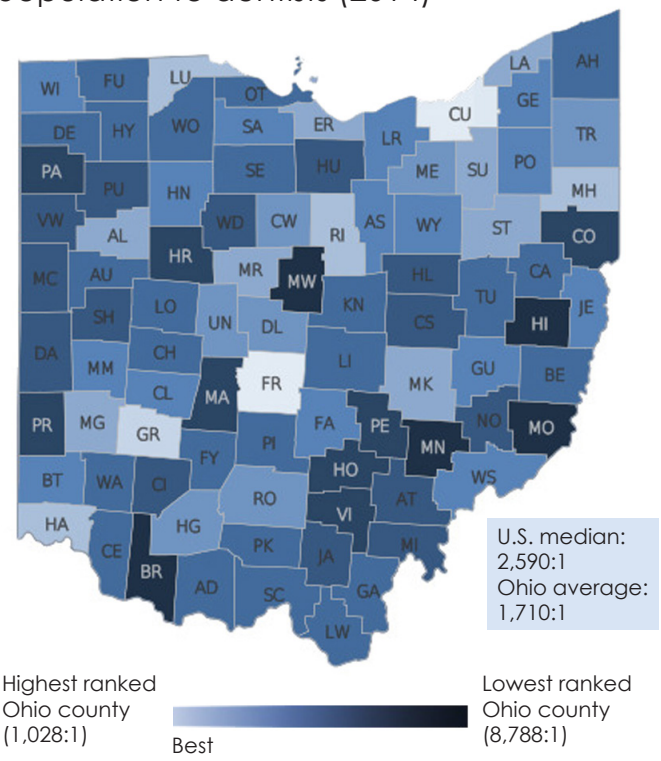
✔ Notable change
Data value increased or decreased 10 percent or more from Year 2 to most recent year

Figure 2.f.12. **Primary care physicians, by county.** Ratio of population to primary care physicians (2013)



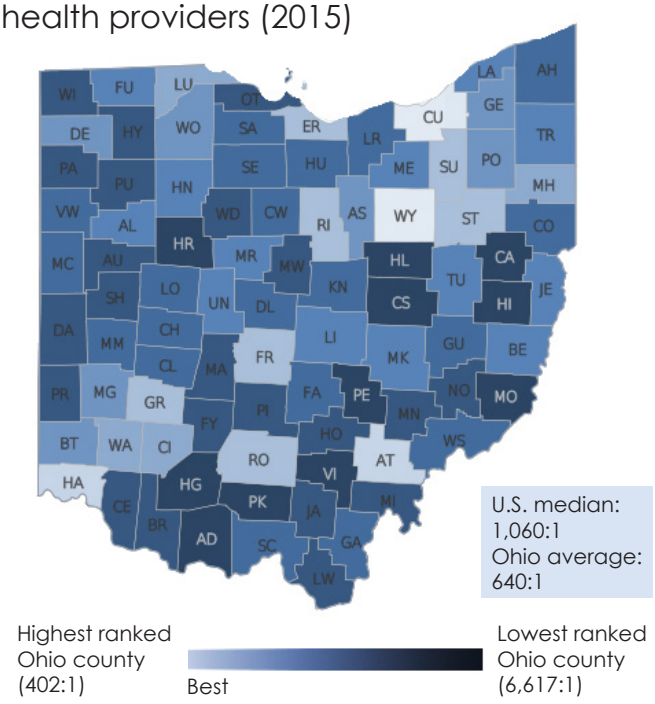
Source: 2016 County Health Rankings, based on 2013 data

Figure 2.f.13. **Dentists, by county.** Ratio of population to dentists (2014)



Source: 2016 County Health Rankings, based on 2014 data

Figure 2.f.14. **Mental health providers, by county.** Ratio of population to mental health providers (2015)



Source: 2016 County Health Rankings, based on 2015 data

A closer look

For more information about Ohio's primary care workforce, see ODH report: Ohio statewide primary care needs assessment: 2015-2016 [link to be provided once posted]

PUBLIC HEALTH AND PREVENTION DATA PROFILE

This section describes the status of Ohio's governmental public health infrastructure in two areas:
- Public health workforce and accreditation
- Public health funding

It also presents health outcomes in two areas addressed by the public health system:
- Communicable disease control
- Health promotion and prevention

The data in this section were gathered through existing population-level surveys, administrative data and public health surveillance systems.

Public health and prevention data highlights

U.S. comparison. Of the 11 metrics in this section with comparable U.S. data, Ohio performed worse than the U.S. on eight. Ohio's rates were markedly worse than the U.S. for breastfeeding and female HPV vaccinations. Ohio's public health workforce and funding levels were lower than those for the U.S. overall.

Healthy People 2020. Ohio met or exceeded two of the seven Healthy People 2020 targets in this section—local health department accreditation and safe sleep for infants.

Notable changes. Ohio made progress in recent years on a number of metrics, including notable increases in the percent of local health departments that are accredited, child immunizations and male HPV vaccination rates, and declines in the teen birth rate and HIV prevalence. Senior falls, however, increased and breastfeeding rates declined.

Disparities. HIV rates were much higher for black/African-American Ohioans than for any other racial or ethnic group in 2014.

Data gaps and limitations. There are a number of data gaps and limitations across public health and prevention metrics including:
- *State vs. local public health workforce and funding.* Ohio is one of many states that has a decentralized public health system, meaning that most of the public health workforce is at the local level. Other states have more centralized or mixed public health infrastructures. Combined state and local data on public health workforce and funding would therefore be helpful for making comparisons across states. Because of differences in methodology, however, this combined information is not available.
- *HIV prevalence.* HIV prevalence data reflect the number of people who are aware of their HIV status and therefore underestimates the actual prevalence. Because HIV testing rates vary by state, the comparison between Ohio's rate and the U.S. or other states should be interpreted with caution.

Public health workforce and accreditation key findings

U.S. comparison. Ohio's state-level public health workforce was less than one-third the size of the U.S. state-level public health workforce (per 100,000 population). A similar comparison for local health departments is not available. It is important to note that Ohio has a decentralized public health system, meaning that most of the public health workforce is at the local level.

Healthy People 2020. Ohio exceeded the Healthy People 2020 target for local health department accreditation. (Note that the target is quite low, 3.7 percent of local health departments, because accreditation is a new process; the U.S. baseline was 1.7 percent in 2014.)

Notable changes. The percent of local health departments that are accredited more than tripled from 3.2 percent in 2014 to 10 percent in 2016.

Figure 2.g.1. **Public health workforce and accreditation**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
State public health workforce. Number of state public health agency staff full-time equivalents (FTEs) per 100,000 population	2010, 2012		10.4	9.9		30.6 (2012)
Local public health workforce. Median number of local health department FTEs per 100,000 population	2010, 2013		39.5	36.6		N/A
Accreditation of local health departments. Percent of health departments that have received accreditation ◉	2014, May 2016		3.2%	10.0%	✔	N/A

Healthy People 2020 key
(based on most recent year)
◉ Ohio met or exceeded target
ⓧ Ohio did not meet target
See appendix for targets

U.S. comparison key
(based on most recent year)
Bold Ohio is better than or same as U.S.
Ohio is worse than U.S.

✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

Public health funding key findings

U.S. comparison. Per capita public health funding at both the state and local levels was lower in Ohio than for the U.S. overall.

Notable changes. State public health funding per capita rose 11 percent from $14.17 in 2013 to $15.68 in 2014.

Figure 2.g.2. **Public health funding**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
State public health funding per capita. State public health agency funding per capita	2012, 2013, 2014	$14.16	$14.17	$15.68	✔	$20 (2015)
Local public health funding per capita. Per capita median of total annual expenditures for local health departments	2010, 2013		$32	$31		$43 (2013)

Healthy People 2020 key
(based on most recent year)
◉ Ohio met or exceeded target
ⓧ Ohio did not meet target
See appendix for targets

U.S. comparison key
(based on most recent year)
Bold Ohio funding is higher than or same as U.S.
Ohio funding is lower than U.S.

✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

Communicable disease control key findings

U.S. comparison. Ohio performed worse than the U.S. for three of the five metrics in this section. Strengths included lower HIV prevalence and higher HPV vaccination rates for male adolescents, compared to the U.S. For female adolescents, however, Ohio's HPV vaccination rate was 13 percent below the U.S. rate.

Healthy People 2020. Ohio has not yet met the Healthy People 2020 target for child immunizations and is also well below the targets for both male and female HPV vaccination rates.

Notable changes. Ohio saw progress on two immunization metrics:
- The percent of young children up-to-date on immunizations increased 10 percent, from 61.7 percent in 2013 to 68.1 percent in 2014.
- The male HPV vaccination rate increased 59 percent from 14.7 percent in 2013 to 23.3 percent in 2014.

Disparities. Disparities by race and ethnicity and gender were present across HIV rates:
- HIV rates were much higher for black/African-American Ohioans than for any other racial/ethnic group in 2014.
- HIV rates were also four times higher among males than females in 2014.

Figure 2.g.3. **Communicable disease control**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Chlamydia. Chlamydia rate per 100,000 population	2011, 2012, 2013	456	460	460		447 (2013)
HIV prevalence. Rate of adolescents and adults aged 13 years and over living with HIV, per 100,000 population	2012, 2013, 2014	169.4	178.4	**186.4**		295.1 (2013)
Child immunization. Average percentage of children ages 19 to 35 months who have received these individual vaccinations: four or more doses of DTP, three or more doses of poliovirus vaccine, one or more doses of any measles-containing vaccine, and three or more doses of HepB vaccine (x)	2012, 2013, 2014	66.8%	61.7%	68.1%	✔	71.6% (2014)
HPV vaccination rate (female). Coverage among female adolescents 13 through 17 years of age (received ≥3 doses) (x)	2012, 2013, 2014	31.9%	35.0%	35.2%		39.7% (2014)
HPV vaccination rate (male). Coverage among male adolescents 13 through 17 years of age (received ≥3 doses) (x)	2013, 2014		14.7%	**23.3%**	✔	21.6% (2014)

Healthy People 2020 key
(based on most recent year)
- Ohio met or exceeded target
- Ohio did not meet target

See appendix for targets

U.S. comparison key
(based on most recent year)
- **Bold** Ohio is better than or same as U.S.
- Ohio is worse than U.S.

✔ Notable change
Data value increased or decreased 10 percent or more from Year 2 to most recent year

Figure 2.g.4. **HIV prevalence, by race/ethnicity.** Rate of adolescents and adults living with HIV, per 100,000 population (2014)

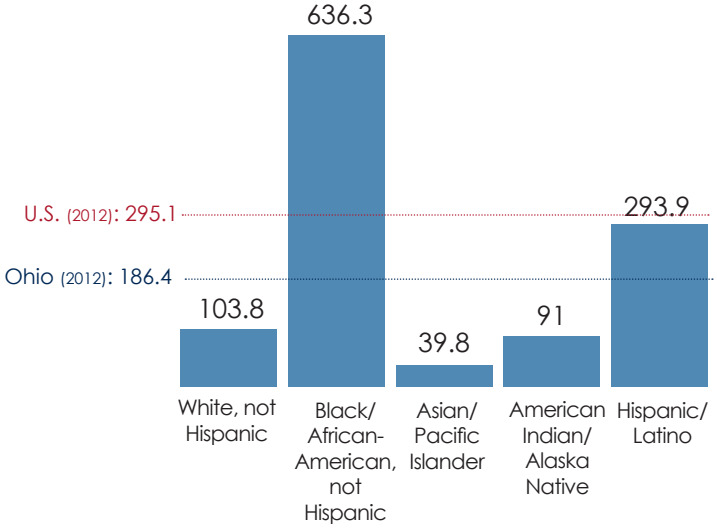
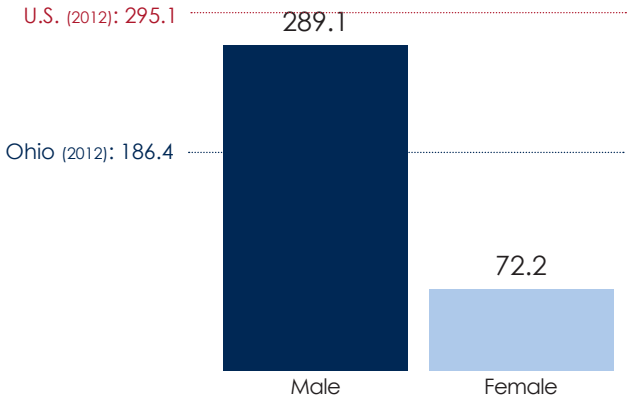


Figure 2.g.5. **HIV prevalence, by sex.** Rate of adolescents and adults living with HIV, per 100,000 population (2014)



Source: Ohio Department of Health HIV/AIDS Surveillance Program (2014)

Source: Ohio Department of Health HIV/AIDS Surveillance Program (2014)

Health promotion and prevention key findings

U.S. comparison. Ohio performed worse than the U.S. for four of five metrics in this section. Ohio's rate of breastfeeding at six months of age was 15 percent worse than the U.S. rate.

Healthy People 2020. In 2010, Ohio exceeded the Healthy People 2020 target for safe sleep for infants. However, Ohio remains below the Healthy People 2020 targets for seat belt use and the percent of infants who are breastfed at six months of age.

Notable changes. There were several metrics for which notable changes were identified:
- The teen birth rate declined steadily from 2011 to 2014, falling 15.8 percent from 2012 to 2014.
- The percent of infants who were breastfed at six months declined, falling to 42.1 percent in 2011.
- The percent of older adults who had fallen within the past 12 months increased 12.7 percent from 26.7 percent in 2012 to 30.1 percent in 2014.

Figure 2.g.6. **Health promotion and prevention**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Falls among older adults. Percent of adults age 65 and older who report having had a fall within the last 12 months	2012, 2014		26.7%	30.1%	✔	28.7% (2014)
Seat belt use. Percent of front seat occupants using a seat belt (x)	2012, 2013, 2014	82.0%	84.5%	85.0%		87% (2014)
Teen birth rate. Number of births per 1,000 female population ages 15-19	2011, 2012, 2014	31.5	29.8	25.1	✔	24.2 (2014)
Safe sleep. Percent of infants most often laid on his or her back to sleep (o)	2008, 2009, 2010	72%	71.7%	**76.0%**		71.7% (2010)
Breastfeeding at six months. Percent of infants who are breastfed at 6 months of age (x)	2009, 2010, 2011	39.5%	48.1%	42.1%	✔	49.4% (2011)

Healthy People 2020 key
(based on most recent year)
(o) Ohio met or exceeded target
(x) Ohio did not meet target
See appendix for targets

U.S. comparison key
(based on most recent year)
Bold Ohio is better than or same as U.S.
Ohio is worse than U.S.

✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

SOCIAL AND ECONOMIC ENVIRONMENT DATA PROFILE

Using data from the U.S. Census Bureau and other government agencies, as well as population-level surveys, this section describes the following key social and economic factors impacting the health of Ohioans:

- Education
- Employment and poverty
- Family and social support
- Trauma, toxic stress and violence

Social and economic environment data highlights

U.S. comparison. Ohio's performance on social and economic factors was mixed. Ohio performed better than or the same as the U.S. on 10 metrics and worse than the U.S. on seven.

Healthy People 2020. Ohio exceeded two of the four Healthy People 2020 targets in this section. Set by the U.S. Department of Health and Human Services, these targets provide benchmarks for gauging progress toward improved health outcomes by the year 2020.

Notable changes. There were several metrics in this section for which notable changes were identified in recent years.

- Unemployment and labor force participation rates were analyzed between 1990 and 2015. While the unemployment rates for Ohio and the U.S. overall have returned to pre-recession levels, labor force participation rates have continued to fall.
- The homicide mortality rate fell by nearly 12 percent between 2013 and 2014, decreasing from 5.9 deaths per 100,000 population in 2013 to 5.2 in 2014.

Disparities. Considerable disparities were identified in this section, including the following:

- African-American children had a much lower rate of fourth grade reading proficiency compared to all other racial and ethnic groups in Ohio.
- Rates of child poverty varied widely across Ohio with a 33 percentage point difference between the county with the highest rate (Gallia) and the county with the lowest rate (Delaware).
- Over 40 percent of children living below the federal poverty level (FPL) had experienced two or more adverse childhood experiences, compared to eight percent of children in the highest income group.

Data gaps and limitations. There are several data gaps and limitations across social and economic environment metrics including:

- *Data lag.* The intimate partner violence metric is derived from data collected via the National Intimate Partner and Sexual Violence Survey (NISVS). Although this survey was conducted again more recently, the data was reported in a different way which was not useful for the SHA. Also, the data used for the adverse childhood experiences metric was collected in the 2011-2012 National Survey of Children's Health. Data from the next iteration of this survey will not be released until 2017.
- *Underemployment.* The unemployment metric does not give an indication of the rate of underemployment in Ohio. Underemployment refers to when individuals are employed only part-time in spite of having a preference to work full-time or are unable to find employment that adequately meets their economic needs or matches their qualifications.

Education key findings

U.S. comparison. Ohio performed better than the U.S. overall on the two metrics in this section for which there was comparable U.S. data – fourth grade reading proficiency and high school graduation rate.

Healthy People 2020. Ohio exceeded the Healthy People 2020 target for fourth grade reading proficiency but remains slightly below the high school graduation target rate of 87 percent.

Disparities. Highlighted disparities are as follows:
- The data showed significant racial disparities in fourth grade reading proficiency. In 2015, 16 percent of African-American fourth graders were proficient in reading based on a national standardized test, compared to 38 percent of Ohio fourth graders overall.
- Fourth graders who were not economically disadvantaged were more than twice as likely to be proficient in reading as were lower-income children.

Figure 2.h.1. **Education**

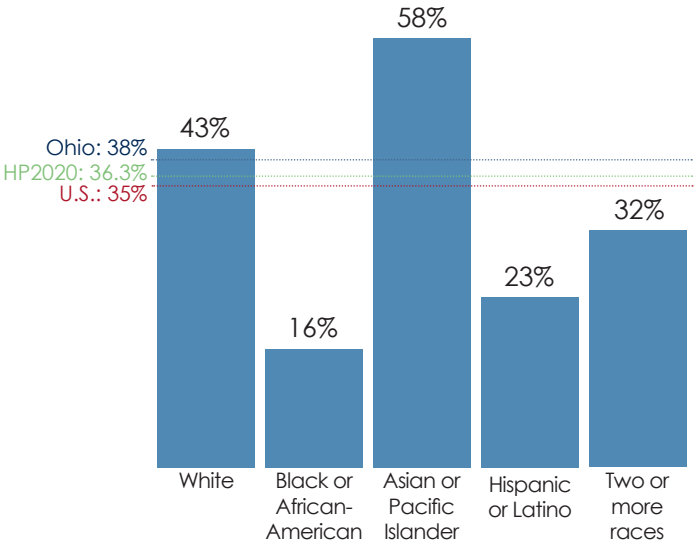
Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Fourth grade reading. Percent of fourth graders proficient in reading ◉	2011, 2013, 2015	34%	37%	**38%**		35% (2015)
High school graduation rate. Percent of incoming 9th graders who graduate in 4 years from a high school with a regular degree, as calculated using the AFGR (Averaged Freshman Graduation Rate) x	2010-2011, 2011-2012, 2012-2013	82%	84%	**85%**		82% (2012-2013)
Kindergarten Readiness Assessment-Literacy (KRA-L): Band 3. Percent of children ready for kindergarten, as measured by percent of children in Band 3 (This indicates that children should do well with reading instruction and may need to be assessed for enrichment programs.)	2011-2012, 2012-2013, 2013-2014 school years	40.8%	39.7%	38.7%		N/A
Kindergarten Readiness Assessment-Literacy (KRA-L): Band 2. Percent of children scoring in Band 2 (This indicates a need to monitor children and assess them for targeted reading instruction.)	2011-2012, 2012-2013, 2013-2014 school years	39.9%	40.1%	40.1%		N/A
Kindergarten Readiness Assessment-Literacy (KRA-L): Band 1. Percent of children scoring in Band 1 (This indicates children need immediate interventions in language and literacy skills and may need to be assessed broadly for intense instruction.)	2011-2012, 2012-2013, 2013-2014 school years	19.3%	20.1%	21.1%		N/A

Healthy People 2020 key
(based on most recent year)
◉ Ohio met or exceeded target
x Ohio did not meet target
See appendix for targets

U.S. comparison key
(based on most recent year)
Bold Ohio is better than or same as U.S.
Ohio is worse than U.S.

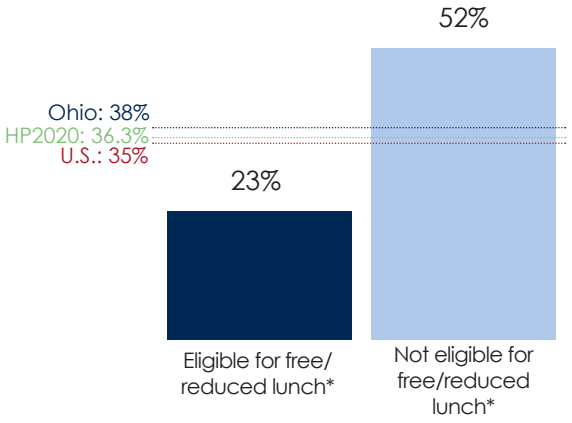
✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

Figure 2.h.2. **Fourth grade reading, by race/ethnicity.** Percent of fourth graders proficient in reading (2015)



Source: U.S. Department of Education, Institute of Education Services, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2015 Reading Assessments as compiled by Kids Count Data Center

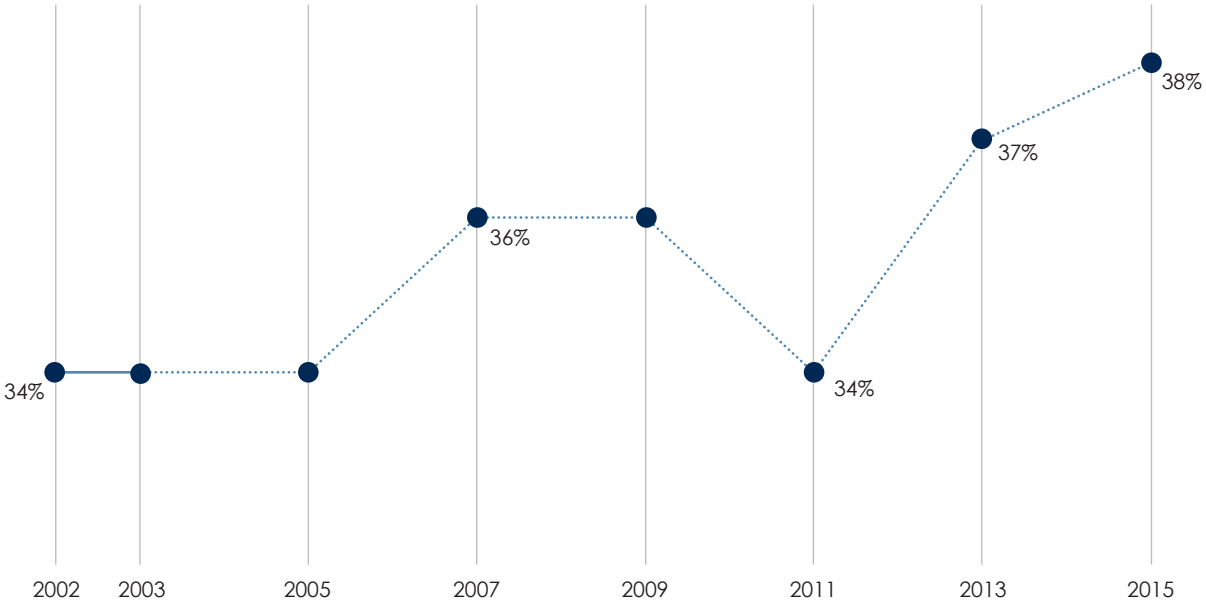
Figure 2.h.3. **Fourth grade reading, by income.** Percent of fourth graders proficient in reading (2015)



***Eligibility for free/reduced lunch is an indicator of economic disadvantage

Source: U.S. Department of Education, Institute of Education Services, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2015 Reading Assessments as compiled by Kids Count Data Center

Figure 2.h.4. **Fourth grade reading.** Percent of fourth graders proficient in reading (2002-2015)



Source: U.S. Department of Education, Institute of Education Services, National Center for Education Statistics, National Assessment of Educational Progress (NAEP) various years, as compiled by Kids Count Data Center

Employment and poverty key findings

U.S. comparison. Ohio performed better than the U.S. overall on three of the seven metrics in this section, with lower rates of adult poverty, unemployment and low-income working families with children. Ohio performed worse than the U.S. on all other metrics — child poverty, labor force participation, median household income and income inequality.

Notable changes. Notable changes regarding employment and poverty include:
- Between 1990 and 2015, unemployment reached its lowest point in 2000 at four percent for both Ohio and the U.S. overall. The unemployment rates for both peaked during the Great Recession in 2009 and 2010 and have come back down since. Ohio's annual average unemployment rate decreased 15.5 percent between 2014 and 2015, dropping from 5.8 percent to 4.9 percent.
- After falling during the recession, median household incomes for Ohio and the U.S. have continually increased since 2010.
- Labor force participation rates have been steadily declining in both Ohio and the U.S. and have not rebounded after the recession. Between 1990 and 2015, both were at their lowest in 2015. The labor force participation rate is the percentage of the population that is either employed or unemployed (i.e., actively seeking work).[8]

Disparities. The following disparities were identified in this section:
- Child poverty rates varied by race and ethnicity. The highest rates were observed among Hispanic/Latino and African-American children.
- Child poverty rates also varied geographically across Ohio with a 33 percentage point difference between the county with the highest rate (Gallia) and the county with the lowest rate (Delaware). Rates were generally highest in the southern portion of the state; Gallia, Vinton, Scioto, Meigs, Adams and Pike counties had the highest rates in Ohio.
- There was also wide variability in unemployment rates by county. The county with the highest unemployment (Monroe) had nearly triple the rate of the lowest county (Mercer).

Figure 2.h.5. **Employment and poverty**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Child poverty. Percent of persons under age 18 who live in households at or below the poverty threshold (<100% FPG)	2012, 2013, 2014	23.8%	22.7%	22.9%		21.7% (2014)
Adult poverty. Percent of persons age 18+ who live in households at or below the poverty threshold (<100% FPG)	2012, 2013, 2014	23.4%	23.7%	**23.2%**		24.1% (2014)
Unemployment. Annual average unemployment rate, ages 16 and older	2013, 2014, 2015	7.5%	5.8%	**4.9%**	✔	6.2% (2015)
Labor force participation. Annual average civilian labor force participation rate, ages 16 years and over	2013, 2014, 2015	63.1%	62.7%	62.5%		62.7% (2015)
Median houshold income. Median household income for Ohioans, inflation adjusted	2012, 2013, 2014	$46,829	$48,081	$49,308		$53,657 (2014)
Income inequality. Ratio of average household income for the richest 20% of households to the poorest 20% of households (income gap ratio)	2009-2013, 2010-2014		4.7	4.8		4.7 (2010-2014)
Low-income working families with children. The share of families that met three criteria: (1) the family income was less than twice the federal poverty level; (2) at least one parent worked 50 or more weeks during the previous year; (3) there was at least one "own child" under age 18 in the family	2012, 2013, 2014	21%	22%	**22%**		23% (2014)

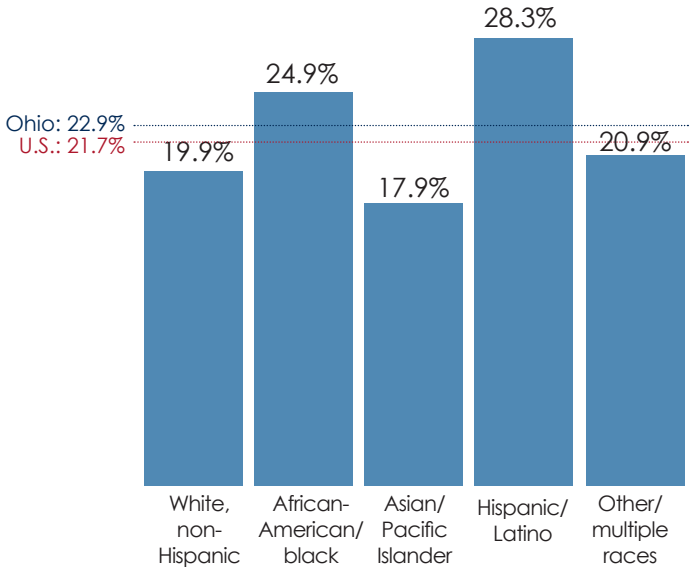
Healthy People 2020 key
(based on most recent year)
- Ohio met or exceeded target
- Ohio did not meet target

See appendix for targets

U.S. comparison key
(based on most recent year)
- **Bold** Ohio is better than or same as U.S.
- Ohio is worse than U.S.

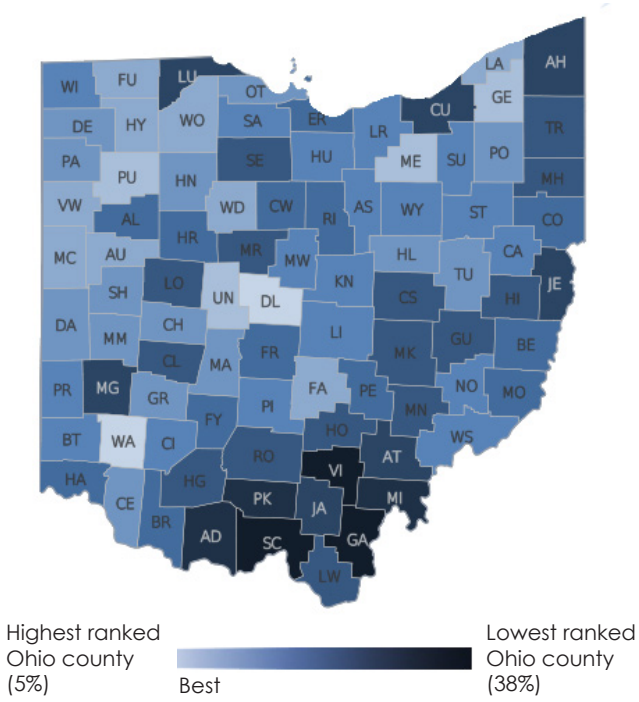
✔ Notable change
Data value increased or decreased 10 percent or more from Year 2 to most recent year

Figure 2.h.6. **Child poverty, by race/ethnicity.** Percent of persons under age 18 who live in households at or below the poverty threshold (2014)



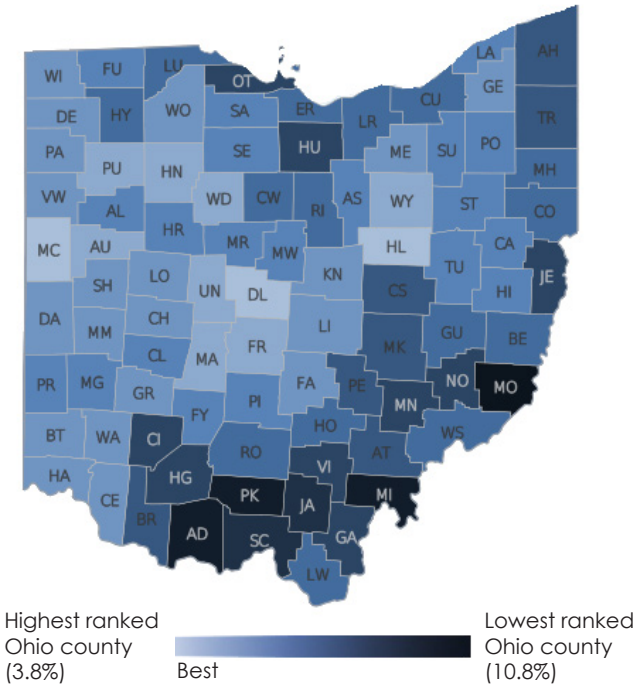
Source: American Community Survey (ACS), as compiled by the Robert Wood Johnson Foundation Data Hub (2014)

Figure 2.h.7. **Child poverty, by county.** Percent of persons under age 18 who live in households at or below the poverty threshold (2014)



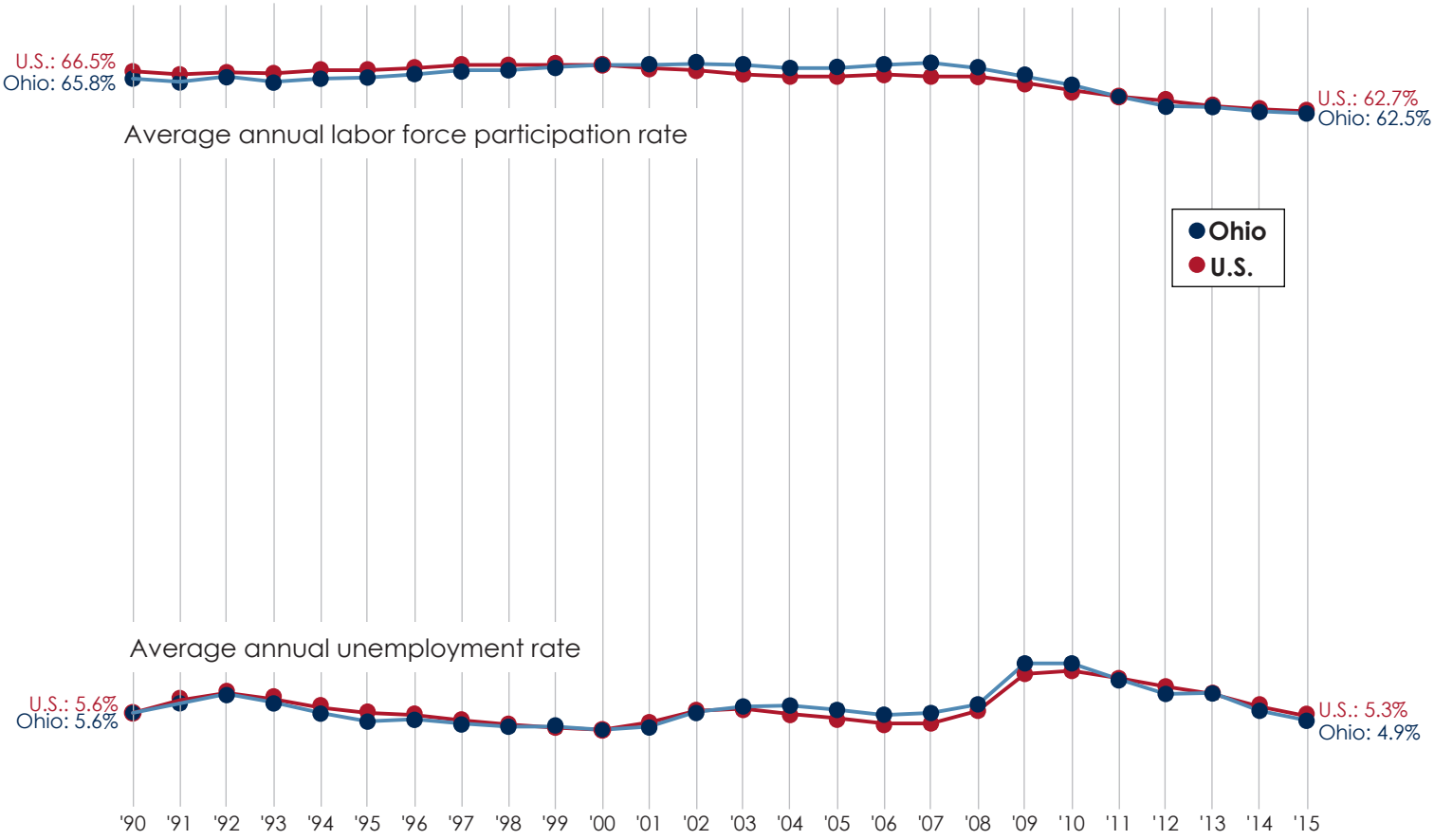
Source: 2016 County Health Rankings, based on 2014 data

Figure 2.h.8. **Unemployment, by county.** Annual average unemployment rate, ages 16 years and over (2014)



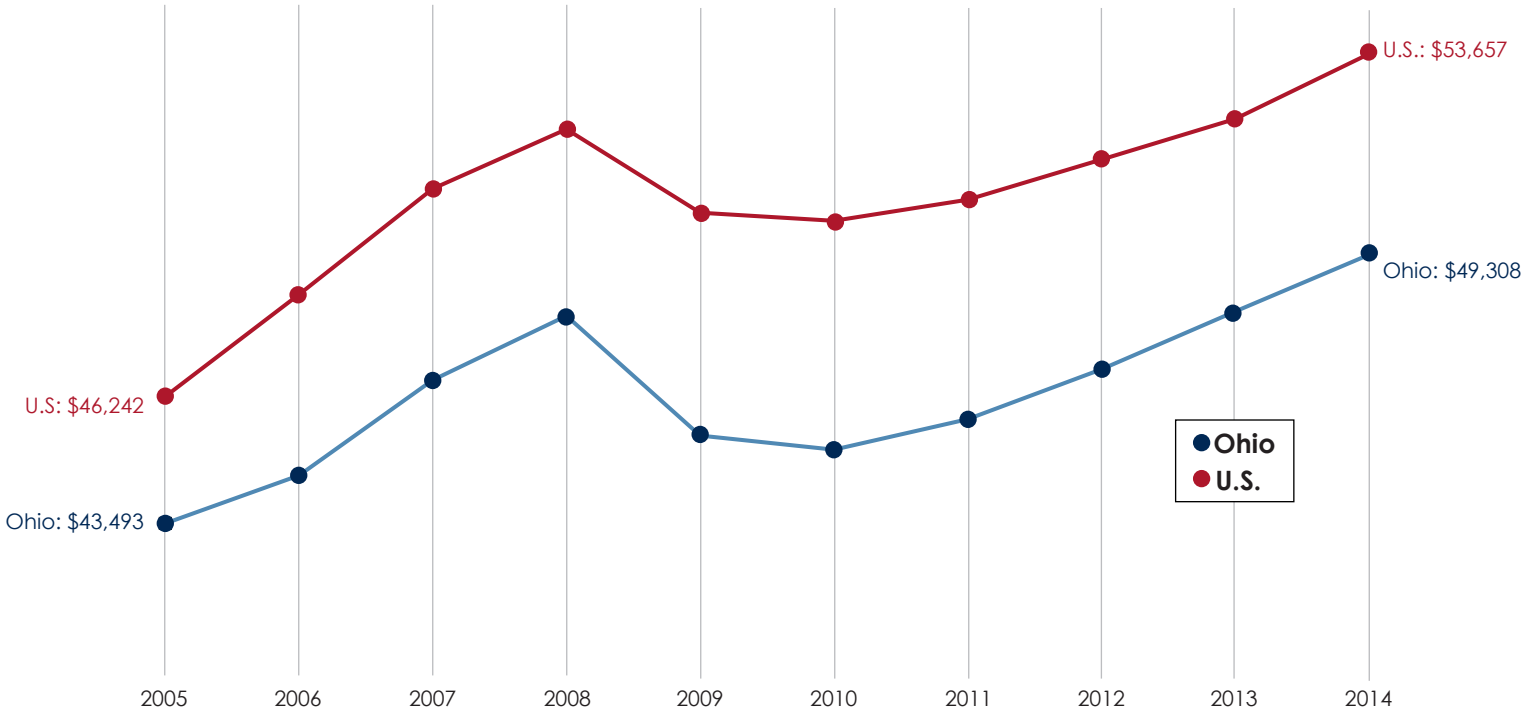
Source: 2016 County Health Rankings, based on 2014 data

Figure 2.h.9. **Unemployment and labor force participation.** Annual average unemployment rate and civilian labor force participation rate, ages 16 years and over (1990-2015)



Source: U.S. Labor Force Statistics from the Current Population Survey; Ohio data from the BLS Local Area Unemployment Statistics

Figure 2.h.10. **Median household income.** Median household income for Ohio and the U.S., inflation adjusted (2005-2014)



Source: U.S. Census Bureau, American Community Survey, 1 year estimates (in inflation-adjusted dollars)

Family and social support key findings

U.S. comparison. Ohio performed better than the U.S. overall on one of the two metrics in this section. Ohio had a higher percent of children living in single-parent households than the U.S. overall, but the state performed better than the U.S. with regard to social associations (the number of membership associations per 100,000 population). The social associations metric is an indicator of social cohesion, which can benefit the health of a community.

Figure 2.h.11. **Family and social support**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Social associations. Number of membership associations per 10,000 population. Associations include membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, labor organizations, business organizations, and professional organizations	2012, 2013		11.5	**11.4**		9 (2013)
Children in single-parent households. Percent of children that live in a household headed by single parent	2012, 2013, 2014	36.9%	37.5%	38.5%		35.5% (2014)

Healthy People 2020 key
(based on most recent year)
- Ohio met or exceeded target
- Ohio did not meet target

See appendix for targets

U.S. comparison key
(based on most recent year)
- Bold: Ohio is better than or same as U.S.
- Ohio is worse than U.S.

✔ Notable change
Data value increased or decreased 10 percent or more from Year 2 to most recent year

Trauma, toxic stress and violence key findings

U.S. comparison. Performance on metrics was mixed. Ohio performed better than the U.S. in terms of violent crime and incarceration, but worse than the U.S. on homicide mortality and adverse childhood experiences. Rates of intimate partner violence and child abuse and neglect were the same as the U.S.

Healthy People 2020. Two metrics in this section have Healthy People 2020 targets. Ohio did better than the target for homicide mortality rate. However, Ohio was still above the Healthy People 2020 target for rate of child abuse and neglect.

Notable changes. Ohio's homicide mortality rate fell by nearly 12 percent between 2013 and 2014, decreasing from 5.9 deaths per 100,000 population in 2013 to 5.2 in 2014.

Disparities. Data showed considerable variation by race, ethnicity and income level in the percent of children having experienced two or more adverse childhood experiences, such as the death of a parent, having a parent serve time in jail, witnessing domestic violence or living with someone with a drug or alcohol problem.

- Non-Hispanic white children were the least likely of all racial groups to have experienced two or more adverse events.
- Over 40 percent of children living below the poverty level met this criterion compared to eight percent of children in the highest income group (400 percent FPL and above).

Figure 2.h.12. **Trauma, toxic stress and violence**

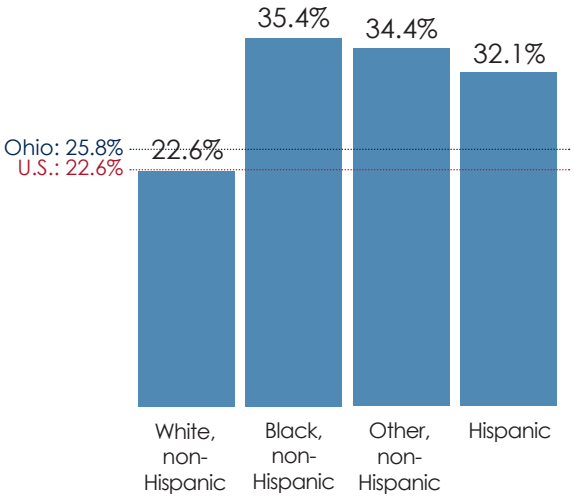
Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Violent crime. Violent crime rate — number of violent crimes reported per 100,000 population. Violent crimes are defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, forcible rape, robbery and aggravated assault	2011, 2012, 2013	299.7	299.7	**286.2**		367.9 (2013)
Homicide mortality rate. Homicide death rate per 100,000 population (age adjusted) ◉	2012, 2013, 2014	5.7	5.9	5.2	✔	5.1 (2014)
Intimate partner violence. Lifetime prevalence of rape, physical violence, and/or stalking by an intimate partner for women	2010			**35.6%**		35.6% (2010)
Incarceration. Imprisonment rate of sentenced prisoners under the jurisdiction of state or federal correctional authorities per 100,000 residents	2012, 2013, 2014	440	446	**444**		471 (2014)
Child abuse and neglect. Rate of child maltreatment victims per 1,000 children in population ⓧ	2012, 2013, 2014	11	10.4	**9.4**		9.4 (2014)
Adverse childhood experiences. Percent of children who have experienced two or more adverse experiences	2011-2012			25.8%		22.6% (2011-2012)

Healthy People 2020 key
(based on most recent year)
◉ Ohio met or exceeded target
ⓧ Ohio did not meet target
See appendix for targets

U.S. comparison key
(based on most recent year)
Bold Ohio is better than or same as U.S.
Ohio is worse than U.S.

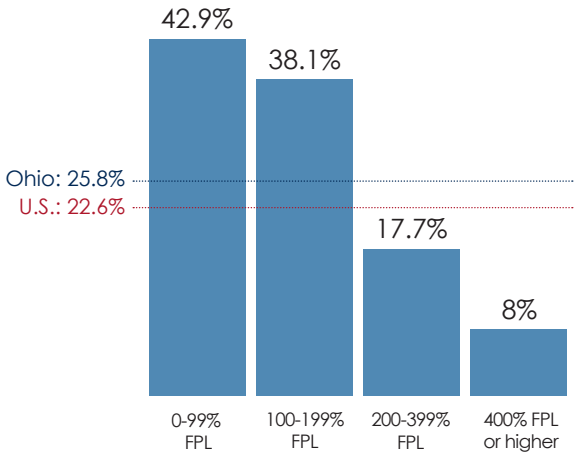
✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

Figure 2.h.13. **Adverse childhood experiences, by race/ethnicity.** Percent of children who have experienced two or more adverse experiences (2011-2012)



Source: National Survey of Children's Health (NSCH), as compiled by the Data Resource Center for Child and Adolescent Health (2011/2012)

Figure 2.h.14. **Adverse childhood experiences, by income.** Percent of children who have experienced two or more adverse experiences (2011-2012)



Source: National Survey of Children's Health (NSCH), as compiled by the Data Resource Center for Child and Adolescent Health (2011/2012)

PHYSICAL ENVIRONMENT DATA PROFILE

This section describes key health outcomes for Ohioans gathered through existing population-level surveys, census data and administrative data from government agencies for:

- Air, water and toxic substances
- Food access and insecurity
- Housing, built environment and physical activity access

Physical environment data highlights

U.S. comparison. Ohio had mixed performance compared to the U.S., measuring better on four metrics and worse on five. The most notable gap was in children exposed to secondhand smoke, where Ohio's rate was more than twice that of the U.S.

Healthy People 2020. Ohio's food insecurity rate was nearly three times higher than the Healthy People 2020 target. Set by the U.S. Department of Health and Human Services, these targets provide benchmarks for gauging progress toward improved health outcomes by the year 2020.

Notable changes. Among the nine metrics for which at least two years of data were available, three had notable changes:

- While Ohio children were exposed to secondhand smoke at twice the rate of the U.S. overall, the rate has declined by more than a third between 2003 and 2011/2012.
- The percent of population potentially exposed to drinking water exceeding a violation limit doubled from two to four percent.
- Healthy food access improved by 14 percent from 2006 to 2010.

Disparities. Disparities were present across several of the physical environment metrics. For example:

- Outdoor air quality varied widely across the state, with the worst air quality in eastern Ohio, particularly in counties along the border with West Virginia and Pennsylvania.
- Analysis by the Kirwan Institute showed that lead poisoning rates varied dramatically across the eight urban counties studied. Cuyahoga County had the highest number of census tracts where confirmed elevated blood lead levels (BLL, 5 ug/dL) exceeded a rate of 50 per 1,000 children under age six. In some cases, these census tracts neighbored other tracts where less than five children per 1,000 had confirmed elevated levels. Lucas and Mahoning counties also had areas where more than 50 per 1,000 children under six had confirmed elevated BLL. Summit County had the lowest levels of lead poisoning, with no tracts where more than 20 children under six per 1,000 had confirmed elevated BLL.
- The residential segregation dissimilarity index measures whether one group is distributed across census tracts in a metropolitan area in the same way as another group. A high value on the 100-point scale indicates the two groups live in different tracts. A value of 60 or higher is considered very high, indicating that 60 percent or more of the members of one group would need to move to a different tract in order for the two groups to be equally distributed. A score of 30 or below is considered low residential segregation. Of the seven Ohio metropolitan areas analyzed for black-white segregation, five had index scores over 60, indicating high levels of segregation between black and white residents. The other two areas, Akron and Canton-Massillon, were only a few points shy of 60 as well (59 and 56 respectively). Cleveland-Elyria had the highest residential segregation with a score of 72.

Data gaps and limitations. There are data gaps and limitations across physical environment metrics including:

- *Lead poisoning*. The lead poisoning metric is based on the number of children who were tested for elevated blood lead levels. Because testing is not universal, this metric does not represent an estimate for the total population. In 2014, 149,538 Ohio children were tested.
- *Transportation*. It is important to note the relationship between transportation and health, particularly as it impacts access to health care. However, there is a lack of state-level data that is comparable at the national level around transportation. As a result, there are no metrics in this data profile related to transportation.

Air, water and toxic substances key findings

U.S. comparison. Ohio performed better than the U.S. on metrics related to water quality, but performed poorly on metrics of air quality, children exposed to secondhand smoke and lead poisoning.

Notable changes. While Ohio children were exposed to secondhand smoke at twice the rate of the U.S. overall, the rate declined by more than two-thirds between 2003 and 2011/2012. The percent of population potentially exposed to drinking water exceeding a violation limit doubled from two to four percent.

Disparities. There were disparities across several metrics. For example:

- Outdoor air quality varied widely across the state, with the worst air quality in eastern Ohio, particularly along the border with West Virginia and Pennsylvania.
- Analysis by the Kirwan Institute showed that lead poisoning rates varied dramatically across the eight urban counties studied. Cuyahoga County had the highest number of census tracts where confirmed elevated blood lead levels (BLL, ≥ 5 ug/dL) exceeded a rate of 50 per 1,000 children under age six. In some cases, these census tracts neighbored other tracts where less than 5 children per 1,000 had confirmed elevated levels. Lucas and Mahoning counties also had areas where more than 50 per 1,000 children under six had confirmed elevated BLL. Summit County had the lowest levels of lead poisoning, with no tracts where more than 20 children under six per 1,000 had confirmed elevated BLL.

Figure 2.i.1. **Air, water and toxic substances**

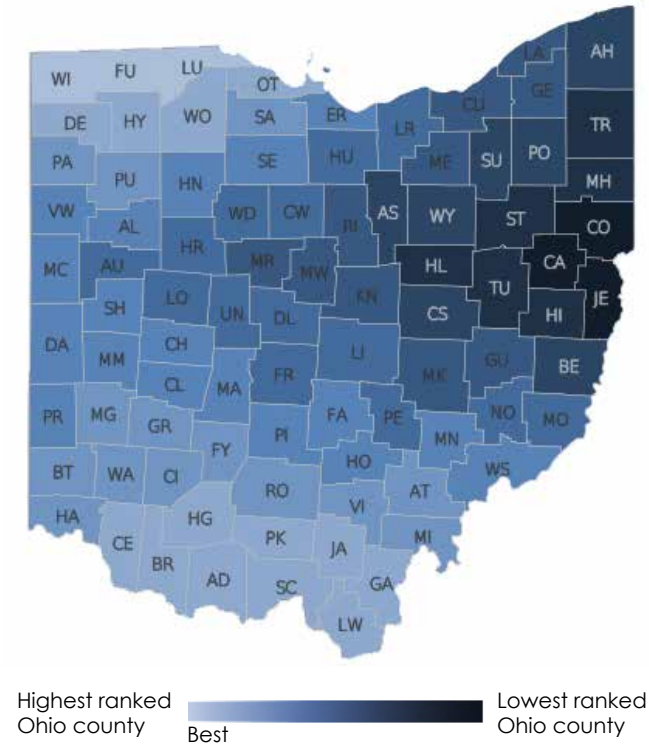
Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Drinking water violations. Percent of population potentially exposed to water exceeding a violation limit during the past year	2012, 2012-2013, 2013-2014	2.0%	2.0%	**4.0%**	✔	7.0% (2013-2014)
Fluoridated water. Percent of the population served by a community water system with optimally fluoridated water	2014			**92.6%**		74.7% (2014)
Outdoor air quality. Average exposure of the general public to particulate matter of 2.5 microns or less in size (PM2.5)	2008, 2011		13.4	13.5		11.4 (2011)
Children exposed to secondhand smoke. Percent of children who live in a home where someone uses tobacco or smokes inside the home	2003, 2007, 2011-2012	38.4%	16.3%	10.3%	✔	4.9% (2011-2012)
Lead poisoning. Percent of young children with elevated blood lead levels (BLL ≥ 5 ug/dL)	2012, 2013, 2014	7.3%	6.4%	6%		4.2% (2014)

Healthy People 2020 key
(based on most recent year)
◉ Ohio met or exceeded target
ⓧ Ohio did not meet target
See appendix for targets

U.S. comparison key
(based on most recent year)
Bold Ohio is better than or same as U.S.
Ohio is worse than U.S.

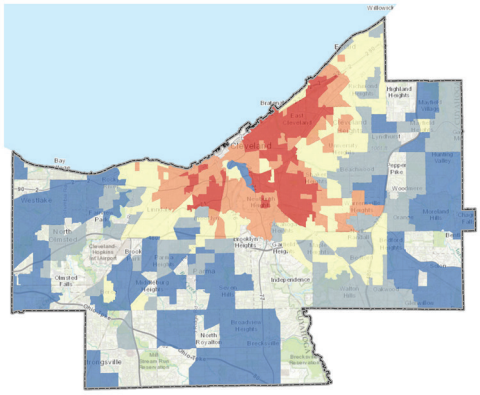
✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

Figure 2.i.2. **Air pollution — particulate matter, by Ohio county** (2011)

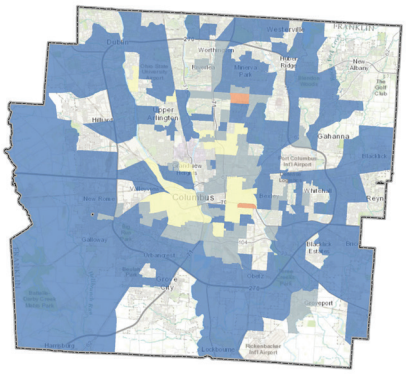


Source: 2016 County Health Rankings, based on 2011 data
Note: Counties are ranked on average daily density of fine particulate matter in micrograms per cubic meter

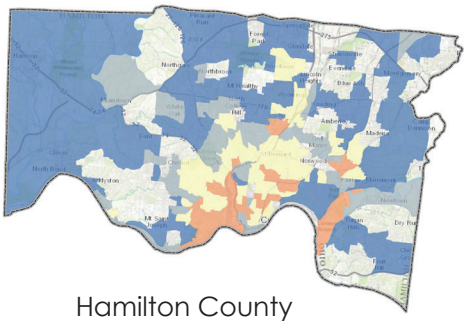
Figure 2.i.3. **Lead poisoning.** Confirmed elevated blood lead levels (≥ 5 ug/dL) per 1,000 children under 6, by census tract (2010-2014)



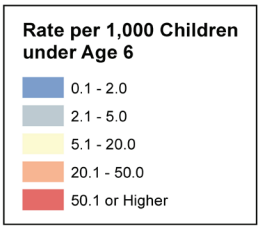
Cuyhoga County

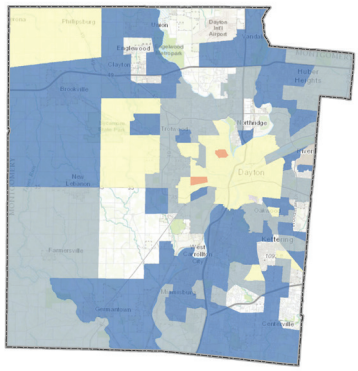


Franklin County

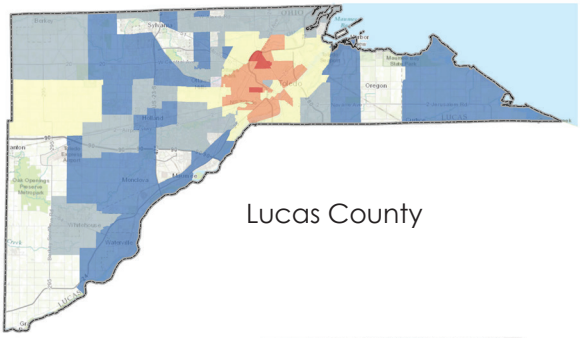


Hamilton County

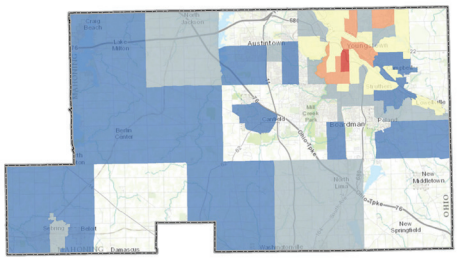




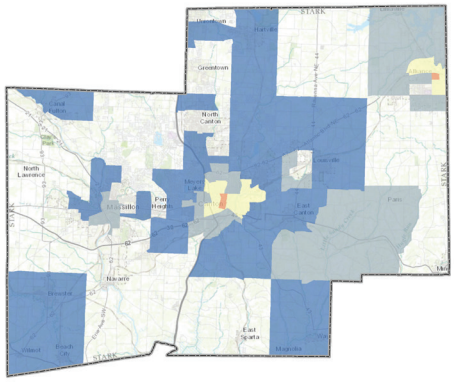
Montgomery County



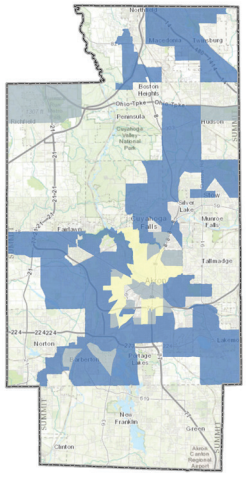
Lucas County



Mahoning County



Stark County



Summit County

Source: Lead test results data, Ohio Department of Health, 2010-2014, as compiled by the Kirwan Institute. Population of children under 6, American Fact Finder, U.S. Census, 5-year census tract estimates 2010-2014. For this analysis, test results were limited to venous-draw tests, as this is the most reliable blood lead level (BLL) test method. A positive test was defined following the current CDC and Ohio standard of 5 ug/dL. For children with multiple test results in the database, only the result with the highest BLL was used to avoid double-counting. Records were aggregated over 5 years to stabilize rates. Only census tracts with a nonzero rate are shown. (Note: This means of counting positives is the same as that used by ODH in updating the state's high-risk ZIP Codes.)

See **Appendix B** for larger maps.

Food access and insecurity key findings

U.S. comparison. Ohio had a higher percent of households that were food insecure than the U.S. overall.

Healthy People 2020. The percent of Ohio households that were food insecure (16.8 percent) was nearly three times the Healthy People 2020 goal of 6.0 percent of households.

Notable changes. Ohio's healthy food access improved by 14 percent from 2006 to 2010, but food insecurity had only changed slightly in the last three years of available data.

Figure 2.i.4. **Food access and insecurity**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Food insecurity. Percent of households that are food insecure ⓧ	2012, 2013, 2014	17.2%	16.9%	16.8%		15.4% (2014)
Healthy food access. Percent of population with limited access to healthy food, defined as the percent of low- income individuals (<200% FPG) living more than 10 miles from a grocery store in rural areas and more than 1 mile in non-rural areas	2006, 2010		7%	6%	✔	N/A

Healthy People 2020 key
(based on most recent year)
◉ Ohio met or exceeded target
ⓧ Ohio did not meet target
See appendix for targets

U.S. comparison key
(based on most recent year)
Bold Ohio is better than or same as U.S.
Ohio is worse than U.S.

✔ Notable change
Data value increased or decreased
10 percent or more from Year 2 to most recent year

Housing, built environment and physical activity access key findings

U.S. comparison. Ohio had fewer households with severe housing problems than the U.S. overall, as well as shorter waitlist times for housing assistance. Ohio had slightly lower access to exercise opportunities.

Disparities. Of the seven Ohio metropolitan areas analyzed, five had black-white dissimilarity index scores over 60, indicating high levels of segregation between black and white residents. The other two metropolitan areas, Akron and Canton-Massillon, were only a few points shy of 60 as well (59 and 56 respectively). Cleveland-Elyria had the highest residential segregation with a score of 72. Residential segregation often reflects concentrations of neighborhood poverty which can contribute to poor health outcomes and health disparities.

Figure 2.i.5. **Housing, built environment and physical activity access**

Metric	Ohio					U.S.
	Years	Year 1	Year 2	Most recent	Notable change	
Severe housing problems. Percent of households that have one or more of the following problems: 1) housing unit lacks complete kitchen facilities; 2) housing unit lacks complete plumbing facilities; 3) household is severely overcrowded; and 4) monthly housing costs, including utilities, that exceed 50 percent of monthly income	2006-2010, 2007-2011, 2008-2012	15%	15%	**15%**		19.2% (2008-2012)
Access to exercise opportunities. Percent of individuals in a county who live reasonably close to a location for physical activity, defined as parks or recreational facilities (including gyms, community centers, YMCAs, dance studios and pools). Individuals who reside in a census block within a half mile of a park or within one mile of a recreational facility in urban areas and within 3 miles in rural areas are considered to have adequate access to opportunities for physical activity	2010 & 2012, 2010 & 2013, 2014	78%	83%	83%		84% (2014)
Access to housing assistance. Average number of months on waiting list for HUD housing assistance.	2013, 2014, 2015	19	25	**24**		26 (2015)

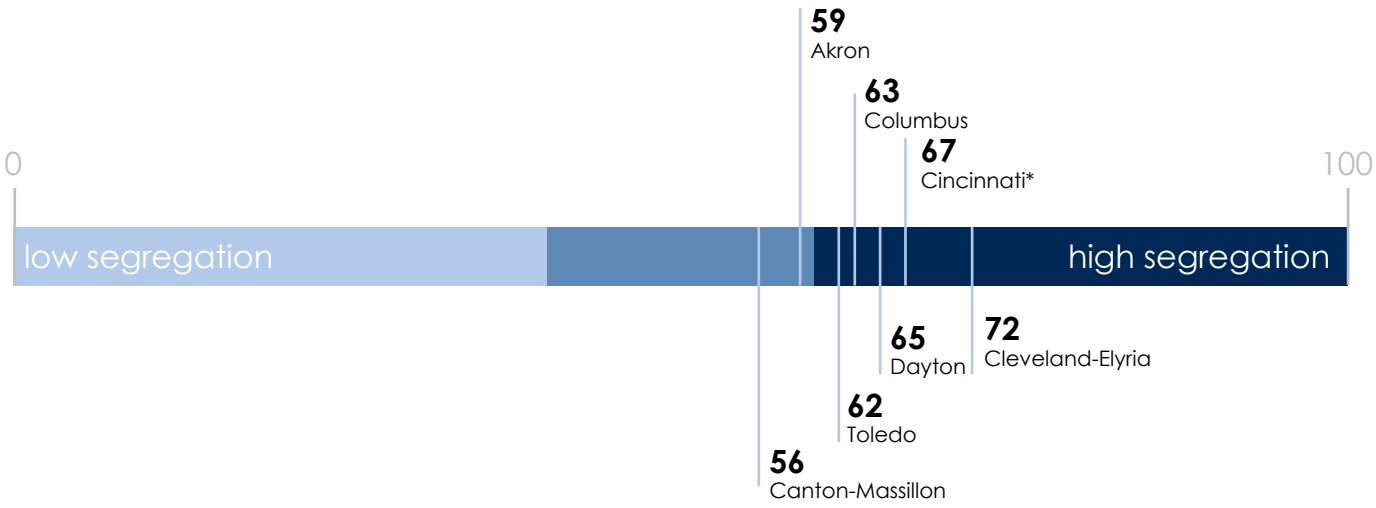
Healthy People 2020 key
(based on most recent year)
- Ohio met or exceeded target
- Ohio did not meet target

See appendix for targets

U.S. comparison key
(based on most recent year)
- **Bold** Ohio is better than or same as U.S.
- Ohio is worse than U.S.

✔ Notable change
Data value increased or decreased 10 percent or more from Year 2 to most recent year

Figure 2.i.6. **Residential segregation.** Black-white dissimilarity index for Ohio's seven largest metropolitan areas (Columbus, Cleveland-Elyria, Cincinnati, Dayton, Toledo, Akron, Canton-Massillon) (2010-2014)



*Cincinnati dissimilarity index calculated from Ohio census tracts only.
Source: American Community Survey, 5-Year Census Tract Estimates. Calculations by The Kirwan Institute.

Data profile notes

1. Analysis of U.S. Census data by Research Office, Ohio Department Services Agency, 2013
2. U.S. Census Bureau Population Projections, 2014 National Population Projections: Summary Tables, Table 1 (Projections of the Population and Components of Change for the United States: 2015 to 2060)
3. Ohio Annual Cancer Report, 2015, Ohio Department of Health, Office of Health Improvement and Wellness, Bureau of Health Promotion, Columbus, Ohio, May 2015.
4. Ohio Department of Health Bureau of Vital Statistics
5. The Behavioral Risk Factor Surveillance System, the source of data about the prevalence of diabetes, does not distinguish between type 1 and type 2 diabetes. It is important to note that type 2 diabetes can in many cases be prevented or delayed and is the most common form of diabetes among adults.
6. Primary care costs include primary care services, defined by CPT, HCPCS and diagnosis codes, when provided by clinics and/or independent practitioners (e.g. physicians, physician assistants, nurse practitioners) that have a primary care specialty. It also includes primary care services provided by practitioners with a primary care specialty in the hospital outpatient setting. Primary care services: Office or other outpatient services (include freestanding clinic and home visits), other ambulatory visits (includes visits provided to individuals in nursing facilities and general ophthalmological visits) and preventive medicine services. Primary care specialty: General practice, family practice, internal medicine, pediatrics, general preventive medicine, neonatal-perinatal medicine, maternal and fetal medicine, public health and general preventive medicine, geriatrics and adult health. Clinics: outpatient health facility, rural health facility, federally qualified health center and comprehensive clinic.
7. Commonwealth Fund Scorecard on State Health System Performance, 2015 edition
8. U.S. Bureau of Labor Statistics

3 LOCAL HEALTH DEPARTMENT AND HOSPITAL ASSESSMENT AND PLAN DOCUMENT REVIEW FINDINGS

Highlights

In order to identify health issues prioritized at the local level, HPIO reviewed 211 local health department and hospital community health assessment and plan documents, covering 94 percent of Ohio counties.

Top health issues. The top 10 health issues identified from these documents were:
- Obesity
- Mental health
- Access to health care/medical care
- Drug and alcohol abuse
- Maternal and infant health
- Cancer
- Cardiovascular disease
- Diabetes
- Tobacco
- Chronic disease (unspecified)

Region and county type. Overall, there was a great deal of similarity in top health issues across regions and county types. Obesity and mental health emerged as top priorities in all Ohio regions and for Appalachian, rural non-Appalachian, suburban and urban counties. Drug and alcohol abuse, access to health care/medical care and cancer were also top issues across all regions.

Background and purpose

Selection of state-level priorities for the state health improvement plan (SHIP) will be informed by top health issues identified at the local level by local health departments and hospitals in their community health assessments and plans (see Figure 1.3 for SHIP prioritization process), as well as other sources. In order to summarize these local-level health issues, HPIO reviewed all of the available local health department and hospital assessment/plan documents released within the past five years. The methods and findings of the document review are described in this section.

Local health departments

As a prerequisite for accreditation from the Public Health Accreditation Board (PHAB), local health departments must lead a community health assessment (CHA) and develop a community health improvement plan (CHIP) at least every five years. Starting in 2020, Ohio law requires local health departments to complete these assessments and plans every three years to foster better opportunities for collaboration with hospitals. PHAB guidance requires that health departments have a prioritization process that leads to a set of health priorities in the CHIP. Most local health departments in Ohio have begun the accreditation process, although not all have completed an initial CHIP document.[1]

Hospitals

To be recognized as tax-exempt under Section 501(c)(3) of the Internal Revenue Code (IRC), hospitals are required to conduct a community health needs assessment (CHNA) and adopt an implementation strategy (IS) every three years. This new requirement was a part of the Affordable Care Act (ACA) and went into effect for taxable years beginning after March 23, 2012. As part of the CHNA and IS, hospitals are required to identify and prioritize significant health needs for the communities they serve.

Collaboration

Collaboration among local health departments and hospitals occurs on a continuum, ranging from no collaboration to development of joint assessment and plan documents. The level of collaboration among and between local health departments and hospitals varies widely across the state.[2]

In addition to collaborating with each other, local health departments and hospitals also collaborate with a broad range of organizations and sectors as they conduct their assessments and plans.

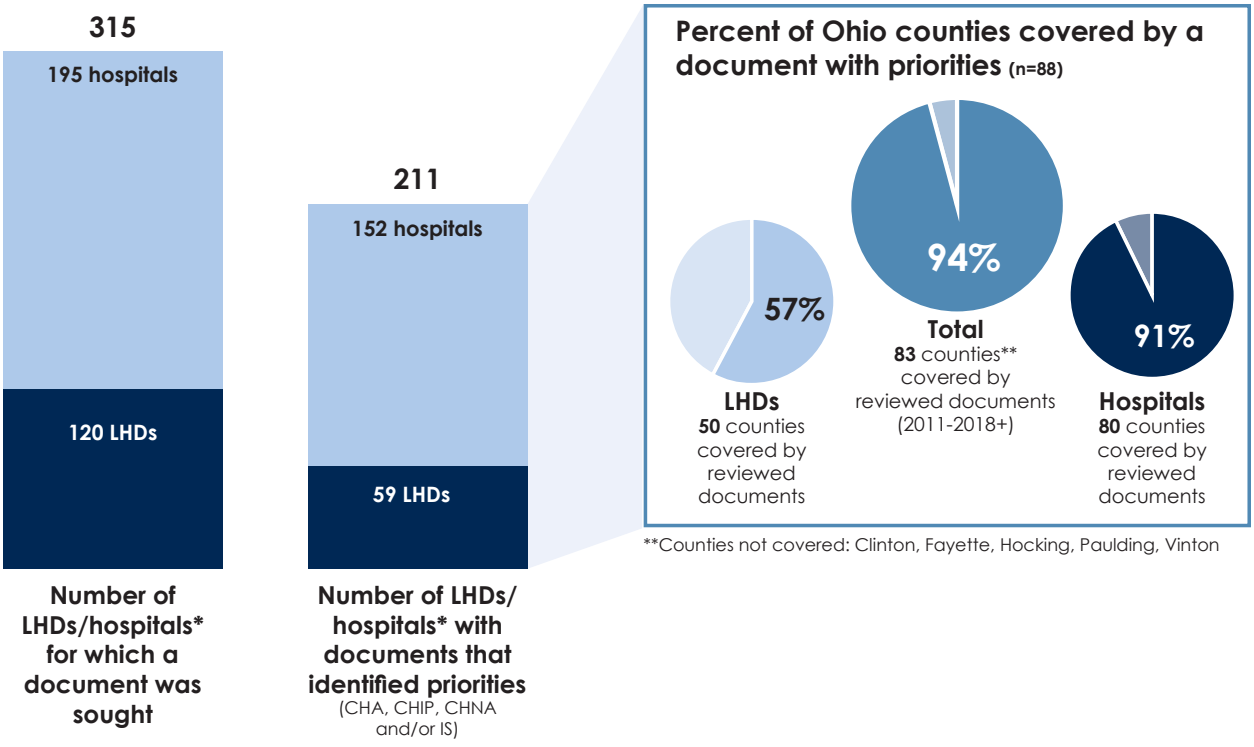
While the document review for this state health assessment (SHA) focused on local health department and hospital documents, it is important to note that there are many other entities that conduct community-level assessments to prioritize the health needs of their communities, including federally qualified health centers, local behavioral health boards, Family and Children First Councils, United Ways, banks and community action agencies. For more information about other local-level assessments and plans see the HPIO publication, **Making the Most of Community Health Planning in Ohio**.

Process

As of March 2016, there were 120 local health departments covering Ohio's 88 counties. HPIO worked with the Ohio Department of Health (ODH) and the Association of Ohio Health Commissioners to obtain all CHAs and CHIPs that had been completed within the past six years. HPIO obtained documents with prioritized health issues from 59 local health departments. Most departments have begun the accreditation prerequisite process, although many have not yet completed a CHIP, which is typically where prioritized health issues are identified. The local health department documents with priorities covered 57 percent of Ohio counties (see Figure 3.1). All of the local health department documents covered one county; some involved collaboration between a city and a county health department.

HPIO obtained a list of hospitals in Ohio from the ODH hospital directory[3] and reconciled this list with information from the American Hospital Association and the federal Health Resources and Services Administration. Because the ACA requirement to conduct CHNAs only applies to federally tax-exempt hospitals, HPIO limited its review of hospital documents primarily to nonprofit and government hospitals. Of the 195

Figure 3.1. **Document review of local health department (LHD) and hospital community health assessment and planning documents**



* Non-government, non-profit and government hospitals

Source: HPIO review of assessment and planning documents, April 2016

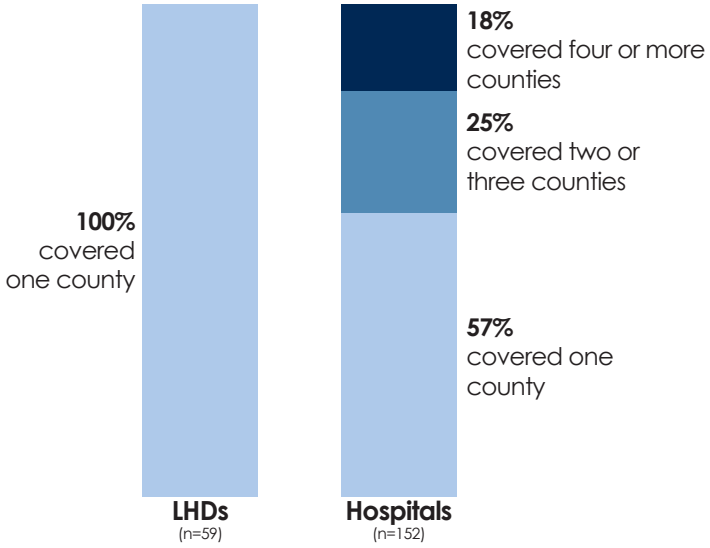
hospitals identified, HPIO was able to obtain 152 documents with prioritized health issues, covering 91 percent of Ohio counties (see Figure 3.1). More than half of the hospital documents with priorities covered one county, while 18 percent covered four or more counties (see Figure 3.2).

HPIO reviewed all available documents to identify health issues prioritized by each hospital and local health department in its assessment or plan document. More information about the categories used to analyze this data is in Appendix C.

Top health issues for Ohio overall

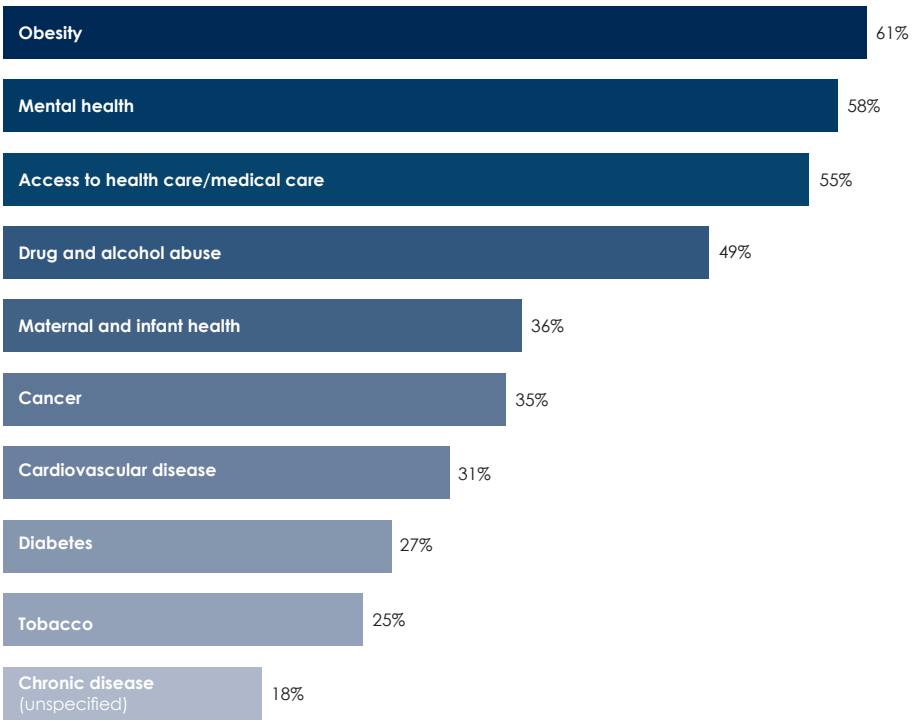
The top 10 health issues across all documents reviewed are listed in Figure 3.3 and the complete results are listed in Appendix C. The top three priorities—obesity, mental health and access to health care/medical care—were each identified by more than half of the assessments/plans, reflecting widespread desire to address these issues. Behavioral health (mental health and addiction) and chronic disease-related priorities (cancer, cardiovascular disease, diabetes and tobacco) dominated the top 10 list. Eight of the top 10 priorities were within the "health conditions" category. It was far less common for local health departments and hospitals to identify health priorities within the "social and economic environment" or "physical environment" categories.

Figure 3.2. **Percent of reviewed documents with priorities covering multiple counties**



Source: HPIO review of assessment and planning documents, April 2016

Figure 3.3. **Top 10 health issues identified in local health department and hospital assessments/plans**



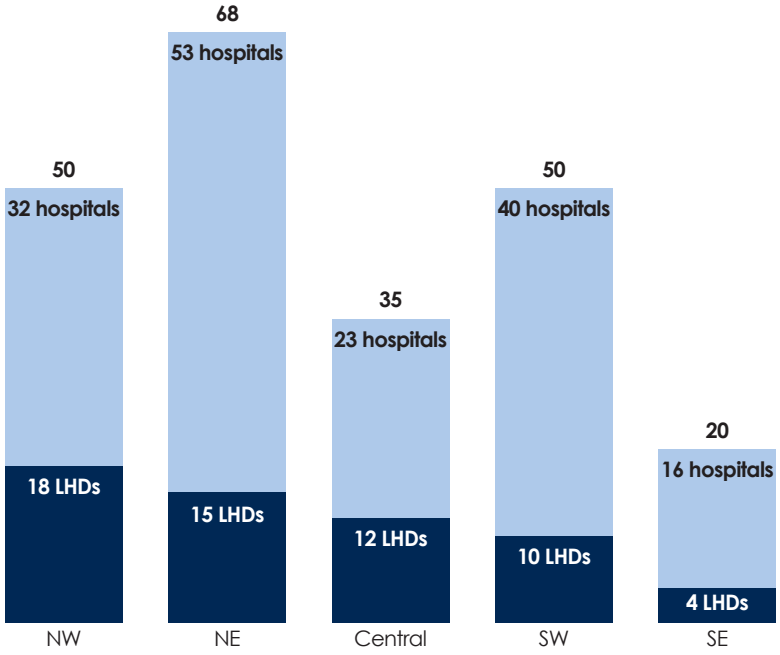
N=211 local health department CHA/CHIPs and hospital CHNA/ISs covering 2011-2018
Source: HPIO review of assessment and planning documents, April 2016

Top health issues by region

HPIO analyzed the findings by region, using the region boundaries outlined in Figure A.3 in Appendix A. Figure 3.4 displays the total number of documents with priorities that were reviewed for each region. Some assessment/plan documents covered more than one region (i.e. covered more than one county, including counties in two different regions). For complete results by region, see Appendix C.

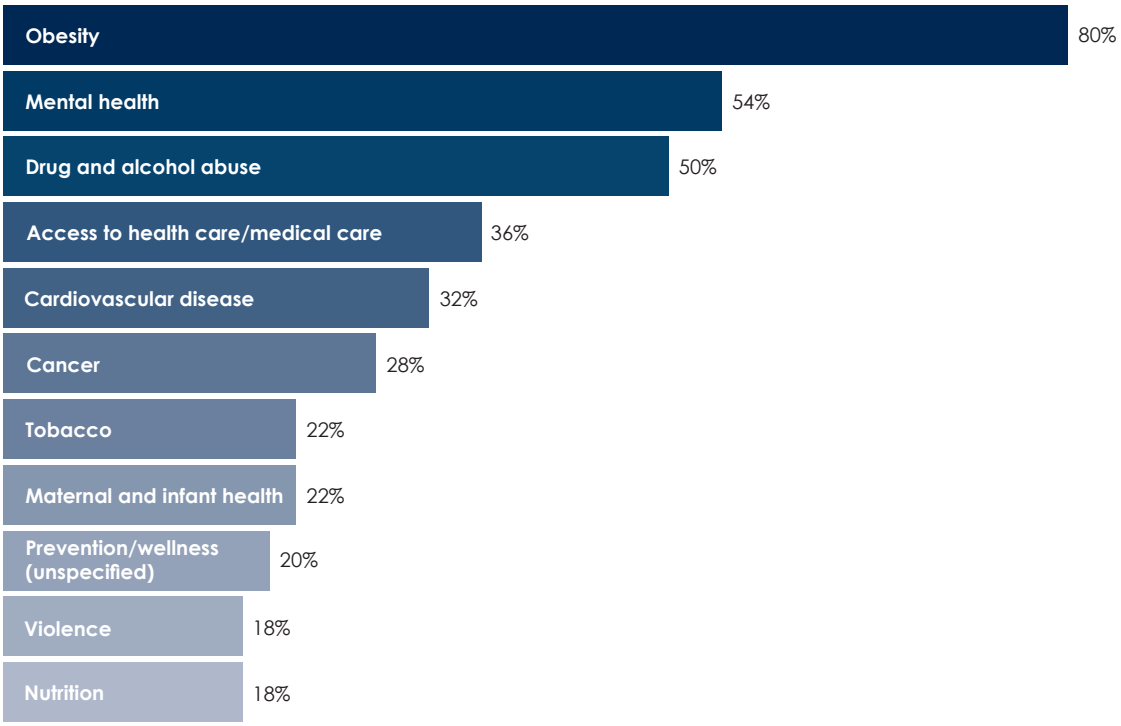
Figures 3.5 to 3.9 display the top 10 health issues for each region and Figure 3.10 displays the overall Ohio priorities, noting the five health issues in the top 10 in all regions.

Figure 3.4. **Number of local health department and hospital documents with priorities that were reviewed, by region(s) covered by document***



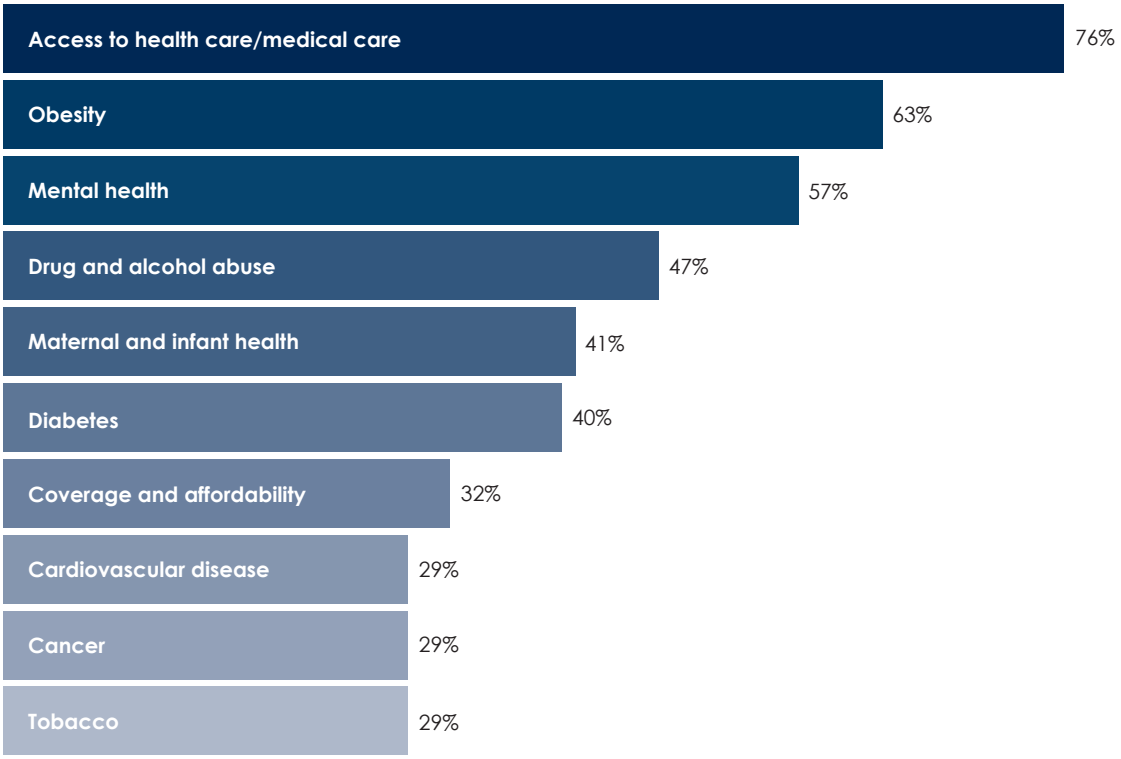
*Association of Ohio Health Commissioners region boundaries
Note: Some documents covered multiple counties, including counties in different regions.
Source: HPIO review of assessment and planning documents, April 2016

Figure 3.5. **Top 10 health issues identified in community health assessments/ plans, by region: Northwest**



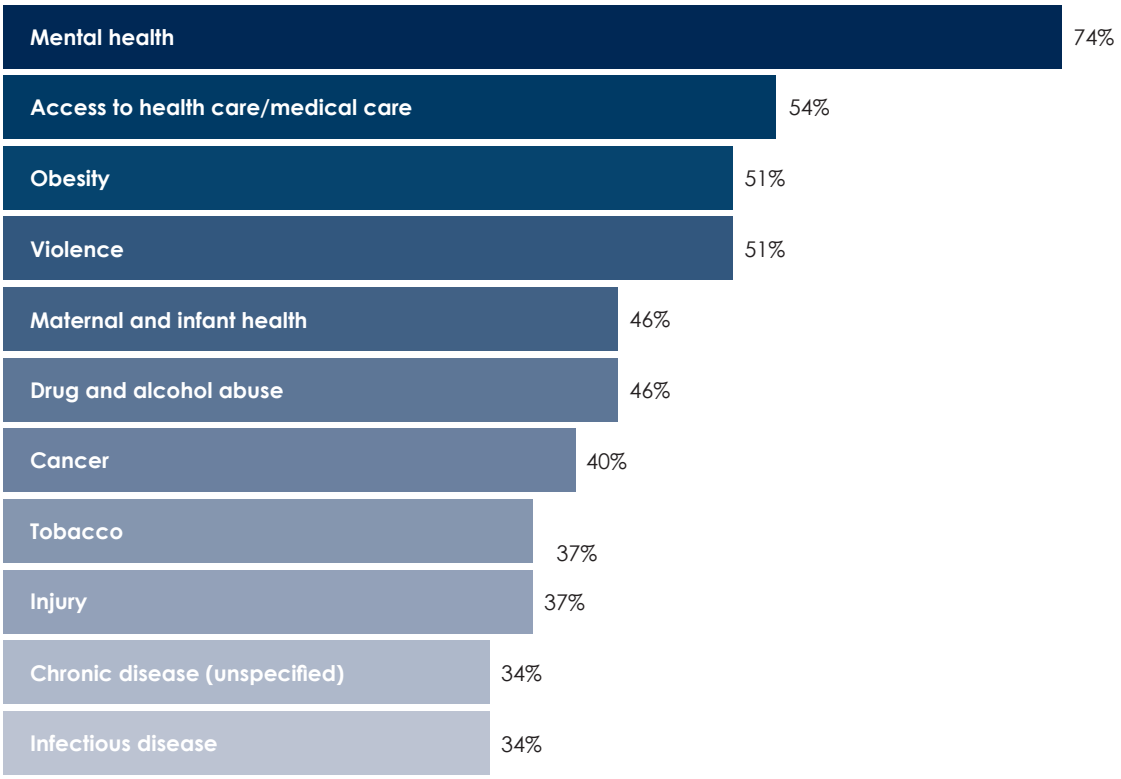
N=50 local health department CHA/CHIPs and hospital CHNA/ISs covering 2011-2018
Source: HPIO review of assessment and planning documents, April 2016

Figure 3.6. **Top 10 health issues identified in community health assessments/ plans, by region: Northeast**



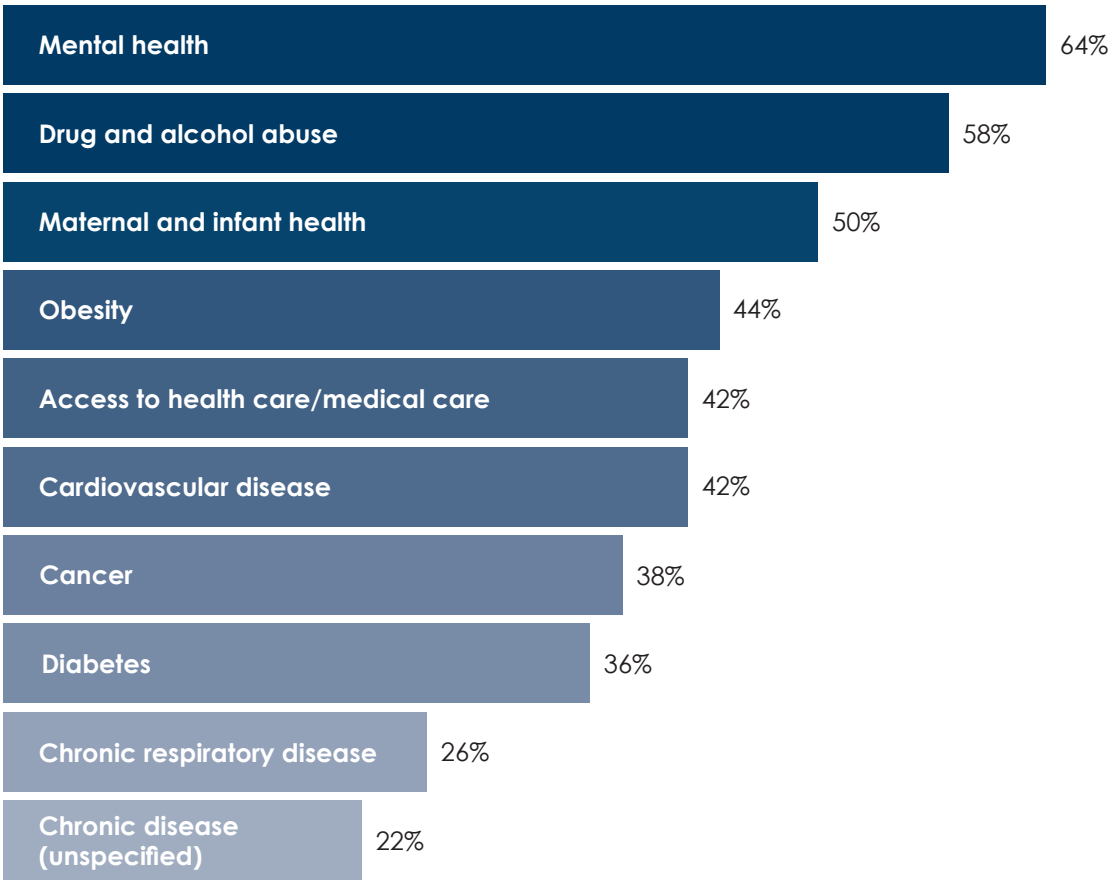
N=68 local health department CHA/CHIPs and hospital CHNA/ISs covering 2011-2018
Source: HPIO review of assessment and planning documents, April 2016

Figure 3.7. **Top 10 health issues identified in community health assessments/ plans, by region: Central**



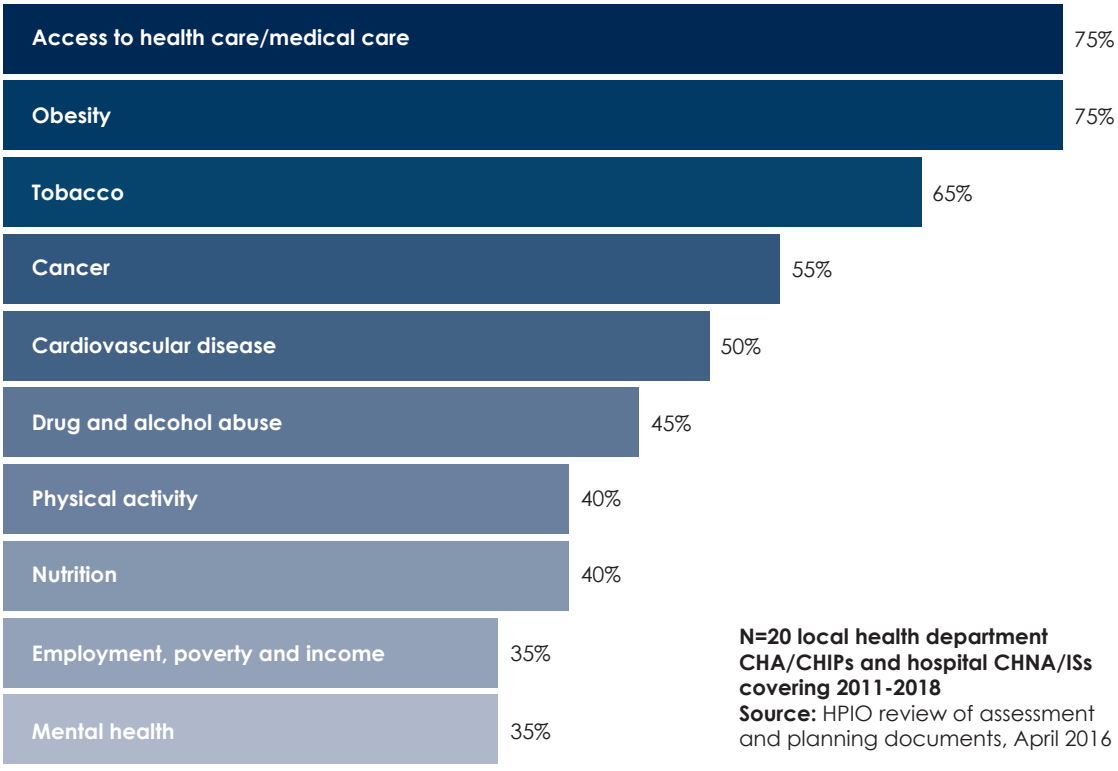
N=35 local health department CHA/CHIPs and hospital CHNA/ISs covering 2011-2018
Source: HPIO review of assessment and planning documents, April 2016

Figure 3.8. **Top 10 health issues identified in community health assessments/ plans, by region: Southwest**



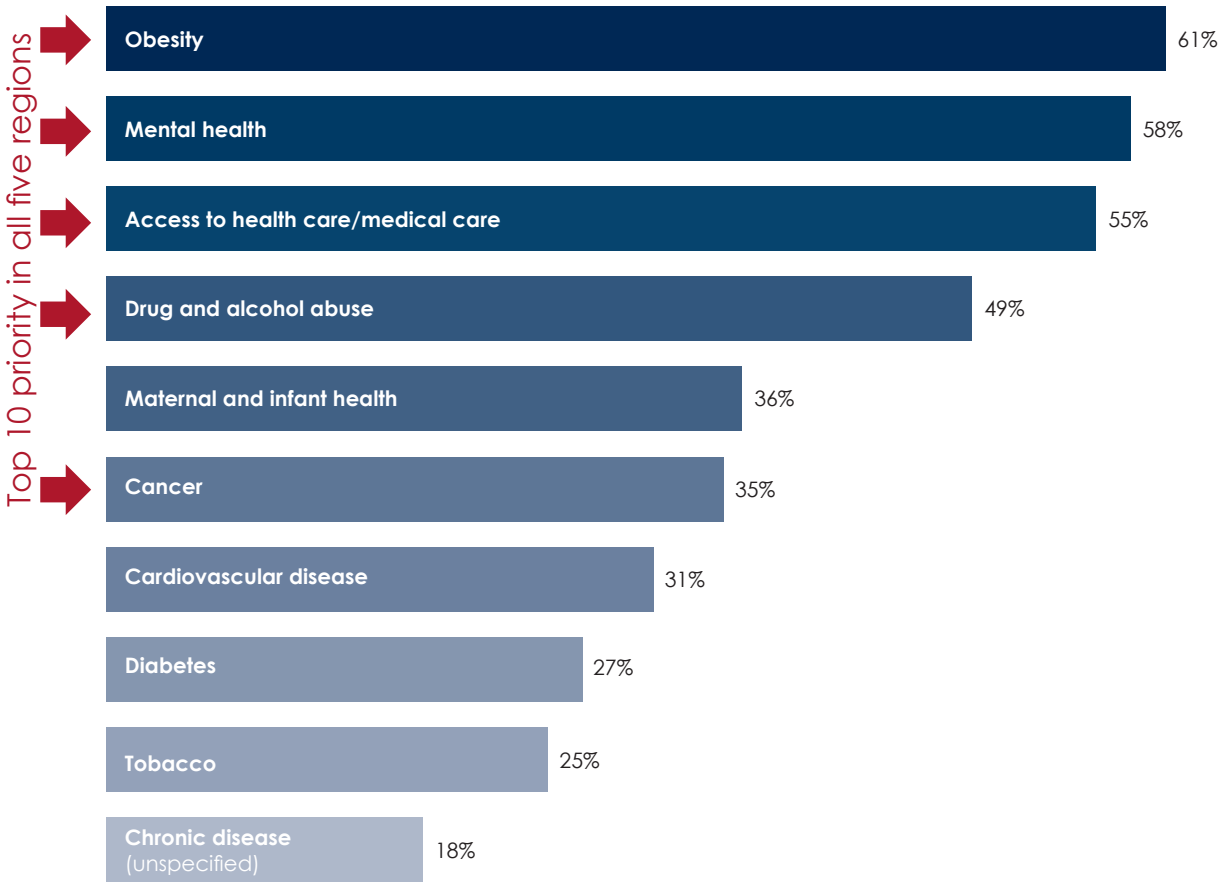
N=50 local health department CHA/CHIPs and hospital CHNA/ISs covering 2011-2018
Source: HPIO review of assessment and planning documents, April 2016

Figure 3.9. **Top 10 health issues identified in community health assessments/ plans, by region: Southeast**



N=20 local health department CHA/CHIPs and hospital CHNA/ISs covering 2011-2018
Source: HPIO review of assessment and planning documents, April 2016

Figure 3.10. **Ohio overall with health issues that were in the top 10 in all five regions**



N=211 local health department CHA/CHIPs and hospital CHNA/ISs covering 2011-2018
Source: HPIO review of assessment and planning documents, April 2016

The proceeding figures show that, overall, there was a great deal of similarity across regions; five priorities were in the top 10 for all five regions of the state:

- Obesity
- Mental health
- Access to health care/medical care
- Drug and alcohol abuse
- Cancer

Some unique regional health issues also emerged from this analysis. The following health issues were in the top 10 for the specified region, but not for Ohio overall:

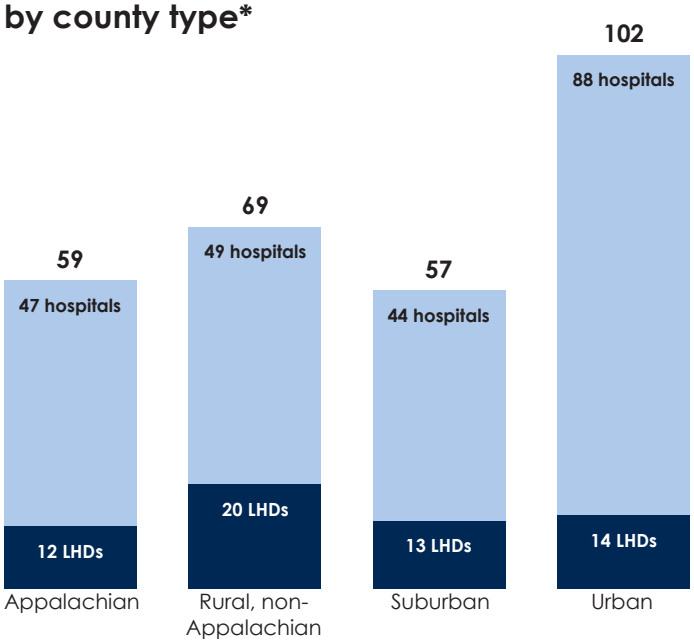
- Northwest: Prevention/wellness (unspecified), violence, nutrition
- Northeast: Coverage and affordability
- Central: Violence, injury, infectious disease
- Southwest: Chronic respiratory disease
- Southeast: Physical activity, nutrition, employment, poverty and income

Top health issues by county type

HPIO also analyzed the priority findings by county type, using the categories shown in Figure A.3 in Appendix A. Figure 3.11 displays the total number of documents with priorities that were reviewed for each county type.

As shown in Figure 3.12, there was a great deal of consistency in the top three health issues prioritized across different types of counties. Obesity and mental health were in the top three issues for all four types of counties—Appalachian, rural non-Appalachian, suburban and urban. Access to health care/ medical care was also strongly represented across most county types.

Figure 3.11. **Number of LHD/hospital documents with priorities that were reviewed, by county type***



*Association of Ohio Health Commissioners region boundaries (see Appendix A)
Note: Some documents covered multiple counties, including more than one county type.
Source: HPIO review of assessment and planning documents, April 2016

Figure 3.12. **Top five health issues, by county type**

Appalachian (n=59)	**Rural, non-Appalachian** (n=69)	**Suburban** (n=57)	**Urban** (n=102)
1. Obesity	1. Obesity	1. Obesity	1. Access to health care/ medical care
2. Access to health care/ medical care	2. Mental health	2. Mental health	2. Mental health
3. Mental health	3. Drug and alcohol abuse	3. Access to health care/ medical care (tie)	3. Obesity
4. Cardiovascular disease (tie)	4. Access to health care/ medical care	3. Drug and alcohol abuse (tie)	4. Maternal and infant health
4. Drug and alcohol abuse (tie)	5. Maternal and infant health	4. Cancer	5. Drug and alcohol abuse
4. Maternal and infant health (tie)		5. Cardiovascular disease (tie)	
5. Tobacco		5. Maternal and infant health (tie)	

Note: Some documents covered multiple counties, including more than one county type.
Source: HPIO review of assessment and planning documents, April 2016

Local document review notes

1. Health Policy Institute of Ohio. "Improving population health planning in Ohio. HPIO. January 2016.
2. Health Policy Institute of Ohio. "Improving population health planning in Ohio. HPIO. January 2016.
3. Data from the Directory of Registered Hospitals. Ohio Department of Health Office of Health Assurance and Licensing. Ohio Department of Health. Accessed March 31, 2016. http://publicapps.odh.ohio.gov/eid/default.aspx

4 State health assessment (SHA) regional forum findings

Highlights

More than 400 stakeholders provided feedback on their community and region's themes and strengths, forces of change and top 10 health issues either through participation in one of five regional forums held across the state or an online survey.

Top 10 health issues. The top 10 health issues identified by stakeholders across the regional forums were:

- Obesity
- Access to behavioral health care
- Drug and alcohol abuse
- Mental health
- Employment, poverty and income
- Equity/disparities
- Access to dental care
- Cardiovascular disease
- Diabetes
- Nutrition

The following issues were in the top 10 for the specified region, but not for Ohio overall:

- Northwest: Physical activity, access to health care/medical care
- Northeast: Maternal and infant health, coverage and affordability
- Central: Maternal and infant health, physical activity
- Southwest: Maternal and infant health
- Southeast: Access to health care/medical care, health insurance coverage and affordability, transportation

Community themes and strengths. Collaboration and alignment were themes frequently discussed by stakeholders in questions around what made them most proud of their county and region, important characteristics of a healthy county and region and factors keeping their county or region from improving overall health and quality of life.

Forces of change. When asked to identify forces of change, such as trends, events and other factors that may impact the health and quality of life within their community and region, four responses made the top five across all regions:

- Increased smoking (includes e-cigarettes), drug and alcohol abuse
- Changes in health insurance coverage and affordability
- Changes in healthcare technology
- Aging population

Data gaps and limitations. Regional forum findings provide useful information on regional health issues in Ohio that would not have been available through any other method in this state health assessment. However, findings are limited by a number of factors including the qualitative nature of participant responses and the expedited timeline for the SHA, which resulted in participants only receiving three weeks notice of the regional forums. Forums were based on a Mobilizing for Action through Planning and Partnerships (MAPP) process. However, the process was truncated to accommodate the four-hour length of each forum.

Purpose

The Health Policy Institute of Ohio (HPIO) commissioned the Hospital Council of Northwest Ohio (HCNO) to facilitate a series of state health assessment (SHA) regional forums. Through these regional forums, stakeholders provided information on their county's and/or region's top health issues, strengths, challenges and trends. Information gathered from the regional forums will be used to inform the selection of state-level priorities in the state health improvement plan (SHIP) (see Figure 1.3). Select findings from these regional forums have been compiled and analyzed and are discussed in more detail in the sections below.

Process

HCNO hosted five regional forums across the state, based on the Association of Ohio Health Commissioners regional boundary lines (see Appendix A) during the last week of April and the first week of May 2016:

- Northwest region – Findlay, April 29, 2016
- Southeast region – Athens, May 2, 2016
- Southwest region – Dayton, May 4, 2016
- Central region – Columbus, May 5, 2016
- Northeast region – Ravenna, May 6, 2016

A total of 372 stakeholders from across the state attended the regional forums[1] and 32 provided input on the regional forum findings through an online survey (see Figure 4.1). Working with Ohio Department of Health (ODH), the Governor's Office of Health Transformation (OHT) and stakeholders in the SHA Advisory Committee, specific outreach was conducted to ensure that there was representation at each of the forums from a variety of sectors and groups. Overall sector representation at the regional forums and from the online survey is described in Figure 4.2. Appendix D provides sector representation and the list of organizations participating at each of the regional forums.

Forum participants were seated in small groups with an assigned facilitator and asked to provide feedback on a series of questions based on a modified version of the Mobilizing for Action through Planning and Partnerships (MAPP) process. Participants were asked to discuss:

- Community themes and strengths
- Community health status and top health issues
- Forces of change (such as trends, events and other factors that affect the overall health and quality of life of the community)
- Community gaps

The forum materials are posted on the **HPIO SHA SHIP website.**

Select questions from these small group discussions were compiled and analyzed, including a ranking of community health priorities, identification of forces of change and key questions from the community themes and strengths exercise. Information from the community gaps exercise will be used in development of the SHIP.

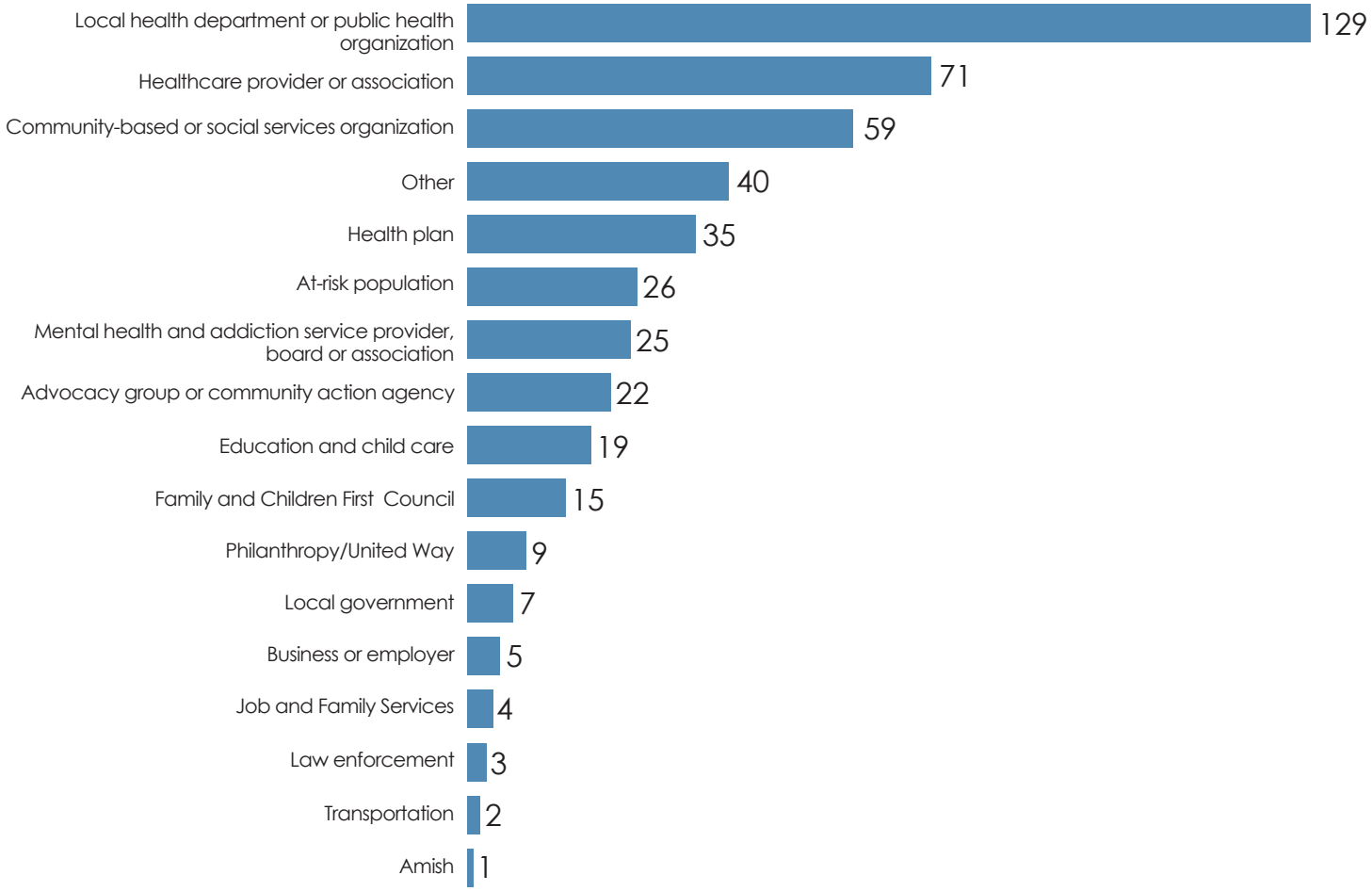
HPIO sent stakeholders who were unable to attend the regional forums[2] an input survey to provide feedback on select regional forum findings. Discussion of the SHA regional forum findings incorporates the feedback of stakeholders from the SHA regional forum input survey. Stakeholder responses from each region were combined and counted as "small groups" in the analysis of the regional forum findings.

Detailed information regarding the response categories/themes discussed in the regional forum findings can be found in Appendix D.

Figure 4.1. **Total number of stakeholders attending the regional forums or providing input via the online survey, by region**

	Ohio (total)	Northwest	Northeast	Central	Southwest	Southeast
Regional forums	372	79	92	78	65	58
Online Survey	32	6	5	10	7	4
Total	**404**	**85**	**97**	**88**	**72**	**62**

Figure 4.2. **Sectors represented at state health assessment regional forums and via the online survey (combined)**



Note: Participants could select more than one sector.

SHA regional forum key findings

Community themes and strengths: Pride in county and region

Figure 4.3 displays the top five responses for what made stakeholders most proud of their county and region. There was a great deal of similarity across regions; two responses were in the top five across regions:

- Collaboration and alignment
- Community engagement

Several more responses were in the top five across four of the regions:

- Access to health care/medical care
- Active living environment
- Education
- Cultural competency/diversity

Safety and economic vitality were in the top responses only for northwest Ohio.

Figure 4.3. **"What makes you most proud of your county and region?"**

Ohio (Combined)	Northwest	Northeast	Central	Southwest	Southeast
n= 75 small groups	n=19 small groups	n=16 small groups	n=16 small groups	n=12 small groups	n=12 small groups
Collaboration and alignment (65) ▲	Collaboration and alignment (19) ▲	Collaboration and alignment (13) ▲	Collaboration and alignment (14) ▲	Collaboration and alignment (10) ▲	Community engagement (11) ▲
Community engagement (42) ▲	Community engagement (9) ▲	Access to health care/medical care (9)	Community engagement (8) ▲	Access to health care/medical care (6)	Collaboration and alignment (9) ▲
Access to health care/medical care (26)	Access to health care/medical care (4)	Community engagement (8) ▲	Adequate funding and resources (6)	Community engagement (6) ▲	Natural resources (6)
Active living environment (19)	Active living environment (4)	Education (5)	Active living environment (5)	Work Ethic (3)	Active living environment (5)
Cultural competency/ diversity (16)	Education (3)	Active living environment (4)	Cultural competency/ diversity (5)	Strong leadership and advocacy (3)	Cultural competency/ diversity (4)
	Safety (3) ★	Cultural competency/ diversity (4)	Access to health care/medical care (5)	Access to community services (3)	
	Strong leadership and advocacy (3)	Work ethic (4)	Education (4)	Adequate funding and resources (2)	
	Work ethic (3)			Cultural competency/ diversity (2)	
	Access to community services (2)			Education (2)	
	Adequate funding and resources (2)				
	Economic vitality (2) ★				
	Natural resources (2)				

▲ Common across all regions
★ Unique to a region

Note: Figure displays top five responses and only includes responses listed by more than one small group in the region. Therefore, only the top four responses are listed for the southwest region. Top responses are those most frequently mentioned by the small groups.

Community themes and strengths: Important characteristics of a healthy county and region

Figure 4.4 displays the top five responses for the most important characteristics of a healthy county or region. There was a great deal of similarity across regions with four characteristics consistently in the top five across regions:

- Access to health care/medical care
- Collaboration and alignment
- Education
- Active living environment

The following top responses were unique to a region:

- Southwest: absence of air and water pollution and toxic substances, community engagement
- Southeast: Access to community services

Figure 4.4. **"What do you believe are the two to three most important characteristics of a healthy county or region?"**

Ohio (Combined)	Northwest	Northeast	Central	Southwest	Southeast
n= 75 small groups	n=19 small groups	n=16 small groups	n=16 small groups	n=12 small groups	n=12 small groups
Access to health care/medical care (50) ▲	Access to health care/medical care (12) ▲	Access to health care/medical care (12) ▲	Access to health care/medical care (12) ▲	Healthy food environment (8)	Access to health care/medical care (8) ▲
Collaboration and alignment (37) ▲	Collaboration and alignment (11) ▲	Equity (8)	Collaboration and alignment (10) ▲	Access to health care/medical care (6) ▲	Economic vitality (8)
Economic vitality (33)	Access to transportation (9)	Economic vitality (8)	Equity (10)	Education (6) ▲	Education (7) ▲
Education (32) ▲	Economic vitality (9)	Active living environment (7) ▲	Active living environment (8) ▲	Collaboration and alignment (5) ▲	Active living environment (6) ▲
Active living environment (32) ▲	Education (8) ▲	Collaboration and alignment (7) ▲	Healthy food environment (6)	Safety (5)	Access to transportation (6)
Healthy food environment (29)	Active living environment (7) ▲	Healthy food environment (7)	Access to behavioral health care (5)	Access to behavioral health care (4)	Access to community services (5) ★
		Education (6) ▲	Education (5) ▲	Active living environment (4) ▲	Collaboration and alignment (4) ▲
		Safety (6)	Safety (5)	Economic vitality (4)	Equity (4)
		Access to behavioral health care (5)		Health care coverage and affordability (4)	Health care coverage and affordability (4)
		Health care coverage and affordability (5)		Absence of air and water pollution and toxic Substances (2) ★	
				Community engagement (2) ★	
				Equity (2)	

▲ Common across all regions
★ Unique to a region

Note: Figure displays top five responses. Top responses are those most frequently mentioned by the small groups.

Community themes and strengths: Factors keeping county/region from improving health and quality of life

Figure 4.5 displays the top five responses for each region regarding factors keeping the county and/or region from improving their overall health and quality of life.

Lack of funding and resources was the top response across all regions. Lack of collaboration and alignment was also identified as a barrier to improving overall health and quality of life across regions, although it was also identified as a point of pride in all regions in Figure 4.3. This emphasizes the importance of both maintaining and strengthening collaboration and alignment across regions.

An evolving public health landscape was also identified as a top barrier. In talking about an evolving public health landscape, stakeholders noted difficulties in adapting to changing guidelines and policies, funding, accreditation and regionalization.

Social climate and poverty were top responses for Ohio overall and across four of the five regions. Social climate included discussions around cultural norms, learned helplessness, lack of motivation, lack of trust and apathy.

The following responses were unique to a region:

- Northeast: Political climate and lack of education
- Central: Lack of leadership, lack of effective policy and lack of an adequate workforce (e.g. the overall workforce lacking skill sets needed for required jobs)
- Southwest: Lack of healthcare coverage and affordability and lack of data

Figure 4.5. **"What do you believe is keeping your county and region from doing what needs to be done to improve health and quality of life?"**

Ohio (Combined)	Northwest	Northeast	Central	Southwest	Southeast
n= 75 small groups	n=19 small groups	n=16 small groups	n=16 small groups	n=12 small groups	n=12 small groups
Lack of funding and resources (59) ▲	Lack of funding and resources (16) ▲	Lack of funding and resources (12) ▲	Lack of funding and resources (12) ▲	Lack of funding and resources (8) ▲	Lack of funding and resources (11) ▲
Lack of collaboration/ alignment (32) ▲	Social climate (8)	Lack of collaboration/ alignment (8) ▲	Lack of collaboration/ alignment (9) ▲	Lack of collaboration/ alignment (5) ▲	Social climate (6)
Social climate (23)	Lack of collaboration/ alignment (7) ▲	Social climate (6)	Lack of community engagement (5)	Evolving public health landscape (3) ▲	Poverty (4)
Evolving public health landscape (19) ▲	Lack of transportation (5)	Evolving public health landscape (5) ▲	Evolving public health landscape (5) ▲	Lack of healthcare coverage and affordability (3) ★	Lack of collaboration/ alignment (3) ▲
Poverty (15)	Evolving public health landscape (4) ▲	Lack of education (4) ★	Lack of leadership (5) ★	Poverty (3)	Evolving public health landscape (2) ▲
	Lack of community engagement (4)	Lack of community/ social services (4)	Lack of effective policy (4) ★	Lack of data (3) ★	Technology (2)
	Lack of health care/ medical care (4)	Political climate (4) ★	Lack of community/ social services (2)	Lack of community/ social services (3)	
	Poverty (4)		Poverty (2)	Lack of healthcare/ medical care (2)	
			Technology (2)	Social climate (2)	
			Lack of adequate workforce (2) ★	Lack of transportation (2)	

▲ Common across all regions
★ Unique to a region

Note: Figure displays top five responses and only includes responses listed by more than one small group in the region. Therefore, only the top four responses are listed for the southwest region. Top responses are those most frequently mentioned by the small groups.

Forces of change

Stakeholders were asked to identify forces of change, such as trends, events and other factors that may impact the health and quality of life within their community and region.

Figure 4.6 displays the top five responses for each region regarding identified forces of change. Four responses were common across all regions:

- Increased smoking (includes e-cigarettes), drug and alcohol abuse
- Changes in health insurance coverage and affordability
- Changes in healthcare technology, such as telemedicine, electronic health records and social media use
- Aging population

Southeast had a number of unique top responses compared to other regions including changes in workforce, disparities and emerging infectious diseases.

Figure 4.6. **Forces of change impacting the health and quality of life within region**

Ohio (Combined)	Northwest	Northeast	Central	Southwest	Southeast
n= 75 small groups	n=19 small groups	n=16 small groups	n=16 small groups	n=12 small groups	n=12 small groups
Increased smoking, drug and alcohol abuse (57) ▲	Increased smoking, drug and alcohol abuse (19) ▲	Changes in healthcare technology (13) ▲	More diverse population (12)	Changes in coverage and affordability (10) ▲	Changes in coverage and affordability (10) ▲
Changes in coverage and affordability (54) ▲	Changes in healthcare technology (16) ▲	Changes in coverage and affordability (11) ▲	Changes in coverage and affordability (11) ▲	Increased smoking, drug and alcohol abuse (9) ▲	Changes in economic conditions (9)
Changes in healthcare technology (52) ▲	Changes in political climate and leadership (16)	Aging population (10) ▲	Changes in access to health care/medical care (10)	Changes in access to health care/medical care (7)	Increased smoking, drug and alcohol abuse (9) ▲
Aging population (42) ▲	Aging population (13) ▲	Increased smoking, drug and alcohol abuse (10) ▲	Increased smoking, drug and alcohol abuse (10) ▲	Aging population (6) ▲	Changes in healthcare technology (8) ▲
Changes in economic conditions (41)	Changes in coverage and affordability (12) ▲	Lack of funding and resources (9)	Changes in economic conditions (9)	Changes in access to behavioral health care (6)	Changes in workforce (6) ★
	Changes in economic conditions (12)	Changes in access to health care/medical care (8)	Changes in healthcare technology (9) ▲	Changes in healthcare technology (6) ▲	Aging population (5) ▲
	Exposure to air and water pollution and toxic substances (12)	Changes in economic conditions (8)	Aging population (8) ▲	Changes in political climate and leadership (6)	Changes in access to behavioral health (5)
	More diverse population (11)	Evolving public health landscape (8)	Changes in political climate and leadership (8)	Evolving public health landscape (5)	Disparities (5) ★
		Exposure to air and water pollution and toxic substances (8)		Lack of funding and resources (5)	Emerging infectious diseases (5) ★
					Exposure to air and water pollution and toxic substances (5)
					Evolving public health landscape (5)
					Lack of funding and resources (5)

▲ Common across all regions
★ Unique to a region

Note: Figure displays top five responses. Top responses are those most frequently mentioned by the small groups.

Top 10 health issues

Participants were asked to rank the health issues facing their county and region using a set of health priority categories identified from a review of local health department and hospital assessment and planning documents in Ohio. See Section 3 regarding this document review and Appendix C for health priority categories.

Figure 4.7 displays the top 10 health issues for each region as well as statewide totals. Overall, there was widespread agreement on top health issues across regions with some regional variation, particularly for southeast Ohio.

Five health issues were in the top 10 responses for all regions:

- Obesity
- Drug and alcohol abuse
- Access to behavioral health care
- Diabetes
- Mental health

The following health issues were in the top 10 for the specified region, but not for Ohio overall:

- Northwest: physical activity, access to health care/ medical care
- Northeast: maternal and infant health, health insurance coverage and affordability
- Central: maternal and infant health, physical activity
- Southwest: maternal and infant health
- Southeast: access to health care/medical care, health insurance coverage and affordability, transportation

Figure 4.7. **Regional forums, ranking of top 10 health issues**

	State total	Northwest	Northeast	Central	Southwest	Southeast
1	Obesity ▲	Obesity ▲	Obesity ▲	Equity/Disparities	Access to behavioral health care ▲	Employment, poverty and income
2	Access to behavioral health care ▲	Drug and alcohol abuse ▲	Drug and alcohol abuse ▲	Obesity ▲	Employment, poverty and income	Access to behavioral health care ▲
3	Drug and alcohol abuse ▲	Access to behavioral health care ▲	Mental health ▲	Drug and alcohol abuse ▲	Equity/Disparities	Drug and alcohol abuse ▲
4	Mental health ▲	Mental health ▲	Access to behavioral health care ▲	Access to behavioral health care ▲	Drug and alcohol abuse ▲	Obesity ▲
5	Employment, poverty and income	Physical activity	Employment, poverty and income	Mental health ▲	Obesity ▲	Access to health care/medical care
6	Equity/Disparities	Cardiovascular disease	Equity/Disparities	Diabetes ▲	Access to dental care	Access to dental care
7	Access to dental care	Access to dental care	Maternal and infant health	Maternal and infant health	Mental health ▲	Coverage and affordability
8	Cardiovascular disease*	Access to health care/medical care	Nutrition	Physical activity	Diabetes ▲	Transportation ★
9	Diabetes* ▲	Nutrition	Coverage and affordability	Cardiovascular disease	Maternal and infant health	Mental health ▲
10	Nutrition	Diabetes ▲	Diabetes ▲	Access to dental care	Nutrition	Diabetes ▲

*Priority ranking tie (values are equal)

▲ Common across all regions
★ Unique to a region

Key

- Health conditions
- Health behaviors, violence and injury
- Social and economic environment
- Physical environment
- Access
- Equity/disparities

A closer look

The Ohio Department of Health (ODH) conducted 10 regional maternal and child health needs assessment forums in 2015. Results, including information about unmet needs and priorities, are posted on the **ODH website**.

Regional forum notes

1. Ohio total does not include those participating from state agencies, HPIO or HCNO.
2. Stakeholders were provided with the option of registering for a mailing list to stay informed of the SHA and SHIP process. The SHA input survey was sent to this stakeholder list as well as stakeholders who registered for a regional forum but were unable to attend.

5 Key informant interview findings

Highlights

OnPointe Strategic Insights conducted 31 key informant interviews with 37 individuals from 29 community-based organizations that serve:

- African-Americans/blacks
- Low-income individuals
- Immigrants
- Refugees
- People with disabilities

Findings from the key informant interviews provide information on the health of these populations and factors that may contribute to and/or cause health disparities and inequities in these populations.

Strengths, resources and quality of life. Resilience and strong social connections were reoccurring themes across the populations groups. However, people with disabilities identified a lack of social connections as an issue impacting overall quality of life.

Strong advocacy and faith communities were more likely to be perceived as a strength within African-American/black populations. Being hard working and having strong principles were most commonly described as strengths for immigrants and refugees.

Health status. When describing the overall health status of the key informant populations, mental health issues and poor nutrition/access to healthy foods were reoccurring themes. Diabetes also emerged as a top response for African-Americans/blacks, low-income individuals and immigrants and refugees and was often linked to the long-term effects of food insecurity and poor nutrition.

Common responses regarding the health status of the immigrant and refugee communities varied quite a bit from other key informant populations and included issues around trauma, cultural and language barriers, safety and violence, and access to care (both physical and dental).

Main causes of health challenges. Transportation was the only issue that emerged as a top response across all key informant populations when discussing the main causes of health challenges. Housing emerged as a top response for African-Americans/blacks, low-income individuals and immigrants and refugees, with a specific focus on affordable housing for low-income individuals living in urban and suburban areas of the state.

Notably, safety and violence issues were identified as a main cause of health challenges only for the African-American/black Ohioans living in the northwest, northeast and central regions of the state.

Data gaps and limitations. The key informant interview findings provide useful information on the health issues facing the key informant populations that would not have been available through any other method in this state health assessment. However, findings are limited by the qualitative nature of the interviews conducted and the small number of individuals interviewed. Findings should not be used in place of quantitative data and are not generalizable to the entire population.

Characteristics such as race and ethnicity, income-level and disability status are shared across population groups (e.g. people with disabilities or African-Americans may also be considered low-income). As a result, it can be difficult to attribute key informant findings to just one population characteristic or identify to what extent a population characteristic is driving the finding.

Purpose

There are many population groups in Ohio experiencing health disparities and inequities. For some of these groups, evidence of disparities may be available at the national level but data is not collected or is not available at the state level. For all of these groups, even when state-level data confirms the existence of disparities, information on the factors contributing to or causing these disparities is lacking. In order to achieve health equity in Ohio, the obstacles facing these populations must be more thoroughly understood and addressed.

As a small first step towards elevating this discussion and informing priorities identified in the state health improvement plan, HPIO commissioned OnPointe Strategic Insights to facilitate a series of key informant interviews with five populations in Ohio who are among those most at-risk for poor health outcomes. During April-May of 2016, OnPointe Strategic Insights conducted 31 key informant interviews with 37 individuals from 29 community-based organizations that serve:

- African-Americans/blacks
- Low-income individuals
- Immigrants
- Refugees
- People with disabilities

Findings from the key informant interviews provide information on the health of these populations and factors that may contribute to and/or cause health disparities and inequities in these populations. It is important to note that these findings are limited both in the populations covered and the number of interviews conducted. There are other at-risk populations, such as lesbian, gay, bisexual, transgender and questioning/queer (LGBTQ) individuals, for which more comprehensive data and information is needed to ensure health equity for all Ohioans. For more information on health disparities and data gaps associated with at-risk populations, see Discussion section on page 104.

Process

HPIO looked to existing data and gathered feedback from organizations that serve as subject matter experts regarding health disparities and equity issues in Ohio to identify populations for the key informant interviews (see Appendix E for list of organizations consulted). HPIO used decision criteria to guide the discussion and selection process (see Appendix E). HPIO also commissioned the Kirwan Institute for the Study of Race and Ethnicity at the Ohio State University to serve as a consultant and conduct supplemental data analysis to inform the process.

Populations identified for key informant interviews

For the purposes of conducting the key informant interviews, the state was divided into the Association of Ohio Health Commissioner's (AOHC) five regions: northwest, northeast, central, southwest and southeast. The final selection of population groups for the key informant interviews is displayed in Figure 5.1 and described in more detail below. With the assistance of stakeholder input, OnPointe Strategic Insights conducted stratified purposive sampling to identify key informant interviewees. Interviewees were individuals working in community-based organizations that serve the selected key informant population groups and included both administrative and direct line staff (see Appendix E for list of community-based organizations interviewed).

African-Americans/blacks

The African-American/black population was selected as a key informant interview group across all regions, except southeast Ohio due to the smaller number of African-Americans/blacks living in that region of the state.[1]

Data demonstrates strong evidence of health disparities for the African-American/black population in Ohio. For example, African-Americans/blacks have higher infant mortality rates[2] and shorter life expectancies[3] than any other racial or ethnic group. In addition, the prevalence of these poor outcomes is high given that African-American and black Ohioans are the largest racial minority group in Ohio comprising 12.1 percent of the population.[4] However, African-American and black Ohioans are often underrepresented in community and state-level health assessment and planning processes.

Figure 5.1. **Key informant interview populations, by region**

	Northwest	Northeast	Central	Southwest	Southeast
African-American/ black	X	X	X	X	
Low-income	X (urban, suburban, rural)	X (urban, suburban, rural/ Appalachian)	X (urban, suburban, rural)	X (urban, suburban, rural/ Appalachian)	X (urban, suburban, rural/ Appalachian)
Immigrant	X (Latino)	X (Eastern European)	X (East African, Latino, Southeast Asian)	X (Latino)	
Refugee		X	X	X	
People with disabilities				X	X

Low-income individuals

Low-income individuals were selected as a key informant interview group. The experiences of low-income individuals may vary depending on whether they live in an area that is urban, suburban or rural/Appalachian. To explore this further, OnPointe Strategic Insights interviewed individuals from community-based organizations serving low-income individuals in urban, suburban and rural/Appalachian counties across all five regions of the state. For the purposes of the key informant interviews, low-income individuals include those generally at or below 200 percent of the federal poverty level (FPL). More than one third of Ohioans live under 200 percent FPL (see Figure 2.a.8).

Data also demonstrates strong evidence of health disparities across low-income Ohioans. For example, Ohioans in the lowest income category were more than three times as likely as the highest income category to be a current smoker[5] and twice as likely to report having diabetes in 2014.[6] However, similar to African-Americans/ blacks, low-income individuals are often underrepresented in community and state-level health assessment and planning processes.

Immigrants

Immigrants living in Ohio were selected as a key informant interview group across all regions, except southeast Ohio due to the smaller number of immigrants living in that region of the state (see Figure 2.a.6). Identification of specific immigrant groups in various regions of the state was based on an analysis of census data conducted by the Kirwan Institute on non-U.S. born populations living in Ohio by country of origin, as well as feedback from subject-matter experts. As a result, immigrant populations selected for the key informant interviews included Latino immigrants in northwest, central and southwest Ohio, Eastern European immigrants in northeast Ohio, and East African and Southeast Asian immigrants in central Ohio.

There is very limited data on immigrant populations in Ohio. Various factors put immigrant populations at higher risk for health disparities, including challenges navigating the healthcare system due to cultural and language barriers.

Figure 5.2. **Breakdown of interviews, by key informant group**

Groups selected for key informant interviews	Totals		
	Interviews	Community-based organizations	Individuals interviewed
African-American/ black	5	5	6
Low-income	15	15	20
Immigrant	6	6	8
Refugee	3	3	3
Disability	2	2	2
Unduplicated total	**31**	**29**	**37**

Note: Numbers in columns may not add up because of duplication in organizations or individuals interviewed.

Refugees
The refugee population was selected as a key informant interview group in northeast, central and southwest Ohio. These regions were selected due to the higher arrival and resettlement of refugees in these regions based on data from the Ohio Department of Job and Family Services and the location of the United States Citizenship and Immigration Services local offices in Cleveland, Columbus and Cincinnati.

There is very limited data on refugee populations in Ohio. These populations are often at higher risk for experiencing health disparities because they are not yet established or acclimated to life in the U.S.

People with disabilities
People with disabilities were selected as a key informant interview group in southwest and southeast Ohio based on prevalence data estimates indicating a higher prevalence of people with disabilities in these regions of the state relative to others (see Figure 2.a.11 in Demographics).

While there is some data indicating the existence of health disparities faced by people with disabilities, disability status often is not included as part of health assessments and surveys. As a result, it can be difficult to capture comprehensive data and information on the health issues and challenges facing this population.

Key informant interview questions
Interviewees were asked a series of questions about the key informant population they serve focusing on:
- Strengths and resources
- Quality of life and health status
- Factors contributing to health issues

See Appendix E for the list of interview questions.

Key informant findings[7]
Strengths and resources
Figure 5.3 describes interviewees' most common responses for the strengths/resources of the key informant population they serve. Resilience emerged as a top response across all key informant populations. Throughout the interviews, the terms resilience, perseverance, determination, self-reliance, resourcefulness and "will to survive" were used to describe all of the population groups. One key informant noted, in reference to the key informant

Figure 5.3. **Most common responses for "What do you view as strengths or resources of the community you serve?"**

Across all key informant populations*	African-Americans/ blacks	Low-income individuals	Immigrants and refugees	People with disabilities
Social service agency resources (24)	Strong advocacy (3)	Social service agency resources (16)	Strong social connections (9)	Social service agency resources (2)
Strong social connections (22)	Strong social connections (2)	Strong social connections (10)	Resilience (8)	Resilience (2)
Resilience (15)	Social service agency resources (2)	Social service agency collaboration (7)	Strong principles (7)	
Strong principles (9)	Faith community connections (2)	Resilience (3)	Hard working (4)	
	Resilience (2)	Schools (3)	Social service agency resources (4)	

Common across all key informant populations

Unique to one key informant population

Note: Because of the small number of interviews for African-Americans/blacks and people with disabilities, most common responses include only those where the response was recorded more than once. For other groups, the top four most common responses are listed.
*Totals for responses in the "across all key informant populations" column include responses that may not be listed as a top response for other groups.

population served, that these are, "resourceful people, which is evidenced by the lengths they go to in an effort to better their family and society."

Strong social connections also emerged as a common response when interviewees described the African-American/black, low-income and immigrant and refugee communities. Notably, low-income communities in suburban and rural/ Appalachian areas of the state reported to have better social connections than their urban counterparts, who actually reported a lack of social connections.

The following responses related to strengths and resources were unique to a population:

- African-Americans/blacks: Strong advocacy and faith community connections
- Low-income individuals: Social service agency collaboration and schools
- Immigrants and refugees: Hard working and strong principles (includes principles such as trust, dignity, being hardworking and family values)

Quality of life

Figure 5.4 describes interviewees' most common responses on quality of life for key informant populations.

Generally, quality of life was perceived to range from poor to average across all key informant populations. Interviewees described violence and safety and mental health and substance use issues as factors impacting quality of life across three of the populations. Economic struggles also emerged as a common theme, often framed around the

Figure 5.4. **Most common responses for "How is the quality of life perceived in the community you serve?"**

Across all key informant populations*	African-Americans/ blacks	Low-income individuals	Immigrants and refugees	People with disabilities
Good social connections (19)	Poor quality of life (5)	Good social connections (8)	Experiencing cultural and language barriers (9)	Mental health challenges and substance use (2)
Experiencing violence and safety issues (13)	Good social connections (4)	Poor quality of life (6)	Good social connections (7)	Lacking social connections (2)
Poor quality of life (13)	Struggling economically (3)	Struggling economically (6)	Average quality of life (6)	Experiencing violence and safety issues (2)
Struggling economically (13)	Transportation challenges (3)	Mental health challenges and substance use (5)	Mental health challenges and substance use (4)	
Mental health challenges and substance use (12)	Experiencing violence and safety issues (3)	Experiencing violence and safety issues (5)	Strong spiritual community (4)	
Average quality of life (11)		Average quality of life (5)		
		Strong spiritual community (4)		
		Challenges accessing health care (4)		

Unique to one key informant population

Note: Because of the small number of interviews for African-Americans/blacks and people with disabilities, top responses include only those where the response was recorded more than once. For other groups, the top four most common responses are listed.
*Totals for responses in the "across all key informant populations" column include responses that may not be listed as a top response for other groups.

availability of jobs that pay a living wage. For mental health issues, depression, hopelessness, trauma and stress were frequently discussed. Violence and safety issues were also frequently mentioned to describe low-income individuals living in urban and rural areas of the state, though it was never mentioned when describing quality of life for low-income individuals living in suburban areas.

Good social connections emerged as a common response for three populations, which also arose as a theme when discussing the strengths and resources of the different populations. Notably, a lack of social connections was perceived to impact the quality of life for people with disabilities.

For immigrant and refugee communities, quality of life in Ohio was often perceived as being better than the life that immigrants left behind in their home countries. Interviewees noted that immigrants and refugees were able to make stronger social connections in areas of the state where large established communities existed to assist new arrivals in accessing and understanding available resources. In areas without large established communities, refugees often tried to build connections with those who immigrated to the U.S. from other parts of the world.

Figure 5.5. **Most common responses for "How would you describe the health status of the community you serve?"**

Across all key informant populations*	African-Americans/ blacks	Low-income individuals	Immigrants and refugees	People with disabilities
Diabetes (25)	Mental health issues (4)	Diabetes (15)	Poor access to healthcare/medical care – physical health (8)	Mental health issues (2)
Mental health issues (23)	Diabetes (4)	Mental health issues (12)	Health illiteracy/language barriers (8)	Poor nutrition/ access to healthy foods (2)
Poor nutrition/access to healthy foods (17)	Poor access to mental health care (4)	Mobility issues (11)	Cultural lack of care seeking behavior (6)	Mobility issues (2)
Cardiovascular disease (14)	Poor nutrition/ access to healthy foods (3)	Poor nutrition/ access to healthy foods (8)	Diabetes (5)	Tobacco use (2)
	Drug and alcohol abuse (3)		Cardiovascular disease (5)	
	High stress (2)		Mental health issues (5)	
	Cardiovascular disease (2)		Trauma (4)	
	Cancer (2)		Poor nutrition/access to healthy foods (4)	
			Safety and violence issues (4)	
			Poor access to dental care (4)	

Common across all key informant populations

Unique to one key informant population

Note: Because of the small number of interviews for African-Americans/blacks and people with disabilities, top responses include only those where the response was recorded more than once. For other groups, the top four most common responses are listed.
*Totals for responses in the "across all key informant populations" column include responses that may not be listed as a top response for other groups.

Health status

When describing the overall health status of the key informant populations (see Figure 5.5), mental health issues and poor nutrition/access to healthy foods were reoccurring themes. Diabetes also emerged as a top response for African-Americans/blacks, low-income individuals and immigrants and refugees and was often linked to the long-term effects of food insecurity and poor nutrition. One interviewee stated, "the connection between food and health is critical – our people make the decision between paying for food and medical care."

The most commonly noted mental health conditions across the population groups included depression, severe mental health issues, schizophrenia, bipolar, manic-depression and post-traumatic stress disorder.

Common responses regarding the health status for the immigrant and refugee communities varied quite a bit from other key informant populations and included issues around trauma, cultural and language barriers, safety and violence and access to care (both physical and dental).

Some of the other factors interviewees mentioned when discussing the overall health status of these populations included high levels of stress and higher chronic disease prevalence, as well as undiagnosed and uncontrolled conditions becoming more serious over time.

Factors contributing to identified health issues

Figure 5.6 describes interviewees' responses regarding the main causes of health challenges facing the key informant populations.

Lack of transportation was the only issue that emerged as a top response across all key informant populations. "Transportation options

Figure 5.6. **Most common responses for "What do you believe are the main causes of health challenges/issues for the community you serve?"**

Across all key informant populations*	African-Americans/ blacks	Low-income individuals	Immigrants and refugees	People with disabilities
Unemployment (17)	Housing issues (3)	Unemployment (14)	Language and cultural barriers (8)	Lack of transportation (2)
Lack of transportation (15)	Safety and violence issues (3)	Poor nutrition/ access to healthy foods (11)	Health illiteracy (6)	Inadequate coverage and affordability (2)
Poor nutrition/ access to healthy foods (13)	Unemployment (2)	Lack of transportation (7)	Mental health issues (5)	
Health illiteracy (11)	Mental health issues (2)	Housing issues (5)	Lack of transportation (4)	
Housing issues (10)	Lack of transportation (2)	Health illiteracy (4)	Lack of cultural competence (2)	
	Poor access to healthcare/medical care - physical health (2)	Inadequate coverage and affordability (4)	Housing issues (2)	
	Lack of cultural competence (2)	Poor access to healthcare/medical care - physical health (4)		

Common across all key informant populations

Unique to one key informant population

Note: Because of the small number of interviews for African-Americans/blacks and people with disabilities, top responses for those groups are only those where the response was recorded during more than one interview. For other groups, the top five most common responses are listed.
*Totals for responses in the "across all key informant populations" column include responses that may not be listed as a top response for other groups.

are abysmal for disabled and [an] increasing elderly population," stated one interviewee. Housing issues emerged as a top response for African-Americans/blacks, low-income individuals and immigrants and refugees with a specific focus on affordable housing for low-income individuals living in urban and suburban areas of the state.

Unemployment was identified as a main cause of health challenges for both African-American/black Ohioans and low-income populations, but was mentioned much more frequently for the low-income population than any other group.

Cultural and language barriers, particularly the inability to speak English, poor access to interpreter services and lack of cultural competence among healthcare providers, emerged as top responses for the causes of health challenges in the immigrant and refugee populations. Interviewees also described a cultural lack of care seeking behavior among immigrants and refugees. Many immigrants and refugees had poor access to health care in their home country and had never seen an eye doctor or dentist. One interviewee noted, "health care is not always the focus of these people as they are trying to survive."

Notably, safety and violence issues were identified as a main cause of health challenges only for the African-American and black Ohioans living in the northwest, northeast and central regions of the state.

Isolation, the complexity of navigating state and federal social support systems and substance use issues were also discussed as contributing factors to health challenges facing people with disabilities.

Key informant notes

1. Data from Ohio's African American Population Report. "Ohio African Americans." Ohio Development Services Agency. Accessed June 14, 2016. https://development.ohio.gov/files/research/P7003.pdf.
2. Data from the Vital Statistics Birth and Mortality Files. "Vital Statistics Data." Ohio Department of Health. Accessed July 13, 2016. http://www.odh.ohio.gov/healthstats/vitalstats/vitalstatsmainpage.aspx.
3. Measure of America, obtained by Robert Wood Johnson Foundation Data Hub (2010)
4. Data from the 2014 American Community Survey 1-year estimates. "2014 ACS 1-year estimates." United States Census Bureau. Accessed July 13, 2016. http://www.census.gov/programs-surveys/acs/technical-documentation/table-and-geography-changes/2014/1-year.html.
5. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2014)
6. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2014)
7. Due to the smaller number of interviews on immigrants and refugees, and similarities in organizations serving these populations, interview findings were combined for analysis. Two interviews were conducted to gather information on people with disabilities. As a result, most common responses for this population include only responses recorded two or more times during interviews.

6 Discussion and Conclusion

This section synthesizes information from all state health assessment (SHA) sources and highlights findings most relevant to development of the state health improvement plan (SHIP), including:

- Summary of emerging health issues identified by local health departments, hospitals, SHA regional forum participants and key informants representing community-based organizations
- Summary of the SHA data profile findings and discussion of the extent to which they support the top health issues identified at the local and regional levels
- Discussion of key themes, including Ohio's strengths and challenges
- Discussion of key disparities by race, ethnicity, income level, disability status, geography and other characteristics

Summary of health issues identified locally, regionally and by key informants

Local and regional health issues. Figure 6.1 lists the top 10 health issues identified in local health department and hospital assessments and plans, as well as the top 10 health issues from the SHA regional forums. It is important to note that the health issues in Figure 6.1 are not listed in ranked order and do not represent the final SHIP priorities. Rather, they provide a useful summary of prioritized key health concerns identified at the local and regional levels.

Universal health issues across regions and county types. HPIO analyzed the health issues identified by local health departments and hospitals by region

Figure 6.1. **Health issues identified by local health departments and hospitals and at regional SHA forums**

	Top 10 health issues	
	Identified in local health department and hospital assessments/ plans	Identified in SHA regional forums
Mental health and addiction		
Mental health	X	X
Drug and alcohol abuse	X	X
Chronic disease		
Obesity	X	X
Cardiovascular disease	X	X
Diabetes	X	X
Cancer	X	
Chronic disease (unspecified)	X	
Maternal and infant health		
Maternal and infant health	X	
Health behaviors		
Tobacco	X	
Nutrition		X
Access to care		
Access to health care/ medical care	X	
Access to behavioral health care		X
Access to dental care		X
Social determinants of health		
Employment, poverty and income		X
Equity/disparities		X

Note: This summary includes the top 10 health issue categories, out of 36 possible categories. See Appendix C for complete analysis.

and county type. Overall, the following issues emerged in all regions and in urban, suburban, Appalachian and non-Appalachian rural counties (see Figures 3.10 and 3.12 in Section 3 of the SHA):
- Obesity
- Mental health
- Access to health care/medical care
- Drug and alcohol abuse

Differences in top health issues by region and county type. Notable regional differences from the prioritization of health issues at the SHA regional forums include:
- Southeast was the only region to identify transportation as a top 10 health issue.
- Southeast also indicated greater concern about employment and poverty (the number one priority) and access to care, including all access to care categories (behavioral health care, dental health care, medical care, and coverage and affordability) compared to other regions.
- Maternal and infant health and equity and disparities emerged as top 10 health concerns in central, northeast and southwest regions, but not in the more rural regions.

Health issues identified during key informant interviews. When asked to describe the health status of the communities they serve, key informants across all groups (African-American/black, low-income, immigrant, refugee and people with disabilities) identified the following issues:
- Diabetes
- Mental health
- Poor nutrition/access to healthy foods
- Cardiovascular disease

In addition, there were issues identified that were unique to one or two groups, as shown below.

African-American/black
- Poor access to mental health care
- Drug and alcohol abuse
- Cancer

Immigrants and refugees
- Poor access to health care/medical care-physical health
- Health illiteracy/language barriers
- Cultural lack of care-seeking behavior
- Trauma
- Safety and violence
- Poor access to dental care

Low-income individuals
- Mobility issues

People with disabilities
- Tobacco use
- Mobility issues

Overall, these findings are very consistent with the prioritized health issues identified at the local and regional levels, and with the data profile findings. Immigrants and refugees, however, appear to be experiencing some unique challenges. Cultural issues, such as language barriers and a lack of care-seeking behavior, stand out as important considerations for this group, as well as trauma, safety and violence.

Summary of data profile findings

Over 140 metrics were compiled and analyzed in creating the data profiles. When available, U.S. comparison data was provided, as well as data regarding whether Ohio met or did not meet Healthy People 2020 targets. Figures 6.2 and 6.3 summarize Ohio's performance on the metrics in the data profiles relative to the U.S. and Healthy People 2020 targets. Overall, this analysis shows that Ohio faces many challenges.

The finding highlighted in Figure 6.2 that Ohio performs poorly relative to the U.S. on population health metrics in the data profiles is very consistent with the local, regional and key informant health issues discussed above.

Figure 6.2, however, also indicates that compared to the U.S. overall, Ohio performs relatively well on access to health care. This finding diverges from local and regional findings; local health departments, hospitals and regional forum participants all identified access to health care as a high priority. There are several possible reasons for this difference, discussed in more detail on page 109.

Ohio spends more on health care than most other states, yet Ohio's performance on population health outcomes has steadily declined relative to other states over the past few decades. Ohio healthcare spending was higher than the U.S. for nine of 15 metrics including metrics related to out-of-pocket spending on health care and Medicare spending. In addition, Ohioans have seen a steady increase in premiums for employer-based health coverage from 2006 to 2014.

Figure 6.2. **Ohio performance on state health assessment data profile metrics compared to U.S.**

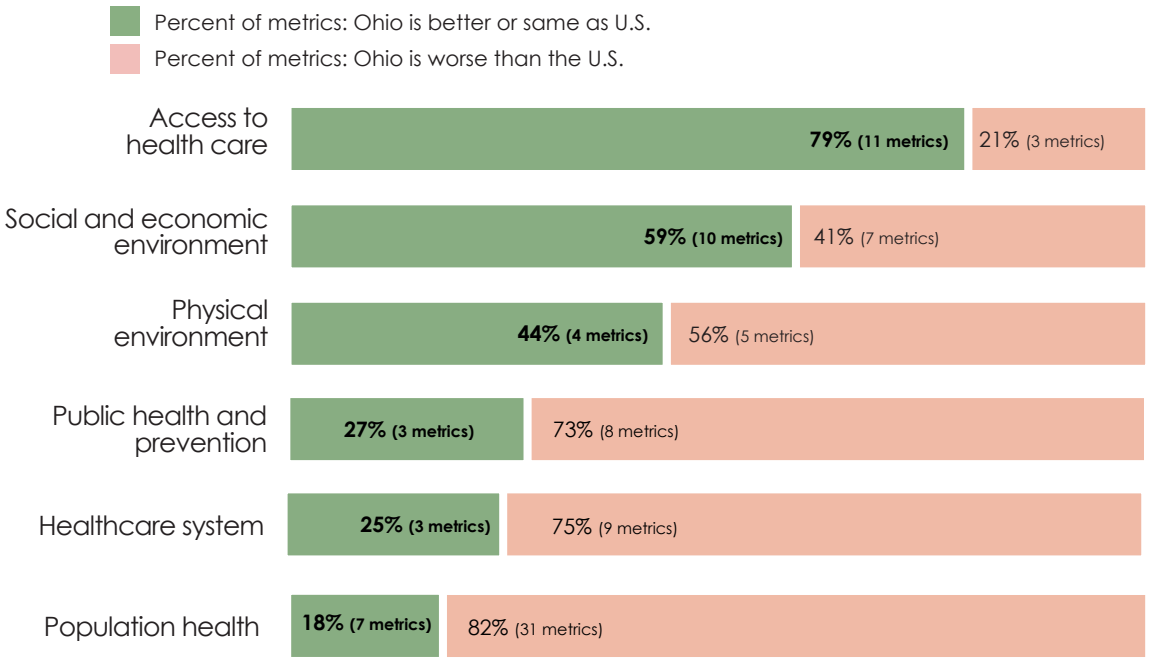
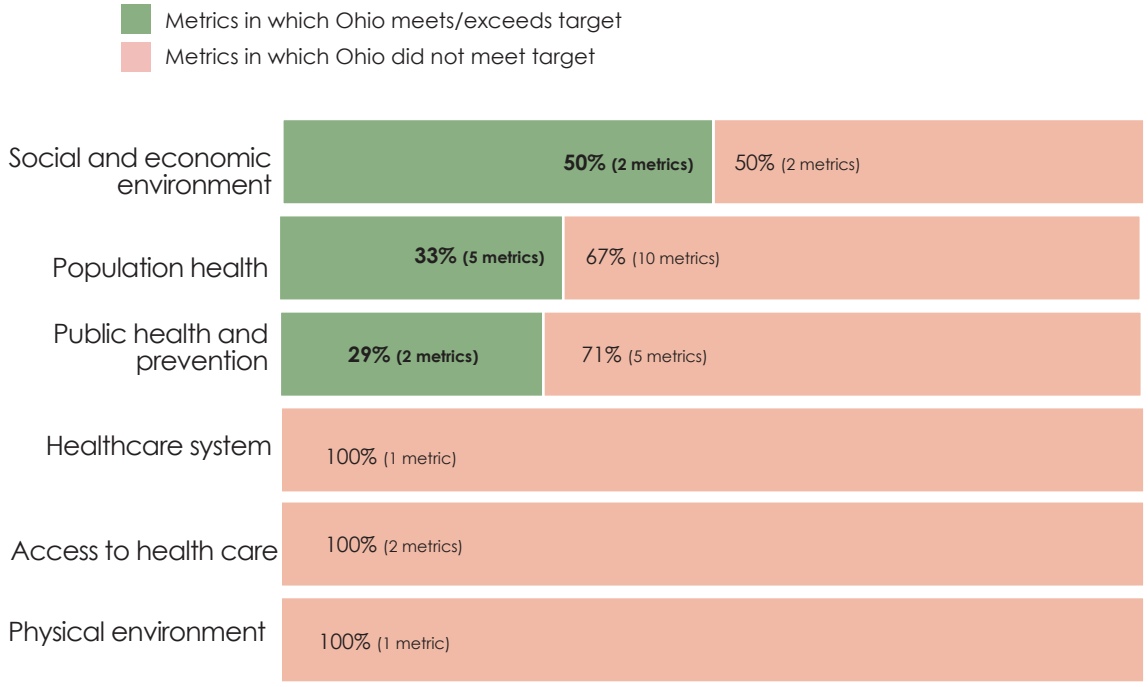


Figure 6.3. **Ohio performance on Healthy People 2020 targets included in state health assessment data profile**



Key themes

Health issues listed in Figure 6.1 fall into six general categories:

- Mental health and addiction
- Chronic disease
- Maternal and infant health
- Health behaviors
- Access to health care
- Social determinants of health

Mental health and addiction

Mental illness and addiction, often referred to as "behavioral health issues," emerged as a strong theme in the SHA and poses as a very serious challenge to the health and wellbeing of Ohioans. Concern about mental health and addiction was widespread, with behavioral health issues prioritized in all regions of the state and across different types of communities (urban, suburban, rural). In addition, key informants discussed mental health issues as significantly impacting the health status of African-Americans/blacks, low-income individuals, immigrants, refugees and people with disabilities. Depression, hopelessness, trauma and stress were also frequently mentioned in these interviews.

Although Ohio's rate of excessive drinking met the Healthy People 2020 target, alcohol and other drug use remain as challenges for Ohioans. SHA findings demonstrate the increasingly negative impact of the opiate epidemic on Ohio. Opiate-related diagnoses (heroin and prescription opioids) accounted for 37 percent of addiction treatment admissions in 2014, up from about seven percent in 2001.

The most striking evidence of the impact of this trend is that the unintentional injury death rate, which includes drug overdoses, increased 30 percent from 2009 to 2014, emerging as Ohio's third leading cause of death in 2014. In addition, unintentional injuries are now the second highest cause of premature death, just behind cancer, indicating a devastating impact on Ohioans under age 75. Given that unintentional injuries (largely from drug overdoses) and cancer were the two leading causes of premature death in Ohio in 2014, addictions to opiates and nicotine (given Ohio's high tobacco-use rate) may be two of the greatest challenges facing the health and wellbeing of Ohioans.

A sharp increase in the number of babies discharged with neonatal abstinence syndrome in recent years also suggests that the consequences of the opiate epidemic are far-reaching and will have long-term effects in Ohio.

Notably, access to behavioral health care also emerged as a critical issue across several SHA sources. Ohio performed worse than the U.S. on metrics related to unmet need for mental health and illicit drug use treatment, and regional forum participants identified access to behavioral health care as a top 10 health issue. Most troubling is that 64 percent of youth with depression did not receive treatment in 2012-2013. While this is comparable to the U.S. rate, this unmet need indicates missed opportunities for early intervention for children experiencing a mental health crisis.

The SHA findings did illuminate some strengths related to social connections and community support, which are important protective factors for mental health. Key informants described strong social connections as a strength of the African-American/black, immigrant and refugee communities, as well as for low-income communities in suburban and rural/Appalachian areas of the state. Similarly, regional forum participants identified community engagement as one of the top characteristics that made them most proud of their community or region. For further discussion of social support see page 111.

Chronic disease

The top 10 health issues identified by local health departments, hospitals and SHA regional forum participants indicate that Ohioans are very concerned about a range of conditions commonly-referred to as "chronic diseases," including obesity, cardiovascular disease, diabetes and cancer, as well as related risk factors including tobacco use and poor nutrition. Concerns about diabetes, poor nutrition and food insecurity were also common themes in the key informant interviews.

The data profiles also indicate that chronic disease is a major challenge for Ohio. Obesity and hypertension, for example, stand out as highly-prevalent conditions reported by nearly one-third of Ohio's adult population. The prevalence of adult diabetes rose from

10.4 percent in 2013 to 11.7 percent in 2014. All three of these conditions were more common among middle-aged Ohioans (ages 45-64) than younger Ohioans (ages 18-44), indicating that chronic disease will be a significant challenge for Ohio's large aging population in the coming years.

Disparities by race, ethnicity and income level in the prevalence of some chronic diseases and related risk factors are particularly troubling and are discussed more on pages 111-117.

Although not included in the top 10 health issues for local health departments, hospitals and SHA regional forum participants, asthma is also a chronic disease that is a significant challenge for Ohio. The prevalence of child asthma increased from 2012 to 2013. Hospital admissions for pediatric asthma, however, decreased by 11 percent from 2011 to 2012, possibly reflecting improvements in asthma care and management.

Outdoor air quality, secondhand smoke and housing quality impact asthma exacerbation. Outdoor air quality is worse in Ohio than in the U.S. overall, and Ohio children were exposed to secondhand smoke at twice the rate of the U.S. overall. Finally, although Ohio does relatively better than the U.S. on measures of severe housing problems and access to housing assistance, housing still emerged as a health challenge across all key informant populations (African-Americans/blacks, low-income individuals, immigrants, refugees and people with disabilities).

The data profiles identified some areas of progress for Ohio's efforts to reduce chronic disease morbidity and mortality. Most strikingly, the overall age-adjusted mortality rates for heart disease and cancer both declined from 2009 to 2014. Second, the percent of cervical cancer diagnosed at an early stage increased more than 11 percent from 2012 to 2013. Finally, although performing worse than the U.S., Ohio did see an improvement of 14 percent in 2014 to 2015 of the percent of ischemic stroke patients who received medication to break up blood clots within three hours of symptoms.

Maternal and infant health

Racial and ethnic disparities in infant mortality stand out as a major challenge for Ohio. In 2014, the black infant mortality rate was more than twice as high as the white rate. This black/white gap is not nearly as large in the U.S. overall, indicating that more can be done to reduce this sobering disparity.

There are many factors that impact infant mortality, including factors inside and outside of the healthcare system. (Social and economic factors are discussed below in the social determinants of health section on page 110.)

Regarding factors within the healthcare system, Ohio did not meet the Healthy People 2020 target for prenatal care in the first trimester, falling nearly five percentage points below the target of 77.9 percent. Prenatal care is one of the key measures of a healthy pregnancy and birth. Data also indicated pronounced disparities around prenatal care across race, ethnicity and education level, discussed more on pages 111-117.

There were two notable areas of progress in maternal and infant health. First, the teen birth rate declined steadily from 2011 to 2014, falling 15.8 percent from 2012 to 2014. Second, the percent of infants most often laid on their backs to sleep met the Healthy People 2020 target and was higher in Ohio than in the U.S. overall in 2010.

Health behaviors

Tobacco use, poor nutrition and physical inactivity all contribute to, or are closely related to, mental health, addiction, chronic disease and infant mortality.

Tobacco. Tobacco use is a major cause of heart disease and cancer—the two leading causes of death in Ohio. Lung and bronchus cancer killed more Ohioans than any other form of cancer in 2012.

Compared to the U.S., Ohio has higher rates of adult smoking and youth all-tobacco use. Ohio's 2014 adult smoking rate (21 percent) was nine percentage points above the Healthy People 2020 target (12 percent). In addition, Ohio mothers were nearly twice as likely to have smoked during pregnancy in 2014 than in the U.S. overall, and Ohio children are much more likely to be exposed to secondhand smoke at home than children in most other states.

There has been some progress, however, in reducing tobacco use prevalence. Adult smoking appears to be declining and youth

cigarette use is now far less common than it once was. However, given the addictive nature of nicotine and the fact that cancer was the leading cause of premature death in Ohio in 2014, Ohio's relatively high rate of smoking remains a challenge.

Nutrition. Poor nutrition contributes to many health problems, including diabetes, heart disease, infant mortality and poor oral health. It also affects outcomes beyond health, including academic achievement. Nutrition was identified as a top 10 priority at the SHA regional forums, and concerns about diabetes, poor nutrition and food insecurity were common themes in the key informant interviews.

The data profiles found that poor nutrition is a problem facing Ohio. Forty-two percent of Ohioans reported that they did not consume fruits on a daily basis and 26 percent did not eat vegetables on a daily basis in 2013. Access to affordable, healthy food remains a challenge for many Ohioans. The percent of Ohio households that were food insecure was higher than the U.S. and nearly three times the Healthy People 2020 goal of six percent of households.

Physical activity. Physical activity helps to prevent or manage conditions such as obesity, diabetes, hypertension, cancer and depression. Physical activity also contributes to brain health and supports healthy aging and mental wellness.

Although Ohio's high prevalence of obesity and diabetes indicate that much more progress is needed on physical activity, this assessment finds that Ohio has some strengths in this area. First, the percent of Ohio adults reporting no leisure-time physical activity declined from 2013 to 2014 and met the Healthy People 2020 target. Second, regional forum participants in most areas of the state identified their active living environments as a characteristic that made them proud of their community, and all regions identified a positive active living environment as one of the most important characteristics of a healthy county or region.

Access to healthcare

Ohio has seen great improvements in health insurance coverage, with sharp declines in the uninsured rate from 2013 to 2015, primarily due to Medicaid eligibility extension and, to a lesser extent, other Affordable Care Act-related changes to private health insurance. Ohio also performs well on access to care relative to the U.S. and has seen notable improvements on a number of metrics including a decrease in unmet dental and vision care needs for children and the percent of adults reporting being unable to see a doctor in the past year due to cost.

However, issues related to accessing care still emerged as a common theme identified by local health departments, hospitals and SHA regional forum participants. Access to health care/medical care was identified as a top 10 health issue by hospitals and local health departments in their assessment and planning documents. However, some of these assessments are several years old and may not reflect improvements that occurred since 2014 with the expansion of health insurance coverage availiability. In addition, SHA regional forum participants identified access to behavioral health care and dental care as two of their top 10 health issues.

While workforce ratios suggest that Ohio performs better than the U.S., there may be an inadequate distribution of providers across the state to meet the need of Ohioans. Data from the SHA supports this as related to behavioral health and dental care. Ohio performs worse than the U.S. on the percent of Ohioans with an unmet need for mental health treatment, illicit drug use treatment and individuals living in areas underserved by dentists.

Some population groups may also experience greater challenges accessing care relative to others. During the key informant interviews, interviewees noted poor access to care as an issue for low-income individuals, immigrants and refugees. A lack of cultural competence among healthcare providers was noted as a concern for African-American/black Ohioans, while cultural competence concerns and cultural and language barriers were described as issues facing immigrants and refugees.

Data also demonstrates disparities in access to care across racial and ethnic groups, disability status as well as by county type. For example, Ohioans who identified as multiracial, black, and/or had a disability were much more likely to forgo seeing a doctor due to cost in the past year when compared to other racial and ethnic

groups and those living without a disability. Children in Ohio who are Hispanic or living in rural counties of the state were more likely to have unmet dental care needs when compared to other racial and ethnic groups or county types, respectively.

Although there is an increase in the number of Ohioans with health insurance coverage, there may be a limited number of providers within a community who accept certain types of coverage (i.e, lower acceptance rates for Medicaid or federal health insurance marketplace plans). Ohioans may also be underinsured or required to spend a high proportion of their annual income on medical care (i.e., through premiums, deductibles and other cost-sharing mechanisms). Data indicate that compared to the U.S., there are more Ohioans living in households where out-of-pocket spending on health care, including premiums, is more than 10 percent of annual income.

Social determinants of health

The social determinants of health refer to an individual's surrounding environment, or the places people live, learn, work and play and the wider set of forces and systems shaping the conditions of daily life. Various aspects of the social and economic environment, as well as the physical environment, have been described throughout the SHA.

The social determinants of health can have a significant impact on health risks and health outcomes at all stages of the life course, but are particularly important for children. Many high-priority health problems that surface in adulthood, such as diabetes, mental health and addiction, are rooted in behaviors and conditions shaped by or experienced during childhood.

Employment, poverty and education. Economic factors are important determinants of a population's health. Ohio's annual average unemployment rate has decreased considerably since the recession in 2009 and 2010. In 2015, the average unemployment rate was down to 4.9 percent. However, labor force participation in Ohio has been steadily declining since 2007 and has not rebounded after the recession.

Employment, poverty and income were among the top five statewide health issues identified by SHA regional forum participants. Four regions (northwest, central, southwest and southeast) also identified poverty as one of the top factors keeping their counties and regions from doing what needs to be done to improve health and quality of life. Finally, unemployment was identified in key informant interviews as a main cause of health challenges for both the African-American/black and low-income populations.

Wide disparities were identified for several of the economic and education metrics highlighted in the data profiles. For instance, there were wide disparities in rates of fourth grade reading proficiency by race and ethnicity, as well as by income. Rates of child poverty varied considerably across the state, with only five percent of children in Delaware County living in poverty in 2014, compared to 38 percent in Gallia County.

Violence, trauma and toxic stress. Violence is another challenge to the wellbeing of Ohioans. In 2013, Ohio's rate of violent crime was 286.2 per 100,000 population, well below the U.S. rate overall, which was 367.9. Additionally, between 2013 and 2014, Ohio's homicide mortality rate fell by nearly 12 percent and its rate of child maltreatment decreased by nearly 10 percent, leading both to be virtually the same as the U.S. overall. However, violence continues to be a significant concern among some groups of Ohioans. Hospitals and local health departments identified violence as a top 10 issue in the central and northwest regions of the state. Also, key informant interviews identified safety and violence issues as a main cause of health challenges for the African-American/black populations living in the northwest, northeast and central regions of Ohio.

Intimate partner violence and adverse childhood experiences stand out as highly prevalent conditions that affect large numbers of Ohioans and can have negative long-term impacts on a wide variety of health outcomes. In 2010, 36 percent of Ohio women reported that they had experienced rape, physical violence and/or stalking by an intimate partner. This type of abuse is associated with several adverse health outcomes, including cardiovascular disease, pregnancy difficulties such as low birth weight babies and perinatal deaths, depression and cigarette smoking.[1]

Adverse childhood experiences include socioeconomic hardship, death of a parent, having a parent who served time in jail, witnessing domestic violence, living with someone with an alcohol or drug problem, etc. In 2011-2012, about one-quarter of Ohio children overall, and 43 percent of Ohio children in poverty, had experienced two or more adverse experiences. Researchers have found a strong relationship between number of adverse childhood experiences and the negative impact on health and wellbeing throughout the life course;

individuals with several adverse experiences during childhood are more likely to suffer from depression, heart disease, addiction and several other poor health outcomes.[2]

Social support. Ohio performed better than the U.S. overall in terms of its number of membership associations per 100,000 population (such as civic, sports and religious organizations). This is an indicator of social cohesion, which can benefit the health of a community. Further, in key informant interviews, strong social connections emerged as a strength of the African-American/black and immigrant and refugee communities as well as low-income communities in suburban and rural/Appalachian areas of the state. However, a lack of social connections was identified as a factor impacting quality of life for people with disabilities and low-income individuals living in urban areas of the state.

Finally, when SHA regional forum participants were asked what is keeping their county or region from doing what needs to be done to improve health and quality of life, one of the top responses was the social climate, which included lack of motivation, learned helplessness, cultural norms, lack of trust and apathy.

Physical environment. Elements of the physical environment are also important to health. Ninety-three percent of the Ohio population was served by community water systems with optimally fluoridated water in 2014, compared to only 75 percent for the U.S. overall. Ohio also had fewer households with severe housing problems than the U.S. overall. Additionally, SHA regional forum participants in the northwest, northeast, central and southeast regions identified their active living environments as something that made them proud of their community or region.

However, Ohio continues to face serious challenges related to the physical environment including drinking water violations, outdoor air quality concerns and food insecurity. Ohio's rates of children exposed to secondhand smoke and lead poisoning (especially in certain regions of the state including Cuyahoga, Lucas and Mahoning Counties) are both considerably higher than those of the U.S. overall.

There are also high levels of segregation between black and white residents in five metropolitan areas of the state – Toledo, Columbus, Dayton, Cincinnati and Cleveland-Elyria. Housing segregation is partly the result of early twentieth-century public policies that excluded racial and ethnic minorities from living in certain neighborhoods and is one example of how structural racism can negatively impact community wellbeing across multiple generations.

All focus group populations for the key informant interviews (African-Americans/blacks, low-income individuals, immigrants and refugees, people with disabilities) were found to experience problems with housing, transportation and access to healthy foods. Regional forum participants in northwest and southeast Ohio also mentioned lack of transportation as a barrier to improved health and quality of life within their region. Poor nutrition/access to healthy food was identified as a top 10 health issue by participants in the northwest, northeast and southwest regional forums.

Key disparities by race, ethnicity, income level, disability status, geography and other characteristics

There are many population groups in Ohio experiencing health disparities. Information in this state health assessment on health disparities and factors that contribute to health disparities was gathered on select metrics in the data profiles as well as through key informant interviews.

Data is not consistently collected or available for all population groups. For example, survey data may not be available for some groups because of small sample sizes. Or, data instruments may not collect any information at all on a particular population. As a result, there is more information on some groups as compared to others (e.g., data is more consistently collected on the African-American/black population than Asian/Pacific Islander).

This section also serves to highlight gaps in data collection efforts across various population groups. Data collection regarding race, ethnicity, income-level, disability status and across other characteristics is necessary to establish the foundation on which to improve the health of all Ohioans.

Figure 6.4. **Performance on health-related outcomes for racial and ethnic groups of Ohioans compared to the U.S. overall rate**

Metric	White/non-Hispanic white	African-American/ black	Asian/Pacific Islander	American Indian/Alaska Native	Hispanic/ Latino
Population health metrics					
Premature death	Worse	Worse	Better	Better	Better
Life expectancy at birth	Worse	Worse	Better	No data available	Better
Infant mortality	Better	Worse	No data available	No data available	Worse
Adult smoking	Worse	Worse	No data available	No data available	Worse
Adult obesity	Worse	Worse	No data available	No data available	Better
Adult diabetes	Worse	Worse	No data available	No data available	Worse
Hypertension prevalence	Worse	Worse	No data available	No data available	Better
Low birth weight	Better	Worse	Worse	Better	Better
Child asthma prevalence	Better	Worse	No data available	No data available	Worse
Healthcare system metrics					
Prenatal care	Better	Worse	Worse	No data available	Worse
Female breast cancer early stage diagnosis	Worse	Worse	Better	No data available	Better
Colon and rectal cancer early stage diagnosis	Worse	Worse	Better	No data available	Worse
Cervical cancer early stage diagnosis	Better	Better	Worse	No data available	Worse
Lung and bronchus cancer early stage diagnosis	Worse	Worse	Worse	No data available	Worse
Mortality amenable to healthcare	Worse	Worse	No data available	No data available	Better
Diabetes with long-term complications	Better	Worse	Better	Worse	Worse
Access to healthcare					
Unable to see doctor due to cost	Better	Worse	No data available	No data available	Worse
Unmet dental care needs children*	Better	Worse	No data available	No data available	Worse
Public health and prevention					
HIV prevalence	Better	Worse	Better	Better	Better
Social and economic environment					
Fourth grade reading proficiency	Better	Worse	Better	No data available	Worse
Child poverty	Better	Worse	Better	No data available	Worse
Adverse childhood experiences	Same	Worse	No data available	No data available	Worse

Metrics for which Ohio racial or ethic group performs better than U.S. overall rate

Metrics for which Ohio racial or ethic group performs the same as U.S. overall rate

Metrics for which Ohio racial or ethic group performs worse than U.S. overall rate

*Comparison was made to Ohio rate because data for the U.S. was not available.
Note: Differences between the U.S. rate or Ohio rate and the rates for Ohio racial and ethnic group performance were not tested for statistical significance. A total of 22 metrics were reviewed.

Disparities across racial and ethnic groups

Figure 6.4 summarizes performance on health-related outcomes for different racial and ethnic groups of Ohioans compared to the overall U.S. rate. Disparities exist across all metrics, varying widely by race and ethnicity. Figure 6.4 also demonstrates the lack of data for Asian/Pacific Islander and American Indian/Alaskan Native populations in Ohio – highlighting an additional opportunity to improve data collection efforts across all racial and ethnic groups.

African-American/black

African-American/black Ohioans were much more likely than any other racial and ethnic group to experience poor health outcomes (see Figure 6.4). On 21 of 22 metrics reviewed, African-American/black Ohioans performed worse than the U.S. or Ohio rate when U.S. data was not available (see Figure 6.5). On a number of metrics, the disparity between African-American/black Ohioans and other racial and ethnic groups was particularly striking. For example:

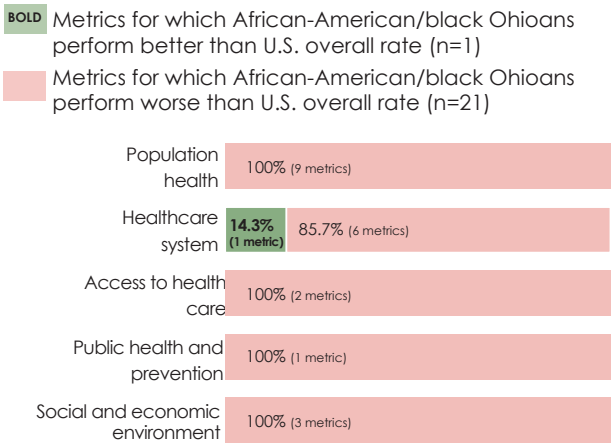
- An African-American child born in Ohio in 2010 could expect to live more than a decade less than children in other racial and ethnic groups.
- The black infant mortality rate was more than two times the rate for white Ohioans in 2014. In addition, black Ohioans were the least likely to receive prenatal care within their first trimester of pregnancy relative to other racial and ethnic groups.
- African-American/black Ohioans were much more likely than any other racial and ethnic group to experience poor outcomes related to obesity, low birth weight, diabetes, hypertension, child asthma and HIV.
- Black Ohioans were the least likely to have colorectal and female breast cancer diagnosed at an early stage compared to other racial and ethnic groups.
- Black Ohioans were 1.8 times more likely to die as a result of untimely and inappropriate health care as compared to white Ohioans.
- African-American/black children in Ohio had the lowest fourth grade reading proficiency rates and were more likely to have two or more adverse childhood experiences compared to other racial and ethnic groups.

During the key informant interviews, when describing the health status of African-Americans/blacks, mental health issues, access to mental health care and diabetes all emerged as common responses. The most frequently mentioned causes of health challenges facing the African-American/black community included:

- Housing issues
- Safety and violence
- Unemployment
- Mental health issues
- Lack of transportation
- Poor access to health care/medical care
- Lack of cultural competence within the healthcare system

There is also substantial diversity within the African-American/black population. For example, data on the African-American/black population may mask disparities that are unique to Africans versus African-American or black Ohioans.

Figure 6.5. **Ohio African-American/black performance compared to U.S. overall rate on metrics included in state health assessment data profile**



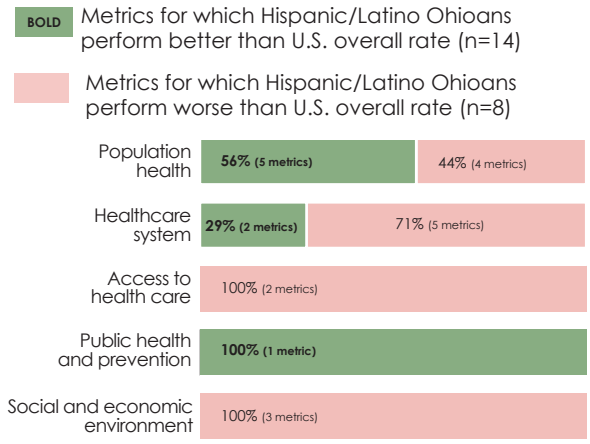
Hispanic/Latino

On 14 of 22 metrics reviewed, Hispanic Ohioans performed worse than the U.S. or Ohio rate when U.S. data was not available (see Figure 6.6).

Disparities for Hispanic Ohioans were widespread across metrics. For example:

- Hispanic Ohioans had the second highest rates of infant mortality, diabetes, child asthma and HIV.
- Only 63 percent of Hispanic women received prenatal care in their first trimester, falling 14 percentage points below white Ohioans in 2014.
- Hispanic Ohioans were the least likely to have cervical cancer diagnosed at an early stage compared to other racial and ethnic groups.

Figure 6.6. **Ohio Hispanic/Latino performance compared to U.S. overall rate on metrics included in state health assessment data profile**



- Children who are Hispanic were more likely to have unmet dental care needs as compared to other racial and ethnic groups.
- Hispanic/Latino children were the most likely to live in a household at or below the poverty threshold in 2014.

When describing the main causes of health challenges facing immigrant and refugee communities, which included Latino communities in northwest and southwest Ohio, the following factors emerged as the most common responses among the interviewees:

- Language and cultural barriers
- Health illiteracy
- Mental health issues
- Lack of transportation
- Lack of cultural competence in the healthcare system
- Housing issues

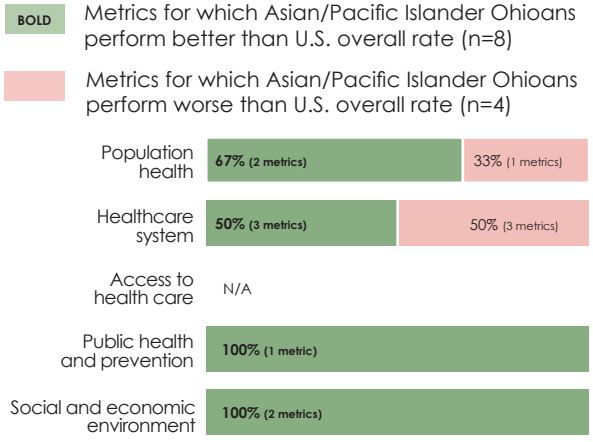
Asian/Pacific Islander

There was clear underrepresentation of the Asian/Pacific Islander population in the data compiled for the state health assessment. Only 12 of 22 metrics displayed by race and ethnicity had available data on Asian/Pacific Islanders (see Figure 6.4). Of those 12 metrics, Ohioans who are Asian/Pacific Islander performed worse than the U.S or Ohio rate on four metrics (see Figure 6.7). Asian/Pacific Islander Ohioans also had more pronounced disparities across these metrics:

- Asian/Pacific Islander Ohioans were the least likely to have lung/bronchus cancer diagnosed at an early stage and the second least likely to have cervical cancer diagnosed at an early stage compared to other racial groups.
- Babies born to Asian/Pacific Islander Ohioans were the second most likely to have a low birth weight compared to other racial and ethnic groups.

The Asian/Pacific Islander population performs well on a number of metrics relative to the U.S. rate and other racial and ethnic groups. However, there is great diversity within this population that is not typically reflected in available data sources. Aggregated statistics on the Asian/Pacific Islander community can mask health disparities, particularly between subpopulations, such as Southeast Asians and new immigrant or refugee groups. For example, a 2014 study found that Bhutanese refugees in Ohio experienced high rates of alcohol and tobacco use, mental health issues and suicide.[3]

Figure 6.7. **Ohio Asian/Pacific Islander performance compared to U.S. overall rate on metrics included in state health assessment data profile**



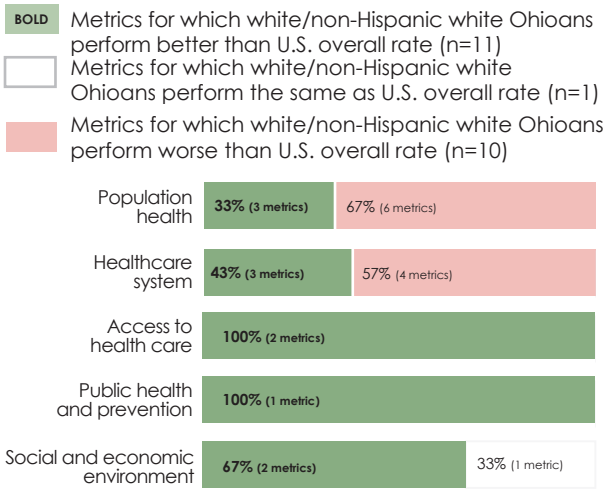
To learn more about Ohio's Asian/Pacific Islander population, please see the **Ohio Asian American Pacific Islander Advisory Council** reports including:

- **2014 Annual Report**
- **A Report on the State of Asian Americans and Pacific Islanders in Ohio, March 2013**

American Indian/Alaskan Native
Very few of the metrics reviewed had information available on American Indian/ Alaskan Native Ohioans (see Figure 6.4). As a result, it was difficult to assess the nature and burden of health disparities for the American Indian/Alaskan Native population in Ohio, which comprised only 0.1 percent of the Ohio population in 2014 (see Figure 2.a.4). Medicare data reviewed in the data profiles did demonstrate particularly strong disparities for Ohioans who are American Indian/Alaskan Native around admissions for diabetes with long-term complications and Medicare spending for those with chronic disease.

White
White Ohioans performed relatively well compared to other racial and ethnic groups in Ohio. However, compared to the U.S. rate, white Ohioans performed poorly on metrics related to population health and healthcare system (see Figure 6.8).

Figure 6.8. **Ohio white/non-Hispanic white performance compared to U.S. overall rate on metrics included in state health assessment data profile**



Disparities across income and education level

Higher income was generally associated with better health outcomes. Compared to the U.S. rate, a slightly higher proportion of Ohioans had a low household income (less than $24,999) and a lower proportion of Ohioans had a higher household income ($75,000 or more) (see Figure 2.a.7).

Diabetes, obesity, hypertension and tobacco use were all more common among lower-income Ohioans (those with household incomes less than $25,000) than among Ohioans with household incomes at $50,000 or more. There was a particularly strong relationship between income level and adult diabetes and smoking. Ohioans in the lowest income group were more than twice as likely to report having diabetes and three times as likely to be a current smoker compared to those in the highest income group. Notably, disparities for obesity and hypertension were less pronounced.

Income disparities across the social factors that impact health were also striking. Fourth graders who were not economically disadvantaged were more than twice as likely to be proficient in reading compared to lower-income children. In addition, more than 40 percent of children living below the federal poverty level had experienced two or more adverse childhood experiences, compared to only eight percent of children in the highest income group.

In regards to education level, women in Ohio who had higher levels of education were more likely to receive prenatal care within their first trimester of pregnancy as compared to those with lower levels of education.

Unemployment, poor nutrition/access to healthy foods, transportation, housing, health illiteracy, coverage and affordability, and access to health care were all identified as main causes of health challenges facing low-income individuals during the key informant interviews.

Disparities across age and gender

The data profiles demonstrate that health disparities exist and vary across age and gender. For example:

- Obesity rates were highest for adults of ages 45-64.
- Diabetes and hypertension prevalence increased with age, greatly impacting those of ages 65 and older.
- Suicide rates varied by age and sex, with middle-aged Ohioans (ages 45-54) and males being most at risk.
- HIV prevalence rates were four times higher among males than females in 2014.
- Asthma prevalence is higher for children in Ohio as compared to adults. However, asthma prevalence rates for both children and adults in Ohio are higher than U.S. rates.

As Ohio's "baby boom" generation ages, Ohio will have a larger proportion of older adults (ages 60+) in 2030 than it did in 2010. These changing demographics will have a substantial impact on the burden of disparities across Ohio's population, particularly as it relates to the long-term effects of chronic disease.

Disparities across other population groups

Disability status

People with disabilities are a community of individuals who share a unique culture and collective lived experiences that cut across the boundaries of race, ethnicity, age, gender and income-level.

Data on people with disabilities is not systematically collected for all metrics, particularly for the social, economic and physical environment factors that impact health. As a result, it is difficult to assess the nature and burden of health disparities for people with disabilities in Ohio. Ignoring and/or excluding disability status, a critical factor with a significant impact on the health of all racial and ethnic groups, does a disservice to the many people who live at the intersection of this double burden.

In 2014, the percentage of adults in Ohio who had any disability was 23.3 percent, slightly higher than the U.S. rate at 22.5 percent (includes U.S. territories).[4] People with disabilities experience disparities for many metrics – with substantial disparities across metrics related to health outcomes and accessing health care. For example, when compared to individuals without a disability, adults with a disability:

- Were two times more likely to smoke cigarettes
- Had higher rates of hypertension
- Were almost four times as likely to report ever having depression
- Were more than three times as likely to forgo seeing a doctor due to cost

During the key informant interviews, lack of transportation and inadequate health insurance coverage and healthcare affordability were the most common responses for the main causes of health challenges facing people with disabilities.

A closer look

To learn more about Ohioans with disabilities, please see:

- **Centers for Disease Control and Prevention Disability and Health Data System**
- **The Double Burden: Health Disparities among People of Color Living with Disabilities**
- **2013 Disability and Health in Ohio Public Health Needs Assessment**
- **2013 Ohio Disability Data Report**
- **HPIO Health and disabilities basics: Overview of health coverage, programs and services, 2014** and **Part II: the health challenges facing Ohioans with disabilities, 2014**

Lesbian, gay, bisexual, transgender and queer/questioning (LGBTQ) individuals

Sexual orientation and gender identity questions are not asked on many national and state surveys, making it very difficult to assess the health needs of the LGBTQ community in Ohio. Often, available data is limited to information on the LGBT population, excluding data on individuals who identify as queer or questioning. All seven objectives related to LGBT health from Healthy People 2020 focus on increasing the number of population-based data systems collecting data on LGBT populations.[5]

Limited national data on the LGBT community indicates LGBT individuals face severe barriers to accessing health care, including stigma, discrimination, workplace policies and violence, and as a result, are more likely to experience poorer health outcomes.[6]

Amish

Ohio has a large Amish community, particularly in Holmes County. However, there is very little data on the Amish — regarding population size as well as overall health outcomes — making it difficult to assess the burden of health disparities within this community.

Disparities by geography

Economic vitality varies widely across the state. The unemployment rate in 2014, for example, varied from a low of 3.8 percent in Mercer County to a high of 10.8 percent in Monroe County. Similarly, child poverty ranged from five percent in Delaware to 38 percent in Gallia

in 2014. Population growth is also uneven; Delaware County was projected to grow by 20.9 percent from 2010 to 2020, while Crawford County was projected to shrink by 6.6 percent.

These conditions affect regional patterns in health outcomes. Appalachian counties in southern and eastern Ohio tend to have poorer health outcomes, such as higher rates of premature death, although there are counties with significant health challenges in all areas of the state. Northeast Ohio also faces some unique challenges, such as poorer outdoor air quality and high rates of black/white residential segregation and child lead poisoning in Cleveland. Finally, HIV prevalence is highest in Cleveland and Columbus.[7]

Conclusions

Ohio is a large and diverse state that faces many health challenges despite a wealth of healthcare resources. Ohio also has significant health disparities by race, income, disability status and geography, and spends more on health care than most other states.[8] This state health assessment underscores the urgent need to improve health and wellbeing in Ohio.

Key findings from the SHA are outlined below:
Key finding #1. Many opportunities exist to improve health outcomes, especially in terms of mental health, addiction, chronic disease, maternal and infant health and health behaviors.

Key finding #2. Many opportunities exist to decrease health disparities by race, ethnicity, income and education-level, disability status and other characteristics.

Key finding #3. Access to health care has improved, but challenges remain especially related to disparities in accessing care, provider distribution and capacity particularly for behavioral health services and dental care, and the affordability of health insurance coverage and care.

Key finding #4. Social determinants of health present cross-cutting challenges. Social determinants of health that drive disparities in health outcomes include:
- Employment, poverty, income and education
- Social support
- Violence, trauma and toxic stress, including the high prevalence of intimate partner violence (rape, physical abuse, stalking) and adverse childhood experiences (such as having a parent who has died or been incarcerated)
- Physical environment, including transportation, housing, residential segregation, lead poisoning and air and water quality

Key finding #5. Opportunities exist to address health challenges across the life course. Many health problems are rooted in behaviors and conditions developed early in life, as well as other childhood experiences. Also, Ohio will have a much larger proportion of older adults in the coming decades. Efforts to address Ohio's health challenges must therefore include strategies at every stage of life, as well as strategies designed to improve short-term and long-term outcomes.

Key finding #6. Improved data collection efforts are needed to assess health issues at the local level and for specific groups of Ohioans. Both the nation and our state need a more coordinated approach to population health data collection and reporting that makes data available for a wider range of metrics at the county-level and by race, ethnicity, disability status and other characteristics.

Greater pooling of data collection resources could also increase the efficiency and quality of data available for state and local-level assessments and evaluation. In addition, increased data sharing between health care and public health could greatly improve the timeliness and usefulness of existing health information.

Key finding #7. Widespread agreement on health issues identified at local, regional and state levels can be an impetus for greater collaboration. The interconnectedness of Ohio's greatest health challenges, along with the overall consistency of health priorities identified in this assessment, indicates many opportunities for collaboration between a wide variety of partners at and between the state and local level, including physical and behavioral health organizations and sectors beyond health.

Key finding #8. Sustainable healthcare spending remains a concern in Ohio, especially since comparatively high spending has not translated into improved population health outcomes.

Current public and private efforts focused on addressing this concern through payment reform provide the opportunity to invest resources strategically so that outcomes are improved. Evidence-based strategies can also be implemented or accelerated in Ohio to address both high healthcare spending and Ohio's performance on health outcomes.

Due to several recent changes in the policy landscape (including the expansion of health coverage, public and private sector value-based payment reform and legislative attention to mental health, addiction and infant mortality), as well as strong public- and private-sector leadership and a desire to collaborate at the state and local level, Ohio is now poised to leverage its resources in a more strategic way to achieve measurable improvements in population health outcomes, health equity and healthcare spending. This state health assessment provides the data needed to inform the next steps in Ohio's journey to improved health and wellbeing through the state health improvement plan.

Discussion and conclusion notes

1. Intimate partner violence: Consequences. Centers for Disease Control and Prevention. http://www.cdc.gov/violenceprevention/intimatepartnerviolence/consequences.html
2. CDC-Kaiser ACE Study, Centers for Disease Control and Prevention. https://www.cdc.gov/violenceprevention/acestudy/about.html
3. "Epidemiology of Mental Health, Suicide and Post-Traumatic Stress Disorders among Bhutanese Refugees in Ohio, 2014" Ohio Department of Mental Health and Addiction Services.
4. Behavioral Risk Factor Surveillance System, 2014. National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention.
5. Office of Disease Prevention and Health Promotion, Healthy People 2020.
6. "Health and Access to Care and Coverage for Lesbian, Gay, Bisexual, and Transgender Individuals in the U.S." Ranji U., Beamesderfer, A., Kates, J et. al Kaiser Family Foundation (April 2015)
7. Due to high prevalence rates, Columbus and Cleveland are the only cities in Ohio that are eligible for Ryan White Part A funding for HIV/AIDS-related services. http://hab.hrsa.gov/abouthab/parta.html
8. Health Policy Institute of Ohio. "2014 Health Value Dashboard." December 16, 2014.

APPENDIX

Background and process appendix

Additional background

There are several other state-led projects that inform and/or relate to the state health assessment (SHA) and state health improvement plan (SHIP).

State Innovation Model (SIM) project

The federal State Innovation Model (SIM) project provides an unprecedented opportunity to address health challenges facing Ohio. In December 2014, the federal Center for Medicare and Medicaid Innovation (CMMI) awarded Ohio a four-year $75 million SIM test grant for implementation of episode-based payments and rollout of a state-wide patient-centered medical home (PCMH) model over a four-year period. The Governor's Office of Health Transformation leads this initiative.

As part of the SIM project, Ohio must develop a population health plan. In September 2015, the Ohio Department of Medicaid (ODM) and Ohio Department of Health (ODH) contracted with the Health Policy Institute of Ohio (HPIO) to facilitate stakeholder engagement and provide guidance on improving population health planning. The Governor's Office of Health Transformation released the resulting report in January 2016, **Improving Population Health Planning in Ohio**. The report offered guidance that informed the development of the SHA, and will inform the upcoming SHIP, including recommendations on how to:

- Improve the SHA and SHIP
- Improve Ohio's population health planning infrastructure, with a particular focus on community health improvement planning conducted by local health departments and hospitals
- Align population health priority areas, measures, objectives and evidence-based strategies with the design and implementation of the PCMH model (see Figure A.1 for Ohio's PCMH clinical quality measures)

Figure A.1. **Patient-centered medical home (PCMH) clinical quality measures as of July 2016**

Category	Measure Name	Population
Pediatric health	Well-child visits in the first 15 months of life	Pediatrics
	Well-child visits in the 3rd, 4th, 5th, 6th years of life	Pediatrics
	Adolescent well-care visit	Pediatrics
	Weight assessment and counseling for nutrition and physical activity for children/ adolescents: Body mass index (BMI) assessment for children/adolescents	Pediatrics
Women's health	Timeliness of prenatal care	Adults
	Live births weighing less than 2,500 grams	Pediatrics
	Postpartum care	Adults
	Breast cancer screening	Adults
	Cervical cancer screening	Adults
Adult health	Adult BMI	Adults
	Controlling high blood pressure	Adults
	Med management for people with asthma	Both
	Statin therapy for patients with Cardiovascular disease	Adults
	Comprehensive diabetes care: HgA1c poor control (>9.0%)	Adults
	Comprehensive diabetes care: HbA1c testing	Adults
	Comprehensive diabetes care: eye exam	Adults
Behavioral health	Antidepressant medication management	Adults
	Follow up after hospitalization for mental illness	Both
	Preventive care and screening: tobacco use: screening and cessation intervention	Both
	Initiation and engagement of alcohol and other drug dependence treatment	Adults

Public health accreditation and previous state health assessment and state health improvement plan

ODH released the previous **SHA in 2011**, followed by the **2012-2014 SHIP** in 2012. ODH applied for accreditation from the then newly created Public Health Accreditation Board (PHAB) in 2014, submitting the 2011 SHA and 2012-2014 SHIP as prerequisite documents. In response to quality improvement guidance received during the accreditation review process, ODH released a revised version of the SHIP (**2015-16 SHIP Addendum**) in October 2015. ODH achieved PHAB accreditation on Nov. 10, 2015.

Local health departments are going through a parallel process in which they conduct community health assessments (CHAs) and develop community health improvement plans (CHIPs) as prerequisites for PHAB accreditation. Similarly, to be recognized as tax-exempt under Section 501(c)(3) of the Internal Revenue Code (IRC), hospitals are required to conduct a community health needs assessment (CHNA) and adopt an implementation strategy (IS) every three years.

Process and methods

Guidance and alignment

This SHA was guided by:

- Recommendations from the Improving Population Health Planning in Ohio report mentioned above
- Public Health Accreditation Board Standards and Measures, Version 1.5
- Mobilizing for Action through Planning and Partnerships (MAPP), a public health assessment and planning model that is widely used by local health departments and hospitals in Ohio

In addition, this SHA builds upon and/or aligns with:

- Existing state agency assessments (see Appendix A page 126)
- Community health assessments and improvement plans conducted by local health departments and hospitals
- HPIO Health Value Dashboard
- Ohio PCMH model quality measures
- County Health Rankings and Roadmaps
- Healthy People 2020

Leadership, project management and stakeholder engagement

In early February 2016, ODH issued a Request for Proposals for modernizing Ohio's SHA and SHIP. The contract was awarded to the Health Policy Institute of Ohio in early March 2016.

HPIO was founded in 2003 by a group of health funders as a nonpartisan health-focused statewide nonprofit organization dedicated to health policy analysis. HPIO focuses on data and evidence and does not represent a particular sector.

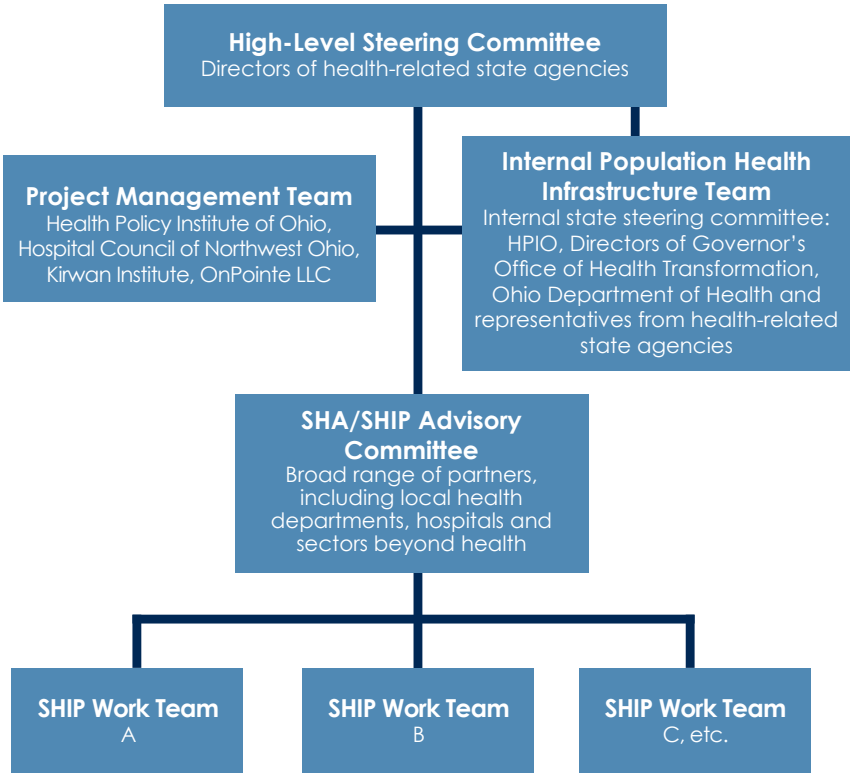
HPIO's mission is to provide the independent and nonpartisan information and analysis needed to create sound health policy.

HPIO provided overall SHA project management, wrote the SHA narrative, designed the SHA graphics, facilitated input from state partners, led stakeholder engagement, convened and managed the SHA/SHIP Advisory Committee and facilitated meetings of an internal state agency infrastructure team.

HPIO also conducted an analysis of local health department and hospital community health assessments and improvement plans. HPIO subcontracted with three other organizations to assist with the project:

- Hospital Council of Northwest Ohio (HCNO): HCNO is a Toledo-based nonprofit with a track record of addressing health issues and health disparities with diverse partners throughout the state. Since 1999, HCNO has conducted more than 75 needs assessments for hospitals and local health departments in 40 counties. HCNO's role with the SHA was to analyze existing data sets to create a data crosswalk, facilitate primary data collection through regional forums and compilation of existing data.
- OnPointe Strategic Insights: OnPointe is a Columbus-based consulting firm with experience in facilitating planning and assessment processes and creating actionable plans with diverse audiences. OnPointe's role with the SHA was to conduct key informant interviews with representatives of community-based organizations.
- Kirwan Institute for Race and Ethnicity Studies: The Kirwan Institute is based at the Ohio State

Figure A.2. **SHA and SHIP stakeholder engagement and project management structure**



University. The Kirwan Institute's role with the SHA was to assist in identifying vulnerable populations that are disproportionately affected by health disparities, advise on the identification of data sets and sources that provide data at a sub-population level and assist with data visualization related to disparities, inequities and demographics by providing data, charts and maps.

The stakeholder engagement and project management structure is shown in Figure A.2.

Notably, the high-level steering committee and the internal population health infrastructure team are led by the Governor's Office of Health Transformation and include representatives from not just ODH, but also the departments of Medicaid, mental health and addiction services, job and family services, developmental disabilities and veterans' services.

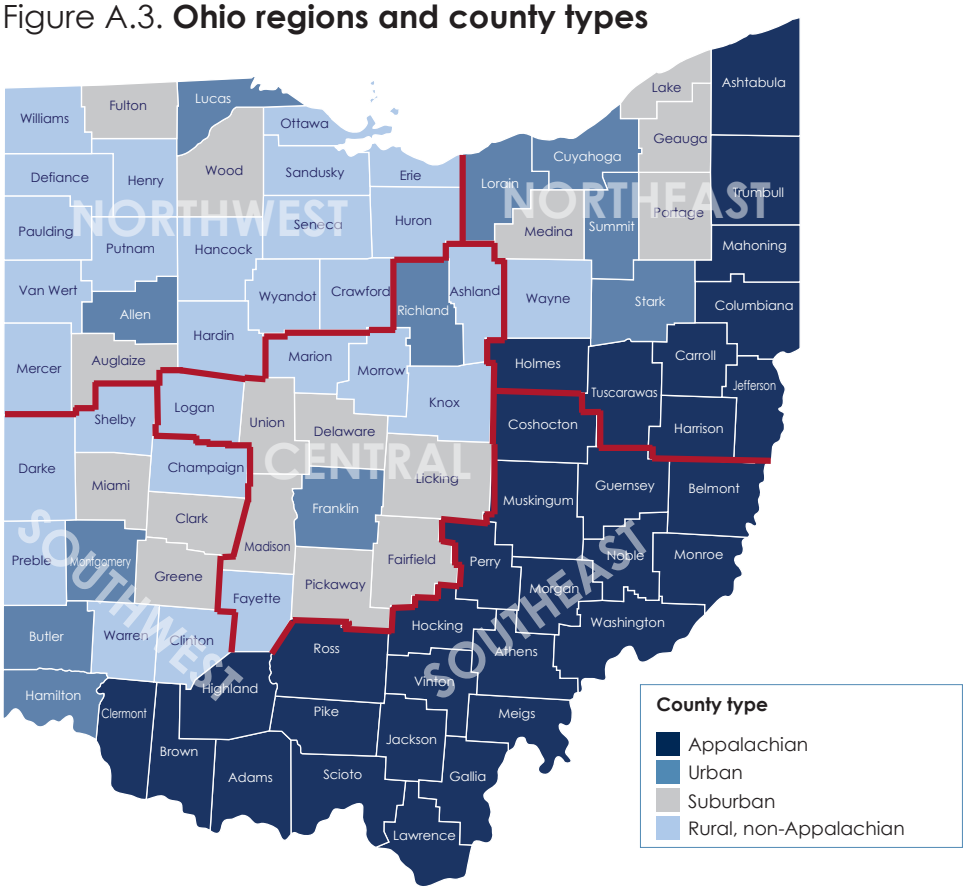
The SHA/SHIP Advisory Committee includes state agencies and a wide array of external partners representing sectors such as public health, healthcare providers (including hospitals, primary care, and mental health and addiction services), insurers, consumers, community service agencies, employers and people with disabilities. This committee met in April, May and June 2016 and provided input and feedback on the SHA. Members are listed later on page 128 of this Appendix.

Methods and sources of information

The SHA was conducted from March to July 2016 and the SHIP will be completed by the end of 2016. The SHA includes information gathered through four methods:

- **Data profiles.** Over 140 metrics are incorporated in the data profiles. The metrics are existing population-level data from several sources, including surveys, birth and death records, administrative data and claims data. Data from all age groups are included (life-course perspective) and some metrics are reported by race, ethnicity, income or education-level, sex, age, geography or disability status. U.S. comparisons, trend data and Healthy People 2020 targets put the data into context (data source: quantitative secondary data).
- **Review of local health department and hospital assessments/plans.** In order to identify local-level health priorities, HPIO reviewed 211 local health department and hospital community health assessment/plan documents, covering 94 percent of Ohio counties. (data source: qualitative and quantitative primary data)
- **SHA regional forums.** The HPIO team hosted five regional forums from late April to early May 2016. Three hundred seventy two stakeholders from around the state participated, and 32 who were not able to attend provided input on key questions through an online survey. Participants identified priorities, strengths, challenges and trends. (data source: qualitative and quantitative primary data)
- **Key informant interviews.** The HPIO team interviewed 37 representatives of 29

Figure A.3. **Ohio regions and county types**



Sources: Regions defined by the Association of Ohio Health Commissioners; county types defined by the Ohio Medicaid Assessment Survey

community-based organizations to explore contributing causes of health inequities and disparities, with a special focus on groups with poor health outcomes and those who may otherwise be underrepresented in the SHA/SHIP process. (data source: qualitative primary data)

Disparities and equity

The SHA addresses disparities, inequities and equity in the following ways:

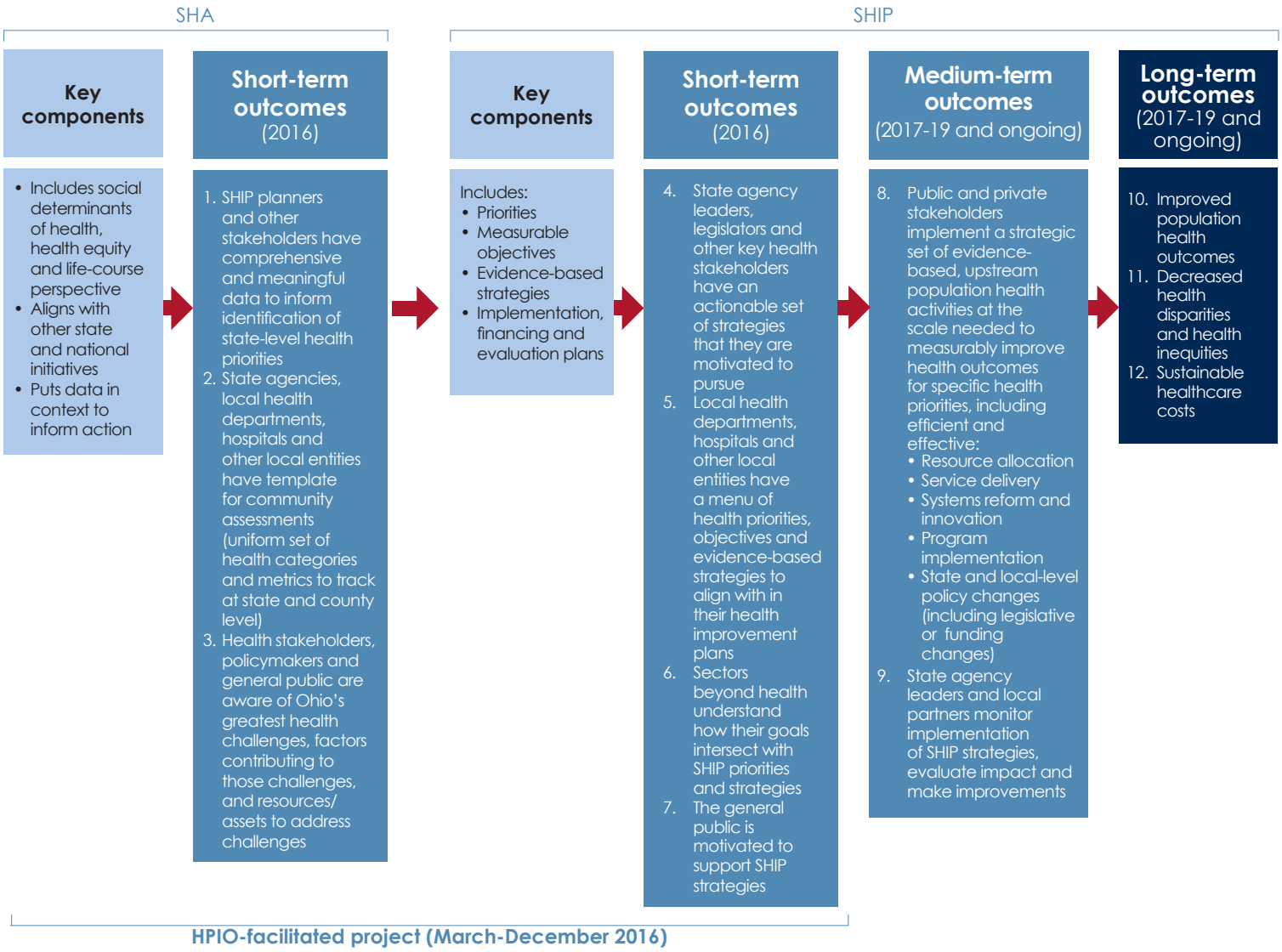
- The data profiles highlight disparities by race, ethnicity, sex, age, geography, income and education level, as well as disability status for selected metrics
- The key informant interviews explore factors contributing to health disparities and inequities
- The HPIO team conducted targeted outreach and invited a wide variety of groups to participate in the regional forums and provide information to inform the SHA, including organizations that serve at-risk populations, such as:
  - Commission on Minority Health regional offices and partners
  - Immigrant, refugee and migrant worker organizations
  - Organizations that provide culturally-competent or culturally-specific services
  - People with disabilities
  - Older adults
  - Lesbian, gay, bisexual, transgender and questioning or queer (LGBT) individuals
  - Trauma survivors

The SHIP will build upon findings in the SHA to identify specific strategies to reduce disparities and achieve equity.

Regions and county types

Some information in the SHA is reported by region, using the region boundaries defined by the Association of Ohio Health Commissioners. Four county types, defined by the Ohio Medicaid Assessment Survey (OMAS) are also used: Appalachian; rural, non-Appalachian; suburban; and urban (see Figure A.3).

SHA and SHIP implementation logic model



State- and local-level assessments and plans

Outward-facing assessment and plan documents that include components such as:
- Description of needs, strengths, resources and challenges (assessments)
- Priorities, goals, objectives, performance metrics and strategies (plans)

	Assessments		Plans	
Agency	State-level	Local-level	State-level	Local-level
Ohio Department of Health (and related collaboratives)	• **The Impact of Chronic Disease in Ohio: 2015** • **2015 Ohio Maternal and Child Health Needs Assessment Comprehensive Community Forum Report** • **Ohio Department of Health Maternal and Child Health Needs Assessment Stakeholder Survey Results** • **Title V Maternal and Child Health Five-Year Needs Assessment** • Ohio Statewide Primary Needs Assessment: 2015-2016 [link not yet available]	Local health departments are required to complete a Community Health Assessment within the past five years as a prerequisite for accreditation.	• **Ohio 2015-2016 State Health Improvement Plan Addendum** • **Ohio's Plan to Prevent and Reduce Chronic Disease: 2014-2018** • **The Ohio Comprehensive Cancer Control Plan 2015-2020** • **Ohio Infant Mortality Reduction Plan 2015-2020** • **Ohio Adolescent Health Strategic Plan** • **Ohio Injury Prevention Partnership, Child Injury Action Group Strategic Plan 2011-2016** • **Ohio Older Adult Falls Prevention Coalition Plan 2014-2016** • **Ohio Sexual and Intimate Partner Violence Prevention Consortium Strategic Plan** • Ohio FY 2015 Preventive Health and Health Services Block Grant • Tobacco Free Ohio Alliance plan [to be available July 2016)	Local health departments are required to complete a Community Health Improvement Plan within the past five years as a prerequisite for accreditation.
Ohio Department of Mental Health and Addiction Services (OMHAS)	**FY 2016/2017 State Behavioral Health Assessment and Plan** (Substance Abuse Prevention and Treatment and Community Mental Health Services Block Grant)	Alcohol, Drug and Mental Health (ADAMH) boards are required to submit a Community Plan to OMHAS every two years. Plan template includes assessment of need and identification of gaps and disparities. OMHAS summarized 2014 assessments/plans in Community Plan Synthesis 2014 document.	**FY 2016/2017 State Behavioral Health Assessment and Plan** (Substance Abuse Prevention and Treatment and Community Mental Health Services Block Grant)	ADAMH boards are required to submit a Community Plan to OMHAS every two years. Plan template includes priorities, strategies and measurement. OMHAS summarized 2014 assessments/plans in Community Plan Synthesis 2014 document.
Ohio Department of Aging (ODA)	N/A	N/A	**State Plan on Aging for FFY 2015-2018** (submitted to the U.S. Agency for Community Living (ACL) every four years)	Strategic Area Plans for Programs on Aging (submitted to ODA every four years by the 12 AAAs – with a required annual update for select sections of the plan, starting SFY 2019)

State- and local-level assessments and plans (cont.)

	Assessments		Plans	
Agency	State-level	Local-level	State-level	Local-level
Ohio Department of Job and Family Services	**Ohio Statewide Needs Assessments**	Regional annual assessments/plans regarding child abuse and prevention (due in 2017)	• Community-Based Grants for the Prevention of Child Abuse and Neglect (CBCAP), annual • **Child and Family Services Plan (CFSP): 2015-2019** • **Ohio's Unified State Plan: Workforce Transformation**	Regional annual assessments/plans regarding child abuse and prevention (due in 2017)
Ohio Department of Developmental Disabilities	• **National Core Indicators Consumer Survey report, annual** • **National Core Indicators Staff Stability survey** (addresses workforce issues)	N/A	• **Strategic Planning Leadership Group Final Report** • **State Systemic Improvement Plan for Part C Early Intervention** • **CMS Transition Plan** • **Ohio Autism Recommendations**	County Boards of Developmental Disabilities are required to develop and adopt strategic plans and report on progress annually. (no common template)
Ohio Department of Medicaid	N/A	N/A	N/A	N/A
Ohio Department of Veterans' Services	N/A	N/A	N/A	N/A
Ohio Family and Children First (OFCF)	N/A	N/A	The OFCF Cabinet Council will begin developing a strategic plan in late 2016.	The local Family and Children First Councils (FCFCs) are required to create a multi-year Shared Plan that identifies shared priorities in each community and how those priorities will be addressed through the local FCFCs. The new SFY 2017-2019 Shared Plan is due to be submitted to OFCF on July 29, 2016.
Ohio Commission on Minority Health	N/A	N/A	• **Strategic Plan: 2016-2020 Update** • **Achieving equity and eliminating infant mortality disparities within racial and ethnic populations: From data to action**	NA

Additional assessments and plans from Ohio entities other than state agencies

- **Ohio Commission on Infant mortality: Committee report, recommendations and data inventory**
- **Ohio's Appalachian children at a crossroads: Roadmap for action**
- **The challenges Ohio adults face to improve their health, Ohio Health Issues Poll 2015**
- Health of white Appalachians in greater Cincinnati (2016 edition to be posted soon)
- **Ohio American Pacific Islander Advisory Council 2014 Annual Report**

SHA and SHIP Advisory Committee stakeholder list

Organizations invited to join the Advisory Committee	
AARP Ohio	Ohio Association of County Boards of Developmental Disabilities
Aetna Better Health of Ohio	Ohio Association of Foodbanks
Akron Children's Hospital	Ohio Association of Health Plans
Akron Regional Hospital Association	Ohio Business Roundtable
Alcohol and Drug Abuse Prevention Association of Ohio	Ohio Chamber of Commerce
American Cancer Society Cancer Action Network	Ohio Children's Hospital Association
Association of Ohio Health Commissioners	Ohio Children's Trust Fund
Canton City Health District	Ohio Commission on Minority Health
Cardinal Health	Ohio Council of Behavioral Health and Family Services Providers
CareSource	Ohio Department of Developmental Disabilities
CareStar	Ohio Department of Education
Case Western Reserve University School of Medicine	Ohio Department of Health
Central Ohio Hospital Council	Ohio Department of Health-Office of Health Equity
Children's Defense Fund	Ohio Department of Job and Family Services-Office of Families & Children
Children's Hunger Alliance	Ohio Department of Medicaid
Cincinnati Children's Hospital Medical Center	Ohio Department of Transportation
Columbus Public Health	Ohio Disability and Health Program
Community Legal Aid Services	Ohio Domestic Violence Network
Cuyahoga County Board of Health	Ohio Environmental Council
Drug Free Action Alliance	Ohio Family and Children First
Educational Service Center of Central Ohio	Ohio Hospital Association
Employers Health	Ohio Housing Finance Agency
Equitas Health	Ohio Justice and Policy Center
Greater Dayton Area Hospital Association	Ohio Olmstead Task Force
Greene County Public Health	Ohio Osteopathic Association
Governor's Office of Health Transformation	Ohio Provider Resource Association
Hamilton County Public Health	Ohio Public Employees Retirement System
Health Action Council	Ohio State Medical Association
Health Improvement Partnership-Cuyahoga	Ohio State University Center for Public Health Practice
Health Policy Institute of Ohio	Ohio State University College of Public Health
Henry County Health Department	Ohio State University Nisonger Center
Hospital Council of Northwest Ohio	Ohio Statewide Independent Living Council
Interact for Health	OnPointe Strategic Insights
Kirwan Institute for the Study of Race and Ethnicity	Pike County General Health District
Lorain County Board of Mental Health	ProMedica Health System
Medical Mutual of Ohio	Safe Routes to School National Partnership
Medina County Combined General Health District	Scripps Gerontology Center, Miami University
Mercy Health	Senders Pediatrics
MetroHealth	The Arc of Ohio
Mid East Ohio Regional Council	The Center for Community Solutions
MOBILE Center for Independent Living	The Center for Health Affairs
NAMI Ohio	The Health Collaborative
Nationwide Children's Hospital	Tobacco Free Ohio Alliance
Ohio Academy of Family Physicians	UHCAN Ohio
Ohio Advisory Council for Aging	Union County Health Department
Ohio Alliance of YMCAs	United Way of Central Ohio
Ohio Association of Area Agencies on Aging	University Hospitals
Ohio Association of Community Health Centers	Voices for Ohio's Children
Ohio Association of County Behavioral Health Authorities	Zanesville-Muskingum County Health Department

Data profile appendix

Metric selection criteria

State-level: Statewide data is available
U.S.: U.S. data is available for comparison
Reputable: Metric is nationally recognized (not home-grown)
Trend: Trend data for at least two years is available
Source integrity and data quality: Data are complete and accurate; response rates and sample sizes are adequate (if survey data)

Preference for metrics with:

Sub-state geography: Data are available at the county level
Alignment: Metric aligns across two or more sources (Health Value Dashboard, County Health Rankings, *Improving Population Health in Ohio* report, State agency metrics)
Benchmarks: Benchmark values have been established for the metric by a reputable state or national organization or agency (e.g. Healthy People 2020)
Face value: Metric is easily understood by the public and policymakers

*__Metric duplication:__ Avoid metric duplication. Remove similar metrics, keeping metrics that best meet above criteria.

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level

Domain: Population health

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Overall health and wellbeing	**Overall health status, adult**	Percent of adults that report fair or poor health	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2012-2014	18.4%	CHR, BRFSS (limited*), and OMAS (limited**)
Overall health and wellbeing	**Overall health status, child**	Percent of children ages 0-17 with fair or poor health	National Survey of Children's Health, for years 2003, 2007, 2011/2012	3.6%	OMAS (limited**)
Overall health and wellbeing	**Life expectancy at birth**	Life expectancy for all Ohioans at birth based on current mortality rates	Measure of America, obtained from Robert Wood Johnson Foundation Data Hub (2010)	N/A	N/A
Overall health and wellbeing	**Expected remaining years of life at age 65**	Years of life expectancy for all Ohioans at age 65 (average remaining years of life a person can expect to live on the basis of the current mortality rates for the population)	Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report (MMWR), State-Specific Healthy Life Expectancy at Age 65 Years - United States, 2007-2009	N/A	N/A
Overall health and wellbeing	**Child mortality**	Number of deaths among children under age 18 per 100,000	CDC Wonder Mortality Data, 2012-2014	N/A	CHR
Overall health and wellbeing	**Infant mortality**	Number of infant deaths per 1,000 live births (within 1 year)	ODH, Vital Statistics Birth and Mortality Files, 2012-2014	N/A	CHR, CDC Wonder Mortality Data (limited) and NOC+
Overall health and wellbeing	**Limited activity due to health problems**	Average number of days in the last 30 days in which a person reports limited activity due to mental or physical health difficulties (ages 18 and older)	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2012-2014, as compiled by the RWJF DataHub	N/A	N/A
Overall health and wellbeing	**Poor physical health days**	Average number of physically unhealthy days reported in past 30 days (age-adjusted) among adults	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System 2014, as compiled by America's Health Rankings 2015 edition	N/A	CHR
Overall health and wellbeing	**Poor mental health days**	Average number of days in the previous 30 days when a person indicates his/her mental health was not good (includes stress, depression, and problems with emotions; adults only)	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System 2014, as compiled by America's Health Rankings 2015 edition	N/A	CHR
Health behaviors	**Adult smoking**	Percent of population age 18 and older that are current smokers	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2012-2014	22.6%	CHR, BRFSS (limited*), OMAS (limited**) and NOC+
Health behaviors	**Youth all-tobacco use**	Percent of high school students who used cigarettes, smokeless tobacco (i.e. chewing tobacco, snuff or dip), cigars, pipe tobacco, hookah, bidis, e-cigarettes or other vaping products during the past 30 days	Ohio Youth Tobacco Survey, Ohio Department of Health (preliminary internal analysis by Tobacco Program), 2014-2015	N/A	N/A

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Population health (cont.)

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Health behaviors	**Smoking during pregnancy**	Percent of mothers who smoked at any time during pregnancy	National Vital Statistics Reports, Vol. 65, No. 1, February 10, 2016	N/A	N/A
Health behaviors	**Illicit drug use**	Percent of individuals aged 12+ with illicit drug use in the past month	SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, for years 2011/2012-2013/2014	N/A	NSDUH (limited***)
Health behaviors	**Excessive drinking**	Percentage of adults reporting binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2014, as compiled by America's Health Rankings 2015 edition Note: This is a composite measure that combines binge drinking and heavy drinking, as used by America's Health Rankings and County Health Rankings.	N/A	CHR and NOC+
Health behaviors	**Liquor sales**	Total gallons of liquor sold in Ohio, in millions	Ohio Department of Commerce Annual Reports	N/A	N/A
Health behaviors	**Perceived risk of substance use, cigarettes**	Percent of individuals aged 12-17 perceiving great risk of smoking one or more packs of cigarettes per day	SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, for years 2011/2012-2013/2014	N/A	NSDUH (limited***) and OHYES (limited****)
Health behaviors	**Perceived risk of substance use, alcohol**	Percent of individuals aged 12-17 perceiving great risk of having 5 or more drinks of an alcoholic beverage once or twice a week	SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, for years 2011/2012-2013/2014	N/A	NSDUH (limited***) and OHYES (limited****)
Health behaviors	**Perceived risk of substance use, marijuana**	Percent of individuals aged 12-17 perceiving great risk of smoking marijuana once a month	SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health for years 2011/2012-2013/2014	N/A	NSDUH (limited***)
Health behaviors	**Fruit consumption**	Percent of adults who report consuming fruits less than one time daily	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2013	N/A	N/A
Health behaviors	**Vegetable consumption**	Percent of adults who report consuming vegetables less than one time daily	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2013	N/A	N/A
Health behaviors	**Physical inactivity**	Percentage of adults aged 20 and over reporting no leisure-time physical activity	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2012-2014	N/A	CHR, BRFSS (limited*)and NOC+
Health behaviors	**Insufficient sleep**	Percentage of adults who report fewer than 7 hours of sleep on average	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2014, as compiled by America's Health Rankings 2015 edition	N/A	CHR
Conditions and diseases	**Youth obesity**	Percent of high school students who are obese (> 95th percentile for Body Mass Index)	Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System, for years 2007, 2011 and 2013	N/A	N/A

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Population health (cont.)

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Conditions and diseases	**Adult obesity**	Percent of adults who are obese (Body Mass Index ≥ 30)	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2012-2014	34.5%	CHR, BRFSS (limited*), OMAS (limited**) and NOC+
Conditions and diseases	**Youth depressive episodes**	Percent of adolescents aged 12-17 who have had at least one major depressive episode	SAMHSA, National Survey on Drug Use and Health, for years 2011/2012-2013/2014	N/A	N/A
Conditions and diseases	**Adult depression prevalence**	Estimated prevalence of adults ever diagnosed with depression	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System	N/A	BRFSS (limited*)
Conditions and diseases	**Poor oral health**	Percent of adults who have lost six or more teeth due to decay, infection, or disease	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, for years 2012 and 2014, as compiled by Commonwealth State Scorecard 2015 edition	N/A	N/A
Conditions and diseases	**Preterm birth**	Percent of live births that are preterm (<37 weeks of gestation)	CDC National Vital Statistics Reports, 2014	N/A	ODH (Public Health Data Warehouse) and NOC+
Conditions and diseases	**Low birth weight**	Percentage of births in which the newborn weighed less than 2,500 grams	Ohio Vital Statistics, Birth File, Maternal and Child Health Block Grant Reports, for years 2012-2014	N/A	CHR, ODH (Public Health Data Warehouse) and NOC+
Conditions and diseases	**Adult diabetes**	Percent of adults who have been told by a health professional that they have diabetes. Note that the survey question does not distinguish between type 1 and type 2 diabetes.	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2012-2014	13.9%	CHR, BRFSS (limited*), OMAS (limited**) and NOC+
Conditions and diseases	**Cancer incidence**	Incidence of breast, cervical, lung and colorectal cancer per 100,000 population, age adjusted	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2010-2012, as compiled by RWJF DataHub	N/A	ODH, County Cancer Profiles
Conditions and diseases	**Heart disease prevalence**	Estimated prevalence of adults ever diagnosed with heart disease	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2012-2014	N/A	BRFSS (limited*)
Conditions and diseases	**Hypertension prevalence**	Estimated prevalence of adults ever diagnosed with hypertension	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2012-2014	35.4%	BRFSS (limited*), OMAS (limited**) and NOC+
Conditions and diseases	**Adult asthma prevalence**	Estimated prevalence of adults who currently have asthma	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2012-2014	N/A	BRFSS (limited*)
Conditions and diseases	**Child asthma prevalence**	Estimated prevalence of children ages 0-17 ever diagnosed with asthma	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, for years 2010, 2012, 2013	N/A	BRFSS (limited*) and NOC+

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Population health (cont.)

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Conditions and diseases	**Alzheimer's**	Mortality rate per 100,000 due to Alzheimer's Disease	Alzheimer's Association, Alzheimer's Disease Facts and Figures, 2013	N/A	ODH (available upon request) and NOC+
Injury and Violence	**Motor vehicle crash deaths**	Number of motor vehicle crash deaths per 100,000 population (age-adjusted)	Source for Ohio data: Ohio Department of Health Vital Statistics; Source for U.S. data: CDC Vital Stats, for years 2010-2014, as compiled by CDC Wonder mortality data	N/A	CDC Wonder Mortality Data, CHR and NOC+
Injury and Violence	**Drug overdose deaths**	Number of deaths due to drug overdoses per 100,000 population (age adjusted)	Source for Ohio data: Ohio Department of Health; Source for U.S. data: CDC WISQARS Injury Mortality Report provided by Ohio Department of Health	N/A	CHR
Injury and Violence	**Suicide deaths**	Number of deaths due to suicide per 100,000 population (age-adjusted)	Source for Ohio data: Ohio Department of Health Vital Statistics; Source for U.S. data: CDC Vital Stats, 2008-2014, as compiled by CDC Wonder mortality data	N/A	CDC Wonder Mortality Data and NOC+

Domain: Healthcare spending

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Total out-of-pocket spending	**Out-of-pocket spending**	Percent of individuals who are in families where out-of-pocket spending on health care, including premiums, accounted for more than 10% of annual income	State health access data assistance center analysis of the Annual Social & Economic Supplement to the Current Population Survey, for 2012-2014, as compiled by the Robert Wood Johnson Foundation DataHub	N/A	N/A
Employer	**Total spending per enrollee (age 18-64) with employer-sponsored insurance**	Total reimbursements per enrollee (age 18-64) with employer-sponsored insurance. Total per enrollee spending estimates include reimbursed costs for health care services from all sources of payment including the health plan, enrollee, and any third-party payers incurred in 2013 and in 2014. Outpatient prescription drug charges and enrollees with capitated plans and their associated claims are excluded.	M. Chernew, Harvard Medical School Department of Health Care Policy, analysis of the Truven Marketscan Database as compiled by the Commonwealth Fund's Local Health System Performance Scorecard, 2016. Total per enrollee spending estimates from a sophisticated regression model include reimbursed costs for health care services from all sources of payment including the health plan, enrollee, and any third-party payers incurred in 2013 and in 2014. Outpatient prescription drug charges are excluded. Enrollees with capitated plans and their associated claims are also excluded. Estimates for each HRR were adjusted for enrollees' age and sex, the interaction of age and sex, partial year enrollment and regional wage difference.	N/A	Commonwealth Fund's Local Health System Performance Scorecard, 2016

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Healthcare spending (cont.)

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Employer	**Average single premium, per enrolled employee by total contribution**	Average single premium per enrolled employee for employer-based health insurance, amount of total contribution	2014 and 2013: Agency for Healthcare Research & Quality Medical Expenditure Panel Survey as compiled by the Kaiser Family Foundation 2012: Agency for Healthcare Research & Quality Medical Expenditure Panel Survey	N/A	N/A
Employer	**Average single premium, per enrolled employee by employer contribution**	Amount of employer contribution	2014 and 2013: Agency for Healthcare Research & Quality Medical Expenditure Panel Survey as compiled by the Kaiser Family Foundation 2012: Agency for Healthcare Research & Quality Medical Expenditure Panel Survey	N/A	N/A
Employer	**Average single premium, per enrolled employee by employee contribution**	Amount of employee contribution	2014 and 2013: Agency for Healthcare Research & Quality Medical Expenditure Panel Survey as compiled by the Kaiser Family Foundation 2012: Agency for Healthcare Research & Quality Medical Expenditure Panel Survey	N/A	N/A
Employer	**Average family premium, per enrolled employee by total contribution**	Average family premium per enrolled employee for employer-based health insurance, amount of total contribution	2014 and 2013: Agency for Healthcare Research & Quality Medical Expenditure Panel Survey as compiled by the Kaiser Family Foundation 2012: Agency for Healthcare Research & Quality Medical Expenditure Panel Survey	N/A	N/A
Employer	**Average family premium, per enrolled employee by employer contribution**	Amount of employer contribution	2014 and 2013: Agency for Healthcare Research & Quality Medical Expenditure Panel Survey as compiled by the Kaiser Family Foundation 2012: Agency for Healthcare Research & Quality Medical Expenditure Panel Survey	N/A	N/A
Employer	**Average family premium, per enrolled employee by employee contribution**	Amount of employee contribution	2014 and 2013: Agency for Healthcare Research & Quality Medical Expenditure Panel Survey as compiled by the Kaiser Family Foundation 2012: Agency for Healthcare Research & Quality Medical Expenditure Panel Survey	N/A	N/A

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Healthcare spending (cont.)

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Marketplace spending	**Average monthly marketplace premiums, 27 year old with $25,000 annual income**	Average premium for enrollees in the federal marketplace enrolled in the second lowest cost silver plan, without advanced premium tax credit, for a 27 year old with income of $25,000	2016 and 2015: U.S. Dept. of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Health Plan Choice and Premiums in the 2016 Health Insurance Marketplace 2014: U.S. Dept. of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Health Plan Choice and Premiums in the 2015 Health Insurance Marketplace	N/A	N/A
Marketplace spending	**Average monthly marketplace premiums, family of four with $60,000 annual income**	Average premium for enrollees in the federal marketplace enrolled in the second lowest cost silver plan, without advanced premium tax credit, for a family of four with income of $60,000	2016 and 2015: U.S. Dept. of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Health Plan Choice and Premiums in the 2016 Health Insurance Marketplace 2014: U.S. Dept. of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Health Plan Choice and Premiums in the 2015 Health Insurance Marketplace	N/A	N/A
Medicare	**Total Medicare (Parts A & B) reimbursements, per enrollee (price, age, sex and race-adjusted)**	Price-adjusted Medicare reimbursements (Parts A and B) per Medicare enrollee (price, age, sex and race-adjusted)	Dartmouth Atlas of Health Care, 2011-2013	N/A	Dartmouth Atlas (data available by hospital referral region and hospital service area)
Medicare	**Total cost, risk adjusted, for Medicare beneficiaries, without chronic conditions (Medicare only enrollees)**	Annual averages of all costs for Medicare beneficiaries without chronic conditions	Centers for Medicare and Medicaid Services	N/A	Centers for Medicare and Medicaid Services
Medicare	**Total cost, risk adjusted, for Medicare beneficiaries, with one chronic condition (Medicare only enrollees)**	Annual averages of all costs for Medicare beneficiaries with a claim indicating beneficiary is receiving service or treatment for one chronic condition	Centers for Medicare and Medicaid Services	N/A	Centers for Medicare and Medicaid Services
Medicare	**Total cost, risk adjusted, for Medicare beneficiaries, with two chronic conditions (Medicare only enrollees)**	Annual averages of all costs for Medicare beneficiaries with a claim indicating beneficiary is receiving service or treatment for two chronic conditions	Centers for Medicare and Medicaid Services	N/A	Centers for Medicare and Medicaid Services

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Healthcare spending (cont.)

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Medicare	**Total cost, risk adjusted, for Medicare beneficiaries, with three or more chronic conditions (Medicare only enrollees)**	Annual averages of all costs for Medicare beneficiaries with a claim indicating beneficiary is receiving service or treatment for three or more chronic conditions	Centers for Medicare and Medicaid Services	N/A	Centers for Medicare and Medicaid Services
Medicaid	**Total Medicaid per member per month cost per calendar year, all non-disabled**	Total per member per month cost for all non-disabled Medicaid enrollees. Dual eligibles were excluded from this calculation. Members with no 'disabled' months of eligibility during the calendar year were included in the 'non-disabled' group for the calendar year. Costs are calculated from Ohio Medicaid fee-for-service claims payments and payments reported on Medicaid managed care encounter claims.	Compiled and analyzed by the Ohio Department of Medicaid	N/A	May be available upon request from the Ohio Department of Medicaid
Medicaid	**Total Medicaid per member per month cost per calendar year, aged, non-disabled (65 and older)**	Total per member per month cost for all aged non-disabled Medicaid enrollees (65 and older). Dual eligibles were excluded from this calculation. Members with no 'disabled' months of eligibility during the calendar year were included in the 'non-disabled' group for the calendar year. Costs are calculated from Ohio Medicaid fee-for-service claims payments and payments reported on Medicaid managed care encounter claims.	Compiled and analyzed by the Ohio Department of Medicaid	N/A	May be available upon request from the Ohio Department of Medicaid
Medicaid	**Total Medicaid per member per month cost per calendar year, non-disabled adults (19-64)**	Total per member per month cost for all non-disabled adult Medicaid enrollees (19-64). Dual eligibles were excluded from this calculation. Members with no 'disabled' months of eligibility during the calendar year were included in the 'non-disabled' group for the calendar year. Costs are calculated from Ohio Medicaid fee-for-service claims payments and payments reported on Medicaid managed care encounter claims.	Compiled and analyzed by the Ohio Department of Medicaid	N/A	May be available upon request from the Ohio Department of Medicaid
Medicaid	**Total Medicaid per member per month cost per calendar year, non-disabled children (18 and younger)**	Total per member per month cost for all non-disabled child Medicaid enrollees. Dual eligibles were excluded from this calculation. Members with no 'disabled' months of eligibility during the calendar year were included in the 'non-disabled' group for the calendar year. Costs are calculated from Ohio Medicaid fee-for-service claims payments and payments reported on Medicaid managed care encounter claims.	Compiled and analyzed by the Ohio Department of Medicaid	N/A	May be available upon request from the Ohio Department of Medicaid
Medicaid	**Total Medicaid per member per month cost per calendar year, all disabled**	Total per member per month cost for all disabled Medicaid enrollees. Dual eligibles were excluded from this calculation. Members with one or more months of Medicaid eligibility in a 'disabled' category were determined to be 'disabled' for the calendar year. Costs are calculated from Ohio Medicaid fee-for-service claims payments and payments reported on Medicaid managed care encounter claims.	Compiled and analyzed by the Ohio Department of Medicaid	N/A	May be available upon request from the Ohio Department of Medicaid

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Healthcare spending (cont.)

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Medicaid	**Total Medicaid per member per month cost per calendar year, aged, disabled (65 and older)**	Total per member per month cost for aged disabled Medicaid enrollees (65 and older). Dual eligibles were excluded from this calculation. Members with one or more months of Medicaid eligibility in a 'disabled' category were determined to be 'disabled' for the calendar year. Costs are calculated from Ohio Medicaid fee-for-service claims payments and payments reported on Medicaid managed care encounter claims.	Compiled and analyzed by the Ohio Department of Medicaid	N/A	May be available upon request from the Ohio Department of Medicaid
Medicaid	**Total Medicaid per member per month cost per calendar year, disabled adults (19-64)**	Total per member per month cost for disabled adult Medicaid enrollees (19-64). Dual eligibles were excluded from this calculation. Members with one or more months of Medicaid eligibility in a 'disabled' category were determined to be 'disabled' for the calendar year. Costs are calculated from Ohio Medicaid fee-for-service claims payments and payments reported on Medicaid managed care encounter claims.	Compiled and analyzed by the Ohio Department of Medicaid	N/A	May be available upon request from the Ohio Department of Medicaid
Medicaid	**Total Medicaid per member per month cost per calendar year, disabled children (18 and younger)**	Total per member per month cost for disabled child Medicaid enrollees (18 and younger). Dual eligibles were excluded from this calculation. Members with one or more months of Medicaid eligibility in a 'disabled' category were determined to be 'disabled' for the calendar year. Costs are calculated from Ohio Medicaid fee-for-service claims payments and payments reported on Medicaid managed care encounter claims.	Compiled and analyzed by the Ohio Department of Medicaid	N/A	May be available upon request from the Ohio Department of Medicaid
Medicaid	**Medicaid per member per month cost for primary care services, all non-disabled**	Per member per month cost for primary care services all non-disabled Medicaid enrollees. Dual eligibles were excluded from this calculation. Members with no 'disabled' months of eligibility during the calendar year were included in the 'non-disabled' group for the calendar year. Primary care costs include primary care services as defined by CPT, HCPS and diagnosis codes. Costs are calculated from Ohio Medicaid fee-for-service claims payments and payments reported on Medicaid managed care encounter claims.	Compiled and analyzed by the Ohio Department of Medicaid	N/A	May be available upon request from the Ohio Department of Medicaid
Medicaid	**Medicaid per member per month cost for primary care services, all disabled**	Per member per month cost for primary care services for all disabled Medicaid enrollees. Dual eligibles were excluded from this calculation. Members with one or more months of Medicaid eligibility in a 'disabled' category were determined to be 'disabled' for the calendar year. Primary care costs include primary care services as defined by CPT, HCPS and diagnosis codes. Costs are calculated from Ohio Medicaid fee-for-service claims payments and payments reported on Medicaid managed care encounter claims.	Compiled and analyzed by the Ohio Department of Medicaid	N/A	May be available upon request from the Ohio Department of Medicaid

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Healthcare system

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Preventive Services	**Flu vaccination**	Percent of population > 6 months old vaccinated for flu within the past year	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System & National Immunization Survey-Flu (NIS-Flu) for years 2012/2013-2014/2015	N/A	BRFSS (limited*)
Preventive Services	**Prenatal care**	Percent of women who completed a pregnancy in the last 12 months who received prenatal care in the first trimester	Centers for Disease Control and Prevention, National Vital Statistics System, as compiled by CDC Wonder Data, Natality 2007-2014	N/A	CDC Wonder Natality Data and NOC+
Preventive Services	**Female breast cancer early stage diagnosis**	Percent of female breast cancer cases diagnosed at an early stage	Ohio Cancer Incidence Surveillance System, compiled and analyzed by the Ohio Department of Health for years 2011-2013	N/A	ODH
Preventive Services	**Colon and rectal cancer early stage diagnosis**	Percent of colorectal cancer cases diagnosed at an early stage	Ohio Cancer Incidence Surveillance System, compiled and analyzed by the Ohio Department of Health for years 2011-2013	N/A	ODH
Preventive Services	**Cervical cancer early stage diagnosis**	Percent of cervical cancer cases diagnosed at an early stage	Ohio Cancer Incidence Surveillance System, compiled and analyzed by the Ohio Department of Health for years 2011-2013	N/A	ODH
Preventive Services	**Lung and bronchus cancer early stage diagnosis**	Percent of lung and bronchus cancer cases diagnosed at an early stage	Ohio Cancer Incidence Surveillance System, compiled and analyzed by the Ohio Department of Health for years 2011-2013	N/A	ODH
Behavioral Health	**Mental illness hospitalization follow-up**	Percent of Medicaid enrollees ages 6 and older who received follow-up after hospitalization for mental illness within 30 days of discharge	Ohio Department of Mental Health and Addiction Services (data request)	N/A	N/A

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Healthcare system (cont.)

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Behavioral Health	**Substance use disorder treatment retention**	Percent of individuals ages 12 and older with an intake assessment who received one outpatient index service within a week and two additional outpatient index services within 30 days of intake	Ohio Department of Mental Health and Addiction Services (data request)	N/A	N/A
Behavioral Health	**Neonatal abstinence syndrome**	Total number of inpatient discharges for Neonatal Abstinence Syndrome	Neonatal Abstinence Syndrome (NAS) in Ohio 2004-2014 Report	N/A	N/A
Behavioral Health	**Opiate admissions**	Average percentage of clients in treatment with an opiate-related diagnosis (includes heroin and prescription opioid)	OhioMHAS Multi Agency Community Information System as compiled and analyzed by the Ohio Department of Mental Health and Addiction Services	N/A	OhioMHAS Multi Agency Community Information System
Timeliness, effectiveness & quality of care	**Mortality amenable to healthcare**	Mortality amenable to healthcare, deaths per 100,000 population	Centers for Disease Control and Prevention National Vital Statistics System and U.S. Census Bureau data for years 2009/2010-2012/2013, as analyzed and compiled by the Commonwealth Fund Scorecard on State Health System Performance, 2015 edition	N/A	N/A
Timeliness, effectiveness & quality of care	**Stroke care**	Percent of ischemic stroke patients who got medicine to break up a blood clot within 3 hours after symptoms started	Centers for Medicare and Medicaid Services for years 04/2013-03/2014 and 04/2014-03/2015	N/A	N/A
Hospital Utilization	**Diabetes with long-term complications**	Admissions for Medicare beneficiaries with a principal diagnosis of diabetes with long-term complications, per 100,000 population	Centers for Medicare and Medicaid Services for 2012-2014	N/A	Centers for Medicare and Medicaid Services

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Healthcare system (cont.)

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Hospital Utilization	**All-payer, all-cause, all-hospital readmissions**	All payer 30-day same hospital readmissions as a percent of admissions or unplanned readmissions. This report uses the OHA all-payer database to create all-cause, all-age, all-payer, all-hospital readmission rates. Subsequent admissions to other hospitals during the 30 days post discharge from an index admission within the collaborative are tracked using a deterministic model matching patient on date of birth, gender and zip code of residence.	Ohio Hospital Association, data request	N/A	N/A
Hospital Utilization	**Heart failure readmissions for Medicare beneficiaries**	Rate of Medicare beneficiaries discharged from the hospital with a principal diagnosis of heart failure who were readmitted for any cause within 30 days after the index admission date, per 100 admissions. This metric is risk-standardized and all-cause.	Centers for Medicare and Medicaid Services for 2012-2014	N/A	Centers for Medicare and Medicaid Services
Hospital Utilization	**Avoidable emergency department visits for Medicare beneficiaries**	Potentially avoidable emergency department visits among Medicare beneficiaries, per 1,000 beneficiaries	Analysis of J. Zheng, Harvard University, as compiled by the Commonwealth Fund Scorecard on State Health System Performance, 2015 edition	N/A	N/A
Hospital Utilization	**Hospital admissions for pediatric asthma, per 100,000 children**	Hospital admissions for pediatric asthma, per 100,000 children ages 2-17 (Excludes patients with cystic fibrosis or anomalies of the respiratory system, and transfers from other institutions)	Healthcare Cost and Utilization Project State Inpatient Databases for 2010-2012, as analyzed and compiled by the Commonwealth Fund Scorecard on State Health System Performance, 2015 edition	N/A	N/A

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Access to health care

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
General access, coverage and affordability	**Uninsured, adults (18-64)**	Percent of 18-64 year olds uninsured (health insurance)	U.S. Census Bureau, American Community Survey, 1 Year Estimates, 2012-2014	8.7%	ACS, CHR, OMAS (limited**) and NOC+
General access, coverage and affordability	**Uninsured, children (0-17)**	Percent of 0-17 year olds uninsured (health insurance)	U.S. Census Bureau, American Community Survey, 1 Year Estimates, 2012-2014	2.2%	ACS, OMAS (limited**) and NOC+
General access, coverage and affordability	**Unable to see doctor due to cost**	Percent of adults reported not seeing a doctor in the past 12 months because of cost	Behavioral Risk Factor Surveillance System, 2013-2014	N/A	NOC+
General access, coverage and affordability	**Routine checkup**	Percent of at-risk adults who have visited a doctor for a routine checkup in the past two years	Behavioral Risk Factor Surveillance System, 2013-2014, as analyzed and compiled by The Commonwealth Fund Health System Data Center	N/A	N/A
Access to behavioral health	**Unmet need, mental health**	Percent of adults who reported unmet need for mental health care in the past year	OHMHAS analysis of Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health: Mental Health data	N/A	N/A
Access to behavioral health	**Youth with depression who did not receive mental health services**	Percent of youth with major depressive episode who did not receive any mental health treatment	SAMHSA, Center for Behavioral Health Statistics and Quality 2010/2011-2012/2013, as analyzed and compiled by Mental Health America	N/A	N/A
Access to behavioral health	**Unmet need, illicit drug use treatment**	Percent ages 12 and over who reported unmet need for treatment for substance use disorders in the past year	SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2011/2012 and 2012/2013.	N/A	NSDUH (limited***)
Oral and vision care	**Received dental care in past year, adults**	Percent of adults who visited a dentist or dental clinic within the past 12 months	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (2010, 2012, 2014)	N/A	BRFSS (limited*)
Oral and vision care	**Unmet dental care needs, children**	Percent of children ages 3 to 17 with unmet dental care needs	OMAS Child Dashboard under Unmet Needs. Indicator "Dental Care (For children 3 years and older)", for 2010, 2012, 2015	4.6%	OMAS (limited**)
Oral and vision care	**Unmet vision care needs, adults**	Percent of adults ages 19 years and older with unmet vision care needs	OMAS Adult Dashboard under Unmet Needs. Indicator "Vision Care", for 2010, 2012, 2015	11.0%	OMAS (limited**)
Oral and vision care	**Unmet vision care needs, children**	Percent of children ages 5 to 17 with unmet vision care needs	OMAS Child dashboard under Unmet Needs. Indicator "Vision Care (For Children 5 Years and Older)", for 2012, 2015	3.0%	OMAS (limited**)
Workforce	**Underserved by primary care physicians**	Percent of Ohioans who live in areas underserved for primary care as defined by ratio of population to primary care physicians	2016: Bureau of Health Workforce, Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services, HRSA Data Warehouse 2016 2014: HRSA Data Warehouse, 2014, as compiled by Kaiser Family Foundation	N/A	N/A

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Access to health care (cont.)

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Workforce	**Underserved by dentists**	Percent of Ohioans who live in areas underserved for dental care as defined by ratio of population to dentists	2016: Bureau of Health Workforce, Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services, HRSA Data Warehouse 2016 2014: HRSA Data Warehouse, 2014, as compiled by Kaiser Family Foundation	N/A	N/A
Workforce	**Underserved by psychiatrists**	Percent of Ohioans who live in areas underserved for mental health care as defined by ratio of population to psychiatrists	2016: Bureau of Health Workforce, Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services, HRSA Data Warehouse 2016 2014: HRSA Data Warehouse, 2014, as compiled by Kaiser Family Foundation	N/A	N/A
Workforce	**Primary care physicians**	Ratio of population to primary care physicians	Area Resource File (AMA, AHA, U.S. Census Bureau and CMS), 2011-2013, as analyzed and compiled by County Health Rankings 2014-2016	N/A	CHR
Workforce	**Dentists**	Ratio of population to dentists	Area Resource File (AMA, AHA, U.S. Census Bureau and CMS), 2012-2014, as analyzed and compiled by County Health Rankings, 2014-2016	N/A	CHR
Workforce	**Mental health providers**	Ratio of population to mental health providers including psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health care	NPI Registry, 2013-2015 as analyzed and compiled by County Health Rankings, 2014-2016	N/A	CHR
Workforce	**Other primary care providers**	Ratio of population to primary care providers other than physicians. Other primary care providers include nurse practitioners (NPs), physician assistants (PAs), and clinical nurse specialists.	NPI Registry, 2013-2015 as analyzed and compiled by County Health Rankings, 2014-2016	N/A	CHR

Domain: Public health and prevention

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Public health workforce and accreditation	**State public health workforce**	Number of state public health agency staff full-time equivalents (FTEs) per 100,000 population. Data normalized per 100,000 population.	Association of State and Territorial Health Officials (ASTHO) as the numerator and American Community Survey 1-year population estimates for denominator, for 2010 and 2012, as compiled by the 2014 HPIO Health Value Dashboard	N/A	N/A
Public health workforce and accreditation	**Local public health workforce**	Median number of local health department FTEs per 100,000 population	National Association of County and City Health Officials (NACCHO) Profile data for 2010 and 2013, as compiled by the 2014 HPIO Health Value Dashboard	N/A	N/A
Public health workforce and accreditation	**Accreditation of local health departments**	Percent of health departments that have received accreditation	2014: HPIO 2014 Health Value Dashboard 2016: Ohio Department of Health	N/A	ODH (available upon request)

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Public health and prevention (cont.)

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Public health funding	**State public health funding per capita**	State public health agency funding per capita	Trust for America's Health Investing in America's Health: A State-by-State Look at Public Health Funding and Key Health Facts for 2013-2015	N/A	N/A
Public health funding	**Local public health funding per capita**	Per capita median of total annual expenditures for local health departments	National Association of County and City Health Officials, as compiled by the 2014 HPIO Health Value Dashboard	N/A	N/A
Communicable disease control and environmental health	**Chlamydia**	Chlamydia rate per 100,000 population	National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention for 2011-2013, as compiled by County Health Rankings	N/A	CHR, Ohio SEOW++
Communicable disease control and environmental health	**HIV prevalence**	Rate of adolescents and adults aged 13 years and over living with HIV, per 100,000 population	Ohio: ODH, HIV/AIDS Surveillance Program, Diagnoses of HIV and/or AIDS reported in Ohio, as of June 30, 2015 (2012-2014) U.S.: CDC, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Diagnoses of HIV Infection in the United States and Dependent Areas, 2014, HIV Surveillance Report, Vol 26 (2013)	N/A	ODH, CHR and Ohio SEOW++
Communicable disease control and environmental health	**Child Immunization**	Average percentage of children ages 19 to 35 months who have received these individual vaccinations: four or more doses of DTP, three or more doses of poliovirus vaccine, one or more doses of any measles-containing vaccine, and three or more doses of HepB vaccine	CDC National Immunization Survey, 2012-2014	N/A	N/A
Communicable disease control and environmental health	**HPV vaccination rate (female)**	Coverage among female adolescents 13 through 17 years of age (received ≥ 3 HPV doses)	CDC National Immunization Survey-Teen Vaccination Coverage 2012-2014	N/A	N/A
Communicable disease control and environmental health	**HPV vaccination rate (male)**	Coverage among male adolescents 13 through 17 years of age (received ≥ 3 HPV doses)	CDC National Immunization Survey-Teen Vaccination Coverage 2013-2014	N/A	N/A
Health promotion and prevention	**Falls among older adults**	Percent of adults ages 65 and older who report having had a fall within the last 12 months	CDC Behavioral Risk Factor Surveillance System for years 2012 and 2014, as compiled by America's Health Rankings 2015	N/A	N/A
Health promotion and prevention	**Seat belt use**	Percent of front seat occupants using a seat belt	National Highway Traffic Safety Administration, 2012-2014	N/A	N/A
Health promotion and prevention	**Teen birth rate**	Number of births per 1,000 female population ages 15-19	National Center for Health Statistics National Vital Statistics System (NVSS), for 2005-2013, as compiled by County Health Rankings	N/A	CHR and NOC+
Health promotion and prevention	**Safe sleep**	Percent of infants most often laid on his or her back to sleep	CDC Pregnancy Risk Assessment Monitoring System (PRAMS), 2008-2010	N/A	N/A
Health promotion and prevention	**Breast feeding at six months**	Percent of infants who are breastfed at 6 months of age	CDC National Immunization Survey (NIS) for 2009-2011, as reported by CDC Breastfeeding Report Card 2012-2014	N/A	N/A

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Social and economic environment

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Education	**4th grade reading**	Percent of 4th graders proficient in reading	U.S. Department of Education, National Assessment of Educational Progress, for years 2002, 2003, 2005, 2007, 2009, 2011, 2013, 2015, as compiled by the Annie E. Casey Foundation Kids Count Data Center	N/A	N/A
Education	**High school graduation rate**	Percent of incoming 9th graders who graduate in 4 years from a high school with a regular degree, as calculated using the AFGR (Averaged Freshman Graduation Rate)	National Center for Education Statistics, for 2010/2011, 2011/2012, 2012/2013 school years, as compiled by the Annie E. Casey Foundation Kids Count Data Center (by subtracting the percentage of high school students not graduating on time from 100)	N/A	CHR
Education	**Kindergarten Readiness Assessment-Literacy (KRA-L): Band 3**	Percent of children ready for kindergarten, as measured by percent of children in Band 3 (This indicates that children should do well with reading instruction and may need to be assessed for enrichment programs)	Ohio Department of Education; KRAL percent by band (State), for 2011/2012, 2012/2013, 2013/2014 school years	N/A	N/A
Education	**Kindergarten Readiness Assessment-Literacy (KRA-L): Band 2**	Percent of children scoring in Band 2 (This indicates a need to monitor children and assess them for targeted reading instruction.)	Ohio Department of Education; KRAL percent by band (State), for 2011/2012, 2012/2013, 2013/2014 school years	N/A	N/A
Education	**Kindergarten Readiness Assessment-Literacy (KRA-L): Band 1**	Percent of children scoring in Band 1 (This indicates children need immediate interventions in language and literacy skills and may need to be assessed broadly for intense instruction.)	Ohio Department of Education; KRAL percent by band (State), for 2011/2012, 2012/2013, 2013/2014 school years	N/A	N/A
Employment and Poverty	**Child poverty**	Percent of persons under age 18 who live in households at or below the poverty threshold (≤100% FPG)	United States Census Bureau, American Community Survey, 1 year estimates, 2012-2014	24.1%	ACS, CHR, Ohio SEOW^{++} and NOC^{+}
Employment and Poverty	**Adult poverty**	Percent of persons age 18+ who live in households at or below the poverty threshold (≤100% FPG)	United States Census Bureau, American Community Survey, 1 year estimates, 2012-2014	17.2%	ACS
Employment and Poverty	**Unemployment**	Annual average unemployment rate, ages 16 and older	Bureau of Labor Statistics (U.S. - Labor Force Statistics from the Current Population Survey; Ohio - Local Area Unemployment Statistics) as directed by ODJFS, 2013-2015	N/A	Ohio Department of Job and Family Services, CHR, Ohio SEOW^{++} and NOC^{+}

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Social and economic environment (cont.)

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Employment and Poverty	**Labor force participation**	Annual average civilian labor force participation rate, ages 16 years and over	Bureau of Labor Statistics (U.S. - Labor Force Statistics from the Current Population Survey; Ohio - Local Area Unemployment Statistics) as directed by ODJFS, 1990-2015	N/A	Ohio Department of Job and Family Services, Ohio Labor Market Information
Employment and Poverty	**Median household income**	Median household income for Ohioans, inflation adjusted	U.S. Census Bureau, American Community Survey, 1 year estimates (in inflation-adjusted dollars), 2005-2014	N/A	CHR, Ohio SEOW++ and NOC+
Employment and Poverty	**Income inequality**	Ratio of average household income for the richest 20% of households to the poorest 20% of households (income gap ratio)	U.S. Census Bureau, American Community Survey, 5 year estimates, 2009-2013 and 2010-2014, as compiled by County Health Rankings, 2015 and 2016	N/A	CHR
Employment and Poverty	**Low-income working families with children**	The share of families that met three criteria: (1) the family income was less than twice the federal poverty level; (2) at least one parent worked 50 or more weeks during the previous year; (3) there was at least one "own child" under age 18 in the family	American Community Survey, 2012, 2013, 2014 as compiled by the Annie E. Casey Foundation Kids Count Data Center	N/A	N/A
Family and Social Support	**Social associations**	Number of membership associations per 10,000 population. Associations include membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, labor organizations, business organizations, and professional organizations.	U.S. Census Bureau, County Business Partners, 2012 and 2013, as compiled by County Health Rankings, 2015 and 2016	N/A	CHR
Family and Social Support	**Children in single-parent households**	Percentage of children that live in a household headed by single parent	SHADAC analysis of the American Community Survey (ACS) Integrated Public Use Microdata Series (IPUMS), as compiled by the Robert Wood Johnson Foundation Data Hub	N/A	CHR and NOC+

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Social and economic environment (cont.)

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Trauma, toxic stress, and violence	**Violent crime**	Violent crime rate--number of violent crimes reported per 100,000 population. 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.	National Incident-Based Reporting System/ Uniform Crime Reporting, Federal Bureau of Investigation, 2013-2015, as compiled by America's Health Rankings	N/A	CHR, Ohio SEOW++ and NOC+
Trauma, toxic stress, and violence	**Homicide mortality rate**	Homicide death rate per 100,000 population (age adjusted)	CDC Wonder, 2012-2014	N/A	CHR, CDC Wonder Mortality Data, Ohio SEOW++ and NOC+
Trauma, toxic stress, and violence	**Intimate partner violence**	Lifetime prevalence of rape, physical violence, and/or stalking by an intimate partner for women	The National Intimate Partner and Sexual Violence Survey (NISVS) (CDC), 2010	N/A	N/A
Trauma, toxic stress, and violence	**Incarceration**	Imprisonment rate of sentenced prisoners under the jurisdiction of state or federal correctional authorities per 100,000 residents	U.S. Bureau of Justice Statistics, 2012-2014	N/A	N/A
Trauma, toxic stress, and violence	**Child abuse and neglect**	Rate of child maltreatment victims per 1,000 children in population	Administration for Children and Families, 2012-2014	N/A	N/A
Trauma, toxic stress, and violence	**Adverse childhood experiences**	Percent of children who have experienced two or more adverse experiences	National Survey of Children's Health, 2011/2012	N/A	N/A

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Physical environment

Subdomain	Metric Name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Air, water and toxic substances	**Drinking water violations**	Percent of population potentially exposed to water exceeding a violation limit during the past year	U.S. Environmental Protection Agency, Safe Drinking Water Information System, FY 2013-FY 2015	N/A	CHR
Air, water and toxic substances	**Fluoridated water**	Percent of the population served by a community water system with optimally fluoridated water	Centers for Disease Control and Prevention, Chronic Disease and Health Promotion Data Indicators, Water Fluoridation Reporting System, 2014	N/A	N/A
Air, water and toxic substances	**Outdoor air quality**	Average exposure of the general public to particulate matter of 2.5 microns or less in size (PM2.5)	CDC WONDER, 2011, as compiled by County Health Rankings	N/A	CHR
Air, water and toxic substances	**Children exposed to secondhand smoke**	Percent of children who live in a home where someone uses tobacco or smokes inside the home	National Survey of Children's Health, 2003, 2007, 2011/2012	N/A	N/A
Air, water and toxic substances	**Lead poisoning**	Percent of young children with elevated blood lead levels (BLL >10 ug/dL)	Centers for Disease Control and Prevention, Childhood Lead Poisoning Data, Statistics, and Surveillance, 2012-2014	N/A	N/A
Food access and insecurity	**Food insecurity**	Percent of households that are food insecure	Feeding America, Map the Meal Gap, 2011-2013 as compiled by County Health Rankings, 2014-2016	N/A	CHR
Food access and insecurity	**Healthy food access**	Percent of population with limited access to healthy food, defined as the percent of low-income individuals (<200% FPG) living more than 10 miles from a grocery store in rural areas and more than 1 mile in non-rural areas	USDA Food Environment Atlas, 2006 and 2010 as compiled by County Health Rankings, 2012 and 2016	N/A	CHR
Housing, built environment and physical activity access	**Severe housing problems**	Percent of households that have one or more of the following problems: 1) housing unit lacks complete kitchen facilities; 2) housing unit lacks complete plumbing facilities; 3) household is severely overcrowded; and 4) monthly housing costs, including utilities, exceed 50% of monthly income	U.S. Department of Housing and Urban Development, 2006-2010, 2007-2011, and 2008-2012 as compiled by County Health Rankings, 2014-2016	N/A	CHR

Data profile metric sources, Ohio Medicaid Assessment Survey alignment and data availability at the county level (cont.)

Domain: Physical environment (cont.)

Subdomain	Metric name	Metric description	Source	2015 Ohio Medicaid Assessment Survey	County-level data available
Housing, built environment and physical activity access	**Access to exercise opportunities**	Percent of individuals in a county who live reasonably close to a location for physical activity, defined as parks or recreational facilities (including gyms, community centers, YMCAs, dance studios and pools). Individuals who reside in a census block within a half mile of a park or within one mile of a recreational facility in urban areas and within 3 miles in rural areas are considered to have adequate access to opportunities for physical activity.	OneSource Global Business Browser, Delorme map data, ESRI, & US Census Tigerline Files, 2010 & 2012, 2010 & 2013, 2014 as compiled by County Health Rankings, 2014-2016	N/A	CHR
Housing, built environment and physical activity access	**Access to housing assistance**	Average number of months on waiting list for HUD housing assistance	Office of Policy Development and Research (PD&R), U.S. Department of Housing and Urban Development, Picture of Subsidized Households, 2013-2015	N/A	Office of Policy Development and Research (PD&R), U.S. Department of Housing and Urban Development, Picture of Subsidized Households

Acronyms
ACS — American Community Survey
BRFSS — Behavioral Risk Factor Surveillance System
CHR — County Health Rankings
NOC — Network of Care
NSDUH — National Survey on Drug Use and Health
ODH — Ohio Department of Health
OHYES — Ohio Healthy Youth Environments Survey
OMAS — Ohio Medicaid Assessment Survey
SEOW — Ohio State Epidemiological Outcomes Workgroup

* BRFSS prevalence data is available at the regional level in 14 regions for certain indicators.
** OMAS data at the county level is available when data is sufficient. Some counties are clustered according to ADAMH service area to provide valid and reliable data.
*** NSDUH data is broken down into 21 different sub-state regions across Ohio.
**** OHYES data is available at the county level for 24 counties where two or more school districts (public and/or private) conducted the survey. Go to www.ohyes.ohio.gov to verify the number of school districts conducting the survey within a county. (To be posted soon)
+ Data is available on the Public Health page of Network of Care, but other sources listed may have more recent data.
++ Ohio SEOW data is available on the Mental Health page of Network of Care.

Alignment with Healthy People 2020 objectives

Domain: Population health

Subdomain	Metric name	Metric description	Relevant HP 2020 topic category	Relevant HP 2020 objective identifier	HP 2020 target
Overall health and wellbeing	**Infant mortality**	Number of infant deaths per 1,000 live births (within 1 year)	Maternal, Infant and Child Health	MICH-1.3	6.0
Health behaviors	**Adult smoking**	Percent of population age 18 and older that are current smokers	Tobacco Use	TU-1.1	12.0%
Health behaviors	**Excessive drinking**	Percentage of adults reporting binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average	Substance Abuse	SA-15	25.4%
Health behaviors	**Perceived risk of substance use-alcohol**	Percent of individuals aged 12-17 perceiving great risk of having 5 or more drinks of an alcoholic beverage once or twice a week	Substance Abuse	SA-4.1	44.0%
Health behaviors	**Perceived risk of substance use-marijuana**	Percent of individuals aged 12-17 perceiving great risk of smoking marijuana once a month	Substance Abuse	SA-4.2	36.7%
Health behaviors	**Physical inactivity**	Percentage of adults aged 20 and over reporting no leisure-time physical activity	Physical Activity	PA-1	32.6%
Health behaviors	**Insufficient sleep**	Percentage of adults who report fewer than 7 hours of sleep on average	Sleep Health	SH-4	29.2%
Conditions and diseases	**Youth obesity**	Percent of high school students who are obese (> 95th percentile for Body Mass Index)	Nutrition and Weight Status	NWS-10.3	16.1% (Target is for adolescents aged 12 to 19)
Conditions and diseases	**Adult obesity**	Percent of adults who are obese (Body Mass Index ≥ 30)	Nutrition and Weight Status	NWS-9	30.5%
Conditions and diseases	**Youth depressive episodes**	Percent of adolescents aged 12-17 who have had at least one major depressive episode	Mental Health and Mental Disorders	MHMD-4.1	7.5%
Conditions and diseases	**Preterm birth**	Percent of live births that are preterm (<37 weeks of gestation)	Maternal, Child and Infant Health	MICH-9.1	11.4%
Conditions and diseases	**Low birth weight**	Percentage of births in which the newborn weighed less than 2,500 grams	Maternal, Child and Infant Health	MICH-8.1	7.8%

Alignment with Healthy People 2020 objectives (cont.)

Domain: Population health (cont.)

Subdomain	Metric name	Metric description	Relevant HP 2020 topic category	Relevant HP 2020 objective identifier	HP 2020 target
Conditions and diseases	**Hypertension prevalence**	Estimated prevalence of adults ever diagnosed with hypertension	Heart Disease and Stroke	HDS-5.1	26.9%
Injury and violence	**Motor vehicle crash deaths**	Number of motor vehicle crash deaths per 100,000 population (age-adjusted)	Injury and Violence Prevention	IVP-13.1	12.4
Injury and violence	**Suicide deaths**	Number of deaths due to suicide per 100,000 population (age-adjusted)	Mental Health and Mental Health Disorders	MHMD-1	10.2

Domain: Healthcare system

Subdomain	Metric name	Metric description	Relevant HP 2020 topic category	Relevant HP 2020 objective identifier	HP 2020 target
Preventive services	**Prenatal care**	Percent of women who completed a pregnancy in the last 12 months who received prenatal care in the first trimester	Maternal, Infant and Child Health	MICH-10.1	77.9%

Domain: Access

Subdomain	Metric name	Metric description	Relevant HP 2020 topic category	Relevant HP 2020 objective identifier	HP 2020 target
Affordability and coverage	**Uninsured adults (18-64)**	Percent of 18-64 year olds uninsured (health insurance)	Access to Health Services	AHS-1	100%
Affordability and coverage	**Uninsured children (0-17)**	Percent of 0-17 year olds uninsured (health insurance)	Access to Health Services	AHS-1	100%

Domain: Public health and prevention

Subdomain	Metric name	Metric description	Relevant HP 2020 topic category	Relevant HP 2020 objective identifier	HP 2020 target
Public health workforce and accreditation	**Accreditation of local health departments**	Percent of health departments that have received accreditation	Public Health Infrastructure	PHI-17.3	3.7%
Communicable disease control and environmental health	**Child immunization**	Average percentage of children ages 19 to 35 months who have received these individual vaccinations: four or more doses of DTP, three or more doses of poliovirus vaccine, one or more doses of any measles-containing vaccine, and three or more doses of HepB vaccine	Immunization and Infectious Disease	IID-8	80%

Alignment with Healthy People 2020 objectives (cont.)

Domain: Public health and prevention (cont.)

Subdomain	Metric name	Metric description	Relevant HP 2020 topic category	Relevant HP 2020 objective identifier	HP 2020 target
Communicable disease control and environmental health	**HPV vaccination rate (female)**	Coverage among female adolescents 13 through 17 years of age (received at least 3 HPV doses)	Immunization and Infectious Disease	IID-11.4	80% (Target is for females ages 13-15)
Communicable disease control and environmental health	**HPV vaccination rate (male)**	Coverage among male adolescents 13 through 17 years of age (received at least 3 HPV doses)	Immunization and Infectious Disease	IID-11.5	80% (Target is for males ages 13-15)
Health promotion and prevention	**Seat belt use**	Percent of front seat occupants using a seat belt	Injury and Violence Prevention	IVP-15	92%
Health promotion and prevention	**Safe sleep**	Percent of infants most often laid on his or her back to sleep	Maternal, Infant, and Child Health	MICH-20	75.8%
Health promotion and prevention	**Breast feeding at six months**	Percent of infants who are breastfed at 6 months of age	Maternal, Infant, and Child Health	MICH-21.2	60.6%

Domain: Social and economic environment

Subdomain	Metric name	Metric description	Relevant HP 2020 topic category	Relevant HP 2020 objective identifier	HP 2020 target
Education	**4th grade reading**	Percent of 4th graders proficient in reading	Adolescent Health	AH-5.3.1	36.3%
Education	**High school graduation rate**	Percent of incoming 9th graders who graduate in 4 years from a high school with a regular degree, as calculated using the AFGR (Averaged Freshman Graduation Rate)	Adolescent Health	AH-5.1	87%
Trauma, toxic stress, and violence	**Homicide mortality rate**	Homicide death rate per 100,000 population (age adjusted)	Injury and Violence Prevention	IVP-29	5.5
Trauma, toxic stress, and violence	**Child abuse and neglect**	Rate of child maltreatment victims per 1,000 children in population	Injury and Violence Prevention	IVP-38	8.5

Alignment with Healthy People 2020 objectives (cont.)

Domain: Physical environment

Subdomain	Metric name	Metric long name/ description	Relevant HP 2020 topic category	Relevant HP 2020 objective identifier	HP 2020 target
Food access & insecurity	**Food insecurity**	Percent of households that are food insecure	Nutrition and Weight Status	NWS-13	6%

Survey crosswalk

Surveys	Frequency of data collection and release	Most recent year data is available for Ohio	Ohio sample size (total # of Ohioans surveyed)	National survey or directly comparable U.S. data available?	Availability of data for disaggregation										
					County-level data available?	Adult	Child	Race/ethnicity					Insurance status	Income or poverty level	Education level
								White	Black	Hispanic or Latino	Asian	Other Race			
Household surveys															
Behavioral Risk Factor Surveillance System (BRFSS)	Annual	2014	10,867	Y	Y (Limited*)	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
National Survey on Drug Use and Health (NSDUH)	Annual	2014	2,415	Y	Y (Limited**)	Y; 12 and over	Y; 12 and over	N	N	N	N	N	N	N	N
Ohio Medicaid Assessment Survey (OMAS)	~3 years	2015	42,876 Adults, 10,122 Parents of children 0-18	N	Y (Limited***)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ohio Health Issues Poll	Annual	2015	811	N	N	Y	N	Y	Y	N	N	N	Y	Y	Y
National Survey of Children's Health	~Every 4 years	2011/12	~1,850	Y	N	N	Y; 0-17	Y	Y	Y	N	Y	Y	Y	Y
School-based surveys															
Youth Risk Behavior Surveillance System	~Every 2 years	2013	1,455	Y	N	N	Y; grades 9-12	Y	Y	Y	Y	Y	N	N	Y
Ohio Healthy Youth Environments Survey (OHYES)	Every 4 years	2015	~40,000	N	Y (Limited****)	N	Y+	Y+	Y+	Y+	Y+	Y+	N	N	Y
Ohio Youth Tobacco Survey	~Every 2 years	2015	24,000	Y	N	N	Y	Y	Y	Y+	Y+	Y++	N	N	Y

* BRFSS prevalence data is available at the regional level in 14 regions for certain indicators.
** NSDUH data is broken down into 21 different sub-state regions across Ohio.

*** OMAS data at the county level is available when data is sufficient. Some counties are clustered according to ADAMH service area to provide valid and reliable data.
**** OHYES data is available at the county level for counties where 2 or more school districts conducted the survey.
+ Sample sie may not be sufficient to allow for reporting of subgroups.
++ Other race is not a response option, but can be aggregated to report races other than white and black when numbers are too low for reporting specific race categories.

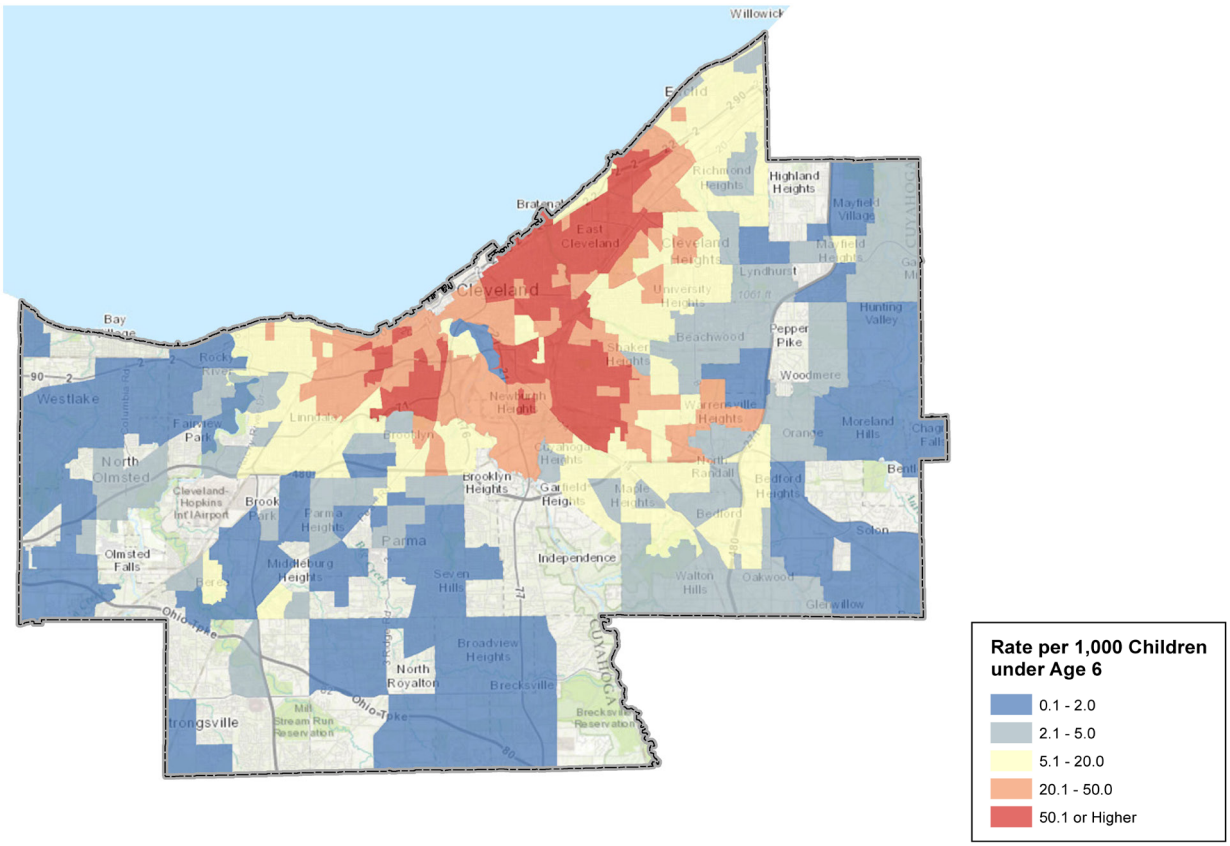
Health insurance coverage source table

	U.S. Census Bureau Small Area Health Insurance Estimates (SAHIE)	U.S. Census Bureau American Community Survey 1 year and 5 year estimates	U.S. Census Bureau Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC)	Ohio Medicaid Assessment Survey	Ohio Health Issues Poll
Overview	Provides detailed single-year data for all counties and state, including uninsured rate estimates available from 2006-2014	Conducted throughout the year and includes insurance coverage status. 1 year and 5 year estimates produced, available from 2008-2014	Measures many social and economic factors including whether a person had health insurance at any point in previous year. Conducted every year between February and April. Long term trend not available	Commissioned periodically by the Ohio Department of Medicaid. Gathers information on a variety of adult- and child-related topics, including insurance coverage status.	Commissioned annually since 2005. Gathers information on a variety of topics, including insurance coverage status.
Release Date	2014 estimates released March 2016	2015 1 year estimates: September 13, 2016 5 year estimates: December 8, 2016	2015 data will be released on September 13, 2016	2015 data was released in August 2015	Data released iteratively. In 2015, uninsured rate data was released in October. In 2014, this data was released in August.
Benefits	• Models state- and county-level estimates using a variety of sources • Helpful for local planners and policymakers, especially in counties with <65,000 residents • Used by County Health Rankings • Accessible through an online interactive tool; easy to use • U.S. to state and local comparisons can be made	• 1 year estimates used by SAHIE to create estimates for all counties • 5 year estimates are more reliable, pooling of multiple years of data • Data released on American FactFinder • U.S. to state and county comparisons can be made	• Produces more detailed data at national level • U.S. to state comparisons can be made on some metrics	• Provides timely data • Relatively easy data extraction • Long term trend can be analyzed for 2008, 2010, 2012 and 2015	• Long term trend data from 2005 • Data downloaded easily from the Interact for Health website or OASIS website • OASIS provides necessary tools to conduct advanced statistical analysis
Challenges and Limitations	• Time lag • 2014 estimates released in March 2016	• 5 year uninsured estimates not as illustrative as they may be for other topics • Time lag, estimates released 9-12 months into the next calendar year	• Due to change in methodology, data collected in 2014 and 2015 are not comparable to previous years • Data for uninsured	• U.S. comparisons cannot be made, state-only survey • County-level data not available for some counties • Timing or availability of future data is not known	• State-only survey, national comparisons cannot be made • Conducted through telephone interviews
Special Populations	At state level, insured and uninsured can be broken down by age, race, sex and poverty levels	Some data can be analyzed by age, race/ethnicity and gender	Some data can be analyzed by age, race/ethnicity and gender	Some data can be analyzed by age, income, developmental disabilities, children with special health care needs, and gender	Some data can be analyzed by age groups, race, gender, education, poverty status, geographical region in Ohio and health rating

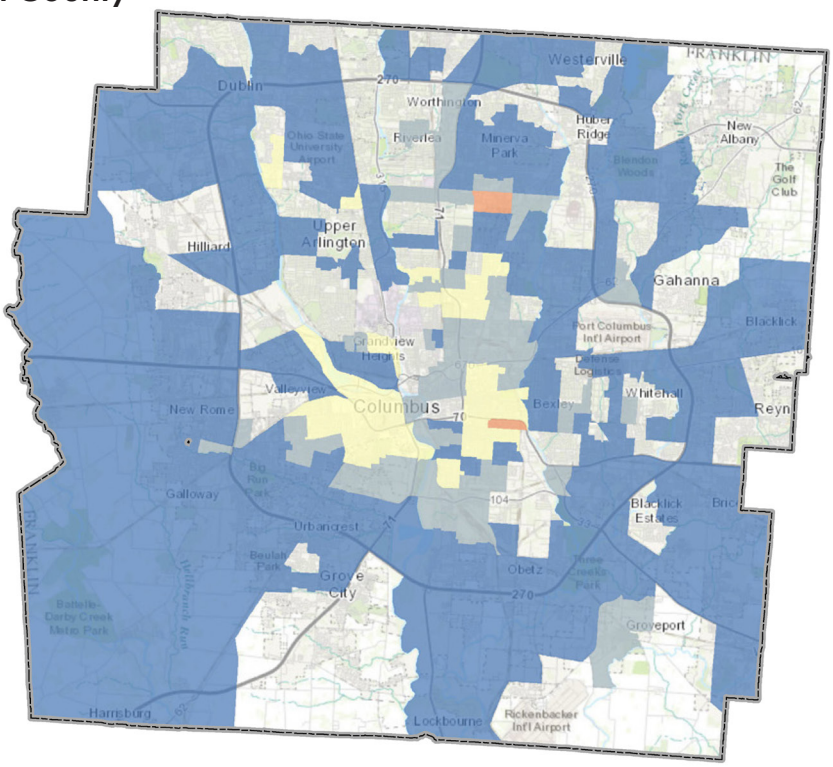
Lead poisoning maps

Confirmed elevated blood lead levels (≥ 5 ug/dL) per 1,000 children under age 6, by census tract (2010-2014)

Cuyhoga County



Franklin County

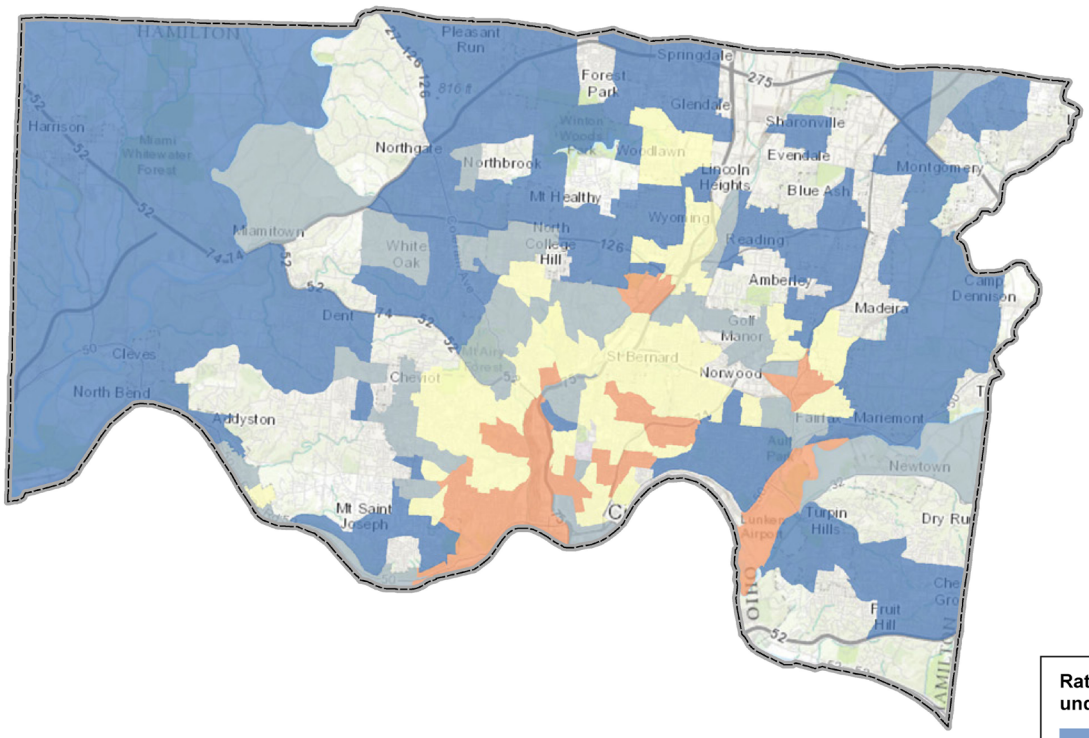


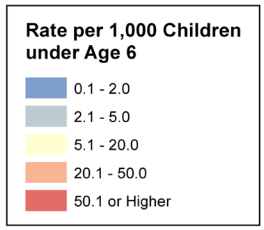
Source: Lead test results data, Ohio Department of Health, 2010-2014, as compiled by the Kirwan Institute. Population of children under 6, American Fact Finder, U.S. Census, 5-year census tract estimates 2010-2014. For this analysis, test results were limited to venous-draw tests, as this is the most reliable blood lead level (BLL) test method. A positive test was defined following the current CDC and Ohio standard of 5 ug/dL. For children with multiple test results in the database, only the result with the highest BLL was used to avoid double-counting. Records were aggregated over five years to stabilize rates. Only census tracts with a nonzero rate are shown. (Note: This means of counting positives is the same as that used by ODH in updating the state's high-risk ZIP codes.)

Lead poisoning maps (cont.)

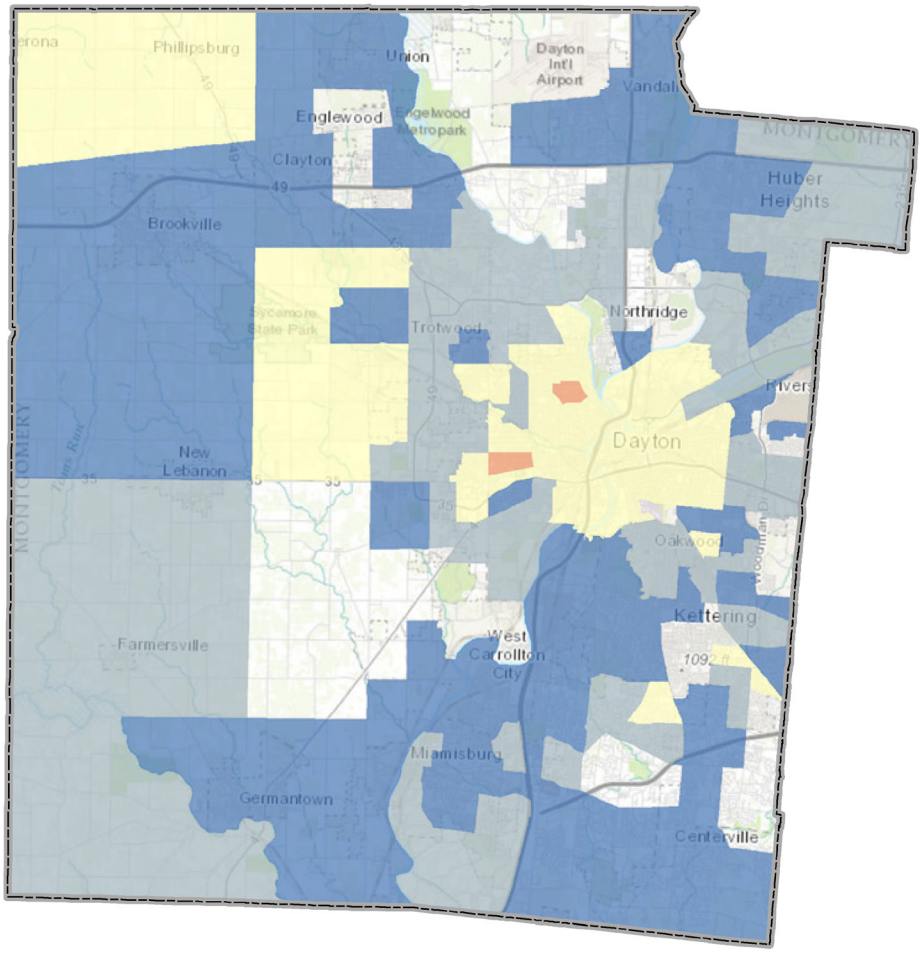
Confirmed elevated blood lead levels (≥ 5 ug/dL) per 1,000 children under age 6, by census tract (2010-2014)

Hamilton County





Montgomery County

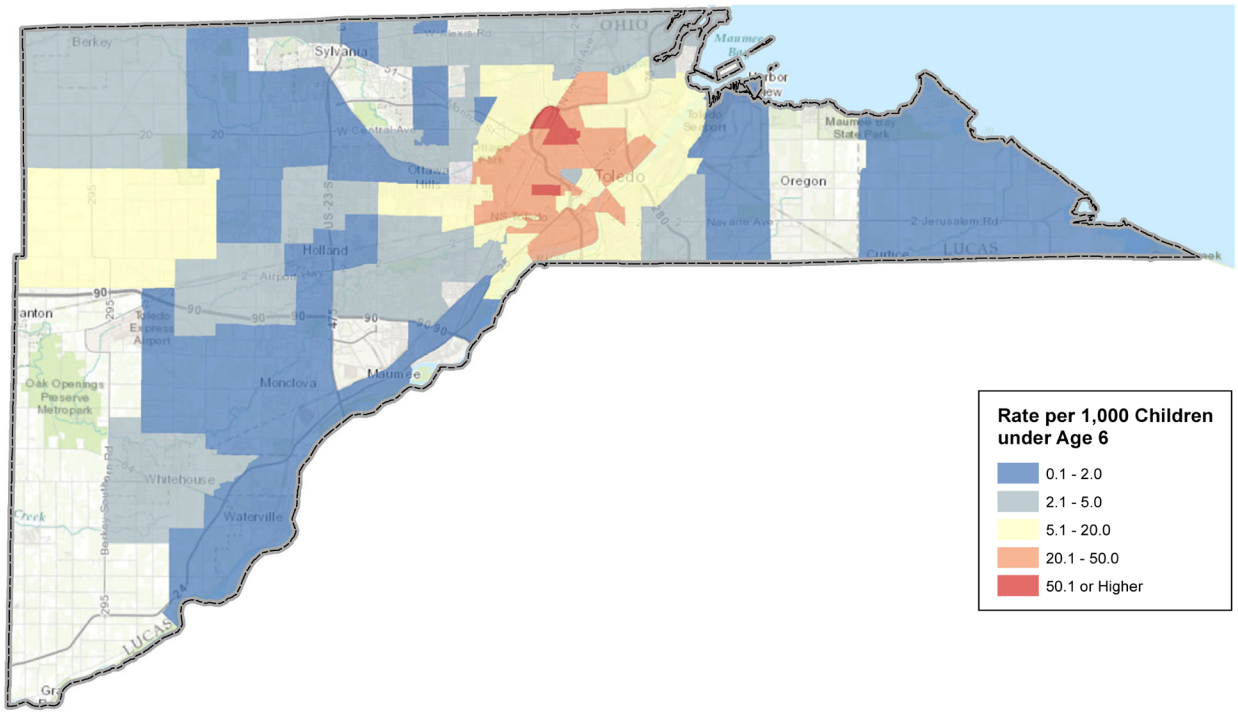


Source: Lead test results data, Ohio Department of Health, 2010-2014, as compiled by the Kirwan Institute. Population of children under 6, American Fact Finder, U.S. Census, 5-year census tract estimates 2010-2014. For this analysis, test results were limited to venous-draw tests, as this is the most reliable blood lead level (BLL) test method. A positive test was defined following the current CDC and Ohio standard of 5 ug/dL. For children with multiple test results in the database, only the result with the highest BLL was used to avoid double-counting. Records were aggregated over five years to stabilize rates. Only census tracts with a nonzero rate are shown. (Note: This means of counting positives is the same as that used by ODH in updating the state's high-risk ZIP codes.)

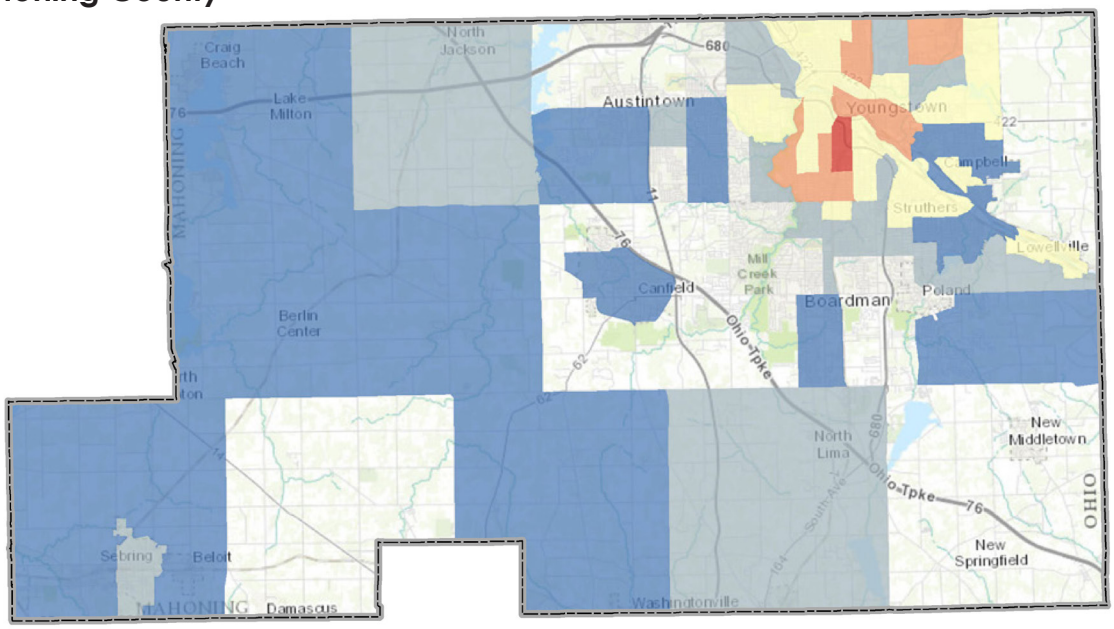
Lead poisoning maps (cont.)

Confirmed elevated blood lead levels (≥ 5 ug/dL) per 1,000 children under age 6, by census tract (2010-2014)

Lucas County



Mahoning County

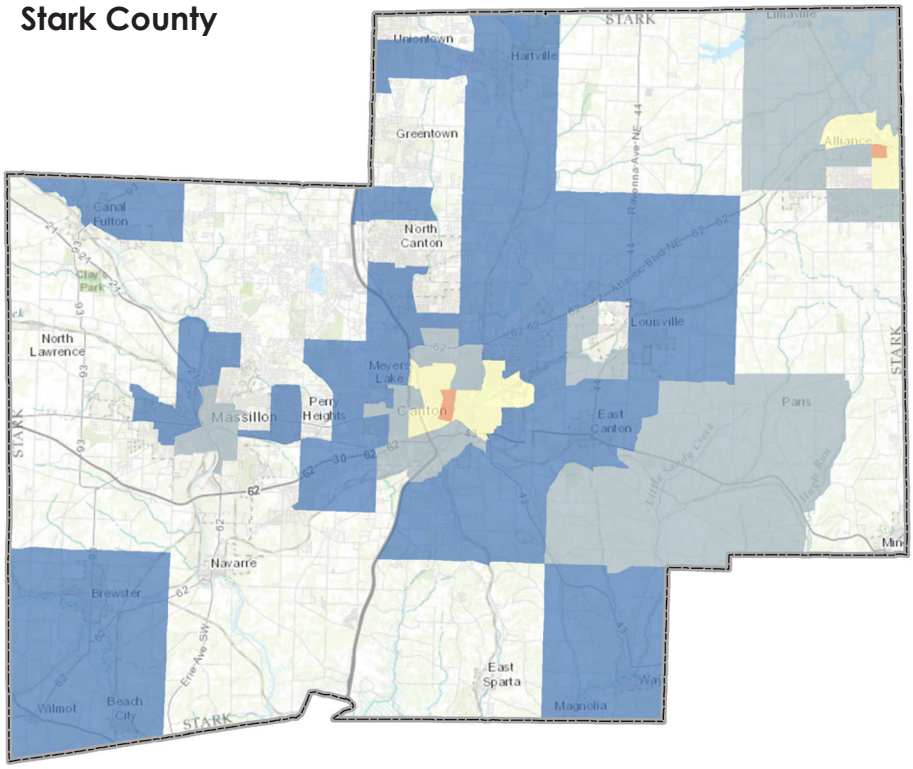


Source: Lead test results data, Ohio Department of Health, 2010-2014, as compiled by the Kirwan Institute. Population of children under 6, American Fact Finder, U.S. Census, 5-year census tract estimates 2010-2014. For this analysis, test results were limited to venous-draw tests, as this is the most reliable blood lead level (BLL) test method. A positive test was defined following the current CDC and Ohio standard of 5 ug/dL. For children with multiple test results in the database, only the result with the highest BLL was used to avoid double-counting. Records were aggregated over five years to stabilize rates. Only census tracts with a nonzero rate are shown. (Note: This means of counting positives is the same as that used by ODH in updating the state's high-risk ZIP codes.)

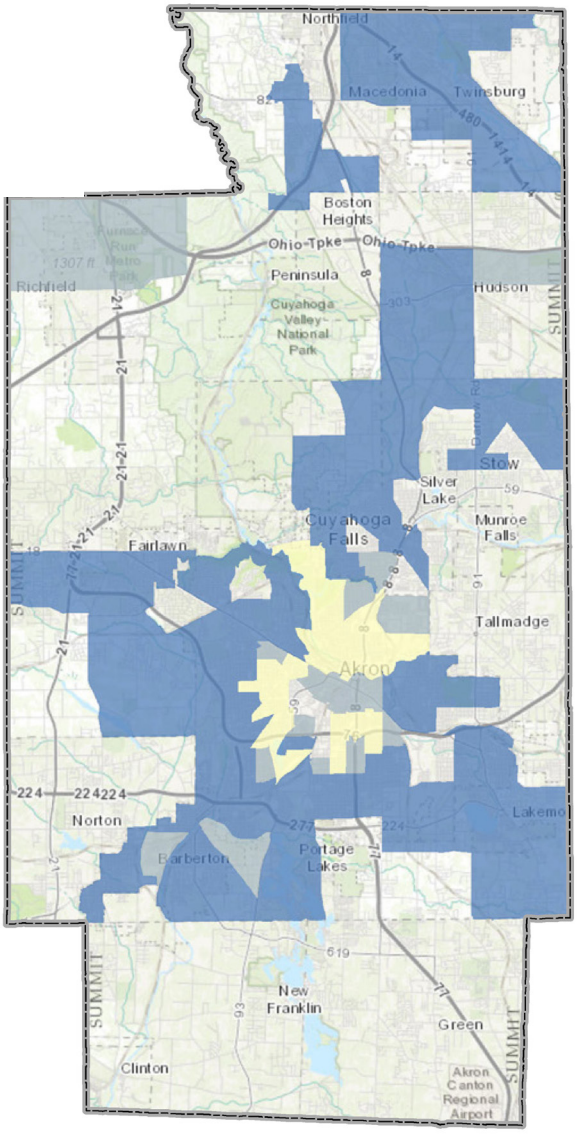
Lead poisoning maps (cont.)

Confirmed elevated blood lead levels (≥ 5 ug/dL) per 1,000 children under age 6, by census tract (2010-2014)

Stark County



Summit County



Rate per 1,000 Children under Age 6

- 0.1 - 2.0
- 2.1 - 5.0
- 5.1 - 20.0
- 20.1 - 50.0
- 50.1 or Higher

Source: Lead test results data, Ohio Department of Health, 2010-2014, as compiled by the Kirwan Institute. Population of children under 6, American Fact Finder, U.S. Census, 5-year census tract estimates 2010-2014. For this analysis, test results were limited to venous-draw tests, as this is the most reliable blood lead level (BLL) test method. A positive test was defined following the current CDC and Ohio standard of 5 ug/dL. For children with multiple test results in the database, only the result with the highest BLL was used to avoid double-counting. Records were aggregated over five years to stabilize rates. Only census tracts with a nonzero rate are shown. (Note: This means of counting positives is the same as that used by ODH in updating the state's high-risk ZIP codes.)

LOCAL HEALTH DEPARTMENT AND HOSPITAL ASSESSMENT/PLAN PRIORITIES APPENDIX

Review process and priority categories

HPIO reviewed all available documents to identify the prioritized health issues specified by each entity (i.e., each hospital facility and each local health department) in their assessment or plan document. In order for the priorities to be included in this analysis, there needed to be documentation of some type of prioritization process. For example, many assessment or plan documents included a brief description of prioritization criteria and specified which group of stakeholders made decisions about narrowing down a broad list of health issues to a more targeted list of health priorities. Priorities were included in the analysis regardless of whether or not the hospital or health department stated that they planned to act upon the priority.

HPIO coded the prioritized health issues using the categories listed in Figure C.1. Modified from an earlier review of local health department and hospital documents,[5] these categories reflect the language used in the local health department and hospital assessments and plans and also align with the SHA conceptual framework.

Figure C.1. **Health priority categories**

Health conditions	
1.	**Cardiovascular disease** Such as heart disease, hypertension, coronary artery disease, congestive heart disease, heart failure, heart attack (MI), stroke, high cholesterol
2.	**Diabetes** Such as pre-diabetes, diabetes mellitus 1, diabetes mellitus 2, insulin dependent diabetes, non-insulin dependent diabetes
3.	**Chronic respiratory disease** Such as asthma, chronic obstructive pulmonary disease (COPD), lung disease
4.	**Obesity** Such as overweight, obesity, morbid obesity, healthy weight, weight reduction
5.	**Cancer** Such as lung, breast, prostate, cervical
6.	**Infectious diseases** Such as sexually transmitted infections, influenza, hospital-acquired, novel virus, HIV, Hepatitis C, immunization rates, access to and completion of recommended immunizations
7.	**Maternal and infant health (prenatal through first year of life)** Focusing on infant mortality, low birth weight, prematurity, prenatal care
8.	**Oral Health** Such as dental care/treatment, cavities, extractions
9.	**Drug and alcohol abuse** Such as addiction, abuse, misuse or dependence of alcohol, marijuana, prescription drugs, opioids, heroin, MDMA
10.	**Mental health** Such as depression, PTSD, bipolar disorder, schizophrenia, other mental illness conditions, stress, emotional well-being, coping skills, suicide, behavioral health (unspecified)
11.	**Chronic pain** Includes joint and back pain
12.	**Dementia, including Alzheimer's Disease**
13.	**Chronic disease (unspecified)**

Figure C.1. **Health priority categories** (cont.)

Health behaviors, violence and injury	
14.	**Tobacco** Such as use of cigarettes, cigars, hookah, e-cigarettes, chew, flavored products
15.	**Physical activity** Such as physical inactivity, fitness, exercise, sedentary lifestyle, active living with a focus on individual behaviors
16.	**Nutrition** Such as diet, junk food consumption, healthy eating with focus on individual behaviors
17.	**Sexual and reproductive health** Such as sexual activity, condom use, prevention of unplanned pregnancy/teen pregnancy, use of contraception
18.	**Violence** Including physical and emotional violence, such as relationship or intimate partner violence, domestic violence, child abuse, elder abuse, sexual violence, street violence, bullying
19.	**Injury** Such as motor vehicle/motorcycle, bicycle, occupational safety, gun-related injuries or deaths, falls
20.	**Healthy lifestyles (unspecified)**
Social and economic environment	
21.	**Employment, poverty and income** Such as unemployment rate, poverty rate, wages, working conditions
22.	**Education** Such as preschool enrollment, school readiness, academic success, high school graduation, educational attainment
23.	**Family and social support** Such as social-emotional support, social capital and cohesion, single-parent households, racism
Physical environment	
24.	**Housing** Such as affordable housing, housing conditions (mold, heat), residential segregation
25.	**Transportation** Such as access to active and public transportation, commute times, driving alone to work/carpool, transportation to healthcare services
26.	**Air, water and toxic substances** Such as pollution, secondhand smoke, drinking water, fluoridation, lead poisoning
27.	**Food environment** Such as healthy food access, food insecurity, farmers markets
28.	**Active living environment** Such as green space, fitness opportunities, complete streets, trails, children walking/biking to school, parks
Access, health care and public health	
29.	**Coverage and affordability** Such as uninsured, underinsured, out of pocket expenses, high deductible health plans, medication coverage and cost
30.	**Access to health care/medical care** Such as number of providers, distribution of providers, access to a patient-centered medical home, access to primary care, access to specialty care (not including dental or behavioral health), wait time, general access to health care (unspecified)
31.	**Access to behavioral health care** Such as number of providers, distribution of providers, access to behavioral health/ treatment specialists (includes mental health and substance use treatment providers)
32.	**Access to dental care** Such as number of providers, distribution of providers, specific dental coverage, access to dental clinic
33.	**Healthcare system performance** Such as quality of care, care coordination, medication management, preventable hospitalization
34.	**Public health system** Such as infrastructure, services, funding
35.	**Access to community services** Including awareness of how to access community services
Equity/disparities Specific prioritization of health equity/disparities as a stand-alone issue (may also recognize issue across identified health priorities)	

Health priorities identified in local health department and hospital assessments/plans

	Total (n=211)	LHD CHA/ CHIP (n=59)	Hospital CHNA/IS (n=152)
Health conditions			
1. **Cardiovascular disease** Such as heart disease, hypertension, coronary artery disease, congestive heart disease, heart failure, heart attack (MI), stroke, high cholesterol	31.3%	1.7%	42.8%
2. **Diabetes** Such as pre-diabetes, diabetes mellitus 1, diabetes mellitus 2, insulin dependent diabetes, non-insulin dependent diabetes	27.5%	5.1%	36.2%
3. **Chronic respiratory disease** Such as asthma, COPD, childhood or adult lung disease	17.1%	3.4%	22.4%
4. **Obesity** Such as overweight, obesity, morbid obesity, healthy weight, weight reduction; childhood or adult	61.1%	62.7%	60.5%
5. **Cancer** Such as lung, breast, prostate, cervical, any type	35.1%	1.7%	48.0%
6. **Infectious diseases** Such as sexually transmitted infections, influenza, hospital-acquired, novel virus, HIV, Hepatitis C, immunization rates, access to and completion of recommended immunizations, etc.	13.7%	8.5%	15.8%
7. **Maternal and infant health (prenatal through first year of life)** Focusing on infant mortality, low birth weight, prematurity, prenatal care	36.5%	25.4%	40.8%
8. **Oral health** Such as dental care/treatment, cavities, extractions	3.8%	3.4%	3.9%
9. **Drug and alcohol abuse** Such as addiction, abuse, misuse or dependence of alcohol, marijuana, prescription drugs, opioids, heroin, MDMA, etc.	49.3%	64.4%	43.4%
10. **Mental health** Such as depression, PTSD, bipolar disorder, schizophrenia, other mental illness conditions, stress, emotional well-being, coping skills, suicide, behavioral health (unspecified)	57.8%	61.0%	56.6%
11. **Chronic pain** Includes joint and back pain	3.8%	0.0%	5.3%
12. **Dementia, including Alzheimer's Disease**	4.3%	0.0%	5.9%
13. **Chronic disease (unspecified)**	18.0%	18.6%	17.8%
Health behaviors, violence and injury			
14. **Tobacco** Such as use of cigarettes, cigars, hookah, e-cigarettes, chew, flavored products	25.1%	23.7%	25.7%
15. **Physical activity** Such as physical inactivity, fitness, exercise, sedentary lifestyle, active living with a focus on individual behaviors	13.7%	15.3%	13.2%
16. **Nutrition** Such as diet, junk food consumption, healthy eating with focus on individual behaviors	16.1%	15.3%	16.4%
17. **Sexual and reproductive health** Such as sexual activity, condom use, prevention of unplanned pregnancy/teen pregnancy, use of contraception	5.7%	5.1%	5.9%
18. **Violence** Including physical and emotional violence, such as relationship or intimate partner violence, domestic violence, child abuse, elder abuse, sexual violence, street violence, bullying	17.1%	16.9%	17.1%
19. **Injury** Such as motor vehicle/motorcycle, bicycle, occupational safety, gun-related injuries or deaths, falls, etc.	12.8%	6.8%	15.1%
20. **Healthy lifestyles (unspecified)**	11.4%	10.2%	11.8%
Social and economic environment			
21. **Employment, poverty and income** Such as unemployment rate, poverty rate, wages, working conditions	11.4%	8.5%	12.5%
22. **Education** Such as preschool enrollment, school readiness, academic success, high school graduation, educational attainment	1.4%	3.4%	0.7%
23. **Family and social support** Such as social-emotional support, social capital and cohesion, single-parent households, racism, etc.	0.9%	1.7%	0.7%
Physical environment			
24. **Housing** Such as affordable housing, housing conditions (mold, heat), residential segregation	1.4%	1.7%	1.3%
25. **Transportation** Such as access to active and public transportation, commute times, driving alone to work/carpool, transportation to healthcare services	5.2%	0.0%	7.2%
26. **Air, water and toxic substances** Such as pollution, secondhand smoke, drinking water, fluoridation, lead poisoning	1.4%	3.4%	0.7%

Health priorities identified in local health department and hospital assessments/plans (cont.)

	Total (n=211)	LHD CHA/ CHIP (n=59)	Hospital CHNA/IS (n=152)
Physical environment (cont.)			
27. Food environment Such as healthy food access, food insecurity, farmers markets, etc.	8.1%	5.1%	9.2%
28. Active living environment Such as green space, fitness opportunities, complete streets, trails, children walking/biking to school, parks, etc.	0.0%	0.0%	0.0%
Access, health care and public health			
29. Coverage and affordability Such as uninsured, underinsured, out of pocket expenses, high deductible health plans, medication coverage and cost	17.5%	10.2%	20.4%
30. Access to health care/medical care Such as number of providers, distribution of providers, access to patient-centered medical home, access to primary care, access to specialty care (not including dental or behavioral health), wait time, general access to health care (unspecified)	55.5%	40.7%	61.2%
31. Access to behavioral health care Such as number of providers, distribution of providers, access to behavioral health/treatment specialists (includes mental health and substance use treatment providers)	11.4%	10.2%	11.8%
32. Access to dental care Such as number of providers, distribution of providers, specific dental coverage, access to dental clinic, etc.	6.6%	1.7%	8.6%
33. Healthcare system performance Such as quality of care, care coordination, medication management, preventable hospitalization	9.5%	5.1%	11.2%
34. Public health system Such as infrastructure, services, funding	2.4%	6.8%	0.7%
35. Access to community services	3.8%	1.7%	4.6%
Other areas			
36. Equity/Disparities	5.7%	3.4%	6.6%
37. *Prevention/wellness (unspecified) Includes unspecified screenings, health promotion	15.6%	25.4%	11.8%
38. *Aging/Older adult health (unspecified)	9.0%	1.7%	11.8%
39. *Child/Adolescent health (unspecified)	8.1%	6.8%	8.6%
40. Other	22.7%	15.3%	25.7%

*These categories emerged as themes during the hospital/LHD document review and were not part of the initial list of categories (backcoded "40. Other" responses)

Health priorities identified in local health department and hospital assessments/ plans, by region

	NW (n=50)	NE (n=68)	Central (n=35)	SW (n=50)	SE (n=20)
Health conditions					
1. **Cardiovascular disease** Such as heart disease, hypertension, coronary artery disease, congestive heart disease, heart failure, heart attack (MI), stroke, high cholesterol	32.0%	29.4%	8.6%	42.0%	50.0%
2. **Diabetes** Such as pre-diabetes, diabetes mellitus 1, diabetes mellitus 2, insulin dependent diabetes, non-insulin dependent diabetes	16.0%	39.7%	14.3%	36.0%	25.0%
3. **Chronic respiratory disease** Such as asthma, COPD, childhood or adult lung disease	10.0%	25.0%	8.6%	26.0%	15.0%
4. **Obesity** Such as overweight, obesity, morbid obesity, healthy weight, weight reduction; childhood or adult	80.0%	63.2%	51.4%	44.0%	75.0%
5. **Cancer** Such as lung, breast, prostate, cervical, any type	28.0%	29.4%	40.0%	38.0%	55.0%
6. **Infectious diseases** Such as sexually transmitted infections, influenza, hospital-acquired, novel virus, HIV, Hepatitis C, immunization rates, access to and completion of recommended immunizations, etc.	16.0%	7.4%	34.3%	10.0%	0.0%
7. **Maternal and infant health (prenatal through first year of life)** Focusing on infant mortality, low birth weight, prematurity, prenatal care	22.0%	41.2%	45.7%	50.0%	15.0%
8. **Oral health** Such as dental care/treatment, cavities, extractions	0.0%	2.9%	8.6%	6.0%	0.0%
9. **Drug and alcohol abuse** Such as addiction, abuse, misuse or dependence of alcohol, marijuana, prescription drugs, opioids, heroin, MDMA, etc.	50.0%	47.1%	45.7%	58.0%	45.0%
10. **Mental health** Such as depression, PTSD, bipolar disorder, schizophrenia, other mental illness conditions, stress, emotional well-being, coping skills, suicide, behavioral health (unspecified)	54.0%	57.4%	74.3%	64.0%	35.0%
11. **Chronic pain** Includes joint and back pain	4.0%	1.5%	5.7%	2.0%	20.0%
12. **Dementia, including Alzheimer's Disease**	6.0%	10.3%	2.9%	0.0%	0.0%
13. **Chronic disease (unspecified)**	6.0%	17.6%	34.3%	22.0%	0.0%
Health behaviors, violence and injury					
14. **Tobacco** Such as use of cigarettes, cigars, hookah, e-cigarettes, chew, flavored products	22.0%	29.4%	37.1%	8.0%	65.0%
15. **Physical activity** Such as physical inactivity, fitness, exercise, sedentary lifestyle, active living with a focus on individual behaviors	6.0%	19.1%	8.6%	12.0%	40.0%
16. **Nutrition** Such as diet, junk food consumption, healthy eating with focus on individual behaviors	18.0%	19.1%	14.3%	14.0%	40.0%
17. **Sexual and reproductive health** Such as sexual activity, condom use, prevention of unplanned pregnancy/teen pregnancy, use of contraception	6.0%	8.8%	8.6%	4.0%	0.0%
18. **Violence** Including physical and emotional violence, such as relationship or intimate partner violence, domestic violence, child abuse, elder abuse, sexual violence, street violence, bullying	18.0%	14.7%	51.4%	2.0%	0.0%
19. **Injury** Such as motor vehicle/motorcycle, bicycle, occupational safety, gun-related injuries or deaths, falls, etc.	12.0%	7.4%	37.1%	12.0%	5.0%
20. Healthy lifestyles (unspecified)	6.0%	22.1%	5.7%	8.0%	5.0%
Social and economic environment					
21. **Employment, poverty and income** Such as unemployment rate, poverty rate, wages, working conditions	6.0%	22.1%	11.4%	0.0%	35.0%
22. **Education** Such as preschool enrollment, school readiness, academic success, high school graduation, educational attainment	4.0%	1.5%	2.9%	0.0%	5.0%
23. **Family and social support** Such as social-emotional support, social capital and cohesion, single-parent households, racism, etc.	0.0%	0.0%	0.0%	4.0%	0.0%
Physical environment					
24. **Housing** Such as affordable housing, housing conditions (mold, heat), residential segregation	0.0%	0.0%	5.7%	2.0%	0.0%
25. **Transportation** Such as access to active and public transportation, commute times, driving alone to work/carpool, transportation to healthcare services	6.0%	13.2%	5.7%	0.0%	5.0%
26. **Air, water and toxic substances** Such as pollution, secondhand smoke, drinking water, fluoridation, lead poisoning	0.0%	1.5%	2.9%	2.0%	0.0%

Health priorities identified in local health department and hospital assessments/ plans, by region (cont.)

	NW (n=50)	NE (n=68)	Central (n=35)	SW (n=50)	SE (n=20)
Physical environment (cont.)					
27. **Food environment** Such as healthy food access, food insecurity, farmers markets, etc.	8.0%	13.2%	5.7%	2.0%	5.0%
28. **Active living environment** Such as green space, fitness opportunities, complete streets, trails, children walking/biking to school, parks, etc.	0.0%	0.0%	0.0%	0.0%	0.0%
Access, health care and public health					
29. **Coverage and affordability** Such as uninsured, underinsured, out of pocket expenses, high deductible health plans, medication coverage and cost	16.0%	32.4%	14.3%	6.0%	25.0%
30. **Access to health care/medical care** Such as number of providers, distribution of providers, access to patient-centered medical home, access to primary care, access to specialty care (not including dental or behavioral health), wait time, general access to health care (unspecified)	36.0%	76.5%	54.3%	42.0%	75.0%
31. **Access to behavioral health care** Such as number of providers, distribution of providers, access to behavioral health/treatment specialists (includes mental health and substance use treatment providers)	10.0%	19.1%	14.3%	0.0%	15.0%
32. **Access to dental care** Such as number of providers, distribution of providers, specific dental coverage, access to dental clinic, etc.	2.0%	14.7%	8.6%	2.0%	5.0%
33. **Healthcare system performance** Such as quality of care, care coordination, medication management, preventable hospitalization	10.0%	19.1%	0.0%	4.0%	5.0%
34. **Public health system** Such as infrastructure, services, funding	4.0%	1.5%	2.9%	2.0%	0.0%
35. **Access to community services**	0.0%	10.3%	2.9%	0.0%	0.0%
Other areas					
36. **Equity/disparities**	10.0%	11.8%	8.6%	0.0%	0.0%
37. ***Prevention/wellness (unspecified)** Includes unspecified screenings, health promotion	20.0%	11.8%	8.6%	18.0%	15.0%
38. ***Aging/Older adult health (unspecified)**	4.0%	22.1%	5.7%	2.0%	5.0%
39. ***Child/Adolescent health (unspecified)**	8.0%	10.3%	11.4%	4.0%	5.0%
40. **Other**	18.0%	32.4%	22.9%	14.0%	35.0%

D REGIONAL FORUM APPENDIX

Regional forum attendance by sector and region

Northwest region

Total attendance: 79

Sector*	Number of Attendants
Hospital, other healthcare provider (including Federally Qualified Health Centers) or provider association	14
Local health department or other public health organization/association	31
ADAMH board, other mental health and addiction service provider or provider association	4
Health insurance plan, including Medicaid managed care plan	8
Community-based organization or social services (housing, faith based, aging, community development, emergency assistance, food banks, job training, DD, etc.)	12
Local government (county commissioners, city councils, mayors, etc.)	1
Law enforcement/criminal justice	0
Transportation	0
Education and child care (early childhood, K-12, higher education, educational service centers	4
Business or employer (including Chambers of Commerce, Employers Health and Health Action Council)	0
Philanthropy/United Way	0
Advocacy group or community action agency	3
Family and Children First Council	1
Job and Family Services	0
Amish	0
At risk population (Commission on Minority Health regional office, immigrant/refugee/migrant worker organization, other organization addressing culturally/specific services or health disparities; People with disabilities; Older adults; LGBT; Trauma survivors)	6
Other	6

*Self-reported by attendees. Attendees could select more than one sector. Some attendees did not report a sector.

Northeast region

Total attendance: 92

Sector*	Number of Attendants
Hospital, other healthcare provider (including Federally Qualified Health Centers) or provider association	23
Local health department or other public health organization/association	26
ADAMH board, other mental health and addiction service provider or provider association	7
Health insurance plan, including Medicaid managed care plan	6
Community-based organization or social services (housing, faith based, aging, community development, emergency assistance, food banks, job training, DD, etc.)	9
Local government (county commissioners, city councils, mayors, etc.)	1
Law enforcement/criminal justice	0
Transportation	1
Education and child care (early childhood, K-12, higher education, educational service centers	2
Business or employer (including Chambers of Commerce, Employers Health and Health Action Council)	1
Philanthropy/United Way	3
Advocacy group or community action agency	4
Family and Children First Council	3
Job and Family Services	3
Amish	1
At risk population (Commission on Minority Health regional office, immigrant/refugee/migrant worker organization, other organization addressing culturally/specific services or health disparities; People with disabilities; Older adults; LGBT; Trauma survivors)	6
Other	12

*Self-reported by attendees. Attendees could select more than one sector. Some attendees did not report a sector.

Regional forum attendance by sector and region (cont.)

Central region

Total attendance: 78

Sector*	Number of Attendants
Hospital, other healthcare provider (including Federally Qualified Health Centers) or provider association	16
Local health department or other public health organization/association	22
ADAMH board, other mental health and addiction service provider or provider association	3
Health insurance plan, including Medicaid managed care plan	10
Community-based organization or social services (housing, faith based, aging, community development, emergency assistance, food banks, job training, DD, etc.)	9
Local government (county commissioners, city councils, mayors, etc.)	4
Law enforcement/criminal justice	3
Transportation	0
Education and child care (early childhood, K-12, higher education, educational service centers	4
Business or employer (including Chambers of Commerce, Employers Health and Health Action Council)	1
Philanthropy/United Way	2
Advocacy group or community action agency	5
Family and Children First Council	3
Job and Family Services	1
Amish	0
At risk population (Commission on Minority Health regional office, immigrant/refugee/migrant worker organization, other organization addressing culturally/specific services or health disparities; People with disabilities; Older adults; LGBT; Trauma survivors)	6
Other	12

*Self-reported by attendees. Attendees could select more than one sector. Some attendees did not report a sector.

Southwest region

Total attendance: 65

Sector*	Number of Attendants
Hospital, other healthcare provider (including Federally Qualified Health Centers) or provider association	11
Local health department or other public health organization/association	18
ADAMH board, other mental health and addiction service provider or provider association	5
Health insurance plan, including Medicaid managed care plan	7
Community-based organization or social services (housing, faith based, aging, community development, emergency assistance, food banks, job training, DD, etc.)	13
Local government (county commissioners, city councils, mayors, etc.)	1
Law enforcement/criminal justice	0
Transportation	0
Education and child care (early childhood, K-12, higher education, educational service centers	4
Business or employer (including Chambers of Commerce, Employers Health and Health Action Council)	2
Philanthropy/United Way	4
Advocacy group or community action agency	3
Family and Children First Council	1
Job and Family Services	0
Amish	0
At risk population (Commission on Minority Health regional office, immigrant/refugee/migrant worker organization, other organization addressing culturally/specific services or health disparities; People with disabilities; Older adults; LGBT; Trauma survivors)	4
Other	3

*Self-reported by attendees. Attendees could select more than one sector. Some attendees did not report a sector.

Regional forum attendance by sector and region (cont.)

Southeast region

Total attendance: 58

Sector*	Number of Attendants
Hospital, other healthcare provider (including Federally Qualified Health Centers) or provider association	6
Local health department or other public health organization/association	23
ADAMH board, other mental health and addiction service provider or provider association	5
Health insurance plan, including Medicaid managed care plan	4
Community-based organization or social services (housing, faith based, aging, community development, emergency assistance, food banks, job training, DD, etc.)	7
Local government (county commissioners, city councils, mayors, etc.)	0
Law enforcement/criminal justice	0
Transportation	1
Education and child care (early childhood, K-12, higher education, educational service centers	5
Business or employer (including Chambers of Commerce, Employers Health and Health Action Council)	0
Philanthropy/United Way	0
Advocacy group or community action agency	1
Family and Children First Council	4
Job and Family Services	0
Amish	0
At risk population (Commission on Minority Health regional office, immigrant/refugee/migrant worker organization, other organization addressing culturally/specific services or health disparities; People with disabilities; Older adults; LGBT; Trauma survivors)	0
Other	5

*Self-reported by attendees. Attendees could select more than one sector. Some attendees did not report a sector.

List of organizations participating in regional forums

Northwest
Access Nursing Care
Aetna
Allen County Public Health
Alzheimer's Association
Blanchard Valley Health System
Buckeye Community Hope Foundation
CareSource
CareStar
Century Health Inc.
Crime Victim Services
Crossroads Crisis Center
Defiance County General Health District
Erie County Community Health Center
Erie County Health Department
Family Service of Northwest Ohio
Fremont City Schools
Fulton County Health Center
Fulton County Health Department
Hancock County Family First Council & Help Me Grow
Hancock Public Health
Henry County Health Department
HOPE Center
Kenton-Hardin Health Department
Lucas County Assistant
Mental Health & Recovery Board of Wayne and Holmes County
Mercy Health
Ohio Association of Community Health Centers
Ohio Department of Health
Ohio Department of Mental Health & Addiction Services
Ohio Family & Children First
Ohio Northern University
Ohio Northern University Raabe College of Pharmacy
Ohio Statewide Independent Living Council
Ottawa County Health Department
Paramount Health Care
Paulding County Hospital
Prevent Blindness
ProMedica
Putnam County Board of Developmental Disabilities
Putnam County Health Department
Sandusky County Health Department
Seneca County General Health District
The University Of Toledo
Toledo Fire & Rescue
Toledo-Lucas County Health Department
Van Wert County Health Department
Van Wert County Hospital
Village House
West Central Ohio Regional Healthcare Alliance
Williams County Health Department
Wood County Board of Development Disabilities
Wyandot County General Health District
Wyandot County Ohio Family & Children First

Northeast
Access Health Mahoning Valley
Aetna
Akron Children's Hospital
Alcohol and Drug Addiction Services Board of Lorain County
American Cancer Society
Ashtabula County Community Action Agency
Ashtabula County Department of Job & Family Services
Ashtabula County Medical Center
AxessPointe Community Health Center
Benjamin Rose Institute on Aging
Cambridge Home Health Care
Canton City Health Department
CareSource
Carroll County General Health District
Child Guidance & Family Solutions
City of Kent Health Department
City of Youngstown
Cleveland Clinic
Cleveland Department of Public Health
Cleveland Office of Minority Health
Cleveland Sight Center
Community Action Wayne/Medina
Community Legal Aid
Crawford-Marion Board of Alcohol, Drug Addiction, and Mental Health Services
Cuyahoga County Board of Health
Direction Home Akron Canton
Family & Community Services, Inc.
Family Planning Association of Northeast Ohio, Inc.
Health Action Council
Independence, Inc.
Lake County Alcohol, Drug Addiction, and Mental Health Services Board
Lake County Job and Family Services
Lifeline, Inc. Lake County's Community Action Agency
Lorain County Children and Families Council
Mahoning County Board of Development Disabilities
Medina County Health Department
Mental Health & Recovery Board of Portage County
Mercy Health

List of organizations participating in regional forums (cont.)

Northeast (cont.)
Ohio Department of Health
Ohio State Medical Association
Paramount Advantage
Portage County Health Department
Portage County Job and Family Services
Portage Help Me Grow
Prevent Blindness
Salem Regional Medical Center
Sandusky County Family and Children First Council
Sandusky County General Health District
Sisters of Charity Foundation of Canton
Stark County Board of Developmental Disabilities
Stark County Family Council
Stark County Health Department
Summit County Public Health
The MetroHealth System
The North East Ohio Network Council of Governments
Then Center for Health Affairs
Townhall II
Trumbull County Combined Health District
Trumbull Mobile Meals, Inc.
Tuscarawas Clinic for the Working Uninsured
Tuscarawas County Health Department
Union Hospital
United Way of Medina County
University Hospitals
University Hospitals Portage Medical Center
Youngstown City Health Department
Central
Aetna
American Cancer Society
Anthem
CareSource
CareStar
Central Ohio Area Agency on Aging
Central Ohio Hospital Council
Central Ohio Trauma System
Columbus Area Integrated Health Services
Columbus Public Health
Community Refugee and Immigration Services
Council for Union County Families
County Commissioner's Association of Ohio
Crawford/Marion Board of Alcohol, Drug Addiction, and Mental Health Services
Delaware General Health District
Equitas Health
Ethiopian Taweheda Social Services
Fairfield County Family and Children First Council
Franklin County Coroner's Office
Franklin County Public Health
Galion City Health Department
Genesis HealthCare System
Healthcare Collaborative of Greater Columbus
Hearing Loss Association of America
Huron County Public Health
InHealth Mutual
Licking County Job and Family Services
Medical Mutual
Molina Healthcare
Morrow County Health Department
Mount Carmel Health System
Nationwide Children's Hospital
Ohio Academy of Nutrition and Dietetics
Ohio Association of Area Agencies on Aging
Ohio Child Care Resource and Referral Association
Ohio Commission on Minority Health
Ohio Council for Home Care & Hospice
Ohio Council of Behavioral Health & Family Services Providers
Ohio Department of Aging
Ohio Department of Developmental Disabilities
Ohio Department of Health
Ohio Department of Medicaid
Ohio Disability and Health Program
Ohio Senior Health Insurance Information Program
Ohio State College of Public Health
Ohio State Medical Association
OhioHealth
Optimal Health Initiatives
Pickaway County General Health District
Richland County Juvenile Court
Richland County Youth and Family Council
Sexual Assault Response Network of Central Ohio
The Center for Community Solutions
The Ohio State Wexner Medical Center
Union County Health Department
United HealthCare
United Way of Union County
Universal Health Care Action Network
Western Reserve Area Agency on Aging
WorkWell
Zanesville-Muskingum County Health Department

List of organizations participating in regional forums (cont.)

Southwest
Aetna
American Cancer Society
Area Agency on Aging, PSA2
Artemis Center
Butler County Board of Developmental Disabilities
Cardinal Health
CareSource
CBD Advisors
Cincinnati Children's Hospital
Cincinnati Health Department
Cincinnati-Hamilton County Community Action Agency Head Start
Clark County Combined Health District
Clermont County Family & Children First
Clermont County Public Health
Clinton County Health District
Community First Solutions
Community Health Centers of Greater Dayton
Dayton Children's Hospital
Greene County Public Health
Hamilton County Development Disabilities Services
Hamilton County Educational Service Center
Hamilton County Public Health
Interact for Health
Kettering Health Network
LifeSpan
McCullough-Hyde/TriHealth
Miami County Public Health
Montgomery County Alcohol, Drug, and Mental Health Services
Ohio Department of Health
Ohio Department of Job and Family Services
OwlCreek Consulting
Paramount Advantage
People Working Cooperatively
Portsmouth City Health Department
Preble County Public Health
Prevent Blindness
Public Health- Dayton & Montgomery County
Reach Out
Sharonville Chamber of Commerce
Shelby County Community Action
Solutions Community Counseling
St. Mary's Development Corporation
TechSolve Lean Healthcare Solutions
The Health Collaborative
The HealthPath Foundation of Ohio
University of Cincinnati Health
Warren County Educational Service Center
Warren County Health District
Wright State University

Southeast
Aetna
Alcohol, Drug Addiction and Mental Health Services Board (Athens-Hocking-Vinton)
American Cancer Society
Athens City-County Health Department
Athens County Family & Children First Council
Belmont County Health Department
Cambridge Guernsey County Health Department
CareSource
Fairfield Department of Health
Gallia County Family & Children First Council
Guernsey County Senior Citizens Center, Inc.
Head Start/Early Head Start
Hocking County Family & Children First Council
Hocking County Health Department
Hopewell Health Center, Inc.
Jackson County Health Department
Jackson County Women, Infants, and Children (WIC)
Licking County Health Department
Meigs County Family and Children First Council
Meigs County Health Department
Muskingum Behavioral Health
Noble County Health Department
Ohio Association of Area Agencies on Aging
Ohio Association of Senior Centers
Ohio Council for Home Care & Hospice
Ohio Department of Health
Ohio Department of Mental Health & Addiction Services
Ohio Hospital Association
Ohio Optometric Association
Ohio Public Health Partnership
Ohio Universal Health Care Action Network
Ohio University
Ohio University Heritage College of Osteopathic Medicine
Pike County Housing Authority
Prevent Blindness
Serenity House
Southeastern Ohio Legal Services
The Salvation Army Samaritan Center
United Seniors of Athens County
Washington County Family & Children First
Washington County Free Clinic
Zanesville-Muskingum County Health Department

Regional forum response coding categories

Community themes and strengths: Pride in county and region
A. **Absence of Air and Water Pollution and Toxic Substances** Such as absence of pollution, secondhand smoke, clean drinking water, lead poisoning
B. **Access to Behavioral Health Care** Such as number of providers, distribution of providers, access to behavioral health/treatment specialists (includes mental health and substance use treatment providers)
C. **Access to Community Services** Includes education to the community about available resources and how to access them
D. **Access to Dental Care** Such as number of providers, distribution of providers, specific dental coverage, access to dental clinic, dental residency programs, etc.
E. **Access to Health Care/Medical Care** Such as number of providers, distribution of providers, access to patient-centered medical home, access to primary care, access to specialty care (not including dental or behavioral health), access to early detection of cancer, wait time, general access to health care (unspecified), timeliness, and quality health care systems
F. **Access to Transportation** Such as access to active and public transportation, transportation to healthcare services
G. **Active Living Environment** Such as green space, fitness opportunities, complete streets, trails, children walking/biking to school, parks, etc.
H. **Adequate Funding and Resources** Such as grant availability, sustainability, etc.
I. **Collaboration and Alignment** Such as shared vision and responsibility between community partners, cohesiveness, coordination and alignment of services/resources
J. **Community Engagement** Including community pride, community engagement, community support, non-profit/philanthropic support, strong support from faith-based community, and volunteerism
K. **Cultural Competency/Diversity** Such as behaviors, attitudes, and policies that address cross-cultural situations, racial, ethnic and cultural diversity, equity, and health literacy
L. **Economic Vitality** Such as low unemployment rate, low poverty rate, ample job opportunities, wages, working conditions, and economic development projects
M. **Education** Such as preschool enrollment, school readiness, academic success, high school graduation, educational attainment
N. **Health Care Coverage and Affordability** Such as low uninsured and underinsured rates
O. **Healthy Birth Outcomes** Focusing on low infant mortality, healthy birth weight, quality prenatal care
P. **Healthy Food Environment** Such as healthy food access, low levels of food insecurity, farmers markets, etc.
Q. **Housing Quality and Access** Such as affordable housing, lack of poor housing conditions (mold, lead, no heat)
R. **Natural Resources** Such as location/land, agriculture, use of natural resources, etc.
S. **Safety** (unspecified)
T. **Strong Leadership and Advocacy** Such as good leadership, advocacy, more grassroots focus, strong and diverse coalitions
U. **Strong Policy** Such as strong public policies
V. **Work Ethic** Such as motivation
W. **Other** (please specify below)
Community themes and strengths: Important characteristics of a healthy county and region
A. **Evolving Public Health Landscape** Includes turnover of staff in public health, changes in guidelines and policies, changes in funding (reimbursement vs. quarterly payments), mandating accreditation, regionalization
B. **Inequity** Includes health illiteracy such as ability to obtain, process, and understand basic health information and services needed to make appropriate health decisions, lack of focus on social determinants of health, time needed for cultural change
C. **Lack of Active Living Environment** Lack of green space, lack of physical activity opportunities including parks, bike trails, sidewalks, lack of public planning for an active living environment, etc.
D. **Lack of Adequate Workforce** Includes lack of quality staff, lack of skill sets
E. **Lack of Behavioral Health Care** Such as number of providers, distribution of providers, access to behavioral health/treatment specialists (includes mental health and substance use treatment providers)
F. **Lack of Collaboration/Alignment** Includes getting buy-in from sectors that impact public health, duplication of services across different agencies, not sharing resources, sense of territorialism, working in silos, slow working entities, lack of alignment, lack of communication, lack of incentives, lack of integrated planning
G. **Lack of Community Engagement** Such as a lack of participation, not enough stakeholder engagement (including businesses and grass roots), community connectedness
H. **Lack of Community/Social Services** Includes education to the community about available resources and how to access them
I. **Lack of Data** Includes lack of consistent data, ease of use of data, shared data between systems
J. **Lack of Education** Such as lack of educational attainment, and affordability, etc.
K. **Lack of Effective Policy** such as ineffective or nonexistent policies
L. **Lack of Funding and Resources** Includes ineligibility of grants, not being able to sustain progress of a program through the grant, appropriate use of public funds/resources (including available evidence-based practices), allocation of resources/services, lack of broad based infrastructure
M. **Lack of Leadership** Such as lack of leadership, lack of coordination

Regional forum response coding categories (cont.)

Community themes and strengths: Important characteristics of a healthy county and region (cont.)
N. **Lack of Health Care/Medical Care** Such as number of providers, distribution of providers, access to patient-centered medical home, access to primary care, access to specialty care (not including dental or behavioral health), wait time, general access to health care (unspecified), timeliness
O. **Lack of Health Care Coverage and Affordability** Such as Medicaid Expansion and Affordable Care Act
P. **Lack of Transportation** Such as lack of transportation, lack of awareness of transportation resources
Q. **Political Climate** Such as too much involvement from State and Government, bureaucracy
R. **Poor Food Environment** Such as lack of healthy food access (food deserts), food insecurity, etc.
S. **Poverty** Includes unemployment, recession, and economics
T. **Social Climate** Such as lack of motivation, learned helplessness, cultural norms, feeling of powerlessness, lack of trust, apathy
U. **Technology** Such as having dial up internet service, no cell phone, access to unreliable health information (WebMD), frustration with technology
V. **Other** (please specify below)
Community themes and strengths: Factors keeping county/region from improving health and quality of life
A. **Evolving Public Health Landscape** Includes turnover of staff in public health, changes in guidelines and policies, changes in funding (reimbursement vs. quarterly payments), mandating accreditation, regionalization
B. **Inequity** Includes health illiteracy such as ability to obtain, process, and understand basic health information and services needed to make appropriate health decisions, lack of focus on social determinants of health, time needed for cultural change
C. **Lack of Active Living Environment** Lack of green space, lack of physical activity opportunities including parks, bike trails, sidewalks, lack of public planning for an active living environment, etc.
D. **Lack of Adequate Workforce** Includes lack of quality staff, lack of skill sets
E. **Lack of Behavioral Health Care** Such as number of providers, distribution of providers, access to behavioral health/treatment specialists (includes mental health and substance use treatment providers)
F. **Lack of Collaboration/Alignment** Includes getting buy-in from sectors that impact public health, duplication of services across different agencies, not sharing resources, sense of territorialism, working in silos, slow working entities, lack of alignment, lack of communication, lack of incentives, lack of integrated planning
G. **Lack of Community Engagement** Such as a lack of participation, not enough stakeholder engagement (including businesses and grass roots), community connectedness
H. **Lack of Community/Social Services** Includes education to the community about available resources and how to access them
I. **Lack of Data** Includes lack of consistent data, ease of use of data, shared data between systems
J. **Lack of Education** Such as lack of educational attainment, and affordability, etc.
K. **Lack of Effective Policy** Such as ineffective or nonexistent policies
L. **Lack of Funding and Resources** Includes ineligibility of grants, not being able to sustain progress of a program through the grant, appropriate use of public funds/resources (including available evidence-based practices), allocation of resources/services, lack of broad based infrastructure
M. **Lack of Leadership** Such as lack of leadership, lack of coordination
N. **Lack of Health Care/Medical Care** Such as number of providers, distribution of providers, access to patient-centered medical home, access to primary care, access to specialty care (not including dental or behavioral health), wait time, general access to health care (unspecified), timeliness
O. **Lack of Health Care Coverage and Affordability** Such as Medicaid Expansion and Affordable Care Act
P. **Lack of Transportation** Such as lack of transportation, lack of awareness of transportation resources
Q. **Political Climate** Such as too much involvement from State and Government, bureaucracy
R. **Poor Food Environment** Such as lack of healthy food access (food deserts), food insecurity, etc.
S. **Poverty** Includes unemployment, recession, and economics
T. **Social Climate** Such as lack of motivation, learned helplessness, cultural norms, feeling of powerlessness, lack of trust, apathy
U. **Technology** Such as having dial up internet service, no cell phone, access to unreliable health information (WebMD), frustration with technology
V. **Other** (please specify below)
Forces of change
A. **Aging Population** (unspecified)
B. **Changes in Access to Behavioral Health Care** Such as number of providers, distribution of providers, access to behavioral health/treatment specialists (includes mental health and substance use treatment providers)
C. **Changes in Access to Community Services** (unspecified)
D. **Changes in Access to Dental Care** Such as number of providers, distribution of providers, specific dental coverage, access to dental clinic, etc.

Regional forum response coding categories (cont.)

Forces of change (cont.)
E. **Changes in Access to Health Care/Medical Care** Such as number of providers, distribution of providers, access to patient-centered medical home, access to primary care, access to specialty care (not including dental or behavioral health), wait time, general access to health care (unspecified), consolidation of health care systems
F. **Changes in Coverage and Affordability** Such as uninsured, underinsured, out of pocket expenses, high deductible health plans, medication coverage and cost
G. **Changes in Economic Conditions** Such as increased minimum wage, cost of living, quality jobs, student loan debt, etc.
H. **Changes in Family and Social Support** Such as social-emotional support, single-parent households, grandparents raising kids, same sex parents, etc.
I. **Changes in Food Environment** Such as healthy food access, food insecurity, farmers markets, hunger, etc.
J. **Changes in Healthcare System Performance** Such as quality of care, care coordination, medication management, preventable hospitalization, patient education
K. **Changes in Healthcare Technology** Such as changes in health care technology as access to unreliable health information (WebMD, social media), social media use, telemedicine, electronic health records/EMR
L. **Changes in Workforce** Includes lack of quality staff, lack of skill sets, migration and retention of young professionals
M. **Changes in Political Climate and Leadership** Such as too much involvement from State and Government, bureaucracy, election and impact on health care
N. ***Collaboration and Alignment*** Includes getting buy-in from sectors that impact public health, community connectedness, shared vision for health at county/regional level
O. **Digital Divide** Such as having dial up internet service, no cell phone
P. **Disparities** Including gender, racial, geographic and income, declining health literacy
Q. **Environmental Changes** Such as climate change and flooding
R. **Emerging Infectious Diseases** Such as sexually transmitted infections, influenza, hospital-acquired, novel virus, HIV, Hepatitis C, etc.
S. **Exposure to Air and Water Pollution and Toxic Substances** Such as pollution, secondhand smoke, drinking water, fluoridation, lead poisoning
T. **Evolving Public Health Landscape** Includes turnover of staff in public health, changes in guidelines and policies, changes in funding (reimbursement vs. quarterly payments), mandating accreditation, regionalization
U. **Human Trafficking**
V. **Immunization Challenges** Including immunization rates, access to and completion of recommended immunizations, requirements for schooling/ childcare
W. **Increased Smoking, Drug and Alcohol Abuse** Such as addiction, abuse, misuse or dependence on alcohol, marijuana, prescription drugs, opioids, heroin, MDMA, e-cigarettes, tobacco, potential legalization of marijuana, etc.
X. **Increased Focus on Active Living Environment** Such as green space, fitness opportunities, complete streets, trails, children walking/biking to school, parks, etc.
Y. **Increased Focus on Adverse Childhood Experiences** Includes impact and lack of screening/awareness
Z. **Increased Focus on Prevention/Wellness** (unspecified) Includes unspecified screenings, health promotion
AA. **Increased Violence and Crime** Including physical and emotional violence, such as relationship or intimate partner violence, domestic violence, child abuse, elder abuse, sexual violence, street violence, bullying, unsafe communities, community unrest, increase in incarceration, and increased access to weapons
BB. **Lack of Community Engagement** Such as a lack of participation, not enough stakeholder engagement (including businesses and grass roots), duplication of services across different agencies, not sharing resources, sense of territorialism, working in silos
CC. **Lack of Funding and Resources** Includes ineligibility of grants, not being able to sustain progress of a program through the grant, appropriate use of public funds/resources (including available evidence-based practices)
DD. **More Diverse Population** Including immigration and impact on language barriers, health literacy, cultural bias
EE. **Poor Housing Quality and Access** Such as affordable housing, housing conditions (mold, heat), residential segregation
FF. **Other** (please specify below)

E Key informant interview appendix

Organizations consulted regarding key informant interviews

Aetna Better Health of Ohio
Asia Services in Action
Case Western Reserve University
Cincinnati Children's Hospital Medical Center
Community Legal Aid
Institute for LGBTQ Health Equity
Interact for Health
The Kirwan Institute for the Study of Race and Ethnicity, The Ohio State University
Mental Health & Addiction Advocacy Coalition
Nationwide Children's Hospital
Ohio Commission on Minority Health
Ohio Department of Health
Ohio Disability and Health Program, Nisonger Center
Ohio Public Employees Retirement System
Philanthropy Ohio
Premier Health

Key informant interview population selection criteria

- An identified vulnerable population must meet one or more of the three criteria listed below.
- All three criteria should be represented in the set of vulnerable populations identified.
- Vulnerable populations can be defined broadly enough to allow for some variation by region (such as immigrant communities across regions).

Criteria 1. Groups of Ohioans who experience health outcomes at rates worse than the overall Ohio population.

Criteria 2. Groups of Ohioans who are suspected to experience poor health outcomes and for which secondary data is not readily available.

Criteria 3. Groups of Ohioans who experience poor health outcomes compared to other groups but whose voices may not be heard during the SHA/SHIP process.

Community-based organizations interviewed about key informant populations

Organization	Demographics
Community Properties of Ohio	African-American (Central)
Toledo-Lucas County Office of Minority Health	African-American (Northwest)
Greater Cincinnati Urban League; Miami Valley Urban League	African-American (Southwest)
Center for Closing the Health Gap	African-American (Northeast)
Northeast Ohio Black Health Coalition	African-American (Northeast)
MidOhio Foodbank	Low Income (Central – Urban)
MidOhio Foodbank	Low Income (Central – Suburban)
MidOhio Foodbank	Low Income (Central – Rural)
Toledo/Lucas County CareNet	Low Income (Northwest – Urban)
Toledo/Lucas County CareNet	Low Income (Northwest – Suburban)
Liberty Freedom Center Food Pantry	Low Income (Northwest – Rural)
Greater Cleveland Food Bank	Low Income (Northeast – Urban)
Kent Social Services; LifePointe Church of Atwater	Low Income (Northeast – Suburban)
People to People Ministries; Salvation Army Orrville	Low Income (Northeast – Rural)
Greater Dover New Philadelphia Food Pantry; Journey's End Ministries	Low Income (Northeast – Appalachian)
CAIN - Churches Active In Northside	Low Income (Southwest – Urban)
The Food Bank	Low Income (Southwest – Suburban)
Grace Ressurection Center	Low Income (Southwest – Rural)
Samaritan Outreach Services	Low Income (Southwest – Appalachian)
The Southeastern Ohio Foodbank	Low Income (Southeast – Appalachian)
Ethiopian Tewahedo Social Services (ETSS)	Immigrant – East African (Central)
Catholic Social Services - Our Lady of Guadalupe	Immigrant – Latino (Central)
Ohio Asian American Health Coalition	Immigrant – SE Asian (Central)
Community Refugee & Immigration Services	Refugee (Central)
Neighborhood Family Practice	Immigrant – Eastern European (Northeast)
Neighborhood Family Practice	Refugee (Northeast)
Adelante, Inc.	Immigrant – Latino (Northwest)
Catholic Charities SW Ohio	Immigrant – Latino (Southwest)
Catholic Charities SW Ohio	Refugee (Southwest)
Society for Equal Access	Disability (Southeast)
Center for Independent Living	Disability (Southwest)

Key informant interview questions

1. How is the quality of life perceived in the community you serve?
2. What do you view as strengths or resources of this community?
3. How would you describe the health status of the community you serve?
4. What do you think are the biggest health challenges or issues facing this community?
5. What do you believe are the main causes of these health challenges/issues?
6. What do you believe are the 2-3 most important things that need to change in order to improve the health and quality of life in this community?
7. Please describe any recent changes or trends occurring that will have an impact on the health and quality of life of the community you serve?
8. Thinking about the immigrant population you work with, why do you think people have moved here?

F State asset and resource inventory appendix

Aspirational Goals	Lead State Agencies	Existing Programs and Resources (state and federally funded)
Infants are born healthy	• Health • Job and Family Services • Medicaid • Mental Health and Addiction Services	• Newborn Screening Program • Child and Family Health Services Program • Ohio Infant Mortality Reduction Initiative • Child Fatality Review • Ohio Partners for Smoke Free Families (OPSFF) • Regional Comprehensive Genetic Centers • Moms First (Ohio Healthy Start Program) • Ohio Collaborative to Prevent Infant Mortality • Shaken Baby Education Program • Sudden Infant Death Syndrome Program • Help Me Grow prenatal to age three system of supports • Women, Infants and Children Nutrition Program • Safe Havens for Newborns • Health coverage for pregnant women and children • Maternal Depression Resources • Fetal Alcohol Spectrum Disorder prevention
Children are ready to learn	• Education • Health • Job and Family Services • Medicaid • Mental Health and Addiction Services	• Early learning and childhood education • Preschool and child care licensing • Hearing and vision screening • Immunization Program • Adoption Assistance • Foster care temporary placements with foster families • Kinship care temporary placement with relatives • Child care regulation and subsidy programs • Child protective services to prevent abuse and neglect • Early Screening, Diagnosis and Treatment (EPSDT) services • Early childhood mental health services
Children succeed in school	• Board of Regents • Education • Mental Health and Addiction Services • School Facilities Commission	• Post-Secondary Enrollment Option (dual credit) • Traditional K-12 public school funding • Educational Choice (EdChoice) Scholarship Program • Career-Technical Education • Disability-specific education resources • Special education programs • Gifted education programs • Academic content standards • Educator evaluations • School safety programs • School transportation programs • School food and nutrition programs • Educational Service Centers • Ohio Mental Health Network for School Success • School Facility Construction Programs

State asset and resource inventory (cont.)

Youth successfully transition to adulthood	• Adjutant General • Board of Regents • Developmental Disabilities • Education • Health • Job and Family Services • Mental Health and Addiction Services • Tuition Trust Authority • Youth Services	• Ohio National Guard Scholarship Program • Transfer to Degree Guarantee • Third Frontier/Ohio Tech Internship Program • Ohio College Opportunity Grant • Carl Perkins Act Career and Technical Education programs • Nurse Education Assistance Loan Program • Student Loan Repayment Program • Woodrow Wilson Teaching Fellowships • War Orphans Scholarship • Ohio Safety Officers Memorial Fund • OhioLINK Academic Library Consortium • Choose Ohio First STEMM program • Ohio Means Success pathway to college and career options • Internships and cooperative education (co-op) programs • Adult Basic and Literacy Education (ABLE) • Employment First for persons with developmental disabilities • General Education Development (GED) program • Abstinence education • Reproductive health and wellness program • Ohio Adolescent Health Partnership • Independent living and transitional assistance for youth • Workforce Innovation and Opportunity Act (WIOA) programs for youth • Mental health services for transition-age youth • Pediatric Psychiatry Network • Suicide prevention • Youth-led substance abuse prevention network • Behavioral health and juvenile justice projects • College Advantage 529 Savings Program • RECLAIM community alternatives to juvenile incarceration • State-run juvenile correctional facilities • Youth reentry volunteer mentor programs
Job seekers find meaningful work	• Aging • Adjutant General • Administrative Services • Board of Regents • Developmental Disabilities • Education • Job and Family Services • Mental Health and Addiction Services • Opportunities for Ohioans with Disabilities • Rehabilitation and Corrections • Transportation • Veterans Services	• Senior Community Service Employment Program • Ohio National Guard Employer Outreach • State of Ohio Career Opportunities • Ohio Business Gateway • State Procurement Opportunities • Minority Business EDGE (Encouraging Diversity) Programs • English for Speakers of Other Languages (ABLE) • Higher education programs and resources for job creators • Higher education technology transfer and commercialization • GI promise • Ohio Energy Pathways • Workforce Development Equipment and Facility Proposals • Supported employment for people with disabilities • Business Grants, Loans and Tax Credits • InvestOhio • Third Frontier funding for technology-based companies • Business Site Selection and Certification • General Education Development (GED) programs • Education job match to school district vacancies • Ohio Means Jobs connects businesses and job seekers • Workforce Investment Act (WIA) programs • One-stop career centers • Apprenticeship programs • Work Opportunity Tax Credit to hire hard-to-place workers • Supported employment for people with mental illness • Personal care assistance for people with disabilities seeking jobs • Vocational rehabilitation for people with disabilities • Offender reentry workforce development programs • Federal Bonding Program • Transportation construction projects • Veterans education and employment benefits

State asset and resource inventory (cont.)

Workers support their families	• Aging • Adjutant General • Board of Regents • Commerce • Development Services • Health • Job and Family Services • Medicaid • Opportunities for Ohioans with Disabilities • Tax • Workers' Compensation	• Alzheimer's Respite and Family Caregiver Programs • Family Readiness and Warrior Support Program • Education opportunities for veterans and service members • Unclaimed Funds • Minority Business Services • Small Business Development Centers • Women, Infants and Children (WIC) Nutrition Program • Temporary Assistance for Needy Families (TANF) • Supplemental Nutrition Assistance Program (SNAP) • Child care subsidy programs • On-the-Job Training programs • Workforce Investment Act (WIA) programs to upgrade skills • Unemployment compensation • Rapid Response for layoff aversion and reemployment • Ohio Works First time-limited cash assistance • Child support enforcement • Private-sector health plan coverage for low-income Ohioans • Medicaid Buy-In for workers with disabilities • Personal care assistance for people with disabilities to keep a job • Individual, business and government tax administration • Administer workers' compensation workplace injury claims • Workplace safety grants • Workplace wellness grants
Families thrive in strong communities	• Administrative Services • Agriculture • Commerce • Development Services • Environmental Protection • Health • Insurance • Job and Family Services • Mental Health and Addiction Services • Natural Resources • Public Safety • Rehabilitation and Corrections • Transportation	• MARCS statewide communication for public safety • Agriculture inspection and farmland preservation • Business regulations that safeguard Ohioans • State Fire Marshal • Liquor Control • Community Economic Development Programs • Community Actions Agencies • Community Grants, Loans, Bonds, and Tax Credits • Affordable Housing Programs • Governor's Office of Appalachia • Advanced Energy Efficiency Programs • Tourism Ohio marketing news and information • Enforce air and water quality and other environmental laws • Promote prevention, wellness, and healthy lifestyles • Report vital statistics and public health outcomes • Ensure access to health services • Regulate health care facilities • Respond to public health emergencies • Regulate insurance products • Temporary Assistance for Needy Families (TANF) • Supplemental Nutrition Assistance Program (SNAP) • Other food assistance programs • Community Linkage upon release from incarceration • Parks and recreational programs • Regulate mining and drilling • Land protection and preservation programs • Land management programs • State Highway Patrol • Homeland Security • Emergency Management Agency • Emergency Medical Services regulation and registries • Bureau of Motor Vehicles • Rehabilitation and Correction Facilities • Offender reentry programs • Prisoner community service program • Regulate aircraft and airports • Regulate rail and railroad crossings

State asset and resource inventory (cont.)

Ohioans' special needs are met	• Health • Development Services • Development Disabilities (includes local funds in addition to state and federal) • Medicaid • Mental Health and Addiction Services • Opportunities for Ohioans with Disabilities • Veterans Services	• Help Me Grow prenatal to age three system of supports • Homeless and Supportive Housing Programs • Protect the health and safety of Ohioans with disabilities • State-run institutions (Developmental Centers) • Intermediate Care Facilities for developmental disabilities • Adult day services and non-medical transportation • Supported living to remain in the community • Medicaid Long-Term Care Services • HOME Choice to help move out of facility-based care • Regulate mental health care training • Access to Recovery Program • Residential housing subsidies for disabled adults • Gambling addiction programs • State-run psychiatric hospitals • Projects for Assistance in Transitioning from Homelessness • Housing initiative for people recovering from mental illness • Mental Health and Addiction Help Line • Services for the visually impaired • Community Centers for the Deaf • Disability determination for Social Security disability benefits • Independent Living Centers for people with disabilities • State-run veterans homes • Veteran crisis hotline
Retirees are safe and secure	• Aging • Insurance • Job and Family Services • Medicaid • Mental Health and Addiction Services	• Long-Term Care Ombudsman Programs • Long-Term Care Consumer Guide • Golden Buckeye Program • Healthy Lifestyle Programs • Connecting Older Adults to Volunteer Opportunities • Senior Farmers Market Nutrition Program • Ohio Senior Health Insurance Information Program • Adult Protective services • Food Assistance programs • Medicaid health coverage for low-income seniors • Medicare prescription assistance for low-income seniors • Medicare premium assistance for low-income seniors • MyCare Ohio Integrated Medicare-Medicaid benefits • Mental health services for seniors