Indiana State Health Assessment and Improvement Plan

May 2018 - December 2021

Contents

Letter from the State Health Commissioner

Dear colleagues:

It is with great pleasure that I present Indiana's State Health Assessment (SHA) and State Health Improvement Plan (SHIP). Over the past year, Indiana State Department of Health staff, in conjunction with partners from across the state, gathered epidemiological data and key informant interviews to paint a picture of the health of Indiana's residents. The findings from our State Health Assessment highlight many significant challenges. However, the SHA also revealed many assets and positive changes in communities across Indiana.

These data informed the development of the State Health Improvement Plan, which provides strategies and objectives for improving Indiana's health over the next three-and-a-half years. Themes from previous plans, such as reducing chronic disease and infant mortality, have been carried forward to this new iteration, while emerging public health threats such as the opioid epidemic are new.

"Implementing the SHIP will require an alignment of efforts throughout Indiana, using the data gathered in this assessment to start the process and measure success."

In addition, we recognize in this SHA and SHIP the importance of the social determinants of health, as well as the disparate impacts that poor health has on certain populations. The 2018-2021 SHIP also seeks to improve the infrastructure of the public health system in Indiana.

Implementing the SHIP will require an alignment of efforts throughout Indiana, using the data gathered in this assessment to start the process and measure success. I want to sincerely thank all the partners and stakeholders across Indiana who contributed to this report and ask for your continued engagement in the future.

Yours in health,

Kris Box, MD, FACOG
State Health Commissioner

KRISTINA BOX, MD, FACOG

Executive Summary

In 2017, the Indiana State Department of Health (ISDH) began the process of revising the State Health Assessment and State Health Improvement Plan. This process, conducted in collaboration with over 100 partner organizations, key informants, and subject matter experts, sought to identify and address Indiana's greatest health challenges.

The 2018 Indiana State Health Assessment (SHA) provides an overview of the health and social wellbeing of Hoosiers and the issues impacting the public health system. Conducting this assessment provides a better and deeper understanding of the current health and quality of life of Hoosiers, as well as the many influences on health, including physical, mental, emotional, and social factors. This assessment provides the foundation for the Indiana State Health Improvement Plan (SHIP) which serves as a coordinated roadmap to improve the health of all Hoosiers.

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THE SHA INVOLVED FIVE STEPS:

- Community health status assessment
- Assessment of prior assessments
- Review of other agency and coalition plans
- Key informant interviews/qualitative data gathering
- Health need identification


INDIANAPOLIS

Indiana has stubbornly high rates of chronic disease, obesity, smoking, and infant mortality. Additionally, emerging health threats, such as substance use disorders and resulting increases in HIV and hepatitis C, and are stretching the resources of public health.

INDIANA IS RESPONDING TO THESE CRISES:

1. In 2011, the Indiana Perinatal Quality Improvement Collaborative was formed to help address the state's high infant mortality rate.

2. In the 2018 legislative session, Indiana passed a bill requiring ISDH to establish a program to certify the perinatal levels of care available at Indiana hospitals and birthing centers.

3. The Indiana State Department of Health and its partners were recognized for their multi-faceted response to an HIV epidemic in Indiana.

4. In 2017 Indiana launched Liv, a health app that provides information for women who are pregnant, are planning to become pregnant, or already pregnant.

5. Indiana piloted, then codified, syringe service programs for counties with demonstrated high rates of hepatitis C or HIV.

6. Indiana piloted a study to better understand the number of infants being born with Neonatal Abstinence Syndrome.

7. Indiana continues to implement the Indiana Tobacco Quitline, receiving 12,160 calls in 2017[1].

8. Indiana's adult smoking prevalence has declined significantly from 25.6% in 2011,21.1% but it has not changed significantly since 2013[2].

9. While e-cigarette use among Hoosier youth declined significantly between 2014 and 2016, e-cigarettes remain the most commonly used tobacco product among Hoosier youth[3].

10. In 2016, Indiana Governor Eric Holcomb made attacking the opioid epidemic a pillar of his governing framework and appointed a multi-agency commission to coordinate and hasten efforts. **Initiatives include:**

    - The OpenBeds platform which provides drug dependent individuals nearly real-time listing of facilities with available treatments slots, grouped by location, payment options, accepted health insurance, type of addiction and whether services are available for pregnant women or new mothers.

    - 'Know the O facts" awareness campaign and NextLevel Recovery website provides data and information about opioid use disorder. http://www.in.gov/recovery/know-the-o/

[1] (Indiana State Department of Health, 2016)
[2] (Behavioral Risk Factor Suveillance System, 2011-2016)
[3] (Youth Tobacco Survey, 2012-2016)

Indiana State Health Assessment

Introduction and Process

The Indiana State Health Assessment (SHA) takes a comprehensive look at the health of Hoosiers by presenting data on demographics, socioeconomic characteristics, quality of life, and health behaviors, built environment, morbidity, mortality, and other indicators of health status.

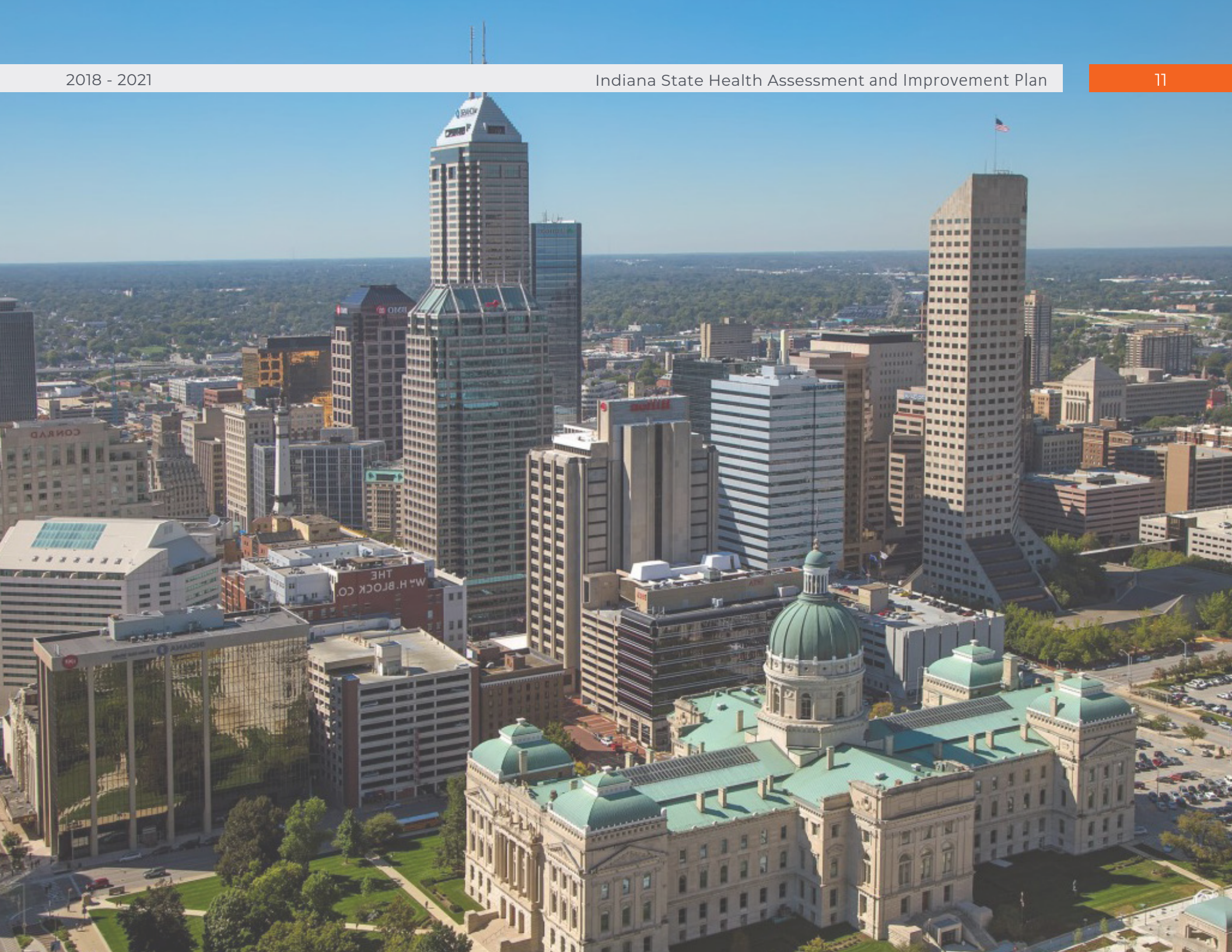
To begin this process, ISDH convened an advisory group of more than 100 stakeholders to guide SHA and SHIP development. This group, the Indiana Health Improvement Partnership (IHIP), met three times during 2017 and early 2018 to develop key components of the SHA including values, forces of change analysis, and assessment of strengths, weaknesses, opportunities, and threats (SWOT). In addition, the IHIP served as a sounding board for continuous feedback and connections to subject matter experts. Members of the advisory group were invited to join a smaller, more nimble steering committee. The steering committee, over a course of three additional meetings, directed the selection of priority indicators, assisted in developing qualitative data collection, and identified key informants for interviewing.

To help navigate the SHA, the IHIP followed a modified version of the Mobilizing for Action through Planning and Partnerships (MAPP) Framework. This community-driven framework assists communities in navigating the process by which systems, policies, and environments are assessed, threats and weaknesses are identified, and key strengths and opportunities are leveraged. This methodology was used to identify key priorities and strategies to alleviate the most pressing health challenges of the state.

VALUES

THE IHIP RECOGNIZED THESE VALUES TO INFORM THEIR WORK:

1. **Health Equity:** Indiana will be healthier by understanding the strength and need of diverse populations, by addressing the underlying social determinants of health, and by ensuring that opportunities to achieve optimum health are available to all Hoosiers.
2. **Effectiveness:** Indiana will focus on evidence-based strategies to positively impact health outcomes, while also fostering innovation and promoting excellence.
3. **Integrity:** Indiana will strive to achieve the best public health outcomes through honesty, trustworthiness, and transparency in all we do.
4. **Respect:** Indiana will respect and value all individuals for their diverse backgrounds, cultures, and communities.



Key Components of the State Health Assessment

The SHA was conducted using a multi-pronged approach including: community health status assessment, assessment of previous assessments, review of existing agency plans, community engagement/key informant interviews, SWOT assessment, and forces of change analysis.

1. COMMUNITY HEALTH STATUS ASSESSMENT

In the spring of 2017, ISDH compiled a list of indicators assembled from a variety of sources including: Healthy People 2020 Leading Health Indicators, County Health Rankings, most commonly requested indicators from the Centers for Disease Control and Prevention (CDC), as well as other internal datasets and registries such as birth/death data, National Violent Death Reporting System (NVRDS), Indiana Trauma Registry, and Indiana Stats Explorer. These data were pulled by the epidemiologists at ISDH. The IHIP steering committee reviewed and analyzed over 90 variables to reflect the spectrum of health indicators deemed important by the public health system. The chosen priority indicators are described further in this document with descriptive analysis.

2. REVIEW OF STATE AGENCY PLANS

A team from ISDH met with subject matter experts to review objectives and strategies to improve the health of Hoosiers. A review of planning documents from other state agencies was helpful in understanding the initiatives and strategies already being conducted or planned for the near future. A concerted effort was made to ensure that the data, activities, and strategies in this SHA and SHIP are aligned with other local, state, and national improvement efforts.

3. ASSESSMENT OF ASSESSMENTS

A small team from ISDH conducted an environmental scan to collect existing community health needs assessments (CHA), primarily from Indiana hospitals and local health departments. Assessments were included if they met the regulatory requirements for the IRS rules regarding Charitable 501(c)(3) Hospitals, they were less than three years old, and they included primary data collection. More than 100 assessments were reviewed, representing populations from all 92 Indiana counties. The identified priority health needs were recorded and coded into an Excel spreadsheet.

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THE TOP TEN IDENTIFIED PRIORITIES OF THE LOCAL CHAs INCLUDED:

- Access to care
- Mental and behavioral health
- Obesity
- Substance abuse disorders
- Nutrition and physical activity
- Diabetes
- Tobacco use
- Heart diseasse
- Cancer
- Maternal and infant health

Identifying Preliminary Priorities

Following the review of more than 200 existing documents (assessment of assessments and review of other agency plans), over 100 variables, and speaking with subject matter experts, findings were summarized and presented to the IHIP steering committee for initial prioritization.

Priorities from this process included:

Social determinants of health and health equity

Improving public health infrastructure (funding and culture/quality of public health practice)

Improving health and reducing health disparities

a. Chronic disease
b. Birth outcomes/infant mortality
c. Reduced injury and death due to opioid exposure
c. Improved access to mental health services

Community Engagement

Another key component of the SHA was the engagement of a broad range of community stakeholders. Subject matter experts from the preliminary topic areas were consulted to better understand what data best described the health status of Hoosiers.

The goals of the community engagement component of the SHA included:

1. Identify barriers and assets that hinder or aid Indiana's most vulnerable residents in their quest to achieve optimal health.
2. Better understand the needs of service providers in communities that serve disparate populations.

The IHIP steering committee approved the data collection purpose and technique, and partners at Indiana University Kokomo designed the data collection tool (see appendix). Over 60 key informants were interviewed from a wide range of stakeholders. The compilation of the interviews helped determine the health factors and foundational issues identified in this SHA.

Key informants were chosen based on four factors:

1. The population they serve has known health disparities.

2. Little information describing the health of the population they serve was available.

3. The community organization/service had a regional or statewide reach.

4. The key informant could speak to health issues of known concern.

Nearly a third of local health departments from around Indiana provided input, as well as scores of other services providers representing a wide range of stakeholders across the state. These included: Area Agencies on Aging; WIC; 2-1-1; Anthem; United Way; Purdue Extension; fire departments; mayors' offices; Boys & Girls Club; among many others.

Summary of primary data:

Nearly a third of local health departments throughout Indiana provided input, as well as many other service providers representing a wide range of stakeholders across the state. These included: Area Agencies on Aging; WIC; 2-1-1; Anthem; United Way; Purdue University Extension; fire departments; mayors' offices; and Boys & Girls Clubs, among many others.

When asked "What *strengthens* your population's ability to achieve optimal health?", informants indicated having strong partnerships, access to evidence-based programming in the community, cultural diversity, access to social and addiction services, health education in schools, and access to workforce development opportunities as important positive features.

When asked about *barriers*, key informants indicated low staffing levels, low funding levels, being able to break cultural barriers, increases in drug use, poverty and apathy, lack of free clinics, unaffordable healthcare and medications, lack of available affordable housing, provider billing, and limited local resources as major themes.

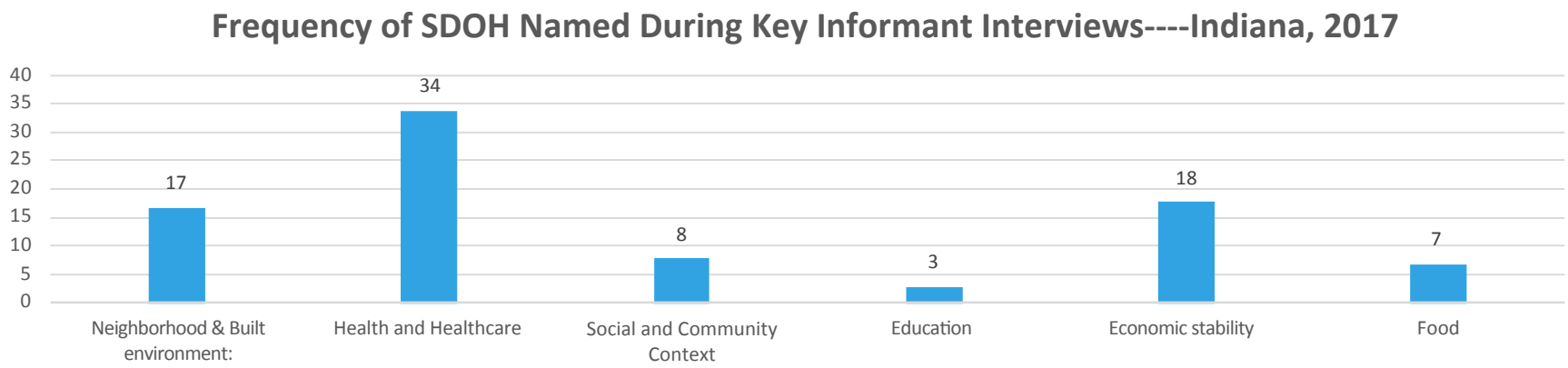
When asked about potential *solutions*, key informants shared a wide range of ideas including: expanding home visiting to all new mothers; more funding to local public health partners (and less to state and federal), stronger partnerships between 2-1-1, state, and local partners; focus on prevention and education; better communication between partners; mandatory INSPECT usage, change in reimbursement model for EMS transportation to provider, promoting trauma-informed-care, and healthier food options for children.

Community Engagement

Key informant interview transcripts were also coded to help identify which conditions in the environment that affect a broad range of health and quality of life outcomes[4], otherwise known as social determinants of health, were mentioned and at what frequency.

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment Income Expenses Debt Medical Bills Support	Housing Transportation Safety Parks Playgrounds Walkability	Literacy Language Early Childhood education Vocational training Higher Education	Hunger Access to healthy options	Social integration Support systems Community engagement Discrimination	Health coverage Provider availability Provider linguistic and cultural competency Quality of care

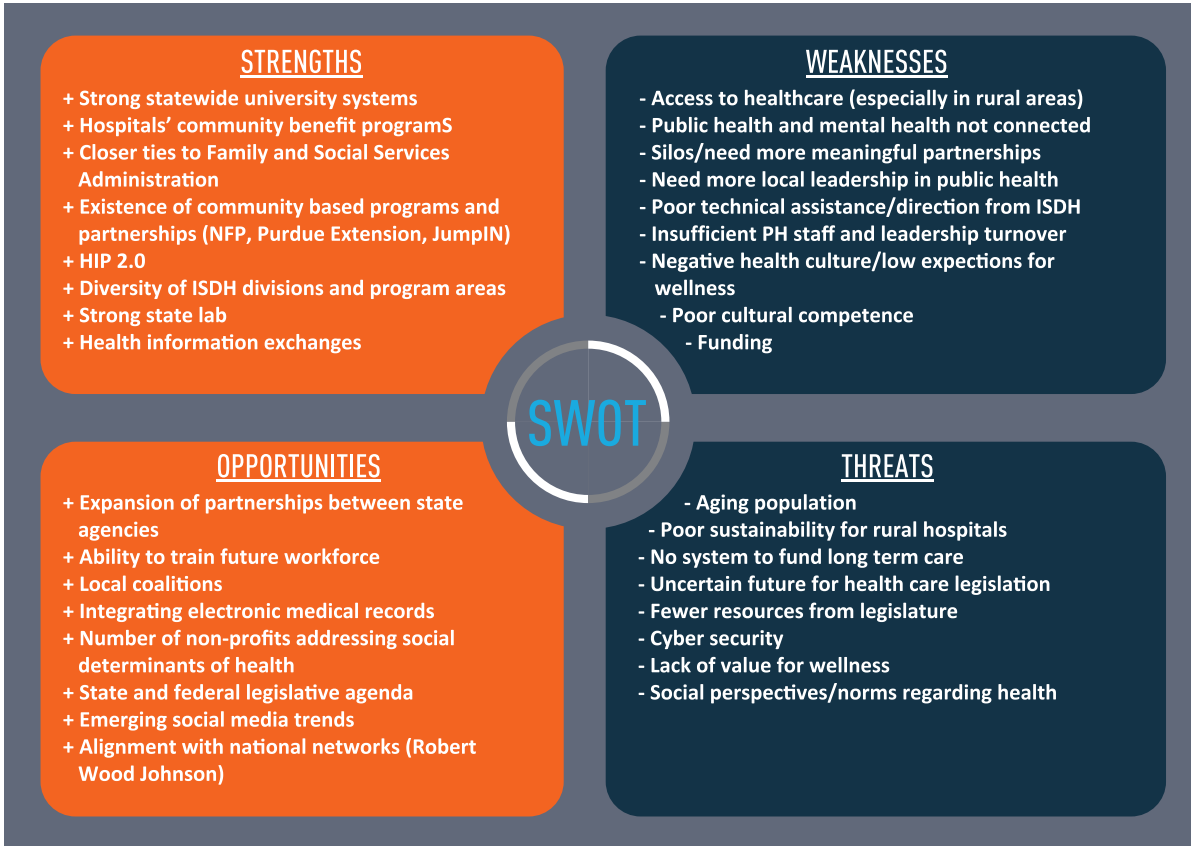
Health Outcomes
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations



[4](Office of Disease Prevention and Health Promotion, n.d.)

Public Health System Forces of Change and SWOT analysis

In May of 2017, the IHIP advisory committee participated in a SWOT and forces of change analysis. The SWOT analysis allowed participants to identify strengths and weaknesses (internal to the public health system), and threats and opportunities (external to the public health system) that have a potential to affect the future of the public health system. The force of change assessment is designed to help identify trends, factors, and events that are influencing, or could influence the health and quality of life of the community. A full compilation of the SWOT and forces of change responses is in the appendix. The results are summarized below:



Selection of Priority Indicators

After completing an exhaustive review of both the primary and secondary data, a discrete set of indicators was chosen by the small group steering committee to best convey the current state of health in Indiana. From these data, pressing health issues emerge as priorities.

Criteria for choosing the final priority health issues included:

1. Magnitude:

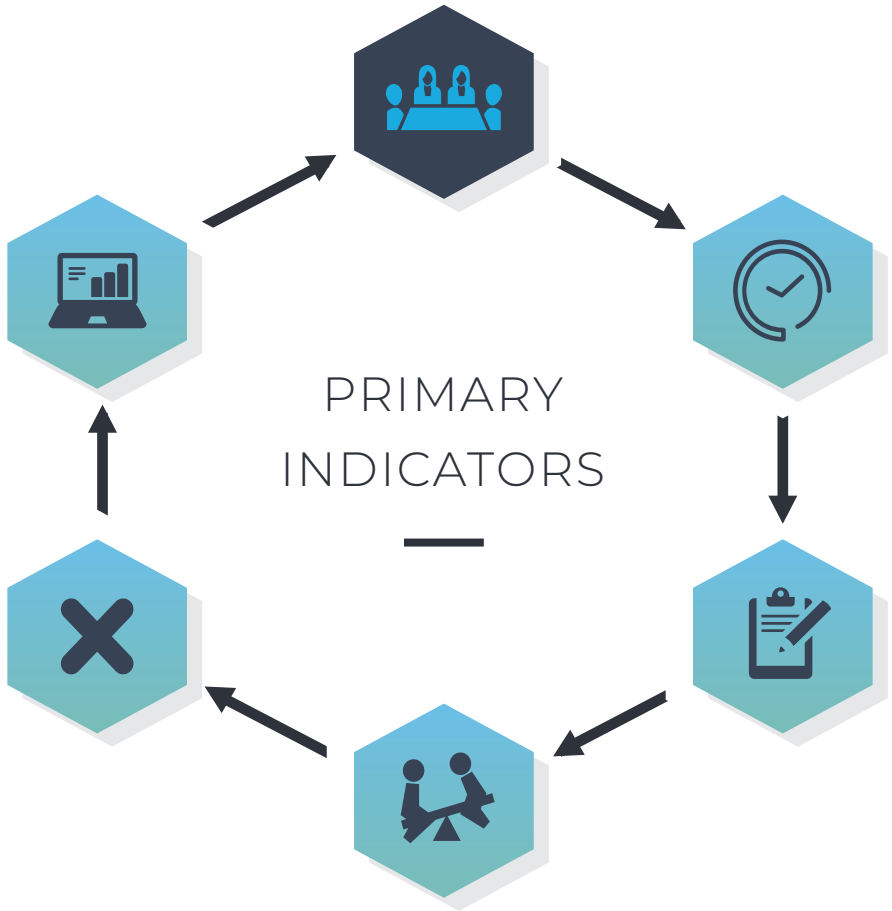
Does the health indicator measure health issues that affect a large proportion of the population?

2. Seriousness:

Does the health indicator reflect health issues with high severity, such as high mortality or morbidity rate?

3. Ability to change:

Does the health indicator measure health issues that are feasible to change? Are other groups able to provide resources?



4. Health equity:

Does the health indicator measure issues that disproportionately affect population subgroups?

5. Social determinant:

Does the issue affect multiple health outcomes?

6. Availability of data:

Is there data available to measure, track, and compare to other states?

DATA INDICATED THESE PRIORITY HEALTH ISSUES:

These priority health issue data resonated with the IHIP steering committee, State Department of Health stakeholders, health coalitions, key informants, subject matter experts and broader planning council and stakeholder group. In order to provide the opportunity for the public to comments on the chosen indicators, a link to the data points was posted to ISDH website, broadcast via Twitter and Facebook, and distributed by partners' to multiple listservs. On social media, the link to the indicators reached over 1500 users. In addition, 65 individuals provided comment via an online survey tool, the majority indicating they 'agree' or 'strongly agree' with findings the of IHIP. Comments from the online engagement suggested more emphasis on social determinants of health data as well as consideration for behavioral health.

After priority topics were identified, subject matter groups were formed in order to examine applicable data points. Reviewing indicators from other state plans, Healthy People 2020, strategic plans, and other sources allowed the group to narrow down the indicators described in this report.

1. Emphasizing social determinants of health—specifically access to health care

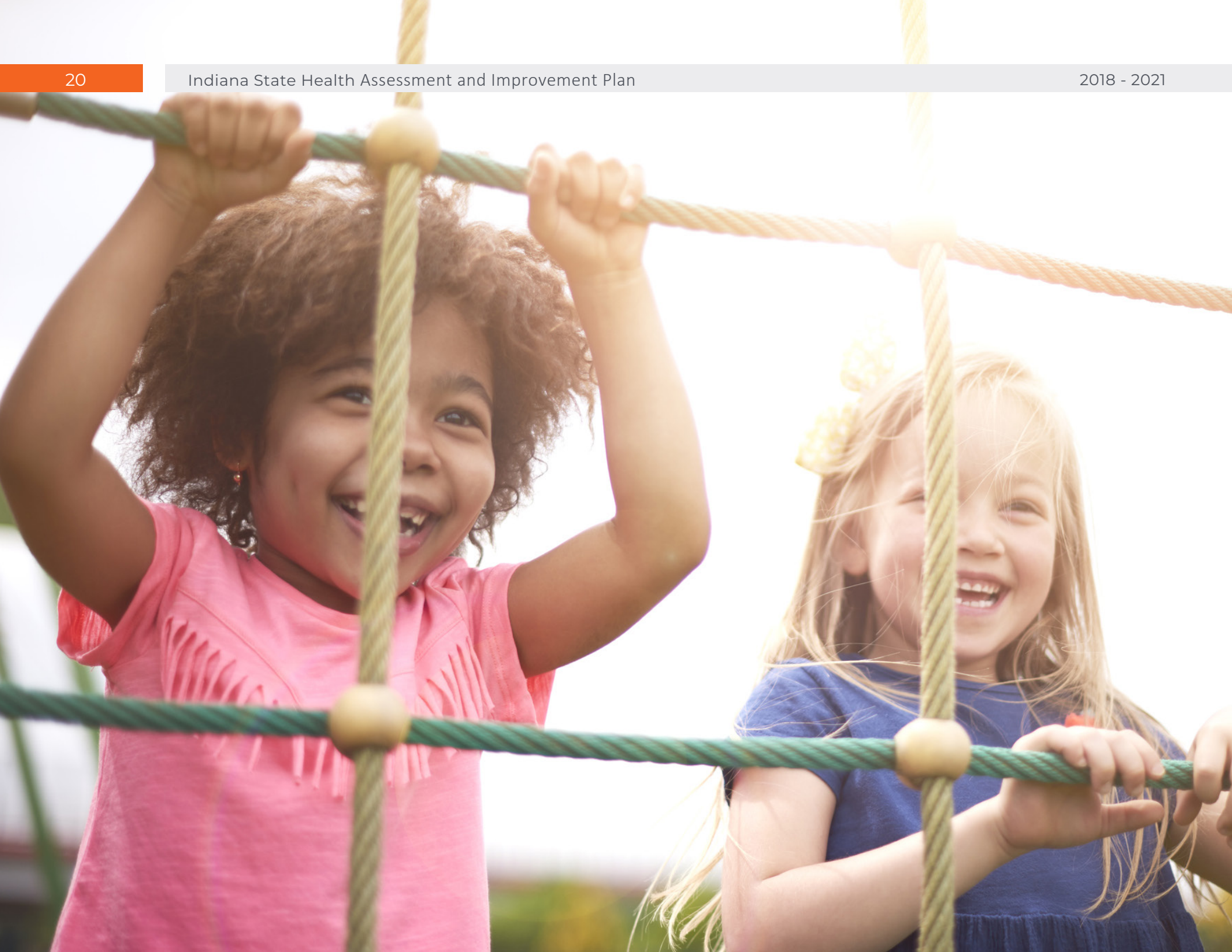
2. Enhancing the public health infrastructure—the quality and culture of health

3. Improving health outcomes and reducing health disparities

   a. Reduce rates of chronic disease

   b. Address the opioid epidemic

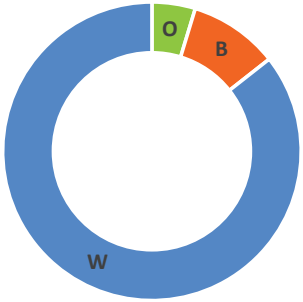
   c. Improve birth outcomes and reduce infant mortality



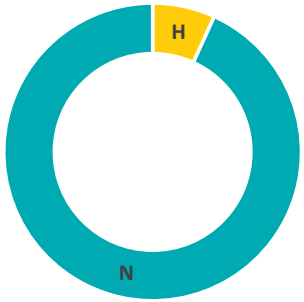
Indiana by the Numbers

Between 2010 and 2016, the population of Indiana grew by 2.3% to 6.6 million. By 2020, the population of Indiana is expected to exceed 6.8 million.

P Preschool: 6%
C College Age: 10%
Sn Seniors: 15%
Sc School Age: 17%
Y Young Adult: 25%
O Older Adult: 26%



O Other: 5%
B Black: 10%
W White: 86%



H Hispanic: 7%
N Non-Hispanic: 93%

Values may not total 100% due to rounding

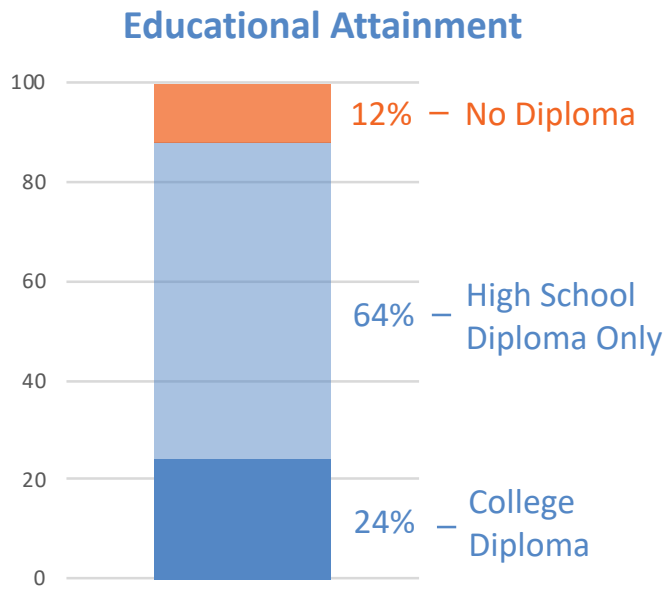
Top Ten Leading Causes of Death by Race and Ethnicity in 2016

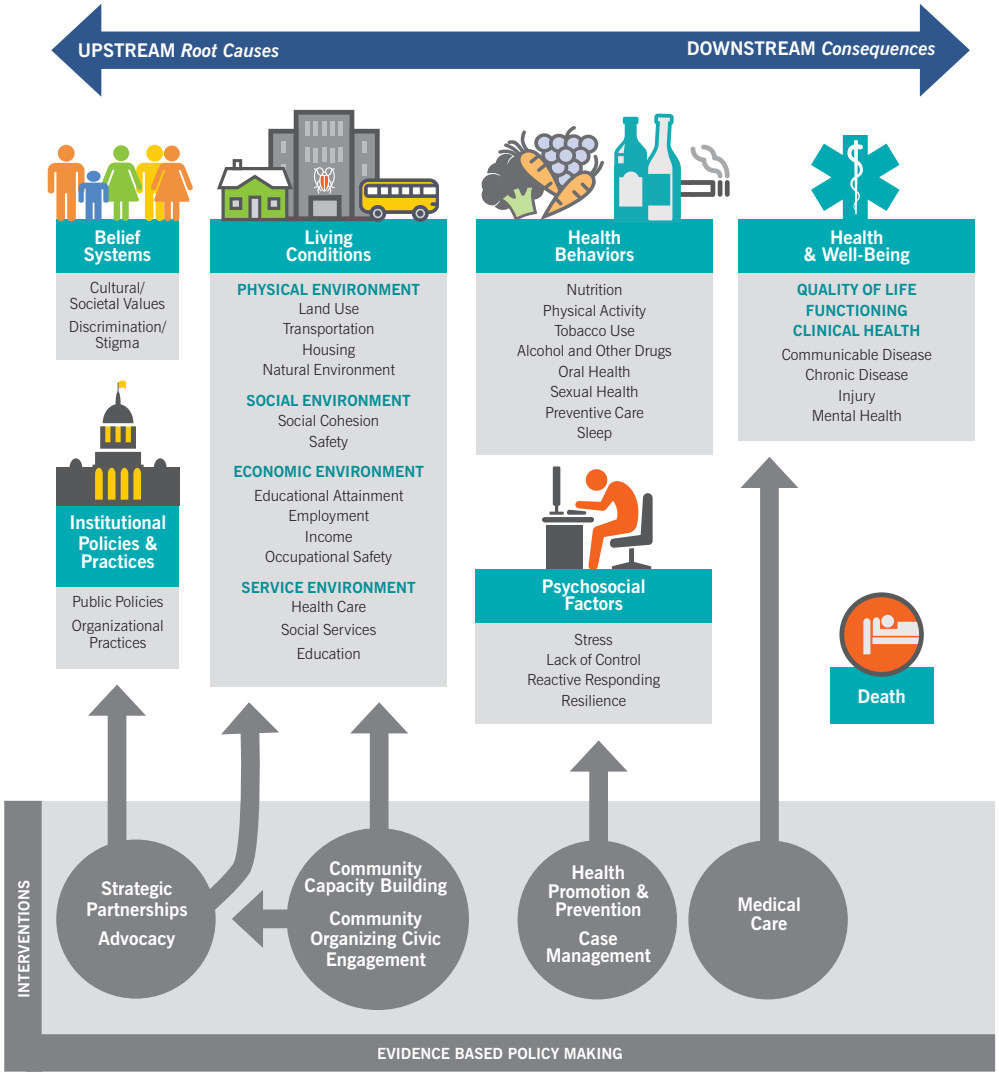
Number of Deaths | Age-Adjusted Rate per 100,000 population

Rank	Black	Hispanic	White
1	Heart Disease 1,102 | 213.0	Cancer 185 | 88.9	Heart Disease 12,730 | 178.5
2	Cancer 1,049 | 195.3	Heart Disease 164 | 91.5	Cancer 12,252 | 171.7
3	Unintentional injuries 312 | 47.7	Unintentional injuries 82 | 20.2	Chronic Lower Respiratory Disease 4,002 | 56.1
4	Diabetes mellitus 268 | 51.1	Stroke 38 | 22.1	Unintentional injuries 3,115 | 52.3
5	Homicide 263 | 36.0	Diabetes mellitus 37 | 20.6	Stroke 2,764 | 38.7
6	Stroke 241 | 47.3	Homicide 32 | 7.5	Alzheimer's disease 2,522 | 35.1
7	Chronic Lower Respiratory Disease 198 | 39.2	Certain Diseases Originating in the Perinatal Period 31 | 4.9	Diabetes mellitus 1,706 | 24.2
8	Kidney disease 173 | 34.2	Chronic Liver Disease and Cirrhosis 29 | 11.7	Kidney disease 1,215 | 17.1
9	Alzheimer's disease 141 | 33.1	Alzheimer's disease 27 | 18.5	Septicemia 1,097 | 15.5
10	Septicemia 100 | 19.3	Kidney Disease 27 | 16.2	Suicide 944 | 16.1

Social Determinants of Health

According to Healthy People 2020, "Health starts in our homes, schools, workplaces, neighborhoods, and communities." Social determinants of health (SDOH) are conditions in the environment that affect a broad range of health and quality of life outcomes.[5] There are differences in the health of those living in communities with poor SDOH, such as their ability to access safe housing, nutritious foods, transportation, and environments free of toxins. As described in research, and discussed in Healthy People's Public Health 3.0 a person's ZIP code can be more of a health predictor than genetic code.[6] In order to improve population health in Indiana, the public health system must expand to include non-traditional partners such as transportation, workforce development, and housing.[7] Several indicators related to SDOH, such as economic stability, education, environment, and social and community context, are presented below.





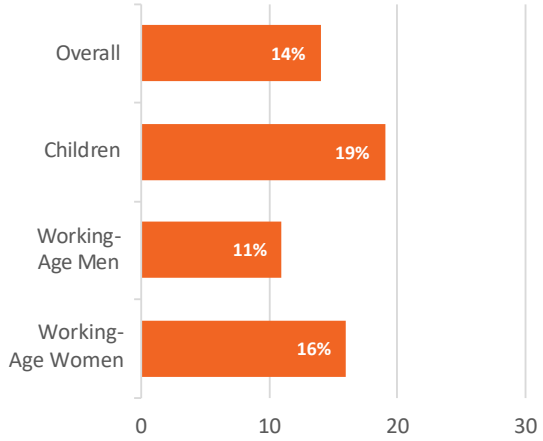
URBAN INFLUENCES SUCH AS THEIR ENVIRONMENT, ACCESS TO EDUCATION, AND SAFETY CAN HAVE PROFOUND IMPACTS ON THE ABILITY TO ACHIEVE OPTIMAL HEALTH.

[5] (Office of Disease Prevention and Health Promotion, n.d.)
[6] (Healthy People, 2017)
[7] (Centers for Disease Control and Prevention, n.d.)
[8] (Bay Area Regional Health Inequities Initiative)

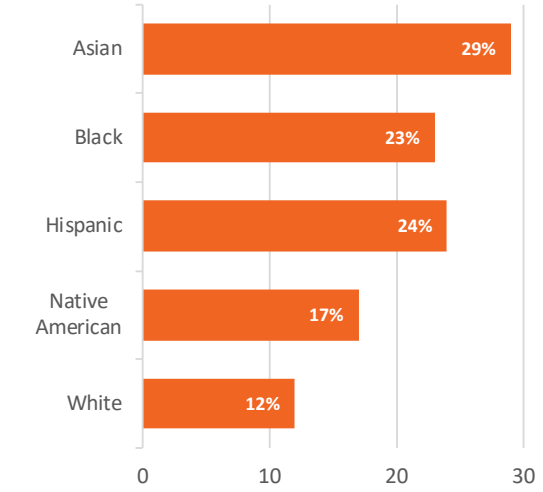
Poverty in Indiana

Poverty Rates By Groups

Gender & Age



Race & Ethnicity



Employment Opportunities

Unemployed
3.4%
of workers unemployed

Income Inequality
13.5 times more income going to the top 20% of households than the bottom 20%

Disconnected Youth
13%
of 18 to 24 year olds not in school or working

Women Wage Gap
$0.74
per $1 median income earned by men

Family Strength

Teen Birth Rate
23.5 per 1,000 teenage girls

Children Living Apart From Parents (Children in Foster Care)
11 per 1,000 children

Family Economic Security

Available & Affordable Housing
74 units per 100 very-low income households

Households Using High-Risk & High-Cost Forms of Credit
8% of all households

Access to Care

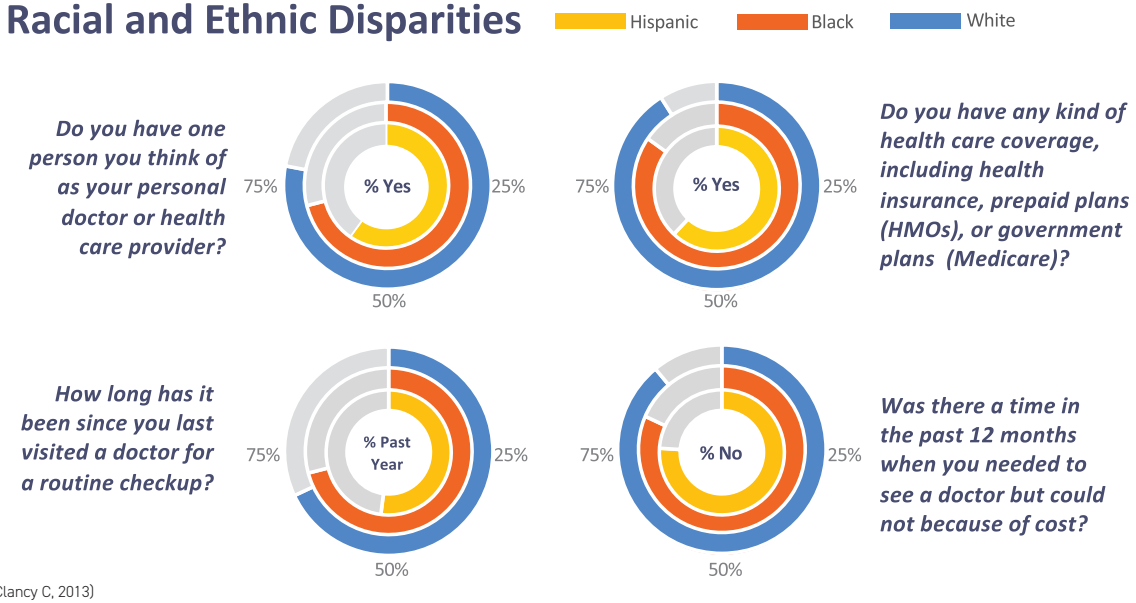
In reviewing data and listening to key informants from around the state it is evident that not all Hoosiers have the same opportunities to be as healthy. As reflected in the assessment of the assessments, key informant interviews, and confirmed by quantitative data, an important social determinant for Indiana residents is the ability to access affordable healthcare.

According to the Robert Wood Johnson Foundation, access to care refers to having health insurance, local care options, and a usual source of care in communities. The uninsured are less likely to have primary care providers than the insured; they also receive less preventive care, dental care, chronic disease management, and behavioral health counseling, all of which impact the priorities identified above. Those without insurance are often diagnosed at later, less treatable disease states than those with insurance and, overall, have worse health outcomes, lower quality of life, and higher mortality rates.[9]

Indiana residents report different health status based on their location in the state. Mid-sized population areas report the lowest number of poor or fair health days, while rural areas report the highest.

Indiana's uninsured rate was 8.1% in 2016, down from 9.6% in 2015 and 11.4% in 2014. Indiana introduced the Healthy Indiana Plan (HIP) 2.0—expanded insurance options for lower income Hoosiers—in 2015. Approximately 20% of Indiana residents are enrolled in Medicaid/Children's Health Insurance Plan (CHIP). Over 1.4 million Indiana residents are enrolled in Medicaid, and more than 20,000 of those enrollees are pregnant.

Racial and Ethnic Disparities



Uninsured

11.4% 2014

8.1% 2016

In 2015, Indiana introduced expanded insurance options for lower income Hoosiers through the Healthy Indiana Plan (HIP) 2.0. Over 1.4 million Indiana residents are enrolled in Medicaid. More than 20,000 of those enrollees are pregnant.

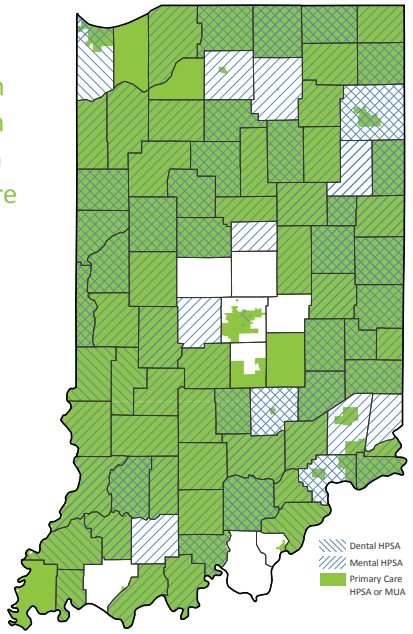
Urban and Rural

Rural residents report a higher number of poor or fair health days than urban populations. Unfortunately, physicians in rural areas have been decreasing for decades. There are 55 mental health care providers for every 100,000 people compared to 133 per 100,000 in urban areas.

Population Residing in areas with Primary Care Shortages

87% of Rural

62% of Urban



[9] (Clancy C, 2013)
[10] (Indiana University Public Policy Center, 2015)
[11] (Indiana University Public Policy Center, 2016)

Language barriers and cultural competency of services can be major obstacles to receiving healthcare or other social services. What we heard from Indiana organizations providing services during key informant interviews:

> *[...we have] a lack of Spanish speaking staff, limited resources in the area, a big cultural gap that exists.*

> *...getting information and translated into the different languages because this is a very cultural[ly] diverse community. They have Amish, Mennonite, Hispanics, Haitian, Burmese, and El Salvador.*

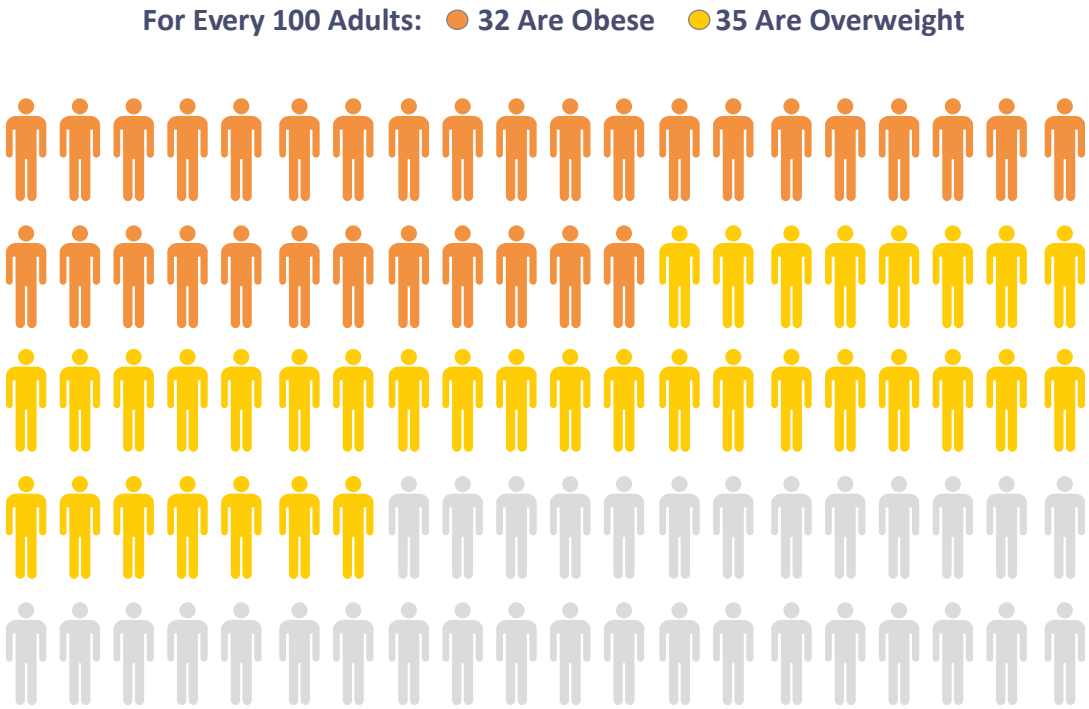
Reducing Chronic Disease and Health Disparities

Chronic diseases are those illnesses and health conditions that have a prolonged impact on a person's health. These include heart disease, diabetes, cancer, and obesity. Chronic diseases are the leading causes of death and disability in Indiana, with heart disease, cancer, and stroke representing the top three killers for Hoosiers. Many chronic diseases can be prevented or managed through early detection, improved nutrition, increased physical activity, and avoiding tobacco use.[12]

Six of the top 10 concerns identified in the community health needs assessments (assessment of assessments) from around the state are chronic diseases or factors related to chronic diseases. Select indicators describing the burden of chronic disease are described below.

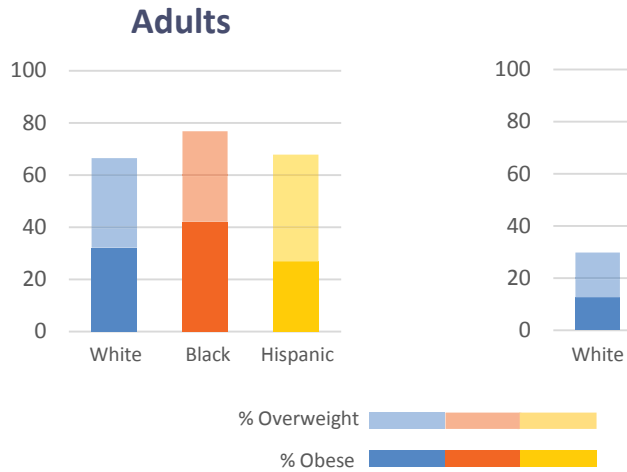
Obesity

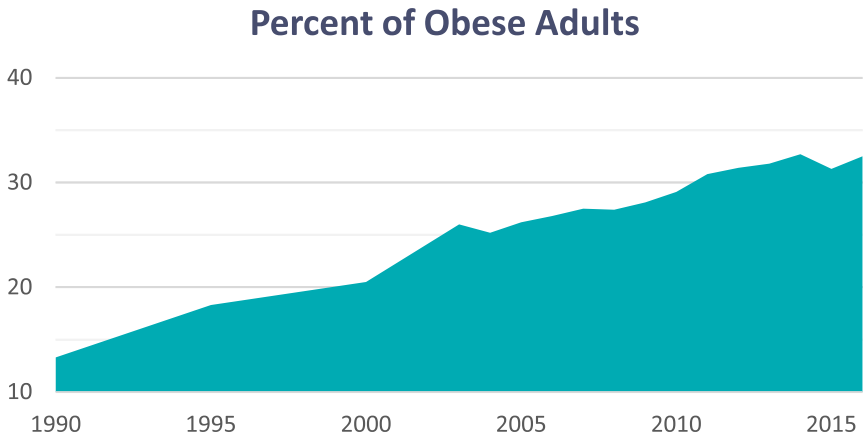
Indiana is the 10th most obese state in the U.S.
According to 2016 BRFSS data, over two-thirds (67.2%) of Indiana adults are overweight (34.7%) or obese (32.5%). Obesity disproportionately affects low-income and rural communities, as well as the African American population. Obesity rates have increased from 13.0% of adult Hoosiers in 1990 to now nearly a third (32.5%) in 2016.

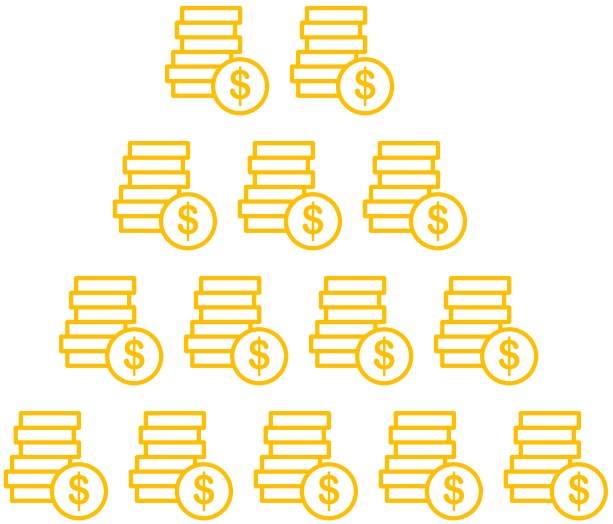


[12](Indiana State Department of Health, n.d.)

A larger percentage of black, non-Hispanic adults were considered to be obese compared to white, non-Hispanic and Hispanic adults.







$3,500,000,000

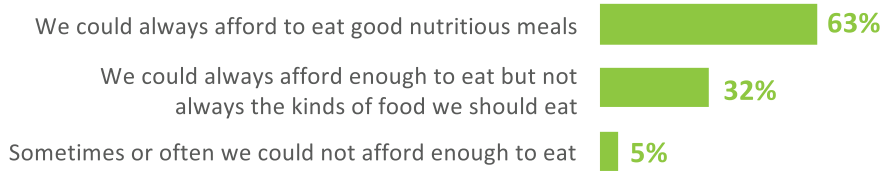
According to one study obesity costs Indiana $3.5 billion dollars a year in related medical costs; over one-third of those costs are financed by Medicare and Medicaid.[13]

[13](Trogdon, Finkelstein, Feagan, & Cohn, 2012)

Healthy Foods and Beverages

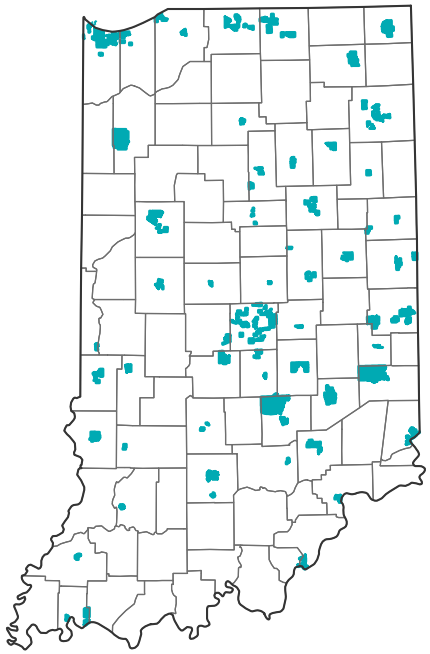
Poor nutrition contributes to four out of the top ten causes of death in Indiana: cardiovascular disease, stroke, diabetes, and cancer. National recommendations from the US Department of Agriculture encourage Americans to fill half their plate with fruits and vegetables or consume at least five servings per day. Many adults and children in Indiana are not consuming even one fruit or vegetable serving per day. Eating a healthy, varied diet is crucial for chronic disease prevention, growth and development, and assuring an adequate variety of nutrients.

Describe the food situation in your household...



Adults consuming 1 or more servings per day

High school students consuming 3 times per day



Food Deserts

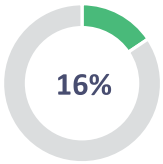
Many families in Indiana do not have ready access to healthy foods where they live. Food deserts are described as geographic areas where access to affordable, healthy foods is restricted due to the absence of grocery stores within reasonable traveling distance. Research suggests that access to healthy foods were associated with positive health outcomes. Nearly 29% of the state's black population and 22% of the state's Hispanic population reside in a food desert compared to 11% of the state's white population.

Physical Activity

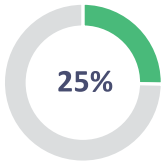
Evidence indicates that a greater amount of moderate-to-vigorous physical activity helps individuals across the lifespan maintain a healthy weight. Regular physical activity also reduces the risk for cancers of the breast, colon, bladder, endometrium, esophagus, kidney, lung, and stomach. For individuals who already have a chronic disease, regular physical activity can reduce the risk of developing a new chronic condition, reduce the risk of progression of the condition they already have, and improve their quality of life and physical function[15].

The 2008 Physical Activity Guidelines recommend that adults should participate in 150 minutes of physical activity a week. However, only 15.6% of adults in Indiana meet both the aerobic and muscle strengthening recommendations. According to the 2015 YRBS, just over a quarter (25.3%) of high school students achieved the national recommendation of 60 minutes or more of physical activity per day.

Adults with 150 minutes of physical activity per week



Youths with 60 minutes of physical activity per day



[14](Rose, 2010)
[15](U.S. Department of Health and Human Services, 2008)

Tobacco Use

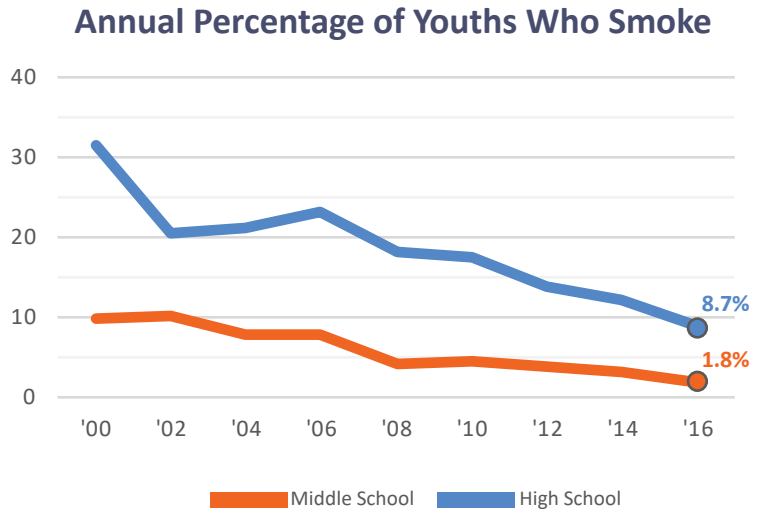
Tobacco is a leading cause of preventable illness and death nationally and in Indiana. Of Indiana adults, 21.1% smoke, the tenth-highest rate in the US. In contrast, smoking is less prevalent in Indiana adolescents than the national average. However use of electronic cigarettes, or 'vaping', is on the rise. In Indiana, tobacco use contributes to five of the top 10 leading causes of death: cardiovascular disease, stroke, diabetes, chronic lower respiratory disease and cancer. Hoosiers who indicate frequent poor mental health days, individuals with lower incomes and education, and adults who identify as LGBT smoke at higher rates than the general population.

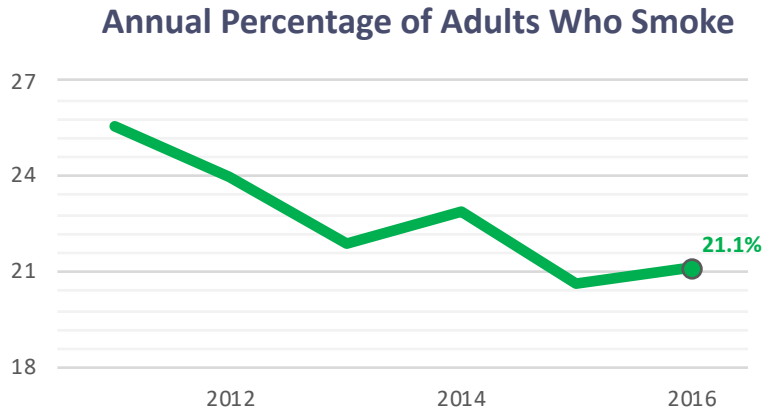
Who are the Hoosiers using tobacco?

38% of adults who have frequent poor mental health days
33% of Medicaid women
33% of adults with an annual household income of less than $25,000
32% of those identifying as LBGT
30% of adults with a high school education or less
23% of African Americans
21% of whites
20% of high schoolers
18% of Hispanics
14% of pregnant women
5% of middle schoolers

Tobacco Facts

- Smoking takes the lives of approximately 11,100 Hoosiers each year.
- Smoking costs Hoosiers an estimated $2.93 billion annually.
- Most Hoosiers who smoke want to quit. Over half of Hoosier adults who smoke tried to quit in the past year.



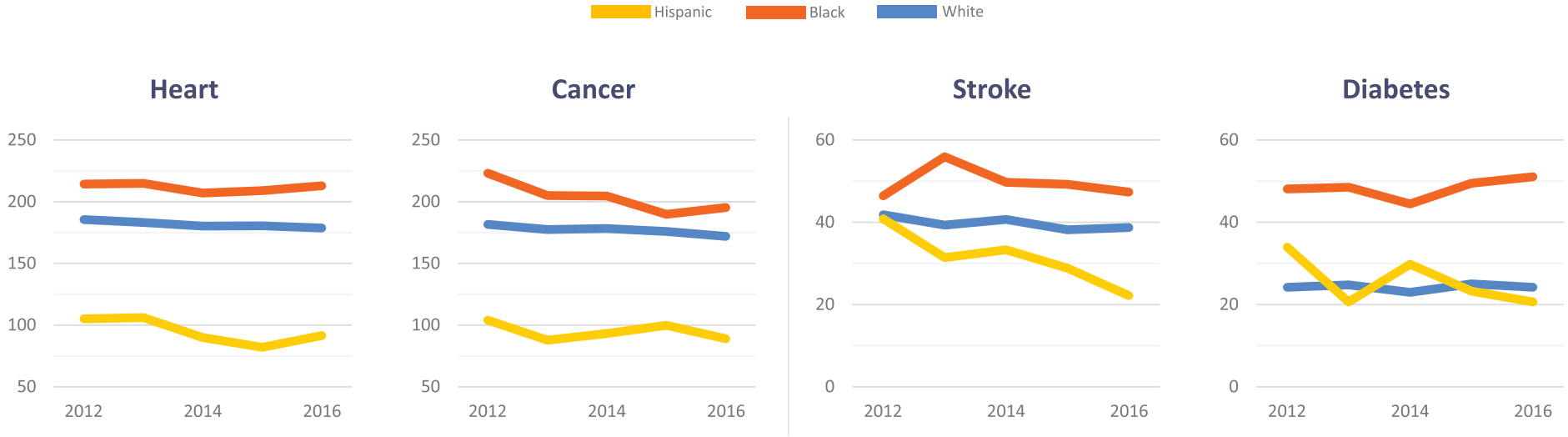


Chronic Disease Prevalence and Mortality

The leading causes of death in Indiana among all racial and ethnic groups include are cardiovascular disease, stroke, diabetes, and cancer.

Annual Age-Adjusted Mortality Rates

per 100,000 population



Estimated 2016 Prevalence in Adult Population

Ever told you had angina or coronary heart disease?

4.9%

Ever told you had cancer (other than skin cancer)?

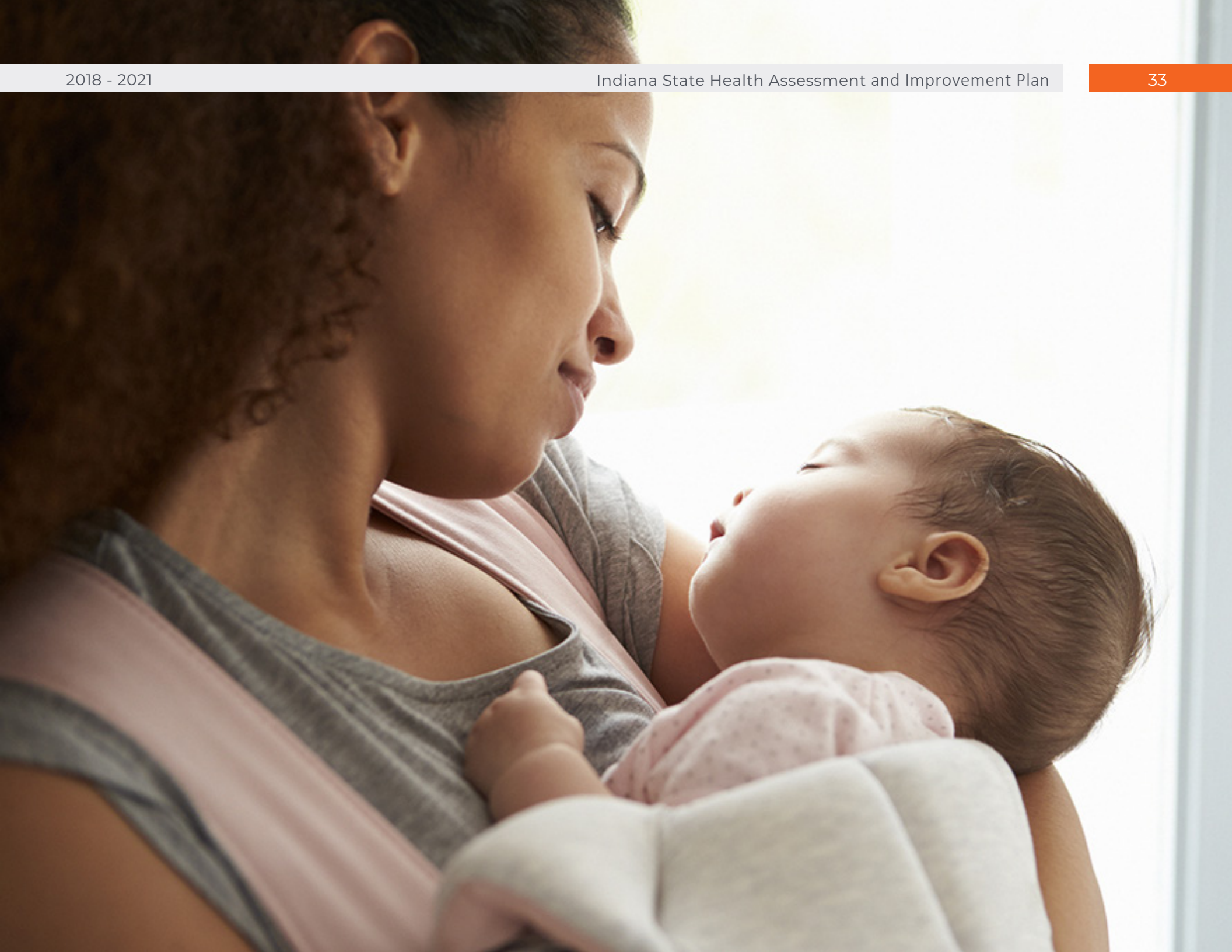
5.5%

Ever told you had a stroke?

4.0%

Ever told you had diabetes?

11.5%

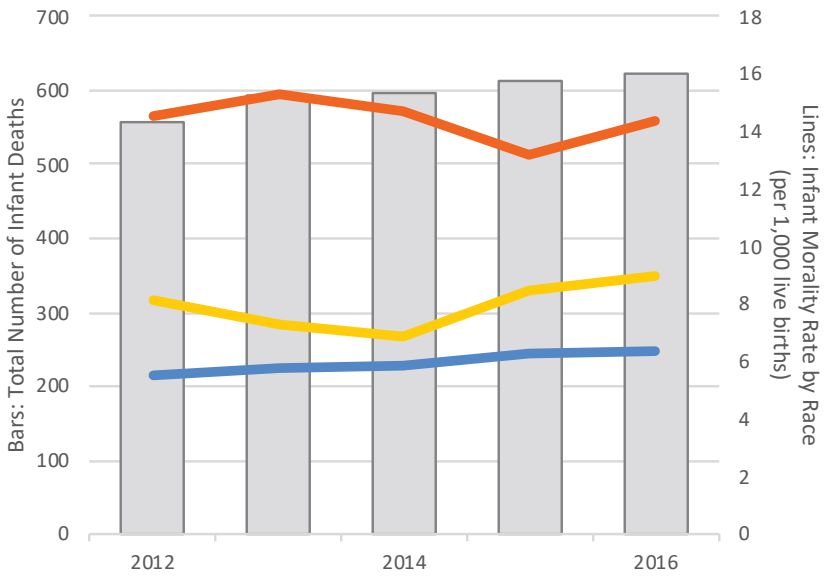


Improve Birth Outcomes

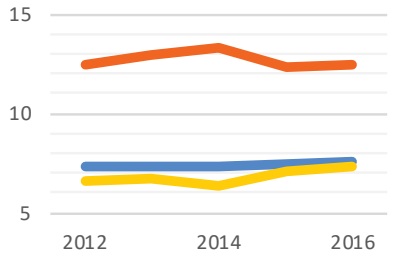
Infant mortality, or the death of a baby before his or her first birthday, has been a state health priority since 2014. The Healthy People 2020 goal is 6.0 deaths per 1,000 live births, and the national average is 5.9 infant deaths per 1,000 live births. Indiana's infant mortality rate was 7.5 deaths per 1,000 live births in 2016. The leading cause of infant mortality is congenital malformations, which are physical defects present in a baby at birth. These can be genetic, result from exposure of the fetus to agents that cause developmental malformations, or be of unknown origin. Other causes of infant mortality include: perinatal risk factors such as low birthweight or preterm birth, assaults/accidents such as homicide, accidental inhalation, falls, etc., sudden unexplained infant death syndrome (SUIDS), and respiratory distress. African American babies die at a disproportionately higher rate (14.4 deaths/1,000 live births) as compared to the Hispanic population (9 deaths/1,000 live births) and the white population (6.4 deaths/1,000 live births).

Strategies to reduce premature death include: increasing breastfeeding rates; ensuring babies are born in settings that are able to provide the appropriate level of care; educating caregivers about the ABC's of safe sleep practices (alone, on their back, in a crib); and good maternal health before a women gets pregnant. Selected data on these indicators are provided below.

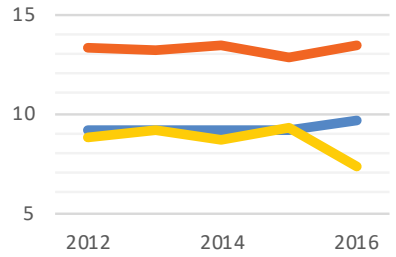
In 2016, 623 infants did not see their first birthday



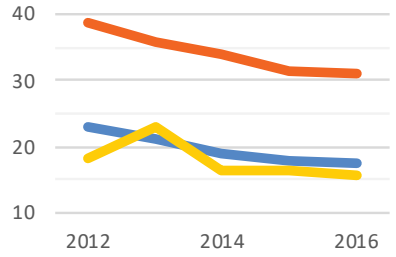
Percentage of Low Birthweight Deliveries



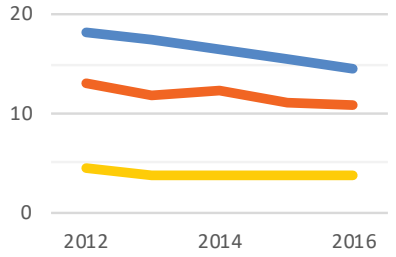
Percentage of Pre-Term Deliveries



Percentage of Mothers Not Breastfeeding at Discharge



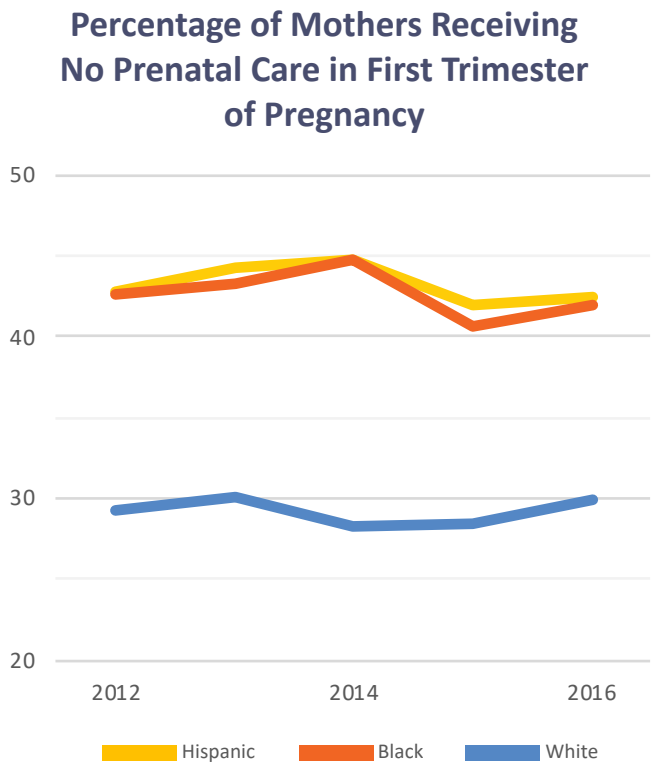
Percentage of Mothers Smoking During Pregnancy

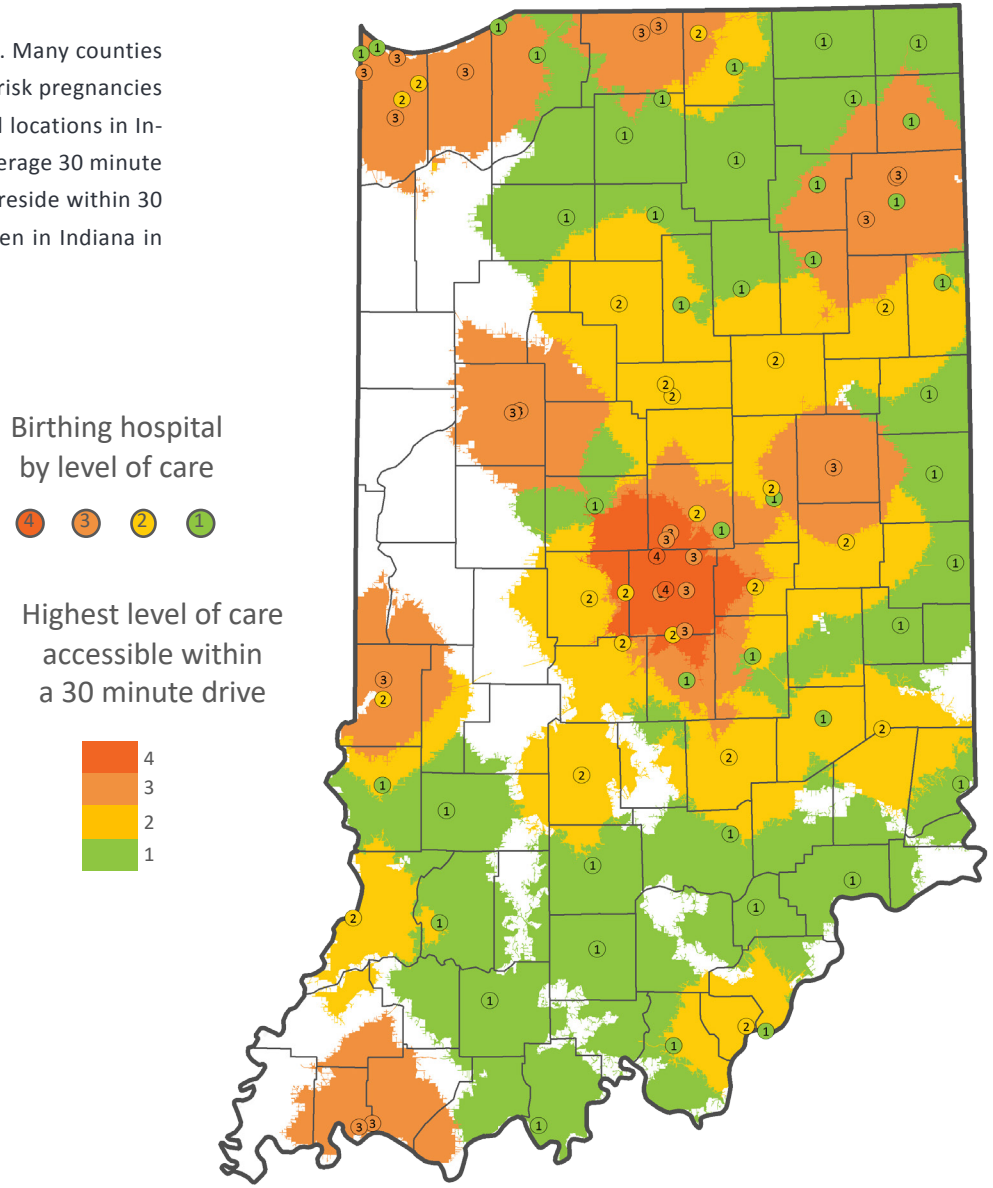


Hispanic Black White

Levels of Care/Access to Care

Birthing hospitals are those facilities that are equipped to care for at-risk babies. Many counties and regions in Indiana do not have a birthing hospital, forcing women with high risk pregnancies to drive long distances to deliver their babies. The map depicts birthing hospital locations in Indiana by level of care along with the highest accessible level of care within an average 30 minute drive from any location. Approximately 37% of childbearing age women do not reside within 30 minutes of a level 3 or 4 Indiana birthing hospital. Over 30% of pregnant women in Indiana in 2016 did not receive prenatal care in the first trimester.

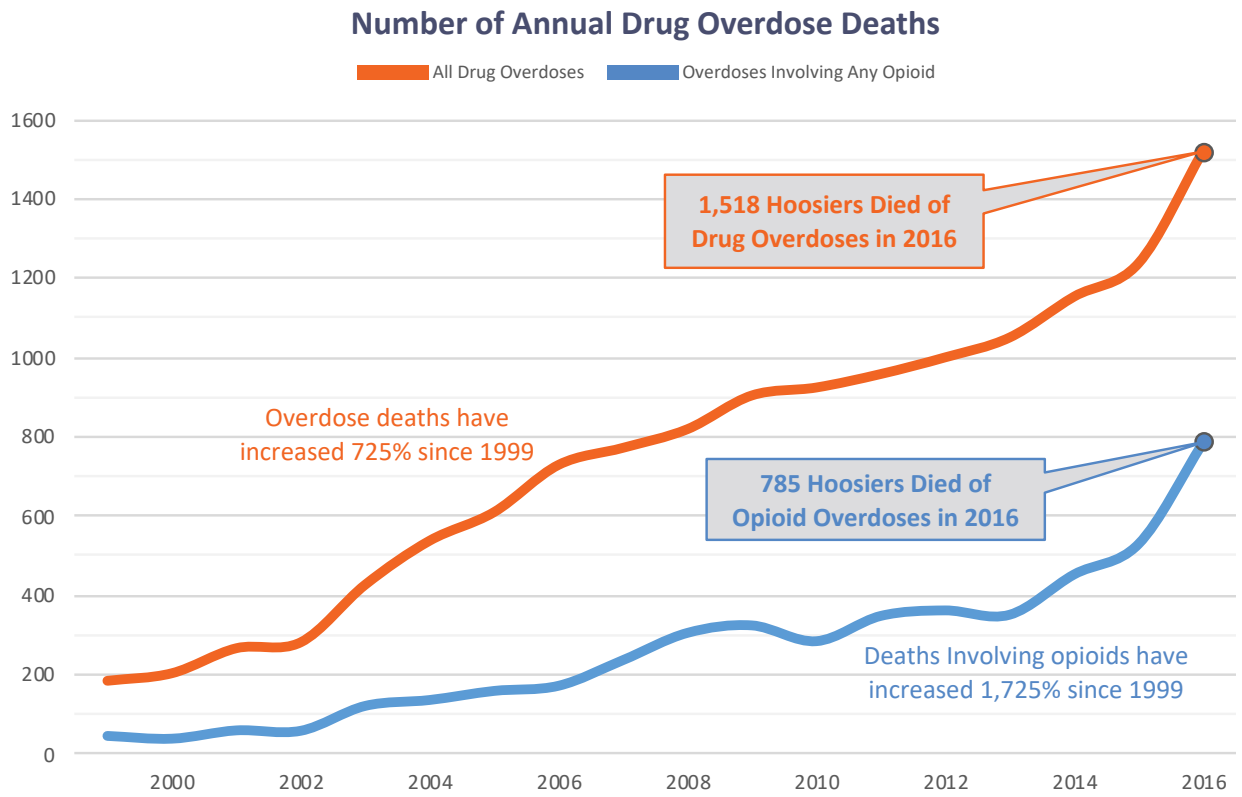




Reduce Injury and Death Due to Opioid Exposure

Drug overdose and opioid-related deaths in Indiana increased five-fold between 1999-2016. Of all drug overdose deaths, 85.1% were unintentional, 6.9% were suicide or intentional self-harm, and 7.8% had undetermined intent. Men were more likely than females to die of a drug overdose, and adults ages 25-34 years had the highest death rate of all age categories (39.2 per 100,000).

In 2015, an HIV outbreak in Scott County focused the national spotlight on health outcomes related to injection drug use and opioid addiction. The outbreak, along with increasing rates of opioid misuse and hepatitis C, prompted legislation allowing syringe service programs in counties meeting specific criteria. In 2017, Governor Eric Holcomb continued the emphasis on attacking the opioid epidemic and included a comprehensive strategy in his Next Level Indiana agenda.[16] Select indicators describing the opioid epidemic in Indiana are included below.



6,934

Hoosiers visited an emergency department in 2016 involving a non-fatal overdose of an opioid

2,426

Hoosiers were hospitalized in 2016 involving a non-fatal overdose of an opioid

[16](Office of the Governor of Indiana, 2018)

Part 2: Indiana State Health Improvement Plan

Approach to Identifying Flagship Priorities

After the final review of indicators with the IHIP team during the SHA process, the final flagship priorities were chosen due to their potential to impact Indiana's most pressing health issues. The priorities address Indiana's top ten causes of death, the top needs identified from the review of statewide assessments, and many of the concerns key informants brought up in interviews. **The final priorities are:**

1. *Improve birth outcomes and reduce infant mortality*
2. *Address the opioid epidemic*
3. *Reduce rates of chronic disease*
4. *Improve the public health infrastructure*

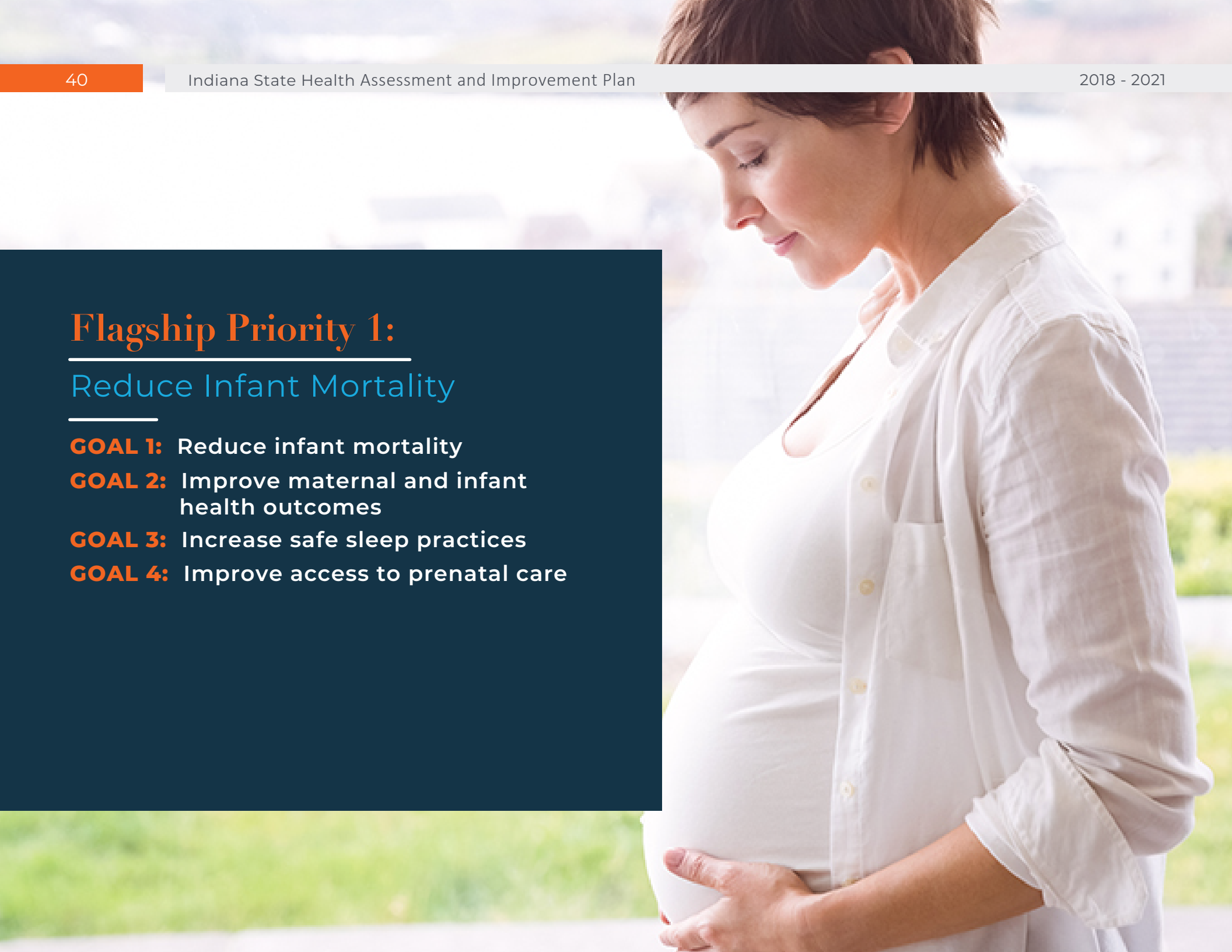
These flagship public health priorities reflect the importance of healthy living as a necessary condition for achieving and maintaining good health and happiness. Yet an individual's ability to live healthfully is influenced by his/her environmental conditions, i.e., social determinants of health. One's ZIP code can have more impact on health outcomes than one's genetic code. Adequate transportation, educational attainment, income, housing, social support and safe neighborhoods are necessary foundations for the health of people and communities. Not every Hoosier has the same opportunities for achieving optimal health. Disparities in health status are evident in the data supporting each of the flagship priorities. Therefore, each flagship priority in the ISHIP addresses social determinants of health and elements of health equity.

In February 2018, ISDH worked with subject matter experts to gather evidence and practice-based strategies to address the priority indicators identified in the State Health Assessment. Action teams started by choosing goals, strategies, and objectives that define areas of impact for each flagship issue over the next four years. The proposed strategies and goals were reviewed by subject matter experts and action teams between February and April during a series of in-person and virtual meetings. They were then released for public comment using social media and email. Respondents either agreed or strongly agreed with the outlined strategies to address the flagship issues.

The majority of the goals and strategies in this plan directly align with Indiana's disease specific improvement plans that meet the rigorous planning standards of the SHA and SHIP. Plans were included for review if they:

1. Were authored within the past five years
2. Included a range of stakeholder input during the plan development
3. Included an assessment of relevant data
4. Used strategies that are evidence-based or promising practices and align with national priorities

For example: The strategies presented to reduce rates of chronic disease in this SHIP reflect similar strategies offered in Indiana's Coordinated Chronic Disease Plan, and the strategies presented to reduce Indiana's high infant mortality rate are based on recommendations from the Indiana Perinatal Quality Improvement Collaborative and Indiana's Title V block grant. Rather than duplicating planning efforts, the IHIP team favored adopting strategies already validated by subject matter experts. Alignment also ensures that partners across the state are working towards the same goals.



Flagship Priority 1:

Reduce Infant Mortality

GOAL 1: Reduce infant mortality

GOAL 2: Improve maternal and infant health outcomes

GOAL 3: Increase safe sleep practices

GOAL 4: Improve access to prenatal care

Flagship Priority 1: Reduce Infant Mortality

GOAL 1: Reduce infant mortality

OBJECTIVES	STRATEGIES
OBJECTIVE *Reduce infant mortality from 7.5 per 1,000 live births in 2016 to 7.0 per 1,000 live births by 2020 (2018 data)*	**1** *Increase the number of delivery hospitals who are appropriately leveled according to Levels of Care legislation passed in 2018*
	2 *Develop and pilot location and demographic specific MCH programming aimed to increase awareness and change behavior of expecting mothers and families*
OBJECTIVE *Reduce Indiana's black infant mortality rate from 14.4 per 1,000 live births in 2016 to 14.0 per 1,000 live births by 2020*	**3** *Participate in national and regional learning communities and alliances to improve the quality of services Indiana delivers*
OBJECTIVE *Reduce Indiana's Hispanic infant mortality rate from 9.0 per 1,000 live births in 2016 to 8.0 per 1,000 live births by 2020*	**4** *Increase the number of families served in evidence-based home visiting programs from 6,962 in 2016 to 10,000 in 2021 (2019 data)*

Flagship Priority 1: Reduce Infant Mortality

GOAL 2: Improve maternal and infant health outcomes

OBJECTIVES	STRATEGIES
OBJECTIVE *Increase percentage of women breastfeeding at hospital discharge from 80.9% in 2016 to 82.5% by 2021*	**1** *Increase the number of hospitals participating in quality improvement projects aimed to increase breastfeeding in their facilities*
	2 *Increase the number of women accessing peer support services*
OBJECTIVE *Decrease the number of babies born with Neonatal Abstinence Syndrome (baseline TBD) (HP2020 MICH-11.4)*	**3** *Increase the number of hospitals using the NAS diagnoses codes for improved surveillance*
	4 *Increase the number of providers certified to provide prenatal care and deliver buprenorphine*
OBJECTIVE *Reduce the number of women who smoke during child bearing years from 19.6% in 2016 to 15.0% in 2021 (HP2020 MICH-11.3)*	**5** *Increase smoking cessation during pregnancy program coverage to include every county in Indiana by 2021*
	6 *Decrease percentage of mothers receiving Medicaid who smoke during pregnancy from 23.4% in 2016 to 20.0% by 2021 (2019 data)*

Flagship Priority 1: Reduce Infant Mortality

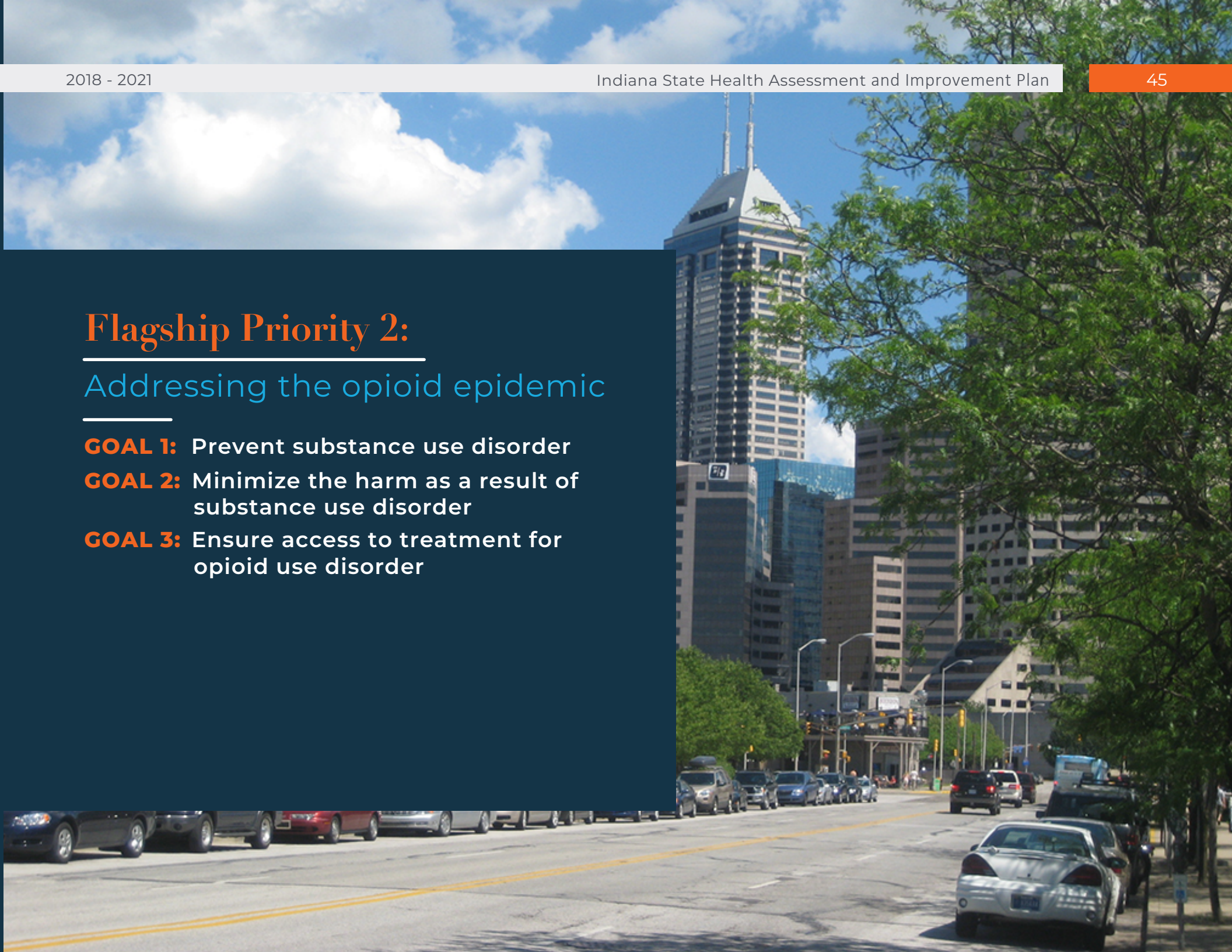
GOAL 3: Increase safe sleep practices

OBJECTIVES	STRATEGIES
OBJECTIVE *Decrease Indiana's 5 year (2012-2016) SUIDS rate from 93.7 per 100,000 live births by 15% by the year 2021 (HP2020 MICH-1.8,1.9)*	**1** *Promote and support Fetal and Infant Mortality Review (FIMR) Teams and their development of strategies and objectives*
	2 *Increase the number of FIMR teams by 50% by 2021 from 7 established teams to 11*
OBJECTIVE *Increase the number of MOM's helpline calls that address needs for safe sleep from 1525 in 2016 to TBD in 2021*	**3** *Promote MOM's Helpline and 211 as connections to statewide resources such as transportation, dental care, health care, safe sleep*
OBJECTIVE *Increase families enrolled in home visiting programs who use safe sleep practices (as measured by MIECHV home visiting data) from 62.2% in 2017 of enrolled families to 63.5% in 2021 (HP2020 MICH-20)*	**4** *Continue to provide education and resources to mothers and families enrolled in evidence-based home visiting services*

Flagship Priority 1: Reduce Infant Mortality

GOAL 4: Improve access to prenatal care

OBJECTIVES	STRATEGIES
OBJECTIVE *Increase the percentage of pregnant women who receive prenatal care in the first trimester from 69.3% in 2016 to 72% by 2021 (HP2020 MICH-10.1)*	**1** *Increase awareness of physicians about the importance of scheduling prenatal visits in the first trimester*
	2 *Increase the number of MOM's Helpline and 211 calls directing women to prenatal care providers*
OBJECTIVE *Increase the number of transportation options for pregnant women to prenatal and other pregnancy related care visits (baseline TBD)*	**3** *Partner with the office of Medicaid to create pregnancy wraparound support services for high-risk mothers*
OBJECTIVE *Decrease the number of counties that do not have an obstetric provider (baseline TBD)*	**4** *Identify high-risk areas throughout Indiana that do not have obstetric providers in order to develop a plan for improving access to OB care*



Flagship Priority 2:

Addressing the opioid epidemic

GOAL 1: Prevent substance use disorder

GOAL 2: Minimize the harm as a result of substance use disorder

GOAL 3: Ensure access to treatment for opioid use disorder

Flagship Priority 2: Addressing the opioid epidemic

GOAL 1: Prevent substance use disorder

OBJECTIVES	STRATEGIES
OBJECTIVE *Increase the number of physicians utilizing the state's prescription drug monitoring program INSPECT to 100% by 2021. (baseline TBD)*	**1** *Increase the number of prescribers that are registered to access INSPECT; use before each new pain prescription and quarterly to monitor drug use*
OBJECTIVE *Decrease the number of opioid prescriptions that are written every year from 84/100 Hoosiers to 70.6/100 Hoosiers by 2021*	**2** *Encourage the use of alternative pain management treatments and therapies and hospital-driven post-operative pain management protocols* **3** *Support relevant education and training of prescribers and patients regarding pain medications and potential for misuse* **4** *Increase the number of elementary, middle and high schools implementing evidence-based prevention programs* **5** *Use the Next Level Recovery, Know the "O" Facts website to spread awareness about substance use disorder* **6** *Encourage and support increased availability and awareness of drug "take back" opportunities*
OBJECTIVE *Increase the number of reported and completed overdose death cases in the National Violent Death Reporting System (NVDRS) from 46% to 90% by 2021*	**7** *Identify and provide technical assistance to high-burden communities and counties, especially with efforts to address problematic prescribing*

Flagship Priority 2: Addressing the opioid epidemic

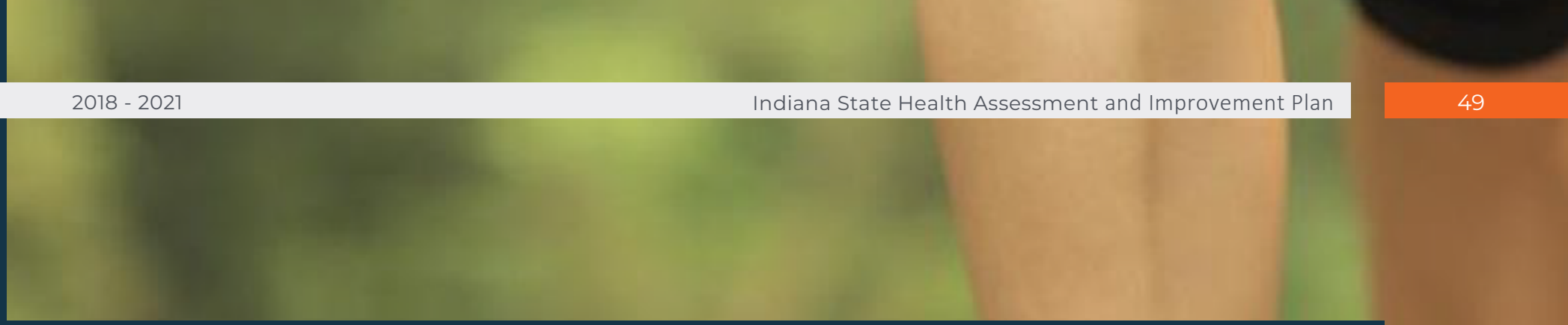
GOAL 2: Minimize the harm as a result of substance use disorder

OBJECTIVES	STRATEGIES
OBJECTIVE *Decrease the rate of overdose death rates (all drug poisoning) from 22.88 in 2016 to TBD by 2021.(HP2020 SA-12)*	**1** *Increase access to naloxone for first responders, individuals using opioids illicitly or taking opioids for pain management or treatment of substance use disorder, their families and friends, and other pertinent individuals in the community per the U.S. Surgeon General's 2018 Health Advisory*
OBJECTIVE *Increase the number of LHDs who receive naloxone kits from 48 (52%) in 2018 to 69 (75%) by 2021*	**2** *Increase awareness of syringe exchange service programs*
	3 *Expand access to comprehensive programs in communities, as permitted by the Indiana Administrative Code, to provide a safe space for harm reduction services*
	4 *Increase the availability of supportive community services such as access to food and housing*
OBJECTIVE *Increase the number of individuals who receive training on naloxone administration from 298 in 2018 to 900 in 2021 (HP2020 SA-8.1)*	**5** *Partner with Local Coordinating Councils for county and community level solutions*

Flagship Priority 2: Addressing the opioid epidemic

GOAL 3: Ensure access to treatment for opioid use disorder

OBJECTIVES	STRATEGIES
OBJECTIVE *Increase the number of persons who were treated in an emergency department for an opioid overdose who then access treatment (baseline TBD)*	**1** *Increase the number of healthcare providers in Indiana with expertise in recovery, licensed recovery counselors, and primary care providers able to provide buprenorphine treatment*
	2 *Promote the use of Recovery Support Specialists and peer recovery coaches as part of treatment teams and on-call response to overdoses in emergency departments (EDs)*
OBJECTIVE *Increase the number of Hoosiers receiving Medication Assisted Treatment (baseline TBD)*	**3** *Expand access to supportive environments for people in recovery to live while transitioning back into the community, such as recovery or sober living houses*
	4 *Decrease stigma of substance use disorder by spreading awareness with the Next Level Recovery Know the "O" Facts website and resources*
	5 *Expand access to all three forms of Medication Assisted Treatment (methadone, buprenorphine, naltrexone) for individuals with opioid use disorder across all settings*
OBJECTIVE *Increase the number of individuals who receive training on naloxone administration from 298 to 900 in 2020*	**6** *Increase access to adequate insurance coverage for opioid use disorder treatment*
	(Aligned with Indiana's Strategic Approach to Addressing Substance Abuse)



Flagship Priority 3:

Reduce chronic disease

GOAL 1: Reduce the burden of obesity living

GOAL 2: Increase opportunities for active living

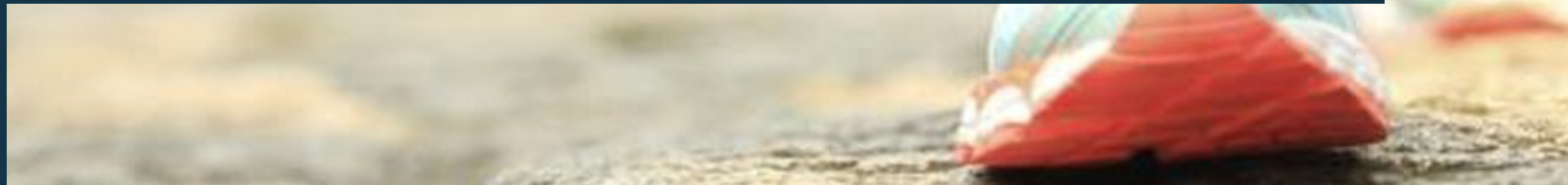
GOAL 3: Increase opportunities for healthy eating

GOAL 4: Decrease the burden of tobacco use

GOAL 5: Decrease the burden of cardiovascular disease and diabetes in Indiana and encourage chronic disease self-management

GOAL 6: Reduce the burden of asthma on Indiana adults and children

GOAL 7: Ensure all Hoosiers are appropriately screened for cancer



Flagship Priority 3: Reduce chronic disease

GOAL 1: Reduce the burden of obesity

OBJECTIVES	STRATEGIES
OBJECTIVE *Increase the percentage of adults at a healthy weight from 31.0% in 2016 to 32.5% in 2021 (HP2020 NWS-8)*	
OBJECTIVE *Increase the percentage of children and adolescents at a healthy weight from 60.3% in 2016 to 63.0% in 2021 (HP2020 NWS-10)*	**1** *Increase the number of employers who utilize multi-component worksite wellness programs in Indiana* **2** *Increase the number of schools that utilize the whole school, whole community, whole child model for school wellness* **3** *Increase the number of out-of-school-time programs that follow healthy eating and active living guidelines (HEAL)*
OBJECTIVE *Decrease obesity among the adult black, non-Hispanic, population from 42.1% in 2016 (Indiana average is 32.5%) to 40.0% in 2021 (HP2020 NWS-10)*	**4** *Increase the number of trainings, including webinars, provided to early care and education centers (ECEs) that provide guidance on increasing healthy foods and beverages and increasing opportunities for physical activity*
OBJECTIVE *Decrease obesity among the adult black, non-Hispanic, population from 42.1% in 2016 (Indiana average is 32.5%) to 40.0% in 2021. (HP2020 NWS-10)*	

Flagship Priority 3: Reduce chronic disease

GOAL 2: Increase opportunities for active living in Indiana

OBJECTIVES	STRATEGIES
OBJECTIVE *Decrease the percentage of adults who report not meeting the aerobic recommendations of 150 minutes per week of moderate activity from 44.1% in 2015 to 43.3% in 2021 (HP2020 PA-2.1)*	**1** *Increase the number of built environment plans and policies adopted to encourage physical activity, such as bicycle and pedestrian plans* **2** *Provide technical assistance and support for communities designing neighborhoods that support active living*
OBJECTIVE *Increase the number of adolescents who meet the recommendations for physical activity of 60 minutes per day from 25.3% in 2015 to 27.3% in 2021 (HP2020 PA-3.1)*	**3** *Increase the number of school based prevention programs and policies such as Safe Routes to School, active recess, enhanced school-based physical education, classroom physical activity breaks, and extracurricular activities* **4** *Provide professional development to school staff on how to incorporate enhanced physical activity programs and policies before, during and after the school day*

Flagship Priority 3: Reduce chronic disease

GOAL 3: Increase opportunities for healthy eating in Indiana

OBJECTIVES	STRATEGIES
OBJECTIVE *Increase average mPINC (Maternity Practices in Infant Nutrition and Care survey)) scores from 80 in 2015 to 95 in 2021*	**1** *Provide professional development and support to hospital staff on how to incorporate breastfeeding friendly practices in labor and delivery* **2** *Provide consultation and peer learning opportunities or collaborative networking opportunities for hospital staff to share experiences with providing breastfeeding friendly practices*
OBJECTIVE *Decrease the percentage of adults who report consuming vegetables less than 1 time a day from 26.7% in 2015 to 25.9% in 2021 (HP2020 NWS-14)*	**3** *Increase the number of SNAP participants utilizing vouchers at Farmers Markets* **4** *Increase the number of WIC participants who redeem fruit and vegetable vouchers* **5** *Increase the number of fresh food options in Indiana*
OBJECTIVE *Decrease the number of adolescents who don't eat fruits from 6.5% in 2015 to 6.0% in 2021*	**6** *Increase the number of sites that send healthy meals home for children 18 and under during school breaks (I.e. summer meals, back pack meals, fall/winter/spring breaks)* **7** *Increase the number of schools participating in Farm to School activities*
OBJECTIVE *Decrease the number of adolescents who don't eat vegetables from 7.3% in 2015 to 6.1% in 2021 (HP2020 NWS-14)*	**8** *Increase the number of out-of-school organizations that follow nutrition standards for the foods and beverages that are provided to the children in their care*

Flagship Priority 3: Reduce chronic disease

GOAL 4: Decrease the burden of tobacco use in Indiana

OBJECTIVES	STRATEGIES
OBJECTIVE *Decrease tobacco use among high school students from 20.3% in 2016 to 15.0% in 2021 (HP2020 TU-2)*	**1** *Support youth mobilization to increase anti-tobacco attitudes by providing education about the tobacco industry* **2** *Expand media messages from state and national tobacco prevention campaigns that includes communication and dialogue on social networks* **3** *Increase capacity of health care providers to identify youth who use tobacco at annual visits and to provide appropriate tobacco treatment-counseling for youth as recommended by the U.S. Public Health Service, Clinical Practice Guideline for Tobacco Treatment and Dependence, through emphasis on pediatricians and health care providers focusing on chronic diseases among youth (asthma, diabetes, for example)* **4** *Disseminate to school administrators and key stakeholders the key findings and data from the Indiana Youth Tobacco Survey, the tobacco use indicators from the Youth Risk Behavior Survey for high school youth, and information regarding the introduction of new tobacco products that may entice tobacco experimentation among youth* **5** *Build collaboration with key school stakeholder organizations, such as the state superintendents, principals, school board, school nurses associations, state youth organizations and other related groups, to engage them in tobacco prevention strategies, with a focus on tobacco free environments* **6** *Educate stakeholders on the need for comprehensive smoke-free air protections, including electronic cigarettes and devices, that covers workplaces and workers* **7** *Develop and implement communication strategies, consistent with public education messages, to encourage Hoosier families to have smoke-free homes and cars* **8** *Increase collaboration with chronic disease health care providers to raise awareness of secondhand smoke exposure within chronic disease management*

Flagship Priority 3: Reduce chronic disease

GOAL 4: Decrease the burden of tobacco use in Indiana

OBJECTIVES	STRATEGIES
OBJECTIVE *Decrease smoking among all Indiana adults aged 18 years and older from 21.1% in 2016 to 17.0% in 2021 (HP2020 TU 1.1)*	**1** *Educate health care systems on the U.S. Public Health Service Clinical Practice Guideline for Tobacco Use Treatment and Dependence and encourage health care member organizations to promote proven cessation programs and policies and encourage their use. These include but are not limited to pediatricians, pharmacists, dentists, dental hygienists, nurse practitioners, OB/GYNs, and behavioral health care providers* **2** *Educate health plans, employers, and health insurance providers about comprehensive tobacco use cessation* **3** *Disseminate return on investment (ROI) messages to educate business, decision makers and public on investing in tobacco cessation* **4** *Increase promotion and access to tobacco treatment among providers and organizations serving Hoosier populations with high rates of tobacco use, including but not limited to low education, those living in poverty and persons identifying as LGBT* **5** *Educate the public on the dangers of secondhand smoke exposure and the solutions to reduce exposure among all Hoosiers, including e-cigarettes, to increase the proportion of smoke-free homes and cars* **6** *Provide training and technical assistance on secondhand smoke education, including electronic nicotine delivery systems (ENDS) that are tailored for specific venues (i.e. hospitals, schools, worksites)* **7** *Encourage property owners to adopt a tobacco-free property and to include a nonsmoking clause, including ENDS, in lease agreements, to increase the number of smoke-free multi-family dwellings in common areas and residential units*
OBJECTIVE *Decrease smoking among women of childbearing age from 19.6% in 2016 to 15.0% in 2021*	**1** *Partner with primary care, maternal and child health providers and organizations statewide, such as WIC and MCH clinics, OB/Gyn providers, and FSSA family outlets to provide and promote tobacco treatment resources for women of child-bearing age*
OBJECTIVE *Decrease smoking among adults who report frequent poor mental health days from 37.5% in 2016 to 34.0% in 2021*	**1** *Increase promotion and access to tobacco treatment among behavioral health care providers and populations with mental illness and substance use* **2** *Increase the number of behavioral health care providers who integrate tobacco treatment into care plans* *(Aligned with Indiana Tobacco Control Strategic Plan 2020)*

Flagship Priority 3: Reduce chronic disease

GOAL 5: Decrease the burden of cardiovascular disease and diabetes in Indiana and encourage chronic disease self-management

OBJECTIVES	STRATEGIES
OBJECTIVE *Reduce diabetes mortality from 26 per 100,000 in 2016 to 25 per 100,000 in 2021 (HP2020 D-2)* **OBJECTIVE** *Reduce diseases of the heart from 180.6 2016 per 100,000 to 178 per 100,000] by 2021 (HP2020 HDS-2)*	**1** *Increase awareness amongst rural and primary care programs of community resources* **2** *Create a referral network for chronic disease between health care providers and community resources which may include hospitals, fire departments, primary care physicians, rural hospitals, EMS providers, and QI advisors* **3** *Increase the use of reimbursable care coordination claims among health care providers*
OBJECTIVE *Increase the number of Hoosier adults with pre-diabetes who have completed the National Prediabetes Prevention Program (from 661 persons in 2017 to 1,000 persons by 2021)*	**1** *Increase the number of CDC recognized diabetes prevention programs in Indiana* **2** *Increase the number of diabetes prevention programs that are reimbursed.*

Flagship Priority 3: Reduce chronic disease

GOAL 5: Decrease the burden of cardiovascular disease and diabetes in Indiana and encourage chronic disease self-management

OBJECTIVES	STRATEGIES
OBJECTIVE *Increase the number of people with diabetes who report that they have taken a formal diabetes self-management course annually (24,424 in 2017 to 27,000 by 2021)*	**1** *Increase the number of locations where accredited diabetes self-management training (DSMT) sites offer DSMT services.* **2** *Increase the number of AADE-accredited, ADA-recognized diabetes self-management education programs that are reimbursed.*
OBJECTIVE *Increase the percentage of adult Hoosiers covered under Medicaid following appropriate medication adherence for high blood pressure (71.6% 2017 and 75% by 2021) (HP2020 HDS-11)*	**1** *Increase screening opportunities for individuals with appropriate risk factors* **2** *Implement Million Hearts initiative in primary care settings following evidence-based protocols for blood pressure screening and follow-up for patients with blood pressure above goal.*

Flagship Priority 3: Reduce chronic disease

GOAL 6: Reduce the burden of asthma on Indiana adults and children

OBJECTIVES	STRATEGIES
OBJECTIVE *Reduce emergency department visits for Indiana residents with the primary discharge diagnosis of asthma from 47.3 per 10,000 in 2015 to 44 per 10,000 by 2021 (HP2020 RD-3)*	**1** *Promote coordinated care for people with asthma* **2** *Expand access to and delivery of asthma self-management education (AS-ME)* **3** *Expand access to and delivery of home visits (as needed) for asthma trigger reduction and AS-ME* **4** *Strengthen systems supporting guidelines-based medical care, including appropriate prescribing and use of inhaled corticosteroids* **5** *Facilitate home energy efficiency, including home weatherization assistance programs and promote smoke-free policies*

Flagship Priority 3: Reduce chronic disease

GOAL 7: Ensure all Hoosiers are appropriately screened for cancer

OBJECTIVES

OBJECTIVE
Increase the number of females 50-75 years old who have had a mammogram in the past two years from 72.5% to 81.1% in 2021 (HP2020 C-17)

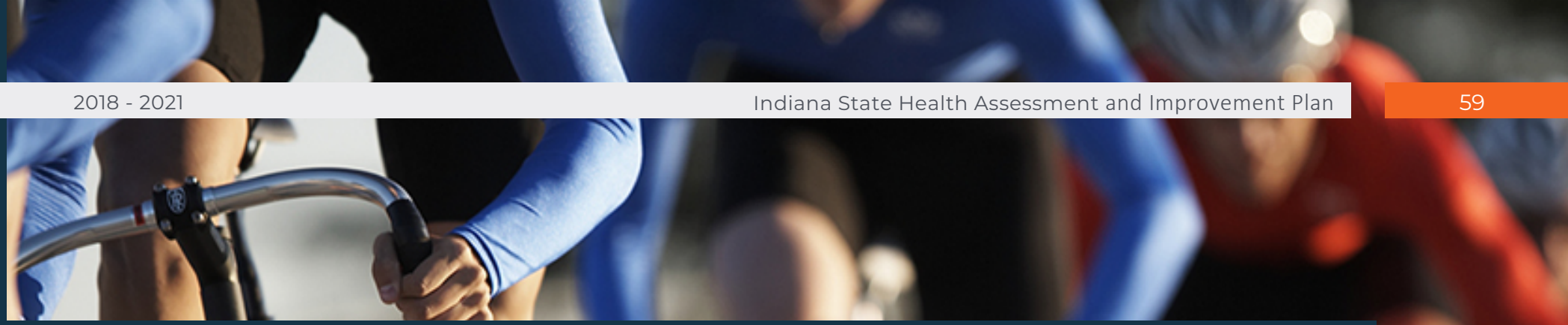
OBJECTIVE
Increase the number of females 21-65 years old who have had a Pap test within the last three years from 74.9% to 93% (HP2020 C-15)

OBJECTIVE
Increase the number of 50-75 years old who have had a colonoscopy, flexible sigmoidoscopy, or blood stool test within the appropriate time frame from 64.65% to 80% (HP2020 C-16)

OBJECTIVE
Increase the number of adults 55 to 80 years old who have a 30-pack-per-year smoking history and currently smoke or have quit within the past 15 years who are screened for lung cancer (baseline TBD)

STRATEGIES

1. *Promote the importance of cancer screenings through public awareness campaigns*
2. *Promote the use of reminder recalls in clinics*
3. *Increase availability of Medicaid reimbursement for cancer screening*
4. *Promote the Breast and Cervical Cancer Program*
5. *Encourage the use of motivational interviewing and brief action planning in clinical settings*



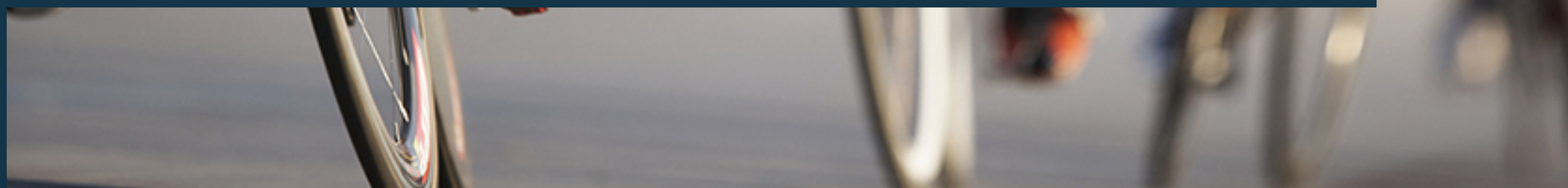
Flagship Priority 4:

Improve the public health infrastructure

GOAL 1: Develop new and foster existing partnerships to improve the public's health

GOAL 2: Increase the availability of timely and accurate data to communities across the state

GOAL 3: Build the capacity of local health departments, the public health workforce, and community partners to provide quality and equitable public health services



Flagship Priority 4: Improving the Public Health infrastructure

GOAL 1: Develop new and foster existing partnerships to improve the public's health

OBJECTIVES	STRATEGIES
OBJECTIVE *Increase the strength of public health partnerships in Indiana (baseline TBD)*	**1** *Conduct a statewide assessment of public health partnerships in Indiana* **2** *Empower local health departments to become the 'chief health strategist' for their communities* **3** *Pilot a state level health-in-all-policies taskforce with the goal of identifying and promoting ways in which to incorporate health considerations in new and existing state agency plans*

Flagship Priority 4: Improve the public health infrastructure

GOAL 2: Increase the availability of timely and accurate data to communities across the state

OBJECTIVES	STRATEGIES
OBJECTIVE *Ensure all 92 counties continue to be included in a community health needs assessment conducted by either a hospital or local health department (maintain all 92 counties)*	**1** *Increase the number of non-profits hospitals, local health departments, and community coalitions that have formal partnerships to conduct a community health needs assessment.*
	2 *Promote the use of websites such as Indiana Indicators and Indiana Stats Explorer in order to provide accurate county level data.*
	3 *Promote the inclusion of questions relating to social determinants of health in community and statewide health needs assessments.*
OBJECTIVE *Increase the number of local health departments that conduct and publish a community health needs assessment (baseline TBD)*	**4** *Increase the availability of community level social determinants of health data such as transportation and access to care.*
	5 *Increase the number of formal data-sharing agreements among state, local, and community partners.*

Flagship Priority 4: Improve the public health infrastructure

GOAL 3: Build the capacity of local health departments, the public health workforce, and community partners to provide quality and equitable public health services

OBJECTIVES	STRATEGIES
OBJECTIVE *Increase the number of health departments implementing practices that meet the best standards outlined by the Public Health Accreditation Board (Baseline TBD)*	**1** *Provide professional development to the public health workforce on accreditation readiness, quality improvement, and performance management.*
	2 *Identify and capitalize on a more diverse and sustainable public health funding model.*
OBJECTIVE *Increase the number of funded public health grant opportunities from federal and non-federal partners (baseline TBD)*	**3** *Conduct regional and local grant writing workshops for local public health systems*
OBJECTIVE *Decrease the disparity in health status from 25.5% in 2017 to TBD in 2021 (HP2020 goal)*	**4** *Provide cultural competence training for the public health system, and develop a method to measure impact.*
	5 *Promote the adoption of proven, evidence-based health equity strategies in Indiana communities.*

Making the ISHIP Happen

Every person plays an important role in community health improvement in Indiana, whether in our homes, schools, workplaces, recreational areas, or churches. Encouraging and supporting healthy behaviors from the start is much easier than altering unhealthy habits. Below are some simple, ways to use ISHIP to improve the health of your community:

Employers

- **Understand priority health issues within the community and use this plan and recommended resources to help make your business a healthy place to work!**
- **Educate your team about the link between employee health and productivity.**

Community Residents

- **Understand priority health issues within the community and use this plan to improve the health of your community.**
- **Use information from this Plan to start a conversation with community leaders about health issues important to you.**
- **Get involved! Volunteer your time or expertise for an event or activity, or provide financial support to promote initiatives related to health topics discussed in this plan.**

Health Care Professionals

- **Understand priority health issues within the community and use this plan to remove barriers and create solutions for identified health priorities.**
- **Share information from this Plan with your colleagues, staff, and patients.**
- **Offer your time and expertise to local improvement efforts (e.g. become a committee member or content resource**
- **Offer your patients relevant, counseling, education, and other preventive services in alignment with identified health needs of the State of Indiana.**

Educators

- **Understand priority health issues within the community and use this plan and recommended resources to integrate topics of health and factors that affect health (i.e. access to health food, physical activity, risk-behaviors, use of the health care system, etc.) into lesson plans across all subject areas such as math, science, social studies, and history.**
- **Create a healthier school environment by aligning this plan with school wellness plans/policies. Engage the support of leadership, teachers, parents and students.**

Government Officials

- **Understand priority health issues within the community.**
- **Identify the barriers to good health in your communities, and mobilize community leaders to take action by investing in programs and policy changes that help members of our community lead healthier lives.**

State and Local Public Health Professionals

- **Understand priority health issues within the community and use this plan to improve the health of this community.**
- **Understand how the State of Indiana compares with peer states, regional peers, and the U.S. population, as a whole.**

Faith-based Organizations

- **Understand priority health issues within the community and talk with members about the importance of overall wellness (mind, body and spirit) and local community health improvement initiatives that support wellness.**
- **Identify opportunities that your organization or individual members may be able to support and encourage participation (i.e. food pantry initiatives, community gardens, youth groups geared around health priorities, etc.).**

Tracking and Evaluation

Indiana Indicators (indianaindicators.org) and Indiana's Stats Explorer (https://www.in.gov/isdh/26720.htm) provide current data for many of the core measures contained in this SHIP at both the state and county levels. Local health departments, hospitals, community coalitions, and others implementing the strategies contained in this SHIP are encouraged to compare their county rates to state figures to better understand their own health burdens. Check back to the sites often to see progress on the SHIP indicators, as data is updated regularly.

The State Health Improvement Plan will be reviewed yearly to track both process and outcomes objectives and strategies. The outcomes of those reviews will be posted to the SHA/SHIP webpage at statehealth.in.gov.

Glossary:

Built Environment - includes all of the physical parts of where we live and work (e.g., homes, buildings, streets, open spaces, and infrastructure). The built environment influences a person's level of physical activity. For example, inaccessible or nonexistent sidewalks and bicycle or walking paths contribute to sedentary habits. These habits lead to poor health outcomes such as obesity, cardiovascular disease, diabetes, and some types of cancer. (https://www.cdc.gov/nceh/publications/factsheets/impactofthebuiltenvironmentonhealth.pdf CDC [Cited 2018 April 5])

Chronic Disease - defined by the U.S. National Center for Health Statistics, a disease lasting three months or longer. (Learn more at: http://www.nationalhealthcouncil.org/newsroom/about-chronic-conditions#1 Cited 2018 April 5)

Community - Community is a group of people who have common characteristics; communities can be defined by location, race, ethnicity, age, occupation, interest in particular problems or outcomes, or other similar common bonds. Ideally, there would be available assets and resources, as well as collective discussion, decision-making and action. (Turnock, BJ. *Public Health: What It Is and How It Works.* Jones and Bartlett, 2009)

Community Health - Community health is a field within public health concerned with the study and improvement of the health of biological communities. Community health tends to focus on geographic areas rather than people with shared characteristics. (http://dictionary.reference.com/browse/community+health) The term "community health" refers to the health status of a defined group of people, or community, and the actions and conditions that protect and improve the health of the community. Those individuals who make up a community live in a somewhat localized area under the same general regulations, norms, values, and organizations. For example, the health status of the people living in a particular town, and the actions taken to protect and improve the health of these residents would constitute community health. (http://www.encyclopedia.com/topic/Community_Health.aspx)

Culture of Health - A culture of health is achieved when the collective set of individual and institutional priorities promotes comprehensive health, generates a perception of the need for well-being, and empowers all to lead healthier lives now and in generations to come. A culture of health is best accomplished by weaving health into all policies, decisions and activities.

Demographics - Demographics are characteristic-related data, such as size, growth, density, distribution, and vital statistics, which are used to study human populations. (Turnock, BJ. *Public Health: What It Is and How It Works.* Jones and Bartlett. 2009)

Evidence-based (public health) - defined as the development, implementation, and evaluation of effective programs and policies in public health through application of principles of scientific reasoning, including systematic uses of data and information systems, and appropriate use of behavioral science theory and program planning models. (https://phpartners.org/tutorial/04-ebph/2-keyConcepts/4.2.2.html *Partners in Information Access for Public Health Workforce* [Cited 2018 April 5])

Goals - Goals are general statements expressing a program's aspirations or intended effect on one or more health problems, often stated without time limits. (Turnock, B.J. *Public Health: What It Is and How It Works.* 4th ed. Sudbury, MA: Jones and Bartlett; 2009.)

Health Disparities - Health disparities are differences in population health status (incidence, prevalence, mortality, and burden of adverse health conditions) that can result from environmental, social and/or economic conditions, as well as public policy. These differences exist among specific population groups in the United States and are often preventable. (Adapted from: National Association of County and City Health Officials (US). Operational Definition of a Functional Local Health Department [online]. 2005 [cited 2012 Nov 8]. Available from URL http://www.naccho.org/topics/infrastructure/accreditation/OpDef.cfm. National Cancer Institute (US). Health Disparities Defined [online]. 2010 [cited 2012 Nov 8] http://crchd.cancer.gov/disparities/defined.html)

Healthy People 2020 - Healthy People 2020 is a document that provides science-based, 10-year national objectives for improving the health of all Americans. For three decades, Healthy People has established benchmarks and monitored progress over time in order encourage collaborations across sectors; guide individuals toward making informed health decisions and measure the impact of prevention activities. (www.healthypeople.gov/2020)

Objectives - Objectives are targets for achievement through interventions. Objectives are time limited and measurable in all cases. Various levels of objectives for an intervention include outcome, impact, and process objectives. (Turnock, B.J. *Public Health: What It Is and How It Works.* 4th ed. Sudbury, MA: Jones and Bartlett; 2009.)

Partnership - A partnership is a relationship among individuals and groups that is characterized by mutual cooperation and responsibilities. (Scutchfield, FD, and CW Keck. *Principles of Public Health Practice.* Delmare CENGAGE Learning. 2009)

Population Health - Population health is a cohesive, integrated and comprehensive approach to health considering the distribution of health outcomes within a population, the health determinants that influence the distribution of care, and the policies and interventions that impact and are impacted by the determinants. (Nash, Reifsnyder, Fabius, and Pracilio. *Population Health: Creating a Culture of Wellness.* Jones and Bartlett. MA, 2011)

Public Health System - Public health systems are commonly defined as "all public, private, and voluntary entities that contribute to the delivery of essential public health services within a jurisdiction." This concept ensures that all entities' contributions to the health and well-being of the community or state are recognized in assessing the provision of public health services.

The public health system includes:

- Public health agencies at state and local levels
- Healthcare providers
- Public safety agencies
- Human service and charity organizations
- Education and youth development organizations
- Recreation and arts-related organizations
- Economic and philanthropic organizations
- Environmental agencies and organizations

Social Determinants of Health - Healthy People 2020 defines social determinants of health as conditions in the environments in which people live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Conditions (e.g., social, economic, and physical) in these various environments and settings (e.g., school, church, workplace, and neighborhood) have been referred to as "place." In addition to the more material attributes of "place," the patterns of social engagement and sense of security and well-being are also affected by where people live. (https://www.cdc.gov/socialdeterminants/faqs/index.htm CDC [Cited 2018 April 5])

State Health Assessment (SHA) - State health assessment is a systematic examination of the health status indicators for a given population that is used to identify key problems and assets in a State. The ultimate goal of a State health assessment is to develop strategies to address the state's health needs and identified issues. A variety of tools and processes may be used to conduct a state health assessment; the essential ingredients are community engagement and collaborative participation. (Turnock, B. *Public Health: What It Is and How It Works.* Jones and Bartlett, 2009).

State Health Improvement Plan (SHIP) - A state health improvement plan is a long-term, systematic effort to address public health problems on the basis of the results of state health assessment activities and the state health improvement process. A plan is typically updated every three to five years. (http://www.cdc.gov/stltpublichealth/cha/plan.html) This plan is used by health and other governmental education and human service agencies, in collaboration with community partners, to set priorities and coordinate and target resources. A state health improvement plan is critical for developing policies and defining actions to target efforts that promote health. It should define the vision for the health of the state through a collaborative process and should address the gamut of strengths, weaknesses, challenges, and opportunities that exist in the state to improve the health status of that state (Adapted from: United States Department of Health and Human Services, Healthy People 2010. Washington, DC)

Strategic Plan – A strategic plan results from a deliberate decision-making process and defines where an organization is going. The plan sets the direction for the organization and, through a common understanding of the mission, vision, goals, and objectives, provides a template for all employees and stakeholders to make decisions that move the organization forward. (Swayne, Duncan, and Ginter. *Strategic Management of Health Care Organizations.* Jossey Bass. New Jersey. 2008).

SWOT Analysis – A strategic planning method used to evaluate the strengths, weaknesses, opportunities, and threats to determine strategic objectives. Strengths are characteristics of organization that give it an advantage over others; Weaknesses are characteristics that place the organization at a disadvantage relative to others; Opportunities are elements that the organization could exploit to its advantage; Threats are elements in the environment that could cause trouble for the organization. The analysis associates the internal and external data to develop strategies.

Values - Values describe how work is done and what beliefs are held in common as a basis for that work. They are fundamental principles that organizations stand for. (Swayne, Duncan, and Ginter. *Strategic Management of Health Care Organizations.* Jossey Bass. New Jersey. 2008)

Wellness - Wellness is the quality or state of being in good health especially as an actively sought goal. (www.merriamwebster.com/dictionary/wellness)

Appendix:

SWOT/Force of Change:

Strengths

Internal factors within the public health system that should be leveraged

Education:

1. Schools of Public Health and public health degree programs
2. Medical, Dental, Nursing, Communications Schools, community colleges
3. Strong statewide university systems
    a. Internships
    b. Public health workforce development
    c. Innovation and research potential

Healthcare:

1. Hospitals' Community Benefit programs

Partners and public health system:

1. Integrated partnerships with Family and Social Services Administration
    a. Grants and programming
    b. Close partnership between agency leaders
2. Local Health Departments in every county (93 total)
3. Strengthening partnership with Department of Child Services
4. Existence of and expansion of Nurse Family Partnership
5. Partnership with the Centers for Disease Control and Prevention
6. JumpIN for Healthy Kids
7. Area Health Education Centers
8. Strengthening partnership with Department of Education

Partners and public health system (cont.):

1. Purdue Extension Services
    a. Available in every county
    b. Community Wellness Coordinators
2. Strong local community organizations/social service organizations (Meals on Wheels)
3. Increased connectivity of and communication among health professionals

Government/policies:

1. Healthy Indiana Plan (HIP 2.0)
2. Indiana's Public health leadership
3. Ability to take in grants
4. There is a national and state focus on healthcare policies
5. Financial reimbursement for preventive services (Medicaid)
6. Good lab/org services
7. Diversity of ISDH divisions and program areas
8. Consistent baseline funding from federal sources
9. Stable infrastructure

Technology/data:

1. Health information exchanges
2. Data collection

Communication:

1. Partner communication with ISDH*

**both a positive and negative identified by groups*

Weaknesses

Internal factors that may need to be addressed to improve health issues

Education:

1. Unfamiliarity of what true collaboration looks like
2. 'Brain drain' of healthcare professionals
3. Disconnect between schools and workforce needs
4. Limited comprehensive health education in schools

Healthcare:

1. Lack of physicians in rural health
2. Lack of network/professional development opportunities for healthcare providers
3. Competitive healthcare systems
4. Public health and mental health not connected

Partnership and collaboration:

1. Competing agenda
2. Egos
3. Silos
4. Weak partnership with education professionals/Department of Education

Government/policies:

1. Lack of emphasis on return on investment (ROI) of public health
2. Funding
    a. Following funding/chasing grant dollars
    b. Low chronic disease prevention funding/high funding for emergencies
    c. Low wages for public health staff
    d. Fluctuating funding for PH (for state and local)
3. Local health department/home rule

Government/policies (cont.):

1. Poor technical assistance/direction from the State of Indiana
2. Inability to describe what Indiana's needs are
3. Leadership (political appointment vs. leadership development)
4. Lack of LOCAL public health leadership
5. Inability to hire state employees versus contractors
6. Policies, laws, and regulations (legislature is making laws without PH knowledge)
7. Lack of emphasis on social determinants
8. Insufficient PH staff and leadership turnover

Technology/data:

1. Data governance
2. Inability for many data systems to communicate
3. State infrastructure – IT lack of interagency interface

Communication:

1. Not telling public health stories to legislature/partners adequately (or if at all)
2. Lack communication on what's working/what's not working
3. Communication from ISDH

Others:

1. Negative health culture/low expectations for wellness
2. How Indiana approaches problem solving/not thinking outside the box
3. Reactive NOT proactive
4. Geographic health disparities
5. Population decline of Rural Indiana
6. Poor cultural competence

**both a positive and negative identified by groups*

Opportunities

External factors that can be utilized and considered as an asset and be taken advantage of

Education:

1. Working with schools
2. Expansion of state agencies' collaboration and increasing understanding of their role in the public health system
3. Partnerships with universities to conduct, share and translate research into practice
4. Utilize interns to train a capable public health workforce
5. Workforce development for early career individuals
6. Professional development for public health workforce
7. Build upon relationship with Dept. of Education to provide comprehensive health education through grade schools

Healthcare:

1. Many hospitals/systems
2. Changing health systems – how to benefit from this. What is our role in a valued-based market?
3. Emerging micro hospitals (St. Vincent)
4. Collaborating with hospitals and other organizations on health assessments
5. Mental health being discussed with overall health
6. Integrate Electronic Medical Records (EMR)

Partnership and public health system:

1. Connections to state philanthropy
2. Grow local health coalitions
3. Maximize current workforce (community, para-medicine) and employees
4. Public-private partnerships in communities
5. Number of non-profits addressing social determinants potential; there is a potential to coordinate efforts
6. Organizations helping to balance need in areas/counties
7. Strengthen partnerships between state and local level health departments and agencies

Partnership and public health system (cont.):

8. National spotlight for Indiana Chamber for Corporate Wellness as a model for public health
9. Facilitating/developing relationships with local and state chamber of commerce
10. Using State Health Improvement Plan (SHIP) to align partnerships and objectives

Government/policies:

1. Educate policy makers
2. Capitalize on current political climate
3. Using PH accreditation/standardized
4. Breaking down silos among state health department
5. Changes to state code to improve funding (allow it to be more sustainable, include community development funding, economic development)
6. Health is on the agenda for the current federal and state legislation
7. Building a business case for public health
8. Update ISDH website

Technology/data:

1. Collect data from Indiana Health Information Exchange (IHIE)
2. Share and use of data
3. Utilization Telehealth
4. Utilization of social media

Communication:

1. Understand audience
2. Raise awareness for health habits for life
3. Identify "best practices" and them disseminate information to the communities (Guidance for opioids, health housing, identifying funds)
4. Define shared definition of public health for Indiana and share
5. Educating local communities on available data

Threats

External factors which may potentially impact the public health system or the health of Hoosiers

Education:

1. Lack of training/better training needed for public health workforce
2. School of health for nursing curriculum is only updated every 5 years so if something new comes out it has to wait

Healthcare:

1. Dietitians not reimbursed
2. Aging population
3. Sustainability for rural access to hospitals in underserved areas
4. Increased number of people with chronic disease
5. No system to fund long-term care
6. Over prescribing antibiotics

Partnership and public health system:

1. Competition for resources unless you are collaborating

Government/policies:

1. No legislator at the SHA/SHIP meetings or in process
2. Uncertain future for health care legislation and funding (state and federal)
3. Need more qualified public health people at policy level
4. Non-strategic use of dollars for public health programming
5. Lack of clear of strategic plan
6. Unintended consequences regarding HIP 2.0 and uncertainty of availability of federal funding to continue program
7. Politics
8. State circuit-breaker (ceiling on what local taxes can be)
9. Less resources from legislation
10. No incentive for further education (tuition reimbursement)
11. Changes or loss of health insurance if laws change

Technology/data:

1. Cyber security for protected health information
2. Computer viruses

Communication:

1. Sensationalism through the media (fake news)

Others:

1. Lack of value for wellness
2. Workforce retention for public health
3. General lack of respect for science/not using scientific principles
4. Mistrust of government
5. Social perspectives/norms in regards to health
6. Salaries for public health workers not competitive
7. Increase cost without increase wages
8. Social economic status inequities growing and contribute to poor health outcomes
9. Fear of change
10. Peoples resistances to change in habits relating to social determinants
11. Access to healthy foods
12. Focus on the disease over health
13. Lack of focus on the long-term gains
14. Opioid epidemic
15. HIV outbreak
16. Resistance of business communities

Forces of Change

Factors, trends, and events that shape the health of Indiana (Environmental, Social, Political, etc.)

Legal/Political

1) Events
    a) Affordable Care Act/Healthcare reform
    b) Administration change in federal and state government
    c) Implementation of HIP 2.0
    d) Passage of needle exchange laws
    e) Passage of Safety PIN law
2) Factors
    a) Governor Holcomb's 5 pillars
3) Trends
    a) Conservative mentality in Indiana
    b) Frequent turnover of state health commissioner
    c) Decreased funding for public health

Economic

1) Events
    a) Recession
2) Factors
    a) Inequity of job locations through-out the state
3) Trends
    a) Growing Amish population
    b) Shrinking rural population
    c) Decrease in tax base due to out-migration from rural communities
    d) Manufacturing state moving toward tech hub

Social

1) Events
    a) Access to food-closing of Marsh, Double 8
    b) HIV outbreak
    c) Opioid crisis
2) Factors
    a) Lack of Section 8 housing inventory and vouchers
3) Trends
    a) Segregation in Indiana cities and school systems
    b) Increase of aging population
        i) Increase of
        ii) Trends increasing in the in home care and less in facilities
        iii) Funds in the end of life care
        iv) Late life planning

Environment

1) Events
    a) Natural disasters
    b) East Chicago lead outbreak
    c) Zika outbreak
2) Factors
    a) Inadequate transportation options in rural communities
    b) Food deserts
3) Trends
    a) Climate change
    b) Increase in tick-borne diseases

Technological/Scientific

1) Events
    a) Passage of meaningful-use laws (EMRs)
    b) HIPAA
2) Factors
3) Trends
    a) Increased use of Telahealth capabilities
    b) Social media
    c) Threats to cybersecurity

Other:

1) Events
2) Factors
3) Trend

Pay for service versus pay for outcomes in health care settings

Asset Map:

Physical Activity:

- Indiana network of YMCAs
- State Parks and trails system
- Schools and churches with shared use agreements
- Municipalities with 'Complete Streets' program policies
- "Active Living Workshops", ISDH Division of Nutrition & Physical Activity
- "Bicycle and Pedestrian Plan Funding Program", ISDH Division of Nutrition & Physical Activity
- Bicycle Coalition
- Wellness Council of Indiana
- "Let's Move Child Care" physical activity program
- Comprehensive School Physical Activity Programs (CSPAP)

Nutrition:

- School lunch and Summer Meals programs
- Farm Produce Safety Initiative, ISDH Food Protection
- Women, Infant, & Child Program (WIC) sites
- The Emergency Food Assistance Program (TEFAP), ISDH
- Commodity Supplemental Food Program (CSFP), ISDH
- Indiana's Emergency Food Resource Network (IEFRN)
- Supplemental Nutrition Assistance Program (SNAP)
- Feeding America Food Banks-(11 locations) Indiana
- Hoosier Farmers Markets, (179 locations as of July 2017)
- Indiana Health Weight Initiative
- The Child and Adult Care Food Program (CACFP),
- Indiana Farm to School Network
- Indiana food councils

Chronic Disease:

- Indiana Joint Asthma Coalition
- Indiana Chronic Disease Management Program (ICDMP)
- "Indiana's Chronic Disease Plan", Chronic Disease Advisory Group
- Improving Kids' Environments (IKE)
- Asthma Call-Back Program, Parkview Health
- Indiana Breast & Cervical Cancer Program, 3 regional offices
- Cardiovascular & Diabetes Coalition of Indiana, (CADI)
- American Cancer Society, Indiana
- Indiana Comprehensive Cancer Control Program
- Indiana Cancer Consortium
- Diabetes Prevention Program
- Healthy Indiana Plan
- State funded community health Centers
- Federally qualified health centers

Opioid, Drug Abuse

- Division of Mental Health & Addiction (DMHA), Indiana Family & Social Services Administration
- "Recovery Works", Family & Social Services Administration
- Indiana Addiction Hotline, Family & Social Services Administration
- "Substance Abuse Prevention & Treatment" block grant programs (SAPT), Indiana Family & Social Services Administration
- Addiction Treatment for Women, (7 locations)
- "Treatment Services for Pregnant Women" block grant programs
- Indiana Perinatal Network
- Life Spring Inc., and Regional Mental Health, servicing 92 IN counties
- 211, Northwest Indiana Social Services Hotline
- 1-800-662-HELP, Indiana Addiction Hotline
- Local Coordinating Councils (LCCs)
- Opioid Treatment Program Centers, 13 statewide; Family & Social Services Administration
- http://www.in.gov/recovery/know-the-o/
- 211

Infant Mortality:

- Indiana "First Steps", Family & Social Services Administration
- Hoosier Healthwise, Family & Social Services Administration
- "Hospital Levels of Care Taskforce", Indiana Perinatal Quality Improvement Collaborative (IPQIC)
- Children's Health Insurance Program (CHIP), Hoosier Healthwise program
- Baby and Me Tobacco Free sites
- Cribs for Kids
- "Labor of Love" program, ISDH Maternal & Child Health
- Maternal, Infant, & Early Childhood Home Visiting program, ISDH
- Safety PIN (Protecting Indiana's Newborns), 7 grantees awarded in 2018
- Women, Infant, & Children (WIC) program, 125 sites statewide
- Birthing Hospitals, 90 sites as of 2016
- MOM's Helpline

Key informant interview questionnaire:

Purpose statement: Based on epidemiological evidence, certain populations in Indiana experience a higher burden of poor health outcomes. The Indiana Health Improvement Planning (IHIP) team seeks to understand the barriers and facilitators that aid or prevent Indiana's disparate populations' ability to achieve optimal health.

Target populations (who we would like to know more about):

1. Ethnic and racial minorities
2. Rural population
3. Veterans
4. Homeless population
5. LBGTQ
6. Children
7. Older adults
8. Individuals with disabilities
9. Older Youth

Key informant protocol: The Indiana Health Improvement Planning (IHIP) steering committee is seeking key informants to help better understand why certain groups of individuals (vulnerable populations) do not achieve optimal health outcomes.

Members of the IHIP committee will conduct key informant interviews with community leaders, coalition directors, healthcare providers, and others who have first-hand knowledge of the experience of vulnerable populations.

Key informants will be groups in three tiers:

Tier one:
Priority individuals that the committee is especially interested in hearing from. These interviews will be conducted face to face if at all possible, however a phone call is acceptable, as well.

Tier two:
Individuals that the committee feels would have valuable information, but might have duplicative or similar information as tier one. These individuals might be recommended by tier one interviewees, or provide context to answers from tier one interviewees. Tier two interviews can be conducted via phone call or online survey monkey questionnaire.

Tier three:
Tier three individuals are those that are recommended by other informants to provide additional information, but may provide duplicative or similar information. These interviews can be conducted via online survey monkey questionnaire. These are less targeted, and chosen more for opportunity to collect additional information.

Procedure: Interviewer can either take paper notes, or notes directly in the survey monkey site. If taken by paper, the notes should be legible, and sent to Eden Bezy, ebezy@isdh.in.gov OR saved to the Syncplicity file folder assigned to you. If conducting the interview via phone or in-person, the interview can be recorded using a conference line, or using a voice recording app for the phone. Please send the recording (along with the paper notes) to Eden Bezy OR save them to the Syncplicity file folder. The interview will then be transcribed by ISDH interns.

Contacting the key informant:

-Key informant should be contacted through email or phone using the following written or spoken script:

Good afternoon, (interviewee):

My name is (interviewer), and I am writing today to request your help in improving the health of Indiana residents.

I work with the Indiana Health Improvement Planning Committee, which is currently gathering information to guide Indiana's State Health Assessment. The assessment captures data on the health of our residents so that the committee can develop a plan to alleviate Indiana's most pressing health needs.

Data only tells part of the story, and we need your help to fill in the gaps. We are seeking key informants to help us understand why some populations are not achieving the same health outcomes as others. You were recommended because of your knowledge, insight, and familiarity with the community that you serve.

I hope you will consider joining us in this effort by participating in a phone interview that will help inform our understanding of the health challenges Hoosiers face.

The interview should take no longer than 30 to 40 minutes. The *themes* that emerge from these interviews will be summarized and made available to the public, *but individual interviews will be kept strictly confidential.*

Would you be willing to speak with me? Please let me know if you have any questions.

Script for interview:

Thank you for agreeing to answer questions for the State Health Assessment. The data that is collected, plus your answers to these questions, will help the committee in developing a plan to alleviate our state's most pressing health needs. We know that some populations are not achieving the same health outcomes as others, and the purpose of this interview is to better understand why.

Anything you tell me is confidential. Nothing you say will be personally attributed to you in any reports that result from this interview. All of our reports will be written in a manner that no individual comment can be attributed to a particular person. The interview will take approximately 30 to 40 minutes and will be recorded in order to ensure accuracy. I will start by asking you about the population you serve, and the organization that you are with, then I will ask about your experience and perceptions of assisting your community. Please answer these questions from the perspective you have from your current position and from experiences in this community.

Would you like to participate in this interview?

To ensure that we capture your words accurately, and so I do not have to miss anything due to notetaking, I would like to record our conversation.

Do I have your consent to record this interview?

Do you have any questions before we begin?

1. Introduction and Icebreaker questions
    a. Tell me a little about your role in your organization. How long have you been in this position?
    b. What do you enjoy most about this role?
2. Please tell me a little bit about the population or community that you serve.
    a. How do you define your community and/or population? (I.e. geographical, shared attributes, certain racial or ethnic groups, etc.)
    b. What are some common health issues they experience?
    c. How many families or individuals do you serve?
3. How does your organization interact with or serve your community?

1. Describe what you think strengthens your population's ability to improve its own health? (I.e. what's going well?)
    a. In what ways could (your organization) be better supported to improve the health of individuals within your community?

    Make sure informant provides in-depth examples to contextualize recommendations. This will help with facilitating conversation and additional useful information to address the purpose.

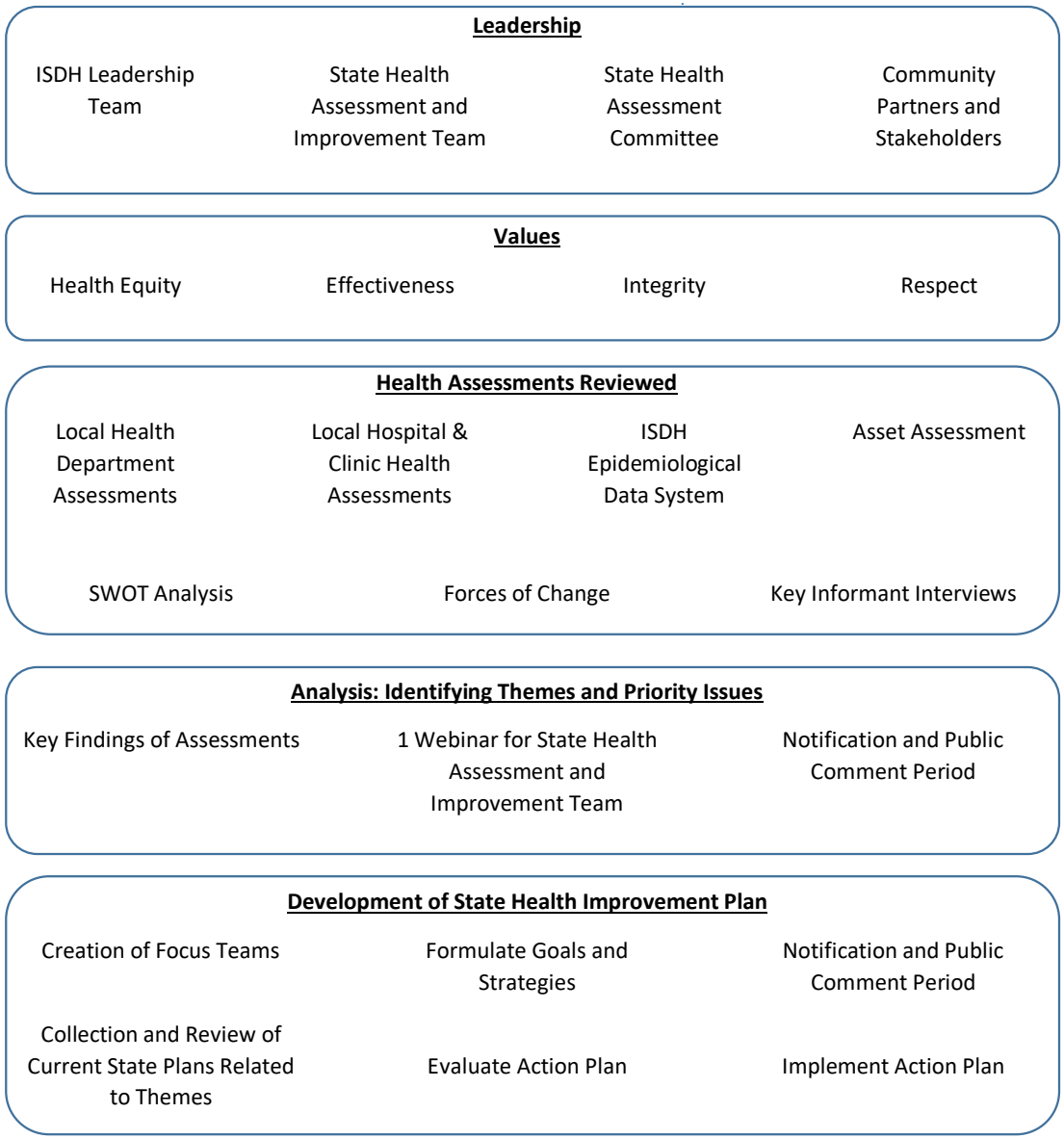
2. What barriers do your target population face to improve its health?
    a. You've spoken generally about overall barriers, are there specific barriers your organization or other organizations like yours face when seeking to improve the health of your community?

    Make sure informant provides in-depth examples to contextualize recommendations. This will help with facilitating conversation and additional useful information to address the purpose.

3. What are some unique experiences that your target population has when accessing care, or working to become healthier?
    a. What are some unique experiences that your organization has when providing care/services/resources/connections to your community?
4. What are some unique solutions that have worked for your population?
5. Do you have suggestions for a population level change or intervention that would help provide more opportunities for your population to be healthier?
    a. A policy change?
6. If you could change or implement something to prevent health problems for your population, what would it be?
7. What can the public health system do to support your work? (i.e. the state health department, local health department)
8. Is there anything else that we should know about improving Indiana's health that you did not yet share?

Thank you very much for agreeing to speak with me today! Your answers provide us with a better understanding of the health of Indiana, and ways that we can improve it.

Process Flowchart for the State Health Assessment and Improvement Plan



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Mom's Helpline

Division of Nutrition and Physical Activity

Child Fatality Review

Trauma and Injury Prevention

Division of Chronic Disease, Primary Care, and Rural Health

- Cancer Control Section
- Asthma Section
- Cardiovascular and Diabetes Section

Tobacco Prevention and Cessation Commission

Epidemiology Resource Center

Office of Public Health Performance Management

State Health Assessment and Improvement Plan Participants/Invitees

AARP
American Academy of Pediatrics
American Diabetes Association
Biocrossroads
CADI
Community Health Network
Criminal Justice Institute
Fairbanks School of Public Health
FSSA
Health & Hospital Corporation
Health by Design
Hoosier Actions
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Indiana Family Health Council
Indiana Primary Health Care Association
Indiana Academy of Family Physicians
Indiana Asthma
Indiana Cancer Consortium
Indiana Healthy Start
Indiana Hospital Association
Indiana's Local Health Departments
Indiana Native American Native Affairs Commission
Indiana Pubic Health Association
Indiana State Department of Child Services
Indiana State Department of Education
Indiana State Department of Health
Indiana State Department of Homeland Security
Indiana State Department of Housing and Community Development
Indiana State Department of Labor
Indiana State Department of Natural Resources
Indiana State Department of Workforce
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Indy Chamber
Local Initiative Support Corporation
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Marion Health
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Pokagon Band of Potawatomi Indians
Primary Health Care Association
Purdue Extension/Purdue University
Rural Health Association
St. Catherine Hospital
Safe Kids
Techserv Corporation
University of Indianapolis
Wellness Council of Indiana

References

Bay Area Regional Health Inequities Initiative. (n.d.). Public Health Framework for Reducing Health Inequities. Retrieved from https://www.cdph.

Behavioral Risk Factor Suveillance System. (2011-2016).

Centers for Disease Control and Prevention. (2015). Youth Risk Behavior Survey. *YRBS*.

Centers for Disease Control and Prevention. (n.d.). *Social Determinants*. Retrieved from CDC website https://www.cdc.gov/socialdeterminants/

Clancy C, M. W. (2013). 2012 National healthcare quality report. *Agency for Healthcare Research and Quality (AHRQ)*.

Health Resources Services Administration. (2018). *Health Professional Shortage Area*. Retrieved from HRSA.org https://datawarehouse.hrsa.gov/topics/shortageAreas.aspx

Healthy People. (2017). *Public Health 3.0*. healthypeople.gov.

Indiana State Department of Health. (2016). *Indiana Mortality Report, State and County Data*. Retrieved from www.in.gov/isdh/reports/2016/index/html

Indiana State Department of Health. (2016). *Indiana Tobacco Control Annual Report 2016*. Indianapolis.

Indiana State Department of Health. (2016). *Mortality Report*. Indianapolis. Retrieved from http://www.in.gov/isdh/27470.htm

Indiana State Department of Health. (n.d.). *Division of Chronic Disease, Primary Care, and Rural Health*. Retrieved from http://www.in.gov/isdh/24725.htm

Indiana State Department of Health ERC. (2016). *Birth outcomes*. Retrieved from Interactive query tools and dashboards http://www.in.gov/isdh/27466.htm

Indiana State Department of Health--MCH. (n.d.). Birthing hospitals in Indiana. *2017*.

Indiana University Public Policy Center. (2015). *Hoosier Health and Access to Care*. Indianapolis: Indiana Univeristy.

Indiana University Public Policy Center. (2016). *Thriving Communities Thriving State*. Indianapolis: Indiana University.

National Children's Health Survey. (2017).

Office of Disease Prevention and Health Promotion. (n.d.). *Social Determinants of Health*. Retrieved from healthypeople.gov https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

Office of the Governor of Indiana. (2018). Indiana's Next Level Agenda.

Rose, D. (2010). Access to Healthy Food: A Key Focus for Research on Domestic Food Insecurity. *The Journal of Nutrition*, 1167–1169. .

State of Obesity. (2017). *The State of Obesity*. Retrieved from The State of Obesity in Indiana https://stateofobesity.org/states/in

talkpoverty.org. (2016). *State of the year--indiana 2017*. Retrieved from talkpoverty.org https://talkpoverty.org/state-year-report/indiana-2017-report/

Trogdon, J., Finkelstein, E., Feagan, C., & Cohn, J. (2012). State and payer specific estimates of annual medical expenditures attributable to obesity. *Obesity*, 214-220.

U.S. Department of Health and Human Services. (2008). *2008 Physical Activity Guidelines for Americans*.

Youth Tobacco Survey. (2012-2016).

Youth tobacco survey. (2016).

Footnotes

1 (Indiana State Department of Health, 2016)