



# COMMUNITY HEALTH ASSESSMENT 2014

AGE 5



AGE 72



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AGES  
0-4

Over 30% of Medicaid mothers did not get early prenatal care, putting their babies at risk.

AGES  
5-11

Asthma and overweight issues continue to be problems for our elementary-age children.

AGES  
12-17

Homicide and suicide are leading causes of death in adolescents.

AGES  
18-34

This group is among the poorest in the county, with a prevalence of depression and a high rate of violent death.

AGES  
35-64

Violent death is among leading causes of death in middle-aged adults.

AGE  
65+

Our seniors need a hand with chronic disease management and mental health issues.

# INTRODUCTION *and* WELCOME!

On behalf of the Marion County Public Health Department, the Community Health Assessment Steering Committee and many local partners, I am pleased to present the Executive Summary of the 2014 Health Assessment. Together, the Steering Committee and I hope you will use the Health Assessment to become more informed about your community and to join with other city residents to help us develop concrete and effective next steps for the MCPHD's emerging Community Health Improvement Plan.

**What is the purpose of the Community Health Assessment?** The Community Health Assessment describes the health status of Marion County residents. Six work groups, representing community stakeholders, focused on specific age groups and identified key health issues using accepted, pre-set criteria. A sample of the key findings:

- In 2012, overweight rates in young children increased to 40%, up from 22% in 2005.
- Among our teens and young adults, homicide and suicide remain leading causes of death.
- Mental health issues, such as high rates of depression, dementia and prescription drug abuse, were revealed in several age groups.
- Marion County saw a significant drop in the overall infant mortality rate, from a high of 12.9 in 2009 to 8.3 in 2012.
- The black infant mortality rate in 2009 was 21.4, dropping to the lowest rate of 12.7 in 2012.
- The Hispanic infant mortality rate in 2009 was 9.9, dropping to a low of 6.1 in 2012.
- The white infant mortality rate in 2009 was 9.8, dropping to a low of 5.5 in 2012.

These and other key issues from each work group were reviewed by the Steering Committee to:

- Refine and validate broad problem categories for the Community Health Improvement Plan.
- Select priority categories on which to focus the Community Health Improvement Plan.

That plan will set out specific policies, strategies and lead partners for reaching the goals to improve our community's health. The key priorities will provide a road map for specific community actions.

I am also proud to introduce the findings from the 2012 Community Health Assessment phone survey. This is important information directly contributed by 5,000 Indianapolis households containing both adults and children.

Community partnerships are invaluable in making a difference in both individual health and the health of the community as a whole. We hope all participants continue their involvement in the health improvement and strategic planning steps. I sincerely thank all who made their time and expertise available to the Community Health Assessment.

I invite you to look at the Community Health Assessment and become involved!



Sincerely,

*Virginia A. Caine, M.D.*

Virginia A. Caine, M.D.

Director, Marion County Public Health Department

# HOW TO USE THIS DOCUMENT

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The Community Health Assessment is divided into eight reports in addition to this Executive Summary. Those reports include:

- **Maternal, Infant and Toddler (Ages 0-4 and Prenatal Period)**
- **Young Child (Ages 5-11)**
- **Adolescents (Ages 12-17)**
- **Young Adults (Ages 18-34)**
- **Middle-Aged Adults (Ages 35-64)**
- **Senior Adults (Ages 65 and older)**
- **Public Health Risk Prevention and Preparedness**
- **The 2012 Community Health Assessment Phone Survey**
- **Data Sources and Methods**

This Executive Summary briefly reviews the Community Health Assessment purpose, process and primary findings. Next are eight report summaries, including:

- Highlights from the six age-group reports, including the three top key findings for each age group. Readers will find additional issues in the full reports.
- A brief review of the Public Health Risk Prevention and Preparedness report, which touches briefly upon the many issues and the role of the Marion County Public Health Department in countering environmental health threats and control of infectious diseases.
- A summary of the 2012 Community Health Assessment phone survey, highlighting some of the most important findings from that survey of some 5,000 adults over age 18 and more than 1,300 children ages 5-17 in the county.

The full reports are available at the Marion County Department of Public Health website: [health.mchd.com](http://health.mchd.com). Interested readers may contact the MCPHD Epidemiology Department at [epidemiology@marionhealth.org](mailto:epidemiology@marionhealth.org) for further information on topics addressed in this report.

# COMMUNITY HEALTH ASSESSMENT EXECUTIVE SUMMARY

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The Marion County Community Health Assessment (CHA) identifies the most important health issues in the county. Issues were identified through discussions with community partners, MCPHD staff, health care representatives, academics and other topic experts. In a Steering Committee and in work groups, participants examined county health statistics in light of their own knowledge and experiences. The Steering Committee advised the Marion County Public Health Department (MCPHD) in conducting the process and organizing the assessment (Appendix 1). Seven work groups each met several times to examine specific areas. Six focused on specific age groups, and one considered overall issues of prevention and environmental health (Appendix 2).

In identifying issues, work groups used population-based data from birth and death certificates, hospitalization records, a countywide phone survey and literature sources. These data were compared with national vital statistics, national hospital discharge studies, Behavioral Risk Factor Surveillance surveys, the County Health Rankings website, and the Healthy People 2020 objectives. Changes over time, compared

different groups within the county, and noted the differences between Marion County and other similar urban counties in the United States. Also compared were county findings with measurements at the state and national levels.

## **The purpose of the CHA was to:**

- 1) Quantify major health issues.
- 2) Identify unhealthy trends.
- 3) Document health disparities.
- 4) Compare the health status of the county to other Midwest cities, the U.S. and other relevant populations.

The work groups and Steering Committee were asked to identify issues with the broadest and most notable impacts on health in our county. Issues might range from social determinants of health, such as aspects of our physical or social environment, to specific causes of health problems, such as smoking or poor diet, to health outcomes, such as leading causes of death (Appendix 3).

CRITERIA FOR PRIORITIZING HEALTH ISSUES

Following review of the health-related data, the work groups prioritized the three leading health issues for their populations. They considered the following criteria:

- Number of persons affected by the condition
- Severity of impact of a condition or leading cause of death
- Whether a condition influenced multiple outcomes
- Whether a condition seemed “saturated” (or conversely, unrecognized) by area health resources
- High probability of prevention
- Indication of an increasing trend
- Indication of severe disparities among sub-populations.

RANKING THE HEALTH CATEGORIES FOR THE HEALTH IMPROVEMENT PLAN

Each age-specific work group identified three key findings as well as other important issues. The Steering Committee met in early 2014 to examine the groups’ findings and to identify overall priorities for the Community Health Improvement Plan.

Several common themes underlie the issues identified by the work groups. MCPHD staff proposed eight categories to encompass the 18 age-specific key issues. Appendix 4: Work Group Priorities/Issues, by Category, shows how the 18 issues were grouped into these eight categories. The Steering Committee considered segregating out “tobacco,” given the health department’s long commitment to this major risk factor. “Prevention and wellness”<sup>1</sup> was also raised in the meeting to allow

discussion of disease risk factors and prevention that may not have been identified in the work groups’ earlier priorities.

Table 1 shows the results of the Steering Committee clarifications, revisions and prioritization of categories, along with the number of votes cast for each category.

Table 1: Prioritization Results

|                   | VOTES | CATEGORY                                  |
|-------------------|-------|-------------------------------------------|
| Top Priorities    | 16    | Unhealthy Weight                          |
|                   |       | Mental Health                             |
|                   | 15    | Poverty                                   |
|                   |       | Chronic Disease Prevention and Management |
| Tier 2 Priorities | 13    | Substance Abuse                           |
|                   | 12    | Access to and Coordination of Care        |
|                   | 11    | Violent Deaths and Prevention             |
| Other             | 8     | Prevention and Wellness                   |
|                   | 3     | Promoting Self Sufficiency                |
|                   | 1     | Tobacco                                   |

Four categories received 15 or 16 votes each and were designated the top priorities: Unhealthy Weight, Mental Health, Poverty and Chronic Disease Prevention and Management.

A second tier of three priorities received between 11 and 13 votes each: Substance Abuse, Access to and Coordination of Care, and Violent Deaths and Prevention.



### Unhealthy Weight

Obesity and overweight are measures of weight per unit of height and reflect the proportion of fat (particularly abdominal fat) to lean (muscle/bone) in a body. The greater the fat accumulation, the greater the effect on other body mechanisms such as insulin control, hormone functions (including changes in puberty and fertility), blood circulation (especially in the extremities), blood pressure, and physical loads on knee and hip joints (increasing risk of arthritis).

#### **Overweight and obesity trends in Marion County children and adults have continued to increase over time.**

The 2012 Community Health Assessment (CHA) found that 4 in 10 elementary children were overweight (defined by CDC age- and gender-specific height/weight charts), up from 2 in 10 in 2005. In addition, 2 in 10 elementary school students were at risk of being overweight, with Hispanic boys at greatest risk.

In 2012, 3 in 10 Marion County children ages 5 to 17 were overweight, and 2 in 10 were at risk for overweight. A child who is overweight is at much greater risk (over 85% more likely) of being obese as a young adult. Overweight and obesity in children also increases their risk of early onset diseases, such as diabetes. Adult onset diabetes, once unrecognized in the pediatric population, currently affects some 2% of 5- to 17-year-olds in the county.

#### **Adults over 18: More than 1 in 3 adults were obese in 2012, up from 1 in 4 in 2005. Two out of every three adults in the county are either overweight or obese.**

As the prevalence of obesity has increased in Marion County, so has the prevalence of obesity-related diseases, including diabetes (14% of adults vs 9.5% nationally), cardiovascular disease and stroke (nearly 8 in 100 county adults), several types of cancer (endometrial, postmenopausal breast, kidney and colon), arthritis disorders, sleep apnea and gallbladder disease. Obese adults are 1.7 times more likely to die prematurely than normal weight adults. Obesity now accounts for approximately 400,000 deaths per year in the United States, second only to tobacco-related deaths. Aggregate health costs of obesity range from 5.5% to 7.0% of total

U.S. annual medical expenditures, at a total (direct and indirect) cost of \$139 billion per year.

Food experts link obesity to small shifts in daily caloric intake (200-300 additional calories) and increased sales of products with added sugars and fats. But eating patterns are not the only factor. The typical workday is increasingly sedentary for both adults and children, who no longer walk or bike to school and spend their free time watching TV or looking at their computers and phones.

More than 1 in 4 county adults reported watching five or more hours of TV per day, a trend associated with increased snacking, portion sizes and percentage of fat calories.

The Steering Committee expanded this category's definition to include several "upstream" community contributors as well. One such contributor is access to healthy and cost-efficient food sources. MCPHD collaborations to increase access to healthier foods include reducing salt content in preschool and hospital fare, partnering with the Hunger Network to make fresh produce more affordable for recipients of Supplemental Nutrition Assistance Program (SNAP) benefits, and policy measures with the Food Council and the city that support groceries in low-income neighborhoods.

In addition, low-income residents in particular are threatened by food insecurity – insufficient food to meet their families' needs each month. Food pantries and community kitchens are not without value, but relying on them to regularly supplement food supplies is not the best way to assure good nutrition. Environmental threats to healthy weight also include exposure to chemicals such as endocrine disruptors in soil, water and food processing.

### Going Forward

Local public health partnerships such as Health by Design, Top 10 by 25, Greenways Foundation, Indy Parks, IN Shape and Jump IN for Healthy Kids are addressing unhealthy weight by encouraging regular walking, biking and use of public transport and green spaces, and challenging communities to improve their local infrastructures, streets and sidewalks to reduce dependence on cars.

### **Poor Mental Health**

Mental illnesses are medical conditions that disrupt a person's thinking, feeling, mood, ability to relate to others and daily functioning. Mental health was listed as a high priority issue by four of the six work groups.

Six percent of Americans suffer from serious mental illness (SMI), which substantially interferes with or limits one or more major life activities. Mental health problems include depression, schizophrenia, bipolar disorder, anxiety, dementia and other conditions. Major depressive disorder has been identified as the leading cause of disability among Americans ages 15-44.

Nationally, almost half of SMIs are diagnosed and recognized by early adolescence, but treatment often lags due to poor access to, and/or underfunding of, community-based care. Poor mental health affects day-to-day functioning at work, in school and in the home.

Untreated mental illness increases the probability of incarceration. Nationally, it is estimated that 1 in 3 women and over 1 in 10 men in state prisons have serious mental illness. Mental illnesses are also comorbidities in people undergoing substance abuse treatment or suffering from multiple physical diseases. An estimated 20% to 25% of the homeless in the U.S. suffer from a mental illness.

➤ **Depression, the most common mental condition, is prevalent in almost all age groups in Marion County and affects both quality of life and ability to treat other major health problems.** One in five adults has been medically diagnosed with depression as well as nearly 1 in 10 children.

Unfortunately, Marion County is described as an underserved area for mental health services,<sup>2</sup> with a population-to-provider ratio far below the average mental health staffing capacity in the state.

➤ **Dementia increases in prevalence with age. Alzheimer's disease, a form of dementia, is the only leading cause of death among county seniors over age 65 that has increased over the past decade, while all other causes have declined.** As the population ages, the caregiving responsibility for cognitively impaired elders is likely to increase, as many of these residents will be cared for at home in the community.

➤ **Suicide is among the five leading causes of death for all county residents ages 12-64 and is the third leading cause among 15- to 24-year-olds, with a rate 30% higher than that of the U.S. as a whole.**

The links among mental illness, suicidal thoughts and eventual suicide are strong. About 10% to 15% of formerly hospitalized depression patients will commit suicide. For every suicide per 1,000 people in the U.S. each year, there is an associated 8.6 hospitalizations and nearly 15 suicide-related emergency department emergency department visits, keeping in mind that more than half of suicide-prone individuals do not seek help from health care services.

Youth suicide has many behavioral precursors that present opportunities for intervention. Nearly 1 in 3 Indiana teens reported substantial depressive symptoms in the past year. More than 1 in 10 had made a suicide plan, and 1 in 10 made a suicide attempt.<sup>3</sup> Suicide reduction in all ages is a HP2020 Leading Health Indicator.<sup>4</sup>

### **Going Forward**

MCPHD is partnering with Mental Health America of Greater Indianapolis, which provides a 24-hour Crisis Hotline and outreach education to businesses and neighborhoods.

MCPHD Social Work is offering expanded depression screening services, and Eskenazi Health Primary Health Clinics are partnering with Midtown Mental Health to offer mental health services in the primary care setting.

Schools are also educating the community to the harm caused by electronic bullying in promoting violence and self-harm among students. Bullying-influenced suicides were recently targeted by the state legislature in an attempt to reduce the 1 in 4 students who report being bullied at school and the 1 in 5 who experience electronic bullying.

### Poverty

For many federal and social services programs, poverty is defined by family size and total annual incomes. In 2012, the federal poverty threshold (FPT) for a family of four was yearly income of \$23,496 or less. Poverty rates doubled in Marion County between 2000 and 2012.<sup>5</sup>

Poverty was a high-priority issue for work groups studying adolescents and young adults. Poverty indicators, such as low educational or employment achievement, can have a multiplier effect on a community, greatly worsening health conditions for residents. Similarly, they are also considered major social determinants of health, as indicated in the County Health Rankings.<sup>6</sup> County residents living in areas with low education or low income levels also experience poor or limited access to health care and preventive services, reside in older housing with health hazards, have limited food, and fewer safe recreational resources, poorer health and shorter lifespans.

► **Persons living at 100% of the federal poverty level now include 1 in 5 residents.** In addition, 1 in 3 Marion County households with children met 2010 federal poverty guidelines,<sup>7</sup> up from more than 1 in 5 households in 2007, exceeding U.S. levels. Two out of three county schoolchildren received free or reduced lunch in 2010 compared to 1 in 3 youths across the state, having increased from over half of school-age kids in 2008.

► **High poverty rates are concentrated in six ZIP codes in central Marion County, which have seven times the poverty rate, three times the average unemployment rate, and five times the crime rate of the county as a whole.**<sup>8</sup> United Way notes that indicators of low education and employment, combined with many families paying over 40% of income for housing, high foreclosure rates, poor transit options to work and low asset wealth, threaten the stability of many Central Indiana families, even pushing some toward homelessness.

► **Almost 1 in 3 young adults ages 18-34 met 100% of federal poverty guidelines.** Half of these young adults had only a high school or lower education, and 1 in 5 was unemployed (not including those out of the labor force, such as students or homemakers). Their future economic health and stability is severely jeopardized.

Not surprisingly, 1 in 3 of these young adults was not covered by health insurance. This makes it nearly impossible for them to obtain regular preventive care or chronic disease management, promoting episodic “sick care” seeking.

### Going Forward

The Steering Committee recognizes both the necessity and challenges of addressing poverty as a major threat to health in Marion County. Related poverty findings in over half the population highlight the need for the Health Improvement Plan to bring together community partners around this issue.

Recent increases in the county’s high school graduation rate to 81% (2012) nearly meet the HP2020 objective and move the county closer to ensuring that future young adults will be prepared for life and careers. Equally encouraging is the downturn in the county’s adolescent birth rate among high school-age women. In addition, health care should be more accessible as the Affordable Care Act allows young adults to be covered under their parents’ plans.

### ***Chronic Disease Prevention and Management***

Chronic disease prevention for all ages includes establishing healthy eating and activity patterns, avoiding environmental pollutants and high-risk behaviors, and becoming regular primary care users of protective immunizations and timely health screenings. These “upstream” prevention measures are very cost effective compared to the cost of treatment and possible medical complications from a chronic disease.

▶ **Asthma is the most common chronic condition of childhood, affecting nearly 1 in 10 U.S. and Indiana children ages 5-17.**<sup>9</sup> In Marion County, 1 in 5 children ages 5 to 17 are currently diagnosed with asthma, twice as many as in the state or nation.<sup>10</sup> Inequities also appear. Boys are more likely than girls to have asthma. Non-Hispanic blacks are three times more likely than whites to be hospitalized and are twice as likely to use the emergency department for severe asthma episodes.<sup>11</sup> As there are no significant ethnic reasons for differences in asthma prevalence, this disparity likely reflects differences in severity of disease, access to primary care, environment, and/or lack disease management effectiveness.

Secondhand smoke exposure affects children and is a known trigger/risk factor for asthma. Nearly 2 in 10 county children ages 5 to 17 were exposed to tobacco smoke at home.<sup>12</sup> Other asthma risk factors such as small-particle air pollution, or indoor triggers such as mold, pet dander and chemicals, are addressed by the MCPHD Healthy Homes program.

▶ **Mid-life county adults also face inequities in chronic disease management and care. One in four has a permanent disability. Over 1 in 5 is uninsured, and only half have a usual medical provider.** Such lack of access to care affects these adults’ abilities to work and to care for others and themselves. The increasing prevalence of obesity, diabetes, heart disease and asthma, and increasing rates of complications and hospitalizations, increase the helplessness of these individuals.

The Health & Hospital Corporation’s “Advantage” program, along with changes in the Affordable Care Act, seeks to

make health care coverage accessible to very low income residents who do not have coverage under other options. HHC financial counselors help applicants navigate the complex eligibility criteria to select a program that meets their needs.

▶ **Among seniors, a strong need exists for chronic disease management and care coordination.** A majority (85%) of persons over age 65 have one or more than one diagnosed chronic illness. One in four has diabetes or heart disease, and 1 in 8 had a prior stroke. Over 1 in 3 has a diagnosed disability. Moreover, 1 in 4 needs help with health care instructions.

Coordinating and tracking progression of these conditions, managing multiple-medication regimens, and assuring timely health screenings and preventive care present challenges to both patients and primary care providers. Primary care physicians are encouraged by Medicare, for example, to include full physical and mental health evaluations of seniors and to coordinate referrals to other services — all in an annual one-hour visit. While this model might be feasible in a population with one major insurance source and a strong relationship with primary care physicians, it may not be feasible in younger populations with erratic coverage and only loose attachment to a primary care provider.

### ***Going Forward***

The Steering Committee stressed that health promotion interventions were far more desirable than disease control and management. If an individual develops a chronic disease such as asthma, managing the disease through regular medication and medical visits (and avoiding disease triggers) not only results in greater functional freedom but reduces costly emergency and hospital care.

MCPHD continues to partner with Smoke Free Indy and the American Lung Association to build on the 2006 county smoke-free air ordinance, promoting smoke-free multi-residence housing. In addition, MCPHD promotes greater provider referral to smoking cessation support through the Indiana Tobacco Quitline, and partnerships with the Asthma Alliance and schools are working to have emergency asthma plans available for affected students.

### Substance Abuse

Substance abuse is among the HP2020 Leading Health Indicators as it poses a significant public health problem that impacts society on multiple levels.<sup>13</sup> Substance abuse is a pattern of alcohol and other drug use leading to dependence and other health consequences. It includes tobacco, alcohol, misused prescription (pain) medications and illicit drug use, reflecting the addictive quality of these substances on the brain. Addiction is defined as a chronic, relapsing brain disease characterized by compulsive drug seeking and use, despite harmful consequences.

The literature indicates that it takes several unsuccessful attempts before gaining final withdrawal from any addictive substance. Substance abuse is associated with failure to fulfill major obligations at work, school or home; legal problems, such as driving while intoxicated or drug possession; and persistent social problems. Mental illness is a frequent comorbidity with substance abuse as people try to mitigate the effects of their mental illnesses with alcohol and/or drugs. Substance abuse increases the complexity of other chronic disease regimens, and getting timely referral to effective addiction treatment is critical.

▶ **Tobacco abuse is common in several age groups, affecting unborn children directly through low birth weight and prematurity as well as prenatal addiction in infants.** The work group covering infant health identified smoking among the county's expectant mothers as an attributable cause of nearly 1 in 5 premature births and over 1 in 4 low birth-weight infants. Nearly 3 in 10 county adults over age 18 smoke cigarettes, compared to 1 in 4 in 2005 and 1 in 5 in the U.S. in 2012. Nearly 1 in 5 county youths ages 5-17 is exposed to someone who smokes at home.

The overall smoking rate for adults was 28.6% in 2012. The white smoking rate was 30.3%, for blacks was 29.1% and Hispanic was 16.3%.

▶ **The work group for 35- to 64-year-old county residents found multiple substance abuse problems in that population.** Alcohol abuse is involved in half of all homicides and motor vehicle accidents and in nearly 1 in 4 suicides. The county has twice the rate of fatal motor vehicle accidents per 100,000 as the U.S. and other major metropolitan areas, with 3 in 10 county adults reporting heavy drinking patterns — nearly six times the national rate.

▶ **Over half of the 1.5 million prescriptions purchased in the county (2010) were opioid pain medications, which are fueling new substance dependence and illegal activity.**<sup>14</sup> Opioids are the largest category of drug type abused. Opioid abuse has increased between 2000 and 2009 in both the state and nation, particularly affecting young and middle-aged adults.<sup>15</sup>

Illegal drug use often involves a downward spiral of social and health consequences, including unemployment, family instability, violence and incarceration. Of nearly 60,000 arrests in the county (2007), over 1 in 4 was directly related to substance abuse.<sup>16</sup> Nationally, nearly half of all incarcerated prisoners suffer substance abuse; in Indiana, 3 in 4 offenders have or had substance abuse problems.<sup>17</sup>

### Going Forward

Smoking has been discouragingly difficult to reduce overall. However, smoking among pregnant mothers has been declining in recent years, and rates among minority mothers are near national levels or HP2020 objectives. Also, the Indiana Tobacco Quitline recently opened services to adolescents as well as adults and is covered by Medicaid.

A new statewide initiative, BitterPill, by the Office of the Indiana Attorney General is working to reduce the prevalence of prescription opioid use and is already seeing positive effects among providers and patients.

### ***Access to and Coordination of Care***

The Steering Committee defined “access” to health care as including not only outreach and enrollment for health care insurance and continuing coordination of all care, but also access to a wide variety of mental health, prevention and rehabilitation services. The committee recognized that the health care “system” includes many practitioners of specialized care that do not effectively respond to community needs, and in fact cause barriers to users who have a variety of needs.

While certain strategies have increased patient access to health services (such as increased insurance coverage and enrollment and patient navigators), some communities need greater outreach to engage in care seeking (as in screening and chronic disease management), while others require greater integration and coordination of care (as in disability or mental health care). Engaging the client is also important when the client is new to a care system — or has had multiple barriers in seeking care. Users of health care are challenged by the many payers and regulations of care, presenting yet another layer of impediments.

▶ **Access to and coordination of health care is lacking among low-income and vulnerable populations who have complex social and health needs.** Young adults and persons with disabilities increasingly face chronic disease and substance abuse with increasing rates of complications and hospitalizations.

▶ **Some disparities begin at birth. Over half (56%) of Medicaid mothers in 2012 received timely and adequate prenatal care compared to over three-quarters (78%) of mothers with other coverage.** More than two-thirds of the county’s 12,429 births in 2012 were covered by Medicaid. Medicaid-covered births have a 13% higher rate of low birth weight (LBW) infants and a 36% higher infant mortality rate than births with all other forms of coverage. Additionally, black infants in Marion County are over three times more likely to die due to short gestation and LBW than white infants.

### ***Going Forward***

As a major insurer, Medicaid is a crucial partner in processing eligibility and monitoring patient care, use and outcomes.

Medicaid Managed Care Organizations use certain access indicators (e.g. the percent of pregnant women getting care in the first trimester) or quality (e.g. low rates of asthma hospitalization) to monitor the overall quality of service delivery to users. The program also seeks to reduce all adult smoking. Coordination of efforts between the MCOs, MCPHD, partners such as the Asthma Alliance and CICOA, tobacco cessation programs and individual providers will help patients get the services they need.



## TIER 2 PRIORITIES

### ***Violent Deaths and Prevention***

Homicide has been chosen by HP2020 as a core Leading Health Indicator of preventable deaths in adults, with an objective of 5.5 homicide deaths per 100,000 population.<sup>18</sup>

➤ **Homicide is a leading cause of death for ages 10 through 64 and is a major cause of racial inequities in life expectancy among males in Marion County.**

Homicide is the leading cause of death for county 18- to 24-year-olds and the second leading cause of death for 25- to 34-year-olds. County homicide rates per 100,000 population are two to three times greater than those of the U.S. and other major urban areas, and four to six times greater than the HP2020 objective.

➤ **Homicides steal life expectancy from men of color in the county.** Homicide rates disproportionately affect black males, who are six to 13 times more likely to die from homicide than white males. Homicide and assault rates have been increasing in the county, with 8.4 aggravated assault arrests per 1,000 population. The highest and most increased rates occur in Center Township. Firearms involvement in Indianapolis homicides among those under age 20 was twice that of 60 other large metro areas. Firearms were involved in 67% of homicides in the young adult group.

Violence disrupts individual and community lives through deaths of young adults, aggravated assaults and high incarceration rates among young adults. Community perceptions of threatened security affect personal and economic choices in neighborhoods, often affecting health outcomes.

The Indiana Youth Risk Behavior Study (2011) found that nearly 1 in 5 high school students carried a gun, knife or other weapon, while 4 in 100 carried such weapons to school.<sup>19</sup> School districts' response to weapons, physical fights on campus, threats of violence, and conflict resolution among youth are so varied that it is difficult to know which interventions are successful.

### ***Going Forward***

The Steering Committee viewed reduction in violent deaths as a major measure of safety and security assurance needed by all communities. Three different working groups asserted that this is a high priority issue for their populations.

Homicides declined 20% among young adults ages 15-24 and 30% among ages 25-34 in the past decade, but rates are volatile year to year. Progress has been made between providers, such as Eskenazi Health, city officials and support agencies, in targeting youth who have experienced violence and reducing their risk of school failure, violent injury and incarceration.

## NEXT STEPS: THE MCPHD AND LOCAL PARTNERS WILL...

1

*Disseminate this Executive Summary, assisted by Indy Indicators, local partners, and solicit community response.*

2

*Describe about 20 small geographic county areas in comparable health-status reports.*

3

*Develop a list of assets and resources to inform the Community Health Improvement Plan (CHIP) planning.*

4

*Release separate reports on Public Health Risk Prevention and Preparedness and the CHA Phone Survey Summary.*



Premature Birth

Smoking

Poverty





AGES  
0-4

MATERNAL,  
INFANT *and*  
TODDLER

Medicaid mothers often fail to get adequate prenatal care, prematurity rates continue to be too high for minority mothers, and smoking rates put mainly white babies at risk. Fortunately, community, county, state and federal programs are working to turn things around.

## KEY FINDINGS

➤ **Medicaid-covered expectant mothers are 2.6 times (31%) more likely not to get prenatal care in their first trimester than mothers with all other forms of coverage (11.7%).**<sup>20</sup>

Half of Medicaid moms get both “timely and adequate”<sup>20</sup> care compared to over 3 in 4 (78.9%) of other insured moms in the county. Almost two-thirds (63%) of all 12,429 county births in 2012 were covered by Medicaid, and that proportion is increasing.

Medicaid births also have poorer birth outcomes, including a 14% higher rate of low birth weight (LBW) infants, a 19% greater rate of premature births and a 37% higher rate of infant mortality, than births by mothers with all other forms of health care coverage.

➤ **High premature birth rates among black mothers are a leading cause of inequity in birth outcomes in the county.**

Black births make up one-third of all Marion County births. Black mothers experience premature deliveries more frequently than white mothers (14% vs 9.3%), exceeding the HP2020 objective by 20%. In Marion County, black infants are almost three times more likely to die than white infants due to short gestation and low birth weight (473.2 vs. 165 deaths per 100,000 population). In addition, black prematurity rates (14%) in 2012 exceeded the HP2020 objective by 20%.

➤ **The county's maternal smoking rate exceeds the HP2020 objective by 10 times, is nearly 50% higher than the national rate (14.5% vs. 10.4%), and is a known risk factor for adverse birth outcomes.**

In Marion County, maternal smoking was associated with 24.6% of all LBW births and 35.3% of LBW births among white mothers. Maternal smoking also was associated with 19.6% of all preterm births and 28% of preterm births among white mothers.

### ***Baby steps:***

- We're making headway in the battle to reduce infant deaths. One successful program is MCPHD's Beds and Britches Etc., or BABE initiative. Pregnant and new mothers receive coupons during their doctor visits to use at one of five “stores” around the county.
- Indianapolis Healthy Start implemented the Wee Ones program, which allows qualifying mothers to keep their babies in prison with them after they give birth. Indianapolis is one of only six states that allow women to keep their babies in prison.
- Indianapolis Healthy Start collaborated with six birthing hospitals to focus on safe sleep practice policies.
- The Women, Infants and Children Program (WIC) staffs Breastfeeding Peer Counselors in hospitals with a goal to increase breastfeeding duration rates, enhance the mother's breastfeeding experience and increase unnecessary formula supplementation.
- MCPHD and the Fetal Infant Mortality Review (FEMR) programs partnered with March of Dimes to fight prematurity.

### **Infant Mortality Drops**

The Marion County Public Health Department reported strong improvements in infant mortality rates in the last decade. The overall infant mortality rate for 2012, as well as the death rates among black infants and white infants, was the lowest since 2002. In 1984, Marion County had the nation's highest black infant mortality in the country. Since 1984, the overall infant mortality rate in Marion County has dropped from 14.2 infant deaths per 1000 live births, to 8.3 in 2012. Infant mortality rates for black infants decreased from 25.2 in 1984 to 12.7 in 2012. And death rates among white infants dropped from 9.9 in 1984 to 5.2 in 2012.

31%

Medicaid-covered expectant mothers are almost three times more likely to fail to get prenatal care in the first trimester.

24.6%

In Marion County, maternal smoking was associated with 24.6% of all LBW births.

70%

In the county, preterm births account for 70% of neonatal deaths.



Asthma

Obesity

Mental Health



AGES  
5-11

YOUNG  
CHILD

Asthma and overweight issues continue to be problems for elementary-age children, but increasing efforts to clear indoor air and new fitness and healthy-eating programs in schools are making inroads.

## KEY FINDINGS

### ➤ The prevalence of overweight in the county's K-6 population is almost double the 2005 rates.

The 2012 Community Health Assessment found that 40% of children in this age group were overweight and 22% were at risk of overweight. In 2005, more than 90,000 public school children were measured for height and weight, and 22% of 5- to 11-year-olds were found to be overweight, with 18% at risk of overweight. Little difference was seen between boys and girls, but Hispanic males were at greatest risk.

### ➤ Young children in the county have high asthma prevalence and high use of secondary medical care. Children in minority communities receive disparate rates of medical care.

Asthma is the most common childhood chronic condition, affecting 9.1% of all U.S. children under the age of 18. The 2012 CHA survey found that 19% of Marion County 5- to 11-year-olds were diagnosed with asthma, and 15% of this age group reported being exposed to tobacco smoke at home.

It was estimated that in 2009, 9.8% of Indiana children 5-17 years of age were afflicted with asthma, with asthma comprising 1 in 5 hospitalizations for this age group. In those under age 15, non-Hispanic blacks are at four times the risk for asthma hospitalization than are non-Hispanic whites. Asthma hospitalizations for county children under age 17 were 56% higher than the HP2020 objective.

### ➤ ADHD and depression are top mental health issues in young children.

The CHA survey found 16% of children ages 5-11 had a medical diagnosis of ADHD, and 4.2% were diagnosed with depression. This compares to U.S. rates of 8.2% for ADHD and 2.3% for depression for this age group.

The U.S. lifetime prevalence for having any kind of mental disorder is 46.4%, with half of all lifetime cases beginning by age 14. The national prevalence for diagnosable mental illness in childhood is 20%. On that basis, it is estimated that more than 25,000 children in Marion County between ages 9 and 17 experience mental illness resulting in impairment of some sort.<sup>21</sup>

### *Fresh starts:*

- Every year, the Marion County Public Health Department's Smile Mobile brings dental care to hundreds of students and other county residents.
- In April 2008, a sidewalk ordinance was passed in Marion County to provide greater opportunities for safe, healthful physical activity by establishing a more complete network of sidewalks.
- In 2011, Mayor Greg Ballard, the Department of Metropolitan Development and the Indianapolis Land Bank launched the Urban Garden Program, which makes available abandoned and underutilized land to community groups and individuals for the purpose of urban gardening. As of 2013, there are 105 urban and community gardens in Marion County.

25,000

children in Marion County  
between ages 9 and 17 experience  
mental illness resulting in  
impairment of some sort.

9.8%

Indiana children 5-17 years  
of age were afflicted  
with asthma.

## OVERWEIGHT

Little difference was  
seen between boys and  
girls, but Hispanic males  
were at greatest risk.





Poverty

Violent Death

Suicide

Depression



AGES  
12-17

ADOLESCENTS

Though violent deaths in Marion County have declined by 30% over the past decade, homicide and suicide are leading causes of death in this age group. Local justice, public safety and education programs need to continue to reach out to this population.

## KEY FINDINGS

### **Poverty and hunger are widespread among the county's youths.**

Nearly 1 in 3 (31.8%) Marion County households with children met federal poverty guidelines in 2010, up from 22.8% in 2007 and higher than the U.S. rate (22.5%).<sup>22</sup> That included 17% of children in married-couple households and nearly half (41%-47%) of single-parent households. The percentage of free and reduced lunch students in the county increased from 57.2% in 2008 to 65.9% in 2012, which exceeded the 2012 state rate by 36%.

In the 2012 CHA survey, over 1 in 4 (27%) homes with children ages 12-17 had incomes below 100% of federal poverty guidelines. Nearly 18% of respondents with children ages 12-17 were unemployed or unable to work. One in four families (26%) reported using food stamps. Moreover, 30% reported occasional or frequent food insecurity, and 13% had to supplement food supplies from local food pantries.

### **Homicide is the leading cause of death in 15- to 24-year-olds in Marion County. It is the 3rd leading cause of death in 10- to 14-year-olds.**

Homicide is the leading cause of death (1 in 3 deaths) among 15- to 24-year-olds; their rate of 31 per 100,000 is nearly three times that of similarly aged U.S. residents. Homicides in the 10-14 and 15-24 age groups result in an average of more than 150 deaths per year. Both mortality rates exceed the HP2020 objective for homicide of 5.5 deaths per 100,000 for all ages. The Indianapolis firearms-related homicide rate for 10- to 19-year-olds is 12.6 per 100,000 population, or twice the rates of 60 other large metropolitan areas.

Homicide disproportionately affects African-Americans and young males, who are three to six times more likely to die due to homicide than their white, or female, peers.

The 2011 Indiana Youth Risk Behavior Study found that among high school students:

- In the past month, 17% carried a gun, knife or other weapon; 4% carried weapons to school.
- In the past year, 8.9% were in a physical fight at school.

### **Diagnosed depression and suicide risk rates are high for county adolescents.**

Among Marion County children ages 12-17, 16% were reported to have been "ever diagnosed" with depression, higher than the U.S. lifetime depression rates for youth (7.1% to 12.8%). The HP2020 Leading Health Indicator objective is that only 7.5% of adolescents will have a major depressive disorder event.<sup>23</sup>

Suicide is the fourth leading cause of death for Marion County youth ages 10-14 and the third leading cause in 15- to 24-year-olds, with rates that are 30% higher than age-related U.S. rates. Some 75 deaths occur per year in the two age groups. Males ages 15-24 are three times more likely to die from suicide than females, and suicide disproportionately affects white males.

The 2011 Indiana Youth Risk Behavior Study found that in the past year, teens reported that:<sup>24</sup>

- Nearly 1 in 3 (29%) had depressive symptoms that interrupted usual activities for two or more weeks.
- 25% had been bullied at school, and 19% had been electronically bullied.
- 18.9% seriously considered suicide.
- 13.6% made a suicide plan.
- Over 1 in 10 (11%) made one or more suicide attempts.

### **Reaching out:**

- The Marion County Public Health Department, through its violence prevention program, offers trigger locks at no charge.
- Students Against Violence Everywhere (SAVE) operates chapters in schools throughout Indianapolis spreading the message of peace and safety. MCPHD teams up with SAVE and other organizations to sponsor a yearly poster contest to encourage local students to express anti-violence messages in creative ways.

32%

of all Marion County residents under age 18 live in poverty, an increase from 22.8% in 2007 and higher than the U.S. rate of 22.5%.

17%

of adolescents admitted to carrying a gun, knife or other weapon in the past 30 days.

29%

of Marion County adolescents had depressive symptoms that disturbed normal activities.



Mental Health

Poverty

Homicide



AGES  
18-34

YOUNG ADULTS

The recession was hard on the county's young adults. About one-third live in poverty, and about half have low educational levels. Higher graduation rates will help future adults, but health, education and job services need to target this age group now.

## KEY FINDINGS

### High levels of poverty indicators are concentrated in this age group.

The CHA 2012 survey found about one-third of respondents ages 18-34 (31%) had households below 100% of federal poverty guidelines. In addition, about 50% of this age group had a high school or lower education level, and 19% were unemployed (distinct from those removed from the labor force by being students or homemakers). About 34% are not covered by health insurance, and over 30% report food insecurity in their households.

The 2010 American Community Survey found 1 in 4 (25.8%) of county 18- to 34-year-olds overall met 100% of federal poverty guidelines, including 1 in 3 of 18- to 24-year-olds (33.7%). Poverty rates have increased as well: The proportion of county residents under 100% of FPL grew to 18.8% between 2000 and 2010.

### Violence has a high impact on death rates, especially for ages 18-24.

Homicide is the leading cause of death for Marion County 18- to 24-year-olds, whose rate is three times the U.S. rate. While it has declined over the past decade, homicide remains the second leading cause of death for 25- to 34-year-olds, occurs at twice the U.S. rate, and exceeds rates for other large urban areas. Both age groups have homicide rates that are four to six times the HP2020 objective (5.5 per 100,000). Black males are six to 13 times more likely to die from homicide than white males.

Suicide rates in this age group are 20%-30% higher than the U.S. rate and are the third leading cause of death. The public health burden of suicide, apart from the 1.5 deaths per 1,000 population each year, includes the 8.6 per 1,000 who are hospitalized annually, and the nearly 15 in 1,000 who visit emergency departments for self-inflicted injuries. About 50% of those who engage in suicidal behaviors do not seek help from health care services.<sup>25</sup>

Firearms were involved in 24% of suicides and 67% of homicides in this age group. An average of 700 homicide-

related visits are made to area emergency departments by 15- to 24-year-olds, and nearly 1,000 visits by 25- to 44-year-olds (2009-2011). In addition, the county rate for aggravated assault arrests is 8.4 per 1,000 population, with the highest and most increased rates in Center Township.

### There is a high prevalence of depression and poor mental health days for this age group, including high rates of abuse of prescription painkillers.

In the CHA phone survey, 17% of respondents ages 18-34 reported a medical diagnosis of depression and averaged over four poor mental health days in the past month. In the BRFSS survey, 47% of Marion County 18- to 25-year-olds reported frequent poor mental health days (14 or more in the past month), which is four times the U.S. rate.

Some 14% of 18- to 25-year-olds abuse painkilling drugs (similar to the U.S. rate). In Indiana, lifetime and past year non-medical abuse of any prescription drug is highest in the 18-25 age group (12.1% and 6.1%, respectively), followed by the 25-34 age group (5.9% and 1.8%, respectively).<sup>26</sup> Misuse of pain medication was statistically higher in the state for both groups than for their U.S. peers. Over 3% of CHA survey respondents in this age group reported that a member of their household abused prescription drugs.

### A new day:

- Eskenazi Health, in partnership with local police, criminal justice, mental health and housing agencies, is breaking the cycle of gun-related violence and death in young adults with "Prescription for Hope" (RxH). It enrolls youth hospitalized with gunshot/knife injuries and provides them with "wrap-around" services, reducing recidivism and injury and promoting successful re-integration into their communities.
- Providers such as Eskenazi Health and Midtown Mental Health are increasing their depression screenings, as are certain workplaces, such as the Chamber of Commerce.



47%

of 18- to 25-year-olds had 14+ days  
in the past month of poor mental  
health — four times the U.S. rate.

Homicide rates are  
the leading cause of  
death in county 18- to  
24-year-olds.

50%

have only high school or  
less education.



Substance Abuse

Violent Death

Disability



AGES  
35-64

MIDDLE-AGED  
ADULTS

Midlife adults are the caregiving generation — it is estimated that 90% care for children or older adults. But the caregivers need care, too, suffering high rates of violent death, physical disability and substance abuse. Extending services to this age group will benefit many.

## KEY FINDINGS

### Violent death is among leading causes of death in middle-aged adults.

Suicide and homicide are among the five leading causes of death in this age group. In Marion County, homicide rates are 13-16 per 100,000 population, or an average of 122 deaths per year, about three times the U.S. rate for this age group.

Suicides cause an average of 324 deaths per year in the county in persons ages 35-64. In the U.S., suicides now eclipse motor vehicle accidents as a leading cause of death for this population. Nationally, violent death rates are highest in the 45-54 and 55-64 age groups.

Indianapolis' homicide rate is twice that of the U.S. (12.6% vs. 6% for large U.S. cities), and exceeds all-ages HP2020 objectives.

### There is a high prevalence of physical disability in this age group and a lack of access to medical care.

Disability affects the ability to earn a living and to care for family members and oneself. Physical disability is associated with increasing prevalence of obesity, diabetes, heart disease and asthma, high rates of health care use, and increasing complications and hospitalizations.

In addition, this age group is less likely to have financial access to health care. The 2012 CHA survey found that in this age group:

- Over 1 in 5 (22%) is uninsured
- Only half (50%) have a usual medical provider
- 1 in 4 delayed medical or dental treatment (23%) or did not fill a prescription (28%) because of cost
- 2 in 3 (64%) had one or more diagnosed chronic diseases
- 14% require medical equipment
- Nearly 1 in 4 (23.6%) had limited activities due to physical or emotional problems.

### Substance abuse is a problem for 35- to 64-year-olds, including alcohol, tobacco and prescription medication misuse.

This abuse contributes to leading causes of death, including suicide and accidental poisoning, and impacts multiple health outcomes. Alcohol abuse is an attributable cause in half of homicides and nearly 1 in 4 suicides. Overall, the county death rate attributed to alcohol was 570 deaths between 2000 and 2008, for a rate of 6.8 deaths per 100,000 population.<sup>27</sup> In 2010, county alcohol-related traffic fatalities involving someone with a blood alcohol content (BAC) of .1 or greater made up 48% of all traffic fatalities, compared to 29% for the state.<sup>28</sup>

Drug overdose deaths for the county for the period 1999-2005 resulted in 572 deaths, or a rate of 10 deaths per 100,000 population, compared to 7 deaths/100,000 in the state.<sup>29</sup>

In the county, 1,395 tobacco-attributed deaths were reported for residents age 35 and older (2001-2004).<sup>30</sup>

### A hand up:

- To address the problem of prescription drug abuse, health officials have joined Indiana Attorney General Greg Zoeller in launching the BitterPill campaign.
- On June 1, 2012, the City of Indianapolis updated the 2006 smoke-free ordinance to include most workplace settings, including hotels, motels, bars, taverns, nursing homes, health-care facilities, assisted living facilities, mental health facilities, bowling alleys and theaters.
- Family members and unpaid caregivers provide an estimated 90% of long-term care for disabled individuals.

64%

of 35- to 64-year-olds have  
one or more diagnosed  
chronic diseases.

Homicide and  
suicide rates are  
2.5 to three times  
higher than U.S.  
rates.

High rate of substance  
abuse includes alcohol,  
tobacco and prescription  
medication misuse.





Mental Health



Independence



Chronic Disease





AGE  
65+

SENIOR ADULTS

Seniors need a hand with chronic disease management and mental health issues. With a little help, we can reduce their isolation and increase their days of independence.

## KEY FINDINGS

### ► Chronic disease management is a challenge for elderly with multiple conditions.

The 2012 Community Health Assessment survey found that 85% percent of persons over age 65 have one or more diagnosed chronic illnesses, and 1 in 4 also reports needing help with health care instructions.<sup>31</sup> Over 1 in 3 (38.8%) has a diagnosed disability.<sup>32</sup> Of those over age 65:

- 10% have asthma
- 25% have diabetes
- 25% have heart disease
- 67% have high blood pressure
- 55% have high cholesterol
- 12.6% have had a stroke

Coordinating and tracking progression of these conditions, managing a multi-pharmacy medication regimen, and assuring seniors have timely health screenings and preventive care present challenges to both patients and primary care settings.

Primary care physicians are encouraged by Medicare to include physical and mental health evaluations and coordinate referrals to other services in this age group.

### ► Mental health concerns cause considerable burden for the 65+ population.

This includes the increasing prevalence and mortality rates due to dementia (including Alzheimer's disease), high rates of suicide among those over age 75, and increased rates of depression in both seniors and their caregivers. The CHA 2012 survey of this age group found that 16% had been diagnosed with depression. Nationally, 6% to 10% of seniors have been diagnosed with dementia, 75% of which was attributed to Alzheimer's disease.

While all-cause mortality rates for seniors have decreased by 60% over the past decade, the exception has been for Alzheimer's disease, which increased by 20%. This increased risk of death was principally borne by women. However, few current resources are focused on this area given the increasing prevalence of these conditions.

### ► More resources need to be available to promote independent living.

It is necessary to reduce the isolation of elders who either live alone or with a spouse, and who have needs such as transportation, community support, and/or access to goods and services. The 2011 American Community Survey found that in those age 65+, nearly 4 in 10 had at least one disability, 1 in 4 had difficulty walking, nearly 2 in 10 had problems living independently, and nearly 1 in 10 had cognitive and self-care difficulties or a vision disability.

The community needs to assure caregiver support for the 10% of households that provide over 80% of long-term care that keeps elders and those with disabilities in the community.

### *Standing tall:*

- A 2012 Central Indiana Commission on Aging (CICOA) report found 59% of elders felt they can remain in their homes financially, and 32% work full or part time.
- Partnered with American Heart Association on community initiatives such as Go Red for Women and Power to End Stroke.
- Partnered with Indiana State Department of Health (ISDH) with the program, Indiana Wisewoman, a heart disease program for at-risk populations.
- Faith-based organizations, quality of life programs, neighborhood associations and area business organizations have partnered with the MCPHD to address chronic diseases.

In the past 10 years,  
mortality rates decreased by

60%

for those age 65+. However,  
the only cause to increase was  
Alzheimer's, up 20%.

It is necessary to  
reduce the isolation  
of elders who either  
live alone or with a  
spouse.

85%

of those age 65+ have  
one or more diagnosed  
chronic illnesses.





# PUBLIC HEALTH RISK PREVENTION *and* PREPAREDNESS

The County Health Rankings reflect the health and available resources of a community by evaluating environmental indicators (e.g. air quality), environmentally influenced factors (such as adult obesity rates), and public health prevention/control measures (such as TB control or immunization rates).



## **COMMUNICABLE DISEASE PREVENTION AND CONTROL**

### ***Vaccine Preventable Diseases & Immunization***

- **Vaccines are effective and cost saving.**
- **New vaccines are available to prevent diseases that affect thousands of Marion County residents.**
- **MCPHD does not have sufficient data available to accurately assess child immunization coverage.**

Immunizations have been called the “cornerstone of children’s preventive health.” Several common vaccines bring a very good return on investment.<sup>33</sup> Every dollar spent on the measles, mumps and rubella vaccine saves \$26 in treatment of those diseases.<sup>34</sup>

Human papillomavirus virus (HPV) is the most common sexually transmitted infection (STI); at least 50% of sexually active men and women will be infected at some point in their lives.<sup>35</sup> The HPV vaccine prevents most HPV, along with the cancers and genital warts it may cause. The lack of symptoms in many HPV infections makes this vaccine a strong public health tool in fighting the spread of the virus.<sup>36</sup>

Rotavirus (RV) is the leading cause of severe acute gastroenteritis (“stomach flu”) in children worldwide. Before the recent vaccine, rotavirus caused thousands of hospitalizations and tens of deaths of children in the United States each year. The vaccine prevents almost all severe illness, particularly severe episodes among infants.<sup>37</sup>

The most recent information available for Marion County are for teens ages 13-17 (2010).<sup>38</sup> Their immunizations are comparable to U.S. levels for measles, mumps and rubella (MMR) and Hepatitis B (HepB), but they have a relatively high incidence of varicella cases (chicken pox), indicating lower immunization coverage.

State immunization registry data are incomplete and not available for timely assessments. Healthy People 2020 has set childhood vaccination targets for common vaccines at 90% in children under age 2.<sup>39</sup> Nationally, coverage levels vary by factors such as poverty level.<sup>40</sup>

### ***Refugee Health***

- **In the past five years, MCPHD has screened and provided for health services for more than 5,000 refugees and coordinated many other services for these non-English speaking residents.**

Since the 2005 Community Health Assessment, Marion County has received the country’s largest resettlement of refugees from Burma (Myanmar) — 4,380 people from 2009 through October 2012. Coming from a country with few preventive health measures, these refugees sometimes have health conditions that are no longer common in the United States. MCPHD staff are responsible for screening the refugees’ health when they arrive and referring them for follow-up care.<sup>41</sup> MCPHD worked with the Chin Community Center to provide local care at a new clinic with easy access for many of the Burmese refugees.<sup>42</sup>

Refugees from Iraq are the second most common refugee group. From 2009 through October 2013, 177 Iraqi refugees arrived.

### ***Tuberculosis Control***

- **The MCPHD Tuberculosis Control program partners with local providers and shelters.**

In the past six decades, the number of tuberculosis (TB) cases in Indiana declined from 1,883 in 1956 to 90 in 2010. In 2011, 100 new Indiana cases were reported, including 30 in Marion County, which had about twice the incidence rate of Indiana overall.<sup>43</sup>

The MCPHD Tuberculosis Control program works with local homeless shelters to increase TB screening and with providers to provide directly observed therapy. Reaching these transient and hard-to-reach populations requires strong collaborations to restrict the spread of the disease.

## **FOOD SAFETY AND MONITORING**

### ***Preventing Foodborne Illness***

- **MCPHD investigates and curbs local and national foodborne disease outbreaks.**

In 2011, about 1 in 6 Americans endured some foodborne illness. Each case costs about \$1,068 in direct medical costs, losses to productivity and mortality.<sup>44</sup>

To prevent foodborne illness, MCPHD inspects and licenses food preparation establishments, including

2,672 restaurants, 886 groceries, 299 taverns, 262 mobile restaurants, 201 schools, 100 limited service schools, and over 200 other facilities in 2012. When foodborne illness outbreaks occur, MCPHD works to identify and resolve the causes, and staff members help implement recalls and public education during national outbreaks.<sup>45</sup>

MCPHD also partnered with Second Helpings to educate their students on safe food handling practices.

## **VECTOR-BORNE DISEASE CONTROL**

### ***Mosquito Control***

- **MCPHD monitors insect-borne diseases and promotes prevention and risk reduction.**

West Nile Virus (WNV) has been a threat in the United States for more than 10 years. In 2012, Marion County had the highest number of WNV-positive mosquito pools and human cases since 2002 as a result of both high heat and little rainfall.<sup>46</sup> MCPHD's Mosquito Control Laboratory samples mosquito larvae and identifies adults to help efficiently direct resources for effective control.<sup>47</sup>

### ***Rodent Control***

- **MCPHD monitors and assures good control of rodent populations.**

In the past 20 years, MCPHD has successfully contained Marion County's rodent populations. MCPHD continues to survey commercial areas likely to attract rodents and other localized areas in response to an average of 2,500 community complaints and referrals each year. MCPHD gives an average of 30 educational presentations per year and lends tools to organizations for community cleanups. The emergence of hantavirus in the 1990s caused MCPHD to add mice to regular response and surveillance efforts.

## **HEALTHY HOMES AND NEIGHBORHOODS**

Marion County has a homeownership rate of 56.9% compared to 70.6% for Indiana.<sup>48</sup> Almost one-third of Marion County's housing units (31.2%) are in multi-unit structures such as apartments.<sup>49</sup>

MCPHD is addressing health hazards in homes involving elevated lead levels, mold, indoor air quality, radon, secondhand smoke, pesticides, bed bugs, cockroaches, rodents and structural deficiencies.

### ***Lead Hazard Reduction, Exposure Testing***

- **MCPHD tests for lead in low-income neighborhoods and children's products, raising awareness about lead exposure sources.**

Lead poisoning is the No. 1 preventable environmental illness in children. Lead can enter the brains of children, disrupting brain development and leading to decreased cognitive ability and a reduction of 4-7 IQ points.<sup>50</sup> Lead-based paint and lead contaminated dust are the most hazardous sources of blood serum lead for U.S. children. Lead-based paint was commonly used in homes before 1978. Over half of homes in Marion County were built before 1970.<sup>51</sup> A 2012 study found that children in the urban center of Indianapolis had disproportionately higher blood lead levels than their suburban counterparts.<sup>52</sup>

MCPHD offers testing and information about the dangers of lead contamination. Soil testing for garden areas and other lead remediation is now recommended for urban gardens and major home refurbishing.

MCPHD works with several neighborhood associations, including MCANA, on many neighborhood environmental health issues affecting neighborhoods.

## **AIR QUALITY MONITORING DATA AND INFORMATION**

Indianapolis consistently ranks among the worst 25 U.S. cities for particle pollution.

Air quality standards help protect residents' respiratory and heart health. Air pollutants are monitored by the City of Indianapolis Office of Sustainability and the Indiana Department of Environmental Management to assure compliance with national standards.<sup>53</sup> MCPHD has no direct authority to monitor and control air quality.

### ***Lead Emissions by Businesses***

From 1996 to 2007, lead emissions from businesses in the county have decreased by over 1.78 tons, or 61.6%, primarily due to federal mandates such as the Clean Air Act and the closing of numerous stationary sources.<sup>54</sup>

### ***Diesel Reduction Efforts***

- **Three Marion County school districts use devices to reduce pollution from diesel fuel.**

The Indiana Diesel Reduction Project provides school and government agencies with subsidized-cost devices to reduce pollutants from diesel fuel.<sup>55</sup>

#### ***Indoor Air Quality: Going SmokeFree!***

- **MCPHD helped implement the SmokeFree ordinance through licensure, education efforts and complaint inspections.**
- **MCPHD works with the Indianapolis Housing Authority and residential complexes to promote voluntary smoke-free residences.**

On June 1, 2012, the City of Indianapolis updated the 2006 smoke-free ordinance to include most workplace settings, including hotels, motels, bars, taverns, nursing homes, health-care facilities, assisted living facilities, mental health facilities, bowling alleys and theaters. E-cigarettes are considered a tobacco product and therefore included in the smoking ban.<sup>56</sup>

### **WATER QUALITY SAFETY AND MONITORING**

#### ***Drinking Water Sources for Marion County***

- **MCPHD monitors and controls surface and ground water contamination to assure safe drinking water for the county.**
- **MCPHD works with businesses to prevent pollution from entering the groundwater.**

Water pollution from a single source can affect much of Marion County's watershed. Significant sources include agricultural runoff and discharges from home sewers or industrial sources. Contaminants can increase levels of E. coli bacteria; E. coli levels in many of the county's rivers and streams exceed Indiana's water quality standards.

The county's three main surface drinking water sources are the White River, fed by Morse Reservoir; Fall Creek, fed by Geist Reservoir; and Eagle Creek, fed by Eagle Creek Reservoir. Groundwater wells are also used for municipal water and provide 25% of the source drinking water. Marion County water utilities project that demand for water will increase to 39 million gallons per day within 10 years.<sup>57</sup> That increased demand must be met by existing groundwater resources.

Surface water is the primary source for Marion County's largest public water utility, Citizens Water, which serves

873,590 people. The City of Lawrence Utilities and Speedway Water Works both use groundwater sources and serve 46,100 and 12,881 people, respectively. Citizens Water had no contaminants exceeding the EPA safety standard in the past 10 years. The City of Lawrence Utilities had one minor report of coliform bacteria, which can indicate other potentially harmful bacterial contamination.<sup>58</sup> Speedway Water Works had two health-based EPA violations, total haloacetic acid (HAA5) in 2003 and coliform in 2002, and regular monitoring violations regarding multiple contaminants in 2001.

#### ***Number of Households Using Wells and Well Testing***

- **MCPHD offers free well testing and information to correct problems with bacteria and metals.**

MCPHD records do not provide good estimates for currently active residential wells, since some known wells may have been abandoned. In 2012, 460 private well samples were collected with results and information to correct problems given to well owners.

#### ***Households with Septic Systems; Leaking Septic Systems and Waterways***

- **From 2009 to 2013, 7,000 Marion County homes were slated to receive public sewers, reducing home septic system use by 25%.**

A septic system is a small-scale sewage treatment system not connected to city sewage pipes. They eventually fail, leaching human waste into groundwater, backyards and streams. Over 20,000 homes are served by private septic systems. MCPHD permits new systems where municipal systems are too distant, as well as repairs to existing systems.

#### ***Combined Sewer Overflow***

- **Marion County is making progress in reducing the impact of our combined sewer systems.<sup>59</sup>**
- **The deep rock tunnel project will provide additional sewage and storm water capacity.**

Combined Sewer Overflows introduce raw sewage into county rivers and streams, most commonly during periods of rain. The Clean Water Act required Indianapolis to reduce these overflows to protect human health and the environment.

### ***Using a Water Quality Index to Promote Environmental Health***

Since 1998, MCPHD has routinely sampled and monitored major streams and rivers and computed a water quality index to “grade” area rivers and lakes. Fall Creek indices have remained static over time. The most upstream site (39th Street) had slightly better water quality than sites closer to downtown. In addition to Fall Creek, water quality index calculations are planned for Pogue’s Run, Pleasant Run, Eagle Creek and White River.

### ***Fish Advisories in County Waters***

- **When a popular fishing location is under a state advisory, MCPHD places signs warning residents of the dangers of consuming the fish.**

Indiana Fish Consumption Advisories range from eating fish only once per week to no consumption for certain fish from certain waters. The most common contaminant triggering advisories in Marion County fishing waters is polychlorinated biphenyls (PCBs), followed by mercury and other organic compounds and metals. MCPHD has no authority to regulate use of contaminated fish.

### ***Swimming Pool Safety and Water Quality***

- **MCPHD inspects 879 pools each summer season and 322 pools year-round, averaging 4,977 inspections each year.**

Swimming pools pose a number of potential health and safety hazards including drowning, illnesses from waterborne pathogens, and injuries from chemicals. MCPHD conducts monthly inspections at licensed facilities, with additional inspections based on complaints, unsatisfactory water tests, and illness or injury reports.<sup>60</sup> Trained environmental health specialists provide education and periodic training to better prevent injury and illness.

### ***Brownfield Sites***

A brownfield is a property where redevelopment is complicated by possible environmental contamination. The Indiana Brownfields program helps communities redevelop their brownfield properties.<sup>61</sup> There are many unidentified brownfields in Marion County.

### ***Leaking Underground Storage Tanks and Other Threats to Groundwater***

- **Marion County had 187 leaking underground storage tank reports from 2007 to 2013, increasing the risk of groundwater contamination.**

Leaking underground storage tanks often contaminate groundwater, presenting a threat to drinking water.

### ***Water Quality and Hazardous Materials Management***

- **In 2012, MCPHD responded to 95 emergency incidents, 107 sanitary sewer overflows, eight fish kills, and 240 general complaints or referrals.**

MCPHD’s Environmental Emergency Response Team (EERT) is on-call 24/7 to respond to chemical and sewage releases, meth lab location reports, infectious waste in public areas, radiological materials incidents, and other acute environmental hazards. It works closely with public safety personnel to assess and resolve hazardous materials incidents.

### ***Tattoo and Body Piercing Inspection Program***

- **MCPHD performed 1,053 inspections of tattoo and body-piercing facilities from 2008 to 2013.**

In the 2012-2013 licensing year, MCPHD licensed and regularly inspected 53 tattoo and body piercing facilities and investigated complaints regarding unlicensed facilities and in-home tattooing. The program minimizes the risk to customers and employees from bloodborne pathogens such as HIV, Hepatitis B and C, and allergic reactions.

## **PUBLIC HEALTH PREPAREDNESS: ALL-HAZARDS PREPAREDNESS**

Since Sept. 11, 2001, public health departments have greatly strengthened their ability to respond to disasters. MCPHD has a primary response role in biological emergencies (including terrorist attacks, pan-influenza, other bio-releases and disease importation), radiation emergencies, and extreme temperature emergencies.<sup>62</sup> MCPHD monitors and investigates trends in reportable communicable diseases and assists with responses to natural disasters and chemical and radiological emergencies.

### ***Collaboration with Local and State Agencies***

When the mayor of Indianapolis declares a disaster, the director of the MCPHD will coordinate medical and health care response. MCPHD coordinates safety

of food and water supplies, prevention and control of epidemics, delivery of emergency medical services, identification of victims and emergency mortuary services. MCPHD is also involved with emergency public information to ensure accurate, coordinated and timely information is provided to government, media, the private sector and the affected populace.

- **MCPHD maintains emergency response plans, coordinates surveillance and response such as for the 2009 H1N1 flu outbreak, and plans and conducts exercises to practice response plans.**<sup>63</sup>
- **MCPHD works with the City of Indianapolis Emergency Services, District 5 hospital and local health department coalitions and the MESH Coalition, a nationally recognized agency for emergency management for better county emergency response.**
- **Indianapolis was one of the first two communities in the nation to receive the H1N1 vaccine and continues to be a national leader in implementing the flu emergency response plan with the Indianapolis Safety Group.**

#### ***Medical Reserve Corps***

In addition to continuously training staff to respond to an emergency event, MCPHD manages a Medical Reserve Corps (MRC) of skilled volunteers to supplement emergency and public health resources.<sup>64</sup>

### **BUILT ENVIRONMENT: POLICIES AND INFRASTRUCTURE TO PROMOTE HEALTH**

#### ***Marion County Sidewalk Ordinance***

- **The 2008 sidewalk ordinance has resulted in additional sidewalks and funding for priority sidewalk projects.**

Thanks to local public health coalitions and community leaders, in April 2008 a sidewalk ordinance was passed in Marion County to provide greater opportunities for safe, healthful physical activity by establishing a more complete network of sidewalks.

#### ***Environmental Health in all policies***

MCPHD has begun working on a process with IN-NAACP, Improving Kid's Environment and Health by Design to ensure that environmental principles are included when developing new policies.

#### ***Transit Indiana/IndyGo***

MCPHD partners with local coalitions to advocate for improved public transit, supporting expanded IndyGo routes, the Central Indiana Regional Transportation Authority and IndyConnect. MCPHD also maintains communication with state legislators and the governor about transit project options.

#### ***Complete Streets Initiative***

MCPHD collaborates with health advocacy coalitions such as Health by Design, AARP and the State Department of Health to develop policies for access and safe use of streets for all users — pedestrians, bicyclists, motorists and public transportation riders of all ages and abilities.

#### ***Food Access***

- **MCPHD evaluates food accessibility in county neighborhoods.**

A food desert is generally considered to be an area that lacks access to affordable fruits, vegetables, whole grains, low-fat milk and other foods that make a healthy diet. MCPHD has used food licensure data to map groceries, restaurants and supplemental food programs such as food pantries.

#### ***School Food Programs: Healthy Choices***

- **MCPHD has baseline data to gauge movement toward healthier cafeteria options in the future.**

MCPHD worked with the county's school districts to assess offerings in school cafeterias during the 2012-2013 school year. Food service managers indicated that the most popular foods selected by students were pizza, chicken nuggets, hamburger/cheeseburger, chicken patty/sandwich and tacos/taco salad.

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### **CONCLUSION**

MCPHD maintains an extensive array of activities to monitor potential threats to the public's health, to assure that they are addressed before they become significant problems, and to address public health problems inherited from the county's history.



# 2012 COMMUNITY HEALTH ASSESSMENT PHONE SURVEY

This section presents results from the 2012 Community Health Assessment survey, one of the data sources for the age-specific work groups. The survey content was developed with the advice of the Steering Committee, faculty from several Indiana universities and other topical experts. In addition to informing the CHA, the data will also provide MCPHD and our partners with uniquely precise and representative information about our community's health.

From June 1 to Sept. 12, 2012, a 16-minute random sample landline and cellphone survey was conducted among 5,013 Marion County residents over the age of 18. The purpose of the survey was to assess community health needs, access to health care, and health risk factors. Most survey questions were taken from standard instruments, including the CDC's Behavioral Risk Factor Surveillance System questionnaire and the National Health Interview Survey. Nearly 6% of interviews were conducted in Spanish, and 30% of the sample was conducted with cellphones.

In this survey summary, the percentages reported are from the percent of those who answered the question, excluding respondents who responded "don't know" or refused to answer the question. All items had a response rate of at least 95%, except where noted. The percentages in the following tables may not sum to 100% due to rounding.

## CHILDREN'S SURVEY RESPONSES (CHILDREN AGES 5-17)

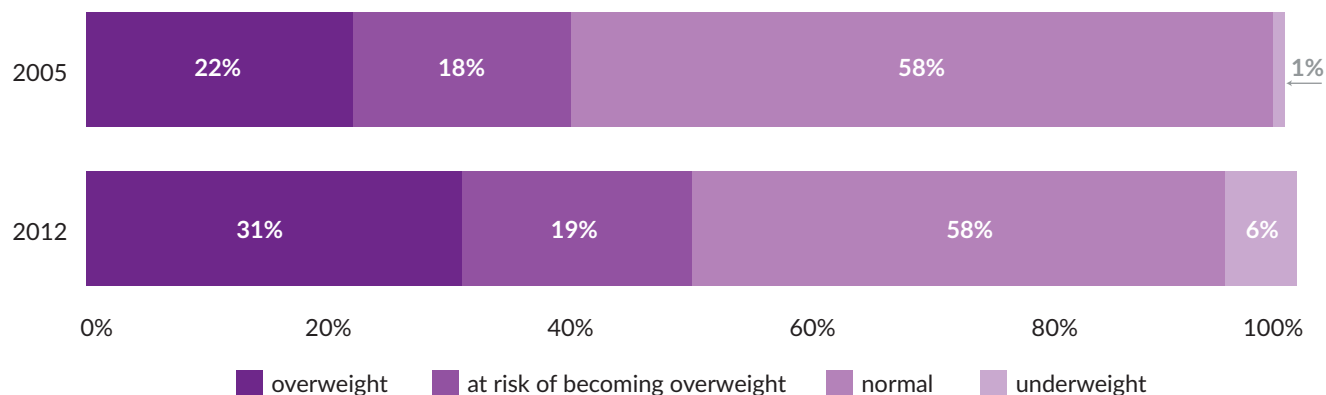
This is the Marion County Public Health Department's first countywide representative survey of school-age children's health. A child was randomly selected in the 1,348 households with any children ages 5-17, and the respondent was questioned about that child. Data from these households were weighted to represent all county children ages 5 to 17. Of the 1,348 adult respondents, 80% were the child's primary caregiver.

### Children's Weight Status

Overall, 30% of children ages 5 to 17 were overweight and 22% were at risk of overweight.<sup>65</sup> These percentages are similar to U.S. rates for school-age children.<sup>66</sup>

In 2005, MCPHD worked with public schools in the county to measure children's height and weight. That study found that 22% were overweight and 18% were at risk of overweight. Therefore, in the seven years from 2005 to 2012, the proportion of overweight children increased from about 2 to 3 out of 10, and the proportion of overweight children and children at risk of overweight increased from 4 to 5 out of 10.

**Figure 1: Overweight Among 5- to 17-Year-Olds, Marion County, 2005 & 2012**

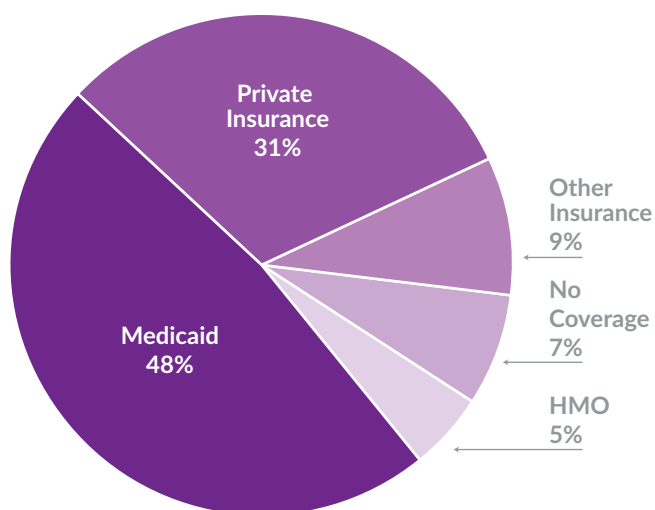


### Child Health Care Access

Overall, 7% of children had no health insurance coverage, similar to the percent uninsured in the United States.<sup>67</sup> Among children with health care coverage, 48% received health care through Medicaid.

One in 10 children (11%) did not have a primary health care provider. This is over twice the rate of 4.7% or less for school-age children in the United States (NHIS, 2011).<sup>68</sup>

**Figure 2: Health Care Coverage Type Among 5- to 17-Year-Olds, Marion County, 2012**



### Emergency Department Use

One in four children (26%) had one (18%) or more (8%) emergency department visits in the previous 12 months. This is 10 percentage points greater than the national proportion using the ED at least once in the past year (16%, NHIS 2011).<sup>69</sup> On average, the surveyed population had just less than one-half (0.4) an ED visit per person.

### Dental Visits

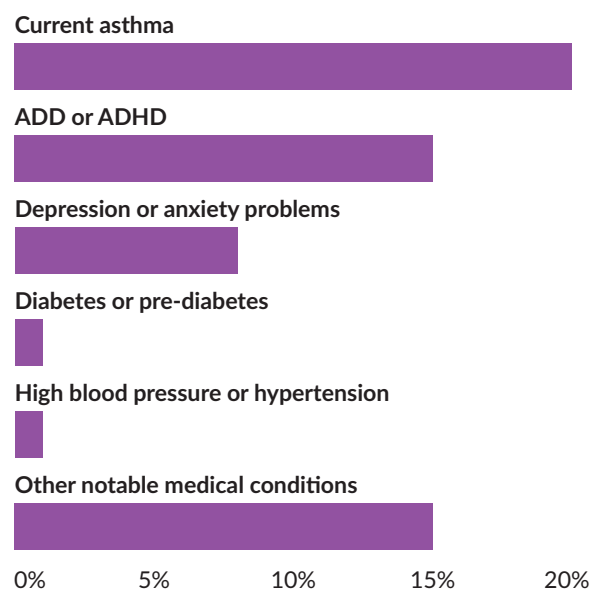
Over 81% of children were reported to have had a dental visit in the past 12 months.

### Child's Health Status

The adult respondent was asked if a health care provider had ever diagnosed the child with certain conditions. Results: 20% of children had asthma, 15% had been diagnosed with attention deficit or hyperactivity disorder, and 9% had been diagnosed with depression or anxiety. Fewer than 2% had diabetes or hypertension.

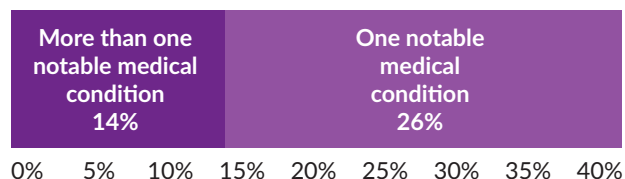
National rates for children ages 5-17 were lower,<sup>70</sup> about half of Marion County rates for asthma and 80% of county estimates for ADHD.<sup>71</sup>

**Figure 3: Percent of 5- to 17-Year-Olds with Certain Medical Conditions, Marion County, 2012**



In all, 40% of Marion County children had at least one of these or another significant medical condition, including 14% with more than one significant medical condition.

**Figure 4: Percent of 5- to 17-Year-Olds with Listed Medical Condition, Marion County, 2012**



### Other Risk Factors

**Screen Time:** The American Academy of Pediatrics recommends that children spend less than two hours a day watching TV, playing video games, or having other screen time for entertainment.<sup>72</sup> One out of three (35%) Marion County children had less than the two hours of screen time not related to schoolwork. Children in our county had an average of 3.6 hours of screen time per day not related to school. That includes television, video games and other recreational computing. Twenty-five percent reported five or more hours per day.

**Physical Activity:** 94% of children were reported to be moderately active for at least one hour per day.

**Secondhand Smoke Exposure:** 17% of children lived where someone smoked within the home.

### ADULT SURVEY RESPONDENTS

Respondents were randomly chosen within contacted households by selecting the adult with the most recent birthdate.

### Demographics

#### Race/Ethnicity

The respondents classified themselves as:

- 54% white non-Latino
- 27% black non-Latino
- 13% Hispanic

No other single race or ethnicity made up over 1% of the sample.

### Age

Overall, 13% were ages 18-24, 11% were 25-30, 28% were 31-45, 34% were 46-64, and 13% were 65 years old or older. This age and ethnicity distribution reflects that seen in the county population.

### Education and Other Characteristics

- English was not the primary language in 16% of households in the county.
- Some 15.7% of adults in the county did not have a high school level or equivalent education.
- At least 1 in 5 households (22%) met 100% of federal poverty guidelines.

### Social and Environmental Safety

The majority of respondents felt safe in their neighborhood, and 3 in 4 felt neighbors were willing to help each other. However, 1 in 4 reported an indicator of neighborhood decline: vacant/abandoned properties. Respondents were asked their level of agreement with three perceived community safety issues:

- 92% of adults agreed that they felt safe in their neighborhood.
- 79% felt their neighbors were willing to help each other.
- One in four (25%) agreed there were many vacant, abandoned or rundown properties in their neighborhood.

### Connected Neighborhoods

Over 3 in 4 (75% or more) said their neighborhoods had sidewalks that were in good condition, lighted at night, and connected to major intersections, destinations or public transit.

Two-thirds (67%) of respondents could walk to a park or greenway, but only 1 in 3 had a community center or library within walking distance.

### Usual Mode of Travel

- Over 6% walked.
- Under 2% biked to work or school.
- 5% took public transportation.

Thus, at least 13% of county residents achieved CDC's moderate level of physical activity (150 minutes per week) through "active transit."

### Food Buying and Nutrition Awareness

Over half (54%) of respondents reported having a full-service grocery within a 10-minute walk of their homes. Nearly all (97%) shopped at a full-service grocery or discount center.

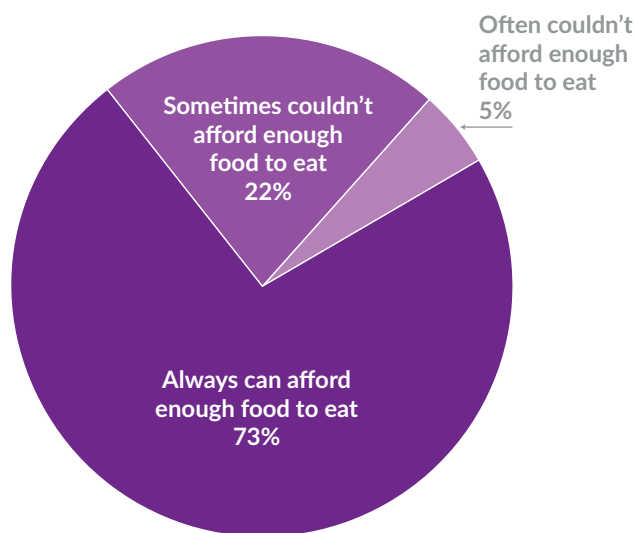
Adults had an average of only two fast food snacks or meals each week, but 1 in 10 ate fast food at least once per day in the past week.

About a quarter of adults (27%) often looked for nutrition information at restaurants. Another quarter (23%) looked for such information at least some of the time.

### Food Security

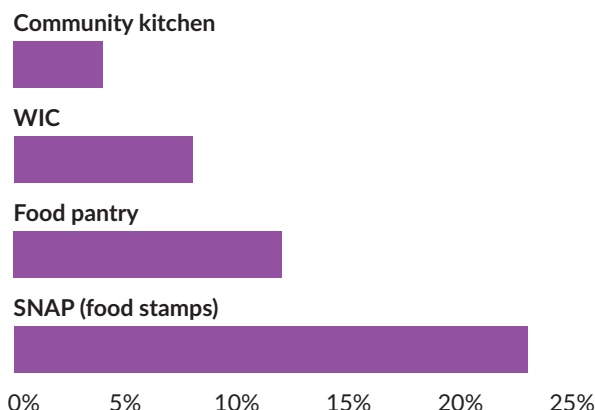
In the past year, over 1 in 4 (27%) households sometimes could not afford enough food to eat, including 5% that often could not afford enough food to eat.<sup>73</sup>

**Figure 5: Percent of Households by Food Insecurity in the Past 12 Months, Marion County, 2012**



One in four adults (23%) used food stamps (SNAP). About half that many (12%) reported using a food pantry in the previous 12 months.

**Figure 6: Food Support Use in the Past 12 Months, by Household, Marion County, 2012**



### Obesity Level

Respondents self-reported their height and weight. From that, their body mass index (BMI) was calculated. BMI values of 18.5 to less than 25 are considered normal, 25 to less than 30 overweight, 30 to less than 40 obese, and 40 and over morbidly obese.

- 1 in 3 Marion County adults (33%) was obese, and 2 in 3 (67%) were obese or overweight.
- The U.S. has a similar prevalence (65.5%) of obesity or overweight, but slightly less obesity within that group (28% obese, 37.5% overweight).<sup>74</sup>

Compared to results from Marion County's 2005 community health survey, the 2012 results show a 7 percentage point increase in obesity (up from 26%), and a 6 percentage point increase in obesity or overweight (from 61%). The portion of adults who were morbidly obese increased from 4% to 6% over that seven-year period (Figure 7).

All race and gender groups saw some obesity increase. The largest increases in obesity were among Hispanic males and black females, both increasing 9 percentage points.

While obesity ranged from 20% to 30% of other groups, the obesity rate among black females was 38%, with another 30% being overweight.

**Figure 7: Body Mass Category, Adults Age 18 Years or Older, Marion County, 2005 & 2012**

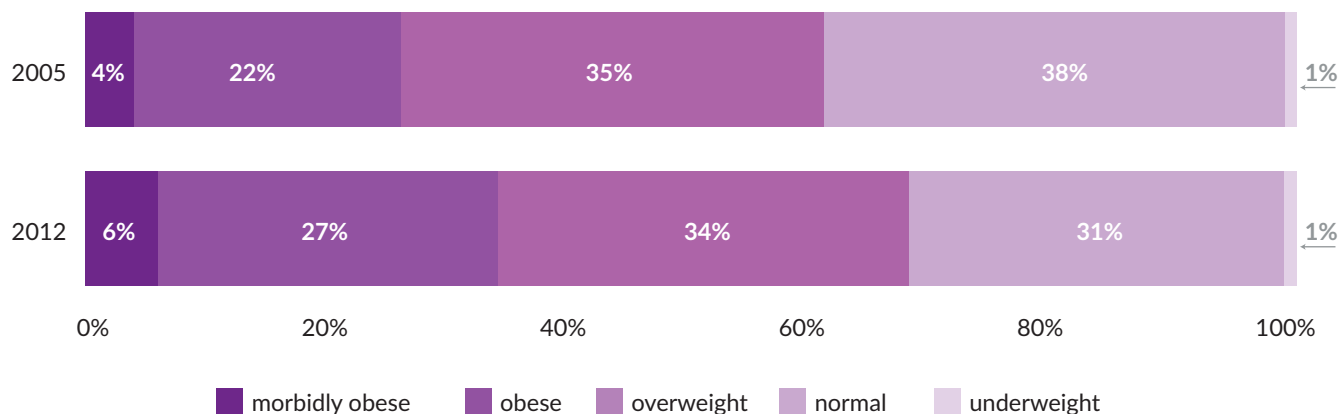
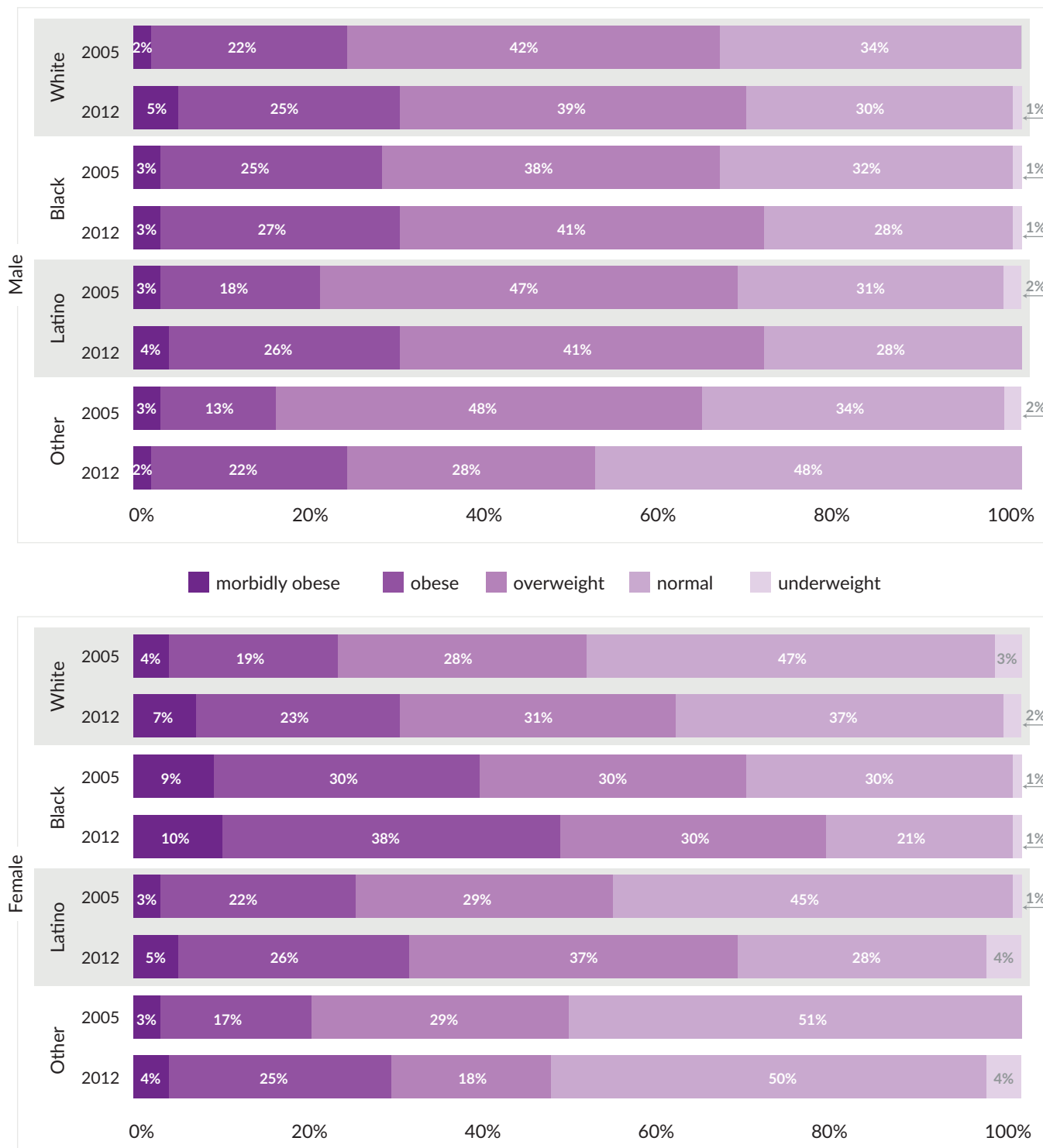




Figure 8: Body Mass Category by Race and Gender, Adults Age 18 Years or Older, Marion County, 2005 & 2012



### Physical Activity Levels and Wellness

The Centers for Disease Control (CDC) recommends that adults get at least 150 minutes of moderately intense physical activity each week (or about 30 minutes per day, 5 days per week). Eight out of 10 respondents (81%) reported getting at least 30 minutes of moderate physical activity each day. Similar to the U.S. rate, 73% of Marion County adults had some physical activity in the previous 30 days, not related to work.<sup>75</sup>

Among the 56% of respondents who were employed, 54% had workplace wellness programs. Where those programs existed, over three-fourths (77%) of respondents said their supervisors supported participation.

One in five adults (22%) had an average of at least one day per week of restricted activity and poor health. This includes 1 in 20 adults (5.6%) with constantly restricted activity due to poor health. Over 1 in 8 (12%) required

special medical aid or equipment compared to 8% nationally.<sup>76</sup>

Adults had an average of 3.7 hours of screen time per day, not related to their work. One in four (25%) reported five or more hours of television viewing per day.

### Access to Health Care

- Three in four adults (77%) had some kind of health insurance coverage, compared to 82% nationally.<sup>77</sup>
- Two-thirds (65%) had a usual primary health care provider.
- However, sometime in the prior year, 1 in 4 (23%) adults did not seek health care due to cost, 25% did not fill a medication prescription due to cost, and 25% visited a dentist while experiencing tooth pain.
- One in five (22%) needed at least occasional help reading medical instructions.

**Figure 9: Health Care Access and Cost as a Barrier, Adults Age 18 and Older, Marion County, 2012**

**Has health care coverage**



**Has one usual health care provider**



**Did not get health care due to cost in the past 12 months**



**Did not fill prescription due to cost in the past 12 months**



0% 10% 20% 30% 40% 50% 60% 70% 80%

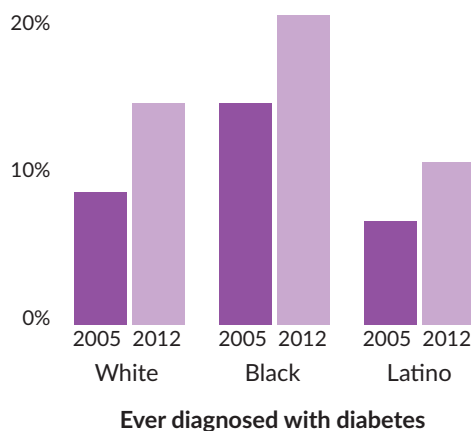
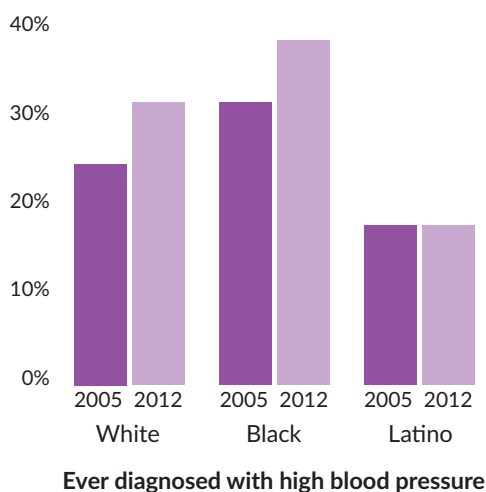
## Diagnosed Chronic Diseases

Over half (59%) of all county adults reported being told by a health professional that they had at least one chronic disease. One-third (32%) had more than one.

- 1 in 3 (31%) was told that he or she had high blood pressure (similar to the U.S. rate).<sup>78</sup>
- 1 in 5 (21%) had depression vs. 17% in the U.S.
- 14% had diabetes (Types 1 & 2, non-gestational) compared to 9.5% nationally.
- 11% had current asthma vs. 9.1% in the U.S.
- 7.7% had had a heart attack, angina or coronary heart disease.
- 1 in 4 adults (24%) had been advised that they had high blood cholesterol, lower than the U.S. average of 38%.

Both high blood pressure and diabetes have become more common since the previous countywide community health survey in 2005, and the 2012 results were similar to increasing U.S. rates.

**Figure 10: Prevalence of High Blood Pressure and Diabetes by Race, Adults Age 18 and Older, Marion County, 2005 & 2012**



In an average group of 20 Marion County black adults:

- 8 would have high blood pressure
- 3 or 4 would have diabetes
- 3 or 4 would have diagnosed depression
- 3 would have asthma.

In an average group of 20 Marion County white adults:

- 6 would have high blood pressure
- 3 would have diabetes
- 5 would have diagnosed depression
- 2 would have asthma.

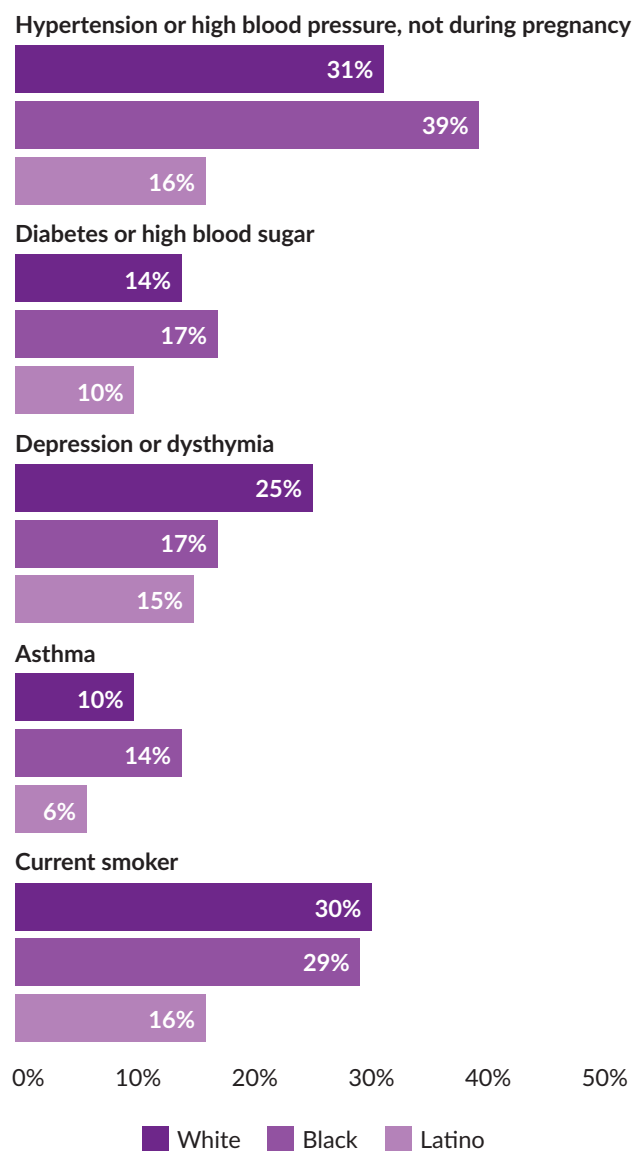
In an average group of 20 Marion County Hispanic adults:

- 3 would have high blood pressure
- 2 would have diabetes
- 3 would have diagnosed depression
- 1 would have asthma.

The low prevalence of chronic disease among Hispanics is due in part to their age distribution; relatively few Hispanics in the county are over 50 years old.

Diagnoses of high blood pressure, diabetes and asthma were more common among blacks than whites and were least common among Hispanics. Depression was much more common among whites (Figure 11).

**Figure 11: Prevalence of Chronic Diseases and Smoking by Race, Adults Age 18 and Older, Marion County, 2012**



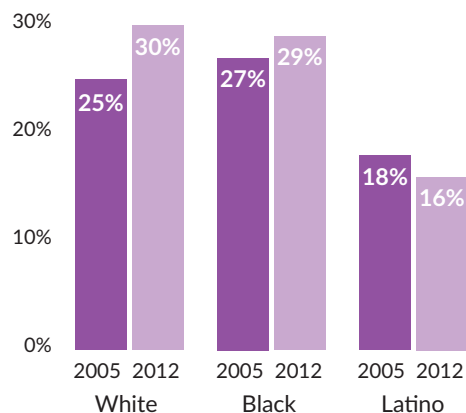
## Health Risk Factors

### Smoking:

- Three out of every 10 (29%) adults smoked cigarettes, compared to 1 in 5 (21.1%) of U.S. adults. County rates are over twice the prevalence set by HP2020 objectives (12%).

- Half (48%) of these smokers had tried to quit in the past year.
- Smoking increased among white, and possibly black, adults since 2005. The 2005 and 2012 estimates differ significantly only for whites (Figure 12).

**Figure 12: Prevalence of Smoking by Race, Adults 18 Years and Older, Marion County, 2005 & 2012**



### Alcohol Use:

Five in 10 adults (49%) had not consumed alcohol in the past month, while 3 in 10 (29%) had drunk heavily at least once in that period. This rate is higher than the 5% heavy drinkers rate reported for the U.S. population.

### Firearms:

Over 1 in 5 (22%) households had some handgun or other firearm.

## SURVEY CONCLUSIONS

Marion County children ages 5 to 17 were similar to national samples in terms of health care coverage and overweight levels. They exceeded national levels of asthma and ADHD. They were less likely than U.S. sampled children to have a usual source of health care, and less likely to have visited the emergency department in the past year.

Adults in the county were more likely than all U.S. adults to report a diagnosis of almost all chronic diseases and risk factors such as smoking and obesity. The exceptions to this were hypertension, restricted activities due to health, and rates of physical activity, for which Marion County rates were similar to U.S. rates, and high cholesterol level, for which the Marion County rate was lower than the U.S. rate.

## APPENDIX 1

# Steering Committee Members, March 2014

Merri Anderson  
*Indianapolis Neighborhood  
Resource Center*

Marc McAleavey  
*Indianapolis Neighborhood  
Resource Center*

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*United Way of Central Indiana*

Fred Bagg  
*Franciscan St Francis Health*

Orion Bell  
*Central Indiana Council on Aging (CICOA)*

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Ben Clark, J. Clay  
*IU Health*

Karen Frederickson Comer  
*Polis Center at IUPUI*

Miriam Acevedo Davis  
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Indra Frank, MD  
*Improving Kids' Environment*

Charlene Graves, MD  
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Immunization*

Gina Hays  
*Mental Health America of Greater  
Indianapolis*

Matt Hendrix  
*Greater Indianapolis Progress Commission*

Katie Humphries  
*St. Vincent Health Services*

Afia Griffith  
*St. Vincent Health Services*

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*Community Health Network*

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K. Ligon  
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*IU Health*

Julie Pains  
*City of Indianapolis*

Doug Poe  
*American Indian Center of Indiana*

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*Richard M. Fairbanks Foundation, Inc.*

Nate Rush  
*Bethlehem House*

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*Gennsaret Clinic*

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(IndyCAN!)*

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IU School of Medicine*

Donna Stephens  
*Learning Well*

Anne-Marie Taylor  
*Indianapolis Neighborhood  
Resource Center*

Booker Thomas  
*HealthNet Clinics*

M. Luisa Tischner, M. Dotson  
*Indiana Latino Institute*

Rev. Angelique Walker-Smith  
*The Church Federation of  
Greater Indianapolis*

Christopher Weaver, MD  
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Johnnie Washington  
*MDWise, Inc. Medicaid MCO*

Jim Whitehead  
*American College of Sports Medicine*

Kjack William  
*Chin Community of Indiana*

Gregory Wilson, MD  
*Fairbanks School of Public Health, IUPUI*



## APPENDIX 2

# Community Health Assessment Work Group Members

The Marion County Public Health Department and the Community Health Assessment Steering Committee thank all members who volunteered their time and expertise to assist with the health assessment process. Asterisked names represent CHA Steering Committee members.

### **MATERNAL, INFANT AND TODDLER WORK GROUP**

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Afia Griffith\*  
*St. Vincent Health Services*

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*March of Dimes*

Caitlin Priest  
*Indiana Perinatal Network*

Leslie Power  
*Indianapolis Parks, Director of Programs*

Peggy Serbey  
*Indiana Child Protective Services*

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### **YOUNG CHILD (AGES 5-11) WORK GROUP**

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Jodi Hackworth  
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*IU School of Medicine, Injury Prevention*

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*Indianapolis Parks, Director of Programs*

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Katy Ellis  
MCPHD, *Tobacco*

Christina Feroli  
*Purdue Extension*

Dennis Fortenberry, MD  
*IU School of Medicine, Adolescent Medicine*

Anne Graves  
*YMCA of Greater Indianapolis*

Roberta Hibbard, MD  
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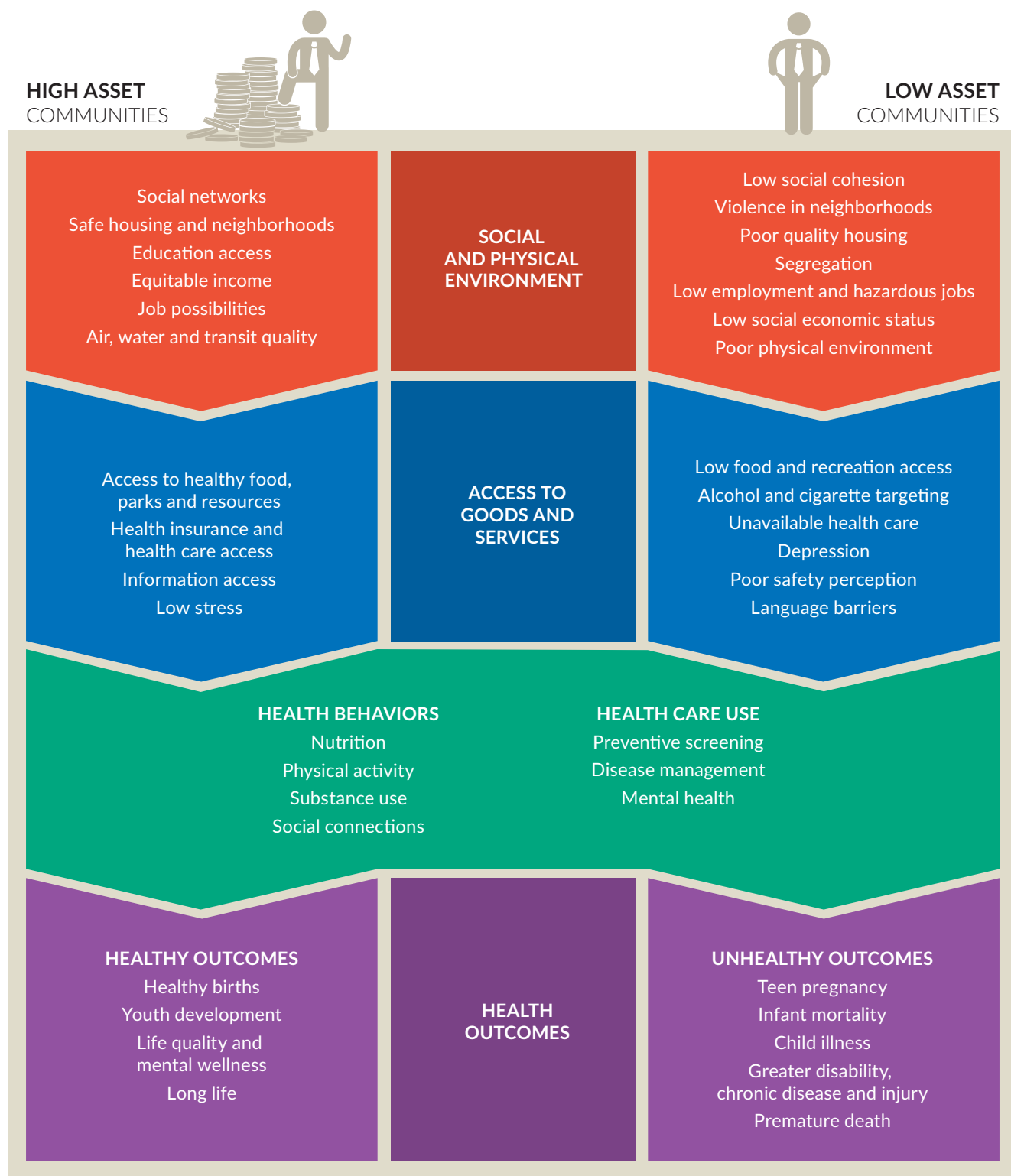
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# Social Determinants of Health



Source: Marion County Public Health Department (2012). Marion County 2012 Community Health Assessment.

# Work Group Priorities/Issues, by Category

| Priority/Issue                            | Work Group | Category                                                                                     |
|-------------------------------------------|------------|----------------------------------------------------------------------------------------------|
| Poverty                                   | 12-17      | Parental poverty translates to youth                                                         |
|                                           | 18-34      | High concentration of poverty indicators                                                     |
| Access to and Coordination of Care        | 0-4        | Poor outcomes and access to prenatal care in Medicaid births; high (black) prematurity rates |
|                                           | 65+        | Need for coordinated multi-chronic disease care                                              |
| Mental Health                             | 5-11       | High rates of ADHD and depression                                                            |
|                                           | 12-17      | Depression; suicide planning                                                                 |
|                                           | 18-34      | High rates of depression                                                                     |
|                                           | 65+        | Increasing rates of dementia                                                                 |
| Substance Abuse                           | 0-4        | High smoking rates in pregnancy (whites)                                                     |
|                                           | 35-64      | High rates of substance abuse; increasing prescription medication abuse                      |
| Violent Deaths and Prevention             | 12-17      | High homicide rates                                                                          |
|                                           | 18-34      | High homicide rates (ages 25-34)                                                             |
|                                           | 35-64      | High violent death rates                                                                     |
| Unhealthy Weight                          | 5-11       | High and increasing overweight and obesity rates                                             |
| Promoting Self Sufficiency                | 65+        | Need for more support for independent community living                                       |
| Chronic Disease Prevention and Management | 5-11       | High asthma prevalence                                                                       |
|                                           | 35-64      | High rates of disability                                                                     |

# Notes from Category Prioritization Discussion, 3/5/2014

## **POVERTY**

- Sick care vs. health care
- A multiplier that impacts all issues
- Includes homelessness
- Important community education point to raise as an issue

## **ACCESS TO CARE & COORDINATION**

- Many “silos” = ineffective response
- “Access” broadly defined as:
  - › Outreach
  - › Coordination
  - › Enrollment
- Integration coordination
- Need engagement in care, not just access
- Screening, not just treatment
- Work upstream, maintain wellness
- Access to health services, not just health care

## **MENTAL HEALTH**

- Suicide has a strong link to depression

## **SUBSTANCE ABUSE**

- Alcohol included
- Rx medication abuse
- Illegal drugs
- Tobacco included

## **VIOLENT DEATHS & VIOLENCE PREVENTION**

- Safety and security needed for all communities
- Must be one of the final seven priorities

## **OBESITY AND UNHEALTHY WEIGHT**

- Obesity – not just in child age group
- Fitness – opportunities not well known
- Weight loss
- Nutrition & prevention systems
- Built environment role in food access, activity access
- Outcomes
  - › Heart disease
  - › Diabetes
  - › Many things that could be independent outcome categories in themselves
- Endocrine disrupters – an environmental issue
- Malnutrition, hunger & underweight – other side of issue
- Diabetes in children – more common due to obesity
  - › Worse than asthma

## **PREVENTION AND WELLNESS**

- Some focus needed on health literacy & education

## **PROMOTING SELF SUFFICIENCY**

- Means keeping people in the community, not dependent on institutions
- Support for caregivers so they can persist in supporting independence
- Includes self-sufficiency at all ages, including mental health patients & homeless

## **CHRONIC DISEASE PREVENTION AND MANAGEMENT**

- Prevention first, treatment second

## **TOBACCO**

- Big Indiana issue

# Dissemination of the Health Assessment Reports and Priorities

## 1. COMMUNICATING THE FINDINGS: INTERNAL AND EXTERNAL TO MCPHD

### Forms of communication and collaboration:

- Data coordination
- Cross posting of the reports with partners
- Public awareness campaigns
- Press events and white papers
- Proposed policy changes
- Communications
  - › Indy Indicators website will have data and reports posted

### Audiences:

Lay public, providers, policymakers, professionals and partner organizations

- Always determine the audience as the principal driver of the form of communication.
- Start with educating MCPHD staff on the messages in the CHA.
- MCPHD must use opportunities for the education of the media, improving websites and social media.
- Maximum effective leverage points? Identify major players to get maximum results for effort. Specific actions should be recommended to specific groups, e.g. hospitals may have to target primary care providers' affiliated clinics.
- Collaborating with partners: Develop a tool set. Provide materials to assist organizations with communicating their message. Help encourage a sense of partnership with other organizations.
- Also "think outside the box." Alternative grassroots communications; push message to consumers.
- Searchable e-communications: webinars, "TED" talks, Web-based PowerPoints.

- Executive Summary: Use it when linking to other partners' websites with an invitation to get full report and join CHIP process. Post on partners' websites.

### Priorities:

We recognize that poverty, poor education and employment are the social determinants that apply to all of us in a community. This is reflected in our other priority health issues of poor mental health, poor access to care, and poor outcomes in obesity, smoking, etc., which are leading causes of disease.

Share executive summary and reports with (overall listing):

- CHA participants (executive summary and link to full report):
  - › Work group members
  - › Steering Committee members
- Health care providers and health advocacy agencies:
  - › All hospital systems
  - › Medical societies and other health professional societies
  - › Indiana Primary Health Care Association
  - › Affordable Care Organizations (for planning activities)
- Grant makers/foundations:
  - › United Way (community planning division)
  - › Central Indiana Community Foundation (CICF)
  - › Pulliam Foundation
  - › Fairbanks Foundation
- Community leaders and policy makers:
  - › Front Porch Alliance — City of Indianapolis
  - › State and Indianapolis chambers of commerce
  - › Indianapolis Housing Agency (housing safety/ smoke-free housing)



- › Indiana Neighborhood Resource Center
- › Indiana Minority Health Coalition
- › Top 10 by (20)25 Coalition (healthy living coalition)
- › Labor unions
- Academic partners:
  - › Osteopathy OD program at Marian University
  - › IUPUI Schools of Nursing, Social Work, Medicine, Public and Environmental Affairs (SPEA); Fairbanks School of Public Health
  - › Butler University School of Pharmacy

## **2. PERINATAL AND SMALL CHILD WORK GROUPS: COMMUNICATE REPORT FINDINGS TO...**

- Indiana Perinatal Network (IPN)
- March of Dimes/Indiana Academy of Pediatrics: Medicaid policies; advocates for primary care and child health. Educate women about Medicaid eligibility.
- Healthy Start (MCPHD): Presentations can be made. Reach area professionals and hospitals. Smoke Free Pregnancies Coalition (maternal smoking support)
- Domestic Violence Coalition
- Medicaid MCOs (e.g. Anthem, MDWise and MHS) that serve this area. Educate the providers this way about Presumptive Eligibility.

## **3. ADOLESCENTS, AGES 12-17 WORK GROUP: COMMUNICATE REPORT FINDINGS TO..**

- School networks, including MSDs and charter schools
- School professionals: middle and high school principals, district social workers, guidance counselors, school nurses and wellness coordinators, high school probation officers
- Learning Well, Inc. (school health clinic provider)
- Indiana Department of Education: lead health and social work offices
- Health care: adolescent clinics, teen health care, adolescent providers and researchers, Children's Health Service Research (IUPUI)
- Mental health providers: Gallahue, Cummins, Midtown, Adult & Child (provide service in schools)

- Legislature: local government (any representatives whose constituents have a concentration of these issues), City-County Council (especially president and head of Committee on Community Quality of Life), township trustees
- Foundations: CICF, Pulliam, Lilly, United Way
- Other coalitions: Connect by 25, Success by 6, 10-Point Coalition
- Goodwill: Indianapolis Met (Indianapolis Metropolitan High School)
- Indiana Black Expo
- City of Indianapolis: Gang Task Force, neighborhood centers
- Other organizations for youth: Boys & Girls Clubs, churches, CYO, Scouts, YMCA
- Indiana Minority Health Coalition

## **4. YOUNG ADULTS, AGES 18-34 WORK GROUP: COMMUNICATE REPORT FINDINGS TO...**

- City of Indianapolis: Mayor's neighborhood liaisons, Indy Parks
- LISC (pilot work in health, quality of life planning)
- Indiana Family and Social Services Agency (FSSA): Division of Child Services; social services
- Eskenazi Health: population health coordinators for each clinic
- IUPUI: Center on Philanthropy, Indy Indicators website
- School wellness councils (contact: Stephanie Thornberry)
- Lilly Health Center Board of Directors

## **5. MIDDLE-AGED ADULTS, AGES 35-64 WORK GROUP: COMMUNICATE REPORT FINDINGS TO...**

- Associations of social workers and black social workers
- Noble Center, Goodwill (disability services)
- Indiana Division of Mental Health and Addiction
- Indiana Primary Health Care Association

- Association of Emergency Room Providers; State AMA
- City of Indianapolis: police and public safety
- Nursing organizations: Visiting Nurse Service, Black Nurses Association, Indiana State Nurses Association (and their annual meetings)
- Indiana Public Health Association
- Indiana Diabetes Association
- Media/TV stations: press releases with highlights
- “Living Well Indy” coalition (focus is child obesity but involves hospital providers; work with United Way)
- Greater Indianapolis Progress Commission (GIPC) — CEOs; other working committees interested in health care that may increase productivity
- Community Mental Health Centers (CMHCs)
- National Mental Health Association (Mental Health America of Indianapolis)
- Indianapolis offices of NAACP/Urban League
- Indianapolis Chamber of Commerce

## **6. SENIOR ADULTS, AGE 65+ WORK GROUP: COMMUNICATE REPORT FINDINGS TO...**

- Health care providers and health advocacy agencies:
  - All hospital systems (Health Assessment; planning and gerontology programs)
  - Central Indiana Nursing Home Association
  - Alzheimer's Association

- Arthritis Association
- Indiana Assisted Living Association
- Home Care Task Force
- Association for Home and Hospice Care (advocacy; evaluation of in-home care needs)
- Visiting Nurse Service
- Little Red Door agency
- Mental Health and Aging coalition
- Indiana Dementia Network (IU School of Medicine Healthy Aging program)
- Veteran's Associations; Veteran's Assistance Center for Homeless Veterans
- Community leaders and policy makers:
  - Front Porch Alliance — City of Indianapolis
  - AARP: Safe Streets promotion; naturally occurring retirement areas
  - Elders at the Table coalition (EAT)
  - Aging-In-Place Coalition “Communities for a Lifetime”
  - Generations Project
- Academic partners:
  - University of Indianapolis Center for Aging
  - Community Health Engagement Program (CHEP)
  - Community Translational Science Institute (CTSI)

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- <sup>55</sup> Indiana Department of Environmental Management, Air Quality in Indiana. Indiana Diesel Reduction Projects. [www.in.gov/idem/airquality/2567.htm](http://www.in.gov/idem/airquality/2567.htm)
- <sup>56</sup> Information about the smoking ban can be found at: [www.indy.gov/eGov/City/DCE/Licenses/Documents/Smoking%20Ordinance%20FAQ%205.1.12%20LINKED.pdf](http://www.indy.gov/eGov/City/DCE/Licenses/Documents/Smoking%20Ordinance%20FAQ%205.1.12%20LINKED.pdf)
- <sup>57</sup> Citizen's Sustainability Report 2013 [www.citizensenergygroup.com/pdf/2013SustainabilityReport.pdf](http://www.citizensenergygroup.com/pdf/2013SustainabilityReport.pdf)
- <sup>58</sup> Environmental Protection Agency. (2013). SDIWS Violation Report: City of Lawrence Utilities. Retrieved on October 16, 2013, from [oaspub.epa.gov/enviro/sdw\\_report\\_v2.first\\_table?pws\\_id=IN5249005&state=IN&source=Groundwater&population=46100&sys\\_num=0](http://oaspub.epa.gov/enviro/sdw_report_v2.first_table?pws_id=IN5249005&state=IN&source=Groundwater&population=46100&sys_num=0)
- <sup>59</sup> For more information about CSOs in Marion County and the long term plan to decrease them, please visit: [www.citizensenergygroup.com/Wastewater/CSO.aspx](http://www.citizensenergygroup.com/Wastewater/CSO.aspx)
- <sup>60</sup> The Pool Program's regulatory authority rests in the state pool code (410 IAC 6-2.1) and when necessary inspectors can issue notices of violation to, or bring suit against, pool facilities to ensure compliance with the pool code.
- <sup>61</sup> Indiana Department of Metropolitan Development. Indianapolis Brownfields Redevelopment Program. [www.indy.gov/eGov/City/DMD/ED/Brownfields/Pages/home.aspx](http://www.indy.gov/eGov/City/DMD/ED/Brownfields/Pages/home.aspx)
- <sup>62</sup> The current extreme temperature plan for Marion County can be accessed at: [www.indy.gov/eGov/City/DPS/DHS/Preparedness/Documents/CEMP%20DECEMBER%202012/Extreme%20Temperature%20Plan%20Dec%202012.pdf](http://www.indy.gov/eGov/City/DPS/DHS/Preparedness/Documents/CEMP%20DECEMBER%202012/Extreme%20Temperature%20Plan%20Dec%202012.pdf).
- <sup>63</sup> The city's complete Comprehensive Emergency Management Plan can be accessed at: [www.indy.gov/eGov/City/DPS/DHS/Preparedness/Documents/CEMP%20OCTOBER%202011/ESF%20Descriptions.pdf](http://www.indy.gov/eGov/City/DPS/DHS/Preparedness/Documents/CEMP%20OCTOBER%202011/ESF%20Descriptions.pdf)
- <sup>64</sup> Medical Reserve Corps. <https://www.medicalreservecorps.gov>.
- <sup>65</sup> Overweight and at-risk categories are based on CDC age/gender specific growth charts.
- <sup>66</sup> Ogden, C. et al. 2010, Health\_E Stat, Prevalence of Obesity Among Children and Adolescents: United States, Trends 1963-1965 Through 2007-2008.
- <sup>67</sup> Summary Health Statistics for U.S. Children: National Health Interview Survey, 2011, Series 10, Number 254, December 2012. [www.cdc.gov/nchs/data/series/sr\\_10/sr10\\_254.pdf](http://www.cdc.gov/nchs/data/series/sr_10/sr10_254.pdf)
- <sup>68</sup> Summary Health Statistics for U.S. Children: National Health Interview Survey, 2011, Series 10, Number 254, December 2012, Table 12, 3.1% for ages 5-11, 4.7% for ages 12-17. [www.cdc.gov/nchs/data/series/sr\\_10/sr10\\_254.pdf](http://www.cdc.gov/nchs/data/series/sr_10/sr10_254.pdf)
- <sup>69</sup> Summary Health Statistics for U.S. Children: National Health Interview Survey, 2011, Series 10, Number 254, December 2012, Table 16, for ages 0- under 18. [www.cdc.gov/nchs/data/series/sr\\_10/sr10\\_254.pdf](http://www.cdc.gov/nchs/data/series/sr_10/sr10_254.pdf)
- <sup>70</sup> Summary Health Statistics for U.S. Children: National Health Interview Survey, 2011, Series 10, Number 254, December 2012, finds 9.9% of children 5-11 having current asthma, and 11.9% of those 12-17 having current asthma. [www.cdc.gov/nchs/data/series/sr\\_10/sr10\\_254.pdf](http://www.cdc.gov/nchs/data/series/sr_10/sr10_254.pdf)
- <sup>71</sup> Ibid., Table 3 for ages 3- under 18.
- <sup>72</sup> Gentile, DA, Oberg, C, Sherwood, NE, Story, M and Walsh, DA. Well-Child Visits in the Video Age: Pediatricians and the American Academy of Pediatrics' Guidelines for Children's Media Use, *Pediatrics* 2004; 114:1235.
- <sup>73</sup> The U.S. Department of Agriculture monitors the extent and severity of food insecurity in U.S. households through the food security section of the annual, nationally representative Current Population Survey. In 2006, 10.9% of households experienced food insecurity at some point during the year. Households with children tended to be more affected by food insecurity and were nearly twice as likely to report food insecurity during at least part of the past year as were households with no children under the age of 18 years (15.6% versus 8.5%, respectively). In Widome, R, Eating When There is Not Enough to Eat: Eating Behaviors and Perceptions of Food Among Food-Insecure Youths. *Am J Public Health*. 2009;99:822-828.
- <sup>74</sup> CDC BRFSS, 2011, [apps.nccd.cdc.gov/brfss/display.asp?cat=AS&yr=2010&qkey=4416&state=UB](http://apps.nccd.cdc.gov/brfss/display.asp?cat=AS&yr=2010&qkey=4416&state=UB)
- <sup>75</sup> CDC BRFSS, 2011, [apps.nccd.cdc.gov/brfss/display.asp?cat=AS&yr=2010&qkey=4416&state=UB](http://apps.nccd.cdc.gov/brfss/display.asp?cat=AS&yr=2010&qkey=4416&state=UB)
- <sup>76</sup> Ibid., BRFSS 2011.
- <sup>77</sup> Ibid., BRFSS 2011.
- <sup>78</sup> Ibid., BRFSS 2011.