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September 2019

# **COMMUNITY HEALTH ASSESSMENT 2019**

**Montgomery County, Ohio** 



#### From the Health Commissioner:

Dear Family, Friends, and Neighbors:

Public Health - Dayton & Montgomery County's 2019 Community Health Assessment describes the health of our county and identifies key factors that contribute to our public health challenges. Similar to previous versions in 2010 and 2014, the county-level data in this assessment measure behavioral health, maternal and child health, deaths, chronic diseases, health risks, built environment and access to care. New to this assessment are geographic snapshots which define health characteristics of smaller areas of the county.

The data tell a compelling story around disparities in health outcomes between population groups. Our White population enjoys a longer lifespan, has more economic stability, experiences less burden of preventable disease and violence, and benefits from better access to healthcare. Our Black, Asian, Native American and other populations and individuals of Hispanic ethnicity fare much worse and have less opportunity to be healthy.

This assessment is foundational to improving individual and population health because the data will be used to establish health priorities and to develop an action plan to best meet the needs of our diverse community. That action plan must incorporate health and equity considerations into decision-making on policies and services that impact public health. The public health needs and issues identified in this assessment underscore the urgent need for all sectors to address social determinants of health to maximize the health of all residents of Montgomery County.

Reducing the leading causes of preventable disease and premature death, reaching out to underserved, vulnerable populations and promoting health equity remain the cornerstones of creating a healthier Montgomery County. By working together, we can achieve our shared vision of Montgomery County as a healthy, safe and thriving community!

Sincerely,

Jeffrey A. Cooper Montgomery County Health Commissioner

J. Michael Sims, President • Patricia S. Meadows, MSSW, President Elect • Aaron R. Block, MD Bob Downing • Jan Lepore-Jentleson • Gary L. LeRoy, MD Marietta Orlowski, PhD • Emmett C. Orr, MPA • John F. Rhodes, DDS



#### **Board of Health Members**

# **EXECUTIVE SUMMARY**

Montgomery County's Community Health Assessment (CHA) will aid community partners, stakeholders, and residents in identifying priority health issues, developing goals, and selecting strategies for implementation as part of the Community Health Improvement Planning process. The data presented are from multiple sources such as the Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System (BRFSS), Ohio Department of Health Vital Statistics, U.S. Census Bureau, Greater Dayton Area Hospital Association hospital data, Dayton Children's Community Health Needs Assessment, Ohio Cancer Incidence Surveillance System (OCISS), and the Ohio Disease Reporting System (ODRS). Information is summarized into eight sections: population characteristics, behavioral health, maternal and child health, chronic disease risks and outcomes, health risks and outcomes, access to care, and built environment.

#### **Focus Groups**

Primary qualitative data were collected from focus groups representing five underserved communities: African Americans, African American Young Adults (under 30 years old), Lesbian, Gay, Bisexual, Transgender and Queer (LGBTQ), Hispanic/Latinos, and Senior Citizens. These groups provided input on health concerns and barriers to receiving health care within their communities as well as opportunities they felt could improve health. When asked to prioritize the health concerns discussed during the meetings the top five issues identified pertained to social determinants of health, mental health, substance use, chronic diseases, and care coordination.

#### **About Montgomery County**

Montgomery County's population of 531,987 is comprised of 73% White, 21% Black, 2% Asian, and 3% Native American or two or more races. Three percent of the population is of Hispanic or Latino ethnicity. The median income of households is \$47,045, but the percentage of Blacks living below the poverty level is more than two times higher than Whites. The homeless population is estimated at over 4,500 individuals; single men comprise the largest segment of this population (54%), followed by single women (28%), families with children (10%), minors (6%), and couples (2%).

#### **Behavioral Health**

Mental health and substance misuse and abuse are strongly influenced by a variety of social factors as well as an individual's physical environment. The rate of hospital visits for all major mental health disorders increased between 2016 and 2017. Twenty-one percent of Ohio youth have experienced three or more Adverse Childhood Experiences (ACEs). Men have the highest rates of suicide, and firearms are the most common mechanism of suicide. Most self-harm related hospital visits are paid by Medicaid indicating an income disparity. Since 2014, the overdose death rate has more than doubled in the county with most deaths occurring in the East Dayton area. Those with a high school education or less account for 76% of overdose deaths and Whites account for 81% of overdose deaths.

#### **Maternal Child Health**

Infant mortality is an important indicator of the overall health of a community. In 2017, nearly eight infants died for every 1,000 live births in Montgomery County. A racial disparity exists with Black babies dying at a rate four times higher than White babies. Most Montgomery County babies die because they are born too early and too small. Nearly 10% of babies are born of low birth weight (< 2,500g or 5lbs, 8oz). Two times as many low birth weight babies are born to Black women than to White and Hispanic women. Smoking during pregnancy, adequacy of prenatal care, and poor living conditions contribute to low birth weight.

#### Death

Since 2012-2013, the life expectancy of county residents has decreased 2.1 years. By sex and race, White women have the longest expectancy (78.0 years) while the life expectancy of Black men is 65.5 years. Homicide and suicide are not top causes of death overall, however, homicide is the 7th leading cause of death for Blacks and the 2nd leading cause for those 1 to 34 years of age. Suicide is the 3rd leading cause of death for the same age span and the 9th leading cause among men. Heart disease and cancer remain the top two leading causes of death in Montgomery County.

#### **Chronic Disease Risks & Outcomes**

About 69% of Montgomery County's adult population and half of the child population are overweight or obese. Less than 1 in 5 adults meet the physical activity guidelines. Twenty-three percent of the county's residents are smokers; 30% higher than the national average. Those with less than a high school education are more likely to be diagnosed with diabetes (26% compared to 14%). Those with lower incomes (less than \$15,000) are more likely to be heavy drinkers.

Age, race, and sex can attribute to differences in disease rates. New cancers and cancer deaths occur most often among those older than 65 years; those over 65 years account for nearly 70% of all cancer deaths and 56% of all new cancer cases. New cases of prostate cancer occur more frequently among Black males (155.1 per 100,000). Although rates of lung cancer death have declined since 2012-2013, males have the highest rate of lung cancer death (58.6 per 100,000).

#### **Health Risks & Outcomes**

Differences in health risks and outcomes are related to age, race, and sex. Accidents are the third leading cause of death regardless of race or sex, though they are the leading cause of death for those ages 1 to 54 years. Accidental deaths have nearly doubled since 2012-2013. Poisoning and falls account for 82% of all accidental deaths. Falls are most common among those 65 years and older.

The rate of sexually transmitted diseases, including chlamydia, gonorrhea, and syphilis, have increased since 2014. Specifically, the number of syphilis cases is five times higher. Most chlamydia (55.3%) and gonorrhea (48.5%) cases occur among 20 to 29 year olds. The number of new cases of HIV has remained stable since 2014. Montgomery County was included in a statewide hepatitis A outbreak in 2018. The number of hepatitis A cases dramatically increased from 1 in 2017 to 227 in 2018. Ninety percent of cases are White, 62% are between the ages of 25 and 44 years, and nearly 60% are male.

#### Access to Care

The ability to receive care is affected by several factors such as language, transportation, cost, and insurance. Nearly 21% of adults with an income of \$15,00 to \$24,999 report not seeing a doctor due to cost, whereas only 4% of those with an income greater than \$50,000 report not seeing a doctor due to cost. Montgomery County has more primary care physicians, but fewer dentists per person compared to Ohio and the U.S. Eight percent of residents are uninsured, while 11% of children have untreated cavities.

#### **Built Environment**

A person's built environment contributes to their overall health, quality of life, and longevity. Violent crime rates increased since 2013 and tend to be higher in low income areas. These same areas have older homes which lead to higher blood lead levels among children, a higher density of alcohol and tobacco retail outlets, and low access to grocery stores.



### **Key Community Health Indicators**

Indicator	Montgomery County	Ohio
Accidental Drug Overdose Death Rate (2017)	106.7 per 100,000	44.1 per 100,000
Suicide Death Rate (2016-2017)	15.6 per 100,000	14.5 per 100,000
Mental Health Provider Ratio (2017)	531:1	561:1
Substance Use Treatment Centers (2017)	2.3 per 100,000	3.5 per 100,000

#### **Birth Outcomes**

Indicator	Montgomery County	Ohio
Low Birthweight (< 2500g) (2017)	9.8%	8.7%
Women Who Smoked During Pregnancy (2017)	8.7%	11.0%
Preterm Births (< 37 weeks gestation) (2017)	11.6%	10.4%
Infant Mortality Rate (2017)	7.8 per 1,000 live births	7.2 per 1,000 live births

#### Mortality

Indicator	Montgomery County	Ohio
Heart Disease Death Rate (2016-2017)	176.8 per 100,000	185.4 per 100,000
Cancer Death Rate (2016-2017)	175.9 per 100,000	172.2 per 100,000
Accident Death Rate (2016-2017)	126.4 per 100,000	71.8 per 100,000
Life Expectancy at Birth (2016-2017)	74.0 years	75.6 years

#### Cancer

Indicator	Montgomery County	Ohio
All Cancer (2014-2015)	466.8 per 100,000	467.4 per 100,000
Breast (female) (2014-2015)	135.6 per 100,000	128.5 per 100,000
Prostate (2014-2015)	98.4 per 100,000	100.4 per 100,000
Lung (2014-2015)	72.7 per 100,000	69.4 per 100,000
Colorectal (2014-2015)	37.2 per 100,000	42.6 per 100,000

#### **Chronic Disease Health Risks**

Indicator	Montgomery County	Ohio	
Met Aerobic Recommendations (2015 & 2017)	25.4%	29.9%	
Overweight (2016-2017)	35.4%	34.5%	
Obese (2016-2017)	33.1%	32.6%	
Food Insecurity (2017)	17.0%	14.6%	
Current Smoker (2016-2017)	22.6%	21.8%	

#### Access to Care

Indicator	Montgomery County	Ohio
Percent Uninsured (2017)	8.0%	7.4%
Could not see a doctor because of cost (2016-2017)	10.6%	11.0%
Visited dentist within the past year (2014 & 2016)	63.4%	66.7%

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#### Introduction

In 2018, Public Health - Dayton & Montgomery County (Public Health) participated in the Southwest Ohio Regional Health Needs Assessment which involved 26 counties in 3 states. 35 hospitals, and 31 local health departments. This comprehensive and collaborative health needs assessment informed nonprofit hospitals and local health departments of the concerns faced by the larger communities they serve.

Public Health used the results of the regional assessment and health issues identified in focus groups to identify a central theme, Social Determinants of Health, of Montgomery County's 2019 Community Health Assessment.

#### "Social determinants of health are the conditions in the environment in which people are born, live, work, play, worship, and age that affect a wide range of health and guality-of-life outcomes" - Healthy People 2020

Ideally, everyone should have an equal opportunity to lead a healthy, fulfilling, and productive life. Unfortunately, some communities experience poorer health outcomes due to unfavorable social and environmental conditions such as poverty, unstable housing, unsafe neighborhoods, limited access to healthy food, and substandard education.

#### Social determinants are organized into 5 key areas:



#### **Tools for Understanding This Report**

#### **Report Layout**

The first section of this Community Health Assessment (CHA) is a summary of findings from the 6 focus groups representing underserved populations within Montgomery County. The following section includes Montgomery County data organized into 8 categories each containing several subcategory topics. These categories are population characteristics, behavioral health, maternal and child health, chronic disease risks and outcomes, health risks and outcomes, access to care, and built environment. If applicable, a narrative describing the Public Health Importance (PHI), and/or the relationship to Social Determinants of Health (SDOH) is associated with each subcategory topic. In addition, an Across the Nation table is included to compare Montgomery County to Ohio, the United States, and the Healthy People 2020 goal. The final section contains small area snapshots of sub-county level data, which highlight differences in health by geographic location within Montgomery County.

#### **Data Sources**

#### American Community Survey (ACS)

The U.S. Census Bureau conducts the ACS each year to provide communities with population estimates during the years between the Population and Housing Census, which is conducted every 10 years. Survey participants are selected via random sampling of addresses from every state to produce population, demographic, and housing unit estimates.

#### Behavioral Risk Factor Surveillance System (BRFSS)

The BRFSS is the largest health survey system in the U.S. conducted on a continuous basis. The Centers for Disease Control and Prevention (CDC) collects interview data through landline and cell phone surveys of adults 18 and older. The BRFSS provides estimates of the population's health-related risk behaviors, chronic health conditions, use of preventive services, and emerging health issues.

#### Greater Dayton Area Hospital Association (GDAHA) Healthcare Database

The GDAHA Healthcare Database is the central collection point for hospital data for all GDAHA member hospitals. This database is managed by ASCEND Innovations, Inc.

#### Vital Statistics – Ohio Department of Health (ODH)

ODH retains records of all births and deaths that occur in the state of Ohio and all births and deaths of Ohio residents that occur outside of the state.

#### Healthy People (HP) 2020

Healthy People produces science-based, 10-year objectives aimed at enhancing the health of all Americans. HP 2020 serves to identify nationwide health improvement priorities and provide measurable objectives and goals at the national, state, and local levels.

#### **Technical Note**

While the population of Montgomery County is becoming more diverse, certain races and ethnicities still cannot be represented alone in this assessment. A population needs to be large enough to provide an accurate representation of the population's health. An analysis based on small numbers is less reliable.



#### Key Terms

#### **Adequate Prenatal Care**

Prenatal care initiated by the fourth month of pregnancy and 80% or more of recommended visits received.

#### **Age-adjusted Rate**

A rate of morbidity or mortality in a population that is statistically modified to eliminate the effect of age differences in a population.

#### Air Quality Index (AQI)

An index for reporting daily air quality. It tells you how clean or polluted your air is, and what associated health effects might be a concern for you.

#### Behavioral Risk Factor Surveillance System (BRFSS)

A telephone (landline and cellphone) survey that collects data on healthrelated risk behaviors, chronic health conditions, and use of preventive services from U.S. residents 18 years of age and older.

#### **Binge Drinking**

Adult males having 5 or more drinks on one occasion, and adult females having 4 or more drinks on one occasion.

#### **Bipolar Disorder**

A mental health condition that causes mood swings that include emotional highs (mania) and lows (depression). In some cases, mania may trigger a break from reality (psychosis).

#### **Birth Rate**

The total number of live births per 1,000 females in a population in a year. The birth rate among females of child-bearing age (15 to 44yrs) is also called the general fertility rate.

#### Bisexual

An orientation that describes a person's emotional, romantic, and/ or sexual attraction to men, women, and other genders. Sometimes used interchangeably with "pansexual."

#### Body Mass Index (BMI)

A common measure of body fat calculated from a person's weight and height. In adults, a BMI between 18.5 and 24.9 is considered healthy. A BMI of 25 to 29.9 is overweight, and a BMI of 30 or more is obese. A child's (ages 2 to 19 years) BMI is calculated using a height and weight calculation, and the category is determined by plotting the BMI value on a gender and age specific growth chart.

#### **Built Environment**

Human-made surroundings in which people live, work, and play.

#### Cardiovascular Disease

A group of diseases that affect the heart or blood vessels. The most common disease, coronary artery disease, involves narrowed or blocked arteries that can lead to life-threatening events such as heart attack, stroke, or heart failure.

#### Cancer

Diseases in which abnormal cells divide without control and are able to invade other parts of the body.



#### **Census Tract**

Small, subdivisions of a county used by the U.S. census to provide a geographic boundary in which to collect statistical data. The average population size of a census tract is 4,000 people but it can range between 1,200 and 8,000 people.

#### **Chronic Disease**

A health condition that takes many months or years to develop and is long-lasting in its effects.

#### Chronic Lower Respiratory Disease (CLRD)

Diseases that affect the lungs and airways such as asthma and chronic obstructive pulmonary disease (COPD). Forms of COPD include emphysema and chronic bronchitis.

#### **Communicable Disease**

Diseases that spread from one person to another or from an animal to a person. The spread happens by an airborne viruses or bacteria, blood, or other bodily fluids.

#### Death Rate (Mortality Rate)

A measure of the frequency of death in a defined population during a specified interval of time.

#### **Focus Group**

A small-group discussion guided by a trained leader. It is used to learn more about opinions on a designated topic to guide future action.

#### Food Desert

Urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food. Instead of supermarkets and grocery stores, these communities may have no food access or are served only by fast food restaurants and convenience stores that offer few healthy, affordable food options.

#### **Food Insecurity**

The disruption of food intake or eating patterns because of lack of money or other resources.

#### Gay

An orientation that describes a person's emotional, romantic and/or sexual attraction to the same gender (usually men to men).

#### Healthy People 2020

A framework of national health objectives used to track progress towards national goals of improved health and reduced health threats.

#### Heavy Drinking

Adult males having more than 2 drinks per day and adult females having more than 1 drink per day.

#### **Hispanic/Latino Ethnicity**

A person of Latin-American or Spanish descent.

#### **HIV vs. AIDS Diagnosis**

Human immunodeficiency virus (HIV) is the virus that can lead to acquired immunodeficiency syndrome (AIDS). AIDS is the final stage of HIV infection. People at this stage of HIV have badly damaged immune systems and are vulnerable to infections and infection-related cancers.

#### Hypertensive Disease or Hypertension

Blood pressure that is consistently too high or blood pressure that is above 130/80.



#### **Key Terms (continued)**

#### llicit Fentanyl vs. Fentanyl Analog

Fentanyl is a powerful opioid that was originally created in a pharmaceutical lab for pain management among those with serious illnesses. Illicit fentanyl refers to the same substance when it is created in an illegal lab for sale on the black market. Fentanyl analogues are substances that are similar to fentanyl but have small differences in their chemical makeup. These can be up to 100 times stronger than fentanyl.

#### Infant Mortality

The death of an infant before his or her first birthday.

#### Infant Mortality Rate

The number of infant deaths (less than 1 year of age) per 1,000 live births.

#### Lesbian

An orientation that describes a woman who is emotionally, romantically and/or sexually attracted to other women.

#### LGBTQ

Lesbian, Gay, Bisexual, Transgender, and Queer (or Questioning).

#### Life Expectancy

Number of years that a person is expected to live from a given age.

#### Low Birth Weight (LBW)

A baby weighing less 2,500 grams or 5 pounds, 8 ounces at birth.

#### Medicaid

A government program that provides health insurance to low-income and disabled individuals.

#### Medicare

A government program that provides health insurance to individuals age 65 and over.

#### Mental Illness

A wide range of conditions that affect your mood, thinking and behavior. Examples include depression, anxiety, schizophrenia, eating disorders, and addictive behaviors.

#### Misuse vs. Abuse

Misuse refers to the use of a substance for a purpose other than its intended use. Abuse refers to the harmful or hazardous use of substances, including drugs and alcohol, that can lead to dependence or repeated use.

#### Morbidity

A term used to refer to an illness or illnesses in a population.

#### Mortality

A term used to refer to death or deaths in a population.







#### National School Lunch Program (NSLP)

A federally assisted meal program operating in public and nonprofit private school residential child care institutions to offer nutritionally balanced, low-cost or free lunches to children each school day.

#### Percent

A ratio "out of 100." Example: 75% means 75 per 100.

#### **Poverty Level**

The minimum income that an individual or family needs to obtain the necessities to live (such as food, water, and shelter) within a given country.

#### Preconception

The period of time before becoming pregnant.

#### **Prediabetes vs. Diabetes**

Prediabetes is a serious condition where blood sugar levels are elevated but are not yet high enough to be considered diabetes. Diabetes refers to a group of diseases that result in blood sugar levels that are too high and harmful to health.

#### Preterm

A birth occurring before 37 weeks of pregnancy have been completed.

#### **Race vs. Ethnicity**

Race refers to a person's physical characteristics (i.e., skin, hair, or eye color). Ethnicity refers to cultural factors, including nationality, regional culture, ancestry, and language.

#### Rate

Occurrence of a disease within a population in a given time period often expressed as a ratio. Example: 5.0 per 100,000 means 5 cases for every 100,000 people.

#### **Risk Factor**

Any characteristic or exposure of an individual that increases the likelihood of developing a disease or injury.

#### **Schizoaffective Disorder**

A mental health condition that includes symptoms of schizophrenia (hallucinations or delusions) and of mood disorders (depression or mania).

#### Schizophrenia

A severe mental health condition that causes people to interpret reality abnormally. This often includes hallucinations, delusions, and disordered thinking. Schizophrenia can impair daily functioning and requires lifelong treatment.

#### Sex vs. Gender

Sex refers primarily to the external physical differences between males and females assigned at birth. Gender is an individual's inner sense of being male, female or something in between.

#### Shingles

An infection that causes a painful rash. Shingles is caused by the same virus that is responsible for chickenpox.

#### Social Determinants of Health

The conditions in the environment in which people are born, live, work, play, worship, and age that affect a wide range of health and quality-of-life outcomes.

#### Socioeconomic Status

Social standing or class of an individual or group often measured as a combination of education, income, and occupation.



#### Key Terms (continued)

#### Supplemental Nutrition Assistance Program (SNAP)

Program that offers nutrition assistance to eligible, low-income individuals and families and provides economic benefits to communities.

#### Transgender

A person whose personal identity and gender do not correspond with their sex assigned at birth.

#### Trimester

A full-term pregnancy is 40 weeks. Pregnancy is divided into three trimesters: first trimester (0 to 13 weeks), second trimester (14 to 26 weeks), and third trimester (27 to 40 weeks).

#### Women, Infant, and Children (WIC) Program

Federal program that provides nutritious foods, breastfeeding support and nutrition education to low-income pregnant, postpartum, and breastfeeding women, and infants and children until 5 years of age who are found to be at nutritional risk.

#### Years of Potential Life Lost (YPLL)

An indicator that measures the potential years of life lost to those who die before a specified age.



# "Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."





(World Health Organization, 1948)

2019 Community Health Assessment

# **COMMUNITY HEALTH FOCUS GROUPS SUMMARY**

To better understand the health needs and concerns of the community, 5 focus groups were conducted with populations experiencing significant health disparities and social inequities within Montgomery County. The populations selected represented African American; African American Young Adults (under 30 years old); Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ); Hispanics/Latino; and Senior Citizen communities. Additionally, a larger focus group was held with individuals from agencies who support these underserved populations.

The focus groups were held at various locations in Montgomery County during the months of June and July of 2018. The attendance at the focus groups ranged from 5 individuals in the Hispanic/Latino group to 22 individuals in the LGBTQ group. The Hispanic/Latino focus group was conducted with the assistance of a translator. All thoughts shared during the meetings were recorded by a facilitator and displayed around the room.

Using the following questions, the participants shared their perceptions regarding health concerns, barriers to receiving health care, and opportunities to improve health in their communities as well as among children.

#### Focus group participants discussed the following questions:

- 1. What are the most serious health issues facing your community?
- 2. What can you do to improve your health?
- 3. What barriers have you experienced in receiving health care in your community?
- 4. What would you say is the most important child health issues in your community?
- 5. What would you say is the most important thing that can be done to improve child heath in your community?

The following tables provide a summary of common responses per question and focus group. Bolded responses are the common and repeated responses.

1. What are the most serious	health issues facing your community?
African American Community (under 30 years old)	Mental health (overdoses, PTSD and Trauma), Substance abuse, Access to care (providers not in urban core), Food deserts (grocery stores not in community), Water pollution
African American Community	Gun violence (men under 30 years old), Domestic violence, Substance abuse, Mental health (unaware of how to access care, stigma), Food deserts, Transportation, Anger (homicides, road rage, incarceration), Providers not listening to patient concerns, Compliance with care (difficulty finding transportation, costs for services, scheduling barriers for doctor visits)
Hispanic Community	Substance abuse, Dental care (costs for services), Obesity, Child care, Diabetes
Senior Citizen Community	Mental Health, Costs for services (medications, copays, specialists), Transportation, Chronic Diseases (Epilepsy, Heart disease, Cancer, Diabetes), Physical access to buildings
LGBTQ Community	Provider LGBTQ-competency, <b>Mental health</b> (difficult to find LGBTQ- friendly providers, waiting lists for providers), Violence, <b>Substance</b> <b>abuse</b> , Discrimination, Access to LGBTQ-specific care, Lack of trust in health care system, Homelessness, Poverty, <b>Transportation</b>



2. What can you do to improve	e your health?
African American Community (under 30 years old)	Health Promotion/Edu collaboration (address Participate in commun
African American Community	Exercise more, Eat hea
Hispanic Community	Exercise more
Senior Citizen Community	Exercise more, Particip Eat healthier foods
LGBTQ Community	Exercise more, Lose w take time for self)

3. What barriers have you e	experienced in receiving hea
African American Community (under 30 years old)	Lack of insurance, Dental accepting insurance), Qua West Dayton specifically), patient concerns, Navigat
African American Community	Lack of insurance, Costs ( (doctor offices spread out barriers (immigrant and r care system
Hispanic Community	Costs (for health care service area, Access to care (doct appointments), Cultural a
Senior Citizen Community	Dental care (Medicaid act (earn too much to qualify insurance premiums), Tra qualifying for Project Mol going to doctor, Accessibi
LGBTQ Community	Misgendering (not using p name, harassment by pro inappropriate questions, care (LGBTQ specific servi adoption, gender affirmin health practitioners

4. What would you say is the r	nost important child hea
African American Community (under 30 years old)	Diet, Physical inactivit support (problems wit
African American Community	Housing instability, Ad
Hispanic Community	Parent education, Lac
Senior Citizen Community	Parent substance abus help), Parent education
LGBTQ Community	Physical inactivity, Foo key kids, coping skills, physical activity (safe p

ucation (link people to available resources), Community i inter-neighborhood conflicts and build trust in community), **nity** 

althier foods, Go to doctor

pate in community (exercise classes, adult education classes),

eight, Practice self-care (go to therapy, improve self-esteem,

alth care in your community?

I care (insurance not covering dental or dentists not ality of care based on area of residence, Access to care (in , Transportation, Discrimination, Providers not listening to ting available resources

for procedures, co-pays and deductibles), Access to care t geographically), Transportation, Cultural and language refugee populations), Structural racism, Mistrust in health

vices), Costs for daycare, Low pay for available jobs in Dayton tor office hours are inconvenient, "3 strikes" for missed and language barriers

cepted by few dentists), Medicare donut hole, Access to care for Medicaid), Costs (hospital bills, co-pays, medications, ansportation (lack of room for disabled persons on RTA, not bility, doctors do not do home visits), Embarrassment about ility for disabled persons

preferred name, hospital wristbands have birth sex and birth widers), **Discrimination** (microaggressions by providers, feeling of not being welcome at appointments), **Access to** ices hard to find or not covered by insurance; fertility and ng surgery), Access to LGBTQ-friendly health and mental

alth issue in your community?

**cy**, Violence (conflict resolution, anger management), **Social** th home life, not enough support), Sexual health

Iverse Childhood Experiences, Mental health, Divorce, SIDS

k of child care (unattended children)

se, Family stress (lack of nurturing, stigma against asking for on, Physical inactivity

od insecurity, **Social support** (bullying, family dinners, latch places for LGBTQ youth to feel welcome), Opportunities for parks, playgrounds, affordable sports programs)

# **COMMUNITY HEALTH FOCUS GROUPS SUMMARY**

5. What would you say is the r	nost important thing that can be done to improve child health in your community?
African American Community (under 30 years old)	Peer support, <b>Parent education</b> , Parent support, Positive imaging (in media, music, etc.), Knowledge about available resources
African American Community	<b>Parent education</b> , More school nurses, Coordination of care, Trauma Informed Care, More involvement from caseworkers, More home visits
Hispanic Community	Improve nutrition with higher quality foods, Increase physical activity, Advertise opportunities for activities
Senior Citizen Community	Increase access to healthy foods, Parent education, Nutrition education, Expand WIC options
LGBTQ Community	Decrease child homelessness, More opportunities for physical activity (parks, playgrounds), Nutrition education, Increase access to health foods, Higher quality education

The following table presents the most common responses to each question overall.

Focus Group Questions	Most Common Responses
1. What are the most serious health issues facing your community?	Opioids, Transportation, Food Deserts, Mental Health, Diabetes
2. What can you do to improve your health?	Exercise More, Diet/Healthy Foods, Health Promotion/Education
3. Have you experienced barriers to receiving health care in your community?	Transportation, Discrimination, Costs, System of Care
4. What would you say is the most important child health issue in your community?	Mental Health, Obesity, Healthy Behaviors
5. What would you say is the most important thing that can be done to improve child health in your community?	Parent Education, More Physical Activity, Social Services, Community Collaboration

At the end of the meeting, one final question was asked of the participants: "Given the health issues facing the community, which ones would be your top priorities?"

Each participant was given 3 colored dots to select their top health issues from the comments made during the meeting. After the votes were tallied and organized into similar themes for all focus groups, the overall top priorities were: **social determinants of health, mental health, substance use, chronic diseases, and care coordination.** 

Rank	
1	Social Determinants of Health
	<ul> <li>Access to Care (Insu</li> </ul>
	Cultural Competence
	<ul> <li>Healthy Food/Nutrit</li> </ul>
	Discrimination
	Education
	<ul> <li>Employment</li> </ul>
	<ul> <li>Parenting/Family</li> </ul>
	<ul> <li>Language</li> </ul>
	<ul> <li>Opportunity to Exer</li> </ul>
	Public Safety
	<ul> <li>Transportation</li> </ul>
2	Mental Health
-	Suicide
3	Substance Use
	<ul> <li>Stigma</li> </ul>
4	Chronic Diseases
5	Care Coordination



Top Priorities	
nce, Cost, Availability of Services and Pro	viders)
n	
se	
	_



### **MONTGOMERY COUNTY** ABOU



### PHI PUBLIC HEALTH IMPORTANCE:

Accurately describing Montgomery County's demographic and socioeconomic characteristics provides background information needed to understand population-level health issues. These population characteristics are also useful in selecting culturally-appropriate public health interventions and services for the county.

#### Population and Socioeconomic Characteristics by Race Montgomery County, 2017

Indicator	Montgomery	White	Black	
Total Population	531,987	389,413	109,808	
Males	48.1%	48.6%	46.2%	
Females	51.9%	51.4%	53.8%	
Highest Level of Education				<b>KEY FINDINGS</b>
< High School	10.1%	9.0%	13.8%	
High School or Equivalent	28.1%	28.4%	28.8%	The median
Some College or Associate's	35.0%	34.3%	39.6%	household income
Bachelor's or Higher	26.8%	28.3%	17.8%	IS \$23,271 nigner
Median Household Income	\$47,045	\$53,303	\$30,032	for Blacks
Household Type			1000	
Family Households	60.5%	61.9%	55.8%	The percentage of Placks living
Married Couple	67.5%	74.5%	40.7%	below the poverty
Male Head of Household	7.7%	7.3%	9.2%	lovel is 2.5 times
Female Head of Household	24.8%	18.2%	50.1%	higher than the
Nonfamily Households	39.5%	38.1%	44.2%	nercentage of
Living Alone	85.0%	83.7%	90.3%	Whites
Not Living Alone	15.0%	16.3%	9.7%	Wintes.
Below Poverty Level	17.9%	13.3%	32.8%	
Unemployment Rate	8.0%	6.2%	14.1%	
Veterans	10.0%	10.3%	9.6%	

Source: American Community Survey, U.S. Census

Across the Nation <sup>1</sup>							
Montgomery Ohio United Stat							
Total Population	531,987	11,609,756	321,004,407				
Race							
White	73.2%	81.9%	73.0%				
Black	20.6%	12.3%	12.7%				
American Indian and Alaskan Native	0.2%	0.2%	0.8%				
Asian	2.0%	2.0%	5.4%				
Other	0.8%	0.9%	5.0%				
Two or More Races	3.1%	2.7%	3.1%				
Ethnicity							
Hispanic or Latino	2.7%	3.5%	17.6%				
Median Household Income	\$47,045	\$52,407	\$57,652				
Below Poverty	17.9%	14.9%	14.6%				
Unemployment Rate	8.0%	6.5%	6.6%				

#### **SDOH** SOCIAL DETERMINANTS OF HEALTH:

An individual with a disability can have a difficult time accessing opportunities and resources that contribute to overall health such as appropriate educational and employment opportunities. Those missed opportunities can affect potential earnings which may have a negative impact on housing, transportation, social interactions, and personal relationships.

The impact of housing instability, poverty, social isolation, unsafe living conditions, and limited access to health care on the health outcomes of the homeless population is much more severe than in the general population. This population has a higher occurrence of undiagnosed chronic diseases and mental illnesses, substance use, risky health behaviors, and death.

Source: American Community Survey, U.S. Census

Disability Type by Age Among Children with a Disability, Montgomery County, 2017					
Type of Disability	Under 5	5 to 1			
Hearing	45%	9%			
Vision	77%	15%			
Cognitive	-	80%			
Walking	-	12%			
Self-Care	-	16%			

#### **C** KEY FINDINGS

- Of children with a disability, more than 75% under the age of 5 have vision problems.
- ▶ 80% of children between the ages of 5 and 17 who have a disability have cognitive difficulties.



Source: American Community Survey, U.S. Census



▶ In 2018, there were 4,617 individuals who were homeless.

Couples

ngle Men 54.4%

1.9%

#### **C** KEY FINDING

More than 65% of those 65 and older with a disability have difficulty walking; the second most common difficulty in this age group is independent living (44%).

# **Behavioral Health** MENTAL HEALTH



#### SDOH SOCIAL DETERMINANTS OF HEALTH:

Mental health concerns such as depression and anxiety are more common among adults who have had exposure to unfavorable social, economic, or environmental circumstances. Stressful experiences such as poverty, debt, low educational attainment, unemployment, and weak social support all contribute to poor mental health.



#### **C** KEY FINDING

Women make up 70% of hospital visits for anxiety or stress-related disorder and major depression, and they account for 65% of visits for bipolar disorder.



Across the Nation						
	Montgomery <sup>1</sup>	Ohio1	United States <sup>2</sup>	HP 2020 Goal		
Suicide Death Rate*	15.6	14.5	13.8	10.2		

\*Age-adjusted rate per 100,000

<sup>1</sup>Ohio Death Certificates, Ohio Department of Health, 2016-2017 <sup>2</sup>Mortality Public-use Data on CDC Wonder Online Database, 2016-2017



#### • KEY FINDING

Whites are more likely than Blacks to have a hospital visit for anxiety or stress-related disorder and major depression.

Mental Health-related Hospital Visits by Disorder and Race (per 1,000), Montgomery County, 2017



Across the Nation						
Montgomery Ohio United						
Mental Health Provider Ratio <sup>1</sup>	531:1	561:1	470:1			
Received Mental Health Services in the Past Year <sup>2</sup>	17.2%	16.9%	14.5%			

<sup>1</sup>National Provider Identifier Standard (NPI), CMS, 2017 <sup>2</sup>National Survey on Drug Use and Health, 2014-2016

#### Mental Health-related Hospital Visits by Disorder (per 1,000) Montgomery County, 2016-2017

Mental Health Disorder	2016	2017	Trend
Anxiety and Stress-related	90.0	101.5	$\uparrow$
Major Depressive Disorder	65.8	71.4	$\uparrow$
Bipolar Disorder	17.3	19.5	$\uparrow$
Schizophrenia	5.1	5.6	↑
Schizoaffective Disorder	3.1	3.6	$\uparrow$

Source: Greater Dayton Area Hospital Association Healthcare Database

higher than for women.

#### Self-harm related Hospital Visits by Insurance Type, Montgomery County, 2017



Source: Greater Dayton Area Hospital Association Healthcare Database

#### **C** KEY FINDING

▶ Nearly half (49%) of self-harm related hospital visits were paid for by Medicaid.

# Behavioral Health



### PHI PUBLIC HEALTH IMPORTANCE:

Childhood mental illness is a chronic condition that can continue through the lifespan and impact overall health. Children who suffer from anxiety, depression, and mood disorders may have difficulty functioning at home and in school or forming positive healthy relationships with others. Trauma has been found to be the central issue of mental health problems in children and can have a negative impact on brain development. Children who are exposed to multiple traumatic events, or adverse childhood experiences, are at higher risk of developing psychological problems and have higher rates of disease and disability.

		Orientation			Gend	er	R	ace/Ethn	icity
	Ohio	Straight	Gay/Lesbian/ Bisexual	Male	Female	Transgender	Black	White	Hispanic
Bullied at School in the Past Year	22%	17%	39%	18%	25%	46%	17%	21%	25%
Missed School in the Past Month Because Felt Unsafe	8%	6%	19%	7%	9%	34%	11%	7%	14%

Source: Ohio Healthy Youth Environment Survey (OHYES!)

#### • KEY FINDINGS as self-reported

- Gay, lesbian, and bisexual youth are twice as likely to be bullied and 3 times more likely to stay home from school because they feel unsafe compared to straight youth.
- ▶ 46% of transgender youth are bullied, and one-third miss school because they feel unsafe attending.



#### Mental Health Among Youth Grades 7-12 by Gender, Ohio, 2015-2018



Source: Ohio Healthy Youth Environment Survey (OHYES!)

#### **KEY FINDING** as self-reported

Gay, lesbian, bisexual and transgender youth are more likely than straight youth to experience psychological distress, consider suicide, or receive mental health care.

#### **Adverse Childhood Experiences**

ACEs are traumatic events occurring in childhood that place individuals at an increased risk of health problems as adults.

ACEs Include:	Related Health Problems Include:
<ul> <li>Physical abuse</li> <li>Substance abuse in the home</li> <li>Sexual abuse</li> <li>Mental illness in the home</li> <li>Emotional abuse</li> <li>Parental separation or divorce</li> <li>Witnessing physical abuse</li> <li>Incarcerated household member</li> </ul>	<ul> <li>Substance abuse</li> <li>Mental illness</li> <li>Poor pregnancy outcomes</li> <li>Chronic disease</li> </ul>

#### Mental Health Among Youth Grades 7-12 Ohio, 2015-2018

Any Psychological Distress	39.1%
Anxious	23.8%
Depressed	17.0%
Received Mental Health Care	29.0%
Considered Suicide	13.0%

Source: Ohio Healthy Youth Environment Survey (OHYES!)

#### **KEY FINDING** as self-reported

Nearly 40% of Ohio youth experience psychological distress, 24% experience anxiety, and 17% experience depression.

#### Adverse Childhood Experiences (ACEs) Among Youth Grades 7-12, Ohio, 2015-2018

Adverse Childhood Experience	Ohio Youth
ACE Score of 3 or More	21%
Parents Separated, Divorced, or Unmarried	33%
Emotional Abuse	28%
Drugs/Alcohol Abuse in the Home	22%
Mental Illness in the Home	21%
Incarcerated person in the Home	13%
Physical Abuse	8%
Witnessed Physical Abuse	7%
Sexual Abuse	5%

Source: Ohio Healthy Youth Environment Survey (OHYES!)

#### **KEY FINDING** as self-reported

- 21% of Ohio youth have experienced 3 or more Adverse Childhood Experiences (ACEs). The most common ACEs reported:
  - separated parents emotional abuse
  - substance abuse in the home
  - mental illness in the home

#### Youth Grades 7-12 with 3 or More ACEs Ohio, 2015-2018



Hispanic

**Behavioral Health** 

# SUBSTANCE MISUSE & ABUSE

### SDOH SOCIAL DETERMINANTS OF HEALTH:

Many social factors influence substance misuse and abuse. These include events in childhood, neighborhood factors, and economic pressures.

- Childhood victimization, family disruption, and Adverse Childhood Experiences (ACEs) can contribute to later substance use.
- Neighborhood disadvantage, social norms for drug use, and the availability of drugs near one's home can also contribute to substance misuse and abuse.
- Economic factors including low socioeconomic status, unemployment, and homelessness have been associated with increased substance use.



Substance Use Disorder-related Hospital Visits

#### **KEY FINDING**

► The rate of alcohol use disorder-related hospital visits for men is more than twice as high as for women.

Across the Nation <sup>1</sup>					
Montgomery Ohio United States					
Substance Use Treatment Centers per 100,000 Residents	2.3	3.5	4.1		

<sup>1</sup>Substance Abuse and Mental Health Services Administration Services Locator Map, 2017 Note: Treatment centers defined as facilities responding to SAMHSA's National Survey of Substance Abuse Treatment Services; data updated monthly



#### **KEY FINDING**

Whites have a higher rate of opioid use disorder-related hospital visits, and Blacks have a higher rate of alcohol use disorderrelated hospital visits.







		Ac	ross the Na	ntion1	
<u>_</u>			Montgomery	Ohio	United States
Among	g surveyed High School students in Ohio:	Marijuana Use	13.6%	12.8%	13.6%
/1.3%	Heard, read, or watched an ad about substance use prevention in the past year	Cocaine Use	1.4%	1.6%	1.8%
53.3%	Said their parents discussed dangers of substance use in the past year	Heroin Use	0.4%	0.4%	0.3%
21.5%	Ever lived with someone who was a problem drinker, used illegal drugs, or abused prescription medications	Alcohol Use Disorder	6.5%	6.3%	6.0%
11.5%	Rode in a car with someone who had been drinking in the past 30 days	<sup>1</sup> National Survey o	n Drug Use and Hea	lth, 2014-2	016

Source: Ohio Healthy Youth Environment Survey (OHYES!), 2015-2018

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#### **KEY FINDING** as self-reported

When compared with straight youth, gay, lesbian, bisexual, transgender and gender non-conforming youth were more likely to report use of each drug type and less likely to report a conversation with parents about drugs.

**Behavioral Health** 

# **ACCIDENTAL DRUG OVERDOSE**



#### PHI PUBLIC HEALTH IMPORTANCE:

In 2017, more than 70,000 individuals died of a drug overdose nationwide. This contributed to a decline in life expectancy for the second year in a row. Ohio had the second highest drug overdose death rate in the country following only West Virginia. Within Ohio, Montgomery County had the highest rate of drug overdose deaths.

#### Percent of Overdose Deaths by Education Montgomery County, 2017



#### **C** KEY FINDING

The highest rate of overdose deaths occur among individuals whose highest level of education is a high school diploma or GED.

**Overdose Death Rate\***, Montgomery County, Ohio, and the United States, 2014-2017



\*Age-adjusted rate per 100,000 Source: Ohio Death Certificates, Ohio Department of Health; Mortality public-use data on CDC WONDER online database

#### **Overdose Deaths by Race/Ethnicity** Montgomery County, 2014 & 2017

	2014	2017
	Percent	Percent
White	88%	81%
Black	12%	17%
Hispanic	0%	2%

Source: Ohio Death Certificates, Ohio Department of Health

#### **KEY FINDING**

The percent of White individuals who died of an overdose decreased between 2014 and 2017, while the percent who were Black increased.

A drug mention means that a particular substance was found in a person's bodily system at the time of death. The presence of more than one drug can result in more than one mention for a person who has died.

- mention in overdose deaths. Carfentanil is the most common fentanyl analogue (data not shown).
- while Illicit fentanyl increased between 2014 and 2017.



![](_page_17_Picture_0.jpeg)

# **ACCIDENTAL DRUG OVERDOSE**

![](_page_17_Figure_2.jpeg)

![](_page_17_Figure_3.jpeg)

**Overdose-related Hospital Visits (per 1,000)** by Demographic Characteristics Montgomery County, 2017

![](_page_17_Figure_5.jpeg)

![](_page_17_Picture_6.jpeg)

Source: Greater Area Dayton Hospital Association Healthcare Database

#### **Overdose-related Hospital Visits by Insurance Type** Montgomery County, 2017

![](_page_17_Figure_9.jpeg)

Source: Greater Area Dayton Hospital Association Healthcare Database

#### **KEY FINDING**

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Medicaid pays for the majority of overdose visits.

#### **C** KEY FINDINGS

- Men are more likely than women to have an overdose-related hospital visit.
- ▶ The rate of overdose-related hospital visits for Whites is higher than for Blacks.

20

![](_page_17_Picture_17.jpeg)

#### **Density of Accidental Overdose Deaths - Place of Residence** Montgomery County, 2017

Source: Ohio Death Certificates, Ohio Department of Health

![](_page_18_Picture_1.jpeg)

#### **Birth Count by Race/Ethnicity** Montgomery County, 2013-2017 8,000 6,752 6,653 6,754 6,592 6,646 6,000 4,000

2015

2016

---- Montgomery

2017

#### **KEY FINDINGS**

- On average, there are 6,680 births per year.
- There are nearly 2.5 times as many White births compared to Black births.

2014

Source: Ohio Birth Certificates, Ohio Department of Health

White Black Hispanic

#### Birth Rate (per 1,000 females, 15 to 44yrs) by Race/Ethnicity, Montgomery County, 2013-2017

#### **C** KEY FINDINGS

2,000

0

2013

- The birth rate among Black and Hispanic women increased from 2013 to 2017.
- The teen (15 to 19 yrs) birth rate decreased by 19% from 2013 to 2017 (data not shown).

![](_page_18_Figure_11.jpeg)

Source: Ohio Birth Certificates,

**C** KEY FINDINGS

are married.

Less than half (49%) of

all women who give birth

Only 20% of Black women

women and 45% of

Hispanic women.

who give birth are married

compared to 60% of White

Ohio Department of Health

Births to Married Women by Race/Ethnicity Montgomery County, 2013-2017

![](_page_18_Figure_13.jpeg)

#### SDOH SOCIAL DETERMINANTS OF HEALTH:

A woman's health prior to becoming pregnant plays a major role in whether a baby is born full-term (gestation >37wks) and at a healthy birth weight (>2,500g or 5lbs, 8oz). The conditions in which women live, learn, and work affect a wide range of health risks and outcomes. Some of these conditions include neighborhood safety, housing stability, availability of healthy food options, access to care, educational and employment opportunities, and social support.

![](_page_18_Figure_16.jpeg)

![](_page_18_Picture_17.jpeg)

![](_page_18_Figure_19.jpeg)

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**Maternal Child Health** 

# PRECONCEP

![](_page_19_Picture_0.jpeg)

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![](_page_19_Picture_1.jpeg)

Receiving adequate prenatal care increases a woman's chance of having a healthy pregnancy and a healthy birth. Adequate prenatal care is when a pregnant woman visits her doctor during the first 4 months of pregnancy and then at regular, prescribed intervals throughout the remainder of the pregnancy.

![](_page_19_Figure_3.jpeg)

#### **C** KEY FINDINGS

- The percent of women receiving adequate prenatal care decreased over the last 5 years.
- White women are more likely to receive adequate prenatal care compared to Black and Hispanic women.

Adequate Prenatal Care by Insurance Type Montgomery County, 2013-2017

![](_page_19_Figure_8.jpeg)

Source: Ohio Birth Certificates, Ohio Department of Health

#### **C** KEY FINDING

Receiving adequate prenatal care is more common among women with commercial insurance compared to women on Medicaid.

![](_page_19_Figure_13.jpeg)

#### **KEY FINDINGS**

- breastfed their baby when they left the hospital declined over the past 5 years.
- they left the hospital; which is nearly 1.5 times higher than Black mothers.

![](_page_19_Picture_18.jpeg)

#### **Maternal Child Health**

# PREGNANCY/POSTPARTUM

# **Maternal Child Health BIRTH OUTCOMES**

### PHI PUBLIC HEALTH IMPORTANCE:

Premature births (before 37 weeks) often result in low birth weight babies (less than 2,500g, 5lbs, 8oz). These babies can suffer from serious medical conditions because their bodies have not fully developed. Sometimes these problems are too severe, and the baby is unable to survive. These conditions can also lead to developmental delays and learning disabilities as the baby matures.

![](_page_20_Picture_3.jpeg)

Low Birth Weight (<2,500g) by Race/Ethnicity Montgomery County, 2013-2017

![](_page_20_Figure_5.jpeg)

Source: Ohio Birth Certificates, Ohio Department of Health

#### **KEY FINDING**

Black women are twice as likely to have a low birth weight baby compared to White women, and nearly 2 times more likely compared to Hispanic women.

![](_page_20_Figure_9.jpeg)

![](_page_20_Figure_10.jpeg)

Low Birth Weight (<2,500g) by Smoker Status Montgomery County, 2013-2017

![](_page_20_Figure_13.jpeg)

#### **C** KEY FINDING

Women who smoke during pregnancy are nearly twice as likely to have a low birth weight baby compared to women who do not smoke.

![](_page_20_Picture_16.jpeg)

![](_page_20_Picture_18.jpeg)

# Maternal Child Health INFANT MORTALITY

![](_page_21_Picture_1.jpeg)

### SDOH SOCIAL DETERMINANTS OF HEALTH

The causes of infant mortality can be related to the conditions in which moms and babies live, learn, work, and play. Communities experiencing higher levels of poverty, crime, and food insecurity, as well as deteriorating neighborhood and housing conditions often experience higher rates of infant mortality. Women living within these communities may experience higher levels of stress. High levels of stress can cause a baby to be born too early (prematurely), which can increase a baby's risk of dying before they reach their first birthday.

![](_page_21_Picture_4.jpeg)

Infant Mortality Rate (per 1,000 Live Births) by Race, Montgomery County, 2013-2017

![](_page_21_Figure_6.jpeg)

Source: Ohio Birth and Death Certificates, Ohio Department of Health

#### • KEY FINDINGS

- All infant mortality rates declined since 2013.
- Black babies die at a rate 4 times higher than White babies.
- The Hispanic infant mortality rate from 2013 to 2017 is 7.7 deaths per 1,000 live births (data not shown).

#### Source: Ohio Death Certificates, Ohio Department of Health

#### Leading Causes of Infant Death, 2013-2017

Rank	Cause	% of Deaths
1	Prematurity/Related Conditions	32.1%
2	Birth Defects	14.1%
3	Maternal Complications	12.9%
4	Accidents/Unintentional Injuries	12.4%
5	Other Causes	8.4%

#### • KEY FINDINGS

- Most babies die because they are born too early and too small.
- ▶ 68% of accidental deaths among infants are caused by sleep-related suffocation or strangulation in bed (data not shown).

Across the Nation					
	Montgomery <sup>1</sup>	Ohio <sup>1</sup>	United States	HP 2020 Goal	
Adequate Prenatal Care	73.6%	76.1%	<b>75.6%</b> <sup>4</sup>	77.6%	
Smoking During Pregnancy	8.7%	11.0%	5.5% <sup>3</sup>	14	
Breastfeeding at Hospital Discharge	70.8%	73.4%	-	81.9%	
Preterm Birth	11.6%	10.4%	9.9% <sup>3</sup>	9.4%	
Low Birth Weight	9.8%	8.7%	8.3% <sup>3</sup>	7.8%	
Infant Mortality Rate (per 1,000 live births)	7.8	7.2	5.8 <sup>2</sup>	6.0	
Black	16.9	15.6	11.3 <sup>2</sup>	6.0	
White	4.2	5.3	4.9 <sup>2</sup>	6.0	

<sup>1</sup>Ohio Birth and Death Certificates, Ohio Department of Health, 2017 <sup>2</sup>Mortality public-use data on CDC Wonder online database, 2017 <sup>3</sup>National Vital Statistics, Birth Report, 2017 <sup>4</sup>National Vital Statistics, Adequate Prenatal Care Report, 2016

# **Public Health Importance**

Women and families can take steps to give their baby the best chance for a healthy start in life. The steps for a healthy start begin before pregnancy occurs and continue throughout the pregnancy and after the baby is brought home.

#### PRECONCEPTION

- Manage existing medical conditions
- Eat a proper, nutritious diet
  - Maintain a healthy weight

#### POSTPARTUM

- Breastfeed
- Avoid infant's exposure to secondhand smoke
- Place infant to sleep on his or her back

#### PRENATAL

- ▶ Begin care during the first trimester
- Quit smoking and drinking alcohol
- Know the signs of preterm labor

#### **Health Outcomes**

![](_page_22_Picture_1.jpeg)

Top 10 Causes of Death, Montgomery County, 2016-2017

![](_page_22_Figure_3.jpeg)

#### **C** KEY FINDING

• Heart disease and cancer cause more deaths than the other 8 leading causes of death combined.

	Top 10 Causes of De Montgomery County	Top 10 Causes of Death by Race Montgomery County, 2016-2017		Top 10 Causes of De Montgomery County	
Rank	White	Black		Rank	Male
1	Cancer	Heart Disease		1	Heart Disease
2	Heart Disease	Cancer		2	Cancer
3	Accidents	Accidents		3	Accidents
4	Stroke	Stroke		4	CLRD*
5	CLRD*	Diabetes		5	Stroke
6	Alzheimer's Disease	Alzheimer's Disease		6	Diabetes
7	Diabetes	Homicide		7	Alzheimer's Disease
8	Septicemia	Kidney Disease		8	Septicemia
9	Influenza/Pneumonia	CLRD*		9	Suicide
10	Chronic Liver Disease	Septicemia		10	Kidney Disease

Source: Ohio Death Certificates, Ohio Department of Health \*Chronic Lower Respiratory Disease

#### • KEY FINDINGS

• Accidents are the 3rd leading cause of death regardless of sex or race.

Although not in the top 10 causes of death for the county, suicide is the 9th leading cause of death among men, and homicide is the 7th leading cause of death among Blacks.

Top 3 Causes of Death by Age Group, Montgomery County, 2016-2017					
Age Group	#1	#2	#3		
<1 year	Prematurity/LBW*	Congenital Malformations	Maternal Complications		
1-14 years	Accidents	Homicide	Suicide		
15-24 years	Accidents	Homicide	Suicide		
25-34 years	Accidents	Homicide	Suicide		
35-44 years	Accidents	Heart Disease	Cancer		
45-54 years	Accidents	Cancer	Heart Disease		
55-64 years	Cancer	Heart Disease	Accidents		
65-74 years	Cancer	Heart Disease	CLRD**		
75+ years	Heart Disease	Cancer	Stroke		

\*Low birth weight (<2500g) \*\*Chronic Lower Respiratory Disease

![](_page_22_Figure_13.jpeg)

#### Life expectancy (LE) is a measure of a community's overall health. It is an indicator used to determine how long a person can expect to live from birth.

![](_page_22_Figure_15.jpeg)

![](_page_22_Figure_16.jpeg)

Years of potential life lost (YPLL) is an indicator used to illustrate the potential years of life lost to those who die before the age of 75.

#### **KEY FINDING**

Accidents are the leading cause of death among those aged 1 to 54 years.

Source: Ohio Death Certificates, Ohio Department of Health

![](_page_22_Figure_22.jpeg)

	Montgomery <sup>1</sup>	Ohio1	United States <sup>2</sup>
Life Expectancy	74.0	75.6	78.6

<sup>1</sup>Ohio Death Certificates, Ohio Department of Health, 2016-2017 <sup>2</sup>National Vital Statistics System (NVSS), CDC, 2017

![](_page_23_Picture_1.jpeg)

### PHI PUBLIC HEALTH IMPORTANCE:

Overweight/obesity is a complex health issue that has become an increasingly common condition among U.S. adults and children. It can be caused by a combination of factors such as individual behaviors and genetics. Risk behaviors can include unhealthy food choices or poor nutrition and physical inactivity. Being overweight or obese is associated with diseases such as diabetes, mental health disorders, heart disease, liver disease, many cancers, and stroke. It can also be linked to a reduced quality of life and shorter life expectancy.

![](_page_23_Picture_4.jpeg)

Overweight or Obese Adults by Sex and Race Montgomery County, 2016-2017

![](_page_23_Figure_6.jpeg)

Source: Behavioral Risk Factor Surveillance System (BRFSS)

#### **KEY FINDINGS** as self-reported

- 69% of all adults are overweight or obese.
- Being overweight or obese is more likely among men than women and among Blacks compared to Whites.

![](_page_23_Figure_11.jpeg)

![](_page_23_Figure_12.jpeg)

Source: Behavioral Risk Factor Surveillance System (BRFSS)

#### **KEY FINDING** as self-reported

More than 75% of adults with an income less than \$15,000 are overweight or obese.

Across the Nation							
	Montgomery <sup>1</sup>	Ohio <sup>1</sup>	United States <sup>2</sup>	HP 20 Goa			
Obese	33.1%	32.6%	31.6%	30.5			
Overweight or Obese	68.5%	67.1%	66.9%	-			

<sup>1</sup>Behavioral Risk Factor Surveillance System (BRFSS), 2016-2017 <sup>2</sup>Behavioral Risk Factor Surveillance System (BRFSS), 2017

#### Adult Body Mass Index (BMI) Category Montgomery County, 2016-2017

![](_page_23_Figure_19.jpeg)

Source: Behavioral Risk Factor Surveillance System (BRFSS)

- **KEY FINDING** as self-reported
- 30% of adults are at a normal or healthy weight for their height.

![](_page_23_Picture_23.jpeg)

![](_page_23_Figure_25.jpeg)

### **SDOH** SOCIAL DETERMINANTS OF HEALTH:

Many factors, aside from eating too much and exercising too little, contribute to an unhealthy weight status (overweight and obesity). Community environment plays a key role in the obesity crisis; an area with a lack of healthy food options (a poor food environment) makes it challenging for people to make healthy dietary choices. For example, in an area where the only food options are fast food restaurants and corner stores, people may have no choice but to consume lower quality food. Likewise, people living in an area lacking sidewalks, safe bike trails, or safe parks may find it difficult to make physical activity a part of their routine.

![](_page_23_Figure_28.jpeg)

#### **Chronic Disease Risks & Outcomes**

# PHYSICAL ACTIVI

![](_page_24_Picture_2.jpeg)

### PHI PUBLIC HEALTH IMPORTANCE:

Maintaining an active lifestyle is one of the most important steps anyone can take to improve their health. Physical activity promotes normal growth and development, elevates mood and brain function, improves sleep, and reduces the risk of developing a chronic disease. Exercising in increments as little as 10 minutes can provide these health benefits. Over time, the long-term benefits of consistent, regular physical activity can increase the quality and length of one's life.

![](_page_24_Figure_5.jpeg)

#### **KEY FINDINGS** as self-reported

- Fewer than 1 in 5 adults meet the U.S. guidelines for both aerobic and muscle-strengthening physical activity.
- Men are more likely than women to meet the guidelines for musclestrengthening activity, but women are more likely to meet the guidelines for aerobic activity.

![](_page_24_Picture_9.jpeg)

![](_page_24_Figure_11.jpeg)

### **Physical Activity Guidelines** for Adults

- Aerobic: 150 to 300 minutes a week of moderate-intensity activity, or 75 to 150 minutes a week of vigorousintensity activity or a combination of the two.
- Muscle-strengthening: moderate or greater intensity activity involving all major muscle groups on 2 or more days a week.

Source: U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans, 2nd edition.

**KEY FINDING** as self-reported More than 70% of Children exercising children participated outside of schools in an intramural sport during the past year. Children participating in an intramural sport

Across the Nation						
Montgomery <sup>1</sup> Ohio <sup>1</sup> United HP 202 States <sup>2</sup> Goal						
Meet Both Guidelines	18.4%	19.0%	20.3%	20.1%		

<sup>1</sup>Behavioral Risk Factor Surveillance System (BRFSS), 2015 & 2017 <sup>2</sup>Behavioral Risk Factor Surveillance System (BRFSS), 2017

![](_page_24_Picture_20.jpeg)

![](_page_24_Figure_21.jpeg)

Source: Dayton Children's Hospital Community Health Needs Assessment \*6-11 years

![](_page_24_Picture_23.jpeg)

#### **Chronic Disease Risks & Outcomes**

# **FOOD INSECURITY & NUTRITION**

![](_page_25_Picture_2.jpeg)

### PHI PUBLIC HEALTH IMPORTANCE:

Proper nutrition is the cornerstone of good health and well-being throughout one's life. Nutrition involves the amount and types of food eaten and includes a variety of nutrients such as vitamins and minerals, fats, proteins, and carbohydrates, which together contribute to overall health. Poor nutrition and physical inactivity may lead to a person becoming overweight or obese. Even for individuals at a healthy weight, poor diet is associated with heart disease, hypertension, diabetes, osteoporosis, and certain types of cancer.

#### Nutritional Habits Among Children\* Montgomery County and Surrounding Areas, 2017

 About 30% of children eat less than one serving of fruit and less than one serving of vegetables per day.

Source: Dayton Children's Hospital Community Health Needs Assessment

\*0-11 years

![](_page_25_Picture_9.jpeg)

![](_page_25_Picture_10.jpeg)

![](_page_25_Figure_11.jpeg)

Adults Consuming Fruits and Vegetables an Average of Less Than Once per Day by Race Montgomery County, 2015-2017

![](_page_25_Figure_13.jpeg)

Source: Behavioral Risk Factor Surveillance System (BRFSS)

#### • KEY FINDING as self-reported

41% of Montgomery County adults report eating fruit less than once per day, and 21% report eating vegetables less than once per day.

Across the Nation <sup>1</sup>						
Montgomery Ohio United States						
Overall Food Insecurity	17.0%	14.6%	12.6%			
Food Insecurity Among Children	21.6%	19.6%	17.0%			

<sup>1</sup>Feeding America, 2017

Women, Infants, And Children (Wi Montgomery County, 201	C) Program L7
Number of WIC Participants	9,200
Infants Receiving WIC	3,100
Percent of Women Who Received WIC During Pregnancy	31.8%
WIC Authorized Stores	42
WIC Authorized Pharmacies	3
WIC Farmers' Market Nutrition Prog	gram (FMNP)
Maximum Vouchers available through FMNP	787
Farmers authorized to participate in FMNP	14

Source: WIC Program, PHDMC

Supplemental Nutrition Assistance Prog Montgomery County, 2017	grams (SN/ 7
Active Participants	70,839
Percent of Population Enrolled in SNAP	13.3%
Percent of Population below 100% FPL Enrolled in SNAP	86.2%
Monthly Benefits Issued	\$9,200,2
Average Monthly Benefit Issued per Participant	\$129.8

Characteristics	Households Receiving SNAP	Households not Receiving SNAP
Households	14.6%	85.4%
With one or more people 60 yrs and over	26.4%	42.2%
With child(ren) under 18 yrs	46.7%	21.6%
With disabled individual(s)	50.6%	74.4%
Below poverty level	52.3%	47.7%
Median Household Income	\$16,269	\$54,988

Source: American Community Survey, U.S. Census

### SDOH SOCIAL DETERMINANTS OF HEALTH:

Food insecurity can be influenced by income, employment, race/ethnicity, and disability. These factors can also influence the ability to purchase healthier food options even when available. Children not receiving proper nutrition are at risk for developmental issues and chronic conditions such as obesity and Type 2 diabetes. When healthy food is scarce, government, charitable, and community-based programs can offer healthy foods to residents. These include programs like SNAP, WIC, and the NSLP as well as meal deliveries for the elderly, nutritional education, and efforts to increase outlets with healthy food for sale in communities without access to a grocery store.

National School Lunch Progra Montgomery County, 20	m (NLSP) )17
Schools Enrolled in the NLSP	162
Free Lunch Eligible Students	48.3%
Reduced Price Lunch Eligible Students	4.4%
Free or Reduced Price Lunch Eligible Students	52.7%

Source: National School Lunch Program, Ohio Department of Education

![](_page_25_Picture_28.jpeg)

# **Chronic Disease Risks & Outcomes** ALCOHOL USE

### PHI PUBLIC HEALTH IMPORTANCE:

Excessive alcohol use (binge drinking, heavy drinking, and any drinking by pregnant women or people younger than age 21) can be harmful to your health. The excessive use of alcohol comes with many short-term and long-term health risks. Short-term health risks include an increased risk of injury and violence, acute alcohol poisoning, risky sexual behavior (including unprotected sex and sex with multiple partners), and poor birth outcomes including miscarriage, stillbirth, or fetal alcohol spectrum disorders (FASDs). The health risks associated with long-term, excessive alcohol use include cardiovascular disease, liver and digestive diseases, various types of cancer, learning and memory impairment, mental health problems (e.g., anxiety and depression), social issues, and alcohol dependence or alcoholism.

![](_page_26_Figure_3.jpeg)

Adult Binge Drinking by Age Montgomery County, 2016-2017 22.2% 16.0%

35-44 Source: Behavioral Risk Factor Surveillance System (BRFSS)

45-54

55-64

65+

#### **KEY FINDING** as self-reported

25-34

Montgomery 18-24

Binge drinking is most common among adults age 25 to 34 years.

![](_page_26_Figure_8.jpeg)

#### • KEY FINDINGS as self-reported

- Heavy and binge drinking are more common among men than women.
- More Whites report binge drinking and heavy drinking than Blacks.

Across the Nation						
	Montgomery	Ohio	United States	HP		
Alcohol-related Causes of Death Rate <sup>1</sup>	11.6	8.6	9.5			
Alcohol Liver Disease Death Rate <sup>1</sup>	6.5	5.2	5.9			
Binge Drinking	16.0% <sup>2</sup>	18.4%²	17.4% <sup>3</sup>	2		
Heavy Drinking	6.2% <sup>2</sup>	6.7% <sup>2</sup>	6.3% <sup>3</sup>			

<sup>1</sup> Mortality public-use data on CDC Wonder online database, 2016-2017;

Age-adjusted rates per 100,000. <sup>2</sup> Behavioral Risk Factor Surveillance System (BRFSS), 2016-2017

<sup>3</sup> Behavioral Risk Factor Surveillance System (BRFSS), 2017

![](_page_26_Picture_16.jpeg)

#### Alcohol Use Among Youth 12 to 20 Years in the Past Month

Ohio ranks 25th in the U.S. for drinking among youth in the past month.

alcohol in the past month.

Source: National Survey on Drug Use and Health, 2014-2016

#### Adult Heavy Drinking by Income Montgomery County, 2016-2017

![](_page_26_Figure_22.jpeg)

Source: Behavioral Risk Factor Surveillance System (BRFSS)

#### **KEY FINDING** as self-reported

Heavy drinking is highest among those with an income less than \$15,000.

![](_page_26_Picture_27.jpeg)

![](_page_26_Figure_28.jpeg)

### **SDOH** SOCIAL DETERMINANTS OF HEALTH:

Many demographic factors are associated with alcohol use. Some key influencers of alcohol initiation among youth are family norms, parentchild relationships, social networks, and peer pressure. Among high school students, the best predictor of alcohol use is social acceptance. Those of lower socioeconomic status are also subjected to more alcohol advertising, which

normalizes or glamorizes alcohol use. These factors may influence those living in deprived areas to drink more frequently or more heavily compared to those living in wealthier areas.

![](_page_26_Picture_32.jpeg)

> 21% of youth in Ohio and 22% in **Montgomery County report using** 

![](_page_26_Picture_34.jpeg)

# Chronic Disease Risks & Outcomes

![](_page_27_Picture_1.jpeg)

### **PHI** PUBLIC HEALTH IMPORTANCE:

Smoking is toxic to your health and the health of others. Cigarette smoking harms nearly every organ system within the body and can cause several chronic diseases including cancer, heart disease, stroke, diabetes, and chronic lower respiratory diseases. Each year smoking claims the lives of more than 480,000 Americans, including 41,000 Americans who die due to secondhand smoke exposure (CDC, 2018). Smoking also reduces the quality and length of one's life. Smokers can expect to die, on average, 10 years before non-smokers. By quitting, smokers can add back quality years to their life.

#### Adult Current Smoker Status by Education Montgomery County, 2016-2017

![](_page_27_Figure_5.jpeg)

Source: Behavioral Risk Factor Surveillance System (BRFSS)

#### **KEY FINDING** as self-reported

 College graduates are less likely to smoke compared to those with a lower level of education.

#### Each Year

Smoking Claims the Lives

of More Than

![](_page_27_Picture_12.jpeg)

Americans.

![](_page_27_Figure_14.jpeg)

Source: Behavioral Risk Factor Surveillance System (BRFSS)

#### **KEY FINDINGS** as self-reported

- > 23% of adults currently smoke.
- 61% of women compared to 40% of men have never smoked.

Across the Nation				
	Montgomery <sup>1</sup>	Ohio <sup>1</sup>	United States <sup>2</sup>	HP 2020 Goal
Current Smoker	22.6%	21.8%	17.1%	12.0%
Smokeless Tobacco	4.0%	4.9%	4.1%	0.2%

<sup>1</sup>Behavioral Risk Factor Surveillance System (BRFSS), 2016-2017 <sup>2</sup>Behavioral Risk Factor Surveillance System (BRFSS), 2017

# E-Cigarette Status Among Adults Montgomery County, 2016-2017

![](_page_27_Figure_22.jpeg)

### • KEY FINDING as self-reported

25% of adults have tried e-cigarettes and 5% currently use e-cigarettes.

#### E-Cigarette Status Among Youth Ohio, 2014

![](_page_27_Figure_26.jpeg)

#### **KEY FINDING** as self-reported

In middle school, only 13% of students report trying e-cigarettes, but by high school, 41% report trying e-cigarettes.

![](_page_27_Figure_30.jpeg)

Social, environmental, psychological, and genetic factors all influence cigarette use. However, the social environment, such as peer and family approval of tobacco use, may be a person's strongest motivation to start and continue smoking. The accessibility of tobacco and exposure to tobacco ads also influence one's decision. Often, communities of lower socioeconomic status are targeted more heavily by tobacco marketing. All of these factors negatively influence a person's decision to use tobacco.

![](_page_27_Picture_32.jpeg)

![](_page_27_Picture_33.jpeg)

DIABETES

# PHI PUBLIC HEALTH IMPORTANCE:

Diabetes affects over 30.3 million Americans, and about 25% of people with diabetes are not aware of their condition. Another one-third (84.1 million) of U.S. adults have prediabetes, a less serious condition that places one at high risk of developing type 2 diabetes. There are many complications that arise with diabetes that reduce one's quality of life. People with diabetes are twice as likely to have heart disease or a stroke compared to those without diabetes. It is also the leading cause of kidney failure, adult-onset blindness, and lower-limb amputations.

![](_page_28_Figure_3.jpeg)

#### **C** KEY FINDING

 Medicare pays for the majority of diabetes-related hospital visits. Adults Diagnosed with Diabetes and Prediabetes by Sex, Montgomery County, 2016-2017

![](_page_28_Figure_7.jpeg)

Source: Behavioral Risk Factor Surveillance System (BRFSS)

#### **KEY FINDINGS** as self-reported

- Men are more likely than women to be diagnosed with diabetes and prediabetes.
- A diagnosis of diabetes is less likely at higher levels of education.

Adults Diagnosed with Diabetes by Education Montgomery County, 2016-2017

![](_page_28_Figure_13.jpeg)

Source: Behavioral Risk Factor Surveillance System (BRFSS)

# Across the NationMontgomery1Ohio1United<br/>States2Diabetes<br/>Death Rate\*25.524.921.2Diabetes<br/>Diagnosis313.6%11.2%10.5%

\*Age-adjusted rate per 100,000

<sup>1</sup>Ohio Death Certificates, Ohio Department of Health, 2016-2017 <sup>2</sup>Mortality public-use data on CDC Wonder online database, 2016-2017 <sup>3</sup>Behavioral Risk Factor Surveillance System (BRFSS), 2016-2017

![](_page_28_Picture_18.jpeg)

Diabetes Death Rate\* by Race and Sex Montgomery County, 2016-2017

![](_page_28_Figure_20.jpeg)

**C** KEY FINDING

The diabetes death rate among Black men is nearly 2 times the rate of all Montgomery County.

![](_page_28_Picture_24.jpeg)

### **SDOH** SOCIAL DETERMINANTS OF HEALTH:

Compared to Whites, racial and ethnic minority populations have a higher percentage of adults, adolescents, and children diagnosed with diabetes and are more likely to have poorer self-management of diabetes. Minority groups also have a higher percentage of undiagnosed diabetes compared to Whites (CDC, 2017). Neighborhood and community characteristics play a significant role in diabetes development and management. Having access to health care services, healthy food options, and safe places to exercise are associated with lower rates of diabetes and higher rates of compliance with diabetes self-management. Many minority populations live in areas with low access to these resources.

![](_page_28_Figure_27.jpeg)

#### **Chronic Disease Risks & Outcomes**

# **CARDIOVASCULAR DISEASE**

![](_page_29_Picture_2.jpeg)

Cardiovascular disease is a group of diseases that affect the heart or blood vessels. The most common disease, coronary artery disease, involves narrowed or blocked arteries that can lead to life-threatening events such as heart attack, stroke, or heart failure.

![](_page_29_Figure_4.jpeg)

Coronary heart disease becomes less common as income increases.

![](_page_29_Figure_6.jpeg)

Heart Disease Death Rate\* by Race and Sex Montgomery County, 2016-2017

![](_page_29_Figure_8.jpeg)

![](_page_29_Figure_9.jpeg)

#### **C** KEY FINDINGS

- The death rate for heart disease is 1.8 times higher in Black men than the overall heart disease death rate.
- On average, Black men die at a younger age from heart disease compared to other race and sex groups (data not shown).

#### Across the Nation

	Montgomery <sup>1</sup>	Ohio1	United States <sup>2</sup>	
Heart Disease Death Rate*	176.8	185.4	165.3	
Stroke Death Rate*	53.9	41.7	37.5	
Ever Diagnosed with High Blood Pressure <sup>3</sup>	38.0%	34.7%	32.3%	

\*Age-adjusted rate per 100,000

<sup>1</sup>Ohio Death Certificates, Ohio Department of Health, 2016-2017 <sup>2</sup>Mortality Public-use Data on CDC Wonder Online Database, 2016-2017 <sup>3</sup>Behavioral Risk Factor Surveillance System (BRFSS), 2016-2017

Source: Great	Cardiovascular Disease Montgomery	-related Hospit County, 2017
er Dav	Condition	Number of
/ton /	Hypertensive Disease	184,72
Area H	Heart Attack	3,421
lospit	Stroke	3,789
<u>a</u> .		

#### **KEY FINDING**

Most cardiovascular disease-related visits are due to hypertensive disease.

#### Stroke Death Rate\* by Race and Sex Montgomery County, 2016-2017

![](_page_29_Figure_21.jpeg)

\*Age-adjusted rate per 100,000 Source: Ohio Death Certificates, Ohio Department of Health

![](_page_29_Figure_24.jpeg)

#### tal Visits

Visits

53.9 53.1 57.2 52.8 67.0 53.9 54.9

50.4

#### SDOH SOCIAL DETERMINANTS OF HEALTH:

There are several factors that can contribute to the development of cardiovascular disease. One such factor is the body's response to constant, long-term stress - also known as chronic stress. Chronic stress negatively affects heart rate, blood pressure, and the hardening of walls of blood vessels. Individuals of lower socioeconomic status and racial and ethnic minority groups report higher levels of chronic stress related to income, housing, and food instability, social stigma, and racial biases. The higher levels of stress experienced by these groups help to explain the higher rates of cardiovascular disease among lower income and minority groups.

#### **C** KEY FINDING

▶ The death rate for stroke is lowest in White men (49.8 per 100,000) and Black women (50.4 per 100,000)

# **CANCER & PREVENTATIVE SCREENINGS**

![](_page_30_Picture_2.jpeg)

### PHI PUBLIC HEALTH IMPORTANCE:

Cancer is complex; it is many different diseases that affect all the systems of the body. Cancer consistently falls in the top two causes of death, claiming the lives of more than 600,000 Americans each year (National Center for Health Statistics, 2018). While cancer is a serious condition, much of it is preventable. Estimates suggest that only 5 percent of cancers are due to genetic factors. Lifestyle choices and the environment in which people live impact the risk of developing cancer the most. Making healthy life choices such as proper nutrition, regular exercise, not smoking, not drinking too much, avoiding excess sun exposure and tanning beds, obtaining screenings, and getting certain vaccinations can significantly reduce an individual's risk of ever developing cancer.

New Cancers <sup>1</sup> , Montgomery County, 2014-2015			Cancer Deaths <sup>2</sup> , Montgomery County, 2016-2017				
Type of Cancer	Number of Cases	Rate* of New Cases	Trend (11-12)	Type of Cancer	Number of Deaths	Rate* of Death	Trend (12-13)
All Cancer	6,272	466.8	Î	All Cancer	2,502	175.9	↓
Female Breast	957	135.6	1	Lung	681	47.3	1
Prostate	641	98.4	1	Female Breast	187	24.6	1
Lung	1,014	72.7	↓ ↓	Prostate	117	20.1	1
Colorectal	502	37.2	-	Colorectal	199	14.2	1
Melanoma	361	28.0	Î	Pancreas	169	11.6	1
Uterus	204	27.0	Î	Liver and IBD <sup>†</sup>	112	7.3	1
Bladder	286	20.6	L L	Ovary	53	7.0	1
Kidney and Renal Pelvis	242	18.2	Î	Leukemia	87	6.3	1
Non-Hodgkin's Lymphoma	245	18.1	1	Non-Hodgkin's Lymphoma	76	5.3	1
Oral Cavity and Pharynx	175	13.2	Î	Esophagus	75	5.0	1
Ovary	90	12.3		Brain and CNS <sup>‡</sup>	64	4.9	1
Thyroid	138	12.2	1	Bladder	68	4.6	1
Leukemia	158	12.2	1	Kidney and Renal Pelvis	62	4.3	
Pancreas	166	11.9	1	Multiple Myeloma	64	4.3	1
Liver and IBD <sup>†</sup>	115	8.1	1	Uterus	32	3.9	1
Brain and CNS <sup>‡</sup>	90	7.6	Î	Melanoma	43	3.3	1
Cervix	38	7.1	1	Cervix	16	2.4	-
Stomach	96	6.8	-	Oral Cavity and Pharynx	33	2.2	-
Testis	27	5.7	1	Stomach	27	1.9	1
Esophagus	69	5.0	Î	Larynx	22	1.5	1
Larynx	69	5.0	1	Thyroid	**	**	-
Multiple Myeloma	67	4.8	1	Testis	**	**	-
Hodgkin's Lymphoma	32	2.9	Î	Hodgkin's Lymphoma	**	**	1.4
All Other Sites and Types	480	-	-	All Other Sites and Types	294		· ·

\*Age-adjusted rate per 100,000.

+Central Nervous System. ‡Intrahepatic Bile Duct.

(-) No change/Not applicable.

\*\*Data not shown when cases are < 10.

**KEY FINDINGS** 

Lung cancer is the most common and deadly of all cancers (nearly 30% of all cancer deaths).

Sources:

2011-2012; 2012-2013.

<sup>1</sup>Ohio Cancer Incidence Surveillance System (OCISS)

<sup>2</sup>Ohio Death Certificates, Ohio Department of Health

Note: the trend compares the years in parentheses -

- Breast cancer is the most commonly diagnosed cancer among women, and prostate cancer is the most commonly diagnosed cancer among men.
- ▶ The overall rate of new cancers steadily increased since 2011-2012. However, the overall rate of death due to cancer has decreased since 2012-2013.

Across the Nation				
Cancer Death Rates*	Montgomery <sup>1</sup>	Ohio <sup>1</sup>	United States <sup>2</sup>	HP 2020 Goal
All Cancer	175.9	172.2	154.1	161.4
Female Breast Cancer	24.6	21.7	20.0	20.7
Colorectal	14.2	15.2	13.8	14.5
Lung Cancer	47.3	46.2	37.5	45.5
Prostate Cancer	20.1	19.6	19.0	21.8

\*Age-adjusted rate per 100,000 <sup>1</sup>Ohio Death Certificates, Ohio Department of Health, 2016-2017 <sup>2</sup>Mortality public-use data on CDC Wonder online database, 2016-2017

![](_page_30_Figure_16.jpeg)

#### **Chronic Disease Risks & Outcomes**

# **CANCER & PREVENTATIVE SCREENINGS**

![](_page_31_Picture_2.jpeg)

#### **Prostate Cancer Rates\*** Montgomery County, 2014-2017

![](_page_31_Figure_4.jpeg)

#### ■ Montgomery ■ White ■ Black

\*Age-adjusted per 100,000 Source: Ohio Cancer Incidence Surveillance System (OCISS) Ohio Death Certificates, Ohio Department of Health

#### **KEY FINDING**

The rate of new prostate cancer cases among Black men is nearly 2 times higher than White men.

#### Men 40 Years and Older Who Have Ever Had a Prostate-specific Antigen (PSA) Test for Prostate Cancer, Montgomery County, 2014 & 2016

![](_page_31_Figure_10.jpeg)

Source: Behavioral Risk Factor Surveillance Systems (BRFSS)

#### **KEY FINDING** as self-reported

▶ 54% of men 40 years and older had a PSA test.

Adults 50 Years and Older Who Have Ever Had a Sigmoidoscopy or Colonoscopy to Screen for Colon Cancer, Montgomery County, 2015-2016

![](_page_31_Figure_15.jpeg)

#### **KEY FINDING** as self-reported

Over 80% of adults aged 65 years and older were screened for colon cancer.

![](_page_31_Figure_19.jpeg)

#### Women 40 Years and Older Who Have Had a Mammogram in the Past 2 Years Montgomery County, 2015-2016

![](_page_31_Figure_21.jpeg)

Source: Behavioral Risk Factor Surveillance Systems (BRFSS)

#### **KEY FINDING** as self-reported

Black women 40 years and older are more likely to have had a mammogram in the past 2 years compared to White women.

Women 21 to 65 Years Who Have Had a Pap Test in the Past 3 Years Montgomery County, 2014-2016

![](_page_31_Figure_27.jpeg)

Source: Behavioral Risk Factor Surveillance Systems (BRFSS)

#### **KEY FINDING** as self-reported

Black women 21 to 65 years are more likely to have received a pap test in the past 3 years compared to White women.

![](_page_31_Picture_31.jpeg)

**Chronic Disease Risks & Outcomes** 

ASTHMA

![](_page_32_Picture_1.jpeg)

### **SDOH** SOCIAL DETERMINANTS OF HEALTH:

The physical characteristics of neighborhoods and housing environments account for much of the disparity in the number of children diagnosed with asthma. Lower socioeconomic areas tend to have higher rates of smoking and higher levels of air pollution, dampness, dust, and pests compared to wealthier neighborhoods, which can lead to increased rates of asthma among children living in these environments. Additionally, stress has also been linked to higher rates of asthma. Children living in poverty can experience additional hardships related to living without daily needs, safety, food, and stable housing. These anxiety-causing issues can trigger stress-induced asthma.

Across the Nation <sup>1</sup>				
	Montgomery	Ohio	United States	
Adults Who Ever Had Asthma	16.6%	13.8%	14.2%	
Adults Who Currently Have Asthma	11.5%	9.8%	9.4%	
Children Who Ever Had Asthma	14.5%	11.1%	12.4%	

<sup>1</sup>Behavioral Risk Factor Surveillance System (BRFSS), 2016-2017

![](_page_32_Figure_6.jpeg)

Sources: <sup>1</sup>National Health Interview Survey; <sup>2</sup>National Survey of Children's Health; <sup>3</sup>Dayton Children's Hospital Community Health Needs Assessment

#### **KEY FINDING** as self-reported

The percentage of children who currently have asthma is higher in the Greater Dayton Area than in Ohio and the U.S.

Asthma-related Hospital Visits Montgomery County, 2017			
Characteristics	Percent		
Sex	K		
Male	34.7%		
Female	65.3%		
Rac	e		
White	58.1%		
Black	37.5%		
Other Race	1.9%		
Unknown Race	2.6%		
Insuranc	е Туре		
Commercial Insurance	23.1%		
Medicaid	49.7%		
Medicare	19.6%		
Self-Pay	4.7%		
Other	2.9%		

Source: Greater Dayton Area Hospital Association Healthcare Database

#### Adults Who Currently Have Asthma by Income Montgomery County, 2016-2017

![](_page_32_Picture_13.jpeg)

Source: Behavioral Risk Factor Surveillance System (BRFSS)

![](_page_32_Picture_15.jpeg)

![](_page_32_Figure_17.jpeg)

- Women account for nearly two-thirds (65%) of asthma-related hospital visits.
- Medicaid pays for the largest proportion of asthma-related hospital visits (50%).

![](_page_32_Picture_20.jpeg)

13.4%

Black

#### **Adults Who Currently** Have Asthma by Race Montgomery County, 2016-2017

![](_page_32_Picture_22.jpeg)

8.2%

Source: Behavioral Risk Factor Surveillance System (BRFSS)

#### **KEY FINDINGS** as self-reported

- Asthma is most common among individuals who earn less than \$15,000.
- Blacks are more likely to currently have asthma compared to Whites.

![](_page_33_Picture_0.jpeg)

![](_page_33_Picture_1.jpeg)

#### PHI PUBLIC HEALTH IMPORTANCE:

Although usually preventable, injuries are a leading cause of death for individuals between the ages of 1 and 44 (CDC WISQARS, 2017). Whether accidental, self-inflicted, or perpetrated by another, some consequences of injuries and violence are death, disability, poor mental health, high medical costs, and lost productivity. Risk-taking behaviors, such as alcohol and drug abuse, and unsafe driving, can lead to unintentional injury. Causes of violence are more complicated and include personal, community, and social factors.

Age Group 1 <sup>st</sup> Leading Cause 2 <sup>nd</sup> Leading Cause								
All Ages	Poisoning	Falls						
< 1 year	Suffocation	Falls, Drowning						
1-14 years	Motor Vehicle Accidents	Drowning						
15-24 years	Poisoning	Motor Vehicle Accidents						
25-34 years	Poisoning	Motor Vehicle Accidents						
35-44 years	Poisoning	Motor Vehicle Accidents						
45-54 years	Poisoning	Motor Vehicle Accidents						
55-64 years	Poisoning	Falls						
65-74 years	Falls	Poisoning						
75+ years	Falls	Other						

Source: Ohio Death Certificates, Ohio Department of Health

![](_page_33_Picture_6.jpeg)

#### Number and Rate\* of Suicide and Homicide Deaths Montgomery County, 2012-2017

![](_page_33_Figure_8.jpeg)

**KEY FINDINGS** 

- Poisoning from drugs, alcohol, pesticides, chemicals, gases, or vapors is the leading cause of injury-related or accidental deaths; falls are the second leading cause.
- Poisoning and falls account for about 82% of all accidental deaths (data not shown).

County, 2016-2017					
Age Group	Injuries As % of Total Deaths				
All Ages	12.9%				
< 1 year	11.2%				
1-14 years	68.3%				
15-24 years	84.5%				
25-34 years	78.4%				
35-44 years	58.9%				
45-54 years	29.9%				
55-64 years	11.9%				
65-74 years	4.3%				
75+ years	4.2%				

#### **KEY FINDINGS**

- ▶ The number and rate of accidental deaths nearly doubled since 2012-2013 (data not shown).
- Nearly 85% of deaths among those ages 15 to 24 are due to injuries.
- Both suicide and homicide death rates have increased since 2012-2013.

Source: Greater Dayton Area Hospital Association Healthcare Database

	by Demo	njury-re ographic	lated Hospital Visi Characteristics, N	it Rate (per Iontgomery	1,000) County, 2017		Across th	e Nat	ion	
		Falls	Transportation- related Injuries	Assaults	Intentional Self-Harm		Montgomery <sup>1</sup>	Ohio <sup>1</sup>	United States <sup>2</sup>	Н
	Total	49.1	18.8	6.8	1.0				States	-
	<18	13.9	7.9	1.6	1.2	Accidental	126.4	71.8	48.4	
ge	18 to 64	39.1	24.8	10.3	1.1	Death Rate*				
	65+	131.1	11.4	1.0	0.2	Suicide	15.6	145	12.0	
×	Male	38.7	18.3	7.2	0.9	Death Rate*	15.0	14.5	15.0	
Ň	Female	58.7	19.2	6.4	1.1	Homicide				$\square$
8	White	51.2	14.6	4.2	1.0	Death Rate*	11.3	7.1	6.2	
Ka	Black	46.5	34.1	16.2	0.9		1	1	1	

#### **C** KEY FINDINGS

- Falls are most common among individuals age 65 and over.
- Assaults are nearly 4 times more likely among Blacks than Whites.
- Medicare pays for nearly half (47%) of all hospital visits for falls.
- Medicaid pays for the majority of hospital visits for assaults (60%) and intentional self-harm (49%).

#### Injury-related Hospital Visits by Insurance Type Montgomery County, 2017

	Falls	Transportation- related Injuries	Assaults	Intent Self-H
Commercial Insurance	16.4%	36.9%	10.2%	22.7
Medicaid	25.9%	31.7%	59.9%	48.6
Medicare	46.9%	7.3%	7.8%	12.9
Self-Pay	4.7%	5.5%	15.7%	9.3
Other	6.1%	18.6%	6.4%	6.6

Source: Greater Dayton Area Hospital Association Healthcare Database

<sup>1</sup>Ohio Death Certificates, Ohio Department of Health, 2016-2017 <sup>2</sup>Mortality Public-use Data on CDC Wonder Online Database, 2016-2017

![](_page_33_Picture_30.jpeg)

# **Health Risks & Outcomes**

# PHI PUBLIC HEALTH IMPORTANCE:

Vaccines protect individuals from contracting infectious diseases and prevent the spread of diseases within the community. Recommended vaccines vary by a person's age, occupation, or plans for travel to areas outside the U.S. There are individuals who do not receive the proper immunizations due to cost, transportation, and insurance and others who are not vaccinated because of cultural beliefs or a lack of education or misinformation concerning vaccines. Vaccines, however, have proven to be safe and effective when administered appropriately. Public Health professionals must work to ensure the public has access to vaccines and is educated on the importance of vaccines, the diseases they prevent, and the protection they provide.

More than half of children received a flu vaccine

higher in Montgomery County than all of Ohio.

▶ The rate of Hepatitis B infections is 6 times

**C** KEY FINDINGS

in the past year.

Across the Nation							
	Montgomery <sup>1</sup>	Ohio1	United States <sup>2</sup>	HP 2020			
Flu Vaccine (Adults 65+)	57.5%	60.1%	60.3%	90.0%			
Pneumonia Vaccine (Adults 65+)	71.0%	75.4%	75.3%	90.0%			

<sup>1</sup>Behavioral Risk Factor Surveillance System (BRFSS), 2016-2017 <sup>2</sup>Behavioral Risk Factor Surveillance System (BRFSS), 2017

![](_page_34_Figure_5.jpeg)

![](_page_34_Figure_6.jpeg)

#### **Reported Cases of Vaccine-preventable Diseases, Montgomery County and Ohio, 2017-2018**

	· · · · · · · · · · · · · · · · · · ·	<b>U</b> 1			
Poportable Condition	Montgome	ery County	Ohio		
Reportable Condition	Cases	Rate*	Cases	Rate*	
Haemophilus influenzae	29	2.7	523	2.2	
Hepatitis A	228	21.4	1,917	8.2	
Hepatitis B (acute & chronic)	160	15.1	581	2.5	
Influenza A (novel virus infection)	0	0.0	22	0.1	
Influenza-associated hospitalization	1,654	155.6	26,626	114.2	
Influenza-associated pediatric mortality	1	0.1	11	0.0	
Meningococcal disease	1	0.1	19	0.1	
Measles	0	0.0	1	0.0	
Mumps	5	0.5	24	0.1	
Pertussis	171	16.1	1,230	5.3	
Streptococcus pneumoniae	144	13.5	2,498	10.7	
Varicella (chickenpox)	17	1.6	406	1.7	

![](_page_34_Figure_9.jpeg)

![](_page_34_Figure_10.jpeg)

#### **KEY FINDINGS** as self-reported

- More women received a flu vaccine in the past year compared to men.
- women within the same age group.

#### Adults 50 Years and Older Who Have Ever **Received a Shingles Vaccine by Race** Montgomery County, 2016-2017

![](_page_34_Figure_16.jpeg)

Source: Behavioral Risk Factor Surveillance System (BRFSS)

#### **KEY FINDINGS** as self-reported

- Over 70% of adults 50 years and older have not received a shingles vaccine.
- Black adults.

\*Rates per 100,000 Source: Ohio Disease Reporting System (ODRS)

![](_page_34_Picture_23.jpeg)

▶ A higher percentage of men 65 years and older received a flu vaccine in the past year compared to

![](_page_34_Picture_26.jpeg)

Among adults 65 years and older, more White adults received a pneumonia vaccine compared to

#### **Health Risks & Outcomes**

# **COMMUNICABLE DISEASES**

### PHI PUBLIC HEALTH IMPORTANCE:

A primary function of Public Health is to control the spread of communicable diseases. To do this, Public Health monitors disease symptoms and confirmed illnesses reported by health care providers throughout the county. If surveillance detects an unexpected increase in confirmed reports, steps will be employed to investigate and control any potential disease outbreak. Public Health can respond by providing vaccinations, organizing mass distribution of medication if needed, or education to the public. By conducting routine disease surveillance, Public Health reacts quickly and effectively to ensure members of the community are protected.

![](_page_35_Picture_4.jpeg)

#### Most Commonly Reported Communicable Diseases Montgomery County, 2018

![](_page_35_Figure_6.jpeg)

#### **KEY FINDING**

▶ Influenza-associated hospitalizations, hepatitis C, and hepatitis A accounted for nearly 75% of the 1,932 reported communicable diseases in 2018.

Most Commonly Reported Communicable Diseases Among Youth (0-18 years), Montgomery County, 2018

![](_page_35_Figure_10.jpeg)

![](_page_35_Picture_11.jpeg)

#### **C** KEY FINDING

▶ In 2018, 73% of reported communicable diseases in youth (0-18 years) were due to influenza-associated hospitalizations and pertussis, both vaccine-preventable diseases.

#### Hepatits A Cases by Sex and Race Montgomery County, 2018

Count	Percent
227	100%
133	58.6%
94	41.4%
205	90.3%
20	8.8%
2	0.9%
	Count 227 133 94 205 20 20

Source: Ohio Disease Reporting System (ODRS)

# **Hepatitis A Cases**

![](_page_35_Figure_18.jpeg)

![](_page_35_Figure_21.jpeg)

![](_page_35_Picture_24.jpeg)

#### **C** KEY FINDINGS

- From 2014 to 2017, there were only 2 reported cases of hepatitis A.
- ▶ In 2018, Montgomery County became part of a hepatitis A outbreak that was occurring throughout Ohio and related to outbreaks from other states.
  - 227 cases were reported,
  - 90% of cases were White, and
  - 81% of cases were diagnosed in individuals ages 25 to 54 years.

**Health Risks & Outcomes** 

# **SEXUALLY TRANSMITTED DISEASES**

![](_page_36_Picture_2.jpeg)

### PHI PUBLIC HEALTH IMPORTANCE:

Sexually transmitted diseases (STDs) affect people of all ages; however, youth ages 15 to 24 years are particularly burdened by STDs. This age group accounts for more than half of all new infections that occur in the United States each year (CDC, 2017). Many STDs go undetected and untreated, but STDs that do not show symptoms can still cause harm and spread to others. Untreated STDs can lead to infertility in women; they can also complicate pregnancy and lead to serious health consequences for a mother and her baby. Having an STD also increases a person's risk of contracting HIV through sexual contact. Public Health aims to reduce the burden of STDs through education, testing, and treatment.

Source: Ohio Disease Reporting System (ODRS)

Gonorrhea Cases by Age and Sex, Montgomery County, 2018									
Ann Dawan	Total		M	Male		male	Unknown		
Age kange	Cases	Percent	Cases	Percent	Cases	Percent	Cases		
< 13	7	0.4%	1	0.1%	6	0.4%	0		
13 - 14	9	0.6%	0	0.0%	9	0.6%	0		
15 - 19	296	18.3%	140	8.6%	156	9.6%	0		
20 - 29	786	48.5%	417	25.8%	368	22.7%	1		
30 - 39	316	19.5%	204	12.6%	112	6.9%	0		
40 - 49	121	7.5%	93	5.7%	28	1.7%	0		
50 - 64	75	4.6%	68	4.2%	7	0.4%	0		
65+	7	0.4%	7	0.4%	0	0.0%	0		
Unknown	2	0.1%	2	0.1%	0	0.0%	0		
Total	1,619	100%	932	57.6%	686	42.4%	1		

![](_page_36_Figure_7.jpeg)

Across the Nation							
	Montgomery <sup>1</sup>	Ohio <sup>2</sup>	United States <sup>3</sup>				
Chlamydia Rate*	630.2	528.9	528.8				
Gonorrhea Rate*	304.6	206.6	171.9				
Syphilis Rate*	27.3	16.4	31.4				

\*Rate per 100,000

<sup>1</sup>Ohio Disease Reporting System (ODRS), 2018 <sup>2</sup>Ohio Department of Health, STD Surveillance Program, 2017 <sup>3</sup>Centers for Disease Control and Prevention, Division of STD Prevention, 2017

STR	The state	A C	
SEX	ANYONE Ually /	: WHO IS Active C	AN
G	ET GON cdc.	ORRHEA .gov	

#### **KEY FINDINGS**

- ▶ The rate of new gonorrhea cases has steadily increased since 2014.
- Over 650 more gonorrhea cases occurred in 2018 (1,619) compared to 2014 (968).

Chlamydia Cases by Age and Sex, Montgomery County, 2018								
Ago Dongo	Total		M	Male		Female		
Age Range	Cases	Percent	Cases	Percent	Cases	Percent	Cases	
< 13	2	0.1%	1	0.0%	1	0.0%	0	
13 - 14	24	0.7%	1	0.0%	22	0.7%	1	
15 - 19	965	28.8%	236	7.0%	728	21.7%	1	
20 - 29	1,854	55.3%	620	18.5%	1,234	36.8%	0	
30 - 39	367	11.0%	167	5.0%	199	5.9%	1	
40 - 49	90	2.7%	51	1.5%	39	1.2%	0	
50 - 64	43	1.3%	28	0.8%	15	0.4%	0	
65+	4	0.1%	3	0.1%	1	0.0%	0	
Unknown	1	0.0%	0	0.0%	0	0.0%	1	
Total	3,350	100%	1,107	33.0%	2,239	66.8%	4	

Source: Ohio Disease Reporting System (ODRS)

![](_page_36_Picture_17.jpeg)

#### **Syphilis Cases** Montgomery County, 2014-2018

![](_page_36_Figure_19.jpeg)

Source: Ohio Disease Reporting System (ODRS)

#### **KEY FINDINGS**

- The rate of chlamydia cases was higher in 2018 compared to the rate in 2014.
- Over the past 5 years, the highest number of chlamydia cases occurred in 2016 (3,503 cases).

#### **KEY FINDING**

The number of syphilis cases reported in 2018 was 5 times higher than the number reported in 2014.

![](_page_37_Picture_0.jpeg)

![](_page_37_Picture_1.jpeg)

### PHI PUBLIC HEALTH IMPORTANCE:

Certain groups are at a higher risk of contracting HIV. Two groups with historically higher rates of HIV are gay/bisexual men and Black/African Americans. An estimated 1 in 6 gay/bisexual men and 1 in 7 Black/African Americans with HIV are unaware they are infected (CDC, 2018). These two groups share similar social characteristics. Both groups are subject to stigma, fear, and discrimination, which affect an individual's decision to seek care or obtain high quality health services that reduce HIV infectiousness or decrease susceptibility.

Across the Nation						
	Montgomery <sup>1</sup>	Ohio <sup>1</sup>	United States <sup>2</sup>	HP 2020 Goal		
New HIV Rate (per 100,000)	11.9	8.7	11.8	10.0		

<sup>1</sup>HIV/AIDS Surveillance Program, Ohio Department of Health, 2017 <sup>2</sup>HIV Surveillance Report, Centers for Disease Control and Prevention, 2017

![](_page_37_Figure_6.jpeg)

#### **KEY FINDINGS**

- ▶ There are 63 new HIV diagnoses and 1,497 individuals living with HIV.
- The number of new HIV diagnoses declined from 2013 to 2016 but increased from 2016 to 2017.

![](_page_37_Picture_10.jpeg)

Rate (per 100,000) of New HIV Cases by Age Group, Montgomery County, 2017

![](_page_37_Figure_12.jpeg)

#### **KEY FINDING**

▶ The rate of new HIV cases among those 20 to 24 years is 4 times higher than the rate for the entire county.

in urban areas who are at or below the poverty level and lack of education further contribute to stigma and as well as affect access to care and sexual behaviors. Social conditions may have the greatest influence on the spread of HIV. Behaviors and social conditions are the most modifiable factors in preventing HIV spread, and public health interventions should consider the differences in these factors between groups.

![](_page_37_Picture_17.jpeg)

![](_page_37_Figure_19.jpeg)

![](_page_38_Picture_0.jpeg)

![](_page_38_Picture_1.jpeg)

### PHI PUBLIC HEALTH IMPORTANCE:

Receiving regular, preventive care is important to managing and maintaining an individual's health. By visiting a health care provider for check-ups and by receiving routine tests and exams, there is a better chance that an illness or disease will be detected early. While it is more likely to delay or go without dental care rather than medical care, it is equally important to have good oral health as it is vital to a person's overall health.

![](_page_38_Picture_4.jpeg)

#### Uninsured Montgomery County, 2017 Montgomery, 2017 8.0% Montgomery, 2013 12.3% Under 19 Years 4.1% 19-25 years 14.4% 65+ years 0.3% Employed 10.0% Unemployed 30.7%

Source: American Community Survey, U.S. Census Bureau

#### **C** KEY FINDINGS

- ▶ 8% of the population is uninsured, compared to 12% in 2013.
- 14% of the population 19 to 25 years of age are uninsured.

Across the Nation					
	Montgomery	Ohio	United States	HP 2020 Goal	
Uninsured <sup>1</sup>	8.0%	7.4%	8.7%	0%	
Could Not See a Doctor Because of Cost <sup>2</sup>	10.6%	11.0%	13.3%	-	

<sup>1</sup>American Community Survey, U.S. Census, 2017

<sup>2</sup>Behavioral Risk Factor Surveillance System (BRFSS), 2016-2017

![](_page_38_Figure_13.jpeg)

<sup>1</sup> American Community Survey, U.S. Cens	us, 2017 and Area Health Resources
Files, HRSA, 2018	

37.0

80.9

83.9

11.4

27.0

82.9

68.4

9.7

28.7

81.7

68.9

12.1

Family Practice

Pediatricians

**OB/GYN** 

Psychiatrists

	Across the Nation <sup>1</sup>				
	Montgomery	Ohio	United States	HP 2 Go	
Visited the Dentist Within the Past Year	63.4%	66.7%	65.1%	49.	

<sup>1</sup>Behavioral Risk Factor Surveillance System (BRFSS), 2014 & 2016

![](_page_38_Figure_17.jpeg)

to have visited the dentist within the
past year.

Across the Nation				
Dentists per 100,000	Montgomery	Ohio	United States	
Dentists <sup>1</sup>	43.2	48.2	56.2	
Dentists Accepting Medicaid	15.8 <sup>2</sup>	18.2 <sup>2</sup>	21.1 <sup>3</sup>	

<sup>1</sup>Area Health Resources Files, HRSA, 2018 <sup>2</sup>Ohio Department of Medicaid Provider Directory, 2016 <sup>3</sup>Health Policy Institute, Dentist Profile, 2016

# **Access to Care**

![](_page_38_Picture_23.jpeg)

![](_page_38_Picture_24.jpeg)

![](_page_38_Picture_25.jpeg)

Dental conditions were the third most common reason for a hospital visit in 2017 (behind hypertension and diabetes). These visits were most common in Blacks, individuals under 18, and those using Medicaid or paying for their own care.

#### **Dental Issues Among Montgomery County Children**

![](_page_38_Picture_28.jpeg)

 65.4% - History of tooth decay • 62.2% - One or more sealants • 15.4% - Toothache in the last 6 months • 11.1% - Untreated cavities

Source: Third grade Oral Health Screening Survey, 2013-2015

# Access to Care **HOSPITAL UTILIZATION**

![](_page_39_Picture_1.jpeg)

Commercial

Hypertension

Diabetes

Depression, Anxiety

Top Reasons for a Hospital Visit by

### SDOH SOCIAL DETERMINANTS OF HEALTH:

The ability to receive needed health and dental care can be impacted by race and ethnicity, language, socioeconomic status, age, gender identity, disability, and sexual orientation. These factors can make accessing care difficult due to high out-of-pocket costs, availability of needed specialists in the community, and discrimination and poor cultural competency of health care providers. When access to care is difficult, people are less likely to receive preventive care, delay care for illness or injury, and can end up with unmet health care needs, heavy financial burdens, and preventable hospitalizations.

![](_page_39_Figure_4.jpeg)

#### Source: Greater Dayton Area Hospital Association Healthcare Database

Medicare (Age 65+)	Self-Pay	Medicaid
Hypertension	Dental	Dental
Diabetes	Hypertension	Asthma
Stroke	Heroin Poisoning	Hypertension

Hypertension is the top reason for a hospital visit among those

Dental is the top reason for a hospital visit among those who

	3rd
/, er	Dental
	Stroke
	Heroin Poisoning
	Diabetes
	Depression, Anxiety
	Dental
	Anxiety

# **BUILT ENVIRONMENT**

A person's built environment, the community where they live and work, impacts their overall health and quality of life. Individuals living in poverty may have more adverse health outcomes than other individuals. Issues such as poor air quality, childhood lead exposure, a high concentration of tobacco and alcohol retail locations, high crime rates and limited access to healthy food disproportionately affect communities in poverty.

Percent of Individuals				
-	Top 20 Zip	Codes		
Montgomery County 2014-2017				
1	45428	68.6%		
2	45402	42.2%		
3	45403	39.3%		
4	45417	38.7%		
5	45405	36.0%		
6	45406	31.8%		
7	45410	31.3%		
8	45404	25.7%		
9	45426	24.7%		
10	45416	21.9%		
11	45439	21.2%		
12	45414	20.9%		
13	45420	20.4%		
14	45409	19.8%		
15	45345	19.6%		
16	45449	18.1%		
17	45344	15.8%		
18	45342	12.5%		
19	45418	12.3%		
20	45424	11.6%		

![](_page_40_Figure_3.jpeg)

![](_page_40_Figure_4.jpeg)

Source: American Community Survey, U.S. Census

![](_page_40_Picture_6.jpeg)

- Tom Frieden, M.D., M.P.H., former Director of the CDC

![](_page_40_Picture_9.jpeg)

# **Built Environment CRIME & VIOLENCE**

### PHI PUBLIC HEALTH IMPORTANCE:

Crime victimization can result in death or serious injury. Victims who survive often report suffering from physical, mental, or emotional pain and distress. Over time, repeated exposure to crime can lead to poor health outcomes and an overall lower quality of life. Children who have had repeated exposure to traumatic events, even just by hearing about it, are more likely to experience anxiety, depression, and behavioral problems. As they reach adulthood, they are at higher risk of using illicit substances, having unsafe sex, experiencing intimate partner violence, or engaging in criminal activity.

![](_page_41_Figure_3.jpeg)

Source: Greater Dayton Area Hospital Association Healthcare Database

#### **KEY FINDINGS**

- Blacks and men are most likely to visit the hospital for assaults.
- ▶ 60% of hospital visits for assaults are paid for by Medicaid.

#### Assault-related Hospital Visits by Insurance Type, Montgomery County, 2017

Insurance	%
Medicaid	60%
Self-Pay	16%
Commercial Insurance	10%
Medicare	8%
Other	6%

Source: Greater Dayton Area Hospital Association Healthcare Database 76 • Community Health Assessment 2019

![](_page_41_Figure_11.jpeg)

#### **C** KEY FINDINGS

- Violent crimes increased 15% between 2013 and 2016.
- Robbery is the only form of violent crime that did not increase between 2013 and 2016.

![](_page_41_Figure_15.jpeg)

![](_page_41_Picture_16.jpeg)

Across the Nation					
Rate per 100,000	Montgomery	Ohio	United States		
Homicide Death Rate*	11.3 <sup>1</sup>	7.1 <sup>1</sup>	6.0 <sup>2</sup>		
Violent Crime <sup>3</sup>	418.4	300.3	397.1		
Property Crime <sup>3</sup>	3,289.4	2,577.5	2,450.7		

POLICE

CRIME SCENE DO NOT CROSS

<sup>3</sup>Ohio Incident-Based Reporting System (OIBRS), 2016

![](_page_41_Figure_20.jpeg)

![](_page_41_Picture_24.jpeg)

![](_page_41_Figure_26.jpeg)

![](_page_42_Picture_0.jpeg)

![](_page_42_Picture_1.jpeg)

**Overall Crime Rate, Montgomery County, 2016** 

![](_page_42_Figure_3.jpeg)

- Jackson Township Police Department covers Farmersville
- The Montgomery County Sheriff's Office covers Harrison, Jefferson, and Washington Townships

Rate per 1,000

![](_page_42_Figure_7.jpeg)

### SDOH SOCIAL DETERMINANTS OF HEALTH:

Crime rates vary by neighborhood, with low income neighborhoods more likely to be impacted by crime than higher income neighborhoods. Higher crime rates in these areas can be associated with increased stress and anxiety among residents. Additionally, poor physical health is associated with a resident's real and perceived safety from crime. These neighborhoods are also vulnerable to high rates of obesity and chronic disease due in part to physical inactivity. Fear prevents participation in any form of outdoor physical activity; walking for leisure or transportation is avoided and parks are under-utilized.

#### Violent Crime Rate, Montgomery County, 2016

![](_page_42_Picture_11.jpeg)

![](_page_42_Picture_13.jpeg)

#### Property Crime Rate, Montgomery County, 2016

![](_page_42_Figure_16.jpeg)

Rate per 1,000

![](_page_42_Figure_18.jpeg)

![](_page_43_Picture_0.jpeg)

![](_page_43_Picture_1.jpeg)

than 5

(µg/dL).

### PHI PUBLIC HEALTH IMPORTANCE:

High ozone levels can aggravate the lungs and respiratory system of young children and older adults, affecting those with chronic lung conditions such as asthma, chronic bronchitis, and emphysema.

Air Quality Index (AQI) Guide			
Air Quality Index Levels	Numerical Value	Health Concern	
Good	0 to 50	Air quality is considered satisfactory, and air pollution poses little or no risk.	
Moderate	51 to 100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.	
Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.	
Unhealthy for Sensitive Groups	151 to 200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.	
Very Unhealthy	201 to 300	Health warnings of emergency conditions. The entire population is more likely affected.	
Hazardous	301 to 500	Health alert: everyone may experience some effects.	

![](_page_43_Figure_5.jpeg)

![](_page_43_Figure_6.jpeg)

#### • KEY FINDINGS

- The percent of days with a "Good" AQI level increased between 2010 and 2017.
- In the last 10 years, the AQI for Montgomery County reached the "Unhealthy" level on only three days in 2011 and 2012 (data not shown).

![](_page_43_Figure_10.jpeg)

![](_page_43_Figure_11.jpeg)

#### **KEY FINDINGS**

The pollen counts are highest for trees in April, for grasses in May, and for weeds in August.

▶ The mold counts begin increasing in April, peak in September, and begin to decline in October.

![](_page_43_Figure_15.jpeg)

![](_page_43_Figure_16.jpeg)

Source: Ohio Healthy Homes and Lead Poisoning Prevention Program & U.S. Census Bureau

## SDOH SOCIAL DETERMINANTS OF HEALTH:

A child's home environment serves as a significant source of lead exposure. Lead can be found in certain toys, lead pipes, soil, and within the paint used on homes built before 1978. Lead paint can break down, peel, and flake spreading lead dust throughout the home. Young children are at high risk of poisoning when they put objects or their hands in their mouths that have been exposed to lead. Lead is harmful to the developing brain and nervous system as it can cause irreversible effects in young children. Some of these health effects include aggressive behavior, hyperactivity, impaired growth, hearing loss, learning disabilities, mental retardation, coma, and, in extreme cases, death. Children that are at a (ID) higher risk for lead exposure are poor, members of racial or ethnic minority groups, recent immigrants, or live in older, poorly maintained rental property (CDC, 2015).

![](_page_43_Picture_21.jpeg)

#### Rate of High Blood Lead Levels Among Children, 0 to 15 years (2014-2017) & Percent of Houses Built Prior to 1970 (2013-2017), Montgomery County

![](_page_43_Figure_23.jpeg)

![](_page_43_Picture_24.jpeg)

![](_page_44_Picture_0.jpeg)

**Built Environment** 

**ALCOHOL RETAIL STORES** 

#### **Density of Alcohol Retail Carry-Out Locations** Montgomery County, 2019

![](_page_44_Figure_4.jpeg)

Source: Division of Liquor Control, Ohio Department of Commerce

### SDOH SOCIAL DETERMINANTS OF HEALTH:

Communities with higher poverty rates and larger minority populations (i.e., Black and Hispanic populations) have a higher concentration of alcohol retail stores and tobacco vendors. These neighborhoods are subjected to the negative social consequences associated with these stores such as physical violence, noise, property damage, and disorderly conduct. Strong social cohesion and community involvement are needed in these neighborhoods to work collectively to address zoning laws that permit a high density of alcohol and tobacco vendors (CDC, 2017).

![](_page_44_Figure_8.jpeg)

![](_page_44_Picture_10.jpeg)

# **Built Environment TOBACCO VENDORS**

#### **Density of Tobacco Vendors** Montgomery County, 2018

![](_page_44_Figure_14.jpeg)

Source: Environmental Health, PHDMC

![](_page_45_Picture_0.jpeg)

Food Deserts and Available Food Options, Montgomery County, 2018

Food deserts are low income census tracts where a significant number of residents are more than 1 mile in urban areas or 10 miles in rural areas from the nearest supermarket.

**Food Desert** 

**Food Location** Types

**Grocery** Small chain retail shop that primarily sells food

Local Market Small neighborhood market that offers food options

Supercenter Combined supermarket and department store (i.e., Walmart)

Supermarket Large grocery store that also sells nongrocery items (i.e., Kroger)

![](_page_45_Figure_10.jpeg)

## **SDOH SOCIAL DETERMINANTS OF HEALTH:**

Neighborhood conditions can impact the availability of healthy, fairly-priced, quality food. Residents of lower income and rural neighborhoods are more likely to have poor access to supermarkets that offer fruits, vegetables, and whole food options due to distance and transportation. Additionally, low income neighborhoods are less likely to have supermarkets or chain grocery stores nearby and tend to have a higher number of convenience stores and small food markets that carry foods of lower nutritional quality. If healthier food options are available in the smaller neighborhood stores, they are often more expensive than in a chain supermarket.

![](_page_45_Figure_13.jpeg)

The park and trail systems within Montgomery County are extensive. Dayton's Five Rivers MetroParks maintains 18 parks and six regional recreation trails within nearly 16,000 acres of green space. Each city and township also has a system of parks and trails.

### SDOH SOCIAL DETERMINANTS OF HEALTH:

When neighborhoods have nearby parks and bike trails, they may often go unused. In communities where sidewalks are absent or poorly maintained, streets are poorly lit, crosswalks are nonexistent, or cars travel at a high rate of speed, residents do not feel safe walking to parks. A fear of violence, whether real or perceived, may also discourage the use of neighborhood parks.

# **Built Environment OUTDOOR RECREATION**

#### Parks and Bike Trails, Montgomery County, 2019

![](_page_46_Picture_0.jpeg)

# MONTGOMERY COUNTY GEOGRAPHIC SNAPSHOTS

While presenting data at the county-level provides an overall picture of the health of the residents of Montgomery County, there is a benefit to understanding the population and health characteristics of smaller areas of the county so that place-based programs and policies can be developed.

For the geographic snapshots, Montgomery county was divided into 13 areas which include both cities and townships. Each area is comprised of individual census tracts that have similar population, economic, and educational attainment characteristics.

The following section presents information pertaining to population demographics, income and poverty, education, employment, housing, food access, birth outcomes, mental and behavioral health, and chronic disease for the 13 selected areas of Montgomery County.

![](_page_46_Figure_5.jpeg)

![](_page_47_Figure_0.jpeg)

![](_page_47_Picture_4.jpeg)

![](_page_47_Picture_6.jpeg)

Life Expectancy at Birth 76.1 years 74.0 years (MC)

![](_page_47_Picture_8.jpeg)

**Accidental** Falls 46.6 49.1 (MC)

![](_page_47_Picture_10.jpeg)

![](_page_48_Figure_0.jpeg)

![](_page_48_Picture_2.jpeg)

#### Housing Units With No Vehicles and Low Access 2% 3% (MC)

![](_page_48_Picture_6.jpeg)

Life Expectancy at Birth 73.8 years 74.0 years (MC)

# Illness

Type 2 Diabetes 144.8 158.0 (MC)

**Heart Attack** 5.8 6.4 (MC)

> Stroke 6.1 7.1 (MC)

![](_page_48_Picture_12.jpeg)

**Accidental** Falls 39.2 49.1 (MC)

![](_page_48_Picture_14.jpeg)

![](_page_49_Figure_0.jpeg)

![](_page_49_Picture_3.jpeg)

![](_page_49_Picture_6.jpeg)

![](_page_50_Figure_0.jpeg)

![](_page_50_Picture_3.jpeg)

#### Housing Units With No Vehicles and Low Access 2% 3% (MC)

**Infant Mortality Rate** (per 1,000 live births)

![](_page_50_Picture_6.jpeg)

Life Expectancy at Birth 76.4 years 74.0 years (MC)

isits (pe	er 1,000)	
	Illness	Accidents
th	<b>Type 2</b> Diabetes <b>120.9</b> 158.0 (MC)	Assault 2.3 6.8 (MC)
	Heart Attack 6.2 6.4 (MC)	Accidental Falls 42.4 49.1 (MC)
ess	Stroke 5.7 7.1 (MC)	Public Health Prevent: Promote. Protect Davton & Monteomer County

![](_page_51_Figure_0.jpeg)

![](_page_51_Picture_2.jpeg)

![](_page_51_Picture_5.jpeg)

![](_page_52_Figure_0.jpeg)

## Moraine, West Carrollton, Miamisburg, and Miami Township

![](_page_52_Figure_2.jpeg)

#### Access to Food Beyond 1 Mile of Supermarket

![](_page_52_Picture_5.jpeg)

![](_page_52_Picture_7.jpeg)

![](_page_53_Figure_0.jpeg)

![](_page_53_Picture_2.jpeg)

![](_page_53_Picture_5.jpeg)

Life Expectancy 74.0 years (MC)

![](_page_54_Figure_0.jpeg)

![](_page_54_Picture_3.jpeg)

![](_page_54_Picture_5.jpeg)

![](_page_55_Figure_0.jpeg)

![](_page_55_Picture_2.jpeg)

![](_page_55_Picture_5.jpeg)

![](_page_56_Figure_0.jpeg)

![](_page_56_Picture_2.jpeg)

No Vehicles and Low Access

![](_page_56_Picture_5.jpeg)

Life Expectancy at Birth 68.7 years 74.0 years (MC)

![](_page_57_Figure_0.jpeg)

![](_page_57_Picture_2.jpeg)

![](_page_57_Picture_5.jpeg)

![](_page_58_Figure_0.jpeg)

![](_page_58_Picture_3.jpeg)

![](_page_58_Picture_5.jpeg)

![](_page_59_Figure_0.jpeg)

![](_page_59_Picture_2.jpeg)

#### Housing Units With No Vehicles and Low Access 4% 3% (MC)

![](_page_59_Picture_5.jpeg)

Life Expectancy at Birth 71.7 years 74.0 years (MC)

![](_page_59_Picture_8.jpeg)

Assault 4.7

6.8 (MC)

Intentional Self Harm

![](_page_59_Picture_12.jpeg)

![](_page_59_Picture_13.jpeg)

#### **Data Sources**

- American Community Survey, United States Census Bureau
- Area Health Resources Files, Health Resources and Services Administration (HRSA)
- Behavioral Risk Factor Surveillance System (BRFSS) Survey, Centers for Disease Control and Prevention (CDC)
- CDC WONDER Online Database, Mortality and Natality, Centers for Disease Control and Prevention (CDC)
- Dayton Children's Hospital 2017 Community Health Needs Assessment
- Division of Liquor Control, Ohio Department of Commerce
- Division of STD Prevention, Centers for Disease Control and Prevention (CDC)
- Economic Research Service, Food Access Research Atlas. United States Department of Agriculture (USDA)
- Environmental Health, Public Health Dayton & Montgomery County (PHDMC)
- Environmental Protection Agency (EPA)
- Five Rivers MetroParks
- Greater Dayton Area Hospital Association Healthcare Database
- Healthy People 2020
- Health Policy Institute
- HIV/AIDS Surveillance Program, Ohio Department of Health (ODH)
- HIV Surveillance Report, Centers for Disease Control and Prevention (CDC)
- Map the Meal Gap, Feeding America
- Montgomery County Homeless Solutions
- Miami Valley Regional Planning Commission (MVRPC)
- Montgomery County Poisoning Death Review
- National Health Interview Survey, Centers for Disease Control and Prevention (CDC)
- National Provider Identifier Standard (NPI), Center for Medicare and Medicaid Services
- National School Lunch Program, Ohio Department of Education (ODE)
- National Survey of Children's Health, Health Resources and Services Administration (HRSA)
- National Survey of Drug Use and Health (NSDUH): 2014-2016 Substrate Estimates of Substance Use and Mental Disorders, Substance Abuse and Mental Health Services Administration (SAMHSA)
- National Vital Statistics System (NVSS), Adequacy of Prenatal Care Report, Centers for Disease Control and Prevention (CDC)
- National Vital Statistics System (NVSS), Births Report, Centers for Disease Control and Prevention (CDC)
- National Vital Statistics System (NVSS), Mortality NCHS Data Brief, Centers for Disease Control and Prevention (CDC)

- Office of Health Promotion, Public Health Dayton & Montgomery County (PHDMC)
- Ohio Birth Certificates and Ohio Death Certificates, Ohio Department of Health (ODH)
- Ohio Cancer Incidence Surveillance System (OCISS), Ohio Department of Health (ODH)
- Ohio Disease Reporting System (ODRS), Ohio Department of Health (ODH)
- Ohio Healthy Homes and Lead Poisoning Prevention Program, Ohio Department of Health (ODH)
- Ohio Healthy Youth Environment Survey (OHYES!)
- Ohio Incident-Based Reporting System (OIBRS), Office of Criminal Justice Services
- Ohio Medicaid Assessment Survey, Ohio Department of Medicaid
- Ohio Youth Tobacco Survey, Ohio Department of Health (ODH)
- Provider Directory, Ohio Department of Medicaid
- Regional Air Pollution Control Agency (RAPCA), Public Health Dayton & Montgomery County (PHDMC)
- STD Surveillance Program, Ohio Department of Health (ODH)
- Substance Abuse and Mental Health Services Administration Services (SAMHSA) Locator Map
- Third Grade Oral Health Screening Survey, Ohio Department of Health (ODH)
- Women, Infants, and Children (WIC) Program, Public Health Dayton & Montgomery County (PHDMC)

![](_page_60_Picture_44.jpeg)

![](_page_60_Picture_50.jpeg)

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![](_page_63_Figure_0.jpeg)

On February 20, 2018, Public Health - Dayton & Montgomery County achieved national accreditation through the Public Health Accreditation Board (PHAB). Public Health achieved this designation because of a steadfast commitment to achieving our mission and vision.

- Our mission is to improve the quality of life in our community by achieving the goals of public health: prevention, promotion, and protection.
- Our vision is Montgomery County is a healthy, safe, and thriving community.
- National accreditation assures Montgomery County's residents and visitors that they will receive the highest quality public health services.