# HEALTH **OF THE CITY**



#### **TABLE OF CONTENTS**

INTRODUCTION 2	Behavioral Health11	CLINICAL CARE 30
About Philadelphia3	Infectious Health Conditions 14	PHYSICAL ENVIRONMENT 34
HEALTH OUTCOMES 4	Infant and Child Health 18	SOCIAL & ECONOMIC
Summary Health Measures 4	<i>Injuries22</i>	DETERMINANTS 37
Chronic Health Conditions 7	HEALTH BEHAVIORS26	ACKNOWLEDGMENTS 43

# INTRODUCTION

Health is influenced by many factors, including social and economic conditions, the built environment, accessibility of healthy products, the behavioral choices people make, and the medical care system. Health of the City describes the health and well-being of people who live in Philadelphia. The Philadelphia Department of Public Health produces this annual report to help health care providers, city officials, people who make decisions for non-governmental organizations, and individual residents make more informed decisions about health.

> Health of the City includes summaries of data from various sources to describe the demographics of the city's residents as well as health outcomes and key factors that influence health in five broad areas:

#### **HEALTH OUTCOMES**

1

represent how healthy Philadelphians are, including measures of quality of life, rates of infectious and chronic illnesses, and premature death.

#### **HEALTH BEHAVIORS**

2

include behaviors that directly impact health, such as nutrition, exercise, tobacco and drug use, and sexual activity.

#### 3 CLINICAL

**CARE** encompasses both access to and quality of preventive, primary, and acute care.

#### 4 **PHYSICAL**

includes air quality and access to housing and transportation.

**ENVIRONMENT** 

#### **SOCIAL AND ECONOMIC**

5

**DETERMINANTS** include education, employment, income and community safety.

#### **ABOUT PHILADELPHIA**

#### THE SIXTH LARGEST CITY

Philadelphia is the sixth largest city in the United States (behind New York City, Los Angeles, Chicago, Houston, and Phoenix), with an estimated population of 1,580,863 in 2017. Philadelphia's young adult population (ages 20 to 34 years) continued to grow and represented the largest portion of the population.

#### POPULATION BY AGE GROUP | 2017

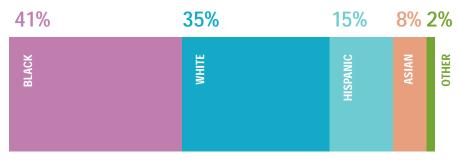


SOURCE: 2017 American Community Survey Estimates, U.S. Census Bureau

#### A DIVERSE CITY

Philadelphia is racially and ethnically diverse – 41 percent non-Hispanic black, 35 percent non-Hispanic white, 15 percent Hispanic, and 8 percent Asian. Yet, Philadelphia continued to be segregated along racial lines, with one race or ethnic group representing the majority in 84 percent of the city's 381 census tracts.

#### POPULATION BY RACE/ETHNICITY | 2017

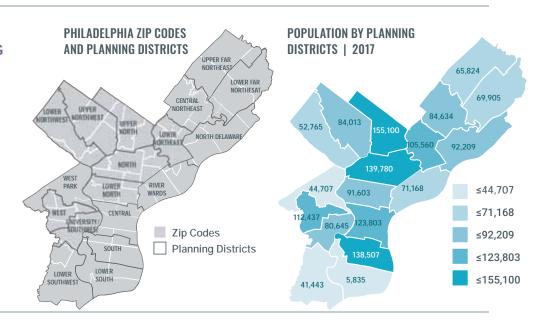


SOURCE: 2017 American Community Survey Estimates, U.S. Census Bureau

#### FORTY-EIGHT ZIP CODES AND EIGHTEEN PLANNING DISTRICTS

Philadelphia consists of fortyeight zip codes and eighteen planning districts representing distinct economic, geographic, and social units.

SOURCE: 2017 American Community Survey Estimates, U.S. Census Bureau



# HEALTH OUTCOMES

Despite experiencing one of the worst public health crises of our time — the opioid epidemic — most key health indicators in Philadelphia continued to improve over the last year. Yet, some health indicators have moved in the wrong direction and Philadelphia's health significantly lags behind other major cities. Also, many disparities in key health outcomes and behaviors persist particularly for racial/ethnic minorities and those experiencing poverty. The following sections provide more details.

#### **SUMMARY HEALTH MEASURES**

Measuring life expectancy and examining trends in causes of death show how people are dying, who is dying prematurely and how these deaths may be prevented. After improving for more than a decade, life expectancy in Philadelphia and nationally has started to decline for many groups. Increases in premature mortality due to drug overdoses and homicides are the primary causes. Increases in chronic conditions and other poor health behaviors are likely to further reverse the trend.

	MOST REC ESTIMATE		OPULATIONS WITH OORER OUTCOMES		CHANGE IN RECENT YEARS	
	DEATHS ALL CAUSES)					
	857.2 p 100,000				>> IMPROVING	
Y L	EARS OF PO	TENTIAL I AGE 75	LIFE			
	9,900.8 years <sup>1</sup>	N	Non-Hispanic b	olacks	<< WORSENING	
	IFE EXPECTA MALES)	ANCY				
	72.4 years <sup>1</sup>	N	lon-Hispanic b	olacks	<< WORSENING	
	IFE EXPECTA EMALES)	ANCY				
	79.3 years <sup>1</sup>				<< WORSENING	
	DULTS SELF OOR OR FAIF					
	22%2		Hispanics; Non-Hispanic t	olacks	NO CHANGE	

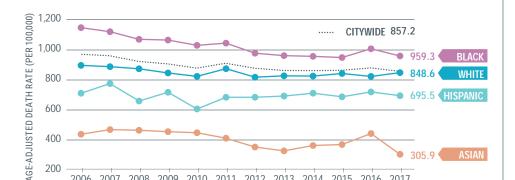
SOURCE: <sup>1</sup> 2017 Preliminary Vital Statistics Report, PDPH <sup>2</sup> 2017 PA Behavioral Risk Factor Surveillance System

305.9 ASIAN

#### **SUMMARY HEALTH MEASURES**

#### **OVERALL MORTALITY**

In 2017, an estimated 15,776 Philadelphia residents died. Heart disease, cancer and unintentional injuries were the leading causes of death.



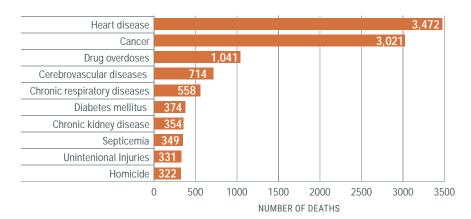
2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

#### LEADING CAUSES OF DEATH IN PHILADELPHIA | 2017

**DEATH RATE | 2006-2017** 

400

200

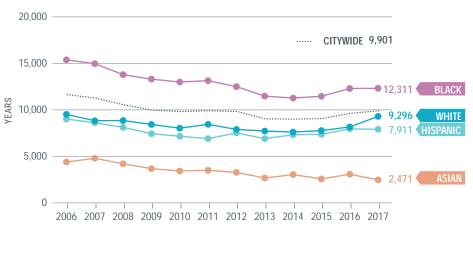


SOURCE: 2007-2017 Vital Statistics, PDPH

#### PREMATURE DEATHS

Premature deaths are those that occur before age 75. As many of these deaths may be preventable, estimating the years of potential life lost (YPLL) is a key measure of Philadelphia's health. From 2000 to 2014 YPLL declined, reaching a low of 9,004 years in 2014. In 2015, this trend reversed and has continued to increase due to increasing deaths from drug overdoses and homicides among young adults.

#### YEARS OF POTENTIAL LIFE LOST BEFORE AGE 75 BY RACE/ETHNICITY | 2006-2017



SOURCE: 2007-2017 Vital Statistics, PDPH

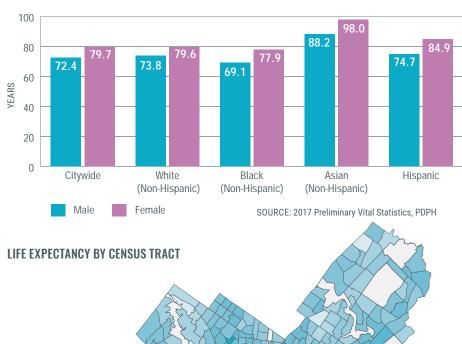
#### **SUMMARY HEALTH MEASURES**

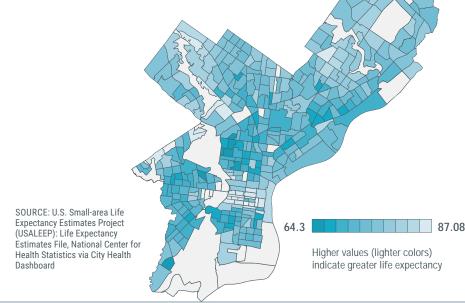
#### **LIFE EXPECTANCY**

Similarly, life expectancy at birth in men and women increased until 2014 and declined in recent years. Non-Hispanic Asians had the highest life expectancy overall. Life expectancy at birth was shortest among non-Hispanic black men at 69.1 years.

Life expectancy varies considerably by neighborhood in Philadelphia. Life expectancy was lowest in communities with high rates of adverse behavioral and economic determinants, including poverty, substance use/abuse, and community violence.

#### LIFE EXPECTANCY BY RACE AND SEX

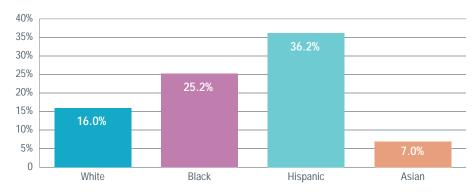




#### SELF-REPORTED HEALTH STATUS

While life expectancy indicates how long people are living, self-reported health status provides a measure of quality of life. Overall, 22 percent of Philadelphians rated their health as poor or fair. There were significant differences among racial/ethnic groups with rates being highest among Hispanics.

#### **SELF-REPORTED POOR OR FAIR HEALTH**



SOURCE: 2015-2017 PA Behavioral Risk Factor Surveillance System

>> IMPROVING

#### CHRONIC HEALTH CONDITIONS

MOST RECENT POPULATIONS WITH CHANGE IN ESTIMATE POORER OUTCOMES RECENT YEARS **OBESITY IN CHILDREN** (AGES 5 - 18) 21.9%1 Hispanic boys; << WORSENING Non-Hispanic black girls OBESITY IN ADULTS 35.0%<sup>2</sup> Non-Hispanic blacks; << WORSENING Hispanics **HYPERTENSION IN ADULTS** 33.0%2 Non-Hispanic blacks << WORSENING **DIABETES IN ADULTS** 12.0%2 O NO CHANGE Non-Hispanic blacks **CANCER INCIDENCE** 502.5 >> IMPROVING per 100,000<sup>3</sup> CHILDHOOD ASTHMA HOSPITALIZATIONS

Six of the leading causes of

cancer, cerebrovascular disease,

chronic respiratory disease,

diabetes, and chronic kidney

significantly reduce quality

of life and life expectancy,

and lead to disability and high health care costs. Many

disease. These conditions often

factors, particularly poor health

conditions, resulting in varying

rates among the population.

behaviors and lack of access to care, contribute to these

death in Philadelphia are

related to chronic health conditions: heart disease,

SOURCE: 1 2016 - 2017 School District of Philadelphia

58.8

per 100,000<sup>4</sup>

<sup>2</sup> 2017 PA Behavioral Risk Factor Surveillance System

<sup>3</sup> 2013 – 2015 PA Department of Health Cancer Registry

<sup>4</sup> 2016 Hospital Discharges, PA Health Care Cost Containment Council

Hispanics

Non-Hispanic blacks;

#### CHRONIC DISEASES AMONG ADULTS

Children and adults with obesity are at increased risk for developing chronic health conditions like high blood pressure, type 2 diabetes, asthma, and cardiovascular disease. Approximately 1 in 3 adults had obesity, with rates being highest among non-Hispanic blacks. Similar patterns were observed for hypertension among adults. The rate of diabetes remained stable and was highest among non-Hispanic blacks and Hispanics.

#### PREVALENCE OF DIABETES, HYPERTENSION AND OBESITY AMONG ADULTS

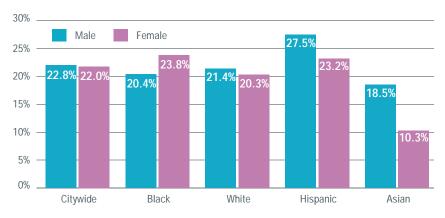


SOURCE: 2011 - 2017 PA Behavioral Risk Factor Surveillance System

#### **CHILDHOOD OBESITY**

In 2017, just over 1 in 5 children ages 5 to 18 in public schools had obesity. This high rate of obesity among children undoubtedly contributes to the growing epidemic of obesity among adults. Non-Hispanic black girls and Hispanic boys had the highest rates of obesity. Prevalence of childhood obesity declined slightly over the last decade, but that trend seems to have slowed and potentially reversed in recent years.

#### **OBESITY AMONG CHILDREN (AGES 5 – 18)**



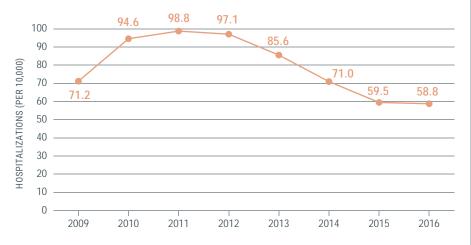
SOURCE: 2016 - 2017 School District of Philadelphia

#### **CHRONIC HEALTH CONDITIONS**

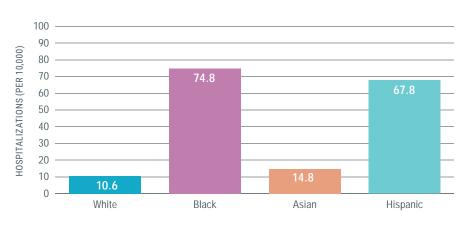
#### **CHILDHOOD ASTHMA**

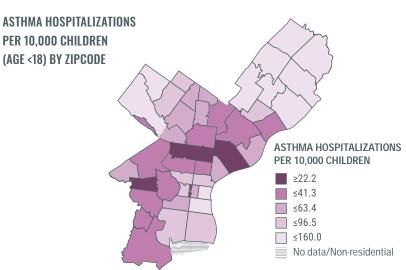
Asthma is a significant problem for many children in Philadelphia. The rate of asthma-related hospitalizations declined to a low of 58.8 hospitalizations per 10,000 children in 2016. Non-Hispanic black and Hispanic children had the highest rates of asthma-related hospitalizations, 5 to 6 times higher than that of non-Hispanic white children. Rates were also highest among children living in the upper North and West Philadelphia.

#### ASTHMA HOSPITALIZATIONS PER 10,000 CHILDREN (AGE <18)



#### ASTHMA HOSPITALIZATIONS PER 10,000 CHILDREN (AGE <18) BY RACE/ETHNICITY





SOURCE: 2016 Hospital Discharges, PA Health Care Cost Containment Council

The term "behavioral health" includes conditions related to mental illness, substance use, and emotional well-being. Behavioral health conditions are often associated with disability and premature death. In partnership with the city's Department of Behavioral Health and Intellectual Disability Services, new indicators related to behavioral health conditions are included in this year's report.





#### **BEHAVIORAL HEALTH**

	MOST RECENT ESTIMATE	POPULATIONS WITH POORER OUTCOMES	CHANGE IN RECENT YEARS	
DIAGNO	OSED DEPRESS	SIVE DISORDER IN ADI	ULTS	
	22%1		O NO CHANGE	
FREQUI	ENT MENTAL S	TRESS AMONG ADUL	TS	
	16%1	Low income	O NO CHANGE	
SUICID	E IDEATION IN	<b>TEENS</b> (AGE 14-18)		
	13.8%2		O NO CHANGE	
SUICID	E DEATHS			
	10.1 per 100,000 <sup>3</sup>	Non-Hispanic white males	O NO CHANGE	
PRESC	RIPTION OPIOI	D USE		
	35%1			
OPIOID	-RELATED DEA	ATHS		
	59.0 per 100,000 <sup>3</sup>	Non-Hispanic white males	<< WORSENING	
ER VISITS FOR DRUG OVERDOSES				
	8,0654		<< WORSENING	

SOURCE: <sup>1</sup> 2017 PA Behavioral Risk Factor Surveillance System

<sup>2</sup> 2017 Philadelphia Youth Risk Behavior Survey

<sup>3</sup> 2017 Preliminary Vital Statistics, PDPH

<sup>4</sup> 2017 Syndromic Surveillance, PDPH

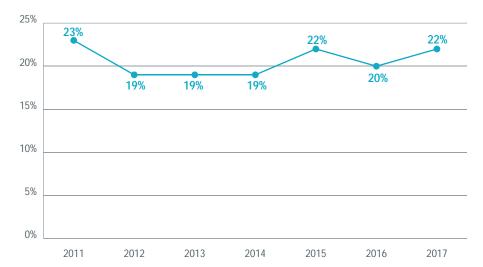
For more data about behavioral health system in Philadelphia, please visit https://dbhids.org/wp-content/uploads/2018/10/ CBH-2017-Annual-Report-1.pdf.

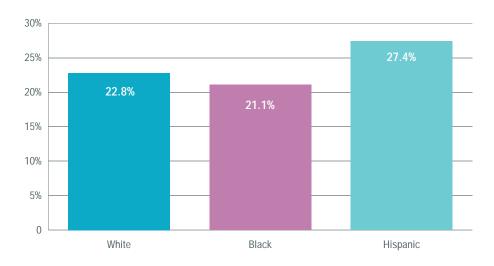
#### **BEHAVIORAL HEALTH**

#### DIAGNOSED DEPRESSIVE DISORDER

In 2017, roughly 1 in 5 adults had a diagnosed depressive disorder, which was nearly double the amount 15 years ago. Rates remained relatively stable in recent years and were highest among Hispanics. These estimates include only diagnosed depressive conditions and may be an underestimate of adults with poor mental health.

#### DIAGNOSED DEPRESSIVE DISORDER AMONG ADULTS | 2011–2017

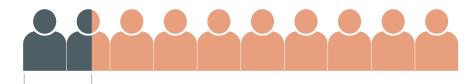




SOURCE: 2011-2017 PA Behavioral Risk Factor Surveillance System

#### FREQUENT MENTAL STRESS AMONG ADULTS

Overall health depends on both physical and mental wellbeing. Mental stress impacts quality of life and has been linked to several physical health conditions, particularly hypertension.



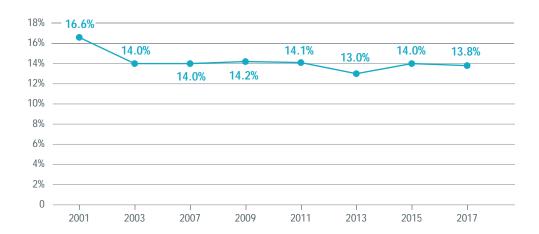
APPROXIMATELY
16 PERCENT OF ADULTS
REPORTED FREQUENT
MENTAL STRESS.

#### **BEHAVIORAL HEALTH**

#### **SUICIDE IDEATION AMONG TEENS**

Nearly 1 in 7 high school students reported seriously considering suicide in 2017.

#### SUICIDE IDEATION IN YOUTH | 2001-2017



SOURCE: 2001 - 2017 Philadelphia Youth Risk Behavior Survey

#### **SUICIDE DEATHS**

Suicide death rates remained fairly stable in Philadelphia, approximately 175 each year. Suicides were most common among non-Hispanic white men.

#### SUICIDE DEATHS | 2007-2017



SOURCE: 2007 - 2017 Vital Statistics, PDPH

#### **BEHAVIORAL HEALTH**

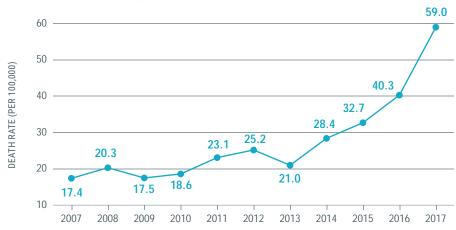
### THE OPIOID EPIDEMIC

An opioid epidemic is occurring in Philadelphia and nationwide. This epidemic is largely fueled by years of over prescribing of highly addictive pharmaceutical opioids to treat chronic pain. In 2017, approximately 1 in 3 Philadelphians reported taking a prescription opioid in the last year — rates were high across all age, sex, and racial/ethnic groups.

#### **OVERDOSE DEATHS**

Drug overdose deaths among Philadelphia residents increased nearly 4-fold in recent years. Most drug overdose deaths involve opioids, which include both heroin and pharmaceutical opioids. In 2017, the opioid overdose mortality rate reached a peak of 59.0 deaths per 100,000 people (914 deaths among Philadelphia residents) – 84 percent of these deaths involved fentanyl, a lethal synthetic opioid that has penetrated the illicit drug market.

#### OPIOID OVERDOSE DEATHS | 2007–2017

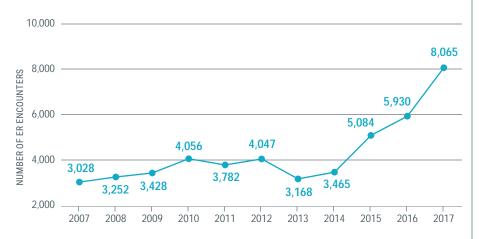


SOURCE: 2007 - 2017 Medical Examiner's Office, PDPH

#### **OVERDOSE ER VISITS**

Fatal drug overdoses are just the tip of the iceberg. Emergency rooms and emergency response units are responding to significant increases of non-fatal drug overdoses. In 2017, there were over 8,000 ER visits for drug overdoses in Philadelphia. However, this is an underestimate of the total non-fatal drug overdoses as many individuals never go to the ER when overdoses are reversed in community settings.

#### EMERGENCY ROOM VISITS FOR DRUG OVERDOSES | 2007-2017



SOURCE: 2007 - 2017 Syndromic Surveillance, PDPH

Infectious diseases are spread between people or animals via food, water, air, insects, blood or other bodily fluids. Advances in public health, specifically sanitation, antibiotics, and universal vaccinations, during the twentieth century dramatically reduced illness and deaths related to communicable diseases. With the exception of conditions transmitted via sexual contact and needle sharing, communicable disease incidence rates remain low in Philadelphia.

	MOST RECENT ESTIMATE	POPULATIONS WITH POORER OUTCOMES	CHANGE IN RECENT YEARS
HIV INC	CIDENCE		
	32.5 per 100,000 <sup>1</sup>	Non-Hispanic black men who have sex with men (MSM)	>> IMPROVING
GONOR	RHEA CASES		WORSENING
	21,066²	Young adult females	WORSENING
CHLAM	IYDIA CASES		WORSENING
	7,275 <sup>2</sup>	Young adult females	WORDENING
CHLAM	IYDIA AND GOI	NORRHEA AMONG TEI	ENS
	4.0%2	Teenage girls	// IMPROVING
SYPHI	LIS		WODEFNING
	1,026 <sup>2</sup>	Non-Hispanic black MSM	<< WORSENING



SOURCE: <sup>1</sup> 2017 HIV Surveillance Data, AIDS Activity Coordinating Office, PDPH

<sup>2</sup> 2017 STD Surveillance, PDPH Division of Disease Control

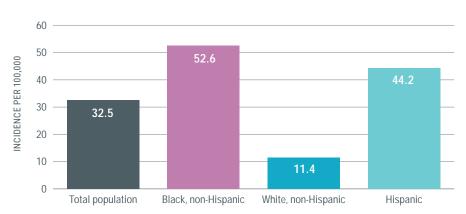
#### **HIV/AIDS**

The number of new HIV diagnoses has declined by nearly half over the last decade. There were an estimated 32.5 new cases per 100,000 people in 2017, representing a slight increase from 2016. Despite significant declines in the number of transmissions due to heterosexual contact, the number of new diagnoses among men who have sex with men (MSM) remained stable and increased among persons who inject drugs. This increase was driven by an outbreak related to the ongoing opioid epidemic in Philadelphia. Overall, rates were nearly 5 times higher in non-Hispanic blacks and Hispanics than non-Hispanic whites and Asians.

In 2016, HIV incidence was highest in Philadelphia compared to other large cities and nationwide.

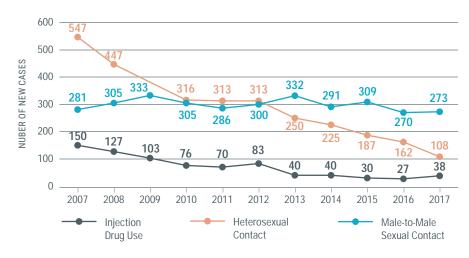
For more data about HIV/AIDS in Philadelphia, please visit https://www.phila. gov/documents/hiv-aids-dataand-research/

#### **NEW HIV DIAGNOSES | 2017**



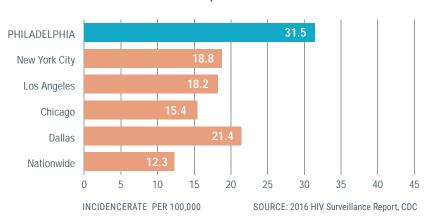
SOURCE: 2017 HIV Surveillance Data, AIDS Activity Coordinating Office, PDPH

#### NEW HIV DIAGNOSES BY TRANSMISSION CATEGORY | 2007-2017



SOURCE: 2007-2017 HIV Surveillance Data, AIDS Activity Coordinating Office, PDPH

#### NEW HIV DIAGNOSES IN LARGE U.S. CITIES | 2016



#### **CHLAMYDIA AND GONORRHEA**

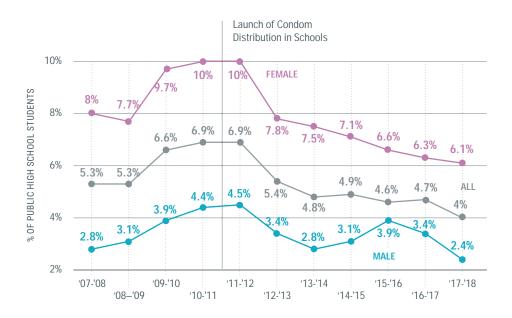
Reported cases of chlamydia and gonorrhea continued to rise. There were 21,066 cases of chlamydia and 7,275 cases of gonorrhea reported in 2017.

Rates of sexually transmitted infections among teens trended downward in recent years. Rates of chlamydia were nearly 5 times higher than gonorrhea among teens. Overall, rates of both gonorrhea and chlamydia were higher in teen girls than boys.

#### REPORTED CHLAMYDIA AND GONORRHEA CASES | 2008-2017



#### CHLAMYDIA AND GONORRHEA AMONG PUBLIC HIGH SCHOOL STUDENTS | 2008-2018



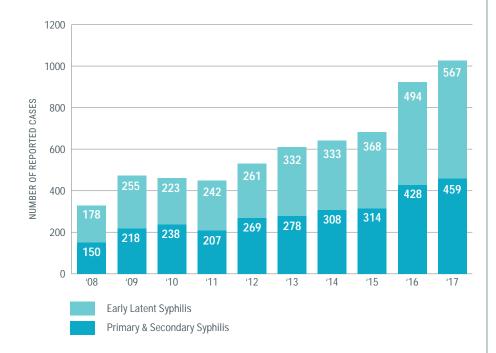
SOURCE: 2008-2017 STD Surveillance, PDPH Division of Disease Control

#### **SYPHILIS**

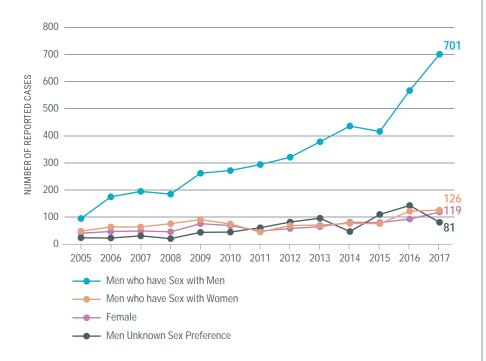
The number of syphilis cases per year has increased nearly 5 times since 2004, with over 1000 cases reported in 2017. This resurgence of syphilis infections is largely among young adult men who have sex with men (MSM), who accounted for nearly three-fourths of new cases in 2017.

For more data about infectious diseases in Philadelphia, please visit http://www.phila.gov/health/diseasecontrol/Epidemiology.html.

#### REPORTED SYPHILIS CASES | 2008-2017

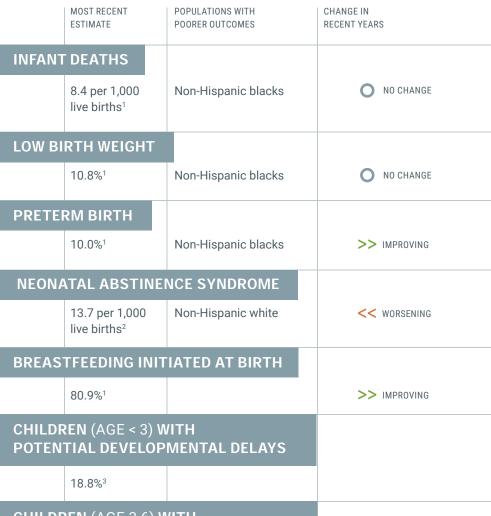


#### REPORTED SYPHILIS CASES BY RISK GROUP | 2008-2017



SOURCE: 2008-2017 STD Surveillance, PDPH Division of Disease Control

Health outcomes at birth and during childhood are key indicators of a population's health. Giving children a healthy start greatly increases their likelihood of good health outcomes as adults.





#### **CHILDREN** (AGE 3-6) WITH POTENTIAL DEVELOPMENTAL DELAYS

18.7%<sup>3</sup>

#### INCIDENCE OF CHILD BLOOD LEAD EXPOSURE

4.2%4	Lowest income	>> IMPROVING
	neighborhoods	

SOURCE:

- <sup>1</sup> 2017 Preliminary Vital Statistics, PDPH
- <sup>2</sup> 2016 Hospital Discharges, PA Health Care Cost Containment Council
- <sup>3</sup> 2017 Office of Child Development and Early Learning Report, PA DHS
- <sup>4</sup> 2017 Childhood Lead Surveillance Report, PDPH

#### **INFANT DEATHS**

After declining for several years, infant (age less than 1) death rates remained stable in recent years in Philadelphia. Non- Hispanic black babies were three times as likely as non-Hispanic white babies to die before their first birthday. Many of these deaths were related to improper sleep positioning and thus preventable.

In 2015, the most recent year with comparable data, infant mortality was higher in Philadelphia than in other large cities and nationwide.

#### **INFANT DEATHS | 2007-2017**



SOURCE: 2007-2017 Vital Statistics, PDPH

#### LOW BIRTH WEIGHT

In 2017, approximately 1 out of every 11 babies was born with a low birth weight, less than 2,500 grams. Non-Hispanic black babies were twice as likely to be born at a low birth weight than non-Hispanic white babies. While overall rates remained stable, rates among non-Hispanic blacks rose in recent years.

#### LOW BIRTH WEIGHT (<2,500 GRAMS) | 2007-2017



SOURCE: 2007-2017 Vital Statistics, PDPH

#### PRETERM BIRTH

Rates of premature birth (before 37 weeks of pregnancy) slowly declined in recent years in Philadelphia. Rates of preterm birth were highest among non-Hispanic blacks.

#### PRETERM BIRTH (<37 WEEKS) | 2007-2017



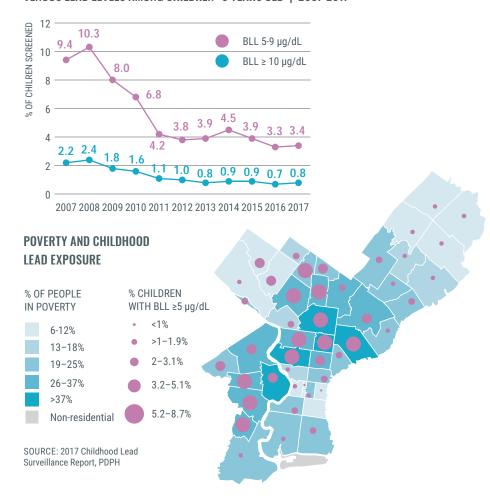
SOURCE: 2007-2017 Vital Statistics, PDPH

#### **CHILD LEAD EXPOSURE**

In 2017, approximately 3.4 percent of tested children (ages 5 and under) had blood lead levels 5-9 µg/dL and 0.8 percent were above 10 µg/dL all above the CDC-designated "reference level" of 5 µg/ dL. Rates of childhood lead exposure are highest among the neighborhoods with high poverty rates and older housing.

For more data on childhood lead poisoning in Philadelphia, please visit http://www.phila. gov/health//childhoodlead/ index.html.

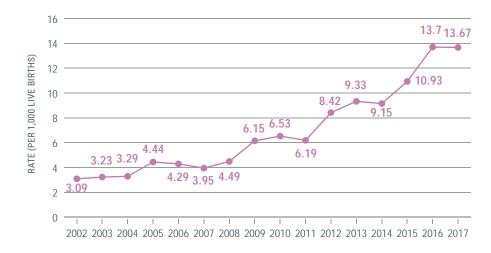
#### VENOUS LEAD LEVELS AMONG CHILDREN <6 YEARS OLD | 2007-2017



#### NEONATAL ABSTINENCE SYNDROME

Neonatal abstinence syndrome (NAS) is a condition that occurs when newborns are withdrawing from exposure to drugs in the womb. Rates of NAS rose substantially in recent years due to use of both pharmaceutical and illicit opioids. In 2017, the rate of NAS was 13.7 per 1,000 live births, nearly 4 times the rate a decade ago.

#### NEONATAL ABSTINENCE SYNDROME | 2002 - 2017



SOURCE: 2002-2017 Hospital Discharges, PA Health Care Cost Containment Council

## DEVELOPMENTAL DELAYS

Developmental delay in young children can occur in one or many areas — for example, gross or fine motor, language, social or thinking skills — and can have lasting impact on a child's long-term outcomes.

Developmental delay is most often first detected by physicians using simple screening tools to assess developmental milestones during well child visits during the first three years of life. Delay could be the result of genetic causes, like Down syndrome, complications of pregnancy and birth, like prematurity or NAS, environmental exposures during early years, like lead exposure or infections, or have no identifiable cause. Most children with developmental delay can catch up with specialized early intervention services, which are available to all families in Philadelphia.

Based on data from the early intervention programs in Philadelphia, *almost 19 percent of children under the age of 6 exhibit some signs of delay in reaching their developmental milestones*. While some of these children catch-up without any interventional services, ensuring those with delays are identified and referred to services is critical.

Injuries that result in premature death are broadly categorized into two groups: unintentional (e.g. traffic accidents, poisonings, drug overdoses) and intentional (e.g. homicides, suicides, assaults, etc.). Unintentional injuries as a group are the third leading cause of death overall and the leading cause of death for adults ages 25 to 44 in Philadelphia.



#### **INJURIES**

	MOST RECENT ESTIMATE	POPULATIONS WITH POORER OUTCOMES	CHANGE IN RECENT YEARS
номіс	IDE DEATHS		
	19.8 per 100,000 <sup>1</sup>	Young non-Hispanic black males	<< WORSENING
PEDES	TRIAN AND BI	CYCLE INJURIES	
	129.4 per 100,000 <sup>2</sup>	Center City, University City, and North Philadelphia areas	>> IMPROVING

SOURCE: 1 2017 Preliminary Vital Statistics, PDPH

<sup>2</sup> 2017 PA Department of Transportation

#### **HOMICIDES**

After declining for several years, the homicide mortality rate in Philadelphia increased over the past few years.

#### HOMICIDE DEATHS | 2007–2017



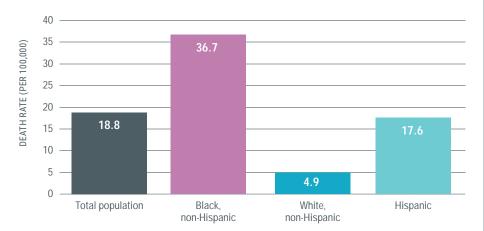
SOURCE: 2007-2017 Vital Statistics, PDPH

#### **INJURIES**

#### **HOMICIDES**

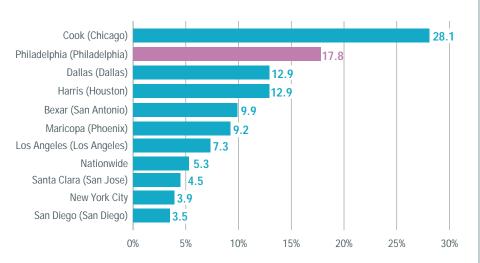
The homicide mortality rate was highest among non-Hispanic blacks, nearly ten times higher than non-Hispanic whites and double the rate among Hispanics.

#### **HOMICIDE DEATHS BY RACE/ETHICITY**



SOURCE: 2007-2017 Vital Statistics, PDPH

#### **HOMICIDES IN LARGE U.S. CITIES**

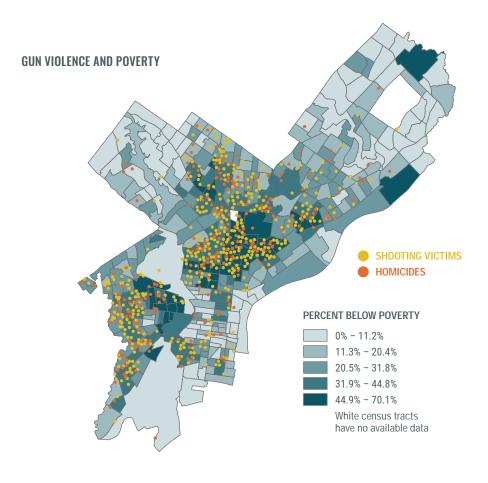


SOURCE: 2016 FBI Uniform Crime Reports

#### **INJURIES**

#### **GUN VIOLENCE**

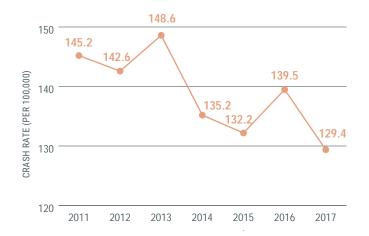
Over 84 percent of homicides involved a firearm. In addition to the roughly 300 fatal shootings, there were approximately 900 non-fatal shootings in 2017. Shootings clustered in socioeconomically disadvantaged neighborhoods.



#### **PEDESTRIAN AND BICYCLE INJURIES**

Pedestrian and bicycle crashes declined slightly from 2011 to 2017. Rates were highest in Center City, University City, and North Philadelphia areas.

#### PEDESTRIAN AND BICYCLE INJURIES, 2011-2017



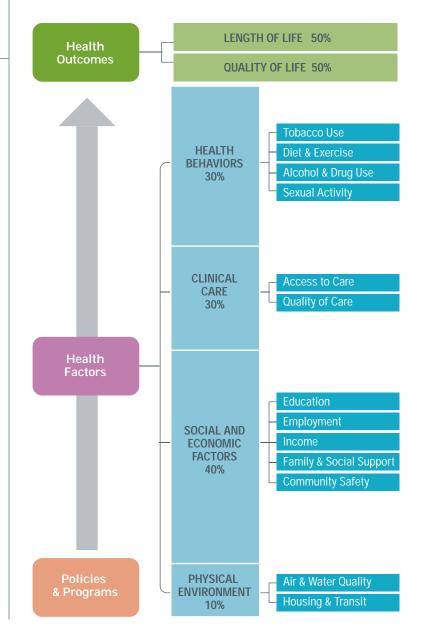
SOURCE: 2017 PA Department of Transportation

# HEALTH FACTORS

Many potentially modifiable factors influence health, including behaviors, accessibility and use of clinical care, social and economic conditions, and the physical environment. Monitoring and addressing these factors is critical to reducing preventable illness and improving the health of Philadelphians.

#### **HEALTH FACTORS**

The Robert Wood Johnson Foundation County Health Rankings presents an index of health at the county level that assigns weights to these health factor types. The largest weights are assigned not to clinical health care, but instead social and economic determinants of health (40 percent) and modifiable health behaviors (30 percent), reflecting a consensus of experts based on extensive research that these factors have the most powerful influence on population health. Similar to the health conditions discussed above, in recent years some risk factors have improved while others persist or have worsened.



MOST RECENT

POPULATIONS WITH

| CHANGE IN

The CDC recommends four key health behaviors that contribute to a healthy life: no tobacco or drugs, healthy nutrition, regular exercise, and limited alcohol consumption. All of these are associated with lower risk of chronic health conditions, like cardiovascular disease, cancer, and diabetes, which are major causes of death and illness in Philadelphia.

	ESTIMATE	POPULATIONS WITH POORER OUTCOMES	RECENT YEARS	
CIGARI	ETTE SMOKING	AMONG ADULTS (>18	8)	
	23.0%1	Non-Hispanic blacks	>> IMPROVING	
CIGARI	ETTE SMOKING	AMONG TEENS (15-1	8)	
	3.5%2	Non-Hispanic whites	>> IMPROVING	
E-VAPO	OR USE AMONG	<b>TEENS</b> (GRADES 9-1	2)	
	5.0%2		>> IMPROVING	
TOBACCO USE AMONG TEENS (GRADES 9-12)				
	10.2%2	Non-Hispanic whites	>> IMPROVING	
BINGE	DRINKING AMO	ONG ADULTS (>18)		
	22.0%1	Non-Hispanic whites; Hispanics	O NO CHANGE	
BINGE	DRINKING AMO	<b>DNG TEENS</b> (GRADES 9	9-12)	



 $6.9\%^{2}$ Non-Hispanic whites >> IMPROVING

#### **ADULTS (>18) CONSUMING >1 SWEETENED BEVERAGE**

31.6% Non-Hispanic blacks; Hispanics

>> IMPROVING

#### TEENS (GRADES 9-12) CONSUMING >1 SWEETENED BEVERAGE

17.6%2

Non-Hispanic blacks; Hispanics

>> IMPROVING

#### **SEXUAL ACTIVITY: TEEN BIRTHS** (AGE 15–19)

25.6 per 1,000<sup>3</sup>

Non-Hispanic blacks; Hispanics

>> IMPROVING

#### SEXUAL ACTIVITY: TEEN CONDOM USE (GRADES 9-12)

 $55.2\%^{2}$ 

O NO CHANGE

SOURCE:

<sup>1</sup> 2017 PA Behavioral Risk Factor Surveillance System

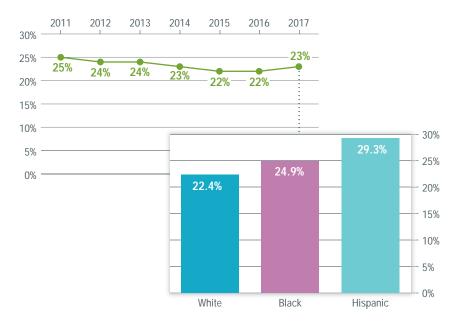
<sup>2</sup>2017 Philadelphia Youth Risk Behavior Survey

<sup>3</sup> 2017 Preliminary Vital Statistics, PDPH

#### ADULT CIGARETTE SMOKING

In 2017, 23 percent of adults reported current cigarette smoking. While cigarette smoking among adults is slowly declining, Philadelphia continues to have the highest smoking rate among large U.S. cities.

#### **ADULT CIGARETTE SMOKING, 2011–2017**

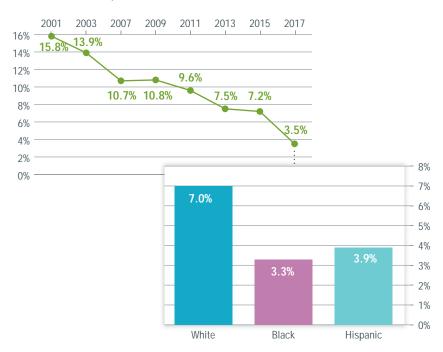


SOURCE: 2011 - 2017 PA Behavioral Risk Factor Surveillance System

#### TEEN CIGARETTE SMOKING

Among teens, cigarette smoking declined. In 2017, 3.5 percent of teens reported cigarette smoking and 10.2 percent reported any tobacco use.

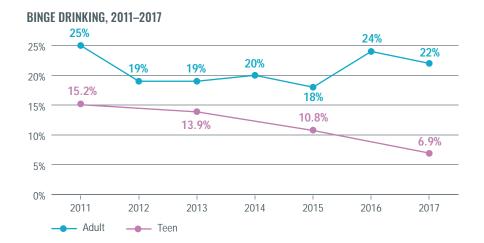
#### **TEEN CIGARETTE USE, 2001-2017**



SOURCE: 2001 - 2017 Philadelphia Youth Behavior Risk Survey

#### **ALCOHOL**

In 2017, 22 percent of adults and 6.9 percent of teens engaged in at least occasional binge or heavy drinking. Rates of binge drinking have remained stable among adults and declined among teens in recent years.

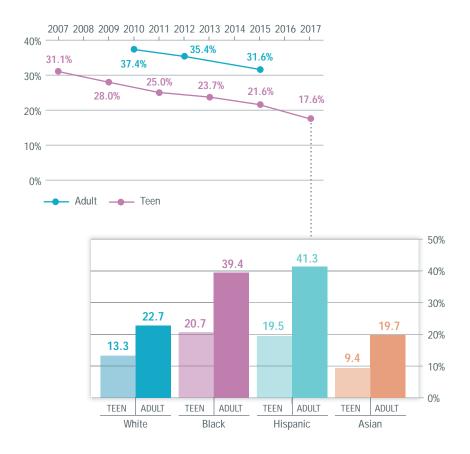


SOURCE: 2011 – 2017 PA Behavioral Risk Factor Surveillance System, Philadelphia Youth Behavior Risk Survey

#### **SWEETENED BEVERAGES**

Drinking sugary drinks increases risk of obesity and diabetes. Daily consumption of sugar sweetened beverages declined among teens and adults in recent years. In 2017, the first year of the Philadelphia Beverage Tax implementation, 17.6 percent of teens consumed at least one sugar sweetened beverage daily -- down from nearly 22 percent in 2015. Rates were highest among non-Hispanic blacks and Hispanics.

#### ADULTS AND TEENS DRINKING 1 OR MORE SWEETENED BEVERAGES DAILY



SOURCE: 2007 - 2017 Philadelphia Youth Behavior Risk Survey, 2010 - 2015 PHMC Household Survey

#### **HEALTHY FOOD ACCESS**

Often, neighborhoods with high poverty also have lower access to healthy food outlets. Neighborhoods with low walkable access to food and high poverty rates cluster in the North, River Wards and Southwest regions of Philadelphia.

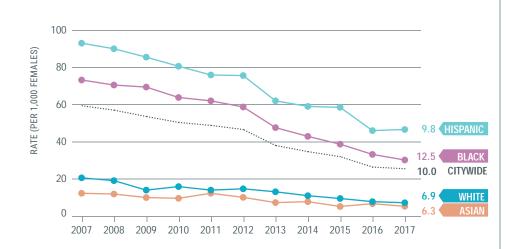


SOURCE: 2015 Food Access Research Atlas, USDA

#### **TEEN BIRTHS**

High-risk sexual behaviors, particularly among teens, can affect immediate and long-term health. Two key indicators of these high-risk behaviors among teens are condom use and teen births, which are most often unplanned. Teen births continued to decline in 2017. Teen birth rates were highest among Hispanic teens. Reported condom use among teens remained stable at around 55 percent.

#### TEEN BIRTHS BY MOTHER'S RACE/ETHNICITY, 2007-2017



SOURCE: 2007-2017 Vital Statistics, PDPH

Access to high-quality clinical and preventive care is critical to Philadelphians' health. Access to care largely depends on health insurance coverage, affordability, and adequate availability of healthcare providers and facilities.

MOST RECENT POPULATIONS WITH CHANGE **ESTIMATE** POORER OUTCOMES IN STATUS

#### **UNINSURED ADULTS**

 $9.7\%^{1}$ Hispanics; Immigrants >> IMPROVING

#### **UNINSURED CHILDREN**

 $3.6\%^{1}$ Hispanics; Immigrants; >> IMPROVING Non-Hispanic Asians

#### **ADULTS WITH NO PRIMARY CARE PROVIDER**

18.0%<sup>2</sup> Uninsured; low income >> IMPROVING

#### ADULTS FORGOING CARE DUE TO COSTS

13.0%<sup>2</sup>

NO CHANGE

#### CHILDREN (19-35 MONTHS OLD) WITH **UP TO DATE IMMUNIZATIONS**

78.0%<sup>3</sup>

>> IMPROVING

#### **ADULTS (>50) WITH COLON CANCER SCREENING**

68.0%<sup>2</sup> O NO CHANGE

#### **WOMEN WITH MAMMOGRAPHY IN PAST 2 YEARS**

 $80.0\%^{2}$ NO CHANGE

#### PRIMARY CARE PHYSICIANS PER CAPITA

1:1.2434 Neighborhood clusters in Greater Northeast, West, Northwest, and Southwest regions

>> IMPROVING

#### POTENTIALLY PREVENTABLE HOSPITALIZATIONS

1,374 Non-Hispanic blacks; >> IMPROVING per 1,000<sup>5</sup> Hispanics

SOURCE:

- <sup>1</sup> 2017 American Community Survey 1-Year Estimates, U.S. Census Bureau
- <sup>2</sup> 2017 PA Behavioral Risk Factor Surveillance System
- <sup>3</sup> 2017 PhilaVax Immunization Registry, PDPH
- 4 2016 Leonard Davis Institute of Health Economics, University of Pennsylvania
- <sup>5</sup> 2016 Hospital Discharges, PA Health Care Cost Containment Council

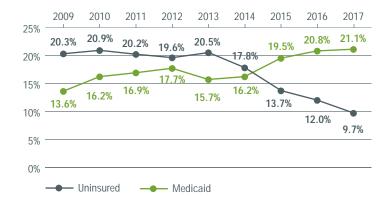


#### INSURANCE COVERAGE

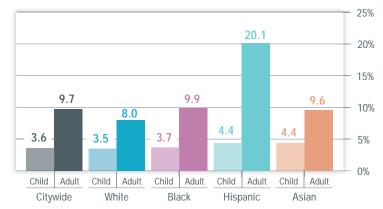
Health insurance coverage has improved significantly for adults and children in Philadelphia. In 2017, 9.7% of adults and 3.6% of children did not have insurance coverage. Insurance coverage among children began improving in 2004 and rates are lower than the national average and other large cities. Rates of uninsured adults declined significantly as Medicaid enrollment increased due to ACA Medicaid expansion. In 2017 approximately 1 in 5 adults ages 18-64 were enrolled in Medicaid.

While more Philadelphians have insurance coverage overall, Hispanic adults have significantly higher uninsured rates compared to other racial/ethnic groups.

#### UNINSURED AND MEDICAID AMONG ADULTS (AGES 18 TO 64)



#### UNINSURED AMONG ADULTS (AGES 18 TO 64) AND CHILDREN

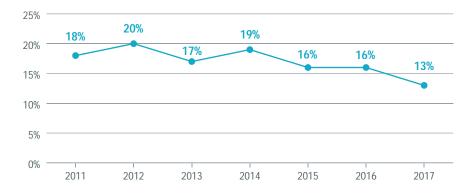


SOURCE: 2017 American Community Survey 1-Year Estimates, U.S. Census Bureau

#### **COST OF CARE**

Paralleling trends in insurance coverage, the percent of adults avoiding care due to cost declined in recent years. In 2017, 13 percent of adults did not seek needed health care because of cost.

#### **ADULTS AVOIDING HEALTH CARE DUE TO COST**



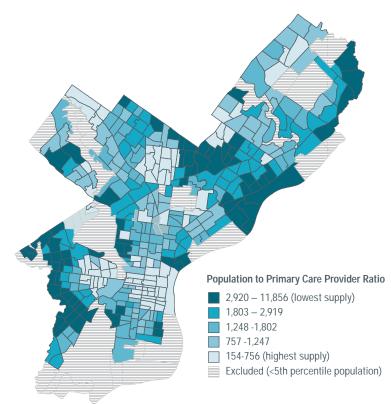
SOURCE: 2011 - 2017 PA Behavioral Risk Factor Surveillance System

#### **PRIMARY CARE PHYSICIAN SUPPLY**

Overall the availability of primary care providers in Philadelphia has improved. Yet, several clusters of areas in the Northeast, Southwest and parts of South Philadelphia have lower access to primary care. Some of these areas meet the federal criteria as primary care shortage areas. Approximately 18 percent of adults reported not having a primary care physician.

For more data on access to primary care in Philadelphia, please visit [link to ATC report].

#### PRIMARY CARE PHYSICIAN SUPPLY | 2016

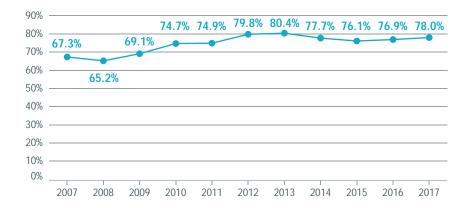


SOURCE: Leonard Davis Institute of Health Economics. University of Pennsylvania

#### **PREVENTIVE CARE**

Immunizations and screenings are critical public health prevention tools. The number of young children in Philadelphia with up-to-date recommended vaccinations has increased over the last decade and has remained stable in recent years.

#### CHILDREN WITH RECOMMENDED VACCINATIONS



SOURCE: 2017 PhilaVax Immunization Registry, PDPH

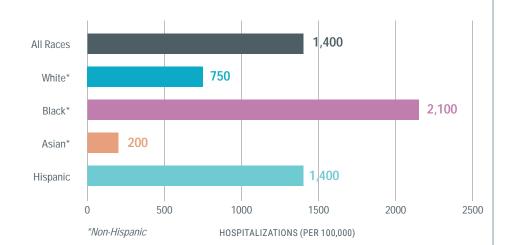
#### AMBULATORY CARE SENSITIVE CONDITIONS

When chronic health conditions like asthma, diabetes, and hypertension are managed adequately in primary care settings, patients can avoid many hospitalizations for complications due to these conditions. For this reason, rates of hospitalizations for these "ambulatory caresensitive conditions", are used as an indicator of access to and quality of primary care. In Philadelphia, rates of hospitalizations due to these conditions have declined steadily over the last decade. However, in 2016, rates were nearly 2.5 times higher among non-Hispanic blacks and 2 times higher among Hispanics than non-Hispanic whites.

#### HOSPITALIZATIONS FOR AMBULATORY CARE SENSITIVE CONDITIONS, 2005–2016



#### HOSPITALIZATIONS FOR AMBULATORY CARE SENSITIVE CONDITIONS BY RACE/ETHNICITY



SOURCE: 2005-2016 Hospital Discharges, PA Health Care Cost Containment Council

#### PHYSICAL ENVIRONMENT

Clean air and water and a safe environment in and out of the home are essential for good health. Unsafe air conditions increase risk of heart disease and exacerbate respiratory conditions like asthma and chronic obstructive pulmonary disease. Unsanitary water can spread infectious illnesses and harmful chemical compounds. Unsafe home conditions can have similar impacts and increase risk for unintentional injuries and create extreme stress for families. Ensuring a safe environment is particularly important for children and seniors.

	MOST RECENT ESTIMATE	POPULATIONS WITH POORER OUTCOMES	CHANGE IN RECENT YEARS
DAYS W	/ITH UNHEALT	HY AIR QUALITY	
	12 <sup>1</sup>		O NO CHANGE
WALKA	BILITY		
	79 out of 100 <sup>2</sup>	Far Northeast, Northwest, South regions	>> IMPROVING
HOUSING WITH POTENTIAL LEAD RISK			
	7,275 <sup>2</sup>		>> IMPROVING
HOUSING CODE VIOLATIONS			
	4.0%²	North region	<< WORSENING

SOURCE:

- <sup>1</sup> 2017 AMP 410 S Reports, Air Management Service, PDPH
- <sup>2</sup> 2016 Walk Score® via City Health Dashboard
- <sup>3</sup> 2015 American Community Survey 5-year Estimates via City Health Dashboard
- <sup>4</sup> 2017 Philadelphia Licenses & Inspections



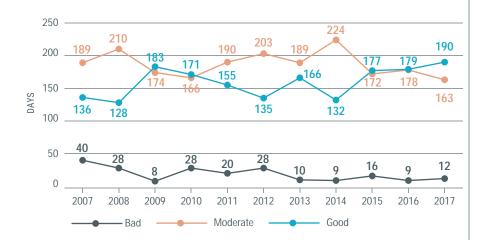
#### PHYSICAL ENVIRONMENT

#### **AIR QUALITY**

Air quality is summarized by the Air Quality Index (AQI), which combines information about four major air pollutants regulated by the Clean Air Act: ground-level ozone, particle pollution, carbon monoxide, and sulfur dioxide. When the AQI is below 50, it is considered "good" air quality. When the AQI is between 50 and 100, it is considered "moderate" air quality and when it is above 100 the air is considered unhealthy.

The number of days with unhealthy air quality has declined significantly in Philadelphia, while days with good air quality have increased. In 2017, Philadelphians experienced more days with good air quality than in previous years.

#### DAYS WITH GOOD, MODERATE, AND UNHEALTHY AIR QUALITY



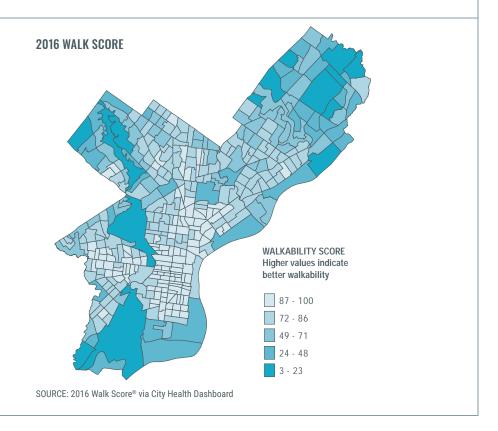
SOURCE: 2007-2017 AMP 410 S Reports, Air Management Service, PDPH

#### WALKABILITY

Having walkable neighborhoods encourages active transit and facilitates easy access to jobs, food, and health resources.

Philadelphia's Walk Score®, a summary scoring of walkability to neighborhood resources and amenities, is 79 out of 100.

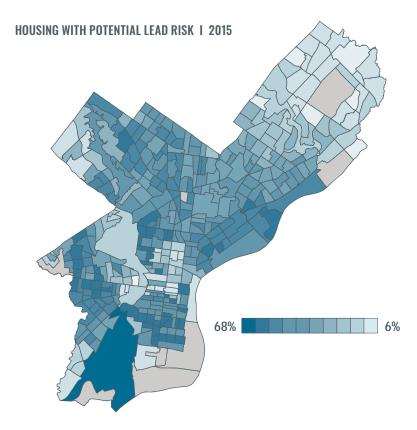
Some areas in the far Northeast, Northwest, and South have walk scores that are significantly lower than the rest of the city.



#### PHYSICAL ENVIRONMENT

#### **HOUSING WITH POTENTIAL LEAD RISK**

Most Philadelphia homes were built before 1950, and many of those in low income areas have been poorly maintained. Based on age of housing, 42.2 percent of houses in Philadelphia have a potential risk of lead exposure, which is particularly harmful for young children.



SOURCE: 2015 American Community Survey 5-year Estimates via City Health Dashboard

#### HOUSING CODE VIOLATIONS

Housing code violations occur when people living in rental properties make complaints to the Department of Licenses and Inspections, which then conducts inspections. The number of housing code violations is a proxy for measuring housing quality in the city, but it is influenced by the staffing levels of the Department of Licenses and Inspections. In 2017, 187.5 violations per 1,000 occupied housing units were issued. Rates are highest in the lowest-income neighborhoods, particularly in North Philadelphia.

#### HOUSING CODE VIOLATIONS



SOURCE: 2017 Philadelphia Licenses & Inspections

CHANGEIN

#### **SOCIAL AND ECONOMIC DETERMINANTS**

DODIII ATIONS WITH

MOST DECENT

Social support, financial resources, education, employment, and stable housing directly impact Philadelphians' ability to access adequate health care, engage in healthy behaviors, and live in a healthy environment. But these determinants are not addressed in traditional clinical and preventive health care. This section provides data on these social determinants of health in Philadelphia.

	MOST RECENT ESTIMATE	POPULATIONS WITH POORER OUTCOMES	CHANGE IN RECENT YEARS
POVER	25.7% <sup>1</sup>	Hispanics; Non-Hispanic blacks; North and West regions	>> IMPROVING
CHILDI	REN IN POVER	ГҮ	
	31.9%1	Non-Hispanic blacks; Hispanics	>> IMPROVING
CHILDI	REN IN SINGLE	-PARENT HOUSEHOLD	S
	55.5%1	Non-Hispanic blacks; Hispanics	>> IMPROVING
UNEMI	PLOYMENT		
	6.2%2		>> IMPROVING
LABOR	FORCE PARTI	CIPATION RATE	
	56.2%2		O NO CHANGE
ON-TI	ME HIGH SCHO	OL GRADUATION	
	67.2%³	Non-Hispanic blacks; Hispanics	>> IMPROVING
ADULT	S COMPLETING	G SOME COLLEGE	
	50.0%1	Non-Hispanic blacks; Hispanics	>> IMPROVING
EXCES	SIVE HOUSING	COST (>30% INCOME)	
	40.2%1	High poverty areas	O NO CHANGE
HOMEI	LESSNESS		
	5,7884		<< WORSENING
VIOLEI	NT CRIME RATI		
	989 per 100,000 <sup>5</sup>	High poverty areas	>> IMPROVING

<sup>1</sup> 2017 American Community Survey 1-Year Estimates, U.S. Census Bureau

<sup>4</sup> 2018 Point in Time Count, Office of Homeless Services

<sup>2</sup> 2017 Bureau of Labor Statistics <sup>3</sup> 2017 PA Department of Education

<sup>5</sup> 2017 FBI Uniform Crime Report

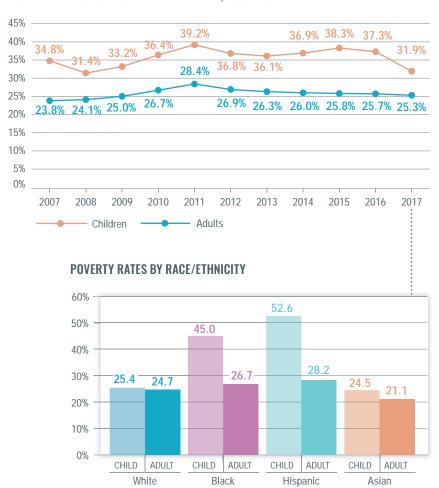


SOURCE:

#### **POVERTY**

In 2017, approximately one-fourth of Philadelphians lived in a household with an income below 100 percent of the federal poverty level. Poverty rates declined in recent years among all racial/ ethnic groups except non-Hispanic whites. Increased rates of poverty among non-Hispanic whites are likely related to the ongoing opioid epidemic. Still, Hispanics and non-Hispanic blacks are still about twice as likely to live in poverty as non-Hispanic whites. Poverty is greatest in North and West Philadelphia.

#### POVERTY RATES FOR ADULTS AND CHILDREN, 2007-2017



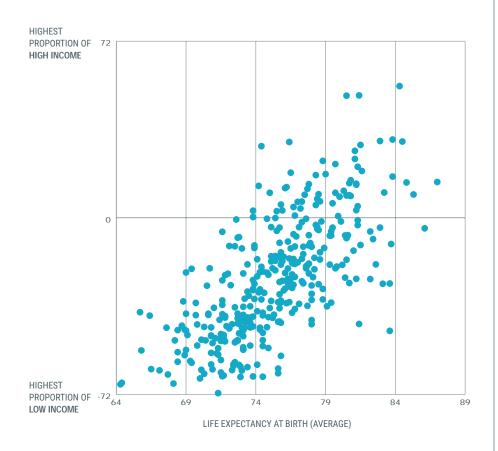
SOURCE: 2017 American Community Survey 1-Year Estimates, U.S. Census Bureau

# IMPACT OF POVERTY ON HEALTH DISPARITIES

Poverty is the underlying determinant for many of the racial and ethnic health disparities that persist in Philadelphia. Many Philadelphians live, learn, work, shop, and play in high poverty neighborhoods that make good health difficult to achieve. Neighborhoods with high rates of poverty often have lower access to healthy affordable foods, safe outdoor spaces for physical activity, and clinical services, and higher rates of tobacco and alcohol retailers and community violence. These contextual factors in addition to cultural norms often shape health behaviors. Ultimately, they both partially explain poor health and point toward potential solutions.

Living just a couple of miles away can reduce life expectancy by nearly 20 years. Income inequality and life expectancy are directly correlated - that is, neighborhoods with more individuals in the lowest income brackets have significantly lower life expectancy than neighborhoods with more individuals in the highest income bracket. Neighborhoods with higher income gaps are also much more likely to have higher proportions of racial/ethnic minorities.

#### INCOME INEQUALITY AND LIFE EXPECTANCY

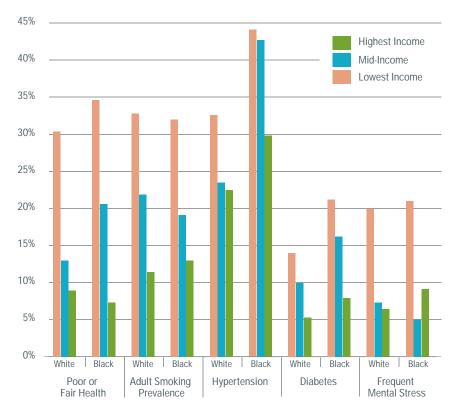


SOURCE: 2015 ACS 5-Year Estimates, U.S. Census Bureau and U.S. Small-area Life Expectancy Estimates Project (USALEEP): Life Expectancy Estimates File, National Center for Health Statistics via City Health Dashboard

#### **POVERTY AND** RACE/ETHNICITY

For many health outcomes and behaviors, higher rates of poverty among non-Hispanic blacks and Hispanics account for much of the disparity. As an illustration, rates of several health outcomes and behaviors are shown below comparing non-Hispanic blacks to non-Hispanic whites by income category. Of note, the white/black disparity is reduced at higher incomes and in many cases no longer present.

#### IMPACT OF POVERTY ON BLACK-WHITE HEALTH DISPARITIES | 2015 - 2017



SOURCE: 2015-2017 PA Behavioral Risk Factor Surveillance System

#### UNEMPLOYMENT

Similar to national trends, unemployment has declined significantly in recent years. In 2017, unemployment rates in Philadelphia were higher than other major U.S. cities and the national average.

Unemployment considers employment status among those working and seeking employment. Workforce participation is a measure of employment among all Philadelphians, including the disabled, retired, and those not actively seeking employment. Workforce participation has remained relatively stable since 2000.

#### **UNEMPLOYMENT RATES | 2007–2017**



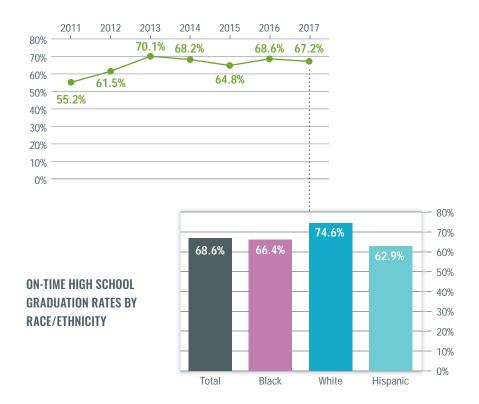
SOURCE: U.S. Bureau of Labor Statistics

#### **EDUCATION**

On-time graduation rates increased since 2011, but remained stable in recent years. In 2017, on-time graduation rates were highest among non-Hispanic whites and lowest among Hispanics.

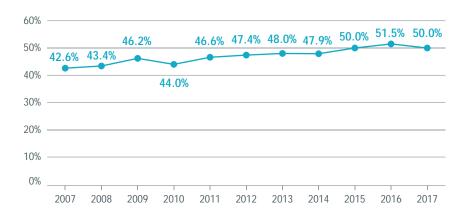
The number of adults completing some college increased over the last decade but has remained stable in recent years. Roughly half of Philadelphians age 25 and older completed at least some college training.

#### **ON-TIME HIGH SCHOOL GRADUATION RATES, 2011–2017**



SOURCE: 2017 PA Department of Education

#### PHILADELPHIANS (AGE ≥25) WITH SOME COLLEGE EDUCATION

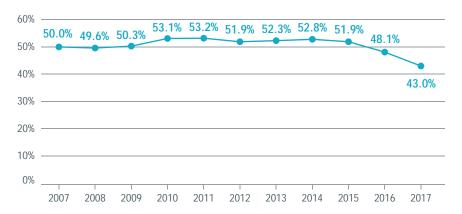


SOURCE: 2007-2017 1-Year Estimates American Community Survey, U.S. Census Bureau

#### **EXCESSIVE HOUSING COST**

In 2017, 43.0 percent of Philadelphia households paid 30 percent or more of their income for rental housing. Rates of housing cost-burden have declined in recent years, but remain very high. The highest rates of housing cost burden occur in high poverty neighborhoods in the North, **Upper North and Lower Northeast** regions of Philadelphia.

#### **EXCESSIVE HOUSING COST. 2007–2017**

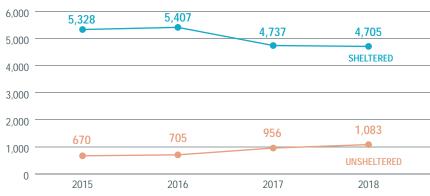


SOURCE: 2007-2017 1-Year Estimates American Community Survey, U.S. Census Bureau

#### **HOMELESSNESS**

Homelessness is one indicator of housing insecurity among a population. The number of individuals living homeless without shelter in Philadelphia increased significantly over the last few years as a direct result of the opioid epidemic. Individuals with substance use disorder, who are also living homeless, often face barriers accessing temporary housing and shelters due to their dependency.

#### HOMELESSNESS, 2015-2018

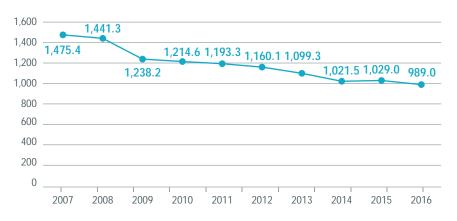


#### SOURCE: Point-in-Time Count. Office of Homeless Services

#### **VIOLENT CRIMES**

Violent crimes create unsafe neighborhoods, increase community stress, and may deter healthy behaviors like outdoor exercise. The violent crime rate in Philadelphia decreased over 30 percent from 2007 to 2016.

#### VIOLENT CRIMES, 2007-2016



SOURCE: FBI Uniform Crime Reports

# **ACKNOWLEDGMENTS**

#### **REPORT CONTRIBUTORS:**

Gillian Capper, MPH

Thomas Farley, MD, MPH

Vibha Gujar, MS

**Amory Hillengas** 

Mahmud Iqbal, MPH

Annaka Scheeres

Raynard Washington, PhD, MPH

Jessica Whitley, MPH

#### **DATA SOURCES:**

American Medical Association Provider Masterfile

**Bureau of Labor Statistics** 

Centers for Disease Control and

Prevention

City of Philadelphia Licenses and

Inspections

County Health Rankings &

Roadmaps

FBI Uniform Crime Reports

Get Healthy Philly

Health Indicators Warehouse

Office of Homeless Services

PA Behavioral Risk Factor Surveillance System

PDPH AIDS Activities Coordinating

Office

PDPH Air Management Services

PDPH Division of Disease Control

PDPH Environmental Health

Services

PDPH Medical Examiner's Office

Pennsylvania Department of

Education

Pennsylvania Department of Health

**Cancer Registries** 

Pennsylvania Department of Health

Vital Statistics

Pennsylvania Department of

Transportation

Pennsylvania Health Care Cost

Containment Council

Pennsylvania National Electronic

Disease

Surveillance System (PA-NEDSS)

Philadelphia Youth Behavioral Risk

**Behavior Survey** 

Public Health Management

Corporation

School District of Philadelphia

US Census-American Community

Survey

**US Environmental Protection** 

Agency



1101 Market Street, 13th Floor Philadelphia, PA 19107 (215) 686-5200

facebook.com/phillyhealth twitter.com/PHLPublicHealth