



Growing Up PHILLY

THE HEALTH AND WELL-BEING OF PHILADELPHIA'S CHILDREN



Department of
Public Health
CITY OF PHILADELPHIA

EXECUTIVE SUMMARY

Every child deserves to grow up in a healthy and nurturing environment. Experiences during childhood such as poverty, poor nutrition, or exposure to environmental hazards can shape and impact future health. Despite advances in pediatric care and public health efforts, poor and racial/ethnic minority children still face a disproportionate burden of chronic disease, premature death, and preventable illness. *Growing Up Philly* provides a summary of the health and well-being of Philadelphia's youngest citizens from birth to adolescence. As the report shows, the health of Philadelphia's children reflects the social and economic problems they face, but also contains evidence of progress.

KEY FINDINGS:

- 1** Perinatal indicators, immunization rates, and health insurance coverage have been improving.
 - » Prenatal care and breastfeeding initiation have increased by more than 50% over the past decade.
 - » Preterm birth has slowly declined by 15% over the last decade to 11.1%.
 - » More than three-fourths of children were up-to-date with all five recommended vaccines upon school entry in the 2018-19 school year.
 - » In 2018, only 3.1 percent of children did not have health insurance coverage, which was lower than the national average (5.5 percent).
- 2** There have been improvements in teen risk behavior indicators.
 - » Substantial declines in unhealthy behaviors such as cigarette smoking and alcohol use have decreased by 87 percent and 46 percent, respectively, among youth since 2001.
- 3** Across most health outcomes and indicators, racial/ethnic disparities continue to persist. Many of these disparities are largely driven by inequities in the distribution of wealth. In Philadelphia, one in three children lives in poverty and one in two lives in a single-parent household.
 - » Non-Hispanic black and Hispanic children had the highest rates of asthma-related hospitalizations, with rates 5 to 6 times higher than non-Hispanic white children.
 - » More than 80% of childhood deaths occurred in non-Hispanic black and Hispanic children.

Growing Up Philly aims to increase public awareness of children's health and identify gaps in knowledge. This information can be used to monitor progress, evaluate existing programs, and finally to inform local decision-making.

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INTRODUCTION

From the moment of conception, a child grows in an environment that shapes his or her long-term health.

During childhood, experiences such as poverty, poor nutrition, or exposure to environmental hazards can have lasting impacts on future health and disease outcomes. In Philadelphia, racial/ethnic and geographic disparities in children's health reflect the long history of discrimination and disenfranchisement of communities of color.

Growing Up Philly summarizes the overall well-being of Philadelphia's children from birth to adolescence. The Philadelphia Department of Public Health developed this report to help healthcare providers, city officials, decision-makers, parents, and caregivers make well-informed decisions about the city's youngest residents.



Trends and patterns of several indicators are summarized using various sources of data across five areas:

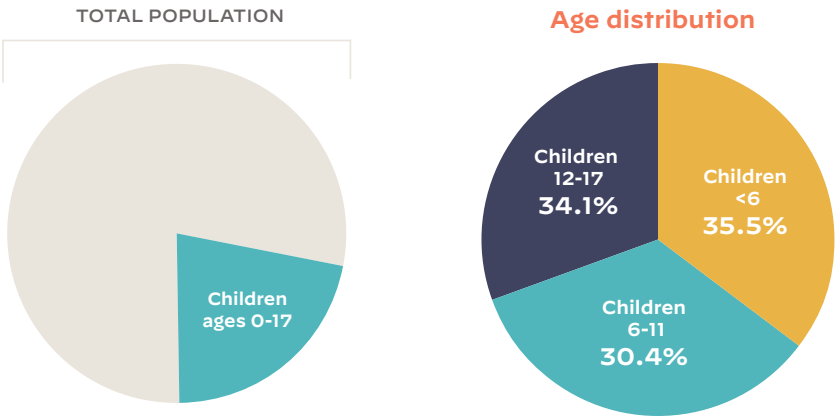
- ① **HEALTH OUTCOMES**
- ② **HEALTH BEHAVIORS**
- ③ **CLINICAL & PREVENTIVE CARE**
- ④ **PHYSICAL ENVIRONMENT**
- ⑤ **SOCIAL & ECONOMIC FACTORS**

ABOUT PHILADELPHIA

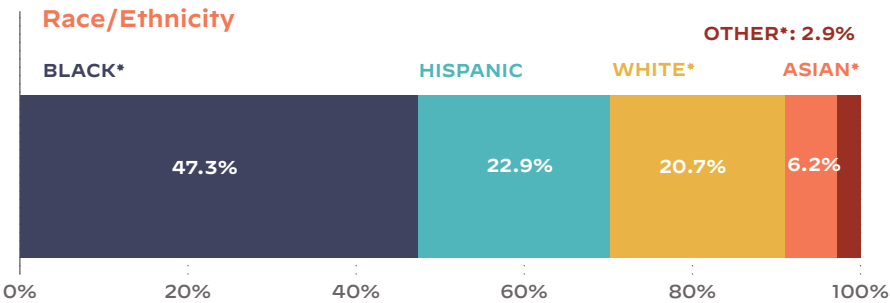
Philadelphia has an estimated population of 344,091 children, representing 21.7 percent of the City’s total population.

As of 2018, there were 122,512 children under the age of 6 years, 117,310 children ages 6 to 11 years, and 104,603 children ages 12 to 17 years.

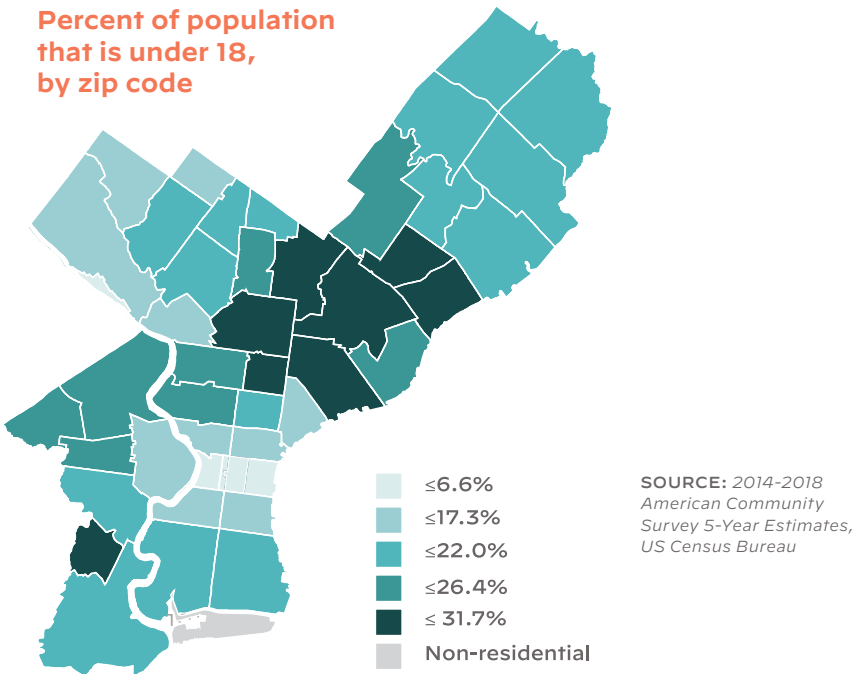
SOURCE: 2018 American Community Survey 1- Year Estimates, US Census Bureau



Racial and ethnic minorities make up the majority of children in Philadelphia.



SOURCE: 2018 American Community Survey 1- Year Estimates, US Census Bureau *Non-Hispanic



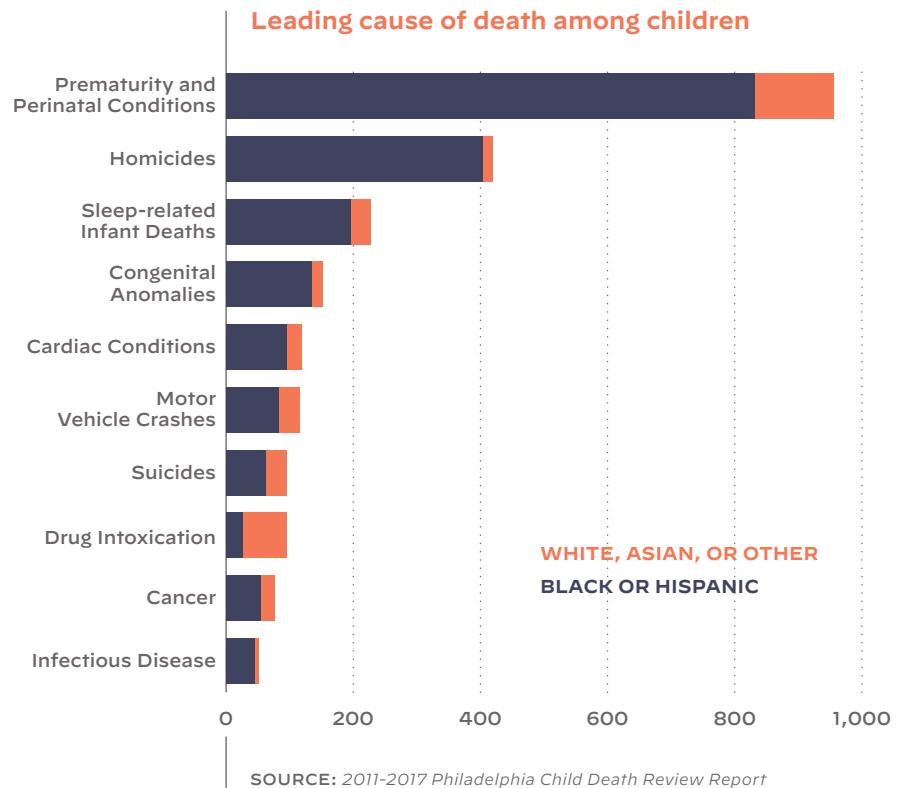


Summary Health Measures

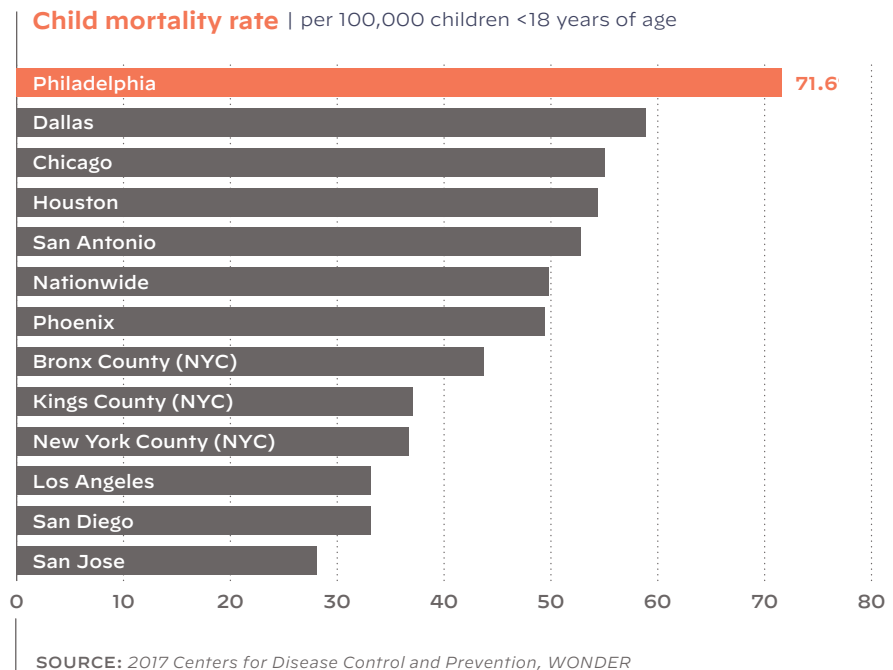
CHILD AND ADOLESCENT MORTALITY

Prematurity and perinatal conditions were the leading causes of death among children from birth to age 21 in Philadelphia during 2011-2017.

Black and Hispanic children were disproportionately impacted and accounted for 70 percent or more for eight of the top 10 categories of child deaths, including 96 percent of all homicides (not due to child abuse).



Compared with other large cities and counties in the United States, Philadelphia had the highest child mortality rate of 71.6 deaths per 100,000 children in 2017. This was nearly 45 percent higher than the national child mortality rate (49.5 deaths per 100,000 children).

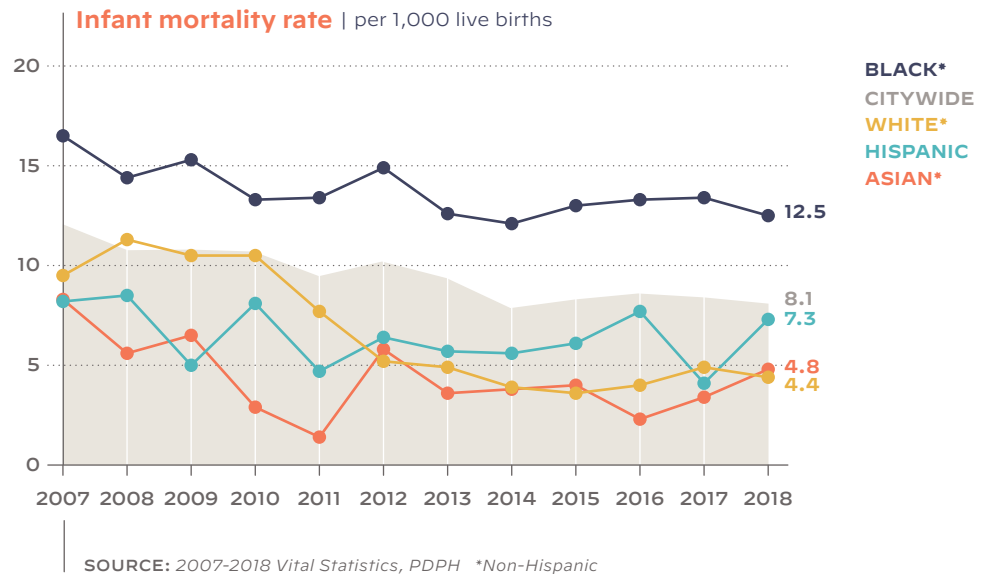


INFANT MORTALITY

Infant mortality is the death of an infant before his or her first birthday.

In Philadelphia, infant deaths accounted for 55 percent of all child deaths in 2011-2017. After declining for several years, infant mortality rates have remained stable in recent years. In 2018, the infant mortality rate was 8.1 per 1,000 live births, nearly 40 percent higher than the national rate (5.8 per 1000 live births).

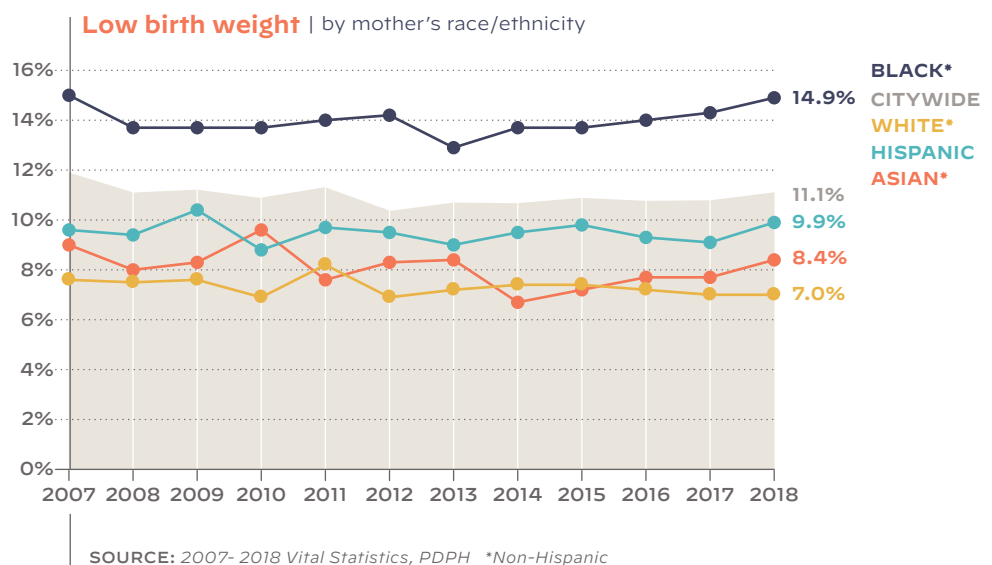
Despite advances in obstetrics, pediatric care, and public health efforts, the mortality rates of black infants have been consistently higher than the rates of other racial and ethnic groups. Many of these deaths were due to prematurity and perinatal conditions (65 percent) and sleep-related deaths (16 percent).



LOW BIRTH WEIGHT

In 2018, 1 in 11 infants was born low birth weight (weighing less than 2,500 grams at birth). Infants with low birth weight are at risk for short- and long-term complications, including sleep-related deaths and developmental delays.¹

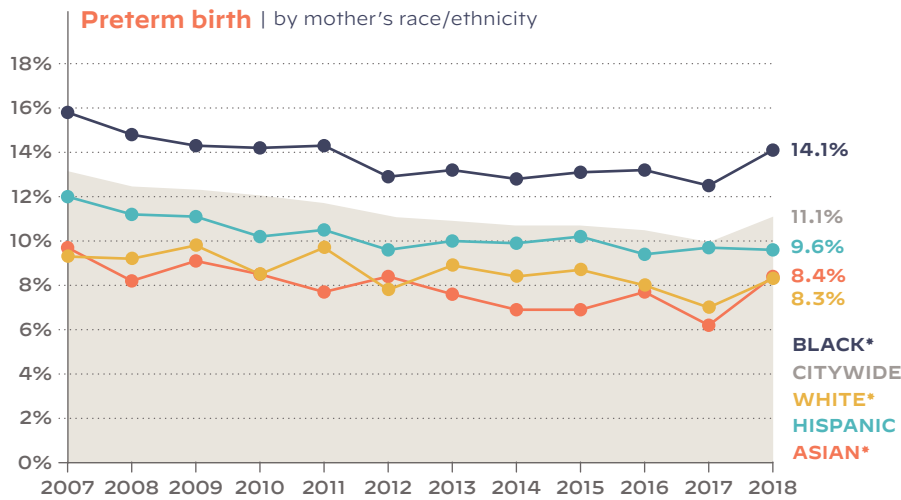
Low birth weight is most common among racial minorities in Philadelphia, especially black and African-American mothers. There are many contributing factors to low birth weight, including health conditions of mothers and chronic stress associated with racial discrimination.²



PRETERM BIRTH

The earlier an infant is born, the higher the risk of serious disability and death. Infants born prematurely can have serious complications, including difficulty breathing and bleeding in their brains.³

Preterm birth (when an infant is born before 37 weeks of pregnancy) has slowly declined in Philadelphia. However, the prevalence remained the highest among non-Hispanic black women.

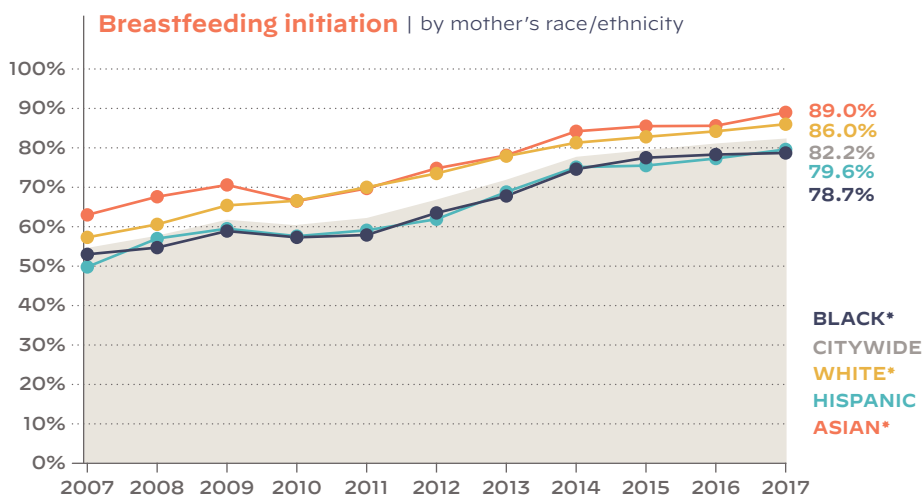


SOURCE: 2007-2018 Vital Statistics, PDPH *Non-Hispanic

BREASTFEEDING INITIATION

The American Academy of Pediatrics recommends that infants be exclusively breastfed for the first 6 months of life.⁴ Infants who are breastfed have a decreased risk of asthma, obesity, ear and respiratory infections, and sudden infant death syndrome.⁵

The percentage of new mothers in Philadelphia who initiated breastfeeding has increased over the past decade, with the majority of mothers (82.2 percent) breastfeeding in 2017. Overall, breastfeeding initiation rates were similar among all racial/ethnic groups. The citywide estimate was also similar to the state (81.8 percent) and national (83.8 percent) prevalence estimates.⁶



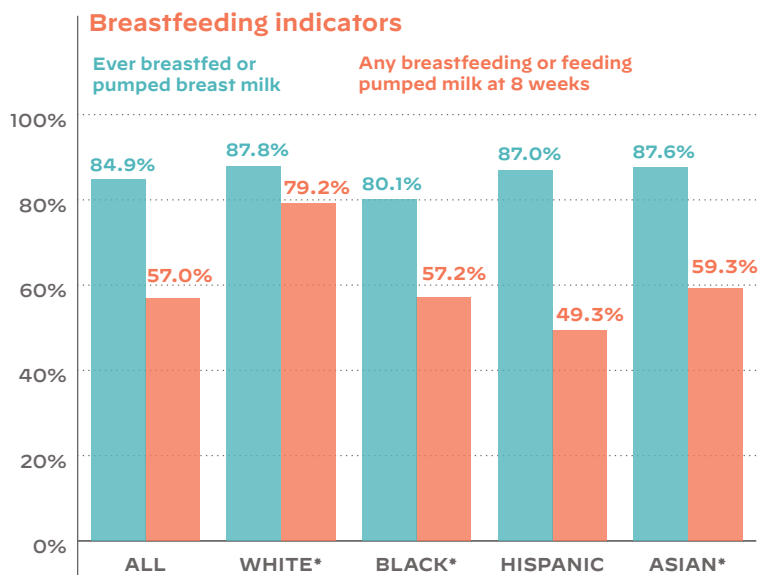
SOURCE: 2007-2017 PA EDDIE; Vital Statistics, PDPH *Non-Hispanic



BREASTFEEDING DURATION

57 percent of Philadelphia women were still breastfeeding at the time they participated in the Philadelphia Pregnancy Risk Assessment Monitoring System, a survey that asks postpartum mothers about their behaviors and experiences before, during, and after pregnancy.

Note:
Reported estimates for non-Hispanic Asian women may not be reliable due to small sample sizes.



SOURCE: 2018 Philadelphia Pregnancy Risk Assessment Monitoring System

*Non-Hispanic



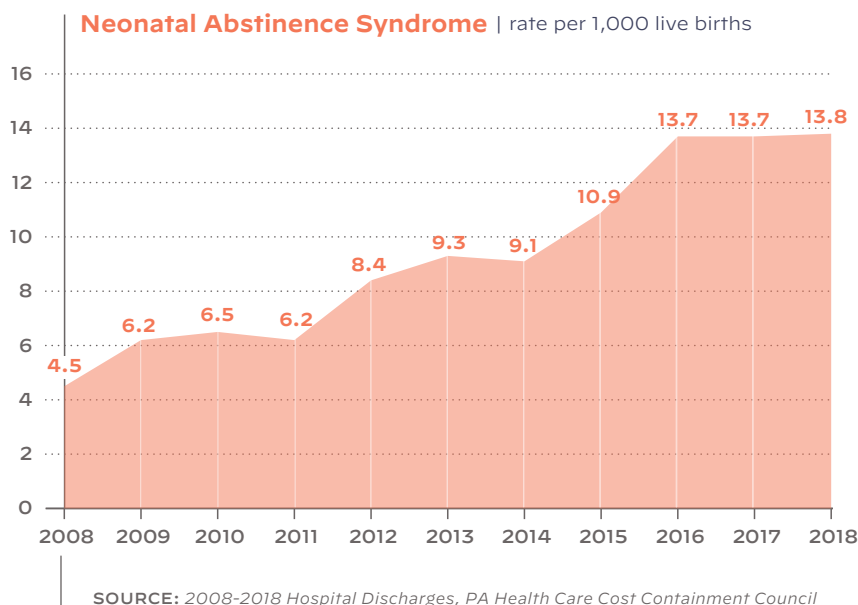
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Health Outcomes

NEONATAL ABSTINENCE SYNDROME

Neonatal Abstinence Syndrome (NAS) is a condition that occurs when infants experience withdrawal symptoms after being exposed to drugs in the womb.⁷

The reported incidence rate of NAS more than quadrupled during 2002-2018 (from 3.1 per 1,000 live births to 13.8). The substantial increase in recent years is due to the use of prescribed and illicit opioids among pregnant women. In 2018, the rate of NAS was 13.8 per 1,000 live births, nearly two times the national rate and four times the rate a decade ago in Philadelphia.⁸

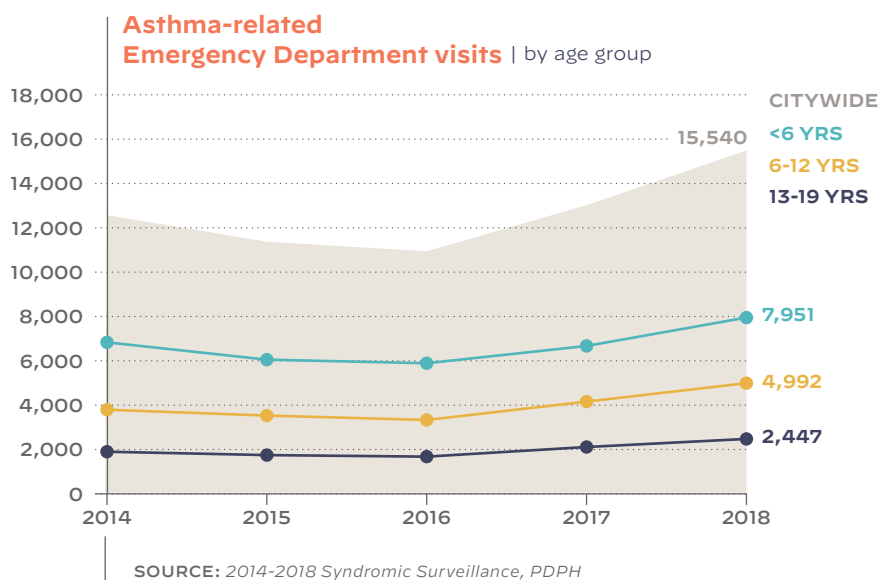


ASTHMA

Asthma is one of the most common chronic diseases during childhood and causes wheezing, coughing, and difficulty breathing. While some children may have mild symptoms, others may suffer serious asthma exacerbations that result in visits to the emergency room, hospitalizations, or rarely, death. Children living in homes free of smoke, pests and mold and with access to asthma medications will usually not need hospital care for their asthma.

The number of asthma-related visits to the emergency department (ED) declined from 2014-2016 and was followed by a 19 percent increase from 2017 to 2018.

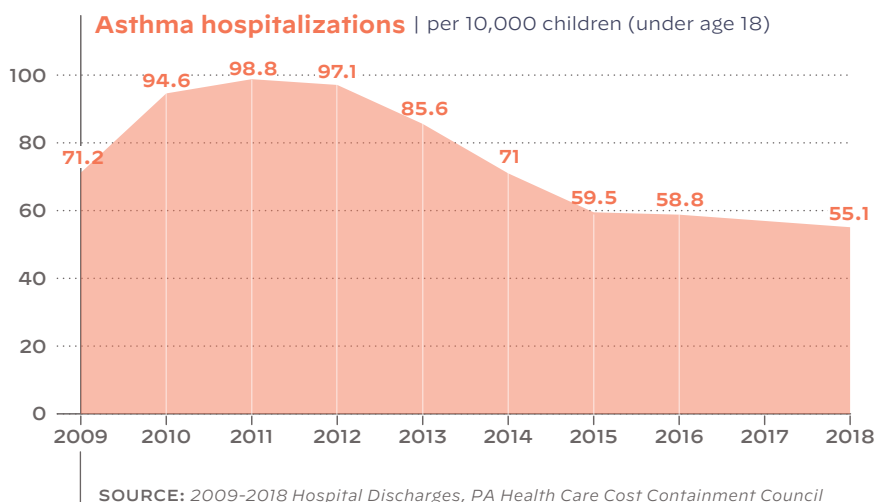
In 2018, there were 15,450 asthma-related visits, with ED visits being the highest among children under the age of six.



ASTHMA HOSPITALIZATIONS

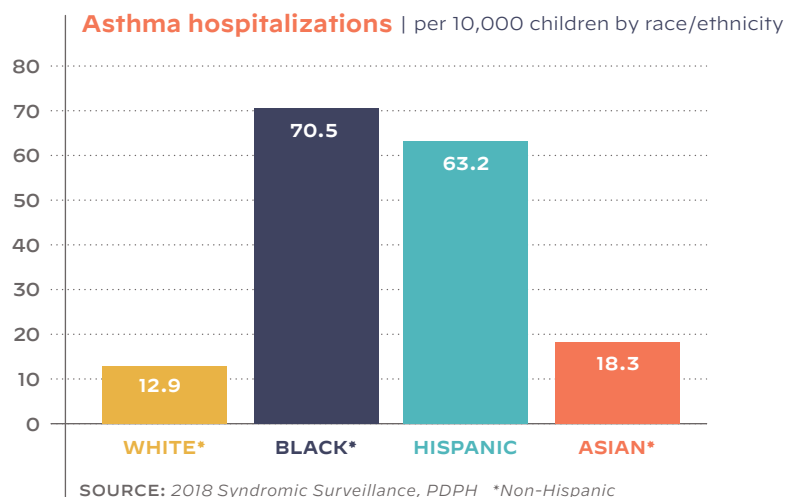
Hospitalizations for asthma reflect in part the severity of asthma attacks and in part the patterns of medical practice.

In 2018, while ED visits for asthma were increasing, the rate of asthma-related hospitalizations among children in Philadelphia declined to a low of 55.1 hospitalizations per 10,000 children.

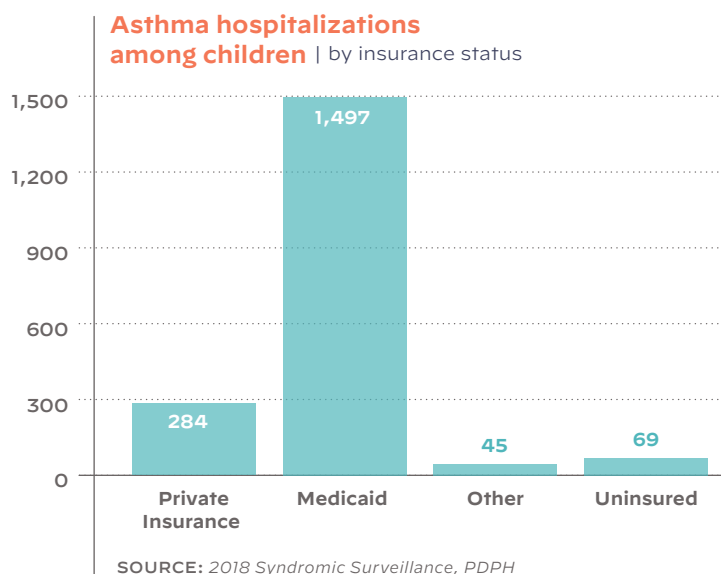


In 2018, non-Hispanic black and Hispanic children had the highest rates of asthma-related hospitalizations - with rates 5 to 6 times higher than non-Hispanic white children.

Racial/ethnic differences in asthma frequency, illness and death are highly connected with poverty, housing quality, and indoor asthma triggers.



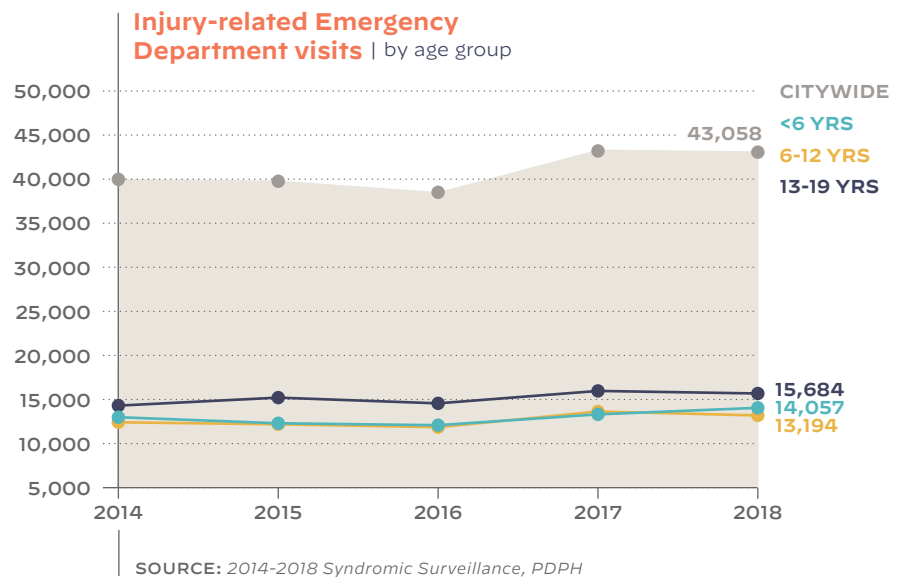
Among the 1,865 asthma hospitalizations for children in 2018, 1,497 of the cases were covered under Medicaid public health insurance.



INJURIES

Unintentional injuries, including falls, suffocation, and motor vehicle accidents among others, are a leading cause of morbidity and mortality for children. Unintentional injuries can often be fatal, especially for children under the age of six.

The number of injury-related emergency department visits among children in Philadelphia remained stable from 2014 to 2016 and has risen from 2016 to 2018, with 43,058 injury-related ED visits in 2018.

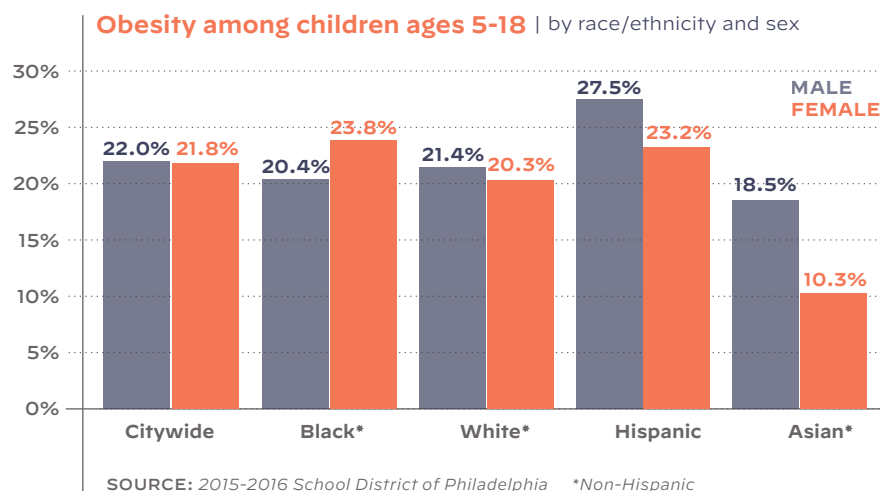


OBESITY

Obesity in childhood is defined as a body mass index at or above the 95th percentile for children of the same age and sex. Children who have obesity are more likely to be obese as adults. Childhood obesity is also associated with a higher risk of chronic health outcomes, including heart disease, type 2 diabetes, and asthma.⁹

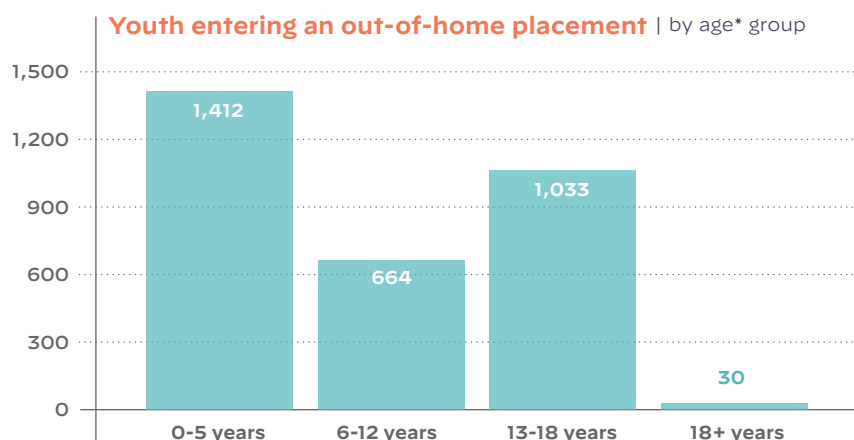
The high proportion of obese children in Philadelphia contributes to the adult obesity epidemic in the region.

21.9 percent of children in Philadelphia aged 5 to 18 were obese in 2016. Obesity was more common among both non-Hispanic black girls and Hispanic/Latino boys.



CHILD MALTREATMENT

Child maltreatment constitutes the physical, sexual, and emotional abuse, or neglect of a child. Child maltreatment has been linked to mental health conditions, substance use disorders, suicide attempts, and risky sexual behavior later in life. Although child victims of maltreatment have an increased risk for poor health outcomes across the lifespan, this risk may be mitigated through the presence of strong, stable, supportive, and protective adults.



SOURCE: 2018 Philadelphia Department of Human Services

*Age at first dependent placement start date in 2018

Philadelphia's Department of Human Services provides an array of services to keep families together and prevent the removal of children from their homes. When prevention services are not sufficient to ensure child safety, Philadelphia's Department of Human Services utilizes out-of-home placement services, such as foster care, to address unmitigated safety threats. Children who enter out-of-home placement represent a particularly vulnerable population and are at highest risk for poor outcomes associated with maltreatment.

In 2018, 2,649 children entered an out-of-home placement for the first time because of active and unmitigated safety threats in their homes. The largest fraction of children who entered placement in 2018 were aged 13 - 18 years (39 percent), followed by children aged 0 - 5 (35 percent).

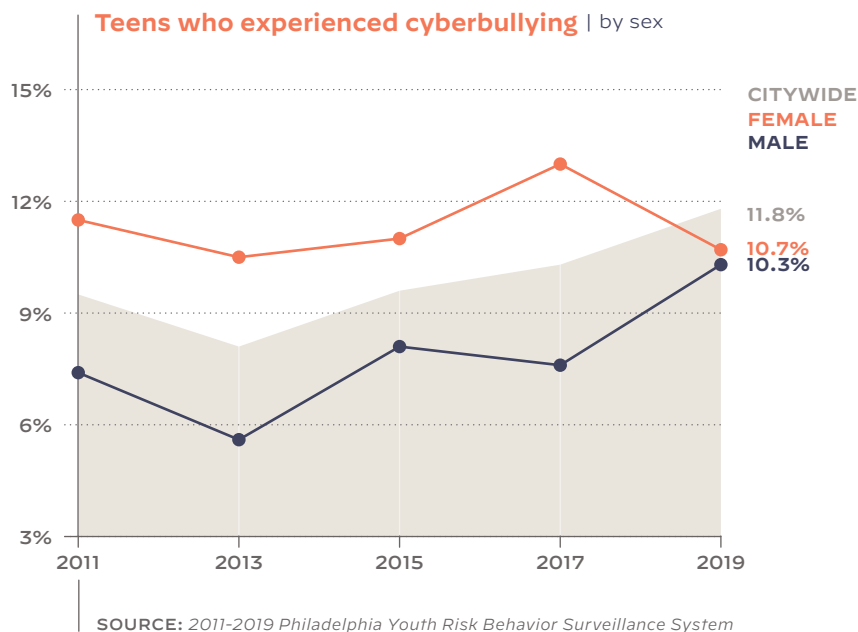


Behavioral Health

CYBER-BULLYING

The Centers for Disease Control and Prevention define cyber-bullying or electronic bullying as being bullied through text message or social media sites. Cyber-bullying and bullying in general can contribute to symptoms of depression and suicidal ideation among teens.¹⁰

The percentage of youth experiencing cyber-bullying increased from 2013 to 2019. Female teens were more likely to report cyber-bullying.



"I feel like a lot of that stems into mental health, too, because a lot of the things that we see on social media, like people doing drugs, people overdosing, people getting into fights, fighting and stuff like that — our generation, that's normal to us."

— Resident from Philadelphia Community Needs Assessment

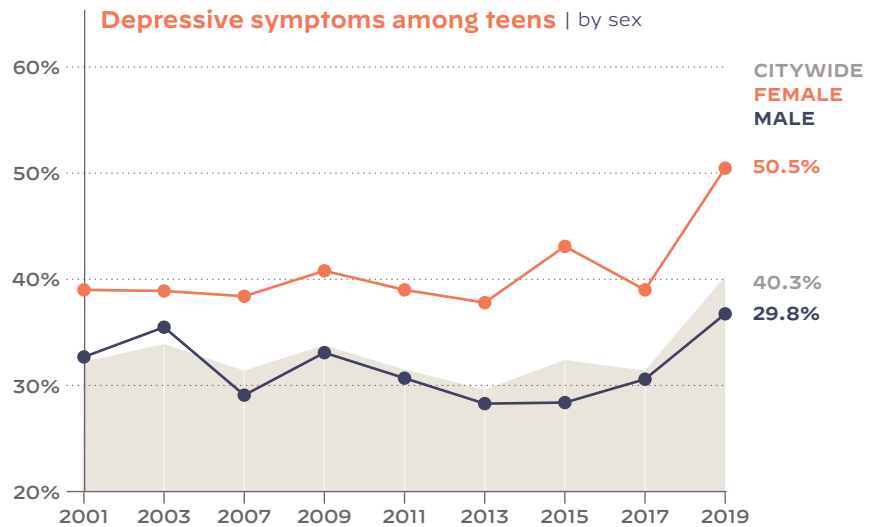
DEPRESSIVE SYMPTOMS

Depressive symptoms, measured as experiencing feelings of sadness and hopelessness for two or more weeks, are important indicators of psychological distress among youth. If left untreated, depressive symptoms can lead to a diagnosis of major depressive disorder and also contribute to suicidal thoughts, plans, and suicide attempts.¹¹

From 2001 to 2019, depressive symptoms among teens have remained relatively constant, at 40.3 percent in 2019, higher than the national average (31.5 percent).

Depressive symptoms were highest among female teens. Nationally, diagnoses of depression are more common among females compared to males, which may be due to stressors related to limited social power and gender differences in stress responses.¹²

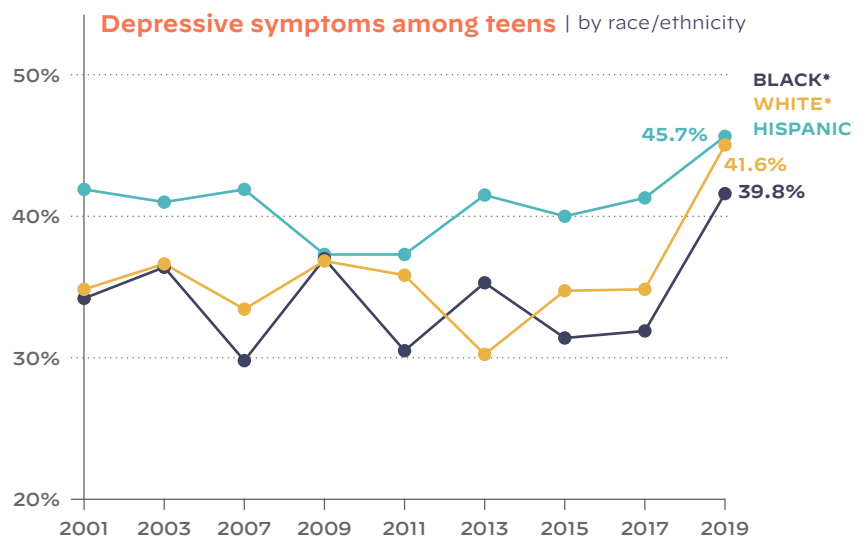
Lower percentages of depressive symptoms among males may be due to underreporting and stigma surrounding mental health among boys and men.¹³



SOURCE: 2001-2019 Philadelphia Youth Risk Behavior Surveillance System

From 2001 to 2019, depressive symptoms were more common among Hispanic teens at 45 percent. This was higher than the national percentage among this population (34 percent).

Racial/ethnic discrimination, alienation, and stress associated with acculturation to U.S. society may contribute to depression among Hispanic teens.¹⁴

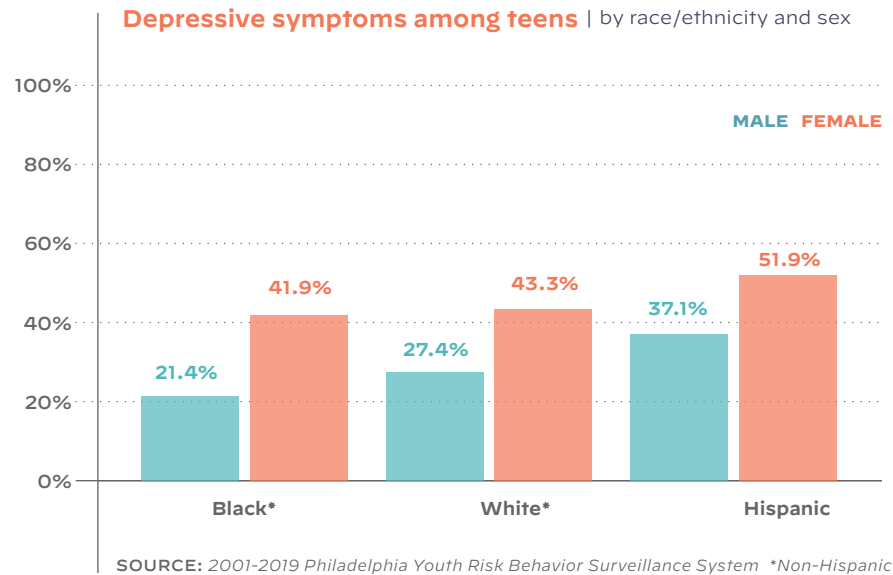


SOURCE: 2001-2019 Philadelphia Youth Risk Behavior Surveillance System

*Non-Hispanic

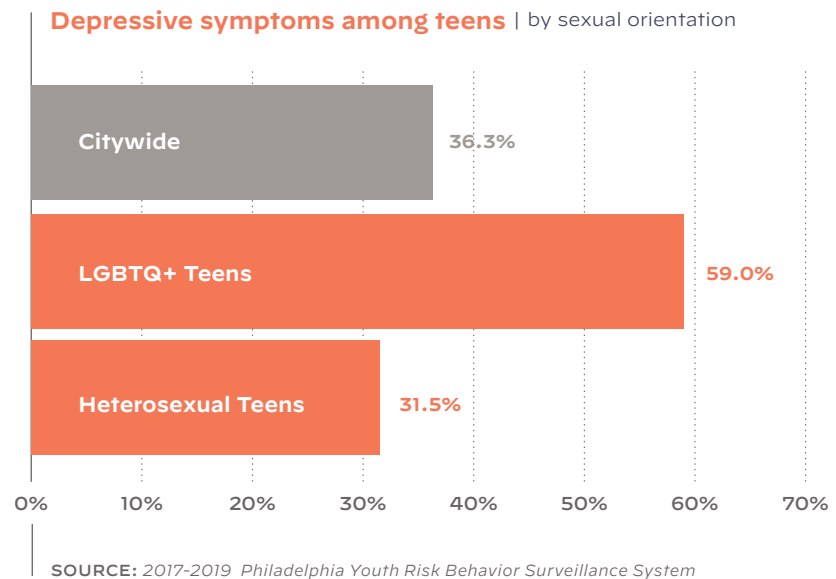
DEPRESSIVE SYMPTOMS, continued

Depressive symptoms were highest among Hispanic male teens at 37.1 percent and Hispanic female teens at 51.9 percent.



In 2017 through 2019, depressive symptoms were more common among youth that identify as lesbian, bisexual, gay, or transgender, or LGBTQ+, (59 percent) compared to heterosexual youth (31.5 percent). This is similar to the national percentage of depressive symptoms among LGBTQ+ teens (63 percent).

High percentages of depressive symptoms among LGBTQ+ teens are likely due to societal stigma and discrimination that members of the LGBTQ+ community face.¹⁵

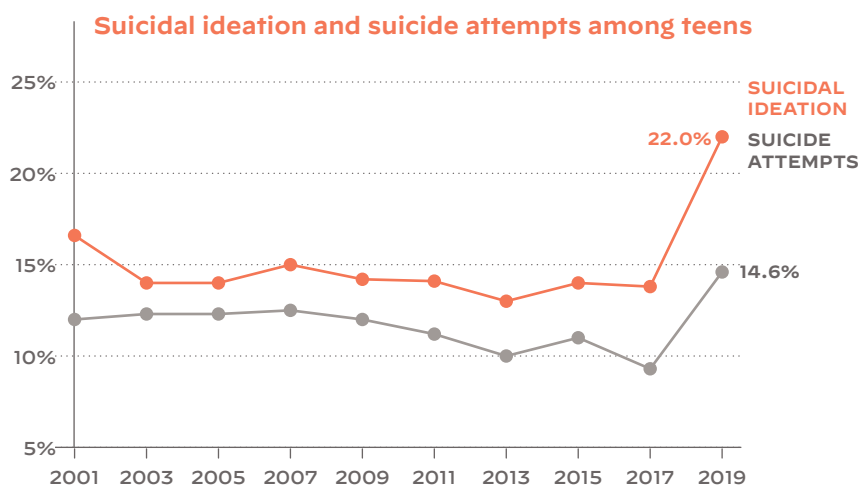


SUICIDAL IDEATION AND ATTEMPT

Suicide is one of the leading causes of death among young people.

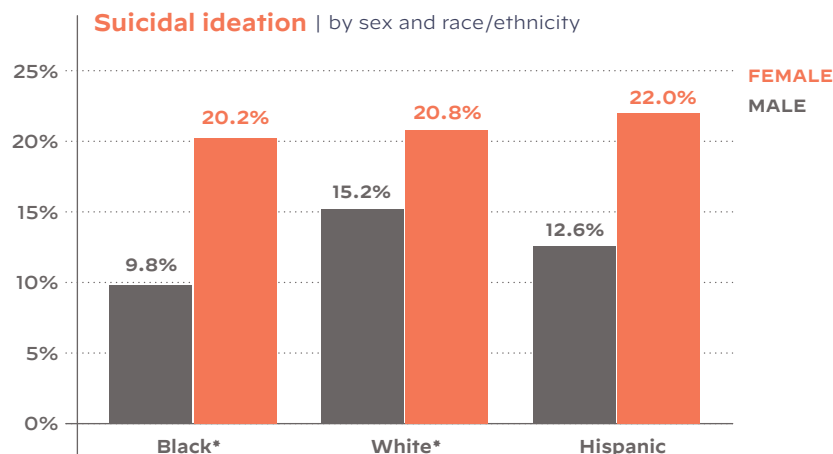
The percentage of teens that have experienced suicidal ideation in the past year remained stable from 2001 to 2017 but increased to 22 percent in 2019.

In Philadelphia, the percentage of youth who have attempted suicide has remained stable from 2001 to 2019. In 2019, 14.6 percent of teens in Philadelphia attempted suicide.



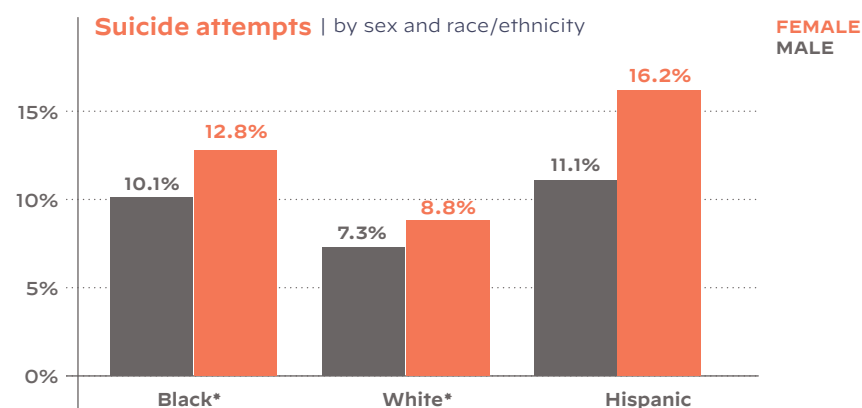
SOURCE: 2001-2019 Philadelphia Youth Risk Behavior Surveillance System

Suicidal ideation among teens was most common among female youth. Suicidal ideation was slightly higher among Hispanic females and non-Hispanic white males.



SOURCE: 2017-2019 Philadelphia Youth Risk Behavior Surveillance System *Non-Hispanic

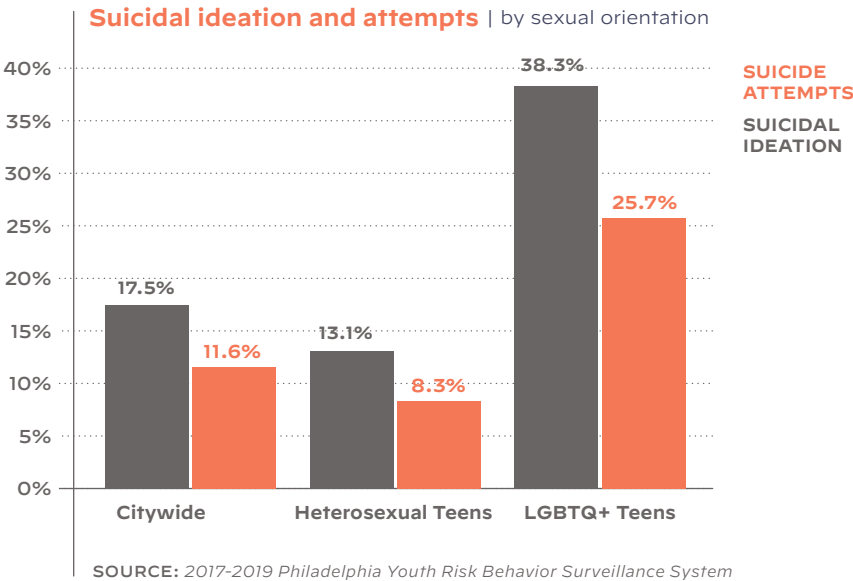
Reports of suicidal ideation and attempts were higher among females than males. Reported suicide ideation was common among all racial/ethnic groups, with female Hispanic youths having a higher proportion of reported suicide attempts at 16.2 percent.



SOURCE: 2017-2019 Philadelphia Youth Risk Behavior Surveillance System *Non-Hispanic

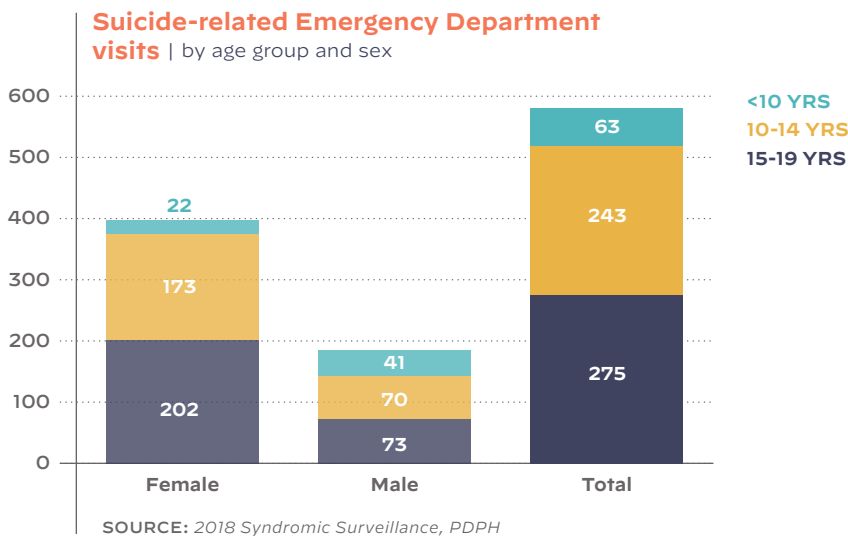
SUICIDAL IDEATION AND ATTEMPT, continued

Both suicidal ideation and suicide attempts were also higher among LGBTQ+ youth than heterosexual youth and the citywide youth population.



SUICIDE-RELATED EMERGENCY DEPARTMENT VISITS

Suicide-related emergency department visits were highest among females aged 15 to 19. This follows a national trend that a higher percentage of female teens are more likely than male teens to attempt suicide (9 percent) and experience suicide-related emergency department visits (3 percent).



Suicide-related emergency department visits for females are likely higher due to use of less lethal means; males are more likely to use firearms for suicide whereas females are more likely to use other less lethal means.¹⁶ As a result, females are more likely to survive a suicide attempt and require medical attention or be hospitalized for their attempts.



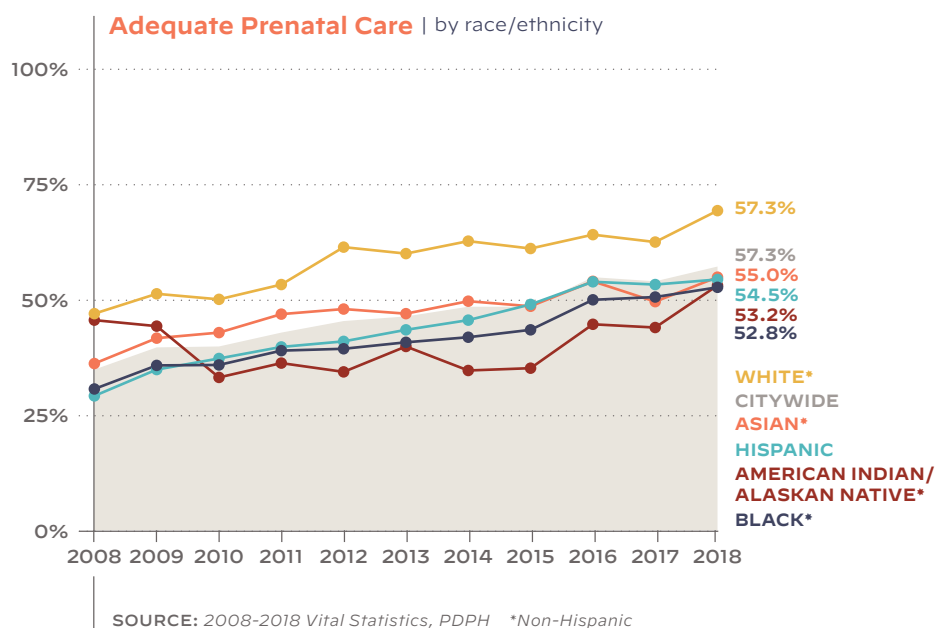
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Health Behaviors

ADEQUATE PRENATAL CARE

Adequate and early prenatal care can lead to improved health outcomes for both mothers and their infants. Early prenatal care is important because mothers can receive information and guidance on steps they can take to ensure the healthiest pregnancy possible.¹⁷

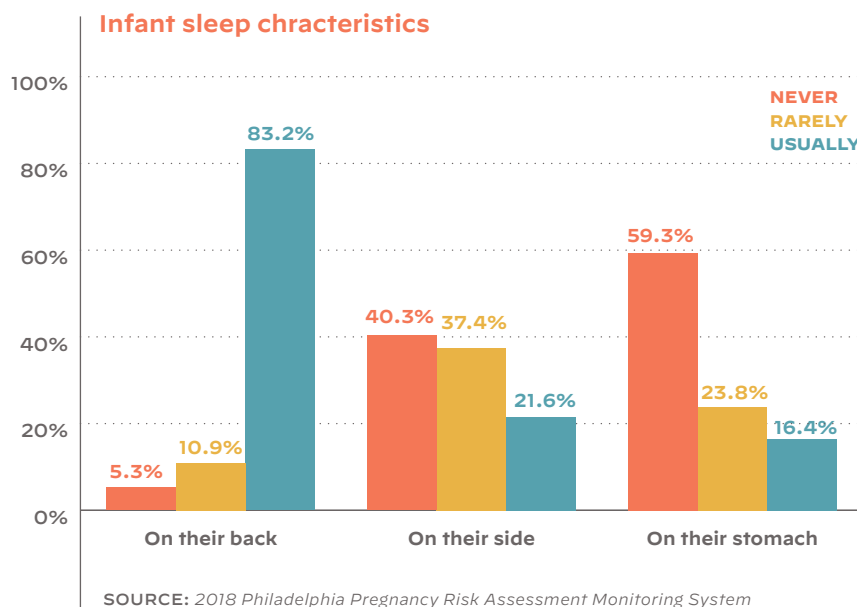
The percentage of mothers in Philadelphia who received adequate prenatal care has increased over the past decade, with 57.3 percent of mothers receiving care. Generally, the prevalence estimates were similar among all racial/ethnic groups.



SAFE SLEEP

To reduce risk factors for sleep-related infant deaths, the American Academy of Pediatrics recommends placing infants to sleep on their backs, room sharing but not bed sharing, and keeping soft objects and loose bedding out of the infant's sleep environment.

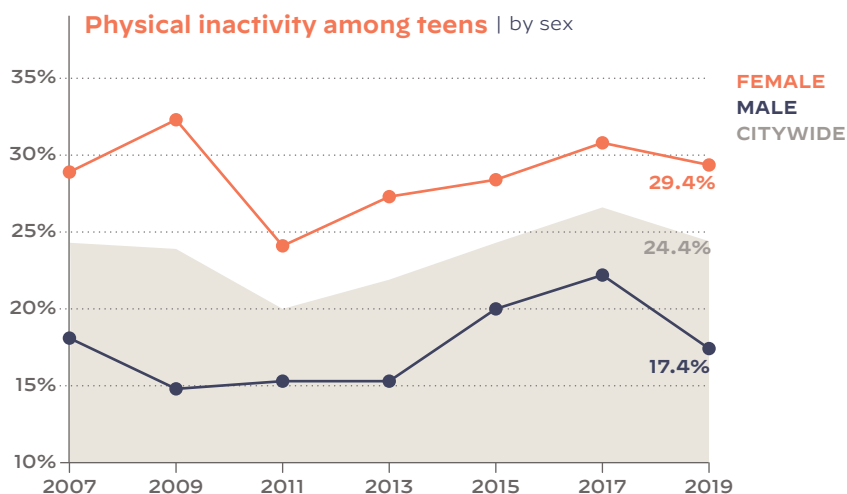
In 2018, 83.2 percent of mothers that were surveyed 2 to 6 months after delivery reported that they usually placed their infant on their back. This estimate was higher than the Healthy People 2020 target (75.8 percent).



PHYSICAL INACTIVITY

The Centers for Disease Control and Prevention recommends that school-aged children and adolescents engage in one hour or more of moderate exercise daily. This includes aerobic exercise daily, muscle-strengthening activities at least 3 days per week and bone-strengthening activities (like jumping rope or running) at least three days per week.¹⁸

Children are considered inactive if they do not exercise for 60 minutes at least one day per week. Physical inactivity among teens remained relatively constant from 2007 to 2019, at 24.4 percent in 2017. Physical inactivity was higher among females (29.4 percent) than males (17.4 percent) in 2019.



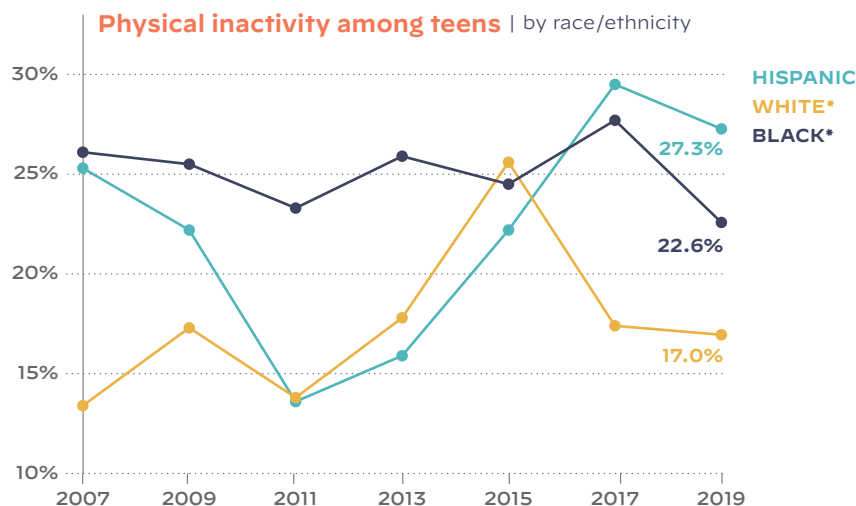
SOURCE: 2007-2019 Philadelphia Youth Risk Behavior Surveillance System

"A lot of kids are kept indoors nowadays because of the crime rates. Kids used to go outside and play, now they're stuck indoors playing videogames, and not getting the exercise they need. They're not being socially active and that's why there's more obesity."

— Resident from Philadelphia Community Needs Assessment

PHYSICAL INACTIVITY, continued

Physical inactivity was also higher among racial/ethnic minorities, including black/African-American teens and Hispanic teens than among white teens.



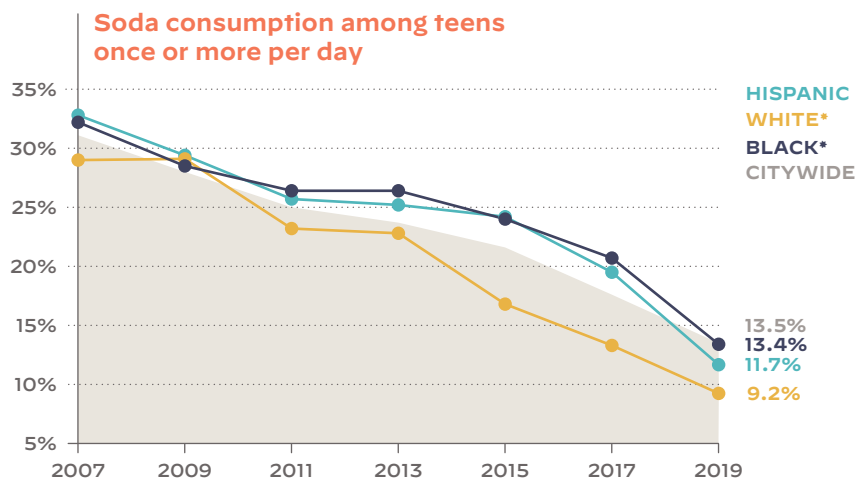
SOURCE: 2007-2019 Philadelphia Youth Risk Behavior Surveillance System

*Non-Hispanic

SODA CONSUMPTION

Sugar-sweetened beverages are the main source of added sugar for children and adolescents and increase the risk of obesity and diabetes.¹⁹

In Philadelphia, soda consumption has declined sharply citywide among teens and among all major racial/ethnic groups, especially after implementation of the Philadelphia Beverage Tax in 2017. The drop in soda consumption was steepest among non-Hispanic black and Hispanic teens, who had the highest consumption at baseline. This was potentially due to a concentration of convenience stores selling soft drinks in Philadelphia's predominantly black and low-income neighborhoods in North Philadelphia.



SOURCE: 2007-2019 Philadelphia Youth Risk Behavior Surveillance System

*Non-Hispanic

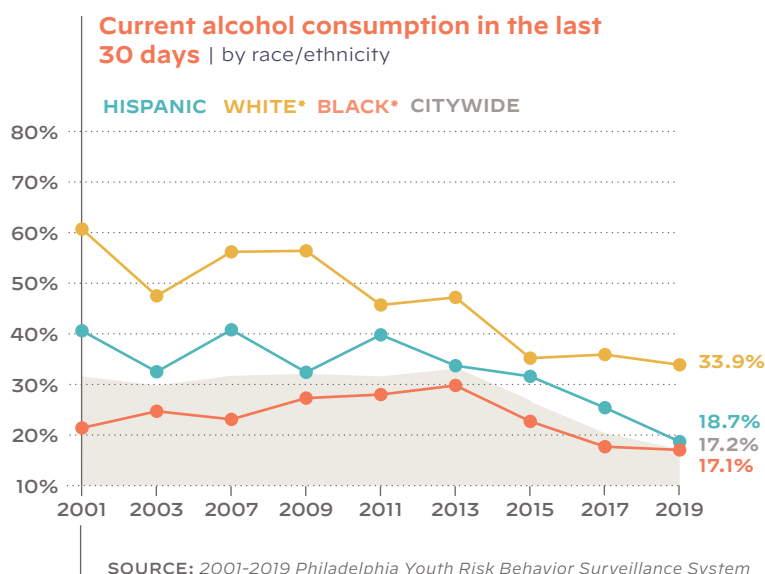


Substance Use

Substance use and abuse among youth and adolescents can impair both their physical and intellectual growth. Substance use places teens at greater risk for unprotected sexual activity, driving while intoxicated, problems in school, and legal system involvement, along with other adverse outcomes.²⁰ Risk factors for teen substance use can include family history of substance use, mental health issues, history of sexual abuse, and low academic achievement.²¹

ALCOHOL USE

Negative consequences of alcohol use include engaging in risky sexual behaviors and injuries of all types.²² Alcohol use among teens can impair brain areas associated with motivation, impulse control, and addiction.

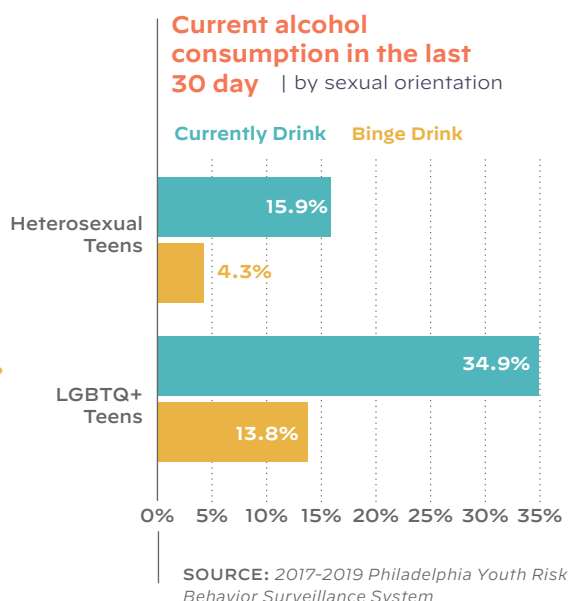


From 2001 to 2013, self-reported alcohol consumption within the past 30 days among teens remained stable. From 2013 to 2019, alcohol consumption among this population decreased from 33 percent to 17 percent.

The percentage of teens in Philadelphia consuming alcohol was lower than the national percentage (30 percent) in 2019.

Alcohol consumption was more common among non-Hispanic white teens (34 percent) than among other racial/ethnic groups (~19 percent of Hispanic teens and 17 percent of non-Hispanic black teens).

Binge drinking (consuming four or more drinks at one time if female and five or more drinks if male) increases the risk for car crashes, falls, violence, and alcohol poisoning.²³



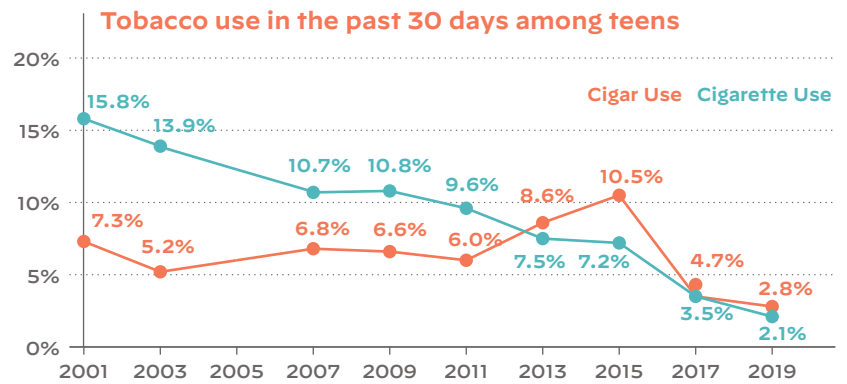
In 2019, 5.2 percent of teens in Philadelphia reported frequent binge drinking during the past 30 days. Both alcohol consumption and binge drinking during the past 30 days were more common among LGBTQ+ teens compared to heterosexual teens.

TOBACCO USE

Cigarette smoking among teens can become a life-long addiction and lead to serious health consequences, including lung cancer and heart disease.²⁴

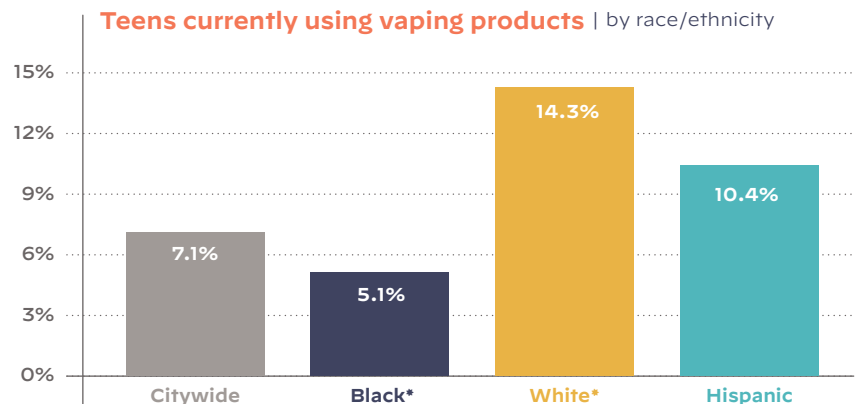
Similar to national trends, reported current cigarette smoking (within the past 30 days) continues to decline among teens in Philadelphia from 2001 to 2019. Current cigarette use among teens decreased by 70 percent between 2015 and 2019.

Cigar smoking within the past 30 days remained stable among teens from 2001 to 2011 and then increased from 2011 to 2015. Current cigar smoking has declined since 2015, and 2.8 percent of teens reported current cigar use in 2019.



SOURCE: 2001-2019 Philadelphia Youth Risk Behavior Surveillance System

Electronic cigarette use, or vaping, has risen sharply among teens in the United States. In 2019, 7.1 percent of teens in Philadelphia reported using electronic vapor products or e-cigarettes within the past 30 days, compared to 2.1 percent of teens smoking cigarettes. Vaping was most common among white teens, at 14.3 percent.



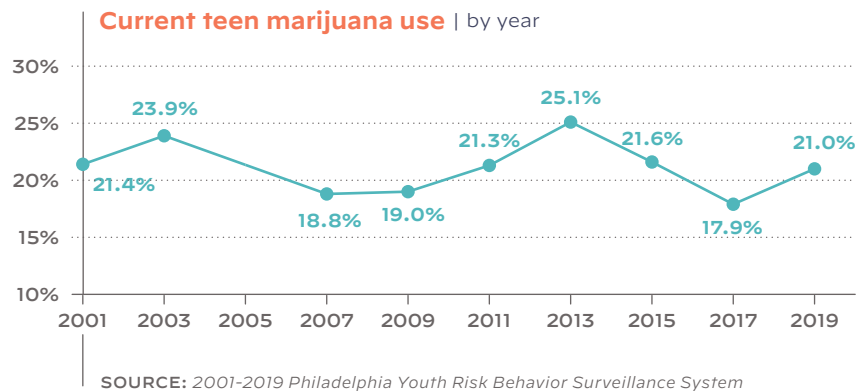
SOURCE: 2019 Philadelphia Youth Risk Behavior Surveillance System

*Non-Hispanic

MARIJUANA USE

Marijuana can adversely impact the developing brain, especially areas related to attention, memory, and learning skills. Marijuana use can also affect coordination and motor skills, which can be unsafe for driving and impair athletic performance.²⁵

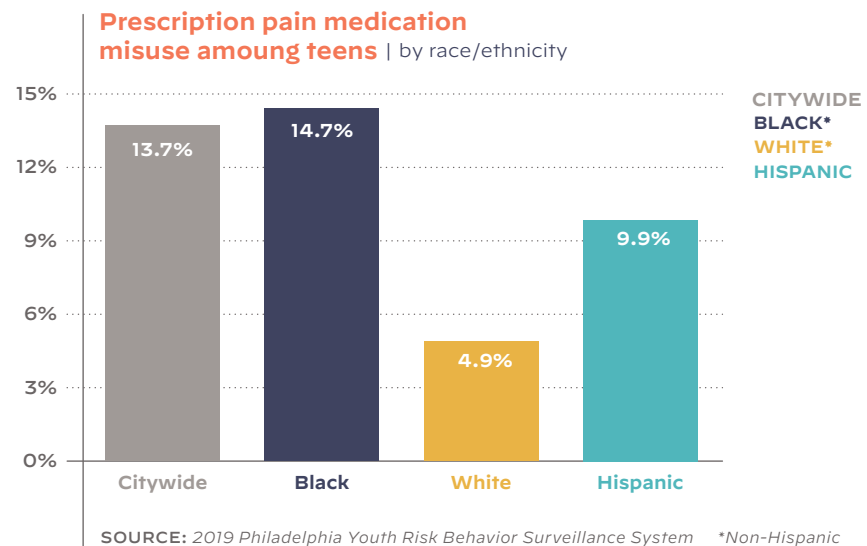
Self-reported marijuana use among teens ranged between 19 percent and 25 percent in recent years. In 2019, 21 percent of teens reported current marijuana use.



PRESCRIPTION PAIN MEDICINE MISUSE

Prescription pain medicine misuse occurs when an individual takes prescription pain medication without a doctor's prescription or differently from a doctor's instructions. Prescription misuse, especially among young people, has been a major contributor to the opioid crisis in Philadelphia.

In 2019, 13.7 percent of teens aged 13 to 17 reported misusing prescription pain medicine. Prescription pain medication misuse was highest among non-Hispanic black teens, at 14.7 percent.





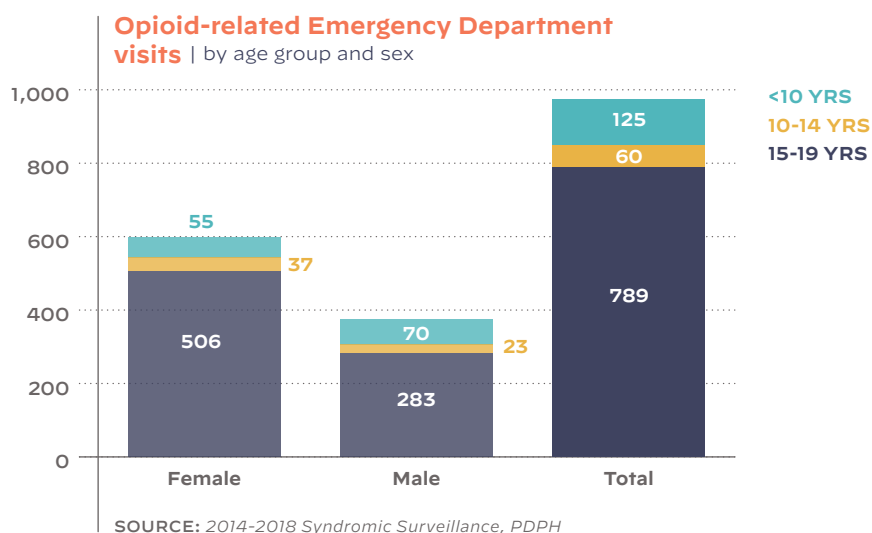
"The youth have been hit hard with the opioid crisis... they suffer sports injuries and are given prescription drugs."

— Resident from Philadelphia
Community Needs Assessment

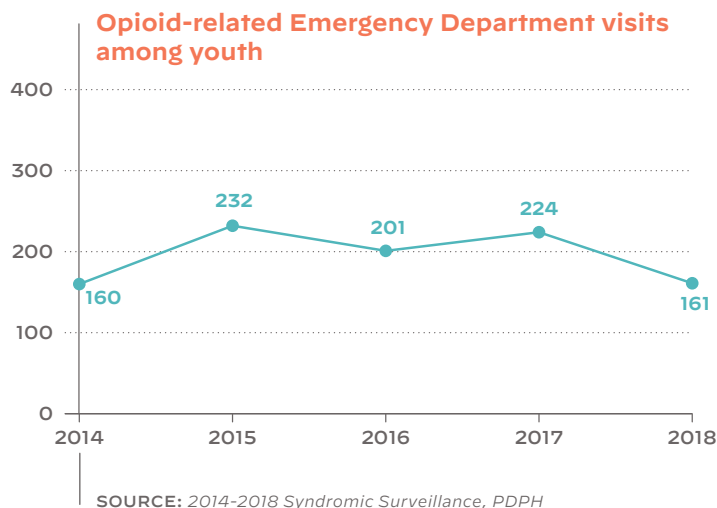
OPIOID-RELATED ED VISITS

The current opioid crisis in Philadelphia continues to affect youth through nonfatal overdoses, resulting in emergency department visits.

From 2014 to 2018, there were 974 opioid-related emergency department visits among people under the age of 20 in Philadelphia. The majority of these emergency department visits were among teens aged 15 to 19 and among female youth.



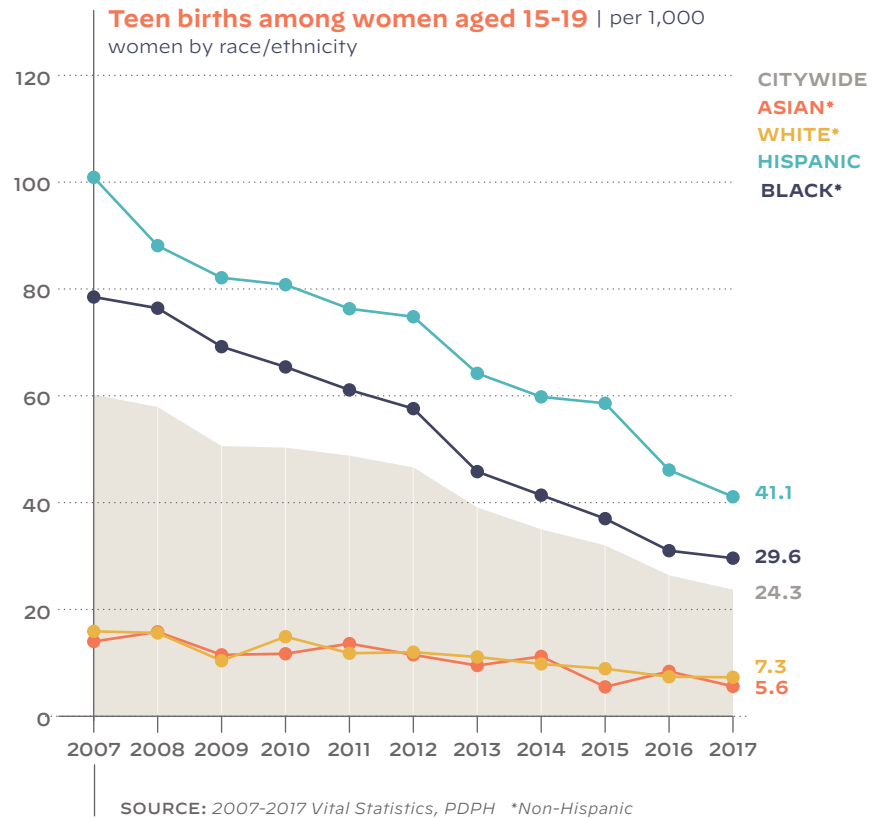
The number of opioid-related emergency department visits among youth increased from 2014 to 2017 and declined from 2017 to 2018. In 2018, there were 161 opioid-related emergency department visits involving youth.



TEEN BIRTHS

Infants born to teen mothers are more likely to have lower school achievement and to drop out of high school, have more health problems, be incarcerated at some time during adolescence, give birth as teenagers, and face unemployment as young adults.²⁶

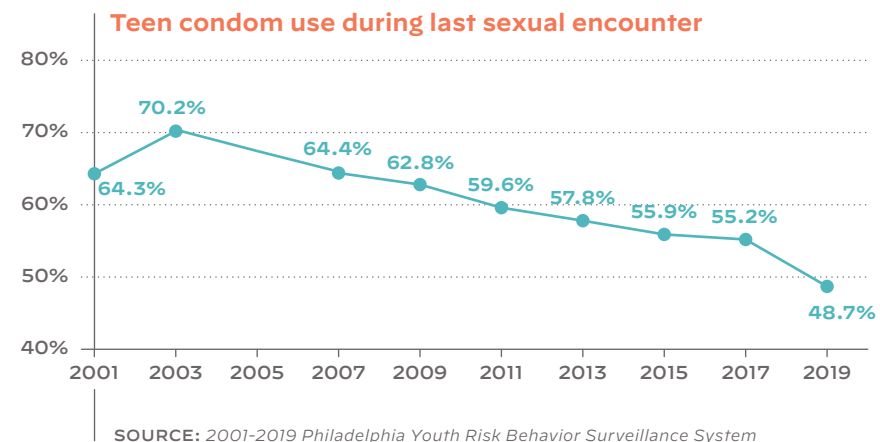
During 2007-2017, the teen birth rate fell by more than half from 60.2 to 25.7 births per 1,000 females. The birth rate for females aged 15 to 19 in Philadelphia in 2017 was higher than the national rate (18.8 births per 1,000 women). Although teen birth rates have declined, racial/ethnic disparities persist, with rates consistently the highest among Hispanic teens.



CONDOM USE

Using condoms can prevent both unintended pregnancy and the transmission of sexually transmitted diseases during sexual intercourse.

From 2001 to 2019, condom use among sexually active teens has slowly declined. Only 49 percent of teens reported using condoms during their last sexual encounters in 2019.





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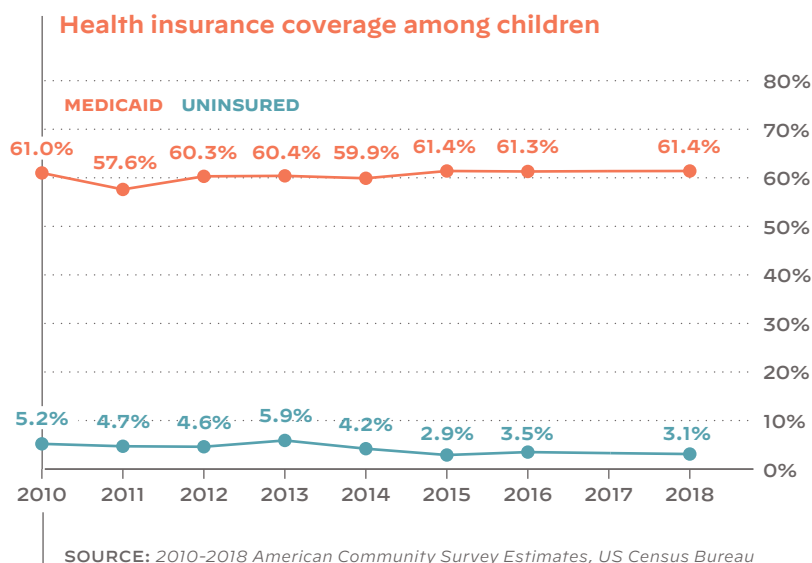
Clinical and
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Care

HEALTH INSURANCE COVERAGE

Those living without health insurance face greater difficulties in accessing medical care and may delay treatment due to cost.²⁸ As a result, those without health insurance experience poorer health outcomes compared to those with health insurance.²⁹

The percentage of children who do not have health insurance declined from 6 percent to 3 percent during 2013 to 2015 and has since remained stable.

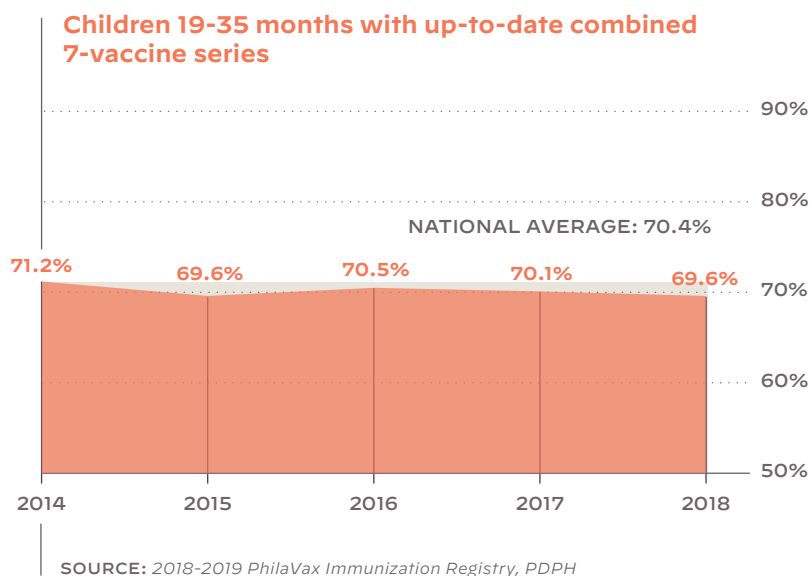
In 2018, 61.4 percent of children in Philadelphia had health insurance under Medicaid. Medicaid coverage has remained stable among children in Philadelphia.



IMMUNIZATIONS: Early Childhood

Immunizations are considered one of the greatest achievements in public health.

Based on data from the PhilaVax Immunization Registry, which does not include all vaccinations for children received outside of the city, approximately 70 percent of children ages 19-35-month have received the recommended seven-vaccine series.



* The combined 7-vaccine series (4:3:1:3*:3:1:4) includes ≥4 doses of DTaP, ≥3 doses of poliovirus vaccine, ≥1 dose of measles-containing vaccine, the full series of Hib (≥3 or ≥4 doses, depending on product type), ≥3 doses of HepB, ≥1 dose of varicella vaccine, and ≥4 doses of pneumococcal vaccines.



IMMUNIZATIONS: School Entry

School vaccination requirements help ensure that all students are protected against vaccine-preventable diseases.

Based on data from the PhilaVax Immunization Registry, more than three-fourths of children were up-to-date with all five recommended vaccines upon school entry in the 2018-19 school year.

Children with up-to-date required immunizations for school entry

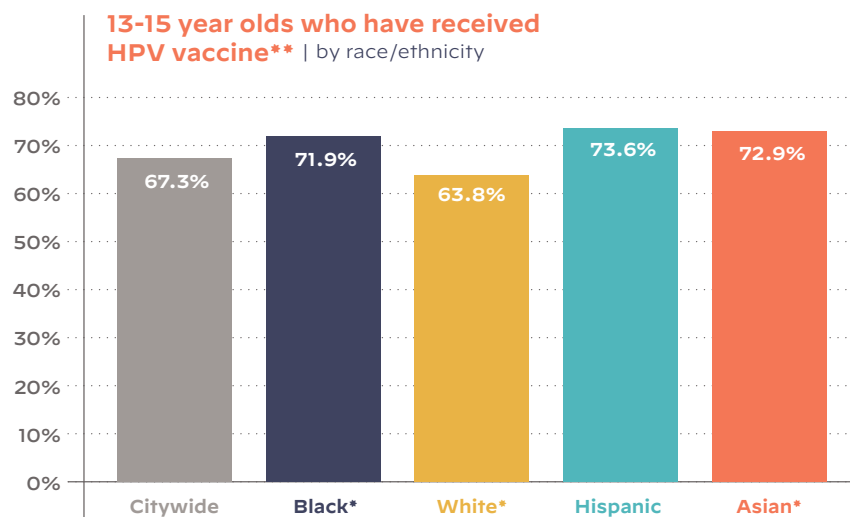
	Doses	Kindergarten to Grade 1 (5–6 years old)	First day of School (5–17 years old)	7th Grade Entry (13 years old)	12th Grade Entry (17 years old)
DTP/Dtap/DT/Td, Tdap	4 doses	92%	89%		
Polio	4 doses	95%	93%		
MMR	2 doses	90%	90%		
HepB	3 doses	93%	91%		
Varicella	2 doses	80%	82%		
All 5 vaccines up-to-date		77%	76%		
MCV 4	1 dose			96%	96%
Tdap	1 dose			73%	

SOURCE: 2018-2019 PhilaVax Immunization Registry, PDPH

HUMAN PAPILLOMA VIRUS (HPV) VACCINE

It is recommended that adolescents between the ages of 11 and 15 years old receive the Human Papilloma Virus (HPV) vaccine, which protects against cervical cancer and genital warts.

In Philadelphia, 67 percent of 13- to 15-year olds have received HPV vaccine, similar to the national average of 68 percent. HPV vaccination rates were lowest among white youth, at 64 percent.



SOURCE: 2018-2019 PhilaVax Immunization Registry, PDPH

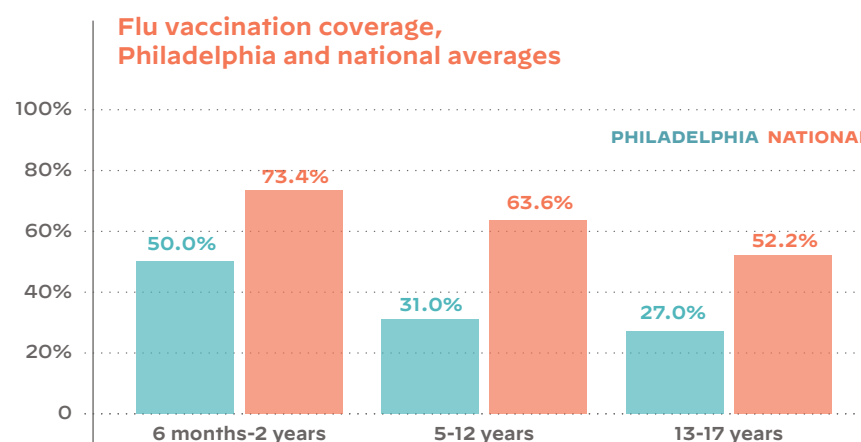
* Non-Hispanic

**These are children that received either the 2- or 3-dose HPV series and are considered to be up-to-date.

INFLUENZA VACCINATION COVERAGE

The American Academy of Pediatrics recommends an annual influenza vaccination for all people 6 months and older.³⁰ Vaccination continues to be the primary way to prevent sickness and death related to influenza.

Influenza vaccination coverage among children decreased with increasing age. This pattern was also consistent with the national influenza vaccination coverage reported in the 2018-19 season. Influenza vaccination coverage was consistently lower in Philadelphia than in the nation.



SOURCE: 2018-2019 PhilaVax Immunization Registry, PDPH

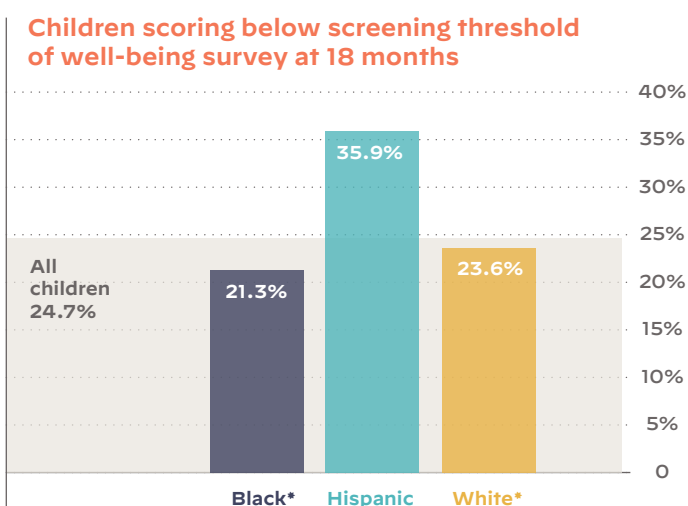
“you have to have a pretty severe [developmental] delay to be eligible for therapy when they’re young. You can see the warning signs and you just have to wait and watch your child fall farther and farther behind, so that you’re playing catch up...”

— Resident from Philadelphia Community Needs Assessment

EARLY CHILDHOOD DEVELOPMENT

Children with delayed development may have higher risk for subsequent problems with learning and health. The American Academy of Pediatrics recommends developmental screening for all children during well-child visits at 18 and 30 months.

At these visits, screening tools such as the Survey of Well-being of Young Children (SWYC) use parents’ reports of their children’s capabilities to help identify children with delayed development. In 2018, the Philadelphia Department of Public Health began collecting data on SWYC screening from local pediatric practices, as part of a long-term effort to track the health and development of children in the city. The first year, data were available on 3,204 children. 24.7 percent and 23.8 percent of children at 18-months and 24-months, respectively, scored below the scoring threshold established by SWYC developers as needing further evaluation.



SOURCE: 2018 Childhood Developmental Delay Surveillance System, PDPH

*Non-Hispanic

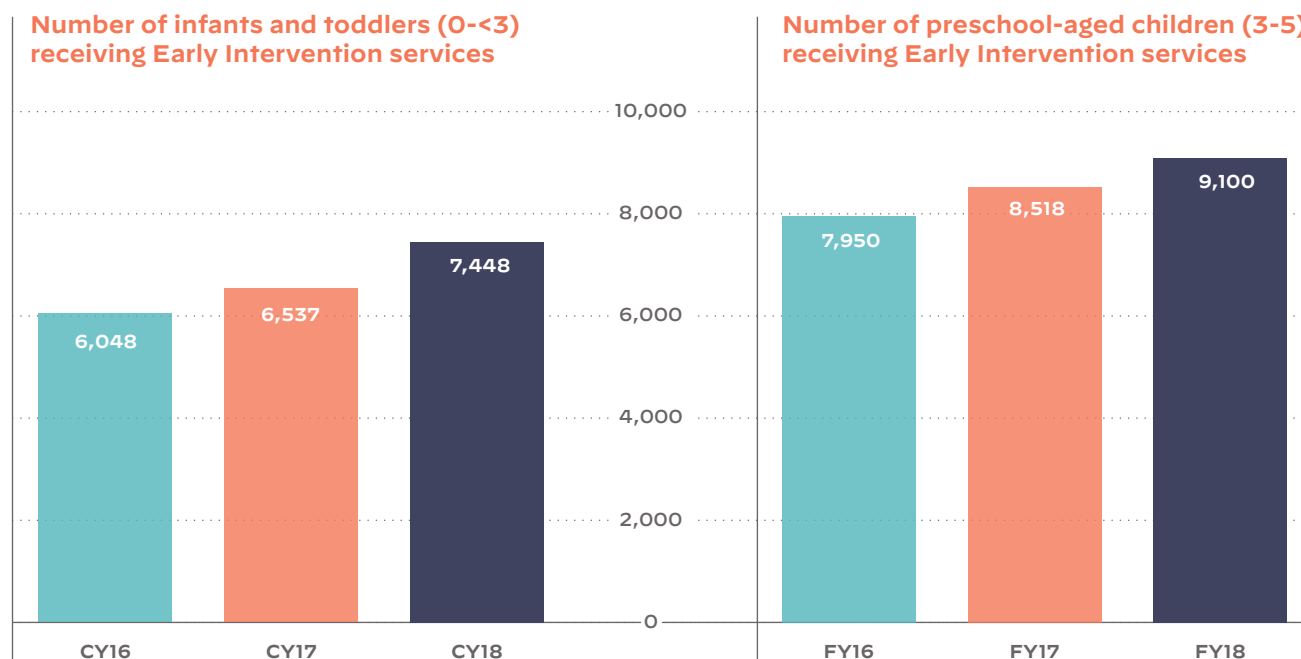
EARLY INTERVENTION SERVICES

Children identified as being at risk for a developmental delay are referred to Early Intervention for evaluation by a team of specialists.

Based on the evaluation, Early Intervention services, which includes speech therapy, physical therapy, and other types of services, may then be provided to children and their families. Infants and toddlers with concern for developmental delays are referred to the Philadelphia Infant Toddler Early Intervention Program.

In the 2018 calendar year (CY), 7,448 children under age 3 received early intervention services. Children 3-5 years old were referred to Preschool Early Intervention Program (Elwynn SEEDS) for services and support.

Over the years, the number of children served by Elwynn SEEDS has increased, with 9,100 children receiving services in the 2018 fiscal year (FY).



SOURCE: 2016-2018 Infant Toddler Early Intervention Program and Elwynn SEEDS

4

Physical Environment

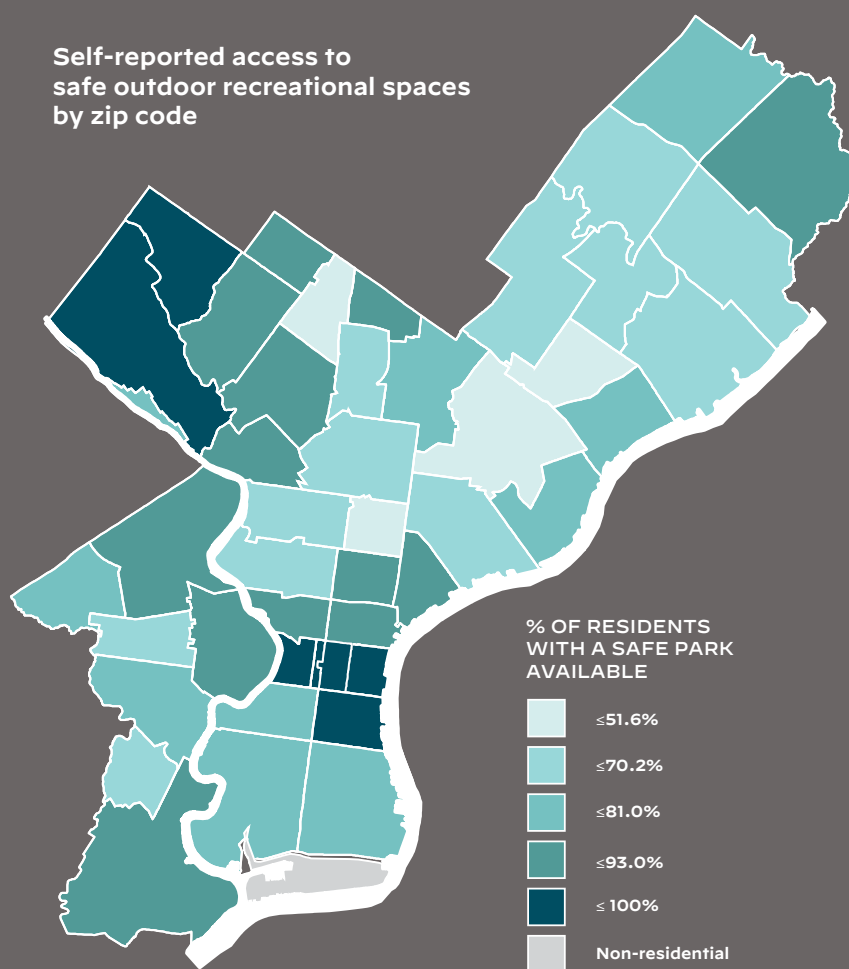


ACCESS TO GREEN SPACE & PUBLIC PARKS

Public parks and outdoor green spaces can help promote physical activity in urban areas, especially among children.³⁰ Access to safe parks and green spaces in neighborhoods can also help alleviate stress and improve mental health among residents.³¹

In 2018, approximately 75 percent of adults reported that they had access to a nearby park or outdoor green space that they were comfortable visiting. Access was greatest in the Northwest and Center City and lowest in North Philadelphia and the Lower Northeast.

Self-reported access to safe outdoor recreational spaces by zip code

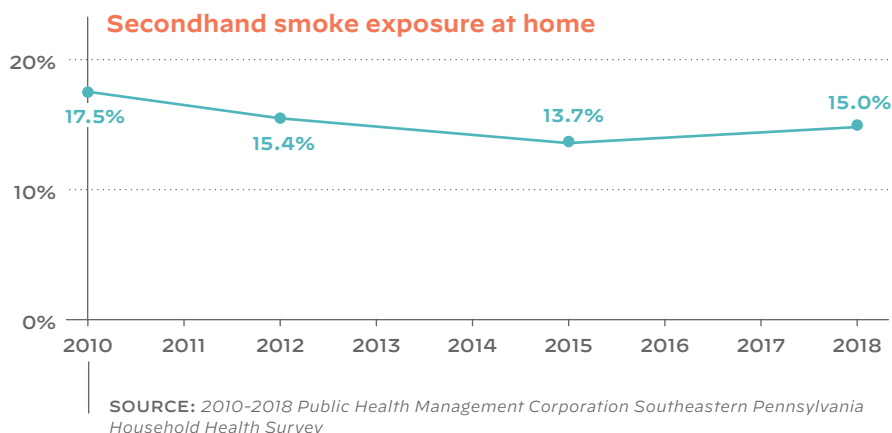


SOURCE: 2019 PHMC Household Health Survey

SECONDHAND SMOKE

Secondhand smoke exposure is especially dangerous for infants and children. Secondhand smoke contributes to multiple health problems in children, including more frequent and severe asthma attacks, respiratory infections, ear infections, and sudden infant death syndrome (SIDS).³²

Secondhand smoke exposure at home among children in Philadelphia has remained stable at about 15 percent from 2010 to 2018.

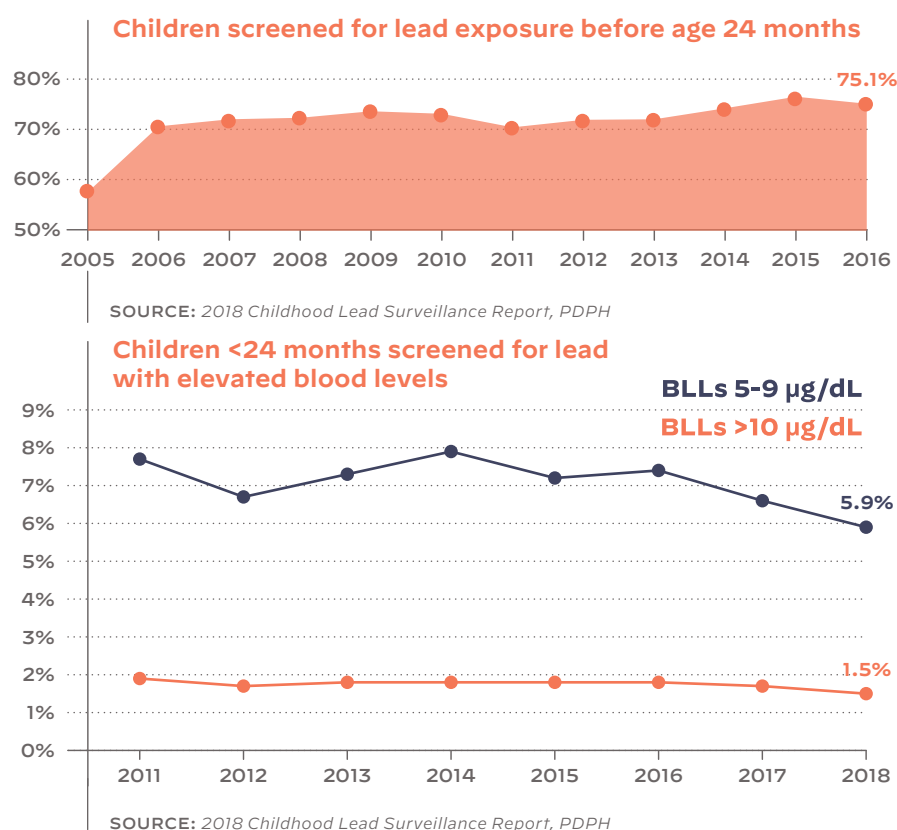


CHILDHOOD LEAD POISONING SCREENINGS

The Philadelphia Department of Public Health recommends that all children be screened for lead exposure between the ages of 8-12 months and again at the age of 24 months.

In 2016, 75 percent of children received at least one lead screening test before they turned 2 years old.

The percentage of children less than 24 months of age who have elevated blood lead levels (BLLs) has decreased from 2011 to 2018. In 2018, 5.9 percent of children less than 2 years of age were newly identified as having blood lead levels between 5-9 µg/dL and only 1.5 percent of children under the age of 2 years had blood lead levels greater than 10 µg/dL.



5

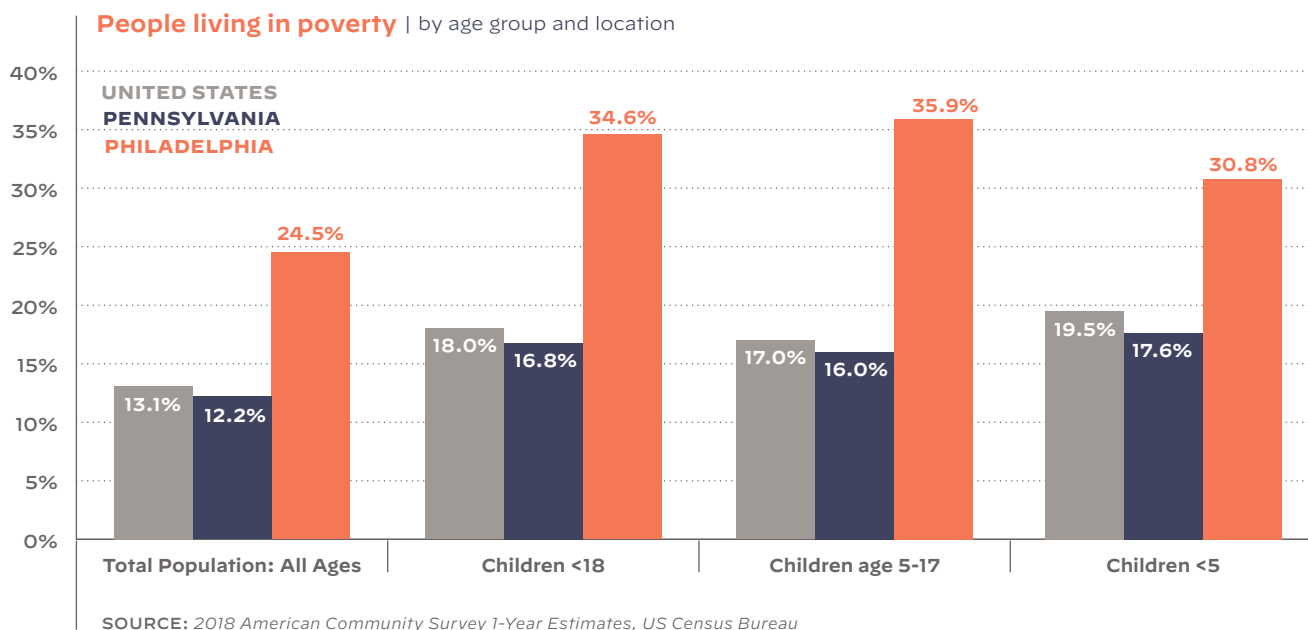
Social and Economic Factors



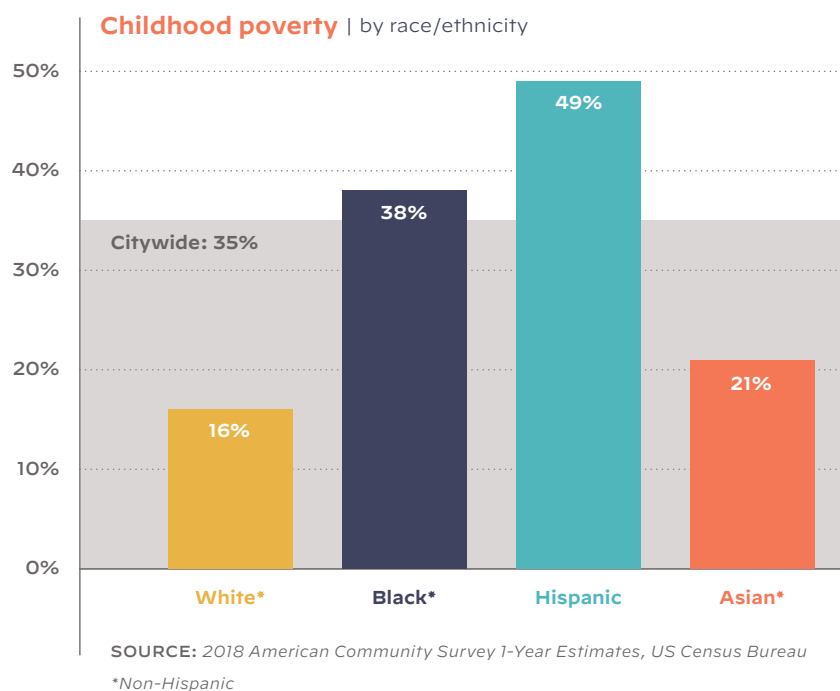
POVERTY

Growing up in poverty can lead to adverse health outcomes in childhood, including hospitalizations, asthma, and acute infections,³³ and have negative impacts on health through adulthood.³⁴

The federal poverty level was \$25,701 in 2018 for a family of four. In 2018, 34.6 percent of children in Philadelphia under the age of 18 (119,055 children) lived in poverty, about twice the state and national average.



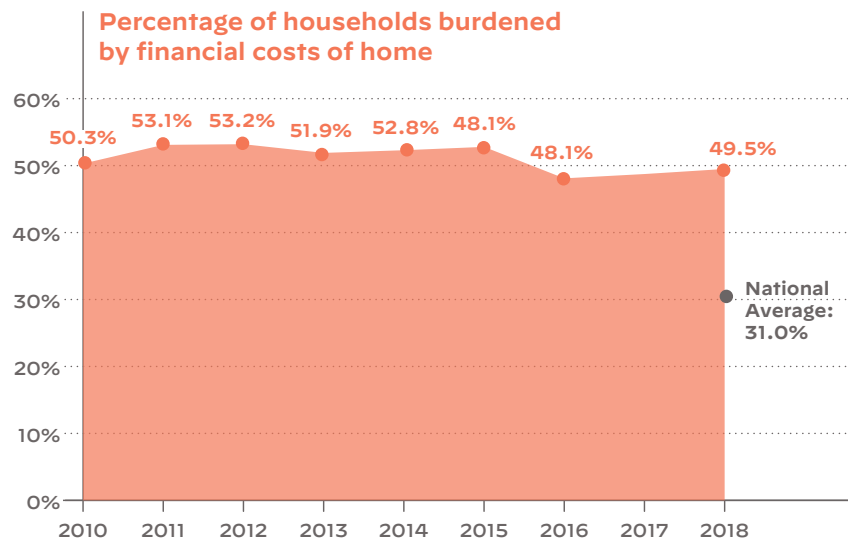
The distribution of poverty among children in Philadelphia is concentrated among racial and ethnic minorities. Almost 50 percent of Hispanic children live in poverty and 38 percent of non-Hispanic black children live in poverty.



HOUSING COST BURDEN

Housing cost burden is defined as spending more than 30 percent of one's monthly income on housing costs, including rent, utilities, and mortgage costs. High housing costs can lead to financial strain and can affect families' ability to pay for essentials, including food.³⁵

In Philadelphia, the percentage of households experiencing cost burden was higher than the national average of 31 percent, and has remained stable, with almost half (49.5 percent) of all households experiencing housing cost burden in 2018.

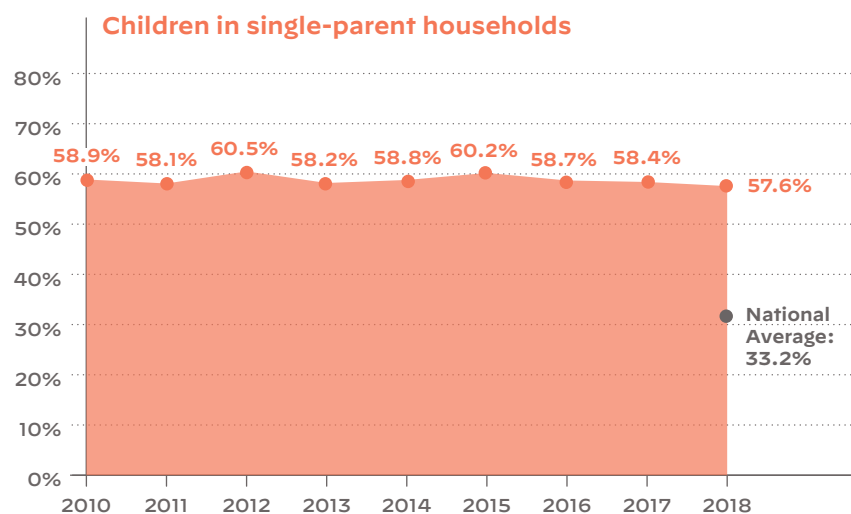


SOURCE: 2010-2018 American Community Survey 1-Year Estimates, US Census Bureau

SINGLE-PARENT HOUSEHOLDS

Growing up in a single-parent household can lead to financial strain in families. Single-parent families are twice as likely to be in poverty compared to married couple families, which can in turn lead to adverse child and parent health outcomes.³⁶

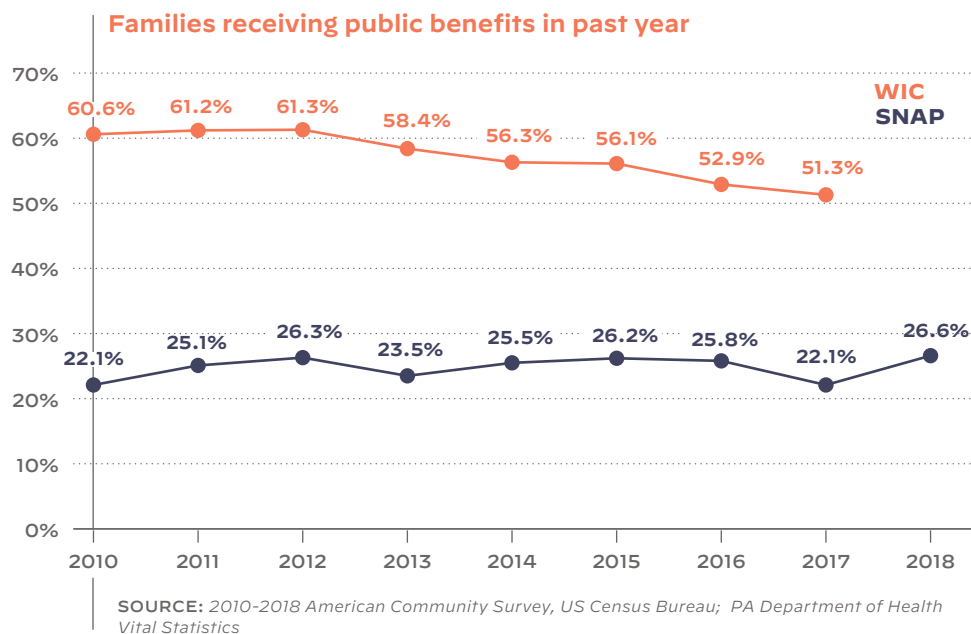
From 2010 to 2018, the percentage of children living in single-parent households remained stable at approximately 58 percent, nearly twice the national average of 33.2 percent.



SOURCE: 2010-2018 American Community Survey US Census Bureau

RECEIPT OF SAFETY-NET BENEFITS

To help reduce the burden of poverty, public assistance programs provide various forms of support to low-income families. The federal Supplemental Nutrition Assistance Program provides food stamps to low-income individuals and families to purchase food, and the federal Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides nutrition education and services to low-income pregnant, breastfeeding, and postpartum mothers with children under the age of five.



The percentage of households who received food stamps or SNAP benefits remained relatively stable from 2010 to 2018, with 26.6 percent of families in Philadelphia receiving food stamps in 2018. This is more than twice the national average (11.3 percent).

The percentage of families receiving WIC benefits has slightly declined from 2010 to 2018, with more than half (51.3 percent) of families in Philadelphia receiving WIC benefits. This is much higher than the Pennsylvania state average (34.1 percent).

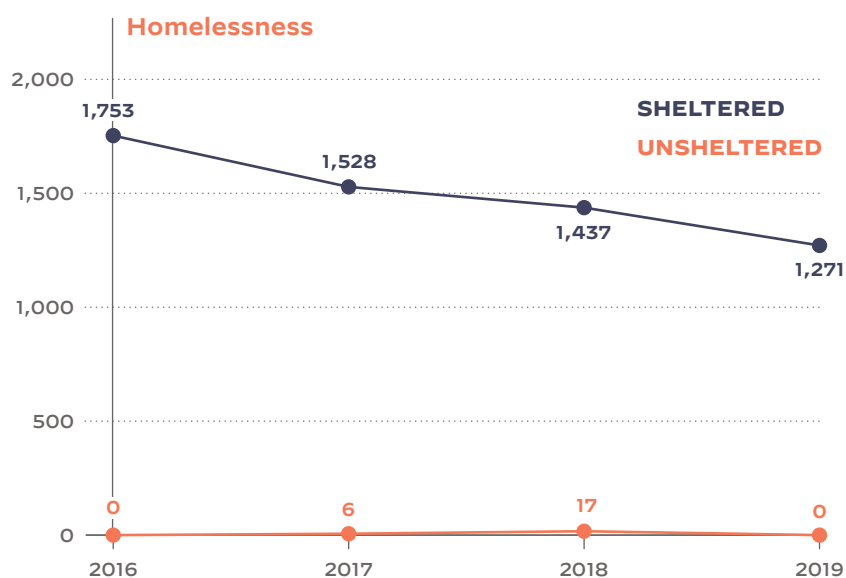
“You’re trying to make the kid an appointment, but that’s over now, because now your utilities are being shut off...It pushes the health and welfare of your children down because you’ve got to worry about their priorities.”

— Resident from Philadelphia Community Needs Assessment

HOMELESSNESS

Homelessness impacts every aspect of children's physical, cognitive, and social-emotional development, placing children at higher risk for poor health outcomes in childhood and later in life.³⁷

The number of children experiencing homelessness in Philadelphia has slowly declined from 2016 to 2019. The majority of these children were sheltered, and in 2019, there were no recorded cases of unsheltered homeless children in the point-in-time count.



SOURCE: 2016-2019 Point-in-Time Count, Philadelphia Office of Homelessness Services

"It is a multigenerational problem—poor living environment, lower education, and low income all lead to poorer health."

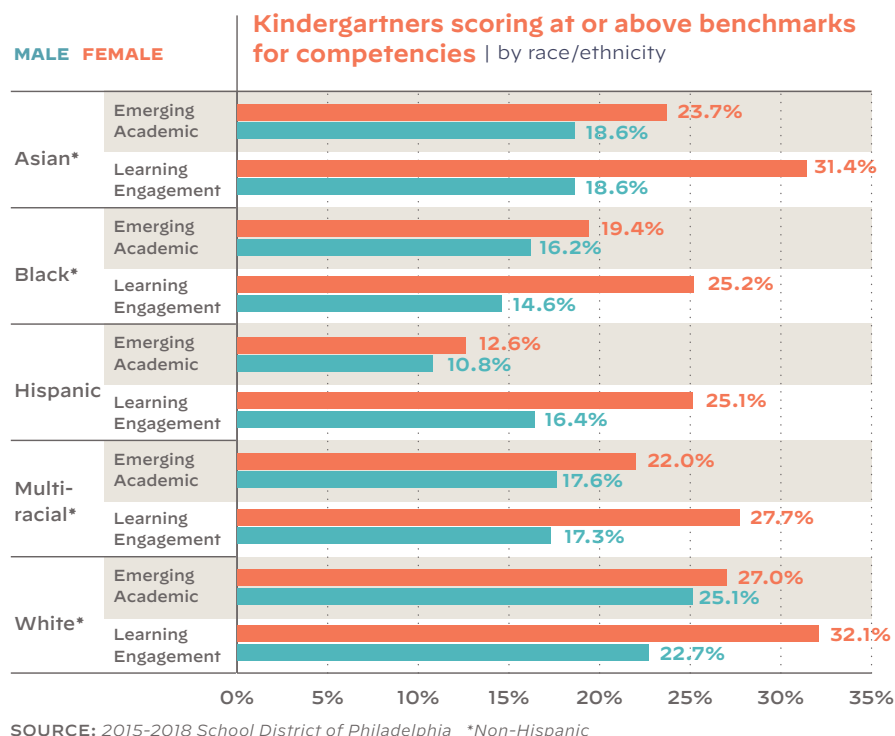
— Resident from Philadelphia Community Needs Assessment

EDUCATION: Kindergarten Readiness

The School District of Philadelphia uses the Kindergarten Entry Inventory (KEI) tool to evaluate the skills of incoming kindergarten students within the first 45 days of school. The results are used by teachers to determine a student's readiness to learn and decide how best to meet the individual needs of each student.

The KEI focuses on two validated dimensions: emerging academic and learning engagement competencies.^{38,39} *Emerging Academic Competencies* measure children's early literacy and mathematics competencies, such as recognizing letters and words and counting and identifying shapes. *Learning Engagement Competencies* measure behavioral regulation, approaches to learning, and physical control of body movements.

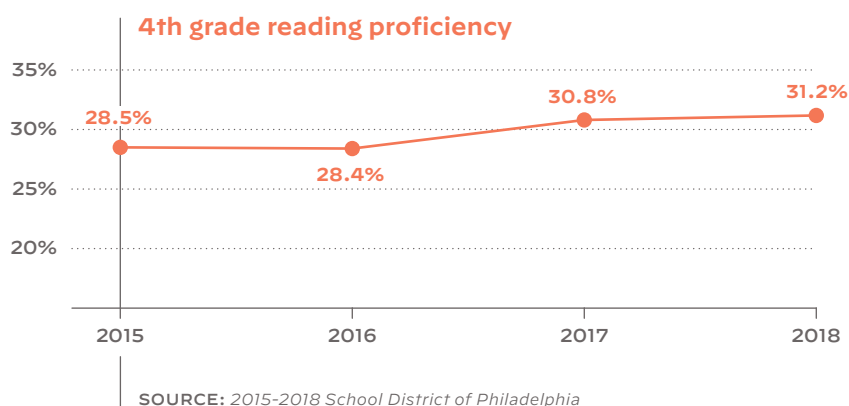
During the 2018-2019 school year, the KEI was administered to 9,127 kindergartners in 145 schools. There were differences in performance across racial/ethnic groups. Across all subgroups, female students consistently outperformed male students.



EDUCATION: Fourth-grade Reading Proficiency

Children who are not at a proficient reading level by fourth grade are at risk of repeating a grade and also face educational challenges including risk for dropping out of school.⁴⁰

31 percent of Philadelphia's public school fourth-graders scored proficient or above on tests of reading during the 2018 school year.



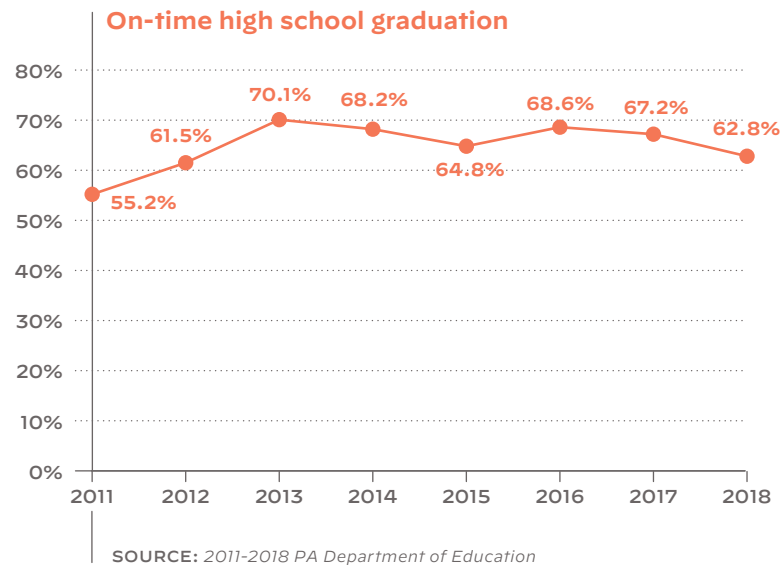
“[Education] is a really serious health issue because if someone is in poverty, they’ll stay in poverty forever without access to a good education system.”

— Resident from Philadelphia Community Health Needs Assessment

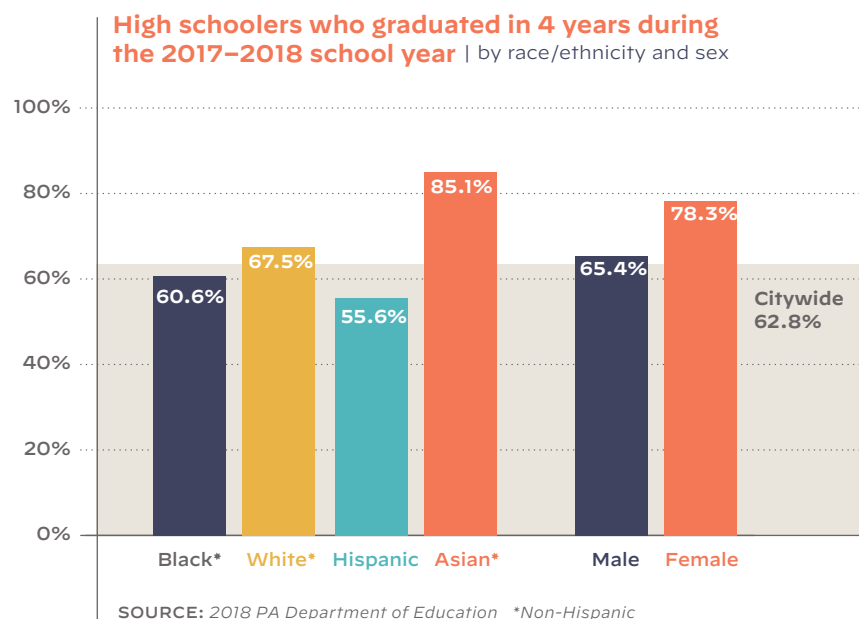
EDUCATION: On-time High School Graduation

Students who graduate within four years of beginning high school are less likely to be incarcerated or unemployed and have better health and economic outcomes later in life.^{41,42}

Improving high school graduation and educational attainment rates can help reduce health inequities, especially among racial/ethnic minority populations.



62.8 percent of high school students in Philadelphia graduated in four years during the 2017-2018 school year. Non-Hispanic black/ African-American students and Hispanic students had lower on-time graduation rates.



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Elwynn SEEDS
Infant Toddler Early Intervention Program
Neighborhood Food Retail Access Report
Office of Child Development and Early Learning
Office of Homeless Services
Pennsylvania Department of Education
Pennsylvania Department of Health Vital Statistics
Pennsylvania Health Care Cost Containment Council
Philadelphia Department of Human Services
Philadelphia Youth Risk Behavior Surveillance System
PhilaVax Immunization Registry Data, PDPH
Public Health Management Corporation
School District of Philadelphia
Syndromic Surveillance, PDPH
US Census – American Community Survey

Design: Maskar Design, Philadelphia