NYC Kids

Highlighting the Health of Kids in the Bronx, Brooklyn and Harlem



Health of Children in Harlem

All children, regardless of where they grow up, should have access to high-quality health care and education, affordable and well-maintained housing, safe play spaces, and sufficient nutritious food and emotional support.¹ This is one of three reports about the health and well-being of children in NYC prior to the COVID-19 pandemic. This entry in the series Health of NYC Children discusses the health of children age 1 to 13 living in Harlem,* focusing on asthma, mental health and access to health care, before and during the COVID-19 pandemic. It also provides recommendations to support children as the city recovers from the pandemic.

Structural and systemic racism have created inequities in access to education and employment opportunities and have led to more poverty, exposure to pollution and substandard housing conditions in certain areas of the city than in others.²

In Harlem, most children age 1 to 13 are Black (40%) and Latino (42%), and 39% have at least one parent or guardian who was born outside the U.S. In 2019, 57% of children in Harlem lived in households with an annual income below 200% of the federal poverty level. Existing inequities were worsened by the COVID-19 pandemic, as neighborhoods with high poverty experienced more unemployment, illness and deaths due to COVID-19.³ Extended physical distancing, disrupted routines and other losses have impacted children significantly, showing the need to make children's mental health a public health priority.⁴

*According to the geographic information available through the 2019 and 2017 NYC KIDS surveys, analyses for Harlem include the ZIP codes 10026, 10027, 10029, 10030, 10035, 10037 and 10039. This area includes the Harlem neighborhoods surrounding the East Harlem Neighborhood Health Action Center.

Almost all Harlem children had an appropriate source of well-child care

In 2019, close to 100% of children in Harlem had health insurance coverage, though 4% experienced a period without health insurance in the past year. Having consistent health insurance coverage and an appropriate source of health care, such as a pediatrician or clinic where health care providers get to know families through annual well-child visits, are critical for children's health. At well-child visits, caregivers and providers can discuss children's physical and emotional development and stay up to date with recommended vaccinations.⁵

Regular preventive dental care is an essential part of overall good health. Children covered by public health insurance programs such as Medicaid and Child Health Plus may have access to low-cost dental care. In 2019, nearly 90% of children living in Harlem and 86% of children in NYC age 2 to 13 had at least one preventive dental visit. Still, many families face economic barriers to accessing adequate dental care.

Vision care is important for children's success in school. During the 2018 to 2019 school year, 1,868 pairs of eyeglasses were distributed to pre-K to eighth grade children in Harlem through on-site vision screening programs and city partnerships with vendors to provide free glasses.







The Neighborhood Health teams in each borough work to reduce the interrelated burdens of poverty, racism and poor health outcomes so every New Yorker can live in a thriving and equitably resourced neighborhood. In the Bronx, Brooklyn and Manhattan, there are **Neighborhood Health Action Centers** that offer coordinated health and social services and community programs.

For example, the East Harlem Neighborhood Health Action Center, located at 158 E. 115th St. in Manhattan, hosts a variety of programs and activities focused on the health and wellness of Harlem residents, and makes referrals to community-based partners. Each Action Center also has a Family Wellness Suite that offers a safe, welcoming and supportive space for families and individuals to connect to community resources and city services.

In 2019, 5% of Harlem children had experienced an asthma attack in the past 12 months

Asthma, a chronic lung disease that makes it hard to breathe, is more common among Black and Latino children living in neighborhoods with higher poverty rates and is one of the leading causes of missed school days.⁶ In 2O19, 15% of children living in Harlem and 12% of children citywide were told by a health care provider that they have asthma, while 4% of children in Harlem missed one or more days of school or child care due to asthma.



In 2019, 62% of Harlem children lived in housing with one or more substandard conditions associated with asthma

Exposure to substandard housing conditions and air pollution result in a higher prevalence of breathing problems and diagnoses of asthma among children.⁷ Substandard housing conditions that contribute to asthma and cause asthma attacks include cracks in walls and floors, visible mice and cockroaches, and the use of additional heating sources, such as gas stoves, to provide or supplement heat. Another common maintenance issue associated with asthma is the presence of leaks that result in mold and mildew. In 2019, 31% of children in Harlem and 21% of children citywide lived in a home where visible mold or mildew or a moldy smell were present.



61% of Harlem children were able to "bounce back" or stay calm when faced with a challenge

In 2019, 74% of children in Harlem and 78% of children citywide were described by their caregivers as having excellent or very good mental and emotional health.

Among children in Harlem, 19% were told by a provider that they had an emotional or behavioral health condition,* including anxiety or depression, and 73% received counseling, medication or both.[†]

During the COVID-19 pandemic, 28% of adults with children in their household reported that the emotional or behavioral health of at least one child was negatively affected by the pandemic, highlighting the urgency of supporting children's emotional and mental health as the city recovers from the pandemic.⁸



*Conditions include depression, anxiety, attention deficit disorder (ADD) or attention deficit hyperactivity disorder (ADHD), oppositional defiant disorder, and conduct disorder or other behavioral problems.

†Estimate should be interpreted with caution. Estimate's relative standard error (a measure of estimate precision) is greater than 30%, the 95% confidence interval's half-width is greater than 10 or the sample size is too small, making the estimate potentially unreliable.

19% of school-age Harlem children have experienced three or more adverse childhood experiences

Adverse childhood experiences (ACEs) are traumatic events that occur in childhood and include things like physical and emotional abuse or neglect, witnessing violence, having a caregiver with a mental illness, or experiencing racism. In Harlem, 19% of children experience at least three ACEs. Preventing ACEs in the lives of young children can reduce the risk for chronic illnesses, depression, suicide and other challenges in adulthood.⁹ The East Harlem Asthma Center of Excellence (EHACE), within Harlem Neighborhood Health, is a neighborhood resource that supports children and families who are disproportionately affected by asthma and its triggers.

The Asthma Counselor Program,

located at **161-169 E. 110th St.** in Manhattan, is one of several of the Asthma Center's community-based components designed to address childhood asthma. The Asthma Counselor Program collaborates with hospitals, schools, community-based organizations and families to reduce emergency room visits and hospitalizations due to asthma.

For more information, including to view calendars of events, visit **nyc.gov/health/actioncenters**.



Policy Recommendations

- Investigate and address gaps in health insurance coverage among families, particularly in the context of high unemployment, to ensure consistent health insurance coverage for children.
- Promote scheduling and completion of annual well-child visits by extending clinic hours and expanding paid leave time for parents and caregivers to attend well-child visits.
- Prioritize attention to the trauma, loss and grief experienced by children and families as a result of COVID-19.
- Elevate children's mental health as a public health priority and expand community-level interventions to reduce adverse childhood experiences.
- Address inequities in the built environment by reducing exposure to air pollution and holding property owners accountable for substandard housing conditions.

This publication is one of three reports, each highlighting different dimensions of the health of children in NYC living in the ZIP codes around the Neighborhood Health Action Centers in the Bronx, Brooklyn and Harlem. An appendix containing the data presented in all three reports, for the city overall and for each of the three geographic areas, is available at nyc.gov/assets/doh/downloads/pdf/episrv/health-of-nyc-children-2024-appendix.pdf.

Data Source

Unless otherwise noted, data included in this report are from the 2019 and 2017 NYC KIDS surveys, NYC Department of Health and Mental Hygiene telephone surveys of parents or guardians about one child from age 1 to 13 years (2019) or from newborn to age 13 (2017). The 2019 NYC KIDS data are weighted to the population of children age 1 to 13 as per the 2010 Census data and the 2014-2018 American Community Survey, and the 2017 NYC KIDS data are weighted to the population of children from newborn to age 13 as per the 2010 Census data and the 2012-2016 American Community Survey.

Acknowledgments

Michelle Repiso-Wood Photography, Rachel Dannefer, Nicole Dreisbach, Nadia Andrews and Harlem Neighborhood Health

References

- 1. Braveman P, Acker J, Arkin E, Bussel J, Wehr K, and Proctor D. Early childhood is critical to health equity. Princeton, NJ: Robert Wood Johnson Foundation, 2018. https://www.rwjf.org/en/insights/our-research/2018/05/early-childhood-is-critical-to-health -equity.html
- 2. Bailey ZD, Krieger N, Agénor M, Graves J, Linos N, Bassett MT. Structural racism and health inequities in the USA: Evidence and interventions. *Lancet*. 2017;389(10077):1453-1463. doi:10.1016/S0140-6736(17)30569-X
- 3. Williams M. Spotlight on life in New York City during COVID-19. Poverty Tracker. Columbia University. 2021. Accessed April 2, 2024. https://www.povertycenter.columbia.edu/news-internal/2021/poverty-tracker/life-in-nyc-covid-19
- 4. New York City Department of Health and Mental Hygiene. Supporting children and youth through the COVID-19 pandemic. July 24, 2020. https://www.nyc.gov/assets/doh/downloads/pdf/covid/covid-19-support-children-and-youth.pdf
- 5. Turner K. Well-child visits for infants and young children. *Am Fam Physician*. 2018;98(6):347-353. https://www.aafp.org/ pubs/afp/issues/2018/0915/p347.html
- 6. Wang H, Dannefer R, Brown-Dudley L, et al. Childhood asthma and the asthma counselor program of the East Harlem Asthma Center of Excellence. New York City Department of Health and Mental Hygiene: Epi Data Brief (90); June 2017. https://www.nyc.gov/assets/doh/downloads/pdf/epi/databrief90.pdf
- 7. Spira-Cohen A, Sedlar S, Azarias A, Wang A, Lawrence C. Asthma and housing quality in New York City. New York City Department of Health and Mental Hygiene: NYC Vital Signs. 2021;19(4):1-4. https://www.nyc.gov/assets/doh/downloads/pdf/survey/asthma-housing-2021.pdf
- 8. Magas I, Norman C. Impacts of COVID-19 on mental health in New York City, 2021. New York City Department of Health and Mental Hygiene: Epi Data Brief (130); December 2021. https://www.nyc.gov/assets/doh/downloads/pdf/epi/data-brief130.pdf
- 9. Sonu S, Post S, Feinglass J. Adverse childhood experiences and the onset of chronic disease in young adulthood. *Prev Med.* 2019;123:163-170. doi:10.1016/j.ypmed.2019.03.032

Health of Children in Brooklyn

The early years of a child's life are a dynamic time for brain, motor skill, speech and emotional development.¹ This report is part of a series about the health and well-being of children in NYC prior to the COVID-19 pandemic. This entry in the series Health of NYC Children describes early childhood development and supports for young children age 1 to 4 living in Central Brooklyn* in 2019 and provides recommendations to support our youngest New Yorkers as the city recovers from the pandemic.

Like other historically redlined neighborhoods, Central Brooklyn has experienced disinvestment resulting in housing instability and inequitable access to high-quality medical care, higher education and employment with a livable wage.² In 2019, 63% of young children in Central Brooklyn and 58% of young children citywide lived in a household with an annual income below 200% of the federal poverty level.

Experiencing poverty and related stress early in life can be harmful to the healthy development of young children and contribute to poor health in adulthood.¹ Health care and educational supports for young children were disrupted during the COVID-19 pandemic, creating challenges for young children whose families rely on in-person schooling and child care to provide opportunities for social, language and cognitive development.

*Central Brooklyn, as defined by the 2019 and 2017 NYC KIDS surveys, includes ZIP codes 11206, 11207, 11208, 11212, 11213, 11216, 11221, 11233, 11237 and 11238. This area includes the Brooklyn neighborhoods surrounding the Brownsville Neighborhood Health Action Center.



The Neighborhood Health teams in each borough work to reduce the interrelated burdens of poverty, racism and poor health outcomes so every New Yorker can live in a thriving and equitably resourced neighborhood. In the Bronx, Brooklyn and Manhattan, there are **Neighborhood Health Action Centers** that offer coordinated health and social services and community programs.

For example, the **Brownsville Neighborhood Health Action Center**, located at **259 Bristol St.** in Brooklyn, hosts a variety of programs and activities focused on the health and wellness of Brooklyn residents and makes referrals to community-based partners. The Action Center also has a **Family Wellness Suite** that offers a safe, welcoming and supportive space for families and individuals to connect to community resources and city services.

For more information, including to view calendars of events, visit **nyc.gov/health/actioncenters**.

In Central Brooklyn, families rely on strong social connections for day-to-day parenting support

Chronic and repeated stress from experiencing poverty and racism is known to have cumulative harmful effects on health and is linked to higher maternal and infant mortality, preterm birth (birth before 37 weeks) and low birth weight (less than 5 pounds, 8 ounces).³

Preterm and low-weight births are associated with problems in the newborn period, developmental disabilities and delays, and chronic diseases such as asthma, obesity and cardiovascular disease later in life.⁴ In 2O19, 13% of births to residents of Central Brooklyn were preterm or low weight, compared with 12% of births to residents citywide.⁵

Addressing systemic racism and bias in health care and continuing to expand access to midwives and doulas (nonmedical helpers who support people during pregnancy and childbirth and after delivery) are critical to prevent maternal illness and death and improve health outcomes for newborns.

More than half of Central Brooklyn infants are nourished by breast milk for six months

Feeding breast milk to infants for the first six months provides health benefits to newborns and protection against chronic diseases.⁶ In 2019, nearly 63% of infants in Central Brooklyn were fed by breast milk for six months. Breastfeeding duration may be influenced by length of parental leave from work after delivery.⁷ In 2019, 82% of toddlers and infants in Central Brooklyn had mothers who worked through pregnancy and returned to work after the birth or maternity leave. Only 56% of young children





in Central Brooklyn had mothers who were able to stay home for at least three months before returning to work.

In Central Brooklyn, one-quarter of young children live with a grandparent or grandparent figure in their household, and 77% have parents or guardians who reported having someone they can rely on outside the home for day-to-day parenting support. More than half (55%) of children had parents or guardians who reported that it was difficult to take time off from work to take care of personal or family matters.

Premature or low-weight birth, unhealthy environments and social stressors may contribute to a greater need for support to reach developmental milestones, such as learning to crawl or talk.⁸ In 2019, 19% of children in Central Brooklyn had a parent or guardian who was concerned about their child's progress learning to sit up, balance, crawl, walk or do things for themself. Nearly 25% had a parent or guardian who was concerned about their child's ability to make speech sounds, talk, or learn the alphabet and count.

The NYC Health Department's Early Intervention Program (EIP) provides speech, occupational therapy, physical therapy and special instruction to children from birth to age 3 who meet criteria for having a delay or disability. Among children in Central Brooklyn born in 2019, almost 8% (827) received an Early Intervention service, compared with 10% (11,250) of children citywide. Creating awareness of the benefits of Early Intervention services, reducing stigma associated with disabilities and supporting families through the process are essential to engaging and retaining families in the EIP.

Early Intervention Program: Provides therapeutic services to young children (newborn to age 3) who are not learning, growing, talking or walking like other children their age.

Healthy Start Brooklyn: Provides classes and programs for expectant and new parents, including doula prenatal and birthing support, group prenatal care, a father's group, newborn care and home visiting.

New Family Home Visits Initiative (NFHV): Offers comprehensive home visiting services for pregnant and parenting families, focusing on breastfeeding assistance, chronic disease and early childhood development. NFHV aims to address racial and social inequities exacerbated by the COVID-19 pandemic.



Parents in Central Brooklyn build their children's vocabularies through stories and song

During the first three years of life, babies' brains grow rapidly. How the brain develops during these early years affects a child's ability to learn later in life. Talking, reading and singing to young children are all ways that caregivers can promote children's brain development, build their vocabularies and prepare them for school.⁹

Telling stories and singing songs are common practices of caregivers for engaging young children. In 2019, 97% of children in Central Brooklyn were engaged through stories or song, while 70% were read to by a caregiver four or more days per week.

Children in grades one to 12 experienced disruptions in learning due to the COVID-19 pandemic. It is estimated that these lost learning opportunities may result in a 3% decrease in lifetime earnings.¹⁰ Expanding availability of public early learning programs and encouraging regular time to read, sing and tell stories together are now especially important in bolstering young children's learning.

57% of children in Central Brooklyn have parents or guardians who find it difficult to afford child care

In 2019, 49% of young children in Central Brooklyn attended a preschool or child care program outside the home — a critical resource for working families. High-quality child care and early childhood education can help support young children's development. However, convenient, affordable and high-quality child care can be difficult to find. Approximately 24% of children in Central Brooklyn needed care outside traditional child care business hours (8 a.m. to 6 p.m. on weekdays), and 22% had a parent or other family member who quit a job, did not take a job or changed jobs due to problems finding child care.

Policy Recommendations

- Adopt NYC Standards for Respectful Care at Birth across health facilities to address racial inequities in health care, and disseminate the standards to communities to promote respect and awareness of patients' rights during pregnancy, labor and childbirth. Promote and fund programs that help young children build skills that will prepare them for school.
- Fund universal, high-quality child care programs, including 24-hour and drop-in care, and pay child care workers competitive wages to retain them in the industry.
- Implement enhanced outreach strategies and facilitate linkages to early childhood services to proactively address learning losses attributable to disruptions caused by the COVID-19 pandemic.
- Expand paid parental leave, and cover time off for well-child visits, follow-up appointments, developmental evaluations, therapy and other services essential to the healthy development of children.

This publication is one of three reports, each highlighting different dimensions of the health of children in NYC living in the ZIP codes around the Neighborhood Health Action Centers in the Bronx, Brooklyn and Harlem. An appendix containing the data presented in all three reports, for the city overall and for each of the three geographic areas, is available online at nyc.gov/assets/doh/downloads/pdf/episrv/health-of-nyc-children-2024-appendix.pdf.

Data Source

Unless otherwise noted, data included in this report are from the 2019 and 2017 NYC KIDS surveys, NYC Department of Health and Mental Hygiene telephone surveys of parents or guardians about one child from age 1 to 13 years (2019) or from newborn to age 13 (2017). The 2019 NYC KIDS data are weighted to the population of children age 1 to 13 as per the 2010 Census data and the 2014-2018 American Community Survey, and the 2017 NYC KIDS data are weighted to the population of children from newborn to age 13 as per the 2010 Census data and the 2012-2016 American Community Survey.

Acknowledgments

Michelle Repiso-Wood Photography, Rachel Dannefer, Nicole Dreisbach, Nadia Andrews and Harlem Neighborhood Health

References

- 1. Braveman P, Acker J, Arkin E, Bussel J, Wehr K, Proctor D. Early childhood is critical to health equity. Princeton, NJ: Robert Wood Johnson Foundation, 2018. https://www.rwjf.org/en/insights/our-research/2018/05/early-childhood-iscritical-to-health-equity.html
- 2. Bailey ZD, Krieger N, Agénor M, Graves J, Linos N, Bassett MT. Structural racism and health inequities in the USA: Evidence and interventions. *Lancet*. 2017;389(10077):1453-1463. doi:10.1016/S0140-6736(17)30569-X
- Lu MC, Kotelchuck M, Hogan V, Jones L, Wright K, Halfon N. Closing the Black-white gap in birth outcomes: A life-course approach. Ethn Dis. 2010;20(1 Suppl 2):S2-62-72. https://www.ncbi.nlm.nih.gov/pmc/articles/pmc4443479/
- 4. Centers for Disease Control and Prevention. Preterm birth. November 1, 2022. Accessed June 5, 2023. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm
- 5. Li W, Onyebeke C, Castro A, et al. Summary of vital statistics, 2019. New York, NY: Bureau of Vital Statistics, New York City Department of Health and Mental Hygiene. https://www.nyc.gov/assets/doh/downloads/pdf/vs/2019sum.pdf
- 6. Eidelman AI, Schanler RJ, Johnston M, et al. Breastfeeding and the use of human milk. *Pediatrics*. 2012;129(3):e827-e841. doi:10.1542/peds.2011-3552
- 7. Van Niel MS, Bhatia R, Riano NS, et al. The impact of paid maternity leave on the mental and physical health of mothers and children: A review of the literature and policy implications. *Harv Rev Psychiatry*. 2020;28(2):113-126. doi:10.1097/HRP.00000000000246
- 8. Hee Chung E, Chou J, Brown KA. Neurodevelopmental outcomes of preterm infants: A recent literature review. *Transl Pediatr.* 2020;9(Suppl 1):S3-S8. doi:10.21037/tp.2019.09.10
- 9. Cprek SE, Williams CM, Asaolu I, Alexander LA, Vanderpool RC. Three positive parenting practices and their correlation with risk of childhood developmental, social, or behavioral delays: An analysis of the National Survey of Children's Health. *Matern Child Health J.* 2015;19:2403-2411. doi:10.1007/s10995-015-1759-1
- 10. Hanushek E, Woessman L. The economic impacts of learning losses. OECD Working Papers (225). doi:10.1787/21908d74-en

Health of Children in the South Bronx

Access to high-quality health care, educational opportunities, adequate health insurance, a safe and well-maintained living environment, nutritious foods and convenient and well-kept parks and playgrounds are essential elements in building health equity among children across NYC.¹ This report is part of a series, Health of NYC Children, about the health and well-being of children in NYC prior to the COVID-19 pandemic. This entry in the series describes obesity and related environmental factors among children age 1 to 13 living in the South Bronx* and provides recommendations to support children as the city recovers from the pandemic.

Like many urban neighborhoods, the South Bronx was subject to an explicitly racist process known as redlining in the mid-20th century, resulting in decades of disinvestment during which housing deteriorated, schools received insufficient funding, small businesses struggled to secure loans and health outcomes for residents worsened.²

Structural or systemic racism persists today and contributes to residents of some NYC neighborhoods being more vulnerable than others to illness, death, and personal and economic losses due to the COVID-19 pandemic.³

In 2019, among children age 1 to 13, 61% of children citywide and 84% of children in the South Bronx lived in households with annual incomes below 200% of the federal poverty level. Additionally, 53% of children in the South Bronx had parents or guardians who reported

*The South Bronx, as defined by the 2017 and 2019 NYC KIDS surveys, includes the ZIP codes 10451, 10452, 10453, 10454, 10455, 10456, 10457, 10459, 10460 and 10474. This area includes the Bronx neighborhoods surrounding the Tremont Neighborhood Health Action Center.

that it is often hard to get by on their family's income. Children in the South Bronx benefit from growing up in diverse, multigenerational households. The majority of children in the South Bronx age 1 to 13 are Black (28%) and Latino (68%) and have at least one parent or guardian who was born outside the U.S. (58%). Approximately one-third of children in the South Bronx live in households where another language in addition to English is spoken. In the South Bronx, 23% of children live with one or more adults besides a parent, such as an older sibling, grandparent or other relative.

44% of public elementary or middle school students in the South Bronx develop overweight or obesity

Developing overweight or obesity as a child increases the risk for asthma, depression and low self-esteem and contributes to high blood pressure, diabetes and other metabolic disorders in adulthood.⁴ Obesity is associated with increased risk for severe illness from COVID-19 in both children and adults.⁵

Obesity occurs more frequently among children who experience food insecurity. Poverty and chronic stress, lack of access to healthy food options, limited time for meal preparation, and unhealthy eating patterns related to fluctuations in food availability contribute to more obesity in food insecure households.⁶







The Neighborhood Health teams in each borough work to reduce the interrelated burdens of poverty, racism and poor health outcomes so every New Yorker can live in a thriving and equitably resourced neighborhood. In the Bronx, Brooklyn and Manhattan, there are **Neighborhood Health Action Centers** that offer coordinated health and social services and programs.

For example, the **Tremont Neighborhood Health Action Center**, located at **1826 Arthur Ave.** in the South Bronx, hosts a variety of programs and activities focused on the health and wellness of Bronx residents, and makes referrals to community-based partners. The Action Center also has a **Family Wellness Suite** that offers a safe, welcoming and supportive space for families and individuals to connect to community resources and city services.

For more information, including to view calendars of events, visit **nyc.gov/health/actioncenters**.



In 2017, 55% of children in the South Bronx experienced food insecurity (defined as running out of food or worrying that food will run out before having money to buy more), while 37% of children citywide experienced food insecurity. It is estimated that food insecurity increased by 36% citywide during the COVID-19 pandemic, and use of food pantries and other emergency food services has remained higher among NYC households with children than among households without children.⁷

Consumption of the daily recommended servings of fruits and vegetables is a challenge for children across the city. In 2O19, 16% of children in NYC age 5 to 13 consumed enough fruits and vegetables to meet the recommended daily serving of one to two cups of fruit and one to three cups of vegetables.⁸ Only 9% of children in the South Bronx in the same age group met the number of recommended servings. Initiatives that increase Green Carts and farmers markets have created demand for more fresh fruits and vegetables in local shops and bodegas.⁹

The campaign **Shop Healthy NYC!** aims to increase access to healthy foods in neighborhoods with high rates of people with obesity.

For every \$2 spent at farmers markets using the Supplemental Nutrition Assistance Program (SNAP) on an electronic benefits transfer (EBT) card, New Yorkers can get \$2 in Health Bucks (up to \$10 per day). Health Bucks can be used to purchase fresh fruits and vegetables at all NYC farmers markets and are available year-round at farmers markets that accept EBT. Sugary drinks are high in calories, have little to no nutritional value and can contribute to type 2 diabetes, heart disease, cavities and weight gain. Sugar-sweetened beverages have been heavily marketed to low-income, predominately Black and Latino neighborhoods.¹⁰ In 2019, 28% of children in the South Bronx and 19% of children citywide age 5 to 13 were reported to consume sugar-sweetened beverages. Among children age 1 to 4, 18% of children in the South Bronx and 10% of children citywide consumed sugar-sweetened drinks.



76% of children in the South Bronx age 6 to 12 get adequate sleep

Getting enough sleep is important for maintaining good health and reduces risk for obesity, diabetes and other chronic diseases.¹¹ In 2019, 64% of young children age 1 to 2 and 70% of children age 3 to 5 in the South Bronx got adequate sleep.¹² Among children age 6 to 12, 76% of children in the South Bronx and 84% of children citywide got adequate sleep (nine to 12 hours on a typical school night).

During the pandemic, screen time was one of the only opportunities for entertainment and socialization. Children age 6 to 10 experienced larger increases in screen time compared with adults and adolescents.¹³ Reducing screen time and creating more opportunities for children to play and socialize in person are important for children's health as the city recovers from the pandemic.

Prior to the COVID-19 pandemic, 49% of children in the South Bronx had more than two hours of screen time per day

Excessive screen time (more than two hours per day spent in front of a computer, TV, phone, video game or other screen) reduces opportunities for children to be physically active, may disrupt sleep, may contribute to unhealthy eating while on the screen and is associated with developing overweight and obesity among children.^{14,15}

In 2019, 49% of children in the South Bronx and 40% of children citywide age 3 to 13 were reported to get excessive screen time.

71% of school-age children in the South Bronx were physically active for 60 minutes at least three days per week

Participation in weekly physical activity (three days per week or more) among children age 6 to 13 in the South Bronx (71%) was consistent with weekly physical activity among children in the same age group citywide (74%).

However, crime (47%) and traffic (46%) are concerns that prevent parents and guardians in the South Bronx from allowing their children to walk, ride a bicycle or play outside. In 2019, 38% of parents or guardians in the South Bronx and 13% citywide described their neighborhood as "not very safe."



Policy Recommendations

- Nurture multigenerational households by providing affordable housing options for extended families.
- Increase household incomes through expanded employment, training and child care.
- Address food insecurity as an ongoing public health issue. Develop a comprehensive strategy to shift from dependence on emergency food supports to sustainable food resources.
- Make neighborhood parks and streets safe places where children and families can be active.

This publication is one of three reports, each highlighting different dimensions of the health of children in NYC living in the ZIP codes around the Neighborhood Health Action Centers in the Bronx, Brooklyn and Harlem. An appendix containing the data presented in all three reports for, the city overall and for each of the three geographic areas, is available online at nyc.gov/assets/doh/downloads/pdf/episrv/health-of-nyc-children-2024-appendix.pdf.

Data Source: Unless otherwise noted, data included in this report are from the 2019 and 2017 NYC KIDS surveys, NYC Department of Health and Mental Hygiene telephone surveys of parents or guardians about one child from age 1 to 13 years (2019) or from newborn to age 13 (2017). The 2019 NYC KIDS data are weighted to the population of children age 1 to 13 as per the 2010 Census data and the 2014-2018 American Community Survey, and the 2017 NYC KIDS data are weighted to the population of children from newborn to age 13 as per the 2010 Census data and the 2012-2016 American Community Survey.

Acknowledgments: Michelle Repiso-Wood Photography; Lauren Shiman, Kim Freeman and Bronx Neighborhood Health; Bureau of Epidemiology Services

References:

- 1. Braveman P, Acker J, Arkin E, Bussel J, Wehr K, and Proctor D. Early childhood is critical to health equity. Princeton, NJ: Robert Wood Johnson Foundation, 2018. https://www.rwjf.org/en/insights/our-research/2018/05/early-childhood-iscritical-to-health-equity.html
- 2. Bailey ZD, Krieger N, Agénor M, Graves J, Linos N, Bassett MT. Structural racism and health inequities in the USA: Evidence and interventions. *Lancet*. 2017;389(10077):1453-1463. doi:10.1016/S0140-6736(17)30569-X
- 3. Estrada LV, Levasseur JL, Maxim A, Benavidez GA, Pollack Porter KM. Structural racism, place, and COVID-19: A narrative review describing how we prepare for an endemic COVID-19 future. *Health Equity*. 2022;6(1):356-366. doi:10.1089/heq.2021.0190
- 4. Sahoo K, Sahoo B, Choudhury AK, Sofi NY, Kumar R, Bhadoria AS. Childhood obesity: Causes and consequences. *J Family Med Prim Care*. 2015;4(2):187-192. doi:10.4103/2249-4863.154628
- Zachariah P, Johnson CL, Halabi KC, et al. Epidemiology, clinical features, and disease severity in patients with Coronavirus Disease 2019 (COVID-19) in a children's hospital in New York City, New York. JAMA Pediatr. 2020;174(10):e202430. doi:10.1001/jamapediatrics.2020.2430
- 6. Tester JM, Rosas LG, Leung CW. Food insecurity and pediatric obesity: A double whammy in the era of COVID-19. *Curr Obes Rep.* 2020;9:442-450. doi:10.1007/s13679-020-00413-x
- 7. Crossa A, Baquero M, Etheredge AJ, et al. Food insecurity and access in New York City during the COVID-19 pandemic, 2020. New York City Department of Health and Mental Hygiene: Epi Data Brief (128); November 2021. https://www.nyc.gov/assets/doh/downloads/pdf/epi/databrief128.pdf
- 8. U.S. Department of Health and Human Services and U.S. Department of Agriculture. 2015-2020 Dietary Guidelines for Americans. 8th edition. December 2015. https://health.gov/our-work/food-nutrition/previous-dietary-guidelines/2015
- 9. Farley SM, Sacks R, Dannefer R, et al. Evaluation of the New York City Green Carts program. *AIMS Public Health*. 2015;2(4):906-918. doi:10.3934/publichealth.2015.4.906
- 10. Dowling EA, Roberts C, Adjoian T, Farley SM, Dannefer R. Disparities in sugary drink advertising on New York City streets. *Am J Prev Med*. 2020;58(3):e87-e95. doi:10.1016/j.amepre.2019.09.025
- 11. Paruthi S, Brooks LJ, D'Ambrosio C, et al. Recommended amount of sleep for pediatric populations: A consensus statement of the American Academy of Sleep Medicine. *J Clin Sleep Med.* 2016;12(6):785-786. doi:10.5664/jcsm.5866
- 12. Centers for Disease Control and Prevention. How much sleep do I need? Published September 14, 2022. Accessed June 6, 2023. https://www.cdc.gov/sleep/about_sleep/how_much_sleep.html
- 13. Nagata JM, Abdel Magid HS, Pettee Gabriel K. Screen time for children and adolescents during the Coronavirus Disease 2019 pandemic. *Obesity*. 2020;28(9):1582-1583. doi:10.1002/oby.22917
- 14. Fang K, Mu M, Liu K, He Y. Screen time and childhood overweight/obesity: A systematic review and meta-analysis. *Child Care Health Dev.* 2019;45(5):744-753. doi:10.1111/cch.12701
- 15. Robinson TN, Banda JA, Hale L, et al. Screen media exposure and obesity in children and adolescents. *Pediatrics*. 2017;140(Suppl 2):S97-S101. doi:10.1542/peds.2016-1758K