# Citywide Diabetes Reduction Plan,



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NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE Michelle Morse, MD, MPH Acting Health Commissioner

April 23, 2025

Michelle Morse, MD, MPH Acting Health Commissioner

Gotham Center 42-09 28th St. Long Island City, NY 11101 Honorable Adrienne Adams, Speaker New York City Council City Hall New York, NY 10007

Dear Speaker Adams:

Please find attached the second data report as required per Local Law 52 in 2023, mandating a citywide plan to reduce diabetes prevalence and improve care. The NYC Department of Health and Mental Hygiene (NYC Health Department) launched the Citywide Diabetes Reduction Plan in April 2024, which focuses on alleviating the diabetes burden on priority neighborhoods and addressing systemic health inequities.

If you have any further questions or concerns, please do not hesitate to contact Maura Kennelly, Deputy Commissioner for External Affairs, at mkennell@health.nyc.gov or (347) 396-4279.

Sincerely,

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Michelle Morse, MD, MPH Acting Health Commissioner New York City Department of Health and Mental Hygiene

### **Executive Summary**

Diabetes is a leading cause of death in New York City (NYC), disproportionately affecting communities of color and those experiencing greater poverty. When not properly managed, diabetes can lead to severe complications, including heart disease, kidney failure, blindness, stroke, and premature death. In an effort to address the growing crisis, the NYC Council passed Local Law 52 in 2023, mandating a citywide plan to reduce diabetes prevalence and improve care. The NYC Department of Health and Mental Hygiene (NYC Health Department) launched the Citywide Diabetes Reduction Plan in April 2024, which focuses on alleviating the diabetes burden on priority neighborhoods and addressing systemic health inequities.

Diabetes data in NYC highlights significant disparities in diabetes prevalence, management, and outcomes, particularly among communities of color and residents in neighborhoods experiencing greater poverty. These findings underscore the importance of focusing interventions on areas with the greatest need and addressing the root causes of health inequities. The NYC Health Department's programming, including education, care improvement, and policy advocacy, aligns with the goals of the Citywide Diabetes Reduction Plan to improve diabetes self-management and reduce the disease burden in priority neighborhoods.

Key diabetes-related initiatives led by the NYC Health Department in 2024 included expanding diabetes education, addressing health-related social needs, supporting primary care providers, strengthening the community workforce, and advocating for policy changes. Looking ahead to 2025, the NYC Health Department will continue its work to reduce the burden of diabetes by leveraging data modernization efforts, setting benchmarks for diabetes interventions, and collaborating with New York State to integrate medical and social service data to improve diabetes care.

By addressing both the immediate needs of those affected by diabetes and the long-term systemic issues contributing to its incidence and prevalence, the NYC Health Department aims to reduce the burden of diabetes in NYC, improve health outcomes, and ensure equitable health care access for all residents. These efforts reflect a shared vision for a healthier, more equitable city where all New Yorkers can lead longer, healthier lives free from preventable chronic diseases such as diabetes.

### Introduction

Diabetes is one of the leading causes of death in New York City (NYC). As a chronic disease caused by the body's inability to produce or effectively use insulin, unmanaged diabetes can lead to heart disease, kidney failure, blindness, stroke, limb amputation, neurological impairment, and premature death. The burden of diabetes contributes to major social, psychological, physical, and financial hardship for New Yorkers, especially among communities of color and those experiencing poverty. Diabetes is a complex and challenging condition involving many factors and variables that may not always be preventable, but type 2 diabetes and its related complications are largely manageable through lifestyle modifications and effective care management.

In 2023, the NYC Council passed Local Law 52 to address the pressing health concerns around diabetes and inequities related to prevalence and diabetes-related disease burden. The law calls for a comprehensive citywide plan to reduce diabetes incidence with annual progress reports and strategies to improve self-management and access to care for New Yorkers. In accordance with the law, the NYC Department of Health and Mental Hygiene (NYC Health Department) published the <u>Citywide Diabetes</u> <u>Reduction Plan</u> in April 2024. The plan outlines goals and strategies the NYC Health Department is taking to reduce the burden of diabetes among New Yorkers. Each goal addresses structural racism, aligns with the <u>Board of Health's Resolution on Racism as a Public Health Crisis</u>, and focuses on <u>priority</u> <u>neighborhoods</u> that disproportionately experience a higher burden of diabetes. The Citywide Diabetes Reduction plan outlines the following goals:

### **Visual 2: Citywide Diabetes Reduction Plan Goals**



The Citywide Diabetes Reduction Plan aligns with <u>HealthyNYC</u>, the NYC Health Department's comprehensive vision for how NYC can improve life expectancy and address drivers of premature mortality, which was launched in 2023. Through citywide strategies outlined by the HealthyNYC campaign, the NYC Health Department seeks to reduce deaths due to cardiometabolic conditions, including diabetes, by 5% by 2030. Overall, the campaign aims to extend the average life expectancy of New Yorkers to 83 years by 2030, with gains across racial and ethnic groups. In March 2024, the City

Council passed <u>Local Law 46</u> which ensures that HealthyNYC is a permanent feature of civic planning in NYC.

The success of the NYC Health Department's HealthyNYC campaign is intertwined with its data modernization efforts, which will help to ensure that the City's resources are being deployed effectively and equitably. In October 2023, the NYC Health Department created the Center for Population Health and Data Science (CPHDS) to strengthen citywide population health surveillance by better linking public health, health care, and social service data to fully characterize and improve the health of New Yorkers. As part of these data modernization efforts, CPHDS is developing data surveillance use cases to understand and inform action on chronic conditions, such as diabetes, that impact New Yorkers.

Building on these efforts, the NYC Health Department has prioritized addressing the broader systemic factors that contribute to chronic disease disparities, recognizing that data-driven strategies must be complemented by targeted interventions to tackle the root causes of health inequities. In January 2025, the NYC Health Department released "Addressing Unacceptable Inequities: A Chronic Disease Strategy for New York City," a multiagency strategy that outlines how City government can advance the chronic disease-related goals of HealthyNYC by tackling the environmental, social, and economic factors that contribute to chronic disease. The report presents three key upstream approaches for chronic disease prevention: meeting the material needs of New Yorkers, addressing the commercial determinants of health, and promoting opportunities for healthy living. It also includes specific proposals for new and existing initiatives that leverage the unique capabilities and resources of City agencies to implement these approaches to improve chronic disease inequities.

A multilayered, person-centered approach is necessary to tackle the burden of diabetes within NYC and its associated complications. As such, the NYC Health Department conducts work that directly serves individuals and communities with and at risk of developing diabetes and works to shift the environment and shape the policies affecting the structural, political, and economic systems that influence health behaviors and outcomes. The NYC Health Department's diabetes-related programming that addresses the individual, community, and policy level is displayed in a social-ecological framework below.



Visual 3. NYC Health Department Diabetes Initiatives Social-Ecological Framework

This progress report on the Citywide Diabetes Reduction Plan is informed by the NYC Health Department's broader agency goals and initiatives. It outlines the NYC Health Department's diabetes goals and strategies in the context of the work being done through HealthyNYC, CPHDS, and the Chronic Disease Strategy in 2025. Additionally, the Citywide Diabetes Reduction Plan provides an update on key citywide diabetes performance metrics and describes programmatic updates on the NYC Health Department's diabetes-related activities.

### Diabetes Data Insights for NYC

This section presents summary aggregate statistics on diabetes-related data in NYC, based on the five metrics outlined in Local Law 52 of 2023. These metrics provide a comprehensive view of the disease's impact. The five metrics outlined in the law are:

- (1) The number of adults with diabetes and the proportion within the general population
- (2) The change in the incidence of diabetes, when such data is available
- (3) The change in the incidence and prevalence of uncontrolled diabetes\*
- (4) The change in the number of individuals on dialysis due in whole or in part to diabetes
- (5) The number of amputations performed due in whole or in part to diabetes

### Text Box 1. Use of Language in Diabetes Care and Education

\*Use of language in diabetes care and education: Language is central to attitude change, social perception, personal identity, intergroup bias, and stereotyping. How we talk to and about people with diabetes plays an important role in engagement, conceptualization of diabetes, treatment, outcomes, and well-being. Based on recommendations from the American Diabetes Association to use patient-centered, nonjudgemental language, this report refers to individuals who are "not meeting blood sugar goals" or have "unmanaged diabetes" instead of "uncontrolled diabetes." We want to recognize individuals' efforts to manage their diabetes with the resources they have, and their blood sugars may still be outside the goal range. For more information on language in diabetes care, see <u>The Use of Language in Diabetes Care and Education</u>.

Data from the Community Health Survey (CHS), the NYC A1C Registry, the United States Renal Data System (USRDS), and the Statewide Planning and Research Cooperative System (SPARCS) dataset were used to measure the impact of diabetes on New Yorkers (Table 1). More detailed information about the sources and data limitations are available in the Appendix.

Metric	Data Source	Year	Measurement
Diabetes prevalence	CHS	2022	<ul><li>Estimated number of adults</li><li>Population-based rate (age adjusted, per 100)</li></ul>
Diabetes incidence	CHS	2020	<ul><li>Estimated number of adults</li><li>Population-based rate (age adjusted, per 1000)</li></ul>
Unmanaged diabetes	A1C Registry	2022	<ul><li>Number of adults</li><li>Percentage of adults with diabetes</li></ul>
Patients on dialysis related to diabetes	USRDS	2022	Number of cases
Diabetes-related lower extremity amputations	SPARCS	2022	<ul> <li>Number of diabetes-related amputations</li> <li>Population-based rate (age adjusted, per 100,000)</li> </ul>

### Table 1. Diabetes Data Sources

#### **Text Box 2. Definitions**

#### **Definitions:**

**Diabetes:** People with diabetes in this report include those who self-report by survey as having been diagnosed with diabetes, are recorded in hospitalization claims data as having a diagnosis code listed for diabetes, or have a history of two or more A1C tests more than 6.5%, all regardless of diabetes type. Diabetes **prevalence** refers to the number of people ever diagnosed with diabetes, and **incidence** refers to the number of people who received a new diagnosis of diabetes in the prior year.

A1C: Hemoglobin A1C tests are used to diagnose people with diabetes and to monitor their average blood sugar levels over the prior three months. In this report, A1C levels more than 8% are considered to be "not meeting blood sugar level goals" or "unmanaged," and A1C levels more than 9% are considered very high blood sugar levels.

**Diabetes-related lower extremity amputation:** People who had a hospitalization that included claims data codes for both a diabetes-related diagnosis and a nontraumatic lower limb amputation procedure, which includes partial or complete leg, foot, or toe amputation.

**Race and ethnicity:** In this report, Latino includes persons of Hispanic or Latino origin, as identified by survey or billing claims and regardless of reported race. Black, white, Asian or Pacific Islander, and multiracial race categories exclude those who identified as Latino.

**Neighborhoods:** The United Hospital Fund (UHF) classifies NYC into neighborhood areas, comprised of contiguous ZIP codes. For more information, visit <u>nyc.gov/assets/doh/downloads/pdf/ah/zipcodetable.pdf</u>. **Neighborhood-level poverty:** Defined based on ZIP codes as the percentage of the population living below the <u>Federal poverty line</u> (FPL) per the American Community Survey (2012-2016). Neighborhoods are categorized into four groups as follows: "low poverty" neighborhoods have less than 10% of the population living below the FPL; "medium poverty" neighborhoods have between 10 and 20% of the population below FPL; "high poverty" neighborhoods have between 10 and 20% of the population below FPL; "very high poverty" neighborhoods have between 20 and 30% of the population living below the FPL; "very high poverty" neighborhoods have more than 30% of the population living below the FPL.

The data provides a detailed view of the state of diabetes and its burden in NYC, highlights significant disparities, and offers insights to inform targeted interventions for addressing this pressing public health challenge. The analysis aims to support population-focused efforts for diabetes prevention and management.

#### **Diabetes Prevalence**

The prevalence of diabetes in NYC revealed significant disparities by age, race and ethnicity, neighborhood-level poverty, and geographic location. As of 2022, approximately 800,000 adults, equivalent to more than 11% of the city's adult population, were living with diabetes. The condition was notably less common among younger adults ages 18 to 44, with a prevalence of 3%, compared to 17% among middle-aged individuals (ages 45 to 64) and 26% among adults ages 65 and older. Racial and ethnic disparities were also evident, with Asian or Pacific Islander, Black, and Latino New Yorkers each having a diabetes prevalence of 14% – about twice the rate observed among white New Yorkers, who had a prevalence of 7%.





White, Black, and Asian or Pacific Islander (API) race categories exclude Latino ethnicity. Latino includes Hispanic or Latino of any race. Source: NYC Community Health Survey, 2022.

Additionally, residents in neighborhoods with very high poverty rates (15%) were almost twice as likely to have diabetes compared to those in low-poverty neighborhoods (8%).







Note: Neighborhood poverty (based on ZIP code) is the percentage of residents with incomes below 100% of the federal poverty line (FPL), per American Community Survey, 2012-2016: low (less than 10%), medium (greater than 10% and less than 20%), high (greater than 20% and less than 30%), and very high (greater than or equal to 30%). Source: NYC Community Health Survey, 2022.



Figure 3. Prevalence of Diabetes Among Adults in NYC by United Hospital Fund (UHF) Neighborhood, 2022

Note: Data presented by UHF34 neighborhoods. Source: Community Health Survey, 2022.

Geographically, the Bronx (15%), Queens (12%), and Brooklyn (12%) had higher prevalence rates than Manhattan (8%). Specific neighborhoods such as Southwest Queens (23%), Pelham-Throggs Neck in the Bronx (18%), East Harlem in Manhattan (17%), and East New York in Brooklyn (17%) stood out as having the highest prevalence rates.

### **Diabetes Incidence**

The age-adjusted incidence of diabetes diagnoses per 1,000 population was 11.2 in 2020, translating to approximately 60,000 newly occurring cases of diabetes among adults that year. Measurement of the incidence of diabetes in this report is limited to data from the 2020 Community Health Survey (CHS). Due to a limited sample size, we were not able to generate reliable estimates of diabetes incidence stratified by demographics and neighborhood.

#### **Unmanaged Diabetes**

Blood sugar levels are an important marker of how well managed a person's diabetes is. High blood sugar levels over time lead to the development of diabetes-related complications. A person's A1C level reflects their average blood sugar levels over the last 3-month period. A1C levels more than 8% are considered as to be "not meeting blood sugar level goals" or "unmanaged," and A1C levels more than 9%

are considered very high and greatly increase the risk of diabetes-related complications. Among adults receiving medical care for diabetes in NYC, 40% were not meeting blood sugar level goals and 14% had very high blood sugar levels. Younger adults ages 18 to 44 faced greater challenges managing their blood sugar, with 25% of those receiving care for diabetes experiencing very high blood sugar levels. Disparities in blood sugar management by socioeconomic status were also pronounced. Among adults with diabetes under medical care, 17% of those living in very high-poverty neighborhoods had very high blood sugar levels compared to only 10% in low-poverty neighborhoods.





Neighborhood poverty (based on ZIP code) is the percentage of residents with income below 100% of the federal poverty line (FPL), per American Community Survey, 2012-2016: low (less than 10%), medium (greater than 10% and less than 20%), high (greater than 20% and less than 30%), and very high (greater than or equal to 30%). Source: NYC A1c Registry, 2022.

Certain neighborhoods in the Bronx, including Hunts Point-Mott Haven (18%), Fordham-Bronx Park (17%), High Bridge-Morrisania (17%), and Crotona-Tremont (17%), exhibited the highest rates of residents with very high blood sugar levels, highlighting the geographic concentration of this health challenge.

## Figure 5. Adults With Very High Blood Sugar Levels in NYC by United Hospital Fund (UHF) Neighborhood, 2022



Note: Very high blood sugar levels are defined as A1c level above 9%. Source: NYC A1c Registry, 2022.

#### **Diabetes-Related Lower Extremity Amputations**

In 2022, diabetes-related lower-extremity amputations (LEAs) in NYC were disproportionately prevalent among populations that have experienced social injustices and neighborhood disinvestment. More than 3,100 New Yorkers underwent diabetes-related LEAs in 2022. The rate of these amputations was more than twice as high among Black (63 per 100,000) and Latino (53 per 100,000) residents compared to white residents (24 per 100,000). Socioeconomic disparities further underscored inequities: residents of very high-poverty neighborhoods experienced an LEA rate of 82 per 100,000 – three times higher than the rate in low-poverty neighborhoods (27 per 100,000). Gender differences were also stark. Male adults had a diabetes-related LEA rate of 71 per 100,000, which was 3.4 times higher than the rate among female adults (21 per 100,000).

#### **Text Box 3. Diabetes-Related Complications**

Diabetes-Related Complications: When diabetes is not well managed, a person's blood sugar levels may be too high. This is called hyperglycemia. Prolonged high blood sugar can cause damage to many parts of the body, particularly kidneys, heart, blood vessels, and feet, which can lead to kidney disease, high blood pressure, and hardening of the arteries. Kidney disease means the kidneys cannot filter waste products out of blood and make urine as they should. The waste buildup leads to symptoms such as swelling of the ankles, vomiting, fatigue, confusion, and headaches. Treatment for these conditions may require people with diabetes may undergo complicated and costly procedures, like lower extremity amputations for peripheral arterial disease and hemodialysis for end stage kidney disease.

Source: American Heart Association, <u>Kidney Disease and</u> <u>Diabetes</u>, 2025.





Notes: Diabetes-related lower extremity amputations were defined as patients hospitalized with a diagnosis code for diabetes and lower extremity amputation procedure code, following Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicators (PQI), July 2022 technical specifications, with the additional inclusion of toe-related amputation procedure codes. "Sex/Gender" is used here given that SPARCS data specify the variable as Gender with categories indicated as Female and Male. White, Black, and Asian or Pacific Islander (API) race categories exclude Latino ethnicity. Latino includes Hispanic or Latino of any race. Neighborhood poverty (based on ZIP code) is the percentage of residents with income below 100% of the federal poverty line (FPL), per American Community Survey, 2012-2016: Iow (less than 10%), medium (greater than 10% and less than 20%), high (greater than 20% and less than 30%), and very high (greater than or equal to 30%). Source: Statewide Planning and Research Cooperative System (SPARCS), 2022.

## Figure 7. Adults in NYC With Diabetes-Related Lower Extremity Amputations by United Hospital Fund (UHF) Neighborhood, 2022



Note: Diabetes lower extremity amputations were identified based on Agency for Healthcare Research and Quality's (AHRQ) Prevention Quality Indicator (PQI) 16 algorithm, version 2022, with the inclusion of toe amputations. Source: Statewide Planning and Research Cooperative System (SPARCS), 2022.

#### **Diabetes-Related Hemodialysis**

Nearly 7,000 NYC adults with diabetes underwent hemodialysis in 2022. Similar to the pattern of diabetesrelated LEA, hemodialysis among adults with diabetes is also disproportionately prevalent among populations in NYC that have experienced greater social injustices and neighborhood disinvestment.

#### Text Box 4. Diabetes Data in Action

**Diabetes Data in Action:** To make the diabetes disparities analyses more readily available to community stakeholders and researchers, the NYC Health Department published a subset of this analysis in an <u>Epi Data Brief</u> in 2025.

#### **Takeaways**

The data highlight profound disparities in diabetes prevalence, management, and outcomes across NYC, emphasizing the critical influence of age, race and ethnicity, socioeconomic status, and geographic location on diabetes outcomes. Though younger adults with diabetes blood sugar levels outside of the goal range, the adverse outcomes of years of high glucose levels manifest in older adults, who undergo diabetes-related lower extremity amputations and hemodialysis treatment at a higher rate than younger adults with diabetes. Communities of color and residents in high-poverty neighborhoods face disproportionately high prevalence rates, poorer blood sugar management, and severe diabetes-related

complications such as lower-extremity amputations. Race and ethnicity do not genetically predispose individuals to develop diabetes or experience worse health outcomes. Rather, it is racism and other social determinants of health that shape the conditions in which people are born, grow, live, work, and age that create more adverse diabetes outcomes among people of color and people who live in poverty.<sup>1</sup> These findings highlight the urgent need to prioritize interventions in neighborhoods and populations experiencing high burden that have faced historic disinvestment. In addition to person- and community-based interventions, mitigating the root causes of systemic inequities that drive disparities in diabetes management and outcomes has a population-wide and enduring impact on promoting health equity across the city.

### Core Activities in Calendar Year 2024

The NYC Health Department engages in a range of strategic programming and policy initiatives to reduce the impact of diabetes on New Yorkers. The work can be categorized into four domains aligned with the goals of the Citywide Diabetes Reduction Plan and a policy domain shaping the landscape in which all work is conducted:

- 1. <u>Diabetes education</u>: Saturate neighborhoods experiencing a high burden of diabetes with evidence-based group interventions.
- 2. <u>Addressing health-related social needs</u>: Increase investment in health-related social needs and nutrition security in neighborhoods most highly impacted by under-investment.
- 3. <u>Improving care</u>: Support safety net primary care and hospitals to address health inequities and advance racial justice.
- 4. <u>Strengthening community workforce</u>: Expand well-supported Peer Leaders, and Community Health Workers (CHWs) among priority communities.
- 5. <u>Advocating, researching, and implementing health policy</u>: Research and advocate for policy and regulation change to improve health and reduce the burden of diabetes and its associated complications on New Yorkers.

The following sections provide updates on the NYC Health Department's activities to promote diabetes self-management and reduce the burden of diabetes on New Yorkers conducted in 2024. The <u>Citywide</u> <u>Diabetes Reduction Plan</u> describes specific programs in more detail.

### **Diabetes Education**

To decrease population-level risk for type 2 diabetes and the number of New Yorkers who have very high blood sugar levels, the NYC Health Department hosts and supports a range of community and evidenced-based diabetes education interventions in priority neighborhoods and sub-populations. Diabetes education aims to equip people at risk of developing diabetes and people with diabetes with positive self-care behaviors and management strategies to improve their glycemic levels. Despite the effectiveness of these classes, 71% of adults living with diabetes in NYC have never taken a diabetes self-management class, underscoring a huge opportunity for the NYC Health Department to increase educational programming to support adults with diabetes.<sup>2</sup>

The NYC Health Department provides diabetes education through group classes, community canvassing, public school engagement, and direct interaction with New Yorkers. The NYC Health Department hosts three types of nationally accredited, evidence-based diabetes education group classes: National Diabetes Prevention Program (NDPP), Diabetes Self-Management Education and Support (DSMES), and Diabetes Self-Management Programs (DSMP). In addition to hosting classes, the NYC Health Department serves as a DSMES Umbrella Site to provide training and technical assistance (TA) to clinical practices and community-based organizations (CBOs) to host DSMES classes onsite in their communities.

			Chronic Discoss or	
Program	National Diabetes Prevention Program (NDPP)	Diabetes Self- Management Education and Support (DSMES)	Chronic Disease or Diabetes Self- Management Programs (DSMP)	NYC Care Calls
Description	Yearlong lifestyle intervention program designed by the CDC and led by a trained lifestyle coach for adults who are at risk for developing diabetes. Evidence shows that participation in NDPP lowers the incidence of type 2 diabetes.	Five-week group workshop class led by a Certified Diabetes Care and Education Specialist (CDCES) to focus on self-care behaviors. Accredited by the Association of Diabetes Care and Education Specialists (ADCES) to empower adults with diabetes to self-manage their condition. Evidence shows that participation in DSMES improves glycemic levels and decreases diabetes-related health care utilization	Six-week group program led by peer leaders, such as community health workers, that equips participants with tools and knowledge to self- manage their diabetes. DSMP has been shown to improve health outcomes and reduce all-cause health care utilization and costs.	Telephonic diabetes self-management program in which patients with type 2 diabetes who have high levels of A1C (A1C greater than or equal to 8) receive monthly, individual calls from a health educator offering direct support and resources to the patients.
NYC Health Department Role	Offer NDPP training and TA to practices and CBOs to become certified coaches and bill Medicare and Medicaid for services.	Offer DSMES workshops to participants in priority neighborhoods and provide TA for clinical organizations to obtain accreditation as an Umbrella Starter Site.	Offer DSMP workshops to patients and provide TA and training to CBOs and practices to deliver workshops.	Employ health educator who calls eligible patients. Prioritized outreach to patients living in the South Bronx, a neighborhood with a high prevalence of people with diabetes who are not meeting blood sugar goals.
Impact in 2024	Started 30 NDPP workshops with 346 participants across 19 clinical organizations and CBOs.	Hosted 14 workshop series in Brooklyn and the Bronx. 219 participants attended at least one session.	Hosted 15 DSMP workshops with 188 participants across five CBOs and one NYCHA facility.	172 patients enrolled in NYC Care Calls.

### Table 2. NYC Health Department Diabetes Education Programming Updates, 2024

### Addressing Health-Related Social Needs

Health-related social needs (HRSN), or unmet social, economic, and environmental needs, affect individuals' ability to maintain their health and well-being and are essential to address for effective diabetes care management.<sup>3</sup> Nutrition security is particularly important, as access to nutritious foods plays a crucial role in managing blood sugar levels and preventing diabetes-related complications. The NYC Health Department leads a variety of initiatives designed to make healthy foods more affordable for New Yorkers with low income, some of which specifically serve people with diabetes.

	Cat the Cand Stuff			
	Get the Good Stuff	Health Bucks	Groceries to Go	wore veggies
NYC Health	Provides dollar-for-	Distribute \$2 coupons	Provides participants	Urban Health Plan
Department	dollar match, up to	redeemable for fresh	monthly credits to	patients who have
Program	\$10 per day, on	fruits and vegetables	purchase groceries	diabetes with blood
Description	Supplemental	at all NYC farmers'	through an online	sugars outside of
	Nutrition Assistance	markets. For every \$2	platform. Participants	target range, food
	Program (SNAP)	spent in SNAP benefits	are NYC Health +	insecurity, and
	purchases of eligible	at more than 120	Hospitals members	Medicaid receive \$100
	fruits, vegetables, and	farmers markets,	with diabetes or	to \$150 per month
	beans in participating	shoppers get \$2 in	hypertension who are	depending on
	supermarkets.	Health Bucks, up to	at risk for or	household size for
		\$10 per day.	experiencing food	fresh fruits and
			insecurity.	vegetables, as well as
				providing case
				management and
				diabetes self-care
				management services.
Impact in	Over \$1.8 million	More than 800,000	Over \$8 million worth	Contractor and
2024	worth of incentives	Health Bucks worth	of grocery credits	funding agreements
	distributed to New	over \$1.6 million	distributed to	finalized. Program
	Yorkers.	distributed at farmers	participants.	recruitment will begin
		markets.		in summer 2025.

Table 3. NYC Health Department Diabetes-Related Nutrition Support Programming Updates, 2024

In addition to promoting access to healthy foods, the NYC Health Department provides training and TA to clinical practices and CBOs to connect their patients with needed HRSN resources. Implementing Multi-Directional E-referral Systems (MDERS), such as Unite Us, in community partners facilitates the electronic exchange of information between clinical providers and CBOs to connect individuals to community programs that address HRSN and social needs, such as DSMES classes and nutrition supports. In 2024, 164 organizations attended at least one MDERS training session.

### Improving Care

The NYC Health Department aims to improve the health care delivered to New Yorkers with diabetes by strengthening care delivery in small independent primary care practices (SIPCPs) through targeted strategies. SIPCPs are critical access points to health care for marginalized populations. The NYC Health Department works directly with SIPCPs to improve the delivery of patient care and help address care quality barriers related to information systems, goal setting, data analysis, and practice redesign. The NYC Health Department will continue to provide practice facilitation support to SIPCPs serving priority neighborhoods to improve the following clinical services:

- Diabetic retinopathy screenings
- Early detection of chronic kidney disease
- Adoption of team-based care models
- Use of electronic health records to provide better care for diabetes
- Capacity of practices for quality improvement initiatives

In 2024, the NYC Health Department partnered with 30 SIPCPs to support them in adopting and enhancing clinical care practices and to implement new team-based care diabetes management workflows to improve health outcomes among priority populations with diabetes. Strengthening primary

care practices and improving care coordination helps bridge gaps in health care access, ensuring that people living with diabetes have access to comprehensive care.

### Strengthening the Community Workforce

Research shows that diabetes management is most effective when led by a multidisciplinary team that includes community health representatives, such as community health workers (CHWs) and Peer Leaders, in addition to health care professionals like pharmacists, nurses, and dieticians.<sup>4</sup> The NYC Health Department trains CHWs and Peer Leaders on patient coaching, group facilitation, and the impact of social determinants of health (SDOH) on diabetes outcomes. Trained Peer Leaders and CHWs are placed in CBOs, SIPCPs, and NYC Health Department sites to work with community members.

In 2024, the NYC Health Department trained 25 Peer Leaders and lifestyle coaches on diabetes, nutrition, and patient coaching techniques. Five CHWs who were placed in SIPCPs were trained on the relevance and importance of SDOH screenings and community resource referrals in priority populations with diabetes, implementing SDOH screening, and referral workflows in SIPCPs. Additionally, six Peer Leaders from four CBOs that deliver NDPP and DSMP programs were trained to use the Unite Us platform for SDOH screening and referrals to their workshops.

In addition to training CHWs and Peer Leaders to work in SIPCPs and CBOs, the NYC Health Department runs Harlem Health Advocacy Partners (HHAP), a placed-based community health worker (CHW) model launched to address a health equity gap for East and Central Harlem residents living in public housing. HHAP provides NYC Housing Authority (NYCHA) residents with information and support to manage or prevent complications from diabetes, hypertension, asthma, and mental health. Nineteen NYCHA residents worked with CHWs at HHAP, and 70% of those participating residents reported an improvement in their diabetes self-management in 2024.

### Advocating for, Researching, and Implementing Health Policy

City, state, and federal policies play a vital role in shaping our daily lives, culture, environment, health, and economy. The NYC Health Department advocates for policies that address upstream factors to shift the environment and help prevent the development and exacerbation of chronic diseases like diabetes. Additionally, the NYC Health Department convenes stakeholders, implements local policies, and engages in research and data dissemination.

Two key focuses of the NYC Health Department are transforming the built environment to promote physical activity and well-being and influencing the food environment to make healthier food options more available and build transparency to make healthier food choices easier. The initiatives listed below reflect the NYC Health Department's ongoing work:

- <u>Active Design Unit</u>: Developed a set of evidence-based design guidelines on how the built environment can be leveraged to prevent chronic disease within NYC, which it continues to partner with other city agencies and external stakeholders to implement.
- <u>NYC Food Standards</u>: Evidence-based nutrition criteria which apply to all food served by City agencies and their subcontractors. Impacts approximately 219 million meals and snacks annually. The NYC Health Department reviews and updates the Standards every three years and provides technical assistance to City agencies to support compliance.
- <u>Sweet Truth Act Added Sugar Warning Policy:</u> The NYC Health Department finalized a rule in September 2024, implementing <u>Local Law 150 of 2023</u>, requiring chain restaurants to post a warning icon next to prepackaged food items and equivalent items that contain at least 50

grams of added sugars. The NYC Health Department is currently educating chain restaurants about compliance for implementation beginning October 2025.

### Work in 2025

Building on the diabetes-related work conducted in 2024, the NYC Health Department will leverage its growing diabetes surveillance and stakeholder engagement capacities to support and inform program and policy work in 2025. Below, we provide specific areas of work for the coming year related specifically to diabetes:

- <u>Centralized calendar of diabetes-related classes and events</u>: The NYC Health Department will
  publish a centralized web-based calendar of diabetes-related classes and events offered by the
  NYC Health Department and its partners to make it easier for patients with prediabetes and
  diabetes to connect with appropriate educational resources. This calendar will also help identify
  whether neighborhoods experiencing a high burden of diabetes need additional local classes
  and events to serve residents.
- Set benchmarks to achieve agency goals around diabetes: To more systematically allocate resources for evidence-based diabetes interventions, the NYC Health Department will use its neighborhood-level analyses of diabetes prevalence and burden to create benchmarks for the number of people with diabetes in priority neighborhoods who need to attend diabetes selfmanagement education classes and receive HRSN support to achieve neighborhood saturation.
- 3. Leverage NYS Medicaid 1115 waiver to improve integration of medical claims and HRSN data to improve diabetes care: New York State Medicaid received approval for its Medicaid 1115 waiver from the Centers for Medicare and Medicaid Services to improve the overall quality and health outcomes of New Yorkers. The waiver includes an investment of \$7 billion statewide through March 2027 to reimburse for HRSN services for certain priority populations enrolled in Medicaid. The NYC Health Department is coordinating with NYS and other key stakeholders in the Medicaid 1115 waiver to create an infrastructure to link Medicaid claims and social service data. This integration will enable better population health management for people with diabetes.

### Conclusion

The NYC Health Department remains dedicated to combating the diabetes epidemic through evidencebased interventions and community-driven strategies. By addressing both immediate challenges and long-term solutions, the NYC Health Department aims to enhance the lives of individuals affected by diabetes while tackling the systemic inequities that contribute to its development. Through targeted community-based initiatives, improving access to high-quality care, and addressing health-related social needs, the NYC Health Department is building a comprehensive framework to lessen the burden of diabetes in the neighborhoods most affected by it. Looking ahead to 2025 and beyond, the NYC Health Department will leverage data modernization efforts and set strategic benchmarks to guide program development more effectively. Cross-sector collaborations and targeted policy interventions remain a priority to foster healthier environments and ensure equitable health care access. These efforts, in alignment with HealthyNYC and the Chronic Disease Strategy, reflect a shared vision for a healthier and more equitable city, where all residents can live longer, fuller lives free from the burden of preventable chronic diseases like diabetes.

### Appendix A: Data Sources and Metrics

#### **Data Sources**

A. Community Health Survey (CHS), 2020 and 2022: The CHS is conducted annually by the New York City Department of Health and Mental Hygiene with a sample of approximately 9,000 to 10,000 noninstitutionalized adults ages 18 and older. Since 2021, the CHS has taken a random sample of NYC mailing addresses, with mailings sent to households asking the adult with the most recent birthday to take the survey, and most surveys are self-completed online. Estimates are age adjusted to the U.S. 2000 standard population. For more survey details, visit <a href="https://www.nyc.gov/site/doh/data/data-sets/community-health-survey.page">nyc.gov/site/doh/data/data-sets/community-health-survey.page</a>.

**B. The New York City A1C Registry (Registry), 2022:** The A1C Registry was created in 2006 and contains results of A1C tests sent to clinical laboratories for NYC residents. All data presented in this report are limited to NYC adults ages 18 and older at the time of their first reported result in the Registry and who had diabetes, defined as at least two A1C test values of 6.5% or greater at any point in time since inception of the Registry in 2006 through 2022. This definition utilizes the American Diabetes Association-recommended A1C cut-point of 6.5% for diabetes diagnosis since the Registry does not contain diagnosis codes.

C. Statewide Planning and Research Collaborative System (SPARCS), 2022: SPARCS is an administrative database of all hospital discharges reported by New York State (NYS) hospitals to the NYS Department of Health. The raw data used to produce this publication was provided by the New York State Department of Health (NYSDOH). However, the calculations, metrics, conclusions derived, and views expressed herein are those of the author(s) and do not reflect the conclusions or views of NYSDOH. NYSDOH, its employees, officers, and agents make no representation, warranty, or guarantee as to the accuracy, completeness, currency, or suitability of the information provided here. Diagnoses are coded according to the International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10) framework and outcomes are defined using a modified version of the Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicator (PQI) measuring the rate of lower extremity amputation (LEA) among patients with diabetes. Our case definition for diabetes-related LEA included all admissions for any listed diagnosis of diabetes and any listed non-traumatic LEA procedure code during a recorded inpatient hospitalization stay, including all hip, leg, complete foot, partial foot, toe and not otherwise specified amputations. All data presented in this report are limited to NYC residents ages 18 and older and rates are age adjusted to the 2000 Census. For more information, visit health.ny.gov/statistics/sparcs/.

**D. United States Renal Data System (USRDS), 2022:** The USRDS is a nationwide data resource supported by the National Institute of Diabetes and Digestive and Kidney Disease (NIDDK) that collects, analyzes, and makes available population-level information on patients with end-stage renal disease (ESRD) and those who receive hemodialysis across the United States. Aggregate statistics for New York City are obtained each year through data requests to USRDS. For more information, visit <u>niddk.nih.gov/about-niddk/strategic-plans-reports/usrds</u>.

### **Limitations by Metric**

The diabetes metrics covered in the report came from several separate data systems, each with differing variables and sets of limitations. The four NYC data sources used in this report all cover the year 2022. The CHS typically includes survey questions each year to estimate diabetes prevalence. However, the most recent CHS that included questions necessary to provide incidence estimates was conducted in

2020. The limited sample size using only the 2020 CHS did not allow for the accurate estimation of diabetes incidence across demographic groups or through time.

The dialysis data included in this report comes from the USRDS which only provided aggregate counts of cases of dialysis due to diabetes that occur among NYC adults. The limited aggregate diabetes-related dialysis data could not be presented by neighborhood or calculated as age-standardized rates. For all presentation of data at the neighborhood level, the data were aggregated by <u>UHF neighborhoods</u>.

### Appendix B: Diabetes Data Tables

 Table 1A. Prevalence of Diabetes Among New York City Adults Ages 18 and Older by Demographic

 Characteristics, 2022

	Number of adults with diabetes			Prevalence of diabetes			
	Number	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Rate (per 100)	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value
NYC overall	794,196	722,490	865,901	11.3	10.3	12.2	
Age group							
18-44	112,788	83,388	142,189	3.4	2.5	4.3	reference
45-64	351,789	303,943	399,635	16.7	14.6	18.8	< 0.001
65+	328,905	282,218	375,592	26.3	23.1	29.4	< 0.001
Sex							
Female	384,085	335,551	432,619	10.0	8.9	11.2	reference
Male	410,111	356,169	464,053	12.8	11.3	14.3	0.005
Race/ethnicity							
White	176,635	143,115	210,154	7.0	5.8	8.2	reference
Black	205,918	169,964	241,872	13.7	11.5	15.8	< 0.001
Latino	251,164	207,004	295,323	14.1	11.9	16.3	< 0.001
Asian/Pacific Islander	138,145	109,400	166,890	13.5	U 11.0	16.1	< 0.001
Other	21,800	10,014	33,586	9.4	4.8	13.9	0.324
Neighborhood Poverty							
Low poverty (<10%)	149,469	120,179	178,759	7.8	6.4	9.2	reference
Medium poverty (10 to <20%)	393,105	337,806	448,404	12.3	10.7	13.8	< 0.001
High poverty (20 to < 30%)	143,632	116,388	170,877	12.3	10.2	14.4	0.001
Very high poverty (30%+)	107,989	83,514	132,465	14.6	11.5	17.7	< 0.001
Borough							
Bronx	161,694	131,434	191,954	15.1	12.5	17.6	< 0.001
Brooklyn	239,687	199,722	279,651	11.6	9.8	13.3	0.005
Manhattan	113,497	85,431	141,564	7.9	6.1	9.8	reference
Queens	240,886	200,564	281,208	11.7	9.9	13.6	0.005
Staten Island	38,431	23,550	53,313	9.0	5.8	12.1	0.572

Notes: Latino includes persons of Hispanic or Latino origin, regardless of reported race. Black, White, Asian or Pacific Islander, and Other race categories exclude those who identified as Latino.

"Neighborhood poverty is defined as percentage of the population in a ZIP code living below the Federal Poverty Level (FPL) per the American Community Survey, 2017-2021. Neighborhoods are categorized into four groups as follows: "Low poverty" neighborhoods are those with less than 10% of the population living below the FPL; "Medium poverty" neighborhoods have greater than 10 and less than 20% of the population below FPL; "High Poverty" neighborhoods have greater than 20 and less than 30% of the population living below the FPL; "Very high poverty" neighborhoods have greater than or equal to 30% of the population living below the FPL."

<sup>u</sup> Indicates that the estimate should be rounded up if rounded to a whole number.

95% Confidence Intervals (CIs) are a measure of estimate imprecision: the wider the CI, the more imprecise the estimate.

Bold p-values indicate statistically significant difference from the reference group.

## Table 2A. Prevalence of Diabetes Among New York City Adults Ages 18 and Older by United HospitalFund (UHF) Neighborhood, 2022

	Number	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Rate (per 100)	Lower 95% Confidence Interval	Upper 95% Confidence Interval
NYC overall	794,196	722,490	865,901	11.3	10.3	12.2
UHF 34 neighborhood						
Bronx	0.001*	2.000	46.205	44.2*	4.2	40.4
Kingsbridge	9,601*	2,906	16,295	11.2*	4.3	18.1
Northeast Bronx	25,691	12,847	38,534	14.9	8.0	21.7
Fordnam - Bronx Park	20,858	13,262	28,454	12.1	/.9	16.2
South Brony A	43,710	27,200	00,174 91,420	18.3	12.2	24.4
Breakhr	01,829	42,220	81,430	15.0	11.2	20.0
Brookiyn	2 472*	250	6 600	4 A¥	0.4	0.5
Greenpoint Downtown Usights Dark Slope	3,473*	258	0,088	4.4*	0.4	8.5
Downtown - Heights - Park Slope	9,990	3,9/3	10,019	5./ 1F.4	2.4	9.0
East New York A	39,389	23,389	20 01 9	15.4	9.9	20.9
Sunset Park	20,482	3 072	19 615	12.5*	11.1	23.2
Borough Park	22 959*	8 684	37 234	96	4.2	14.6
Elathush	42 561	22 888	62 234	16.4	10.3	22.5
Canarsie	14,900	7,790	22,009	8.4	4.3	12.6
Bensonhurst	15.403*	6.420	24.387	8.3	3.6	13.1
Coney Island	39.653	22.139	57.168	13.8	8.8	18.9
Williamsburg - Bushwick ^	13,527	6,716	20,337	9.7	4.1	15.3
Manhattan						
Washington Heights	29,537	12,887	46,187	12.9	6.1	19.7
Central Harlem ^	12,144	5,220	19,068	9.7*	4.0	15.4
East Harlem ^	16,223	7,385	25,061	17.3	10.7	23.8
Upper West Side	12,715*	1,451	23,978	6.0*	1.1	10.9
Upper East Side-Gramercy	13,307*	5,007	21,607	3.7*	1.4	6.1
Chelsea-Village	12,934*	5,330	20,538	6.0	2.6	9.3
Union Square-Lower Manhattan	16,638*	4,851	28,424	7.7*	3.1	12.3
Queens						
Long Island City, Astoria	13,752*	3,357	24,146	9.0*	3.3	14.7
West Queens	36,034	17,499	54,569	9.9	5.9	13.8
Flushing	26,536	12,981	40,090	9.9	5.0	14.7
Bayside Little Neck-Fresh Meadows	15,176	8,439	21,914	8.5	4.5	12.4
Ridgewood Southwest Queens	19,464*	0,495	32,434	8.0 <sup>**</sup>	3.3	12.7
Jamaica	20,705	35,450 24.019	70,073	22.7	14.0	30.9
Southeast Oueens	35,134 21 277	10 009	32 5/15	14.8	5.0	20.0
Bockaway	13 748	7 631	19 865	10.0	5.0 8.0	10.2
Staton Island	15,740	7,051	15,305	10.0	3.0	10.5
Northern Staten Island	17 095	5 15/	20.026	0.6	<i>/</i> / 1	15 0
Southern Staten Island	21 337	12 215	29,030	9.0	4.1 5 1	13.2 11 R
Southern Staten Island	21,337	12,213	50,458	0.5	5.1	11.0

The UHF classifies NYC into 42 neighborhoods, comprised of contiguous ZIP codes, several of which were

combined to create the 34 neighborhoods presented here. For more information, visit <u>a816-health.nyc.gov/hdi/epiquery/sites/</u> <u>default/files/2021-02/uhf-zip-information.pd</u>f.

^ Indicates the neighborhood is served by the NYC Health Department's Bureaus of Neighborhood Health.

\*Estimate should be interpreted with caution. Estimate's Relative Standard Error (a measure of estimate precision) is greater than 30%, the 95% Confidence Interval half-width is greater than 10, or the sample size is less than 50, making the estimate potentially unreliable. 95% Confidence Intervals (CIs) are a measure of estimate imprecision: the wider the CI, the more imprecise the estimate.

## Table 3A. Blood Sugar Control Among New York City Adults With Diabetes Who Received Medical Careby Demographic Characteristics, 2022

	Number of people with diabetes with A1C result in 2022				Percent of peopl	e with diabete	s with A1C resu	ult in 2022	
	<7.0%	7.0-7.9%	8.0-9.0%	>9%	Total	<7.0%	7.0-7.9%	8.0-9.0%	>9%
NYC overall	308,488	151,955	75,307	86,768	622,518	49.6	24.4	12.1	13.9
Age group									
18-44	20,931	10,257	6,632	12,952	50,772	41.2	20.2	13.1	25.5
45-64	112,996	62,129	33,608	44,705	253,438	44.6	24.5	13.3	17.6
65+	174,561	79,569	35,067	29,111	318,308	54.8	25.0	11.0	9.1
Sex									
Female	169,674	79,684	37,792	42,122	329,272	51.5	24.2	11.5	12.8
Male	138,487	72,116	37,425	44,531	292,559	47.3	24.7	12.8	15.2
Neighborhood Poverty									
LOW poverty (<10%) Medium poverty	55,021	25,641	11,305	10,960	102,927	53.5	24.9	11.0	10.6
(10 to <20%) High poverty (20	149,649	75,439	37,703	42,636	305 <i>,</i> 427	49.0	24.7	12.3	14.0
to < 30%) Very high poverty	63,198	30,363	15,349	18,776	127,686	49.5	23.8	12.0	14.7
(30%+)	40,300	20,274	10,845	14,289	85,708	47.0	23.7	12.7	16.7
Borough									
Bronx	56,175	28,397	15,087	19,712	119,371	47.1	23.8	12.6	16.5
Brooklyn	88,532	42,682	21,745	25,805	178,764	49.5	23.9	12.2	14.4
Manhattan	44,988	20,614	10,069	11,380	87,051	51.7	23.7	11.6	13.1
Queens	99,032	51,516	24,532	26,116	201,196	49.2	25.6	12.2	13.0
Staten Island	19,525	8,627	3,814	3,692	35,658	54.8	24.2	10.7	10.4

Notes: "Neighborhood poverty is defined as percentage of the population in a ZIP code living below the Federal Poverty Level (FPL) per the American Community Survey, 2018-2022. Neighborhoods are categorized into four groups as follows: "Low poverty" neighborhoods are those with less than 10% of the population living below the FPL; "Medium poverty" neighborhoods have greater than 10 and less than 20% of the population below FPL; "High Poverty" neighborhoods have greater than 20 and less 30% of the population living below the FPL; "Very high poverty" neighborhoods have greater than or equal to 30% of the population living below the FPL."

There are 687 individuals for whom sex assigned at birth was missing or listed as Other.

There are 770 individuals whose address information could not be used to assign a corresponding neighborhood poverty level.

There are 478 individuals whose address information could not be used to assign a corresponding borough.

### Table 4A. Number and Percent of New York City Adults With Diabetes Who Received Medical Care With last A1C > 9%, by United Hospital Fund (UHF) Neighborhood, 2022

	Number of people with last A1C > 9%	Percent of people with last A1C > 9%	Number of people with diabetes with A1C result in 2022
New York City	86,768	13.9	622,518
UHF 42 neighborhood			
Bronx			
Kingsbridge - Riverdale	753	13.3	5,649
Northeast Bronx	2,523	15.1	16,708
Fordham - Bronx Park	3,392	17.4	19,530
Pelham - Throgs Neck	4,134	15.6	26,575
Crotona - Tremont ^	3,271	17.2	19,002
High Bridge - Morissania ^	3,395	17.3	19,591
Hunts Point - Mott Haven ^	2,244	18.2	12,316
Brooklyn			
Greenpoint	678	13.1	5,162
Downtown - Heights - Park Slope	1,125	13.3	8,456
Bedford Stuyvesant - Crown Heights ^	4,036	16.9	23,860
East New York ^	2,989	17.1	17,511
Sunset Park	1,283	12.8	10,012
Borough Park	2,512	12.3	20,387
East Flatbush - Flatbush	4,368	17.1	25,473
Canarsie - Flatlands	2,734	15.0	18,222
Bensonhurst - Bay Ridge	1,509	10.7	14,077
Coney Island - Sheepshead Bay	2,321	10.7	21,698
Williamsburg - Bushwick ^	2,250	16.2	13,906
Manhattan			
Washington Heights - Inwood	3,367	15.5	21,748
Central Harlem - Morningside Heights ^	1,988	16.2	12,286
East Harlem ^	1,700	16.1	10,540
Upper West Side	879	10.4	8,459
Upper East Side	453	7.9	5,701
Chelsea - Clinton	784	12.6	6,205
Gramercy Park - Murray Hill	550	11.2	4,892
Greenwich Village - Soho	172	7.7	2,245
Union Square - Lower East Side	1,319	10.2	12,986
Lower Manhattan	168	8.4	1,989
Queens			
Long Island City - Astoria	1,630	13.7	11,886
West Queens	5,225	13.8	37,945
Flushing - Clearview	2,099	8.5	24,830
Bayside - Little Neck	472	7.5	6,288
Ridgewood - Forest Hills	1,636	10.6	15,397
Fresh Meadows	753	9.4	7,980
Southwest Queens	4,450	14.5	30,790
Jamaica	5,511	15.2	36,159
Southeast Queens	2,910	13.8	21,015
Rockaway	1,430	16.1	8,906
Staten Island			
Port Richmond	817	14.6	5,604
Stapleton - St. George	1,119	11.7	9,540
Willowbrook	633	8.5	7,450
South Beach - Tottenville	1,123	8.6	13,064

Notes: The UHF classifies NYC into 42 neighborhoods, comprised of contiguous ZIP codes. For more information, visit. <u>nyc.gov/assets/doh/downloads/pdf/ah/zipcodetable.pdf</u>. 63 individuals who had a latest A1C result > 9% cannot be assigned to a UHF 42 neighborhood. ^Indicates the neighborhood is served by the NYC Health Department's Bureaus of Neighborhood Health.

	Number of diabetes-related LEA	Rate of diabetes-related LEA (per 100,000)
NYC overall	3,184	43.7
Age group		
18-44	224	6.9
45-64	1,595	78.2
65+	1,365	98
Sex		
Female	852	21
Male	2,332	70.5
Race/ethnicity		
White	621	24.2
Black	1,040	63.3
Latino	993	52.7
Asian/Pacific Islander	120	10.3
Neighborhood Poverty		
Low poverty (<10%)	469	27.1
Medium poverty (10 to <20%)	1,357	38.3
High poverty (20 to < 30%)	668	50.4
Very high poverty (30%+)	594	81.8
Borough		
Bronx	830	74.5
Brooklyn	870	40.7
Manhattan	519	36.3
Queens	790	36.9
Staten Island	175	38.5

Table 5A. Diabetes-Related Lower Extremity Amputations (LEA) Among New York City Adults Ages 18and Older by Demographic Characteristics, 2022

Notes: Latino includes persons of Hispanic or Latino origin, regardless of reported race. Black, White, Asian or Pacific Islander, and Other race categories exclude those who identified as Latino.

"Neighborhood poverty is defined as percentage of the population in a ZIP code living below the Federal Poverty Level (FPL) per the American Community Survey, 2018-2022. Neighborhoods are

categorized into four groups as follows: "Low poverty" neighborhoods are those with less than 10% of the population living below the FPL; "Medium poverty" neighborhoods have greater than 10 and less than 20% of the population below FPL; "High Poverty" neighborhoods have greater than 20 and less than 30% of the population living below the FPL; "Very high poverty" neighborhoods have greater than or equal to 30% of the population living below the FPL."

There are 410 diabetes-related LEAs for which the patient's Race/ethnicity is Other. The rate is not calculated due to a potentially high degree of race and ethnicity misclassification among this group.

There are 96 diabetes-related LEAs for which the patient's neighborhood of residence could not be determined.

Table 6A. Diabetes-Related Lowe	r Extremity Amputations (LEA) Among New York City Adults Ages 18
and Older by United Hospital Fur	ıd (UHF) Neighborhood, 2022

	Number of diabetes-related LEA	Rate of diabetes-related LEA (per 100,000)
NYC	3,184	43.7
UHF 42 Neighborhood		
Bronx		
Kingsbridge - Riverdale	36	39.4
Northeast Bronx	115	62.1
Fordham - Bronx Park	116	61.4
Pelham - Throgs Neck	180	73.5
Crotona - Tremont ^	129	86.8
High Bridge - Morissania ^	123	77.5
Hunts Point - Mott Haven ^	101	100.5
Brooklyn		
Greenpoint	29	32.7
Downtown - Heights - Park Slope	53	28.9
Bedford Stuyvesant - Crown Heights ^	159	61.2
East New York ^	70	44.8
Sunset Park	38	42.9
Borough Park	74	28.6
East Flatbush - Flatbush	105	38.5
Canarsie - Flatlands	80	41.3
Bensonhurst - Bay Ridge	47	24.3
Coney Island - Sheepshead Bay	99	32
Williamsburg - Bushwick ^	96	64.4
Manhattan		
Washington Heights - Inwood	93	40.9
Central Harlem – Morningside Heights ^	73	52.9
East Harlem ^	108	115.5
Upper West Side	42	17.9
Upper East Side	37	18.5
Chelsea - Clinton	39	28.6
Gramercy Park - Murray Hill	22	18.9
Greenwich Village - Soho	12	17
Union Square - Lower East Side	54	32.1
Lower Manhattan	NA	NA
Queens		
Long Island City - Astoria	48	30.5
West Queens	117	30.6
Flushing - Clearview	69	24.5
Bayside - Little Neck	28	26.1
Ridgewood - Forest Hills	63	25
Fresh Meadows	25	26.7
Southwest Queens	109	44.1
Jamaica	153	50.8
Southeast Queens	97	44.1
Rockaway	68	58.2
Staten Island		
Port Richmond	31	56.5
Stapleton - St. George	48	40.4
Willowbrook	37	39.3
South Beach - Tottenville	58	30.5

The UHF classifies NYC into 42 neighborhoods, comprised of contiguous ZIP codes. For more information, visit nyc.gov/assets/doh/downloads/pdf/ah/zipcodetable.pdf. There are 96 diabetes-related LEAs for which the patient's neighborhood of residence could not be determined. Indicates the neighborhood is served by the NYC Health Department's Bureaus of Neighborhood Health

	Number of incident cases of hemodialysis due to diabetes	Number of prevalent cases of hemodialysis due to diabetes
NYC overall	1,246	6985
Age group		
18-44	90	351
45-64	528	2741
65+	628	3893
Sex		
Female	505	2924
Male	741	4061
Race/ethnicity		
Asian/Pacific Islander	194	1157
Black	405	2679
Latino	404	2170
White	202	897
Borough		
Bronx	284	1588
Brooklyn	350	2053
Manhattan	141	856
Queens	404	2208
Staten Island	67	280

## Table 7A. Diabetes-Related Hemodialysis Among New York City Adults Ages 18 and Older by Demographic Characteristics, 2022

Notes: Latino includes persons of Hispanic or Latino origin, regardless of reported race. Black, White, Asian or Pacific Islander, and Other race categories exclude those who identified as Latino.

There were 41 incident diabetes-related dialysis cases which was not classified into a race or ethnicity category. There were 82 prevalent diabetes-related dialysis cases which were not classified into a race or ethnicity category.

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