

Health Disparities in New York City



*A Report from the
New York City Department
of Health and Mental Hygiene*

Dear Fellow New Yorkers:

New York City's Health Department has, throughout its history, paid special attention to improving the health of the City's most vulnerable residents. From the late 1800s, when the Department developed sanitation programs to improve living conditions in tenement neighborhoods, to the early 1900s, when public health physicians were dispatched door-to-door in poor areas of the City, to the 1990s, when new programs were developed to fight tuberculosis and HIV/AIDS, the Health Department has recognized that social and economic factors are inextricably linked to health.

While great gains have occurred in improving overall health and reducing health disparities, the persistence of racial, ethnic, economic, or other social inequalities in health is unacceptable. Eliminating health inequalities must involve investment on four fronts: improving access to and the quality of preventive health care, promoting healthy life choices, creating social and physical environments supportive of healthy living, and reducing the burden of poverty and other social disadvantage. Reaching these goals requires a broad and detailed understanding of which groups are most vulnerable, the patterns of illnesses and risk factors among these groups, and how disparities change over time. We hope this report is useful to all our partners in this effort.

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Key Findings in This Report

- Much progress has been made in reducing health disparities in New York City, but substantial inequalities remain among New Yorkers of different economic and racial/ethnic groups.
- Poor New Yorkers, as well as African-American and Hispanic New Yorkers, bear a disproportionate burden of illness and premature death.
 - The poorest New Yorkers are 4 times more likely to report poor overall health than the wealthiest.
 - The rate of new HIV diagnoses is about 6 times as high among Blacks as among Whites.
 - Hispanic New Yorkers are more than twice as likely to have diabetes as White New Yorkers.
 - Disparities in diabetes are widening: From 1999–2001, Black New Yorkers were about 3 times as likely to die from diabetes as White New Yorkers.
- Poor health is concentrated in certain New York City neighborhoods.
 - In 2001, the life expectancy in New York City's poorest neighborhoods was 8 years shorter than in its wealthiest neighborhoods.
 - If the all-cause mortality rate in the wealthiest neighborhoods existed in the poorest neighborhoods, more than 4,000 deaths could be prevented each year.
- Factors associated with poor health, such as poor access to medical care, unhealthy behaviors, and poor living conditions, are more common among certain economic and racial/ethnic groups.
 - In every racial/ethnic group, poor New Yorkers are the most likely to not have received needed medical care in the past year.
 - Wealthy New Yorkers are about twice as likely to exercise as poor New Yorkers.
 - 94% of elevated blood lead cases in children in New York City are among African Americans, Hispanics, and Asians.
- Eliminating health disparities in New York City would save thousands of lives each year.

Introduction

Overview

Although there have been great advances in the health of New Yorkers and the U.S. population over the past century, not all groups have benefited equally. Differences in people's health may be caused by many factors, but when differences reflect social inequalities, they are referred to as *health disparities* and are of particular concern to the public health community and society as a whole.

The New York City Department of Health and Mental Hygiene and The Commonwealth Fund are committed to eliminating health disparities. This commitment supports a larger national movement, articulated in the U.S. Department of Health and Human Services' Healthy People 2010 objectives. These objectives have two overarching goals: "to improve health for society as a whole, and to eliminate health disparities among segments of the population, including differences that occur by gender, race or ethnicity, education or income, disability, geographic location or sexual orientation."

In this report, we focus on race/ethnicity and income as ways to analyze health data and identify disparities. These categories often overlap, but each has important implications to understanding and finding ways to eliminate health disparities. For example, Black and Hispanic New Yorkers are generally poorer than White New Yorkers. As a result, racial/ethnic comparisons are usually a comparison of a poorer to a wealthier group. For some health outcomes, when income is taken into account, apparent racial/ethnic differences fall away. This means that, in each income category, Whites face similar health conditions to their Black and Hispanic counterparts. For other indicators, however, the racial/ethnic gaps persist in ways not accounted for by income alone. This means that race and ethnicity influence health in ways not measured by income. Overall, the neighborhoods that experience the highest disease burdens are populated mainly by people who are Black, Hispanic, and poor.

This report is not intended to definitively explain the complex mechanisms through which poverty and race/ethnicity influence health and produce health disparities. But the report does highlight some factors that are important in understanding why illness is more common in poor, African-

American, and Hispanic communities: unequal access to health care, different balances of healthy and unhealthy behaviors, and varying social and environmental conditions.

In This Report

To understand health disparities between economic and racial/ethnic groups in New York City, it is helpful to understand the economic and racial/ethnic diversity of City residents. So, we begin the report with a social and demographic description of the City. Then, we examine health disparities across a wide range of topics, such as life expectancy, leading causes of death, mental illness and substance abuse, HIV/AIDS, obesity and diabetes, asthma, and maternal/infant health. Finally, we explore some of the social and physical conditions that influence health and health disparities.

This report could not include discussions of all types of health disparities. Inequalities in health exist among many groups, including those defined by gender, immigration status, and other social and cultural factors. Each of these disparities merits its own detailed exploration. In addition, racial/ethnic disparities as described in this report are limited to major subgroups — non-Hispanic Black or African American, non-Hispanic White, non-Hispanic Asian, and Hispanic — with populations large enough to permit meaningful statistical comparisons. For some health indicators, values for the Asian population are not shown because conclusions could not be drawn from relatively small populations. Only statistically significant, robust findings are discussed in the text. More focused attention to smaller populations will be an important next step towards a complete understanding of health disparities in New York City.

Income and Race/Ethnicity in New York City

Income and Poverty

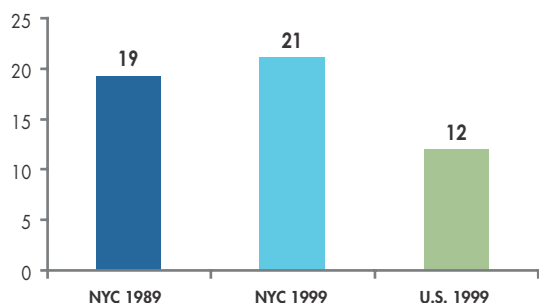
New York City residents are, on average, poorer than the national population. According to the 2000 Census, 21% of New York City residents live below the poverty line, an increase from 19% in the 1990 Census. In contrast, 12% of the U.S. population live in poverty. More than one third of New York City households had an income less than \$25,000 in 1999.

How is poverty measured? The U.S. Census defines poverty using a “set of money income thresholds that vary by family size and composition . . . If a family’s total income is less than that family’s threshold, then that family, and every individual in it, is considered poor.” This threshold is known as the “poverty line.” (For more information on how the U.S. government defines poverty, visit www.census.gov/hhes/poverty/povdef.html.)

In contrast, household income measures the amount of money earned in a household in a given year, and does not account for how many people are in the household. Though imperfect, considered together, these measures provide a picture of how well the needs of individuals and families are being met.

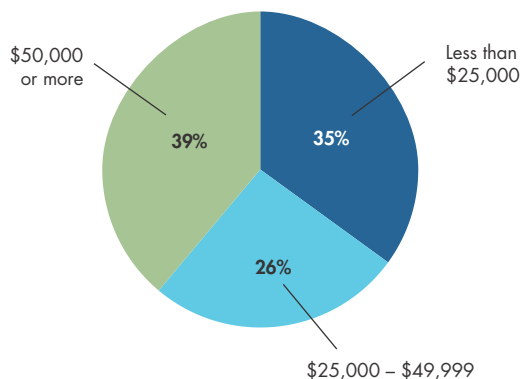
New Yorkers are nearly twice as likely as other Americans to be living in poverty

Percent living in poverty



Source: U.S. Census 2000 / NYC Department of City Planning

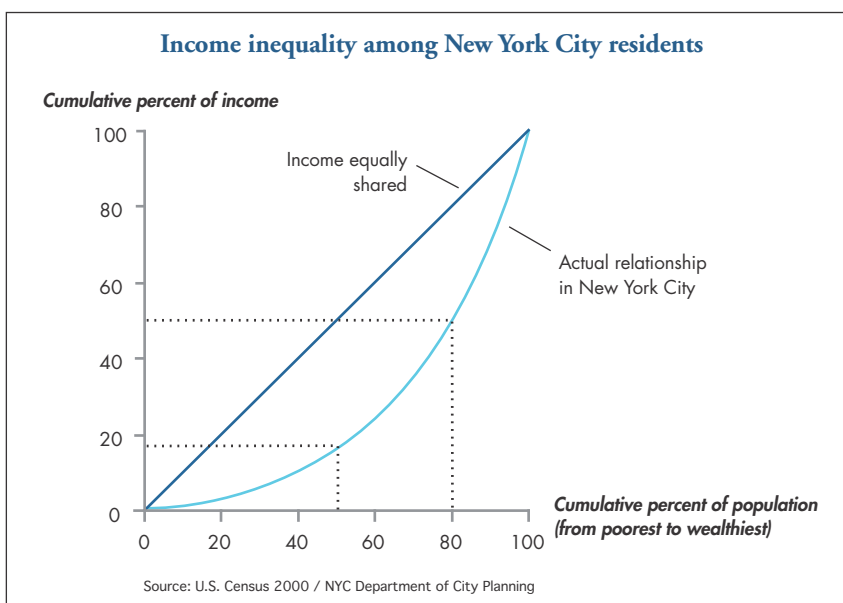
More than one third of New York City households had an income less than \$25,000 in 1999



Source: U.S. Census 2000 / NYC Department of City Planning

Poverty and health. Being poor affects health in many ways. Poverty makes it difficult to find and maintain high-quality medical care. Finding and taking advantage of opportunities for physical activity and good nutrition are harder in poor neighborhoods. Low-quality housing also exposes poor New Yorkers to environmental health risks, such as lead paint. And, low-paying jobs, unavailability of child care, and fear of crime make it difficult to maintain a safe, healthy home. All of these aspects of being poor in New York City contribute to stress and anxiety, which, in addition to being bad for people’s health, also can lead to unhealthy habits like smoking and drug and alcohol use. The relationship between poverty and health, however, is a two-way street. Poor health makes it difficult for people to achieve high education levels and to obtain and keep well-paying jobs, which, in turn, can lead to poverty. Health care costs can also directly contribute to income levels.

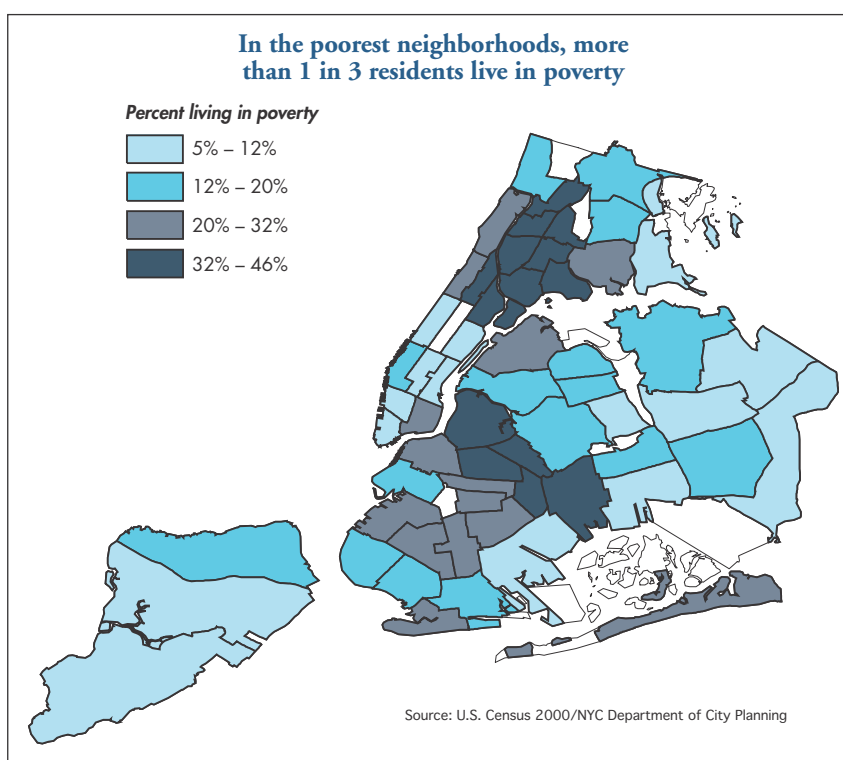
Income is not distributed equally among New York City residents — a large amount of total earned income is enjoyed by relatively few people. The diagonal line in this graph shows a situation in which income is equally distributed among the entire population. The curved line represents the actual situation in New York City: the poorest 50% of the population earn less than 20% of the City's income. In contrast, the wealthiest 20% of New Yorkers enjoy about 50% of the City's income.



Neighborhood Income

The average median household income in New York City's poorest neighborhoods was \$23,000 in 1999.

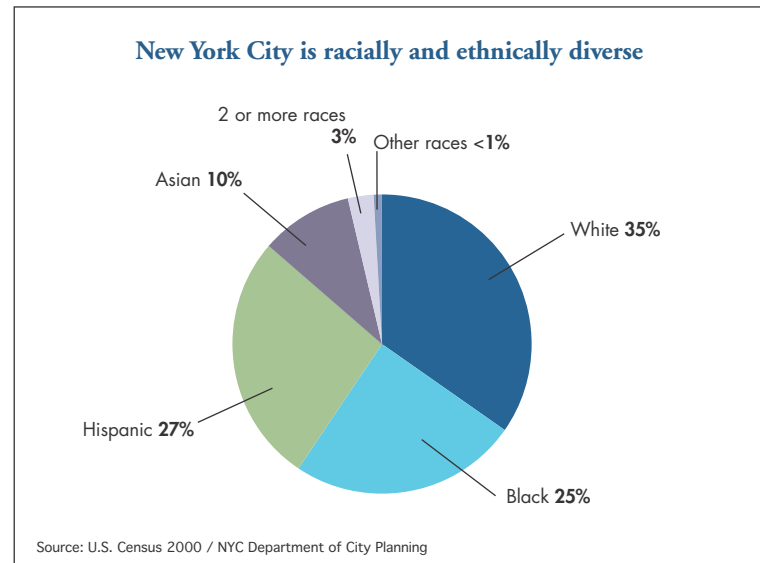
The poorest neighborhoods in New York City are in the South Bronx, East and Central Harlem, and North and Central Brooklyn, where more than 1 in 3 residents live in poverty.



What makes a neighborhood healthy? The neighborhood in which people live can have important effects on health. Healthy neighborhoods are those with civic resources such as libraries and parks, easy access to high-quality medical care, adequate and high-quality housing, and strong community connectedness. A healthy neighborhood also feels safe and has places to exercise and purchase healthy foods, such as fresh fruits and vegetables.

Race and Ethnicity

New York City is one of the most racially and ethnically diverse cities in the U.S. In 2000, 2,800,000 New Yorkers were White, 1,960,000 were Black, 2,160,000 were Hispanic, and 780,000 were Asian; 230,000 non-Hispanic people identified themselves as belonging to 2 or more races.

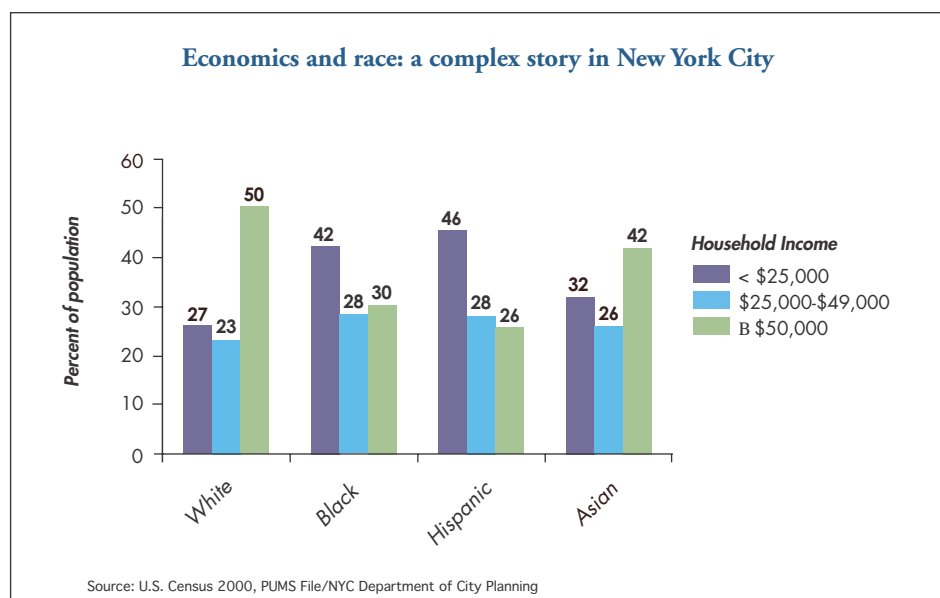


What does race/ethnicity have to do with health? Although certain racial/ethnic groups are poorer than others, economics alone does not account for the racial and ethnic disparities found in health. Historically, explanations for such disparities focused on biological differences. Diseases that have a clear genetic component, however, account for only a tiny part of racial disparities in health.

One way that race/ethnicity can influence health is through discrimination. Discrimination can result in stress and psychological trauma, leading to poor physical and mental health. Discrimination can also limit access to the quantity and quality of important services, including health care, housing, and recreational facilities. (For more information please see the Institute of Medicine report, “Unequal Treatment: Confronting Racial and Ethnic Differences in Health Care,” available at www.iom.edu/report.)

Beyond discrimination, culture and tradition also can affect health. These norms can affect behavioral choices, such as smoking or sexual practices, which, in turn, can greatly influence health.

Household income varies among racial/ethnic groups. Hispanic and Black New Yorkers are, on average, poorer than Whites and Asians.



Measuring race and ethnicity. Racial/ethnic categories are socially, not biologically, determined. Because genetics cannot distinguish among racial/ethnic groups, there is no scientific way to measure these categories. While race is generally identified by physical characteristics (such as skin color), ethnicity refers to cultural identities. In the past, surveys such as the Census required individuals to choose only one answer to the question of race. As a result, individuals often had to choose between two categories with which they identified (such as Black and White). As of 2000, however, the Census allowed people to indicate more than one race.

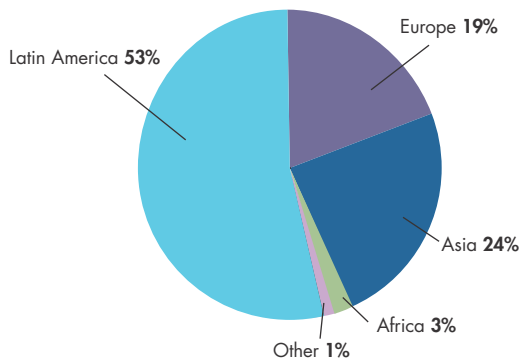
Immigration

More than 1 out of every 3 New Yorkers were born outside the United States, compared to 11% of residents nationwide. New York City has a broad mix of immigrants. Half

of New Yorkers who are foreign-born are from Latin America, but a greater proportion of Asians in New York City are foreign-born than any other racial/ethnic group.

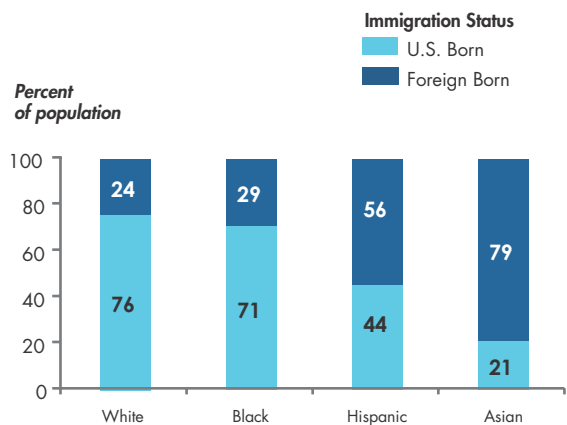
Most foreign-born New Yorkers are from Latin America

Percent of NYC foreign-born population



Source: U.S. Census 2000 / NYC Department of City Planning

Almost 4 out of 5 Asian New Yorkers were born outside the U.S.



Source: U.S. Census 2000, PUMS File/ NYC Department of City Planning

Disparities in Health

General Health

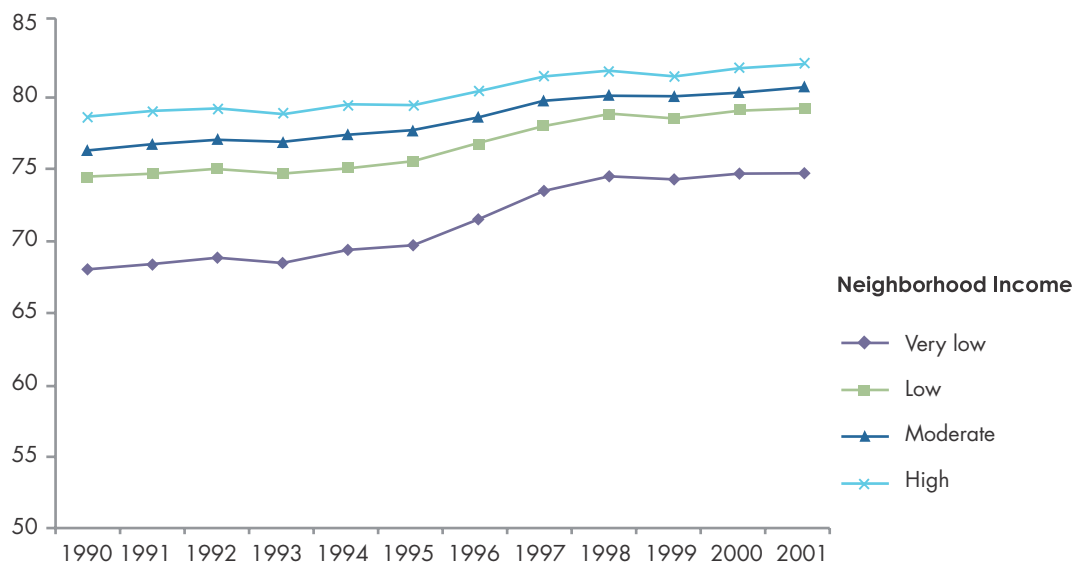
Life Expectancy

Life expectancy — the average age to which a newborn is expected to live — is a fundamental measure of a community's health. In New York City, life expectancy increased in every neighborhood income group from 1990–2001. Although gaps among income groups have narrowed, life expectancy in 2001 in the poorest neighborhoods was 8 years shorter than in the wealthiest neighborhoods.

In 2001, life expectancy in New York City's poorest neighborhoods was 8 years shorter than in its wealthiest neighborhoods.

Life expectancy varies with neighborhood income in New York City

Life expectancy at birth (years)

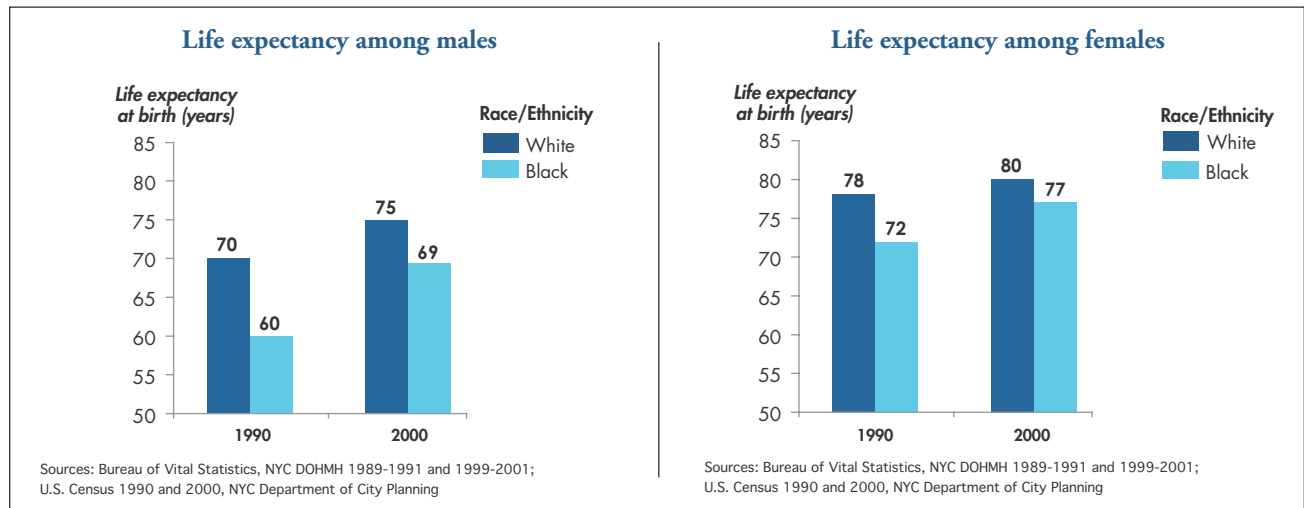


Sources: Bureau of Vital Statistics, NYC DOHMH, 1990–2001; U.S. Census 1990 and 2000/NYC Department of City Planning

Racial/ethnic disparities in life expectancy exist in New York City as well as nationwide. Among New Yorkers, Black males, on average, live 6 years less than White males, compared to a 7-year disparity nationwide. For

female New Yorkers, the difference is 3 years, compared to a 5-year disparity nationwide. This is an improvement from 1990, when, for example, Black male New Yorkers lived 10 fewer years than White males.

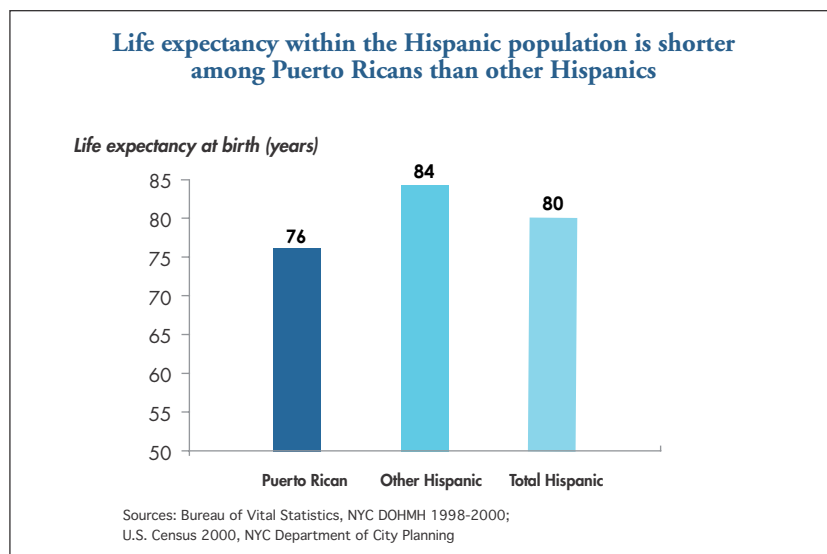
Black New Yorkers have a shorter life expectancy than White New Yorkers



A closer look at Hispanic life expectancy

It is important to understand that differences *within* racial/ethnic communities also exist. In New York City's Hispanic communities, for example, great disparities

exist between Puerto Rican and other Hispanic groups. In 2000, Hispanics of non-Puerto Rican origin had, on average, a longer life expectancy than Puerto Rican New Yorkers.



Leading Causes of Death

Residents of New York City's poorest neighborhoods consistently have higher mortality rates from almost all diseases, compared with residents of its wealthiest neighborhoods. For example, deaths due to AIDS and assault/homicide are 6 times higher in the poorest neighborhoods. For conditions such as liver disease, diabetes, and high blood pressure, the disparity is 3-fold or higher. Only suicide is more common in wealthier communities.

More than 4,000 deaths would be prevented if the all-cause mortality rate in the poorest neighborhoods were lowered to the rate in the wealthiest neighborhoods.

For most causes of death in New York City, death rates are higher in low-income neighborhoods than in high-income neighborhoods

	Lowest-income neighborhoods (deaths per 100,000) in 2001	Highest-income neighborhoods (deaths per 100,000) in 2001	Lowest-income neighborhoods higher by . . .	Highest-income neighborhoods higher by . . .
All causes	985	619	1.6 times	
Heart Disease	324	266	1.2 times	
Cancer	204	156	1.3 times	
AIDS	56	9	6.2 times	
Influenza and Pneumonia	49	30	1.6 times	
Diabetes	43	13	3.3 times	
Stroke	35	20	1.8 times	
Chronic Lower Respiratory Disease/Emphysema	30	19	1.6 times	
High Blood Pressure	23	7	3.3 times	
Unintentional Injuries	23	10	2.3 times	
Assault/Homicide	17	3	5.7 times	
Liver Disease/Cirrhosis	15	4	3.8 times	
Kidney Disease	15	7	2.1 times	
Suicide	4	6		1.5 times

All rates are age-adjusted.

Sources: Bureau of Vital Statistics, NYC DOHMH, 2001; U.S. Census 2000/NYC Department of City Planning

Years of Potential Life Lost

Premature death can be defined as death before 75 years. One way of measuring “premature” death is to calculate the difference between 75 years and the age that a person dies; this is known as “Years of Potential Life Lost.” The rate of premature death is more than twice

as high in poor neighborhoods than in wealthy neighborhoods. And, even among those who die prematurely, people in poorer neighborhoods die younger: For every premature death, 5 more years of life are lost in poor neighborhoods than in wealthy neighborhoods.

Premature death impacts the poor more than the wealthy

	Lowest-income neighborhoods	Highest-income neighborhoods
Percent of deaths that are premature (<75 years)	62%	40%
Total years of potential life lost	153,599	92,074
Total years of potential life lost per 100,000 population	11,385	4,640
Total years of potential life lost per premature death	22	17

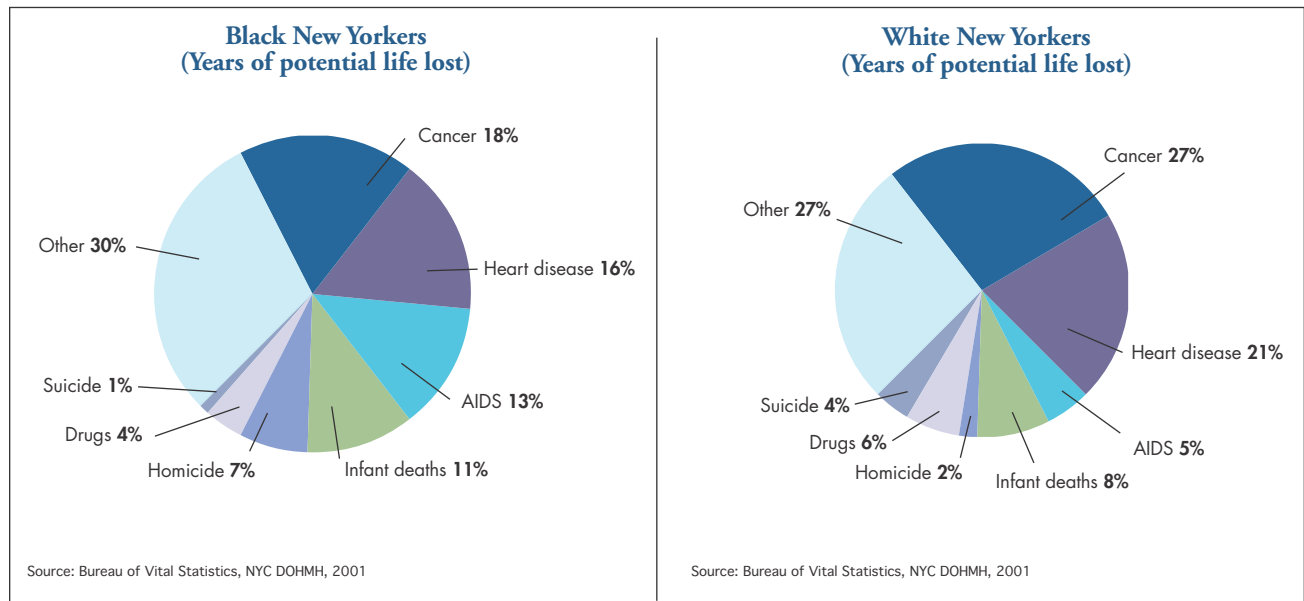
Rates of premature deaths are age-adjusted.

Sources: Bureau of Vital Statistics, NYC DOHMH, 2001; U.S. Census 2000/NYC Department of City Planning

Some conditions tend to claim lives earlier than others, and disparities exist between racial groups. While among Black New Yorkers one fifth of all years of

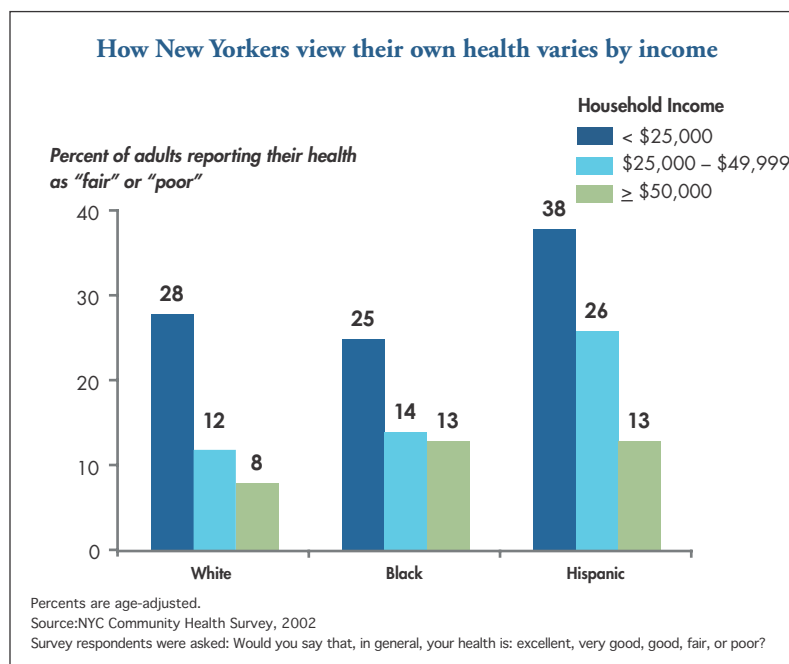
potential life lost are due to AIDS and violence, these causes make up only 7% of the years of potential life lost among White New Yorkers.

Causes of premature death vary by racial group



Self-Reported Health

A common way of measuring overall health is to ask individuals to rate their own health, ranging from “excellent” to “fair” to “poor.” On average, New Yorkers with lower incomes report worse health than those with higher incomes. Poor Hispanic New Yorkers report the worst health of all.



Mental Health

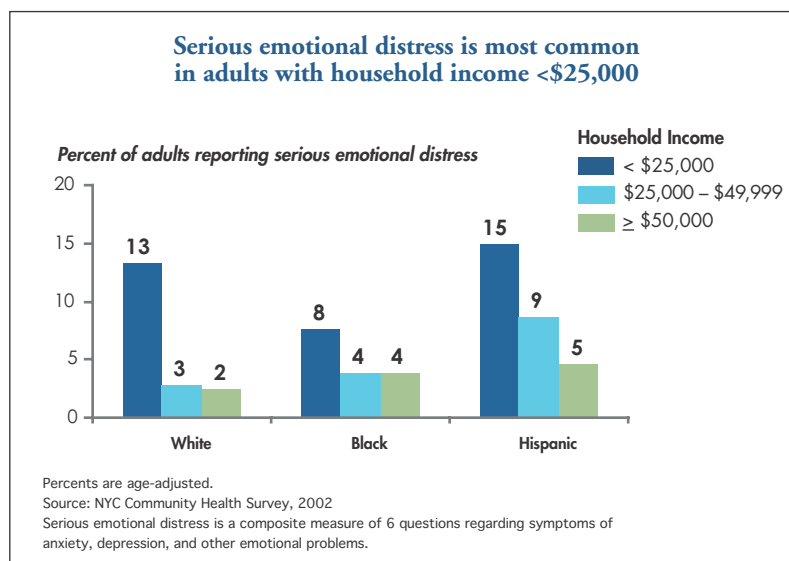
Mental health problems are, generally, more common among poorer New Yorkers than wealthier New Yorkers. For example, those with the lowest income levels are 2 to 6 times more likely to experience serious emotional distress than those with the highest incomes. Among racial/ethnic groups, Hispanic New Yorkers report the highest levels of emotional distress.

A tale of two neighborhoods: mental health in the Bronx

Percent of adults experiencing serious emotional distress:

Fordham and Bronx Park	13%
Kingsbridge and Riverdale	3%

Percents are age-adjusted.
Source: NYC Community Health Survey, 2002

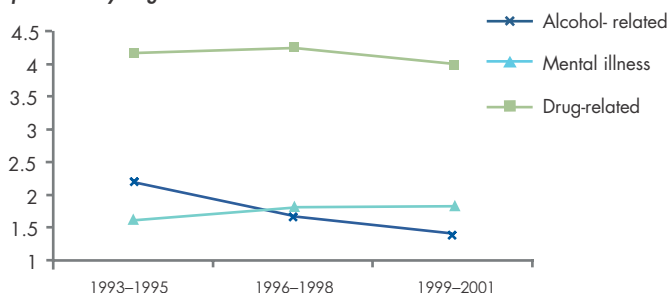


Alcohol Use, Drug Use, and Mental Illness

Hospitalizations due to alcohol use, drug use, and mental illness have been higher in poor neighborhoods than in wealthy neighborhoods for most of the decade. This graph shows that, in the early 1990s, people who lived in New York City's poorest neighborhoods were 4.2 times more likely to be hospitalized for drug use than those who lived in the wealthiest areas. At the end of the decade, this disparity had not changed much. Similarly, the disparities in alcohol-related and mental illness hospitalizations have not changed drastically over time. The disparity in hospitalizations due to mental illness, however, is increasing.

Hospitalization rates for mental illness and substance abuse are higher among the poor

Ratio of adult hospitalization rates, poor:wealthy neighborhoods



Rates are age-adjusted.

Sources: NYS DOH Statewide Planning and Research Cooperative System; U.S. Census 1990 and 2000/NYC Department of City Planning

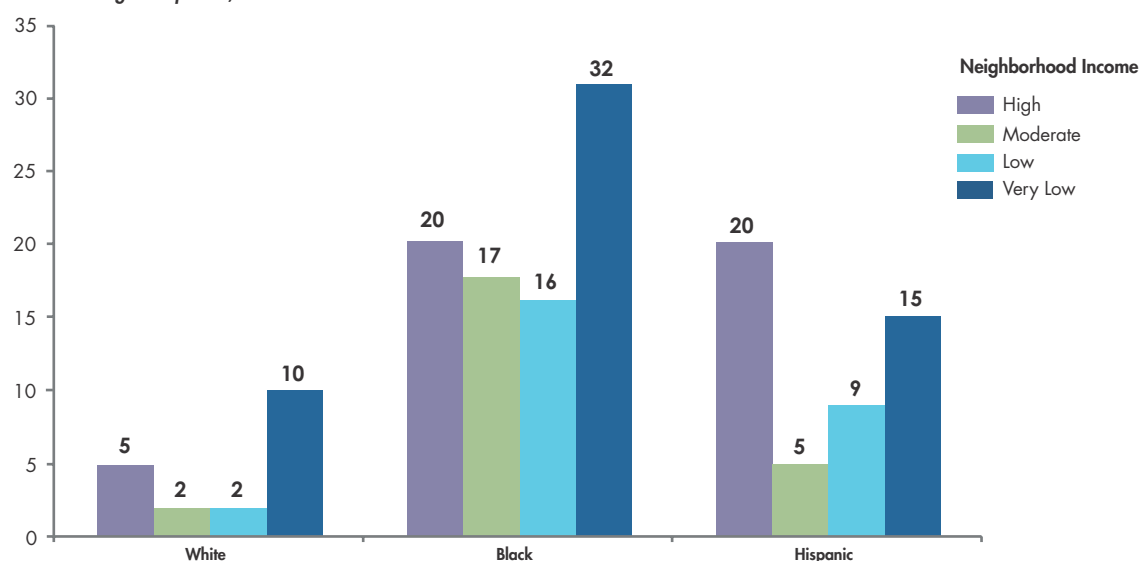
HIV/AIDS

In 2001, those living in the poorest *and* wealthiest neighborhoods were more likely than those living in other neighborhoods to have new HIV diagnoses in all racial/ethnic groups. Overall, African-American New

Yorkers had the highest rates of new diagnoses. These differences may be due to differences in disease rates and varying testing practices among groups.

Both poor and wealthy neighborhoods have high rates of new HIV diagnoses; overall, Black New Yorkers have the highest rates

New HIV diagnoses per 10,000 adults

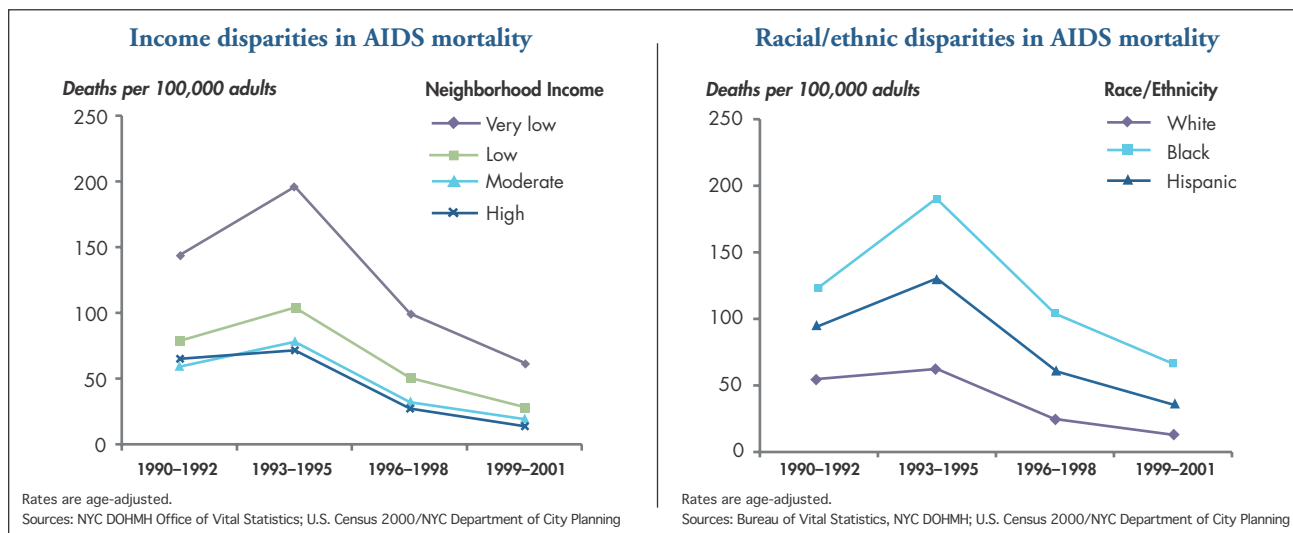


Sources: HIV Surveillance and Epidemiology Program, NYC DOHMH, 2001; U.S. Census 2000/NYC Department of City Planning

Thanks to the availability of life-saving drugs, mortality due to AIDS has been declining. Substantial disparities, however, persist between neighborhoods and among

racial/ethnic groups. African-American New Yorkers and those who live in very low-income neighborhoods are the most likely to die from AIDS.

Mortality due to AIDS is declining in all groups . . . but disparities persist

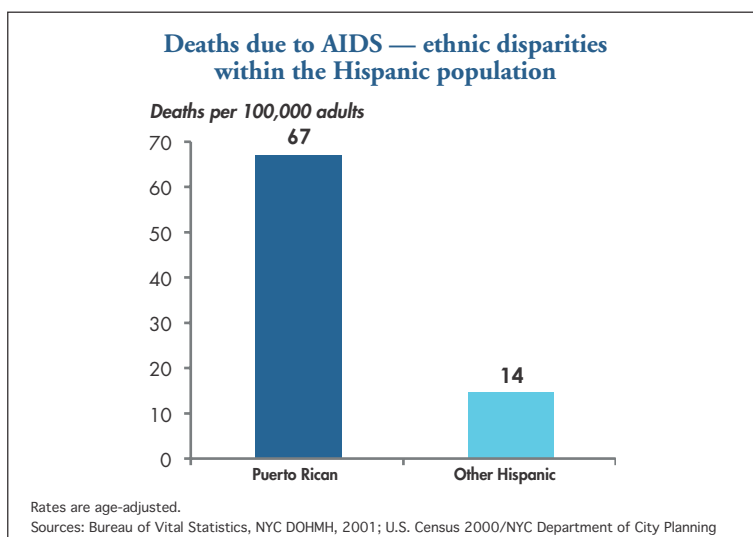


Although HIV/AIDS affects all neighborhoods, it affects them differently. For example, even though the rate of new HIV diagnoses is higher in Chelsea/Clinton (Manhattan) than in Crotona/Tremont (Bronx), the AIDS death rate in the South Bronx is higher. This is likely due to differential access to life-prolonging medical care.

A tale of two neighborhoods: HIV		
	Chelsea and Clinton	Crotona and Tremont
New HIV diagnoses (per 100,000 population)	227	174
Mortality rate (per 100,000 population)	29	59

Sources: HIV Surveillance and Epidemiology Program, NYC DOHMH, 2001;
Bureau of Vital Statistics, NYC DOHMH, 2001

Among Hispanic New Yorkers, the death rate due to AIDS was nearly 5 times higher among Puerto Ricans in 2001 than other groups.



Smoking

Smoking starts young in New York City, and teen smoking varies with race/ethnicity. White boys and girls smoke the most among high-school adolescents. White girls are 2 to 4 times more likely to smoke than other adolescent girls.

With increasing age, African-American New Yorkers smoke more and White New Yorkers smoke less. Although at younger ages White New Yorkers are more likely to smoke than African-American New Yorkers, smoking rates are similar between the two groups at older ages.

A tale of two neighborhoods: smoking in Manhattan

Percent of adults who smoke:

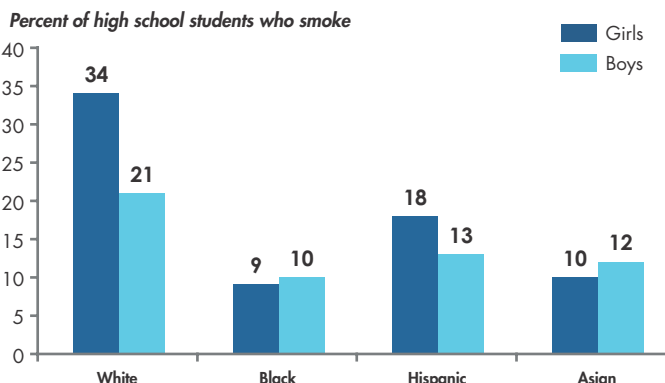
East Harlem	22%
Upper East Side and Gramercy Park	15%

Percents are age-adjusted.

Source: NYC Community Health Survey, 2002

Overall, White New Yorkers are more likely to smoke than Black and Hispanic New Yorkers, but smoking also varies among income levels in the White and Black populations. While about 1 in 3 White New Yorkers with low incomes report smoking, only 1 in 5 of those with high incomes do. Among Black New Yorkers, smoking drops from 1 in 4 to about 1 in 7 in these income groups.

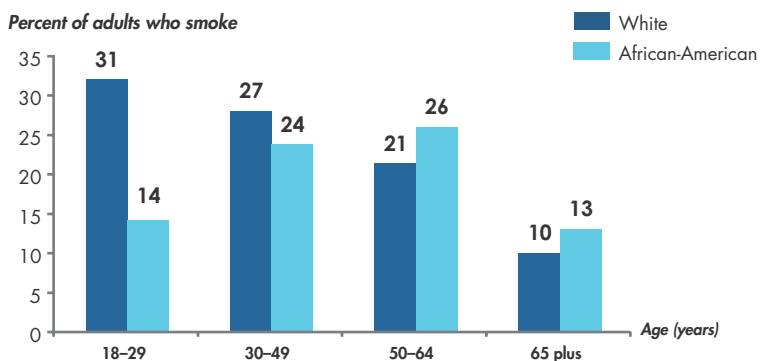
Smoking among high school students — disparities by gender and race/ethnicity



Source: Youth Risk Behavior Surveillance System, CDC, 2003

Survey respondents were asked: During the past 30 days, how many days did you smoke cigarettes?

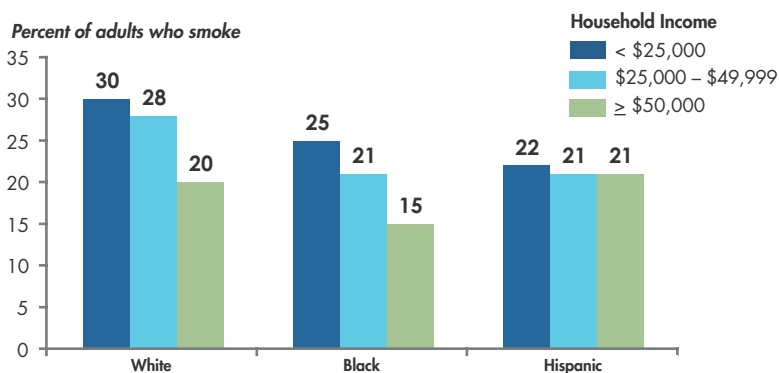
Young White New Yorkers smoke more than young Black New Yorkers, but differences disappear at older ages



Source: NYC Community Health Survey, 2002

Survey respondents were asked: Do you now smoke cigarettes every day, some days, or not at all?

Current smoking — racial/ethnic disparities and income disparities



Percents are age-adjusted.

Source: NYC Community Health Survey, 2002

Survey respondents were asked: Do you now smoke cigarettes every day, some days, or not at all?

Exercise, Obesity, and Diabetes

Poor nutrition and lack of physical activity can lead to obesity and diabetes. Poorer New Yorkers are less likely to exercise, regardless of race/ethnicity.

Despite the exercise patterns shown above, disparities in obesity exist more among racial/ethnic groups than income levels. Black and Hispanic New Yorkers of all income levels are more obese than White New Yorkers.

A tale of two neighborhoods: obesity in Queens

Percent of adults who are obese:

Rockaways	22%
Ridgewood	12%

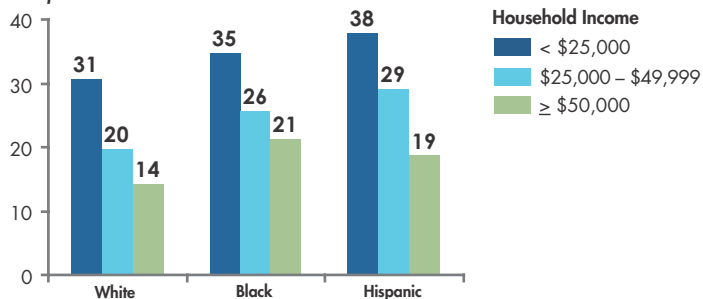
Percents are age-adjusted.

Source: NYC Community Health Survey, 2002

Among children, racial/ethnic disparities exist as well. Obesity is most common among Hispanic elementary school children, but it is common in all groups.

Income disparities in exercise rates

Percent of adults not exercising
in the past month



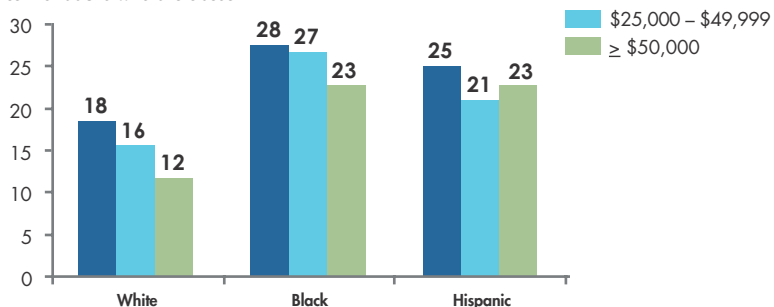
Percents are age-adjusted.

Source: NYC Community Health Survey, 2002

Survey respondents were asked: During the past 30 days, other than your regular job, did you participate in any physical activities or exercises, such as running, calisthenics, golf, gardening, or walking for exercise?

About 1 in 4 Black and Hispanic New Yorkers are obese

Percent of adults who are obese



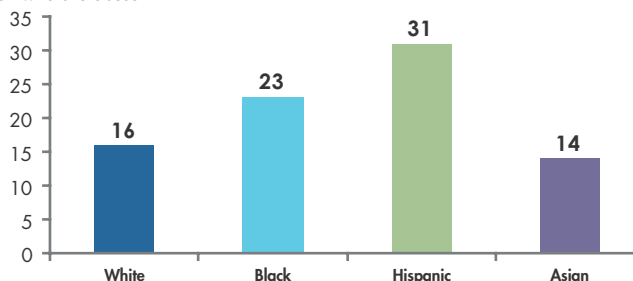
Percents are age-adjusted.

Source: NYC Community Health Survey, 2002

Obesity was defined as body-mass index >30, calculated from respondents' height and weight

Obesity in NYC elementary schools is highest among Hispanic children — nearly 1 in 3

Percent of elementary school
children who are obese



Source: Survey of Elementary School Children, NYC DOHMH and DOE 2003

Obesity was defined by body-mass index, calculated from respondents' height and weight

New York City is experiencing an epidemic of diabetes; cases have doubled over the past decade. As would be expected from high rates of obesity among African Americans and Hispanics, diabetes is most common among these groups. Disparities also exist between low- and high-income groups, particularly in the White and African-American populations.

Racial disparities in diabetes death rates are widening: In 2001, mortality was almost 3 times higher for Black New Yorkers than for White New Yorkers.

Death rates from diabetes are increasing and racial/ethnic disparities are widening. Black New Yorkers are the most likely to die from diabetes.

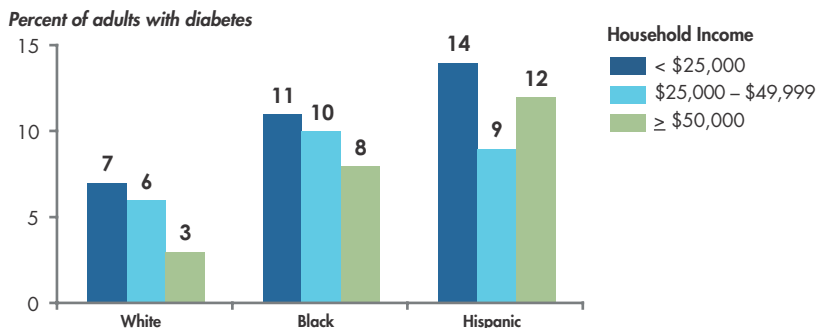
Among Hispanic New Yorkers, Puerto Ricans are much more likely to die from diabetes than other Hispanics.

A tale of two neighborhoods: diabetes in Upper Manhattan

Percent of adults with diabetes:
Washington Heights and Inwood 12%
Upper West Side 4%

Percents are age-adjusted.
Source: NYC Community Health Survey, 2002

Black and Hispanic New Yorkers are most likely to have diabetes, and income disparities exist in all racial/ethnic groups

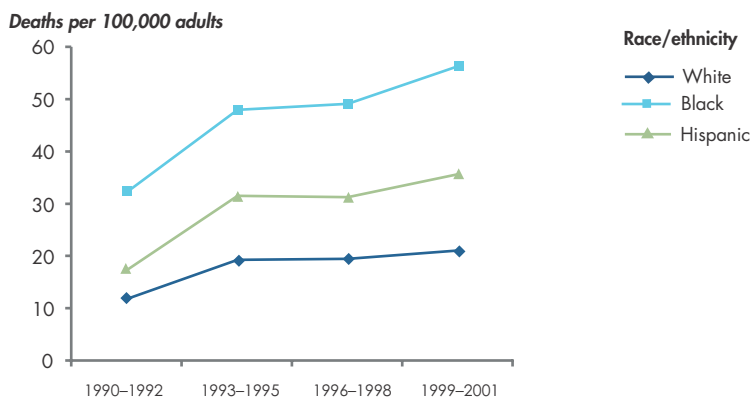


Percents are age-adjusted.

Source: NYC Community Health Survey, 2002

Survey respondents were asked: Have you ever been told by a doctor that you have diabetes?

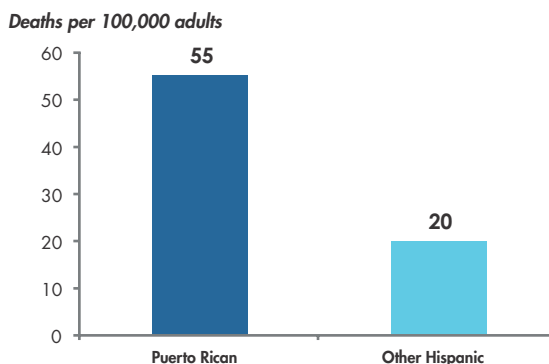
Deaths due to diabetes — racial/ethnic disparities are widening



Rates are age-adjusted.

Sources: Bureau of Vital Statistics, NYC DOHMH; U.S. Census 1990 and 2000/NYC Department of City Planning

Death due to diabetes — ethnic disparities within the Hispanic population

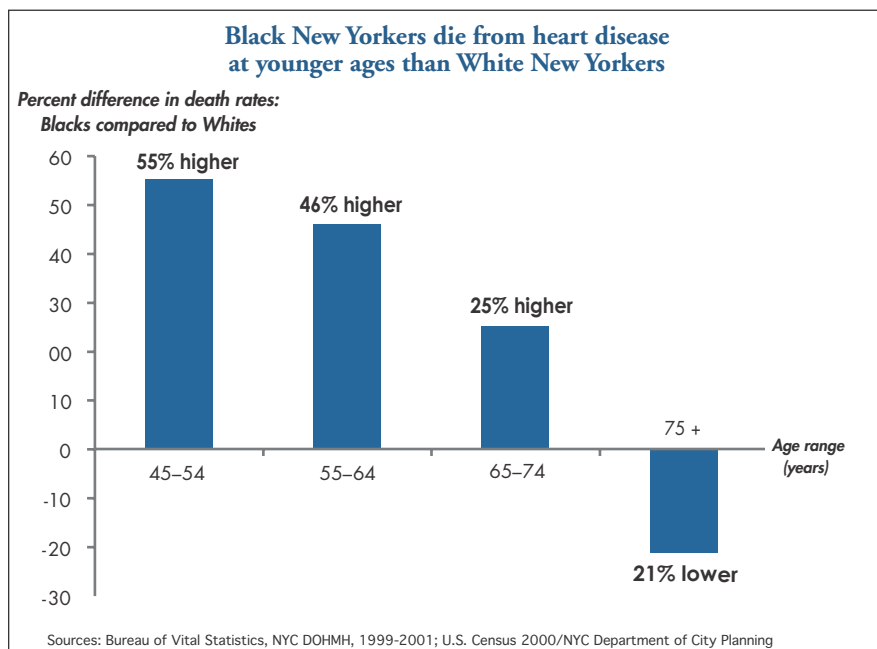


Rates are age-adjusted.

Sources: Bureau of Vital Statistics, NYC DOHMH, 2001; U.S. Census 2000/NYC Department of City Planning

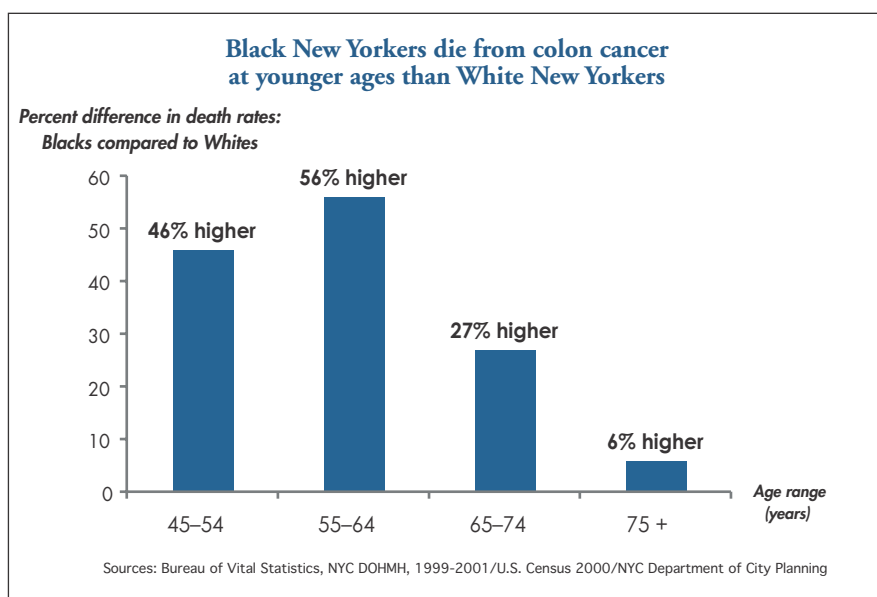
Cardiovascular Disease

Black New Yorkers die at younger ages from heart disease (New York City's biggest killer) than White New Yorkers. For example, while the death rate among those 45–54 years old is 55% higher for Blacks than Whites, this difference decreases as age increases. Among those 75 years or older, the rate is 21% higher for Whites than Blacks. Similar patterns are seen between people living in neighborhoods with low- versus high-income levels. In younger age groups, death rates due to cardiovascular disease are greater among those living in poorer areas. After 75 years of age, these differences decrease considerably.



Cancer

The same pattern is evident in cancer survival. Black New Yorkers who die from colon cancer, for example, do so at younger ages than White New Yorkers, which may indicate missed opportunities for early detection and treatment. While the death rate among those 45–54 years old is 46% higher for Blacks than Whites, this difference decreases as age increases. Among those 75 years of age and older, the death rate among Blacks is only 6% higher than that among Whites. Again, similar patterns are seen between colon cancer deaths and neighborhood income level. Rates of colon cancer mortality are higher among those living in low-income areas compared with high-income areas at younger ages, but those differences are smaller at older ages.

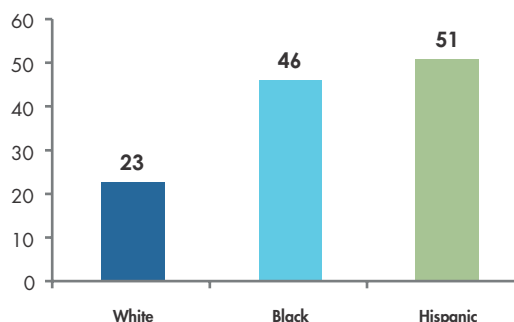


Asthma

Large racial/ethnic disparities exist in asthma control. Among adults with asthma, Black and Hispanic New Yorkers are more likely to go to the emergency department for care (which may indicate poor management of the condition) than White New Yorkers.

Black and Hispanic New Yorkers are more than twice as likely as Whites to use emergency care for asthma

Percent of adults with asthma visiting the emergency department in the past year



Percents are age-adjusted.

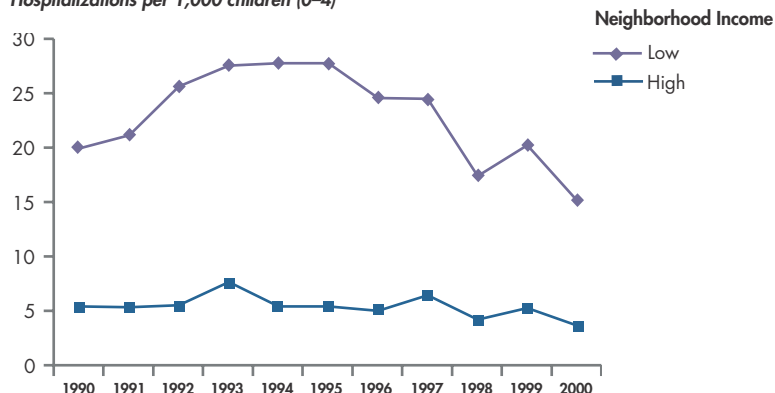
Source: NYC Community Health Survey, 2002

Survey respondents were asked: Over the past 12 months, how many times did you visit the emergency room or urgent care center because of asthma?

Among children, there have been large income disparities in asthma hospitalizations for the past decade. Although the hospitalization rate for children living in poor neighborhoods has declined in recent years, these children were still 3 times more likely to be hospitalized than children living in wealthy neighborhoods in 2000.

Children in low-income neighborhoods are more likely to be hospitalized for asthma than children in high-income neighborhoods

Hospitalizations per 1,000 children (0-4)

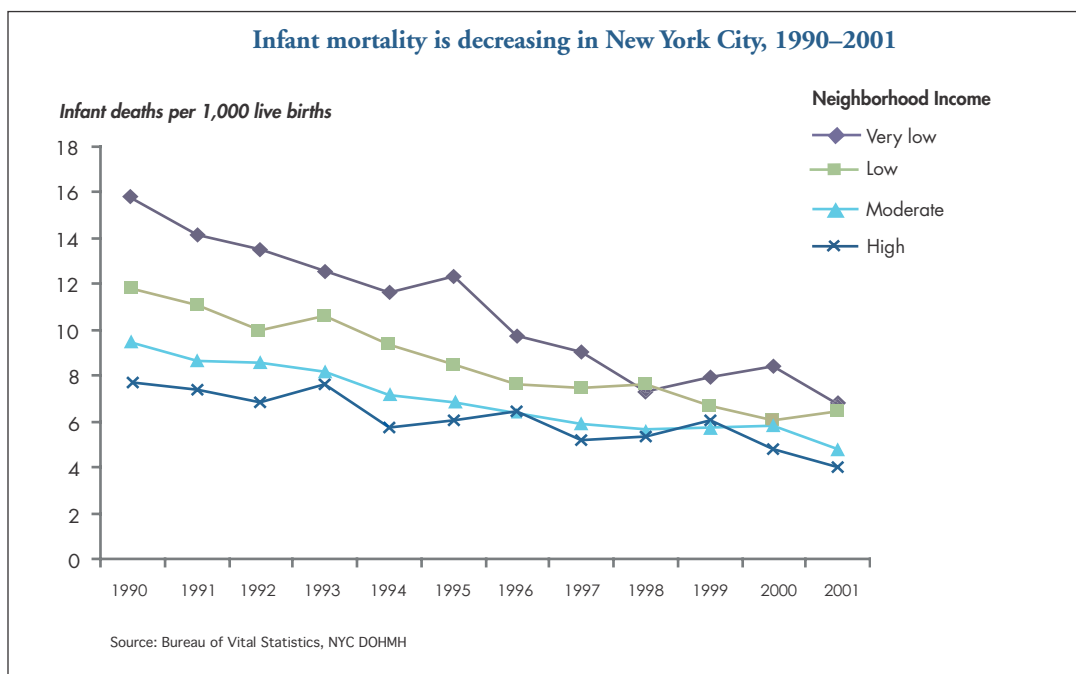


Sources: NYS DOH, Statewide Planning and Research Cooperative System, 2000; U.S. Census, 1990 and 2000/ NYC Department of City Planning

Infant and Maternal Health

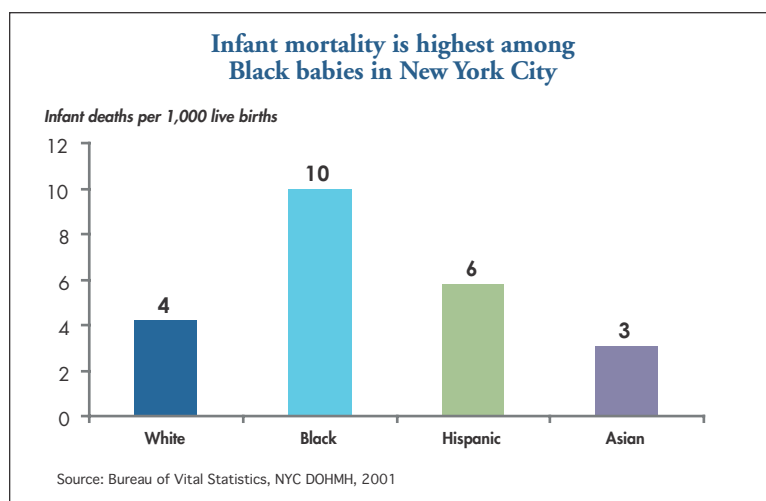
Indicators of maternal and infant health, such as infant mortality, are barometers of the overall health of a community. Infant deaths have been decreasing in all

income groups, but they have been declining most sharply among the poorest New Yorkers.



If the infant mortality rate among African Americans decreased to that of Whites, nearly 200 fewer babies would die each year.

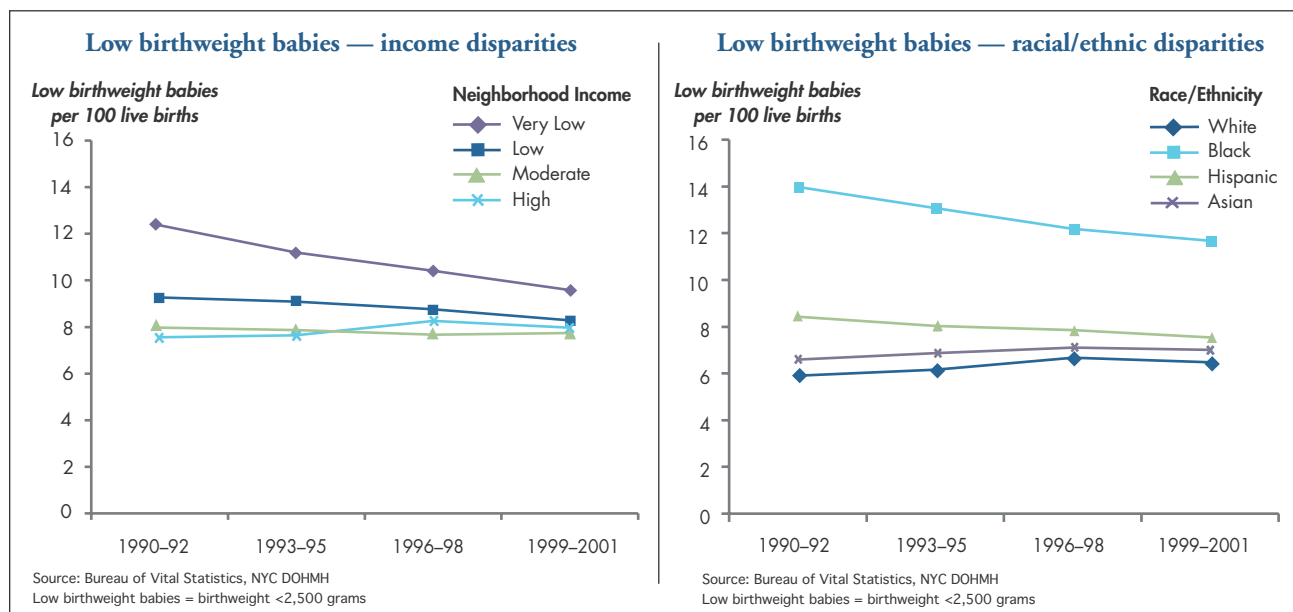
Despite these improvements, racial/ethnic disparities persist in infant mortality. The infant mortality rate of African-American babies is 2 to 3 times that of Whites, Hispanics, and Asians. If the infant mortality rate among African Americans decreased to that of Whites, nearly 200 fewer babies would die each year.



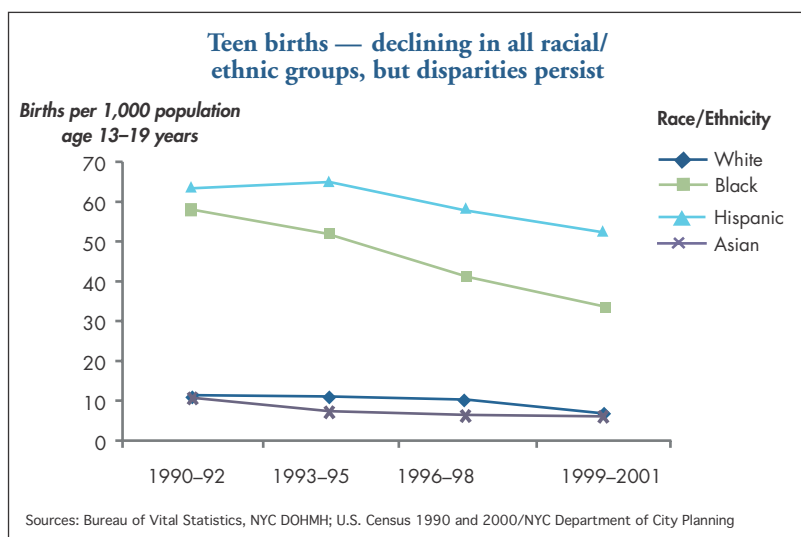
Since low birthweight is a risk factor for infant death, the narrowing disparity in infant mortality may be due to the decrease in low birthweight babies among those in the poorest neighborhoods. The reasons for this decline are not clear, but may include changes in

lifestyle and pregnancy choices, as well as advances in obstetrical care. However, low birthweight is still much more common among Black newborns than other infants in New York City.

New Yorkers who are poor or Black have higher rates of low-birthweight babies



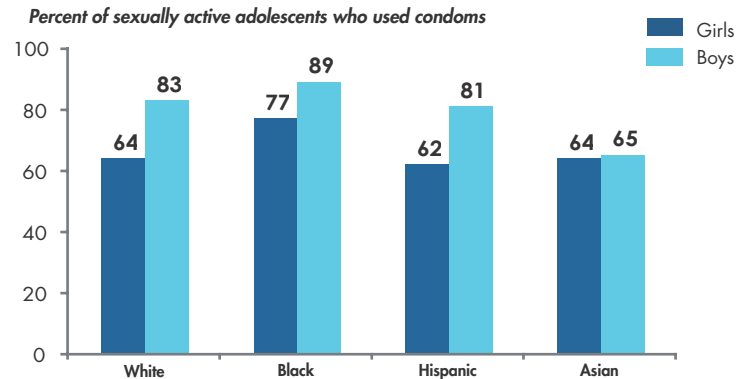
Although not all teen births are unwanted, they can present many difficulties to adolescents and their families, and they indicate less safe sexual practices among young people. Births to teens are more common among Black and Hispanic girls than White and Asian girls. However, the rate of teen births is declining more rapidly among Black than Hispanic girls. In 1999–2001, the rate of teen births was more than 7 times higher among Hispanics than among Whites.



Health Behaviors Among Adolescents

Disparities exist in safe sexual practices among adolescents. Hispanic girls are less likely than African-American girls to report using a condom during their last sexual intercourse.

Condom use among high school students who are sexually active — racial/ethnic disparities

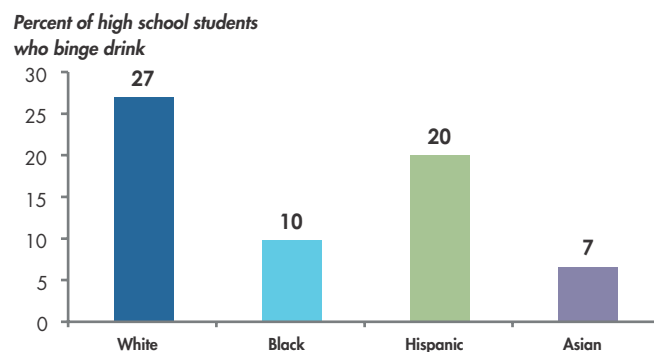


Source: Youth Risk Behavior Survey, CDC 2003

Survey respondents were asked: The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy?

White high school students are more likely than any other racial/ethnic group to binge drink (drink 5 or more drinks within “a couple of hours”). Hispanic students are more likely than Black or Asian students to binge drink.

White adolescents have the highest prevalence of binge drinking

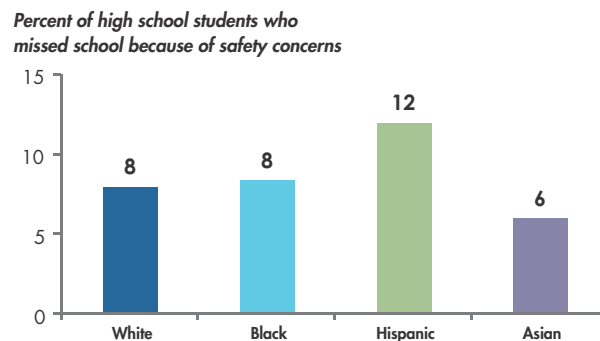


Source: Youth Risk Behavior Survey, CDC, 2003

Survey respondents were asked: Have you had 5 or more drinks of alcohol in a row; that is, within a couple of hours on 1 or more of the past 30 days?

Hispanic adolescents are the most likely to have missed school because they feel unsafe. They are one-and-a-half times more likely than White or African-American students, and 2 times more likely than Asian students, to miss school for this reason.

Hispanic adolescents are the most likely to miss school for safety reasons



Source: Youth Risk Behavior Survey, CDC, 2003

Respondents were asked: Did you not go to school on 1 or more of the past 30 days because you felt unsafe at school or on your way to or from school?

The Social and Physical Environment

Health and health behaviors are influenced by social and physical environments. Economic or racial/ethnic disparities in environmental factors, such as access to health

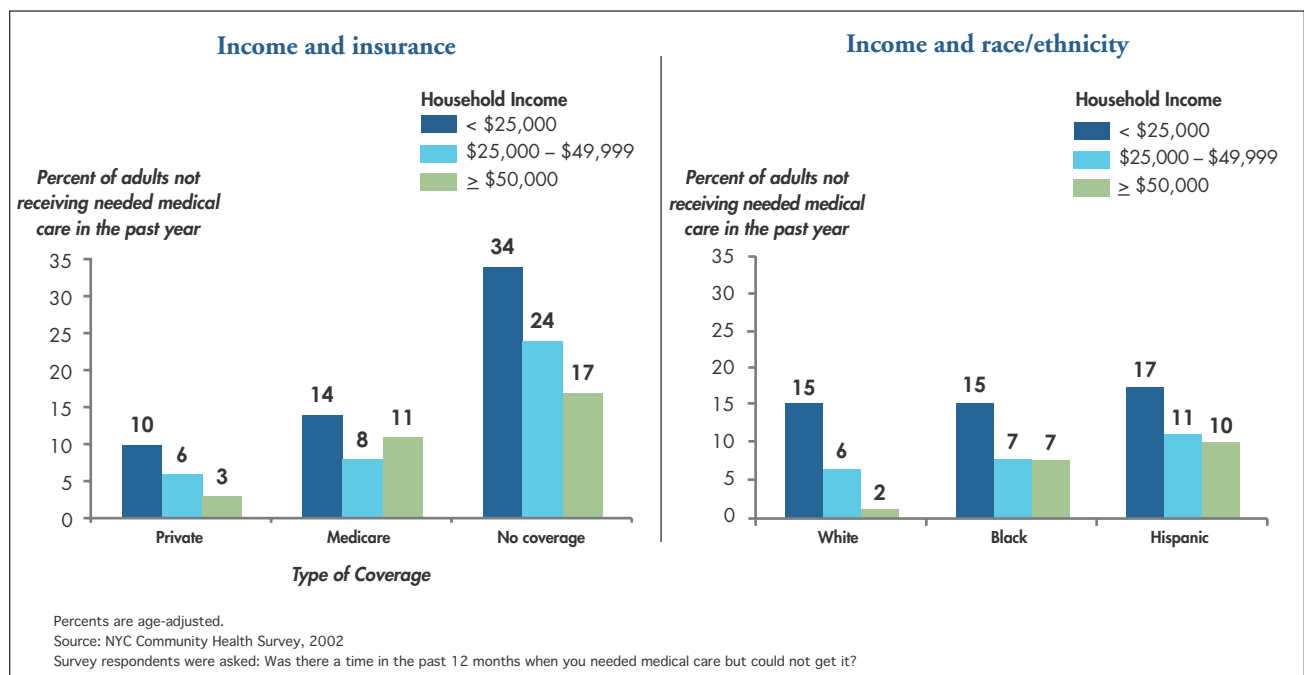
care and housing conditions, can therefore be expected to produce disparities in health.

Access to Medical Care

New Yorkers without health coverage are the most likely to not receive medical care. In addition, poor New Yorkers have more trouble accessing health care than wealthy New Yorkers, even among those with the same type of health coverage. For example, among those with no coverage, the poorest New Yorkers are twice as likely

to not receive needed medical care as the wealthiest. Similarly, in every racial/ethnic group, poor New Yorkers are the most likely to not receive needed medical care. However, among Hispanics, even the wealthiest group is 5 times more likely than comparable Whites to not receive needed medical care.

Poor New Yorkers have the most difficulty accessing health care



A tale of two neighborhoods: access to health care in Brooklyn

Percent of adults not receiving needed medical care in the past year:

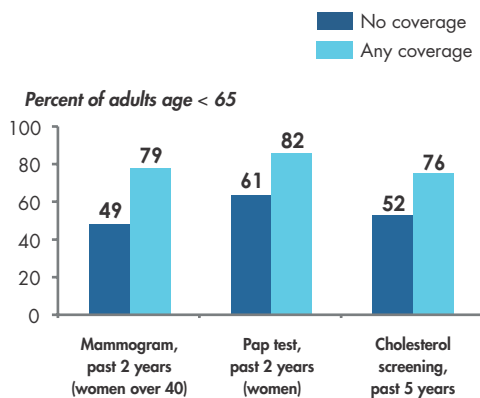
Central Brooklyn (Bedford-Stuyvesant, Crown Heights)	14%
Northwest Brooklyn (Brooklyn Heights, Park Slope)	5%

Percents are age-adjusted.
Source: NYC Community Health Survey, 2002

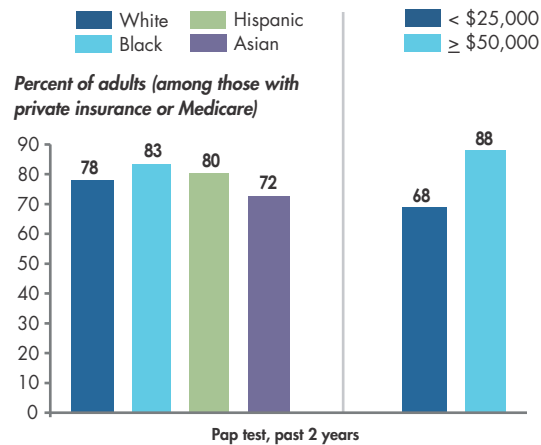
People without health coverage are less likely to receive preventive care than those with coverage. However, even among those with private health insurance or Medicare, racial/ethnic and income disparities exist.

Asian women are less likely than Black women to obtain pap tests, and poor New Yorkers receive fewer pap tests than people with higher incomes.

Health coverage improves but does not guarantee preventive services



Percents are age-adjusted. Source: NYC Community Health Survey, 2002
Please see technical notes for descriptions of the questions that led to these results.



Percents are age-adjusted. Source: NYC Community Health Survey, 2002
Please see technical notes for descriptions of the questions that led to these results.

Although those with private insurance are more likely than those with no coverage to have a regular health care provider, low-income individuals in both groups are the least likely to have one.

Similarly, among both African-American and White New Yorkers, those with lower incomes are less likely to have a regular health care provider than those with higher incomes.

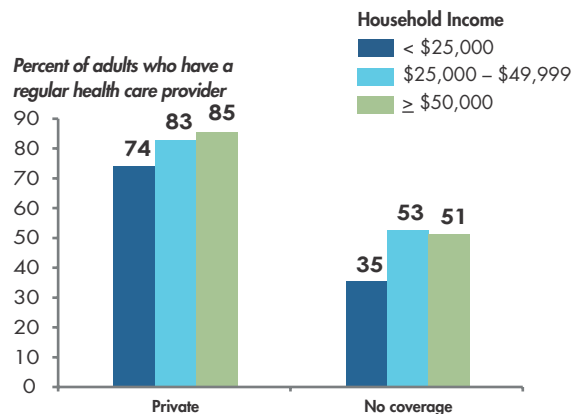
A tale of two neighborhoods: access to care in Staten Island

Percent of adults without a regular health care provider:

North Island	21%
South Shore	12%

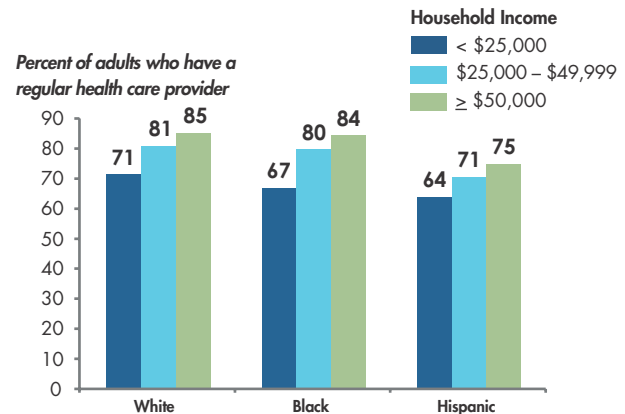
Percents are age-adjusted.
Source: NYC Community Health Survey, 2002

Low-income New Yorkers without coverage are the least likely to have a regular health care provider



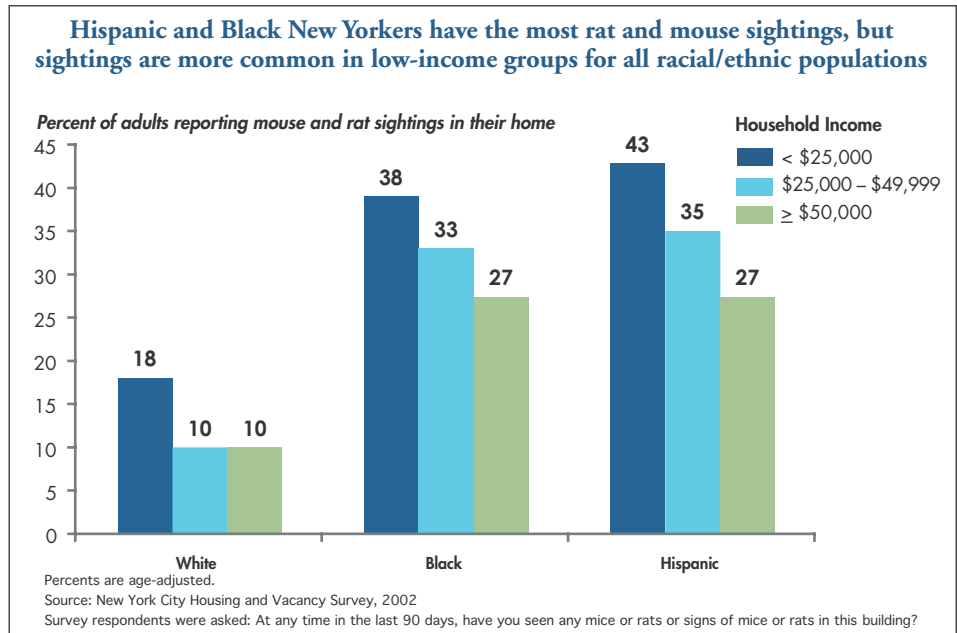
Percents are age-adjusted. Source: NYC Community Health Survey, 2002
Survey respondents were asked: Do you have one person you think of as your personal doctor or health care provider? If no: Is there more than one, or is there no person who you think of?

Low-income New Yorkers in every racial group are the least likely to have a regular health care provider



Housing Conditions

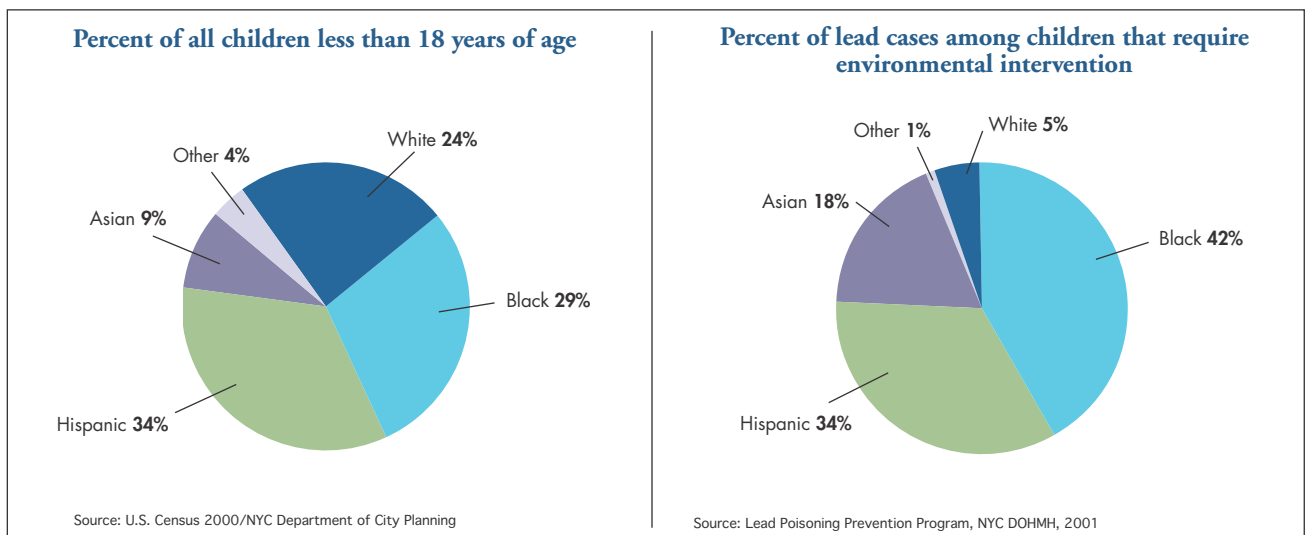
Housing conditions affect health, and housing disparities exist among racial/ethnic groups and among income groups. For example, Black and Hispanic New Yorkers are more likely to report rodents in their homes than are White New Yorkers. In all racial/ethnic groups, those with lower income levels are more likely than those with higher income levels to report mouse and rat sightings.



Another hazardous housing condition is exposure to lead paint. There have been large reductions in lead poisoning in recent years, but many children are still exposed to dangerous levels of lead. In 2001, African-American and Asian children were disproportionately more likely to have levels of lead in their blood that warranted environmental intervention. While African-American children, for example, represent 29% of all children in New York City, they comprise 42% of all childhood cases of elevated lead.

94% of elevated blood lead cases in New York City children are among African Americans, Hispanics, and Asians.

Black and Asian children have disproportionately high levels of lead poisoning



Conclusions

As this report shows, the burden of illness and death among New Yorkers is connected to poverty and race/ethnicity. Moreover, conditions that influence health, such as access to health care and quality of housing, are related to these factors as well. Regardless of the exact mechanisms through which poverty and race/ethnicity affect health, the disparities are striking. The key question, then, is: How can individual New Yorkers, health care providers, community organizations, advocacy groups, and government agencies use this information to improve health and reduce disparities?

There are no easy answers to this question. Acknowledging that social conditions profoundly affect health forces us to also acknowledge that the challenge of reducing disparities is daunting. Nevertheless, in many ways, the information in this report can be used to move us closer to the goal of health equity:

- 1 **Expand concern and responsibility for public health beyond the health care and public health communities.** Health is affected by more than genetics and medical care. Education, housing, parks, employment, welfare, social equity, and economic development are all important for health, and health disparities cannot be addressed successfully without progress in, and collaboration across, these fields. As the Healthy People 2010 guidelines state: “. . . communities, States and national organizations will need to take a multidisciplinary approach to achieving health equity — an approach that involves improving health, education, housing, labor, justice, transportation, agriculture, and the environment, as well as data collection itself.”
- 2 **Combine a multidisciplinary approach with traditional, proven public health strategies.** Relying *solely* on improved social and economic conditions to reduce health disparities is unrealistic. Programs and services aimed directly at particular health problems can be highly effective and are absolutely necessary. Not only can addressing specific issues (e.g., HIV, diabetes, drug use, depression, and smoking) improve health conditions, but effective health and mental health interventions can also help reduce poverty and improve community resilience.

Toward this end, the New York City Department of Health and Mental Hygiene has established **Take Care New York**, a strategy of 10 key health interventions. The 10 components of **Take Care New York** address the City’s leading preventable causes of illness and death and can significantly improve New Yorkers’ health. Most of the areas highlighted in this strategy have been described in this report, but even for conditions not included in this document, substantial economic and racial/ethnic disparities exist. The 10 areas are: have a regular doctor or other health care provider, be tobacco-free, keep your heart healthy (control blood pressure, cholesterol, and weight), know your HIV status, get help for depression, live free of dependence on alcohol and drugs, get checked for cancer, get the immunizations you need, make your home safe and healthy, and have a healthy baby.

Progress in the specific areas identified by **Take Care New York**, coupled with initiatives to address root causes of poor health, would be the most effective way to improve health and reduce or eliminate health disparities.

- 3 **Target resources and interventions to the neighborhoods and communities most at risk due to poor social and economic conditions.** As shown in this report, certain communities consistently have poor health outcomes and would benefit most from targeted efforts to improve health and well-being.

Appendix A

Comparisons Between New York City and National Data: Selected Conditions

Table 1: Mortality

	New York City		U.S.
	Lowest income neighborhoods	Highest income neighborhoods	
Life expectancy	74.5	81.1	77.2
All cause mortality (per 100,000)*	985	619	855

*Rates are age-adjusted.

Source for New York City data (2001): Bureau of Vital Statistics, NYC DOHMH, 2001

Source for national data (2001): National Vital Statistics Report 2003, National Center for Health Statistics, Centers for Disease Control and Prevention

Table 2: Income disparities

		< \$25,000	\$25,000 – 49,999	≥ \$50,000
Percent of adults not exercising	NYC	36	25	16
	U.S.*	37	24	13
Percent of adults with diabetes	NYC	11	7	4
	U.S.*	11	6	4

*For U.S. population, the percentages were averaged across smaller income categories.

Source for New York City data: NYC Community Health Survey, 2002

Source for national data: Behavioral Risk Factor Surveillance System, 2002, Centers for Disease Control and Prevention

Table 3: Racial/ethnic disparities

		White	Black	Hispanic
Obesity (% of adults)	NYC	15	25	22
	U.S.	21	31	22
Smoking* (% of adults)	NYC	24	20	21
	U.S.**	23	22	16
“Excellent” or “Very Good” health* (% of adults)	NYC	60	48	35
	U.S.**	71	57	58
Infant mortality rate (per 1,000 live births)	NYC	4	10	6
	U.S.	6	14	6

* Percents are age-adjusted.

** Percents are sex-adjusted.

Source for obesity in the U.S.: Behavioral Risk Factor Surveillance System, 2002, Centers for Disease Control and Prevention

Source for smoking and “excellent” or “very good” health in the U.S. (2003): National Health Interview Survey, 2004, National Center for Health Statistics, Centers for Disease Control and Prevention

Source for infant mortality rates in the U.S. (2001): National Vital Statistics Report, 2003, National Center for Health Statistics, Centers for Disease Control and Prevention

Source for New York City data on obesity, smoking, and health status: NYC Community Health Survey, 2002

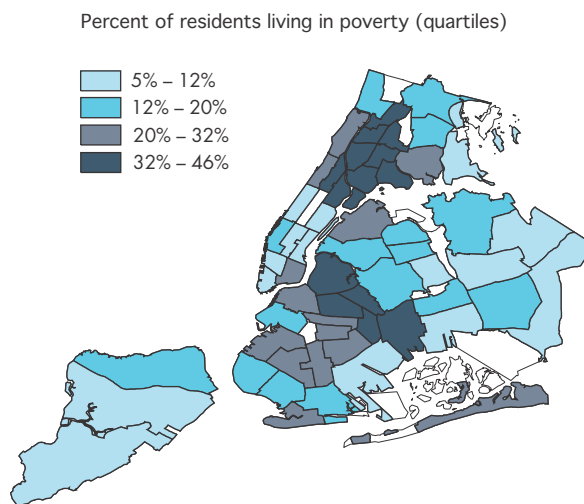
Source for infant mortality rates in NYC: Bureau of Vital Statistics, NYC DOHMH, 2001

Appendix B

Selected Maps of New York City

Geography of health matches geography of poverty

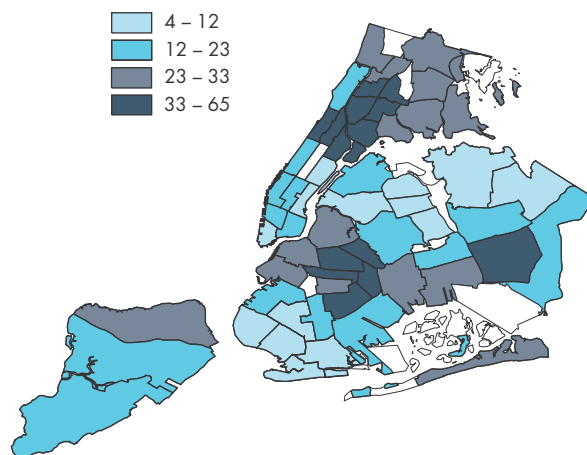
Poverty in New York City neighborhoods



Percents are age-adjusted.
Source: U.S. Census 2000/NYC Department of City Planning

Deaths due to diabetes

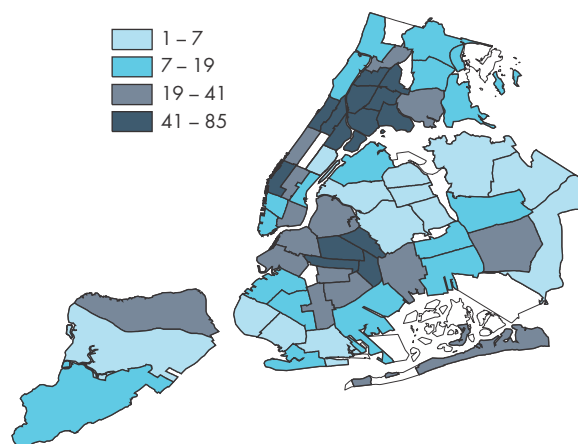
Diabetes deaths per 100,000 population (quartiles)



Rates are age-adjusted.
Sources: Bureau of Vital Statistics, NYC DOHMH, 2002;
U.S. Census 2000/NYC Department of City Planning

Deaths due to AIDS

AIDS deaths per 100,000 population (quartiles)

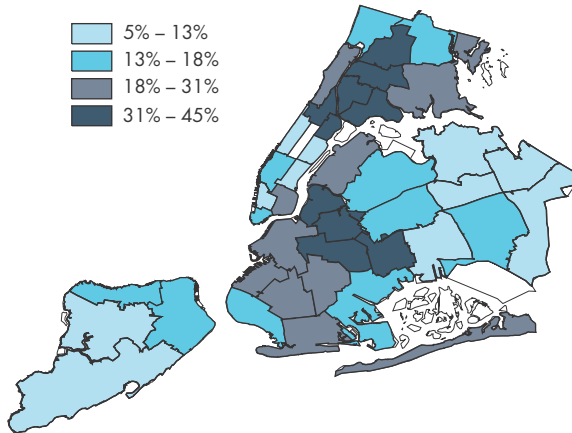


Rates are age-adjusted.
Sources: Bureau of Vital Statistics, NYC DOHMH, 2002;
U.S. Census 2000/NYC Department of City Planning

For all maps on this page, neighborhoods are defined by community districts.

Poverty

Percent of residents living in poverty (quartiles)

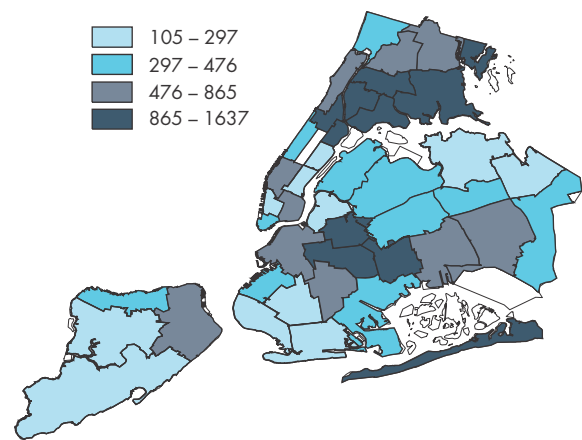


Percents are age-adjusted.

Source: U.S. Census 2000/NYC Department of City Planning

Hospitalizations for asthma (children*)

Hospitalizations per 100,000 children (quartiles)

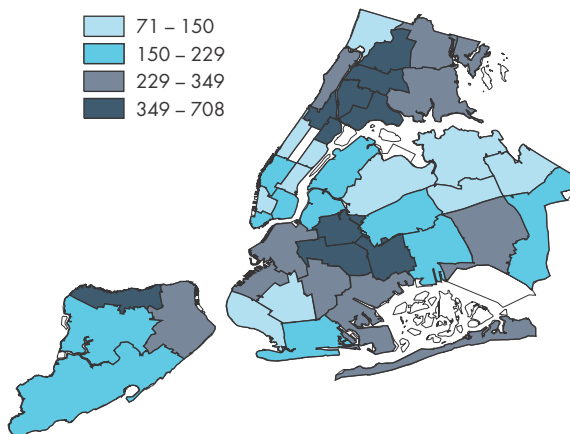


* Children aged 0-14.

Sources: NYS DOH Statewide Planning and Research Cooperative System, 2001;
U.S. Census 2000/NYC Department of City Planning

Hospitalizations for diabetes

Hospitalizations per 100,000 population (quartiles)

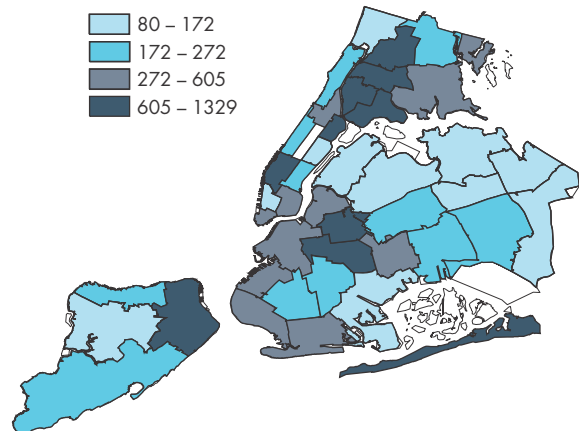


Rates are age-adjusted.

Sources: NYS DOH Statewide Planning and Research Cooperative System, 2001;
U.S. Census 2000/NYC Department of City Planning

Hospitalizations for drug use

Hospitalizations per 100,000 population (quartiles)



Rates are age-adjusted.

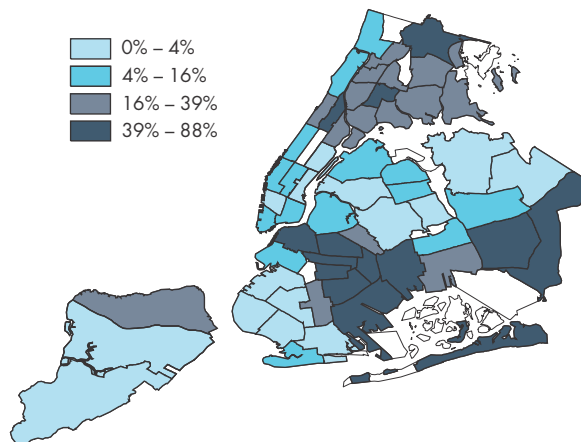
Sources: NYS DOH Statewide Planning and Research Cooperative System, 2001;
U.S. Census 2000/NYC Department of City Planning

For all maps on this page, neighborhoods are defined by the United Hospital Fund's categorization of zip codes.

Geography of infant health matches geography of race/ethnicity

Black New Yorkers

Percent of residents who are Black (quartiles)

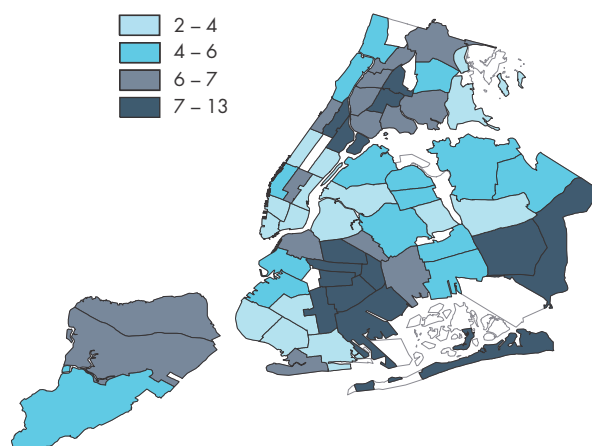


Percents are age-adjusted.

Source: U.S. Census 2000/NYC Department of City Planning

Infant deaths*

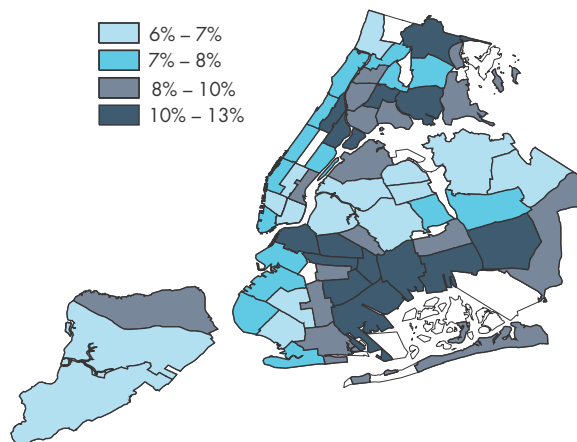
Infant deaths per 1,000 live births (quartiles)



* Infant death indicates death within the first year of life
Rates are age-adjusted.
Source: Bureau of Vital Statistics, NYC DOHMH, 1999-2001

Low birthweight*

Percent of live births that are low birthweight (quartiles)



* Low birthweight indicates birthweight <2,500 grams
Rates are age-adjusted.
Source: Bureau of Vital Statistics, NYC DOHMH, 2002

For all maps on this page, neighborhoods are defined by community districts.

Technical Notes

Data sources

Mortality, years of potential life lost, life expectancy*, infant mortality, low birthweight, births to teens: NYCDOHMH/Office of Vital Statistics; Self-reported health status, serious emotional distress, adult smoking, exercise, obesity, diabetes, access to medical care, clinical preventive services, housing conditions, ED use for asthma: NYCDOHMH/Division of Epidemiology/NYC Community Health Survey, 2002; New HIV diagnoses: NYCDOHMH HIV Surveillance and Epidemiology Program; Lead poisoning: NYCDOHMH Lead Poisoning Prevention Program; Adolescent behaviors: Youth Risk Behavior Survey; Hospitalizations (within New York City): New York State Department of Health/Statewide Planning and Research Cooperative System; Population (income, poverty, race, immigrant status, ancestry): New York City Department of City Planning/Census data; National data on exercise, obesity, and diabetes: Behavioral Risk Factor Surveillance System, 2001, Centers for Disease Control and Prevention; National data on smoking, self-reported health status, infant mortality rate, life expectancy, all cause mortality: National Center for Health Statistics, 2003, Centers for Disease Control and Prevention.

*Life expectancies among racial/ethnic groups were calculated using National Center for Health Statistics data, which include deaths of NYC residents that occurred outside of NYC. All other mortality data only include deaths that occurred within NYC.

How neighborhoods and neighborhood income were defined and calculated

Neighborhoods were generally defined by NYC's 59 Community Districts, which are political boundaries based on groupings of census tracts. When Community District level data were not available for any variable in an analysis (such as hospitalization or HIV diagnoses data), neighborhoods were defined with the United Hospital Fund's 42 zip code aggregations. To calculate neighborhood income level, the neighborhoods were ranked by median household income and then divided into 4 groups, ranging from poorest to wealthiest. Roughly 25% of the NYC population falls into each neighborhood income group.

Preventive health questions

Mammogram: Survey respondents were asked: Have you ever had a mammogram? If yes, How long has it been since your last mammogram?

Pap test: Survey respondents were asked: Have you ever had a pap smear? If yes, How long has it been since your last pap smear?

Cholesterol screening: Survey respondents were asked: Have you ever had your blood cholesterol checked? If yes, About how long has it been since you last had your blood cholesterol checked?

Flu vaccination: Survey respondents were asked: During the past 12 months, have you had a flu shot?

Adjustments

Age-adjusted analyses were standardized to the year 2000 U.S. population.
Percentages have been rounded to the nearest whole number.

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Contents

Key Findings in This Report	Inside front cover
Introduction	1
Income and Race/Ethnicity in New York City	2
Income and Poverty	2
Neighborhood Income	3
Race and Ethnicity	4
Immigration	5
Disparities in Health	6
General Health	6
HIV/AIDS	11
Smoking	13
Exercise, Obesity, and Diabetes	14
Cardiovascular Disease	16
Cancer	16
Asthma	17
Infant and Maternal Health	18
Health Behaviors Among Adolescents	20
The Social and Physical Environment	21
Access to Medical Care	21
Housing Conditions	23
Conclusions	24
Appendix A	
Comparisons Between New York City and U.S. National Data: Selected Conditions	25
Appendix B	
Selected Maps of New York City	26
Technical Notes	Inside back cover