

OVERVIEW

One of the most important first steps toward improving community health is the performance of a comprehensive community health assessment. In 1988, the Institute of Medicine's Committee for the Study of Public Health made the recommendation that every public health agency regularly collect, analyze and make available information on the health and health needs of the community. While the many diverse neighborhoods that make up New York City all share fundamental similarities, each has unique characteristics that define and set it apart. In order to better understand the health needs of all our communities and to encourage community members, health care practitioners and public health officials to work together toward the development of effective prevention programs and policies, the Department of Health is strongly committed to bringing a community-based focus to the analysis and interpretation of city health information.

With this report, *New York City Neighborhood Health Profiles: Queens, 2000*, the Department takes a significant step forward toward fulfilling its commitment to provide a comprehensive City Wide Community Health Profile. The New York City Department of Health has sponsored a series of community health forums in each of the city's five boroughs. Among the critical concerns expressed by participants at these meetings was the need for community-focused health data. In response, the Department of Health has already issued the *City Wide Community Health Profile: Age Group Perspective*. With the *New York City Neighborhood Health Profiles: Queens, 2000*, the Department introduces the first of five borough level reports that will ultimately profile the health of every New York City community.

BACKGROUND

Profiling Community Health

Many factors influence the health and well-being of our communities, and many entities and individuals have a role to play in responding to community health needs and shaping community health priorities. Fundamental to all of these efforts is the need for effective population-based health data.

In its groundbreaking 1988 study, *The Future of Public Health*, the Institute of Medicine listed health assessment first among three core functions for public health agencies at all levels of government. The Institute's Committee for the Study of Public Health recommended that *every public health agency regularly and systematically collect, assemble, analyze, and make available information on the health of the community, including statistics on health status, community health needs, and epidemiologic and other studies of health problems.*

The goal of community health assessment is to provide practitioners, public health officials and community members with informational tools necessary to support the development of innovative programs and improved practices in public and community health. In recent years, the New York City Department of Health has made community health assessment a priority. Building on the borough-wide health profiles first produced in collaboration with the Turning Point Initiative and the New York City Public Health Partnership, the Department recently issued a *City Wide Community Health Profile: Age Group Perspective, 1987-1997*, the first in a series of citywide community health reports. With *New York City Neighborhood Health Profiles: Queens, 2000*, the Department begins the process of providing information at the neighborhood level for all of New York City. The Queens profile and subsequent reports will highlight the health status of all of the city's United Hospital Fund (UHF) neighborhoods, comparing each community to the city as a whole. An important feature of these documents is the integration of disparate data collected by the Department and several New York State health agencies. This new community-focused data presentation is designed to foster partnerships with physicians, community leaders, and other concerned community members. The Department is committed to engaging a broad spectrum of constituencies, and to building and sustaining capacity for the assessment, reporting and maintenance of community health and well-being.

Organization

New York City Neighborhood Health Profiles: Queens, 2000 is divided into two sections:

The first section presents the health profile of the entire borough of Queens, comparing it to New York City as a whole. This borough-wide snapshot serves as a point of reference for the individual neighborhood reports that follow, and describes in detail the five component parts that make up each community health profile (see below). The second section presents the health profiles of each of the borough's ten United Health Fund (UHF) neighborhoods. Once again, the health status of each community is compared to New York City as a whole.

Each profile consists of five components that together provide a picture of each community's health. The five components are: *Demographics*, *Selected Reportable Conditions*, *Selected Cancer Statistics*, *Leading Causes of Hospitalization*, and *Leading Causes of Death*.

The charts presented in the borough and community profiles excerpt highlights from the complete health tables that appear in Appendix F.

Methodology

This report brings together information from several sources including New York City Department of Health Programs: Communicable Disease, HIV/AIDS Surveillance, Sexually Transmitted Disease (STD) Control, Tuberculosis Control, Lead Poisoning Prevention, Office of Vital Statistics; and the New York State Department of Health Statewide Planning and Resource Cooperative Systems (SPARCS) and Cancer Registry. Population estimates, age distributions, and distributions by race and ethnicity are from the 2000 U.S. Census. Information on socioeconomic characteristics such as poverty, education, and linguistically isolated households is taken from the 1990 census. 2000 census data on these socioeconomic characteristics are not yet available.

Population data

The population of New York and its boroughs' residents used in this report is based on the United Hospital Fund (UHF) neighborhood definitions as of October 1998 (see Appendix C for a list of UHF neighborhoods and their associated ZIP codes). United Hospital Fund neighborhoods, which are an aggregate of zip codes, were selected as the best choice among a number of neighborhood designations available. For instance, Health District or Community District are based on census tracts, which do not correspond to zip code based numerator. Another option, Health Service Area (HSA), which is an aggregate of zip codes, is not currently sponsored by any outside agency.

Cancer data

Cancer incidence data are from the New York State Department of Health Cancer Registry. At the time this report was prepared, 1996 was the most recent year for which complete cancer data were available.

Hospitalization data

Hospitalization inpatient data for New York City were obtained through SPARCS (Statewide Planning and Research Cooperative System). The diagnostic groupings were defined from a principal diagnosis based on the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) (see Appendix E). In the Queens profile the 7 leading causes of hospitalization are shown, and for each neighborhood the leading 5 are shown (complete data presented in Appendix F).

Cause of death data

Cause of death data were obtained from the NYC Department of Health Office of Vital Statistics, which codes underlying causes of death. In the Queens-wide profile the 7 leading causes of death are shown, and for each UHF neighborhood the leading 5 are shown (complete data presented in Appendix F).

AIDS data

For this report, an AIDS case is defined as an individual diagnosed with AIDS during the year 2000. The case numbers represent reports received as of August 1, 2001. Total numbers of AIDS cases for the year 2000 may change in subsequent reports, as new information continues to be received. Effective January 1, 1993, the Centers for Disease Control and Prevention expanded the AIDS surveillance case definition to include all HIV-infected persons who have <200 CD4+ T-lymphocytes/microL (<14%); pulmonary tuberculosis; recurrent pneumonia; or invasive cervical cancer. The effect of this expansion should be noted when comparing cases diagnosed before and after 1993.

Lead poisoning data

Lead poisoning data are presented for children less than six years of age, which is the age group at greatest risk for lead poisoning and the targeted age group for lead poisoning prevention, including blood lead screening. New York State law requires medical providers to test children at ages 1 and 2 and to assess the need for a lead test in all children aged 6 months to less than 6 years of age.

Rates and Ratios

Most health data in this report is presented in the form of a rate. A rate is the number of health events within a given time period (usually one year) in a population or population subgroup divided by the number of people in that population or population subgroup. The health rates in Queens and its neighborhoods are then compared to the comparable New York City rates, using a ratio. To calculate the ratio, the Queens rate is divided by the New York City rate. If the rate in Queens is higher, the ratio is greater than 1. If the rate is lower, the ratio is less than 1.

Differences in rates (see Appendix B) between Queens and New York City and between the UHF neighborhoods and New York City are described as follows: differences greater than 50% are termed “substantially higher/ substantially lower;” differences of 10-50 % are termed “somewhat higher/ somewhat lower;” differences of 5-9% are termed “slightly higher/ slightly lower;” and differences of less than 5% are termed “nearly identical.”

In the Queens Borough Health Profile and the Neighborhood Health Profiles, there are narrative sections that highlight particular findings. However, it is important to note that all the health information presented in the Profile section charts and the (more exhaustive) Appendix F tables is important. For complete information, readers should consult these listings. In choosing which aspects of borough or neighborhood health to highlight in the narrative sections, both the individual condition’s overall health importance and the degree to which its rate differed from the New York City rate are considered. In general, any rate in Queens or a UHF neighborhood that is substantially higher or lower than the corresponding rate in New York City is highlighted, with the exception of some conditions with very low case rates (because low case rates can vary considerably from year to year). Many rates that are moderately higher or lower are also highlighted.

In this document, New York City rates are used as a benchmark of comparison. Such a comparison is valid, because data collection methods are the same throughout the city. Comparison of neighbor-

hood rates to New York City is useful for setting health priorities in a community and allocating resources for particular problems. For example, HIV prevention funds are allocated to neighborhoods with the highest numbers of AIDS cases. New York City rates, however, do not necessarily represent optimum health standards. National and international health statistics can also provide relevant and useful reference points. Standards are available in other publications. For example, *Healthy People 2010* gives the goals for health improvement of the US Public Health Service. Neighborhood health rates can also be compared to these national or international standards.

HIGHLIGHTS

Demographics

The neighborhoods of Queens display a wide range of racial and ethnic diversity. For the borough as a whole, the percentage of the population that is Asian (18%) is substantially higher than in New York City overall (10%), and the percentage that is African-American is somewhat lower (19% vs. 25%). The percentage of residents that is Hispanic (25%) is slightly lower than in New York City overall (27%). In West Queens, 46% of residents are Hispanic; in Flushing-Clearview, 35% are Asian; in Bayside-Little Neck and Ridgewood-Forest Hills 60% are white; in Jamaica 60% are African-American. The age-adjusted death rate, fertility rate, and infant mortality rates are generally lower in Queens than in New York City overall. The percent of births to women less than 20 years old, lower in Queens (7.2%) as a whole than in the city overall (8.6%), varies from 1.3% in Bayside-Little Neck to 14% in Rockaway. The percent of persons living in poverty is also lower in Queens (11%) than in New York City overall (19%), ranging from 4.0% in Bayside-Little Neck to 18% in Rockaway.

Selected Reportable Conditions

The rate of AIDS in Queens is 28 cases per 100,000 population (28/100,000) and many of its neighborhoods is substantially lower than in New York City overall (55/100,000). Such differing AIDS case rates usually reflect the contrasting socioeconomic and risk factor profiles of different populations. Rates of chlamydia infection in women and gonorrhea and syphilis in men and women are generally lower in Queens than in New York City overall. Rates of lead poisoning (106/100,000 in Queens overall), in Queens neighborhoods among children less than 6 years old are substantially lower Flushing-Clearview (47/100,000), Bayside-Little Neck (0/100,000), Ridgewood-Forest Hills (48/100,000) and Fresh Meadows (14/100,000), than in New York City overall (104/100,000), but are substantially higher in Jamaica (200/100,000) and somewhat higher in Southwest Queens (154/100,000). Tuberculosis rates in Queens (16/100,000) are similar to the New York City rate (17/100,000), except in West Queens where the rate is higher (25/100,000). Rates for the remaining selected reportable communicable diseases vary considerably among neighborhoods. It is important to note that rates for rare conditions can fluctuate considerably from year to year, especially when considering small geographic areas.

Selected Cancer Statistics

In Queens and most of its neighborhoods, the rates of prostate cancer in men aged 45 to 64 and those aged 65 years and older, breast cancer in women aged 45 to 64 and those aged 65 years and older, and lung and colorectal cancer in adults aged 45 to 64 and those aged 65 years and older in general do not differ substantially from New York City rates. However, the rate of prostate cancer in Southeast Queens for men aged 45 to 64 is substantially higher than the rate in New York City as a whole (214 vs. 130/100,000), and the rate of prostate cancer in Southeast Queens for men aged 65 and older is somewhat higher than in New York City (1041 vs. 805/100,000). The rates of breast cancer in Fresh Meadows for women aged 45 to 64 (261/100,000) and those aged 65 years and older (474/100,000) are somewhat higher than the comparable rates in New York City overall (200 and 373/100,000, respectively). The rate of lung cancer in Rockaway for men aged 45 to 64 (110/100,000) and the rate of lung cancer in Rockaway for men aged 65 years and older (360/100,000) are somewhat higher than the comparable rates in New York City overall (82 and 280/100,000, respectively).

Leading Causes of Hospitalization

The leading causes of hospitalization in Queens for all age groups are similar to those in New York City as a whole, but the rates in Queens are generally somewhat lower. For children aged 9 years and less, asthma remains the leading cause of hospitalization. The rate of hospitalization for asthma in children aged 9 and less is lowest in Bayside-Little Neck (207/100,000) and highest in Jamaica (834/100,000) and Rockaway (839/100,000) (vs. 720/100,000 in New York City overall). Acute bronchitis and bronchiolitis, injuries and poisonings, and pneumonia and influenza are the next three most common causes of hospitalization in children aged 9 years and less. Pregnancy and related conditions, asthma, and mental disorders are major causes of hospitalization among adolescents aged 10 to 17. The rate of hospitalization for malignant neoplasms among adolescents aged 10 to 17 is substantially higher in Long Island City-Astoria than in New York City overall (57 vs. 22/100,000). For adults aged 18 to 24, pregnancy and related conditions is the most frequent cause of hospitalization. The rate varies from 1456/100,000 in Bayside-Little Neck to 10,043/100,000 in Rockaway (vs. 9055/100,000 in New York City overall). In Bayside-Little Neck, the rate for malignant neoplasms among adults aged 18 to 24 is substantially higher than in New York City overall (81 vs. 31/100,000). For adults aged 25 to 64, pregnancy and related conditions remains the leading cause of hospitalization. Other leading causes in this age group include mental disorders, injuries and poisonings, heart diseases, and malignant neoplasms. For adults aged 65 years and older, heart diseases (ischemic heart diseases and other heart diseases) are the first and second leading causes of hospitalization in the borough and in all neighborhoods, except in Rockaway, where pneumonia and influenza is the second most common cause of hospitalization in adults 65 and older, and Flushing-Clearview, where injuries and poisonings is second most common. The rate of hospitalization for pneumonia and influenza in Rockaway for adults 65 and older is substantially higher than in New York City overall (4348 vs. 1828/100,000). In Bayside-Little Neck, the rate of hospitalization for ischemic heart disease in adults 65 and older is somewhat lower than in New York City overall (1409 vs. 2599/100,000), and the rate of hospitalization for other heart diseases in adults 65 and older is substantially lower than in New York City overall (1338 vs. 3375/100,000).

Leading Causes of Death

Malignant neoplasms and heart diseases are the two leading causes of death for adults aged 25 to 64 in all Queens neighborhoods. Malignant neoplasm is the leading cause of death in this age group in all neighborhoods except Southwest Queens and Rockaway (where diseases of the heart are first). In Bayside-Little Neck, the death rate from diseases of the heart in adults aged 25 to 64 is substantially lower than in New York City overall (35 vs. 77/100,000). In Rockaway, the death rate from diseases of the heart for adults aged 25 to 64 is substantially higher than in New York City overall (184 vs. 77/100,000), and the death rate from malignant neoplasms is somewhat higher than in New York City (132 vs. 91/100,000). The death rate from HIV among adults aged 25 to 64 is substantially lower in Long Island City-Astoria (13/100,000), West Queens (9/100,000), Flushing-Clearview (8/100,000), Fresh Meadows (6/100,000), and Southeast Queens (10/100,000) than in New York City overall (41/100,000). Among adults aged 65 years and older, diseases of the heart and malignant neoplasms are the first and second leading causes of death, respectively, in all neighborhoods. In Rockaway, the death rate for diseases of the heart in adults 65 and older is substantially higher than in New York City overall (4296 vs. 2152/100,000). In Bayside-Little Neck, the death rate from cerebrovascular diseases in adults aged 65 and older is substantially lower than in New York City overall (59 vs. 146/100,000).

QUEENS BOROUGH HEALTH PROFILE

QUEENS BOROUGH HEALTH PROFILE

Demographics

The demographics section presents basic vital statistics (fertility and death rates), population distribution by age and race/ethnicity, selected socioeconomic factors (percent of persons living in poverty, percent of adults without a high school diploma, percent of linguistically isolated households), and important pregnancy and childbirth statistics (infant mortality rate, percent of low birth weight babies, percent of pregnant women receiving first trimester prenatal care, percent of births to women less than 20 years old). Each of these parameters serves as an important health indicator: disease patterns and death rates vary by age, socioeconomic conditions are important predictors of health, and infant birth-weight and mortality statistics represent inherent measures of the health status of a community. In addition, demographic and socioeconomic data are fundamental to health planning and resource allocation.

The population of the borough of Queens in 2000 was 2,229,379, or 28% of the total population of New York City. In Queens, the percentage of the population that is Asian (18%) is notably higher than in New York City as a whole (10%). The percentage that is African-American is somewhat lower in Queens (19%) than in New York City overall (25%), the percentage that is Hispanic is slightly lower in Queens (25%) than in New York City (27%), and the percentage that is white almost identical to New York City.

The age-adjusted death rate is somewhat lower in Queens than in New York City as a whole.

Infant mortality rate is also somewhat lower in Queens. New York City's infant mortality rate (IMR: the number of deaths in infants less than 1 year of age per 1,000 live births) has decreased over the past decade from 11.6 in 1990 to 6.7 in 2000, exceeding the Healthy People 2000 objective of 7.0. Although the IMRs in 2000 in both Queens and New York City were lower than the national rate of 6.9, IMRs for certain geographic areas of the city and among particular racial/ethnic groups are still much higher than national and overall New York City rates. Infants born to African-American mothers, for example, have an IMR twice as high as infants born to white mothers. Disparities in IMR can be reduced by promoting preconception healthcare, pregnancy planning, taking folic acid prior to and during early pregnancy, initiating prenatal care in the first trimester of pregnancy, smoking cessation, proper nutrition during pregnancy, placing infants on their backs to sleep, and breastfeeding. The percent of births to women less than 20 years old is somewhat lower in Queens (7.2%) than in New York City overall (8.6%), and the percent of low birth weight babies is slightly lower in Queens (7.6% vs. 8.3%). However, the percent of women receiving first trimester prenatal care in Queens is slightly lower (55% vs 60%).

The percent of persons living in poverty is somewhat lower in Queens (11%) than in New York City overall (19%). The percent of households that are linguistically isolated is somewhat higher (13%) in Queens vs. New York City (12%) overall.

Demographic Characteristics

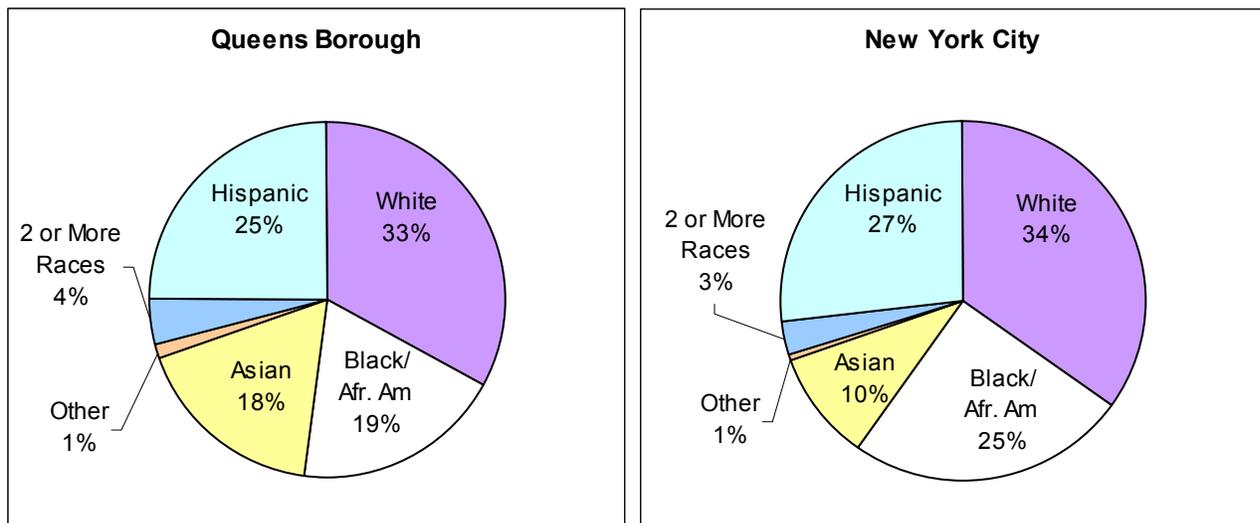
Queens Borough Compared to New York City, 2000

	<u>Queens Borough</u>	<u>New York City</u>
Total Population	2,229,379	8,008,278
Age-adjusted death rate (deaths per 100,000)	645	737
Fertility rate (births per 1,000 women aged 15 to 44)	55	66
Infant Mortality rate (deaths before age 1 year per 1,000 live births)	5.8	6.7
Percent of births to women less than 20 years old	7.2	8.6
Percent of women receiving first trimester prenatal care	55	60
Percent low-birth-weight babies (percent of live births <2500 grams)	7.6	8.3
Percent of persons living in poverty*	11	19
Percent of adults aged 25 and older without a high school diploma*	29	32
Percent of linguistically isolated households*	13	12
Percent of population less than 25 years old	32	34
Percent of population greater than or equal to 65 years old	13	12

*Based on 1990 Census

Population by Race/Ethnicity

Queens Borough Compared to New York City, 2000



Selected Reportable Conditions

This section presents data on sexually transmitted diseases (STDs), the acquired immunodeficiency syndrome (AIDS), tuberculosis, and other important communicable diseases, as well as lead poisoning in children.

Chlamydia (*C. trachomatis*) infections are the most frequently reported sexually transmitted disease in New York City as well as the United States. While most women with chlamydia are asymptomatic, the sequelae of infection can be severe, including pelvic inflammatory disease (PID), ectopic pregnancy, and infertility. Chlamydia data are reported for women only because men are infrequently tested. The rate of chlamydia among women in Queens in 2000 was somewhat lower than in New York City overall (325 vs. 538/100,000). The rate of primary and secondary syphilis in Queens residents was substantially lower (0.6 vs. 1.5/100,000 in New York City), and the rate of gonorrhea in Queens residents was somewhat lower (84 vs. 146/100,000 in New York City).

Over the last several years, AIDS case rates have declined, due in part to a delay in the progression of HIV infection to AIDS as a result of the broad use of highly active antiretroviral therapy in persons infected with HIV. Such therapy maintains a state of health, including delaying the development of severe suppression of the immune system that occurs when a person develops AIDS. While antiretroviral therapy can delay the onset of full-blown AIDS, there is no evidence that it can prevent infected persons from transmitting HIV infection. Prevention efforts continue to be essential to control and reduce the rate of new HIV infections in at-risk populations. The AIDS case rate in Queens residents was somewhat lower in 2000 than in New York City as a whole (28 vs. 55/100,000). Differing AIDS case rates are usually a reflection of the contrasting socioeconomic and risk factor profiles of different populations.

After a marked resurgence from 1986 to 1992, New York City has experienced a gradual decline in the number of tuberculosis (*M. tuberculosis*) cases. Improved case management and infection control, particularly through directly observed therapy (DOT), have contributed to the reduction in case rates. However, the tuberculosis case rate in NYC is still higher than for the nation as a whole, attributable in part to the city's high (compared to the nation) AIDS case rate and its large number of immigrants from countries with high rates of tuberculosis. The tuberculosis case rate in Queens residents in 2000 was slightly lower than in New York City as a whole (16 vs. 17/100,000).

Hepatitis B is caused by a virus and is spread by contact with blood or other body fluids of an infected person, usually by sexual contact or sharing needles, razors, toothbrushes, or any object contaminated with blood or body fluids. Most adults with hepatitis B recover completely, but some infections persist; over time, chronic liver disease can result. The rate of hepatitis B infection in Queens residents in 2000 was somewhat lower than in New York City overall (4.4 vs. 7.1/100,000).

Malaria is caused by the Plasmodium parasite and is transmitted by the bite of an infected mosquito. Malaria occurs in New York City residents who travel to endemic areas such as Africa, Asia, and Central and South America. Health care providers can help prevent malaria by educating their patients about the need for prophylactic treatment when traveling to countries where malaria is

endemic. The rate of malaria infection in Queens residents in 2000 was somewhat lower than in New York City overall (2.3 vs. 2.8/100,000).

West Nile virus first appeared in the western hemisphere in northern Queens in the summer of 1999. It has since become established in the New York City metropolitan area and has spread throughout much of the eastern United States. In 2000, there was only one human case of West Nile virus encephalitis in Queens. Each summer and fall, the New York City Department of Health works with communities to do everything possible to reduce mosquito populations and prevent West Nile virus infections: these measures include working with the public to reduce standing water where mosquitoes can breed, using larvicides to prevent the emergence of adult mosquitoes, monitoring and testing dead birds, and trapping mosquitoes to test for and detect the presence of West Nile virus in the city.

Lyme disease is caused by a bacteria, *Borrelia burgdorferi*, and is transmitted by the bite of an infected blacklegged tick. Most cases among NYC residents are acquired outside of New York City. Blacklegged ticks have very rarely been found in NYC, but they are found in Nassau, Suffolk, and Westchester counties on the NYC border. To avoid getting Lyme disease, it is important to wear light-colored clothing when outdoors in areas where ticks can be found, such as wooded parks; to tuck pants into socks; to wear an insecticide containing DEET; and to check frequently for ticks and remove any that are found. The rate of cases of Lyme disease was substantially lower in Queens residents in 2000 than in New York City overall (1.2 vs. 2.6/100,000).

Listeriosis, caused by the bacteria *Listeria monocytogenes*, is found everywhere in the environment, but most illness is caused by eating contaminated foods. The elderly, pregnant women, and people with weakened immune systems caused by cancer treatments, AIDS, diabetes, or kidney disease are at higher risk for listeriosis. Listeriosis is fatal in 20% of cases. Listeriosis can be prevented by thoroughly cooking raw food from animal sources, thoroughly washing raw vegetables, and keeping uncooked meats separate from ready-to-eat foods. Persons at increased risk should consider avoiding consumption of ready-to-eat foods such as deli meat or hotdogs unless thoroughly cooked; refrigerated pate or meat spreads; raw (unpasteurized) milk or juice; and soft cheeses such as Brie, Camembert, blue-veined, and Mexican-style cheese. Hard cheeses, processed cheeses, cream cheese, and yogurt do not pose a risk. Rates of listeriosis in Queens and New York City overall were similar in 2000.

Salmonellosis, caused by *Salmonella enteritidis*, is a common bacterial illness characterized by diarrhea, fever, and abdominal cramps that develop 12 to 72 hours after infection and last 5-7 days. The elderly, infants, and those with impaired immune systems are more likely to have severe illness. Salmonellosis is spread by eating or drinking contaminated food or water, or by direct contact with infected people or animals. The bacteria is often found in raw meat, eggs, unpasteurized milk, and cheese products.

Campylobacteriosis, caused by the bacteria *Campylobacter jejuni*, is another common cause of food-related illness. Major symptoms include diarrhea, cramps, fever, and vomiting that develop 2 to 5 days after infection. In persons with compromised immune systems, illness can be more severe. Campylobacteriosis is spread by drinking or eating contaminated water or foods, especially undercooked poultry or pork, or by contact with infected animals.

Yersiniosis is caused by the bacteria *Yersinia enterocolitica* or *Yersinia pseudotuberculosis*. Anyone can get yersiniosis, but infection is more common in young children. Symptoms include fever, abdominal pain, and diarrhea, which is often bloody, beginning 4 to 7 days after exposure and continuing 1 to 3 weeks or longer. In older children and adults, right-sided abdominal pain and fever may be the predominant symptoms, and may be confused with appendicitis. Yersiniosis is spread by contaminated water or food, often raw pork and pork products, or from infected people or animals.

The rates for salmonellosis and campylobacteriosis in 2000 in Queens residents were slightly lower and the rate for yersiniosis somewhat lower, compared to New York City overall. These infections can be prevented by avoiding foods with raw or undercooked eggs; avoiding raw (unpasteurized milk); avoiding undercooked meats; handling raw poultry, beef, and pork carefully; wrapping fresh meats in plastic bags at the market to prevent blood from dripping on other foods; refrigerating foods promptly, cleaning cutting boards and counters used for preparation immediately; and ensuring that meat reaches the correct internal cooking temperatures.

Shigellosis, caused by the *Shigella* group of bacteria, is characterized by diarrhea (often bloody), fever, and stomach cramps starting 1-2 days after exposure, and usually resolving in 5 to 7 days. In the elderly and young children, illness can be severe and require hospitalization. Shigellosis is spread by eating or drinking contaminated food or water, or by direct contact with an infected person. Sexual practices that allow oral-anal contact may result in spread. The best ways to prevent shigellosis are through hand washing and avoidance of sexual practices that may result in contact with stool. The rate of shigellosis in Queens residents in 2000 was somewhat lower than for New York City overall (6.5 vs. 12/100,000).

Typhoid fever is caused by the bacteria *Salmonella typhi*. The major symptoms include sustained fever, headache, constipation or diarrhea, rose-colored spots on the trunk, and an enlarged spleen or liver. Typhoid is spread by eating or drinking water or foods contaminated by stool (feces) from an infected person. Anyone can get typhoid, but the greatest risk is to travelers visiting countries where the disease is common. Over the past 10 years, travelers from the United States to Asia, Africa, and Latin America have been especially at risk. A vaccine is available for people traveling to developing countries where exposure may occur, but it is not completely effective. In 2000, the rate of typhoid fever in Queens residents was somewhat higher than for New York City overall (1.0 vs. 0.7/100,000).

Hepatitis A is a liver disease caused by the hepatitis A virus. Symptoms appear 2 to 6 weeks after exposure and may include fatigue, poor appetite, fever, vomiting, dark-colored urine, and jaundice (yellowing of the skin and whites of the eyes). Once a person recovers from hepatitis A, he or she is immune for life and does not continue to carry the virus. Anyone can get hepatitis A, but it occurs more frequently in children and in men who have sex with men. The hepatitis A vaccine is very

effective and is recommended for people traveling to developing countries, men who have sex with men, people with chronic liver disease, injecting drug users, people living in communities with high hepatitis A rates, and in certain outbreak settings. Avoiding sexual practices that result in hand or mouth contact with stool will reduce the risk of hepatitis A. The rate of hepatitis A infection in 2000 was somewhat lower in Queens than in New York City overall (4.6 vs. 6.7/100,000).

Both typhoid fever and hepatitis A can be prevented by strict attention to food and water precautions when traveling to developing countries. Travelers should boil water before drinking or drink bottled water, ask for drinks with no ice or use ice made from boiled water, eat foods that have been thoroughly cooked, avoid raw fruits and vegetables that cannot be peeled, such as lettuce, and avoid foods and beverages from street vendors.

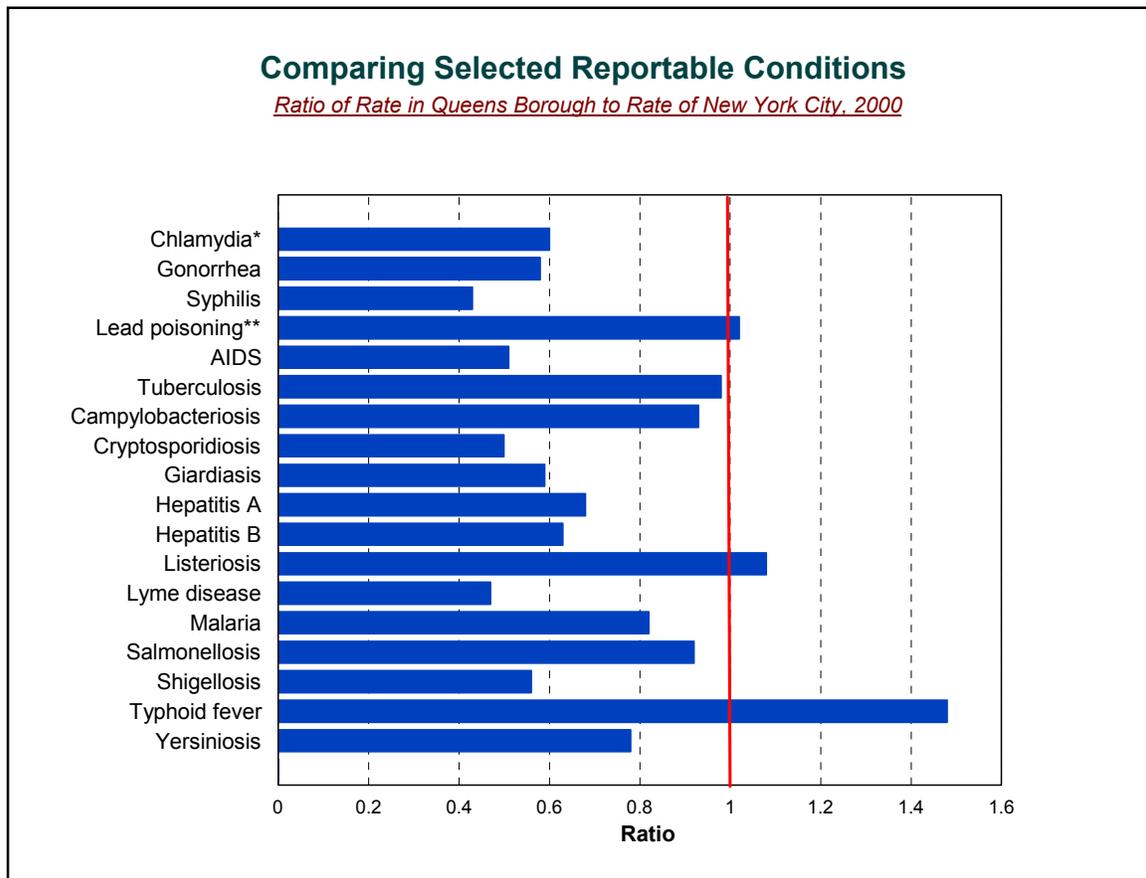
Cryptosporidiosis is a diarrheal disease caused by the parasite *Cryptosporidium parvum*. Although anyone can contract cryptosporidiosis, infections are most severe in persons with HIV or AIDS. The major symptoms are watery diarrhea and abdominal cramping, which last 1-2 weeks in persons with healthy immune systems. In persons with HIV/AIDS, illness may be prolonged. There is no effective treatment. Cryptosporidiosis can be prevented by thorough hand washing before handling food or after using the toilet or changing diapers, avoiding drinking water directly from streams and lakes, and avoiding sexual practices that include oral-anal contact. In Queens residents, the rate of cryptosporidiosis in 2000 was somewhat lower than in New York City overall (1.1 vs. 2.1/100,000).

Giardiasis is a diarrheal disease caused by the parasite *Giardia lamblia*. The major symptoms are diarrhea, abdominal cramps and bloating. Anyone can get giardiasis, although it occurs more often in people who live in institutional settings or attend day care centers, and among foreign travelers and individuals who drink from lakes, rivers and streams. Men who have sex with men are also at increased risk. Giardiasis is treated with antibiotics. Giardiasis can be prevented by thorough hand washing before handling food or after using the toilet or changing diapers, by avoiding drinking water directly from streams and lakes, and by avoiding sexual practices that include oral-anal contact. The rate of giardiasis in Queens residents in 2000 was somewhat lower than in New York City overall (13 vs. 22/100,000).

Lead poisoning in children can cause mental retardation and selective deficits in language, cognitive function, behavior, and school performance. Since the elimination of lead from vehicular emissions, the major source of lead exposure for children in the U.S. is lead-based paint present in older dwellings. Childhood lead poisoning remains a serious problem in New York City because of the age and condition of its housing. Approximately 71% of the city's estimated total housing units were built before 1960, the year that New York began prohibiting the use of lead-based paint, while in Queens, approximately 75% of housing units were built before 1960. In Queens, the rate of lead poisoning in 2000 in children aged less than 6 years was almost identical to the rate for New York City as a whole (106 vs. 104/100,000).

Selected Reportable Conditions for Queens Borough, 2000

	Queens Borough No. of Cases	Queens Borough Rate/100,000	New York City Rate/100,000
Chlamydia*	3761	325	538
Gonorrhea	1876	84	146
Syphilis	14	0.6	1.5
Lead poisoning**	183	106	104
AIDS	633	28	55
Tuberculosis	363	16	17
Campylobacteriosis	223	10.0	11
Cryptosporidiosis	24	1.1	2.1
Giardiasis	292	13	22
Hepatitis A	102	4.6	6.7
Hepatitis B	99	4.4	7.1
Listeriosis	15	0.7	0.6
Lyme disease	27	1.2	2.6
Malaria	52	2.3	2.8
Salmonellosis	308	14	15
Shigellosis	146	6.5	12
Typhoid fever	23	1.0	0.7
Yersiniosis	5	0.2	0.3



* Female cases only; rate per 100,000 women.
 ** Children ages 0 - 5 years old.

Selected Cancer Statistics

Cancer is the second leading cause of death, after heart disease, in the United States as well as in New York City.

Prostate cancer is the most common tumor in the U. S. among men. The widespread use of the PSA (prostate-specific antigen) screening test, beginning in the early 1990's, led to a dramatic increase in the number of new cases, which more recently has been leveling off. The risk for prostate cancer is higher among African-Americans, and survival rates while high overall are lower for African-American men than for whites, at comparable stages of disease. The average yearly rate of prostate cancer among men in Queens (1992-1996) aged 45 to 64 was nearly identical to the rate seen in New York City as a whole. The rate in Queens for men aged 65 years and older was slightly higher than the comparable rate in New York City (862 vs. 805/100,000).

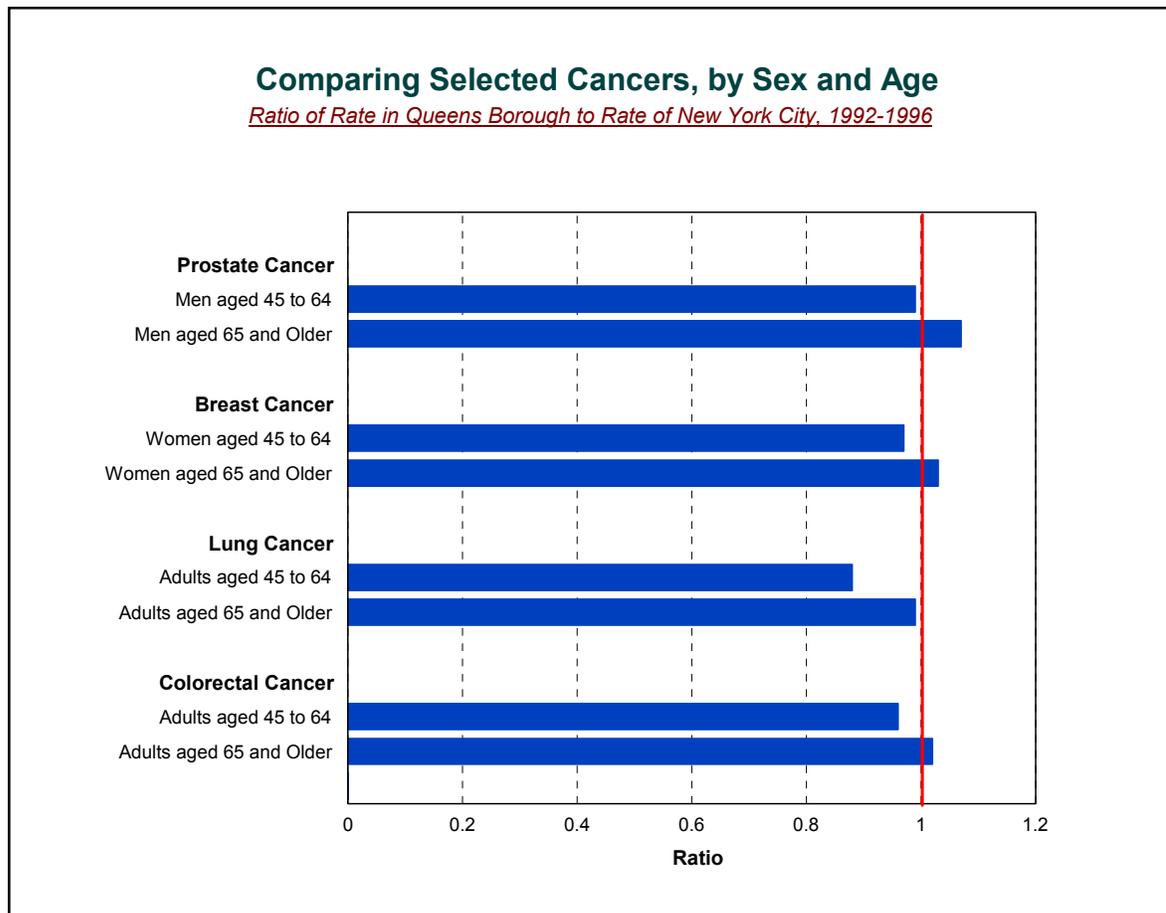
Approximately 192,000 cases of breast cancer with 42,000 deaths are expected in the U.S. in 2001, according to American Cancer Society estimates. Breast malignancy is second only to lung cancer as a cause of cancer deaths in women. Early detection with effective treatment has reduced mortality in some groups of women with breast cancer, and efforts to develop primary prevention strategies continue. Studies suggest that moderate exercise and a healthy diet low in fat may help protect against the disease. Average yearly breast cancer rates for women in Queens (1992-1996) differed only slightly from those for New York City overall, both for women aged 45 to 64 years and for women 65 years and older. The rate in Queens for women over 65 was higher than for those aged 45-64, consistent with the age-related increase in breast cancer seen nationally.

Lung cancer is the leading cause of cancer deaths in the U.S for both men and women. In 1987, death rates for lung cancer in women surpassed those for breast cancer in women. There is strong evidence that cigarette smoking causes lung cancer and that smoking avoidance and cessation are the most important measures in decreasing mortality from the disease. Evidence for the benefit of reduced tobacco consumption is seen in the decline in the overall age-adjusted rates of lung cancer for men since the mid-1980's, and more recently for women less than 60 years of age. Average yearly lung cancer rates (1992-1996) for adults aged 45 to 64 were somewhat lower in Queens than in New York City as a whole (73/100,000 vs. 82/100,000). The rates for adults aged 65 and older were nearly identical.

Colorectal cancer is the second most common cause of cancer deaths. Approximately 135,000 new cases and 56,000 deaths are expected in the U.S. in 2001. Evidence suggests that cigarette smoking and a diet high in total fat, meat, calories and alcohol are associated with an increased risk of colon cancer. Studies indicate that an increased intake of fruits and vegetables and moderate exercise can help protect against the disease. Average yearly rates of colorectal cancer in Queens (1992-1996) are nearly identical to those seen in New York City overall.

Selected Cancers by Sex and Age for Queens Borough, 1992-1996

	Queens Borough No. of Cases	Queens Borough Avg. Yearly Rate/100,000	New York City Avg. Yearly Rate/100,000
Prostate Cancer			
Men aged 45 to 64	1455	129	130
Men aged 65 and Older	4749	862	805
Breast Cancer			
Women aged 45 to 64	2513	194	200
Women aged 65 and Older	3327	385	373
Lung Cancer			
Adults aged 45 to 64	1763	73	82
Adults aged 65 and Older	3934	278	280
Colorectal Cancer			
Adults aged 45 to 64	1329	55	57
Adults aged 65 and Older	4501	318	313



Leading Causes of Hospitalization

Hospitalization data yield important information about community health, different from but complementary to vital statistics and disease surveillance and reporting. Causes of hospitalization reflect the overall health of a community and help define community health needs (for example, the need for infectious disease surveillance and prevention, mental health interventions, measures to address the burden of chronic disease, and addiction treatment).

Certain causes of hospitalization (causes of hospitalizations are defined in Appendix E) such as asthma, mental disorders and addiction, which are all more prevalent in poorer neighborhoods, correlate with socioeconomic status. The most common causes of hospitalization for adults aged 25 to 64 and those aged 65 years and older (heart diseases and malignant neoplasms) reflect general societal health trends. The leading causes of hospitalization in Queens for all age groups in 2000 were similar to those for New York City overall, but occurred at generally lower rates.

Among children aged 9 years and younger, asthma remains the most common cause of hospitalization. The rate in Queens is somewhat lower than the rate in New York City as a whole (572 vs. 720/100,000).

For children aged 10 to 17, the 7 leading causes of hospitalization in 2000 were the same as those for New York City as a whole, except that pneumonia and influenza and diabetes ranked fifth and sixth, respectively, in Queens, while in New York City they ranked sixth and fifth, respectively. All causes of hospitalization for children aged 10 to 17 occurred at somewhat lower rates in Queens than in New York City overall.

Among adults aged 18 to 24, the 7 leading causes of hospitalization in Queens in 2000 were pregnancy and related conditions, mental disorders, injuries and poisonings, drug abuse and dependence, asthma, diabetes, and malignant neoplasms. For New York City as a whole, the 6 leading causes were the same, but pneumonia and influenza ranked seventh. The 6 leading causes of hospitalization occurred at somewhat lower rates in Queens than in New York City as a whole. The rate of hospitalization for malignant neoplasms in Queens among adults aged 18 to 24 was somewhat higher than in New York City overall (35 vs 31/100,000). The rates of hospitalization in Queens among this age group for injuries and poisonings (86 vs. 163/100,000 in New York City), diabetes (45 vs. 81/100,000 in New York City), and for asthma (70 vs. 117/100,000 in New York City) were all somewhat lower than for New York City overall.

Among adults aged 25 to 64, the 7 leading causes of hospitalization in 2000 were the same in Queens as in New York City, but drug abuse and dependence ranked fourth in New York City, while in Queens it ranked seventh. The rate of hospitalization for drug abuse and dependence was substantially lower in Queens than in New York City overall (202 vs. 461/100,000). The rates for all other causes of hospitalization among adults aged 25 to 64 were somewhat lower in Queens than in New York City overall (except for the leading cause of hospitalization, pregnancy and related conditions, whose rate was only slightly lower in Queens).

For adults in Queens aged 65 and older, ischemic and other heart diseases were the first and second most frequent causes of hospitalization in 2000. Both occurred at somewhat lower rates in Queens than in New York City. Injuries and poisonings and pneumonia and influenza, the third and fourth most frequent cause of hospitalization in both Queens and New York City, also occurred at slightly lower rates in Queens. Cerebrovascular diseases, the fifth most common cause of hospitalization in Queens (sixth leading cause in New York City), occurred at a slightly lower rate in Queens than in the city as a whole. Malignant neoplasms and diabetes, the sixth and seventh leading causes of hospitalization in Queens, occurred at somewhat lower rates in Queens than in New York City.

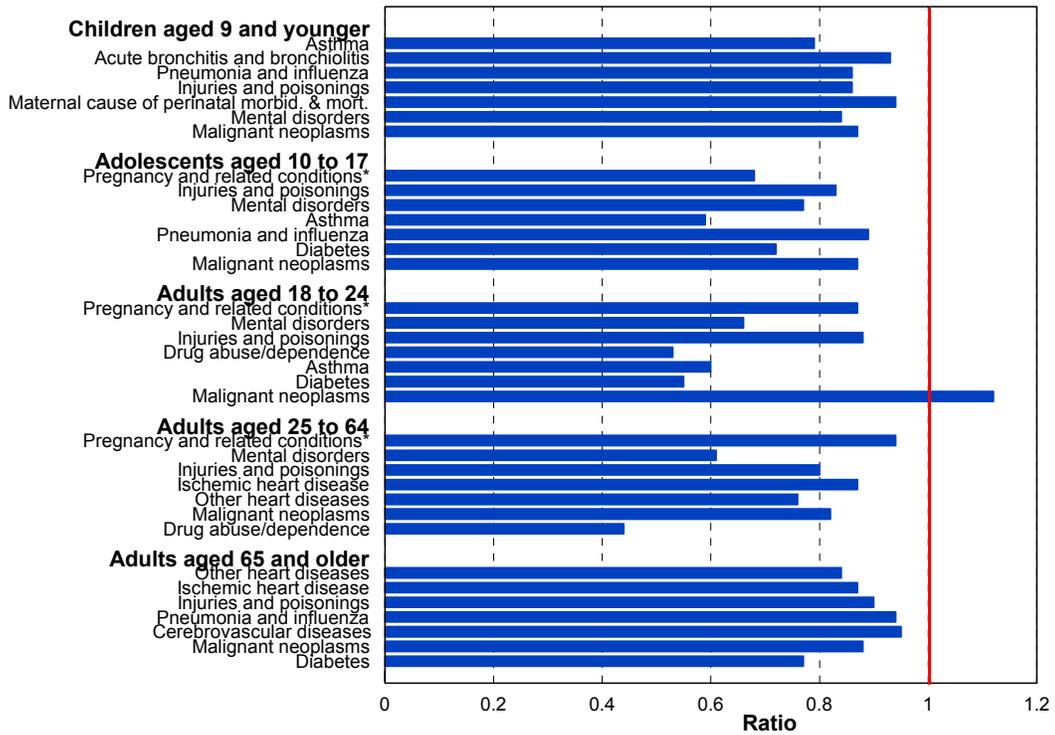
Leading Causes of Hospitalizations by Age for Queens Borough, 2000

	Queens Borough No. of Hospitalizations	Queens Borough Rate/100,000	New York City Rate/100,000
Children Aged 0-9			
Asthma	1648	572	720
Acute bronchitis and bronchiolitis	1091	379	408
Pneumonia and influenza	1086	377	439
Injuries and poisonings	1023	355	411
Maternal cause of perinatal morbidity & mortality	468	162	173
Mental disorders	161	56	67
Malignant neoplasms	72	25	29
Adolescents Aged 10-17			
Pregnancy and related conditions*	789	730	1070
Injuries and poisonings	824	373	449
Mental disorders	626	283	367
Asthma	354	160	271
Pneumonia and influenza	109	49	55
Diabetes	97	44	61
Malignant neoplasms	43	19	22
Adults Aged 18-24			
Pregnancy and related conditions*	8315	7903	9055
Mental disorders	1086	508	775
Injuries and poisonings	1041	487	550
Drug abuse/dependence	183	86	163
Asthma	149	70	117
Diabetes	96	45	81
Malignant neoplasms	75	35	31
Adults Aged 25-64			
Pregnancy and related conditions*	22469	3572	3782
Mental disorders	8396	686	1127
Injuries and poisonings	6398	523	652
Ischemic heart disease	4684	383	442
Other heart diseases	3103	254	333
Malignant neoplasms	3099	253	308
Drug abuse/dependence	2467	202	461
Adults Aged 65 and older			
Other heart diseases	8013	2831	3375
Ischemic heart disease	6372	2251	2599
Injuries and poisonings	5445	1924	2148
Pneumonia and influenza	4874	1722	1828
Cerebrovascular diseases	4136	1461	1539
Malignant neoplasms	4111	1452	1647
Diabetes	1702	601	782

* Rate per 100,000 women.

Comparing Leading Causes of Hospitalization by Age

Ratio of Rate in Queens Borough to Rate of New York City, 2000



* Rate per 100,000 women.

Leading Causes of Death

The specific causes of mortality in a community or population group, combined with the mortality rate itself, are among the most important of basic health indicators. Together with hospitalization and reportable disease data, they help elucidate central community health issues, related social and economic costs, opportunities for intervention and prevention, resource allocation, and management of risk factors. They also serve as a fundamental measure of outcome for both community and larger scale health improvement efforts.

Heart disease and cancer remain the first and second leading causes, respectively, of death in the United States. However, with better understanding of risk factors, effective risk reduction, and advances in treatment, the death rate from heart disease is declining.

The leading 7 causes of death in adults aged 25 to 64 in Queens in 2000 were, in decreasing order of rate, malignant neoplasms, diseases of the heart, HIV infection, psychoactive substance use and accidental drug poisoning, diabetes mellitus, accidents except drug poisoning, and cerebrovascular diseases. The top 5 leading causes of death in New York City for adults aged 25 to 64 were identical (cerebrovascular diseases was the sixth leading cause of death in this age group in New York City, and assault (homicide) was the seventh). The rates for all 7 leading causes of death were somewhat lower in Queens than in New York City as a whole, except for the death rate for HIV infection, which was substantially lower in Queens (15 vs. 41/100,000). The lower death rate from HIV infection in Queens is consistent with the lower AIDS case rate reported in Queens (see *Selected Reportable Conditions*, above), compared to New York City.

The great majority of deaths in Queens in 2000 among adults aged 65 years and older were caused by heart diseases (leading cause) and cancer (second leading cause). The death rate in Queens from heart disease in this age group was nearly identical to the rate in New York City overall (2188 vs. 2152/100,000). The death rate in Queens from malignant neoplasms (cancer) was somewhat lower (802 vs. 908/100,000). The rates for the third leading cause of death in Queens (influenza and pneumonia), the fourth leading cause (cerebrovascular diseases), the fifth leading cause (chronic lower respiratory disease) and the sixth leading cause (diabetes mellitus) were all somewhat lower in the borough than in New York City overall. The rate for the seventh leading cause of death in Queens (accidents except drug poisoning) was somewhat higher in the borough than in the city as a whole. (In New York City, nephritis, nephrotic syndrome, and nephrosis ranked as the seventh leading cause of death in 2000).

Leading Causes of Death by Age for Queens Borough, 2000

	Queens Borough No. of Deaths	Queens Borough Rate/100,000	New York City Rate/100,000
Adults Aged 25-64			
Malignant neoplasms	937	77	91
Diseases of heart	829	68	77
Human immunodeficiency virus (HIV) disease	187	15	41
Psychoactive substance use and accidental drug poisoning	133	11	17
Diabetes mellitus	96	7.8	10.8
Accidents except drug poisoning	95	7.8	8.5
Cerebrovascular diseases	90	7.4	10.5
Adults Aged 65 and Older			
Diseases of heart	6193	2188	2152
Malignant neoplasms	2270	802	908
Influenza and pneumonia	370	131	201
Cerebrovascular diseases	357	126	146
Chronic lower respiratory diseases	323	114	133
Diabetes mellitus	274	97	137
Accidents except drug poisoning	146	52	46

