

SUMMARY OF VITAL STATISTICS 2011

THE CITY OF NEW YORK

EXECUTIVE SUMMARY

RECENT TRENDS IN NEW YORK CITY VITAL STATISTICS

- In 2010, NYC's life expectancy at birth reached 80.9 years (preliminary data for latest year available). This is a 3.9% (3 year) increase since 2001 and a 0.4% (5 month) increase since 2009. The greatest increase across the major racial/ethnic groups was in non-Hispanic blacks, whose life expectancy at birth increased 3 years, 10 months from 2001 to 2010 to 77.2 years, exceeding the gains seen among non-Hispanic whites and Hispanics.
- In 2011, the NYC death rate stabilized at its 2010 historic low of 6.4 deaths per 1,000 population, with 52,789 deaths in 2011. This is a 13.5% decline since 2002.
- Heart disease, cancer and influenza/pneumonia continue to rank as the 3 leading causes of death; they decreased 32.5%, 4.2% and 2.9% respectively from 2002 to 2011. Heart disease decreased 17% since 2009, in part due to efforts to improve the accuracy of cause of death reporting.
- The infant mortality rate continues to decline, down 4% from 4.9 infant deaths per 1,000 live births in 2010 to 4.7 infant deaths per 1,000 live births in 2011. Both the Take Care New York goal of a citywide infant mortality rate of 5.0 by 2012 and the Healthy People 2020 goal of 6.0 have already been met.
- The leading causes of infant deaths continue to be congenital malformations (20%) and short gestation/low birthweight (20%). External causes, which include injuries, homicides and deaths of undetermined intent, also contribute substantially to these deaths (11%).
- The citywide birth rate recently peaked at 16.1 per 1,000 population in 2007, up from 15.2 in 2002, and, since then, has decreased 7.3% over the last 4 years, reaching 14.9 in 2011.
- The teen birth rate declined to a new low of 26.0 live births per 1,000 women 15–19 years of age in 2011. The rate has decreased 29.5% from 36.9 in 2002, and 6.5% from 27.8 in 2010.

January 2013

THIS REPORT WAS PREPARED BY THE DEPARTMENT OF HEALTH AND MENTAL HYGIENE, OFFICE OF VITAL STATISTICS STAFF UNDER THE DIRECTION OF REGINA ZIMMERMAN, PHD, MPH AND WENHUI LI, PHD.

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THIS PUBLICATION ALONG WITH THE 2011 INFANT MORTALITY, PREGNANCY OUTCOMES AND MORTALITY REPORTS ARE AVAILABLE ONLINE AT [HTTP://WWW.NYC.GOV/VITALSTATS](http://www.nyc.gov/vitalstats).



Dear Fellow New Yorker:

For nearly 150 years, the New York City Department of Health and Mental Hygiene has met many different public health challenges, from epidemics of yellow fever and cholera in the 1800s, to AIDS and tuberculosis in the last century.

Today our leading killers are chronic diseases, including heart disease, cancer and diabetes. The Health Department works hard in creative ways to reduce the risk factors that lead to these diseases, such as smoking and obesity. In responding to these insidious, long-term threats, we touch the lives of more than 8 million New Yorkers.

The good news is that New Yorkers have become healthier in recent years thanks to our efforts. The smoking rate is the lowest it has been since 2002, fewer New Yorkers drink sugar-sweetened beverages and more eat fruits and vegetables. The City's air quality continues to improve as well.

Each year, our *Summary of Vital Statistics* presents data on numerous, important health indicators, such as life expectancy, the infant mortality rate and leading causes of death. We use this information to monitor the health of New Yorkers, track our progress and identify areas that need additional attention.

Highlights from our 2011 report include:

- NYC's life expectancy at birth reached 80.9 years (preliminary data) in 2010. This is a 3.9% (3 year) increase since 2001 and a 0.4% (5 month) increase from the prior year, 2009.
- The 2011 NYC death rate stabilized at its 2010 historic low of 6.4 deaths per 1,000 population, with 52,789 deaths in 2011. This is a 13.5% decline since 2002.
- The infant mortality rate declined to a new historic low of 4.7 infant deaths per 1,000 live births in 2011.

Our *Executive Summary*, beginning on the next page, highlights additional important health indicators.

Vital Statistics data—gathered from your birth and death certificates—help us determine how we can continue to adapt to New York's constantly changing health challenges. Our goal, however, remains steadfast in the 21st century: to help all New Yorkers live longer and healthier lives.

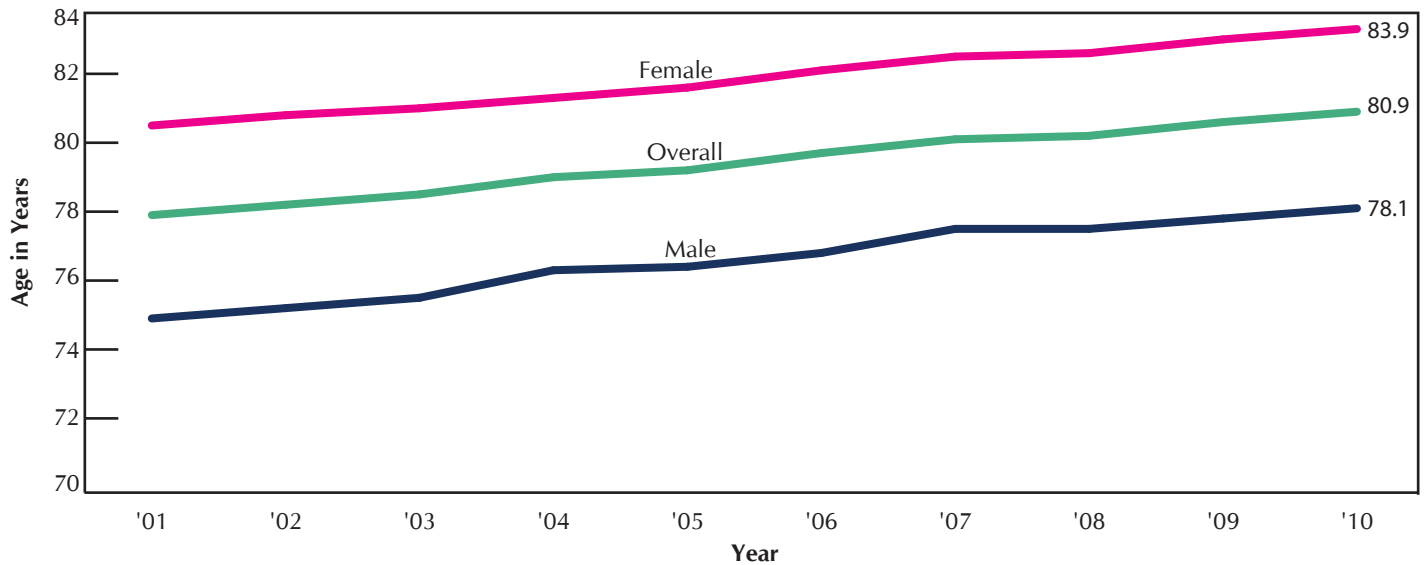
Sincerely,

A handwritten signature in black ink that reads "Thomas Farley". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Thomas Farley, MD MPH
Commissioner

LIFE EXPECTANCY IN NEW YORK CITY

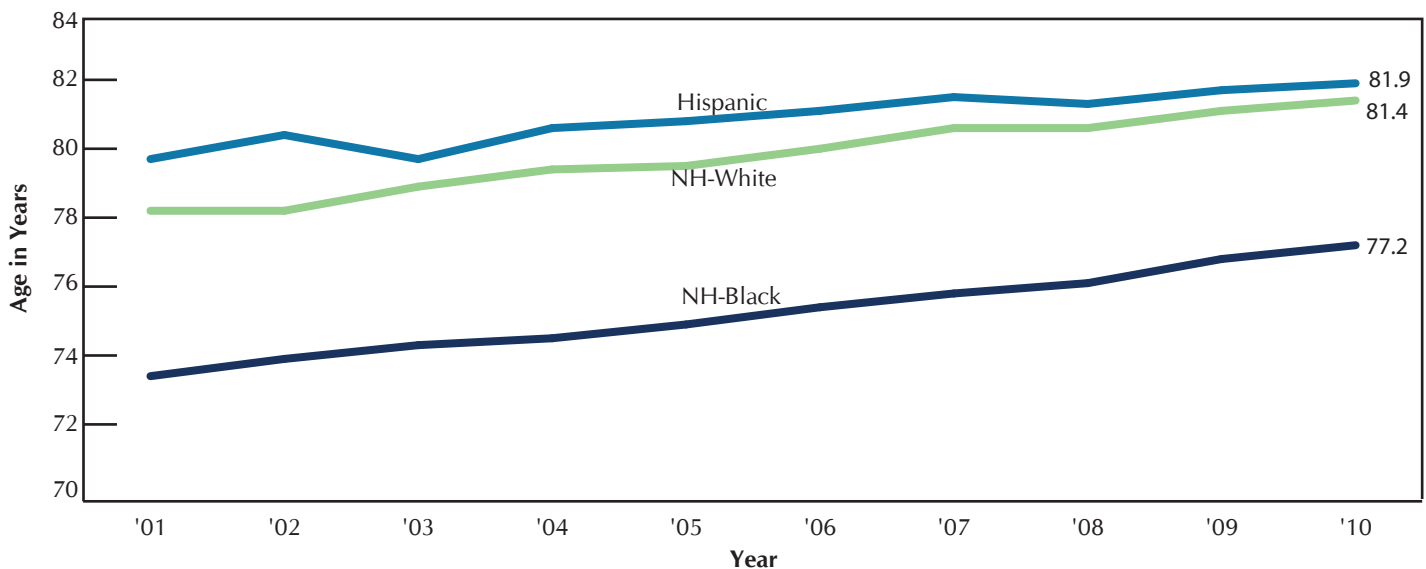
Life Expectancy at Birth, Overall and by Sex, New York City, 2001–2010



*Life Expectancies for the years 2001-2008 have been updated from previous published Summaries by using interpolated population data from 2000 and 2010 US Census counts (See Technical Notes: Population).

- In 2010, NYC's life expectancy at birth reached 80.9 years (preliminary data). This is a 3.9% (3 year) increase since 2001 and a 0.4% (5 month) increase from the prior year, 2009.
- Among males, life expectancy at birth reached 78.1, a 3 year, 2 month gain and among females, it reached 83.3, a 2 year, 10 month gain, since 2001. Life expectancy increased 5 months for males and females from 2009 to 2010.

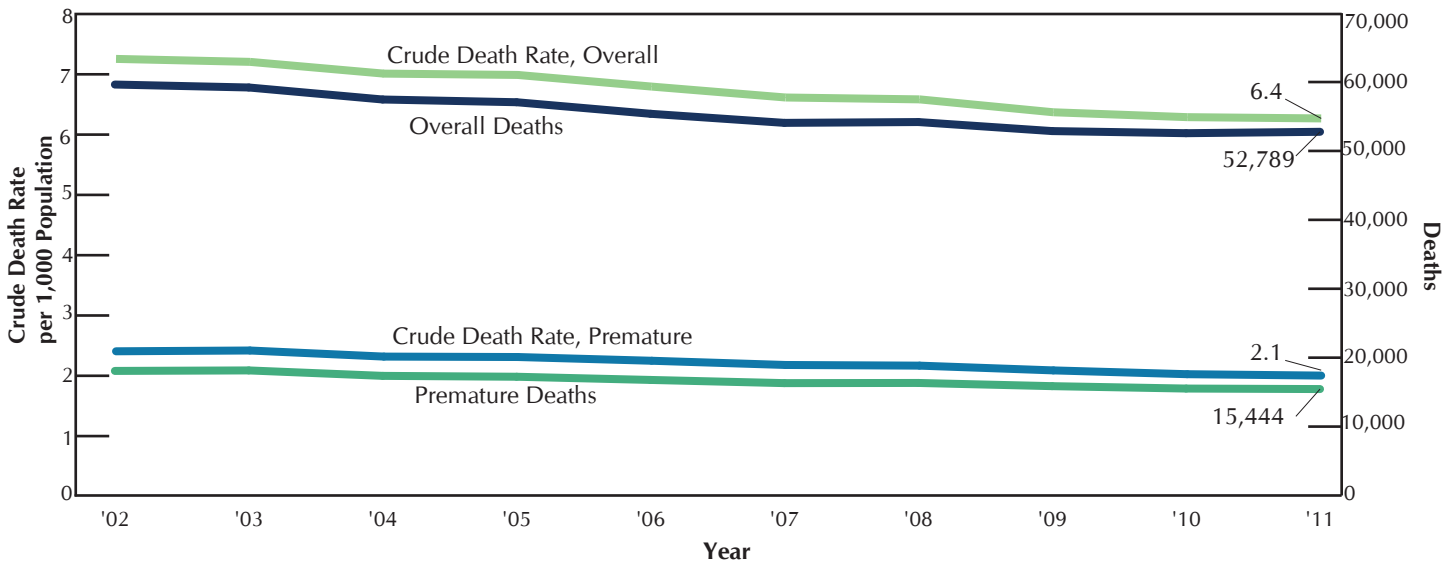
Life Expectancy at Birth by Racial/Ethnic Group, New York City, 2001–2010



- The greatest increase across the major racial/ethnic groups was in non-Hispanic blacks, whose life expectancy at birth increased 3 years, 10 months from 2001 to 2010 to 77.2 years, exceeding the gains seen among non-Hispanic whites and Hispanics.
- Since 2001, life expectancy at birth increased 3 years, 2 months among non-Hispanic whites to 81.4 years and 3 years among Hispanics to 81.9 years.
- Data for Asians and Pacific Islanders are not displayed because the required single year of age population denominators are too small to produce reliable estimates (See Technical Notes, Life Expectancy).

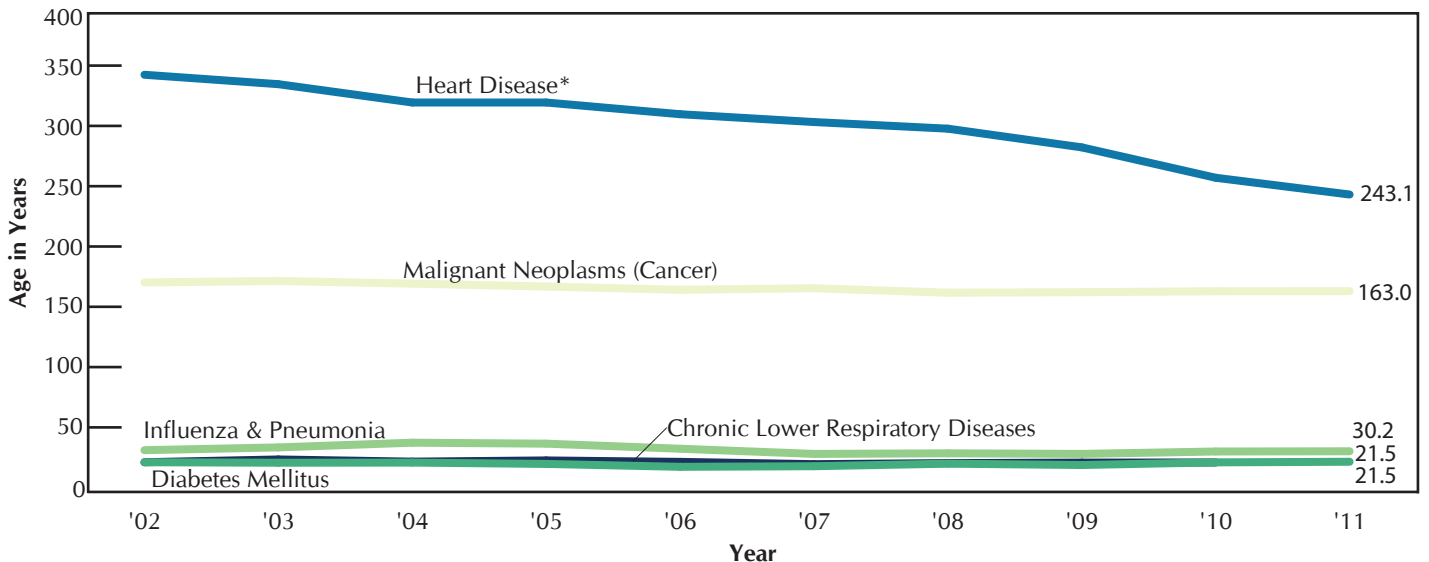
DEATHS IN NEW YORK CITY

Number of Deaths and Crude Death Rates, Overall and Premature (Age < 65 Years),
New York City, 2002–2011



- In 2011, the New York City death rate stabilized at its 2010 historic low of 6.4 deaths per 1,000 population with 52,789 deaths in 2011. This is a 13.5% decline since 2002.
- Premature deaths (before age 65) accounted for 29.3% of all deaths in New York City in 2011. The premature death rate decreased to 2.1 per 1,000 population, a 16.0% decline since 2002.

Crude Death Rates from 5 Leading Causes, New York City, 2002–2011



*Please see 2010 Mortality – Special Section: Cause of Death Quality Improvement Initiative for information on the initiative’s impact on cause of death reporting, particularly heart disease reporting.

- Heart disease, malignant neoplasms (cancer) and influenza/pneumonia continue to rank as the 3 leading causes of death. From 2002 to 2011, crude death rates decreased by 32.5%, 4.2% and 2.9% respectively.
- Since 2009, heart disease has decreased 17%, which is partly attributable to efforts to improve the accuracy of cause of death reporting.*

DEATHS IN NEW YORK CITY

LEADING CAUSES OF DEATH

Top 10 Leading Causes of Death in New York City — 2002, 2010 and 2011

Cause	2011		2010			2002		
	Rank	Death Rate per 100,000 Population	Rank	Death Rate per 100,000 Population	Change to 2011 (%)	Rank	Death Rate per 100,000 Population	Change to 2011 (%)
Diseases of Heart*	1	205.0	1	219.0	-6.4%	1	303.8	-32.5%
Malignant Neoplasms	2	163.0	2	162.9	0.1%	2	170.2	-4.2%
Influenza and Pneumonia	3	30.2	3	30.0	0.7%	3	31.1	-2.9%
Chronic Lower Respiratory Diseases	4	21.5	5	21.0	2.4%	7	21.1	1.9%
Diabetes Mellitus	5	21.5	4	20.9	2.9%	6	21.1	1.9%
Cerebrovascular Diseases	6	21.2	6	19.3	9.8%	4	23.0	-7.8%
Accidents Except Poisoning by Psychoactive Substances	7	12.3	8	11.4	7.9%	8	14.6	-15.8%
Essential Hypertension and Hypertensive Renal Diseases	8	11.7	7	12.8	-8.6%	10	9.0	30.0%
Human Immunodeficiency Virus (HIV) Disease	9	9.3	9	10.2	-8.8%	5	21.2	-56.1%
Use of or Poisoning by Psychoactive Substances†	10	9.2	10	8.1	13.6%	9	11.2	-17.9%

*Please see 2010 Mortality – Special Section: Cause of Death Quality Improvement Initiative for information on the initiative's impact on cause of death reporting, particularly heart disease reporting.

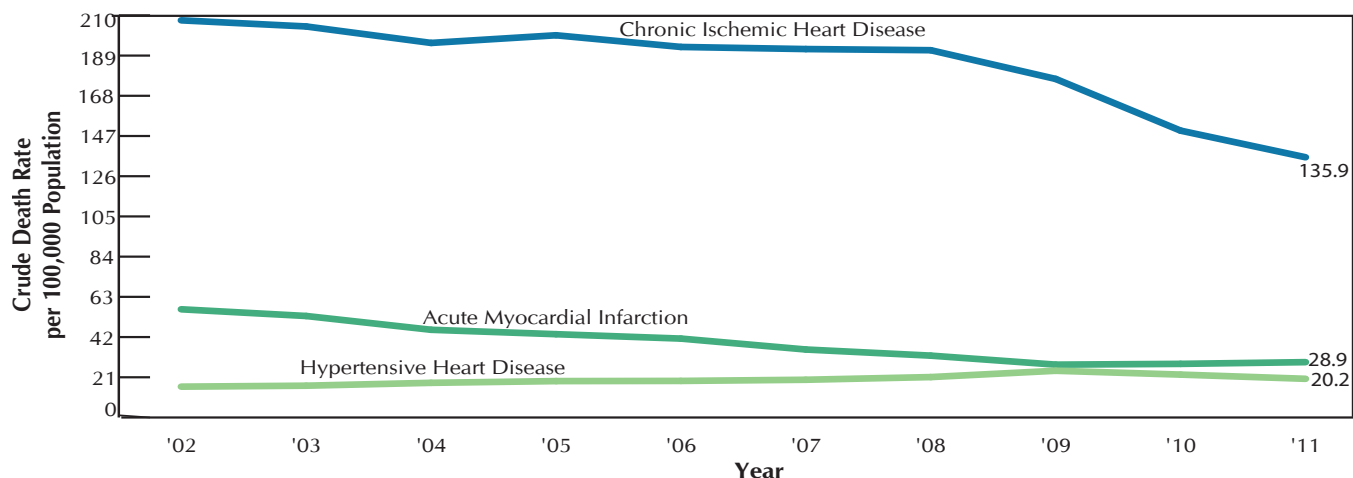
†See Technical Note in Summary of Vital Statistics, Mortality Report: Drug-Related Deaths for definition.

- Chronic lower respiratory diseases, diabetes mellitus, and cerebrovascular diseases (mostly stroke) are the 4th, 5th and 6th leading causes of death in 2011. These death rates have remained relatively stable over the past 10 years ranging from a low of 17.3, 19.5 and 17.3 to a high of 21.5, 23.6 and 23.2 deaths per 100,000 population, respectively.
- The HIV-related mortality rate continues to decline at a faster rate than other causes of death, down 8.9%, since 2010, and 56.2% since 2002 to 9.3 deaths per 100,000 population in 2011.
- The rate of essential hypertension and hypertensive renal disease death increased 30.2% in the past 10 years.

DEATHS IN NEW YORK CITY

HEART DISEASE DEATHS

Crude Death Rates for 3 Leading Causes of Heart Disease* Death, New York City, 2002–2011

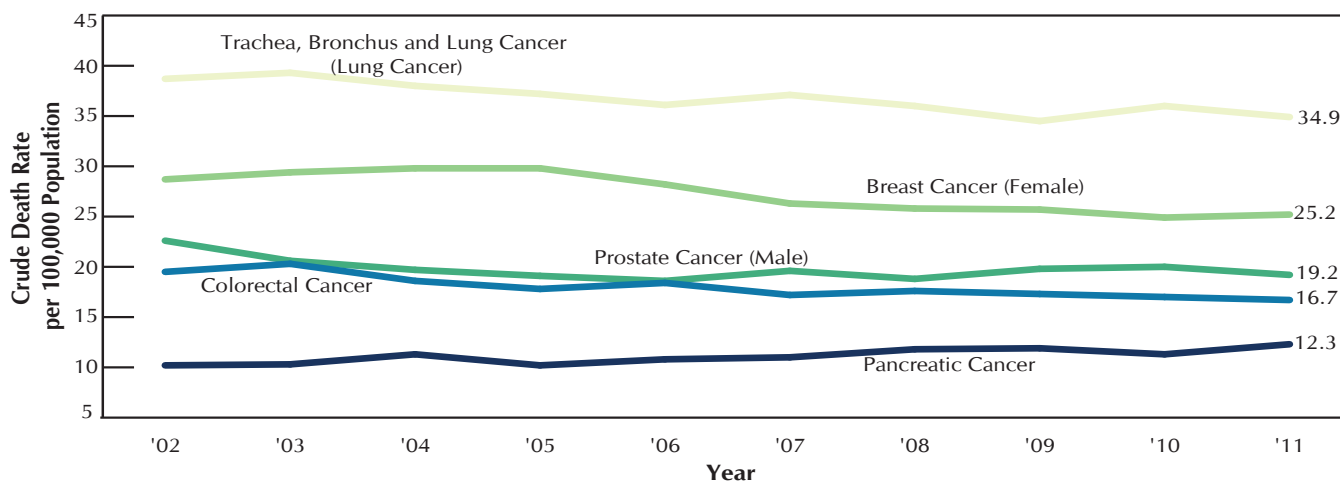


*Please see 2010 Mortality – Special Section: Cause of Death Quality Improvement Initiative for information on the initiative's impact on cause of death reporting, particularly heart disease reporting.

- The rate of chronic ischemic heart disease death, the leading cause of heart disease deaths, decreased 29.1% between 2008 and 2011 to 135.9 in 2011, compared with a 7.5% reduction throughout the preceding 6 years. The recent sharper decline is partly attributable to efforts to improve the accuracy of cause of death reporting.*
- Since 2002, acute myocardial infarction decreased 48.8% while hypertensive heart disease increased 25.5%.

CANCER DEATHS

Crude Death Rates for 5 Leading Causes of Cancer Death, New York City, 2002–2011

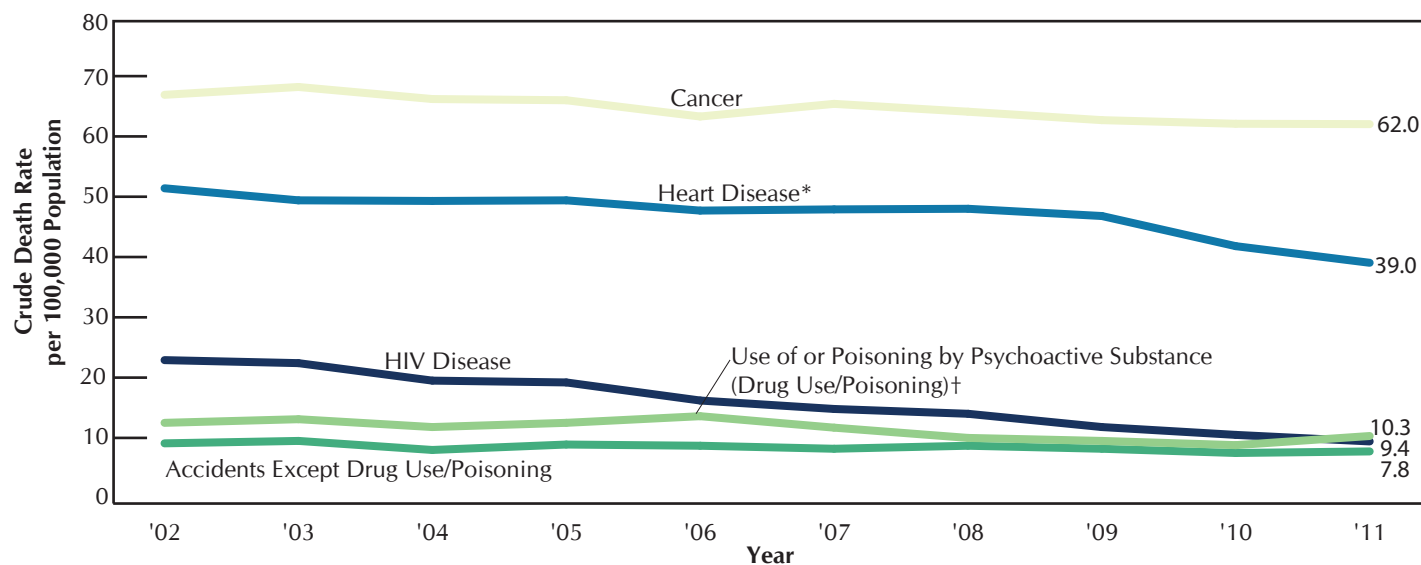


- Since 2002, rates of 4 of the 5 leading causes of cancer death decreased: male prostate cancer (15.0%), colorectal cancer (14.4%), female breast cancer (12.2%) and lung cancer (9.8%).
- Pancreatic cancer increased 20.6% to 12.3 deaths per 100,000 population since 2002.

DEATHS IN NEW YORK CITY

PREMATURE DEATHS

Crude Death Rates for 5 Leading Causes of Premature Death (Age < 65), New York City, 2002–2011



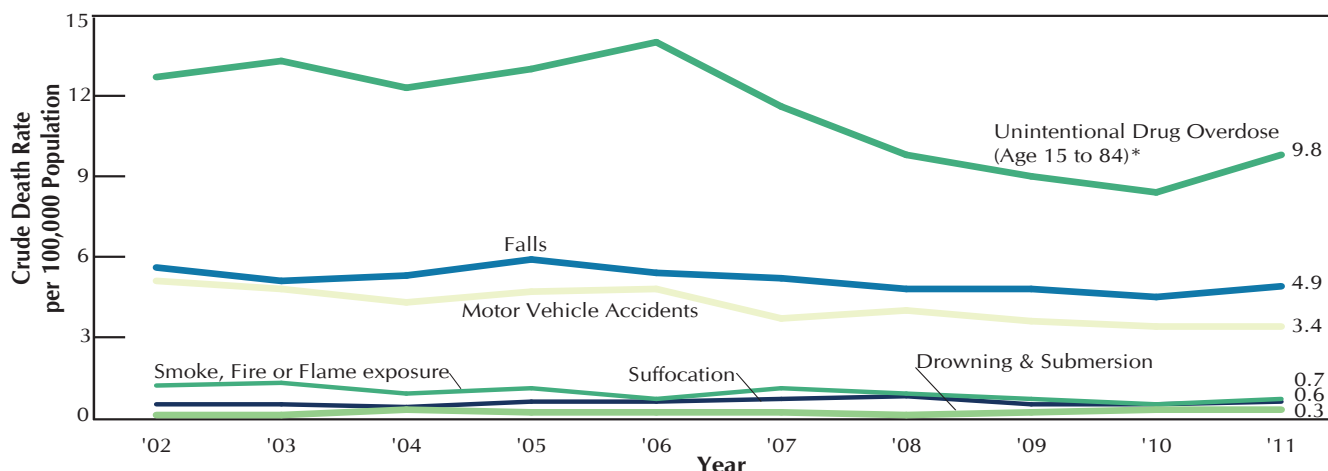
*Please see 2010 Mortality – Special Section: Cause of Death Quality Improvement Initiative for information on the initiative’s impact on cause of death reporting, particularly heart disease reporting.

†See Technical Note in Summary of Vital Statistics, Population and Mortality Report: Drug-Related Deaths.

- In 2011, the 5 leading causes of premature death (before age 65) were cancer, followed by heart disease, drug use/poisoning, HIV infection, and accidents other than drug use/poisoning.
- Over the past 10 years, the HIV-related mortality rate decreased 59.0%, heart disease, 24.1%, and drug use/poisoning, 14.3%.
- The recent decline in heart disease is partly attributed to efforts to improve the accuracy of cause of death reporting.*

ACCIDENTS

Crude Death Rates for Selected Accident Deaths, New York City, 2002–2011

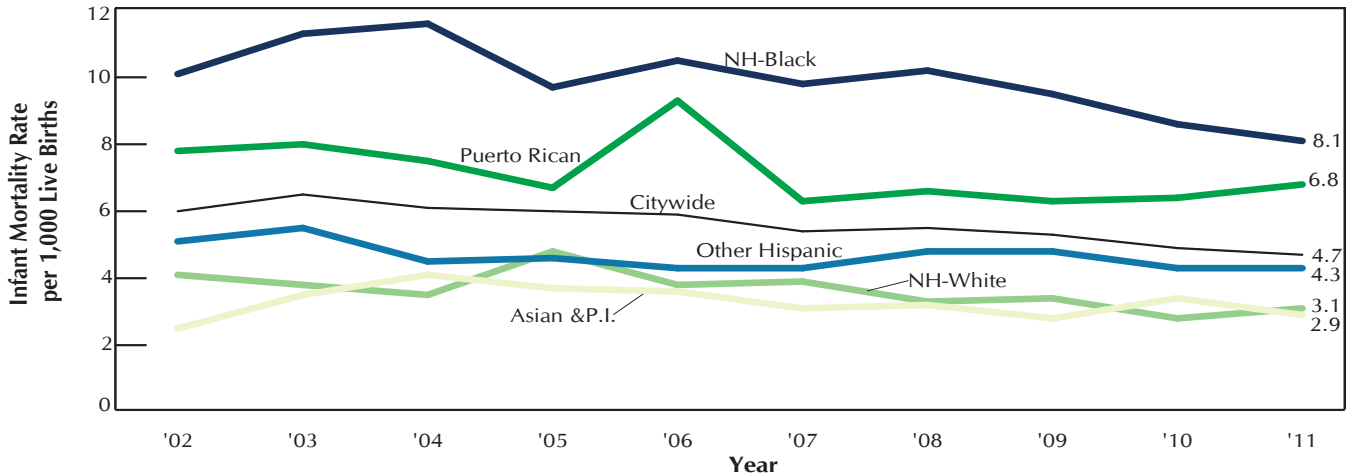


*See Technical Note in Summary of Vital Statistics, Population and Mortality Report: Drug-Related Deaths.

- In 2011, the 3 leading causes of accidental deaths are unintentional drug overdose, followed by falls, and motor vehicle accidents.
- Since 2002, crude death rates for all three have decreased: motor vehicle accidents by 33.3%, unintentional drug overdose by 22.8%, and falls by 12.5%.
- Rates of accidental death due to smoke, fire or flame exposure; suffocation; and drowning and submersion are lower: all less than 1 death per 100,000 in 2011.

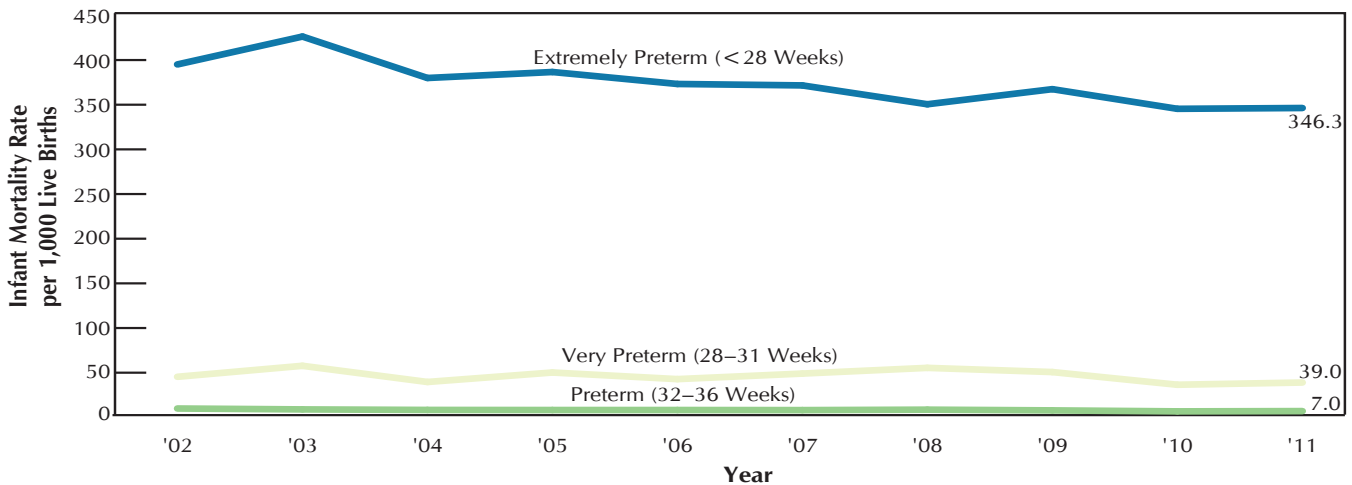
INFANT MORTALITY

Infant Mortality Rate by Mother's Racial/Ethnic Group, New York City, 2002–2011



- The infant mortality rate reached a new historic low of 4.7 infant deaths per 1,000 live births in 2011. Both the Take Care New York goal of a citywide infant mortality rate of 5.0 by 2012 and the Healthy People 2020 goal of 6.0 have already been met.
- From 2002 to 2011, the infant mortality rate has declined 24% for infants born to non-Hispanic whites, 20% for infants born to non-Hispanic blacks, 13% for infants born to Puerto Ricans, and 16% for infants born to other Hispanics. The infant mortality rate for infants born to Asian and Pacific Islanders has fluctuated from a low of 2.5 in 2002 to a high of 4.1 in 2004.
- The racial/ethnic gap in infant mortality rate also declined. For example, the absolute difference in non-Hispanic black and non-Hispanic white infant mortality rates declined from 6 infant deaths per 1,000 births in 2002 to 5 in 2011.

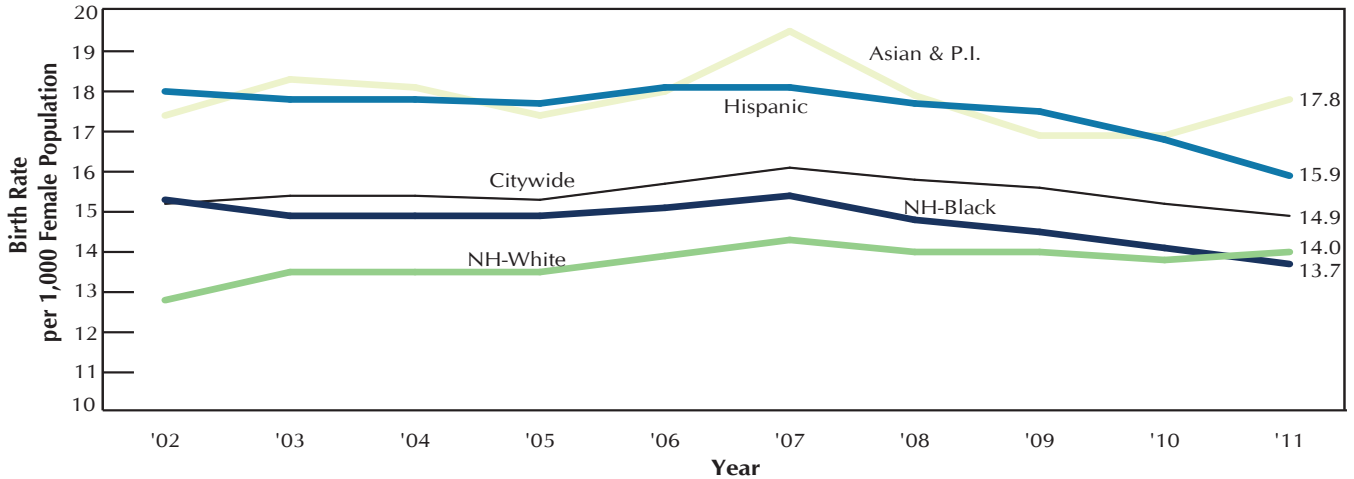
Infant Mortality Rate among Preterm Live Births, New York City, 2002–2011



- In 2011, the less than 2% of infants born extremely preterm or very preterm continued to be at high risk for death; the infant mortality rates were 346 and 39 deaths per 1,000 live births, respectively, for these groups.
- While the proportion of extremely and very preterm births remains virtually unchanged since 2002, at approximately 1.7% of live births (data not shown), the mortality rate for extremely preterm and very preterm infants declined 12% and 14%, respectively, contributing to the reduction in the infant mortality rate.
- The risk of death among preterm infants, at 7 deaths per 1,000 live births in 2011, is much lower than the risk among very preterm and extremely preterm births; it has decreased nearly 30% over the last 10 years.

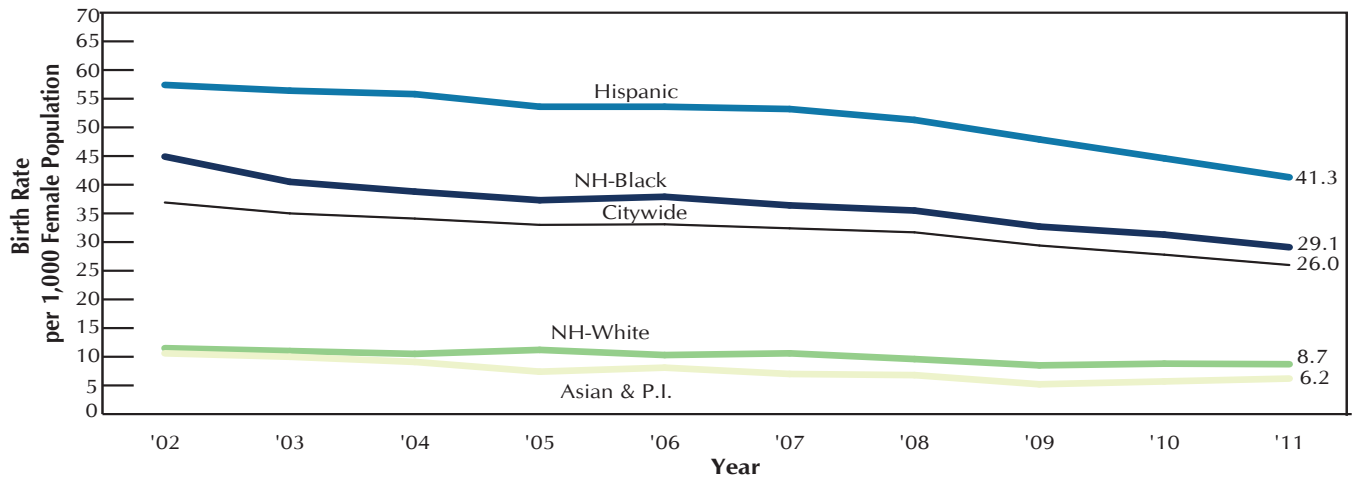
BIRTHS

Birth Rate by Mother's Racial/Ethnic Group, New York City, 2002–2011



- The citywide birth rate recently peaked at 16.1 per 1,000 population in 2007, up from 15.2 in 2002, and, since then, has decreased 7.5% over the last 4 years, reaching 14.9 in 2011.
- From 2002-2011, birth rates fluctuated by racial/ethnic group, with a 9.4% increase among non-Hispanic whites, a 2.3% increase among Asians and Pacific Islanders, a 10.5% decrease among non-Hispanic blacks and an 11.7% decrease among Hispanics.

Teen (Age 15–19) Birth Rate by Racial/Ethnic Group, New York City, 2002–2011



- From 2002 to 2011, teen birth rates declined 29.5%, although racial/ethnic disparities persist.
- The largest decrease occurred among Asians and Pacific Islanders with a 41.5% decrease – they have the lowest teen birth rate, at 6.2 births per 1,000 population in 2011 – followed by non-Hispanic blacks with a 35.2% decline, Hispanics with a 28.0% decline, and non-Hispanic whites with a 24.3% decline.
- In 2011, Hispanics and non-Hispanic blacks had the highest teen birth rates at 41.3 and 29.1 live births per 1,000 population, respectively.