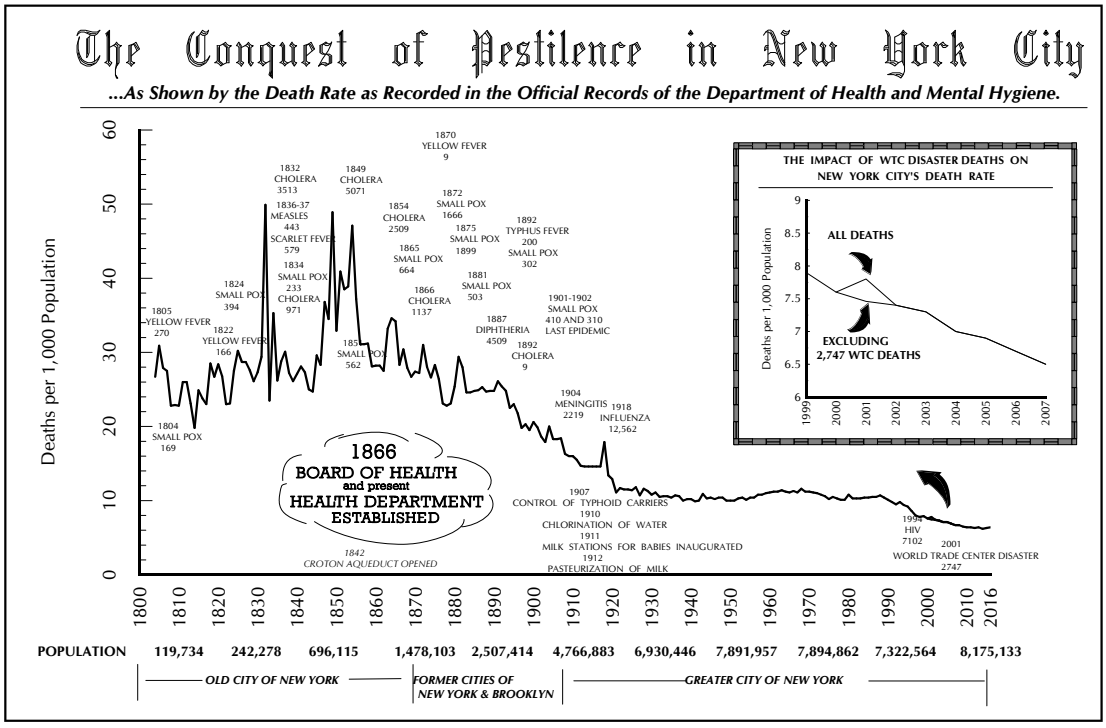
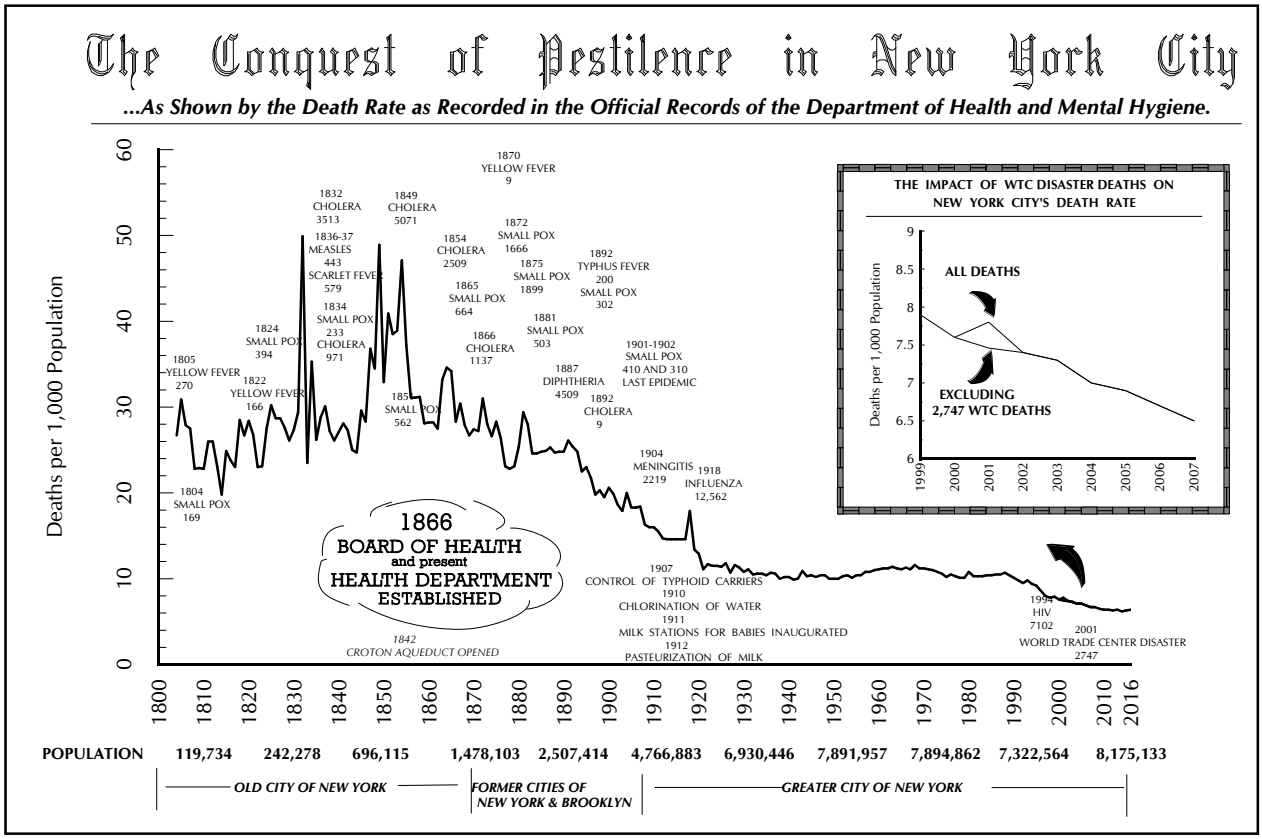
SUMMARY OF VITAL STATISTICS 2016
THE CITY OF NEW YORK



BUREAU OF VITAL STATISTICS, NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE
125 WORTH STREET, CN 7, NEW YORK, NEW YORK 10013

SUMMARY OF VITAL STATISTICS 2016
THE CITY OF NEW YORK



Bureau of Vital Statistics, New York City Department of Health and Mental Hygiene
125 Worth Street, CN 7, New York, New York, 10013

Bill de Blasio, Mayor Mary T. Bassett, MD, MPH, Commissioner

SUMMARY OF VITAL STATISTICS 2016
THE CITY OF NEW YORK

New York City Department of Health and Mental Hygiene

Division of Epidemiology
Charon Gwynn, PhD, Deputy Commissioner

Bureau of Vital Statistics
Gretchen Van Wye, PhD, MA, Assistant Commissioner
Steven Schwartz, PhD, Registrar
Flor Betancourt, MA, Director, Office of Vital Records Documentation
Jessica Borrelli, MPH, Director, Office of Integrated Electronic Records
Mary Huynh, PhD, Director, Office of Vital Statistics
Milton Mino, Director, Office of Vital Records Services
Erica Lee, MPH, Director, Quality Improvement Unit
Wenhui Li, PhD, Director, Statistical Analysis and Reporting Unit
Kimberly Sebek, MPH, Director, Data Use and Disclosure Unit

July 2018

This report was prepared by the Department of Health and Mental Hygiene, Office of Vital Statistics staff under the direction of Wenhui Li, PhD and Mary Huynh, PhD.

Suggested citation: Li W, Zheng P, Huynh M, Castro A, Falci L, Kennedy J, Maduro G, Lee E, Sun Y, and Van Wye G. *Summary of Vital Statistics, 2016*. New York, NY: New York City Department of Health and Mental Hygiene, Bureau of Vital Statistics, 2018.

This publication is available online at http://www1.nyc.gov/site/doh/data/vital-statistics/vital-statistics-summary.page.

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

TABLE OF CONTENTS (CONTINUED)

TABLE OF CONTENTS (CONTINUED)

NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE
Mary T. Bassett, MD, MPH
Commissioner

Dear Fellow New Yorker:

The New York City Department of Health and Mental Hygiene's *Summary of Vital Statistics* provides an overview of both births and deaths in New York City. These data not only highlight the great strides that New York has made to become a more equitable city but also areas that we must address to achieve equity for all New Yorkers.

Highlights from our 2016 report, which begins on the next page, include:

- Citywide, life expectancy remained the same as 2015 at 81.2 years, representing a 1.1 year increase since 2007.
- In NYC, Non-Hispanic blacks have the lowest life expectancy among racial/ethnic groups at 77.2 years while Hispanics have the highest, at 82.4 years.
- From 2015 to 2016, the citywide age-adjusted mortality rate dropped from 582.1 per 100,000 population to 575.4 per 100,000 population. The age-adjusted mortality rate has declined by 13.8% since 2007.
- New York City's age-adjusted premature death (age <65 years) declined 13.6% since 2007. However, the age-adjusted premature death rate increased in 2016 from 2015 from 184.5 per 100,000 population to 189.4.
- Deaths due to unintentional drug overdose continue to rise; the rate in 2016 is almost double the rate ten years ago.
- The 2016 infant mortality rate is still historically low at 4.1 per 1,000 live births, a 4.7% decline from 2015 (4.3 per 1,000 live births).
- Despite the low citywide infant mortality rate, the infant mortality rate remains three times higher for non-Hispanic black New Yorkers as compared to non-Hispanic whites.

Despite the progress that has been made, racial/ethnic and neighborhood disparities continue to persist. We will continue to track these important health indicators and to work towards improving the health of all New Yorkers.

Sincerely,

Mary T. Bassett, MD, MPH
Commissioner

KEY FINDINGS

Life Expectancy

- New York City's life expectancy at birth in 2016 was 81.2 years, remaining the same since 2015 and increasing by 1.1 year since 2007.
- The New York City 2016 life expectancy at birth was 82.4 years among Hispanics, 81.2 years among non-Hispanic whites, and 77.2 years among non-Hispanic blacks. From 2015 to 2016, life expectancy decreased 0.1 year among non-Hispanic blacks and non-Hispanic whites, and remained the same among Hispanics.

Mortality

- The citywide age-adjusted death rate decreased over the past year, from 582.1 per 100,000 population in 2015 to 575.4 in 2016 (1.2% decrease). From 2015 to 2016, the age-adjusted all-cause death rate remained the same among Hispanics and decreased among non-Hispanic blacks by 1.4%, among non-Hispanic whites by 1.6; and among Asians and Pacific Islanders by 0.5%. Over the past ten years, the citywide age-adjusted death rate decreased by 13.8%.
- Between 2007 and 2016, the age-adjusted all-cause death rates decreased among non-Hispanic blacks by 15.3%, among Hispanics by 11.2%, among non-Hispanic whites by 12.7%, and among Asians and Pacific Islanders by 6.3%.
- Age-adjusted premature mortality rates declined by 13.6% citywide over the past ten years. From 2007 to 2016, age-adjusted premature death (age <65 years) rates declined by 16.7% among non-Hispanic blacks, 12.1% among Hispanics, 11.5% among non-Hispanic whites, and 5.0% among Asians and Pacific Islanders.
- The opioid epidemic has resulted in an increase in drug-related deaths across New York City. Drug-related deaths include both unintentional drug overdoses and deaths due to chronic drug use.
- The age-adjusted drug-related death rate increased to 16.4 per 100,000 population in 2016, a 42.6% increase since 2015 and a 65.7% increase since 2007.

Infant Mortality

- In 2016, New York City had an infant mortality rate of 4.1 infant deaths per 1,000 live births, a slight decrease since 2015 (4.3 per 1,000 live births). Due to the small number of deaths, the rate will fluctuate from year to year.
- The infant mortality rate declined by 24.1% since 2007.
- Compared to non-Hispanic whites, the infant mortality rate for non-Hispanic blacks was 3.1 times higher, and the rate for Puerto Ricans was 1.3 times higher. Since 2015, this disparity has increased slightly for non-Hispanic blacks (3.0 times) and declined for Puerto Ricans (2.3 times).

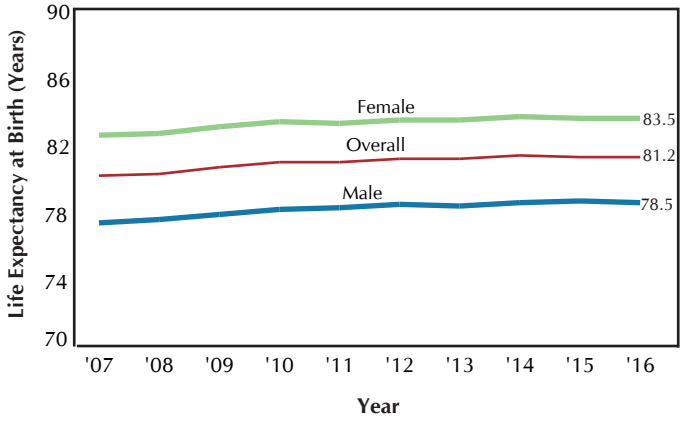
Pregnancy Outcomes

- The 2016 citywide crude birth rate was 14.1 births per 1,000 population. New York City's birth rate decreased by 0.7% since 2015 and by 11.9% since 2007.
- In 2016, the birth rate was highest among Asians and Pacific Islanders at 17.3 births per 1,000 population, followed by 14.8 among non-Hispanic whites, 13.7 among Hispanics, and 11.8 among non-Hispanic blacks.
- For 2016, the community district with the highest crude birth rate was Borough Park with 27.1 births per 1,000 population; the community district with the lowest crude birth rate was Bayside with 6.0 births per 1,000 population.
- From 2007 to 2016, birth rates fell among all teenagers regardless of age, and the overall rate of teen birth (births to women <20) declined by 54.1%. Among teens less than 18 years of age, the birth rate declined over that period by 62.8%; among women 18-19, it declined by 50.4%.
- Induced terminations of pregnancy continued to decline from 2015 to 2016, decreasing by 5.3%. Spontaneous terminations of pregnancy remained the same from 2015 to 2016.
- Teen birth rates declined for all racial/ethnic groups: by 54.4% among Hispanics, 57.6% among non-Hispanic blacks, 37.8% among non-Hispanic whites, and 41.9% among Asians and Pacific Islanders.

For more detailed information, including additional data and details on how to submit data requests, please visit http://www1.nyc.gov/site/doh/data/data-sets/vital-statistics-data.page, or email vsdata@health.nyc.gov.

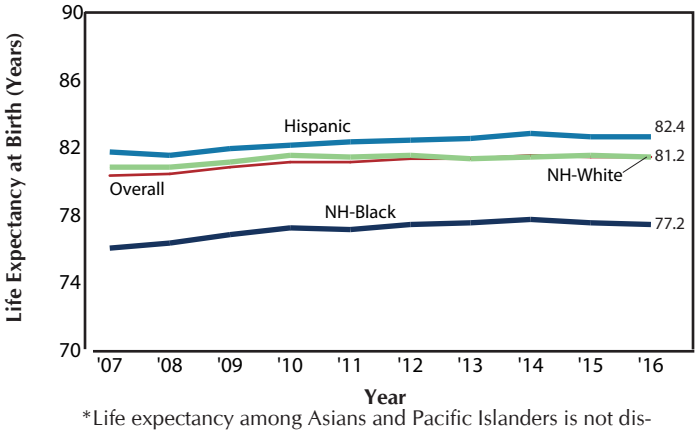
LIFE EXPECTANCY

Figure 1. Life Expectancy at Birth, Overall and by Sex, New York City, 2007–2016



- New York City's life expectancy at birth in 2016 was 81.2 years,remaining the same since 2015 and increasing by 1.1 year since 2007.
- The life expectancy among males was 78.5 years, a 0.1-year decrease since 2015 and a 1.2-year increase since 2007.
- The life expectancy among females was 83.5 years, the same since 2015 and a 1.0-year increase since 2007.

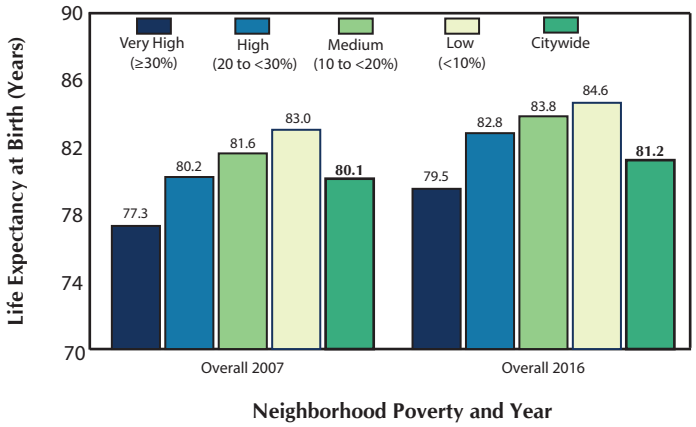
Figure 2. Life Expectancy at Birth by Racial/ Ethnic* Group, New York City, 2007–2016



*Life expectancy among Asians and Pacific Islanders is not displayed because the required single year age population denominators are too small to produce reliable estimates (Appendix B, Technical Notes: Population, Life Expectancy).

- The New York City 2016 life expectancy at birth was 82.4 years among Hispanics, 81.2 years among non-Hispanic whites, and 77.2 years among non-Hispanic blacks.
- Life expectancy increased across all racial/ethnic groups from 2007 to 2016: 0.9 year among Hispanics, 0.6 year among non-Hispanic whites, and 1.4 years among non-Hispanic blacks. From 2015 to 2016, life expectancy decreased 0.1 year among non-Hispanic blacks and non-Hispanic whites, and remained the same among Hispanics.

Figure 3. Life Expectancy at Birth by Neighborhood Poverty*, New York City, 2007 and 2016

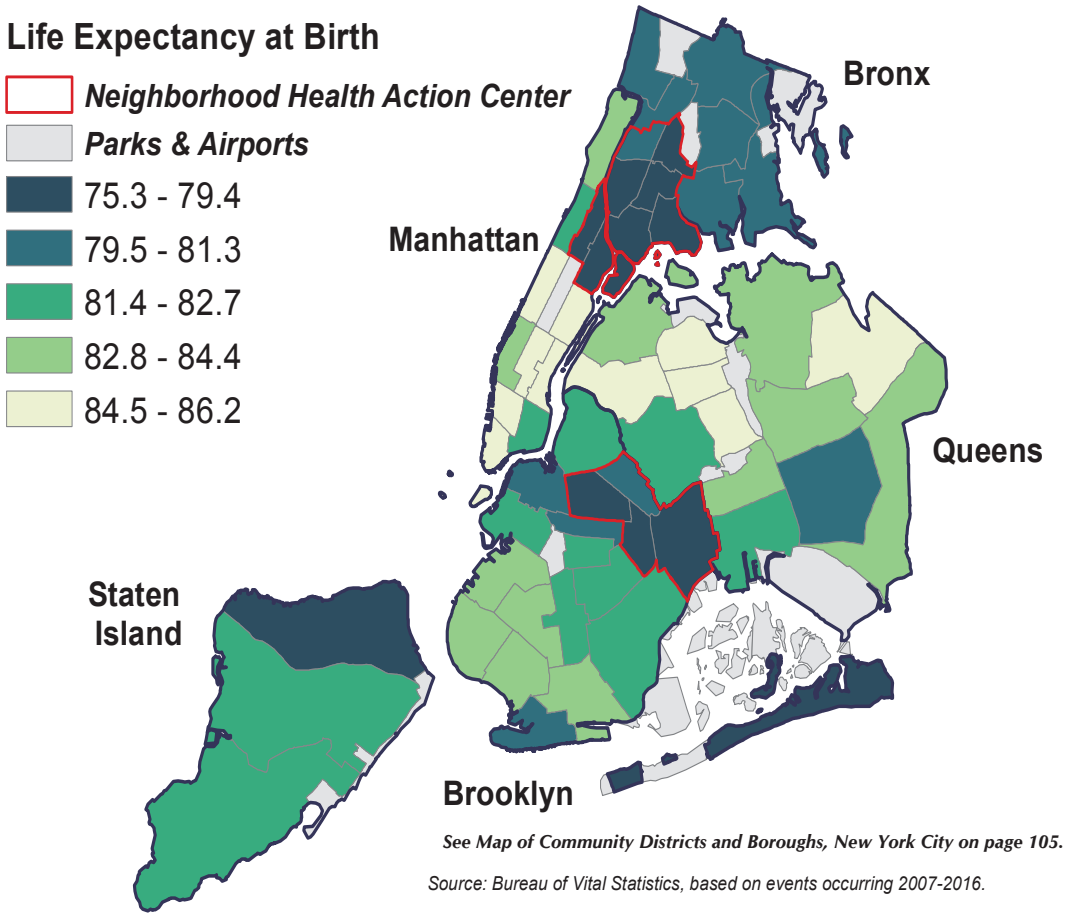


*Neighborhood poverty (based on decedent's residential census tract) defined as percent of residents with incomes below 100% of the Federal Poverty Level, per American Community Survey (ACS) 2005-2009 for 2007 data and per ACS 2011-2015 for 2016 data.

- Life expectancy increased across all categories of neighborhood poverty between 2007 and 2016. For very high poverty areas, life expectancy increased by 2.2 years as compared to 1.6 years for low poverty areas.
- The difference in life expectancy between very high and low poverty areas in 2016 was 5.1 years as compared to 5.7 years in 2007.

LIFE EXPECTANCY

Figure 4. Life Expectancy at Birth by Community District, New York City, 2016



See Map of Community Districts and Boroughs, New York City on page 105.

Source: Bureau of Vital Statistics, based on events occurring 2007-2016.

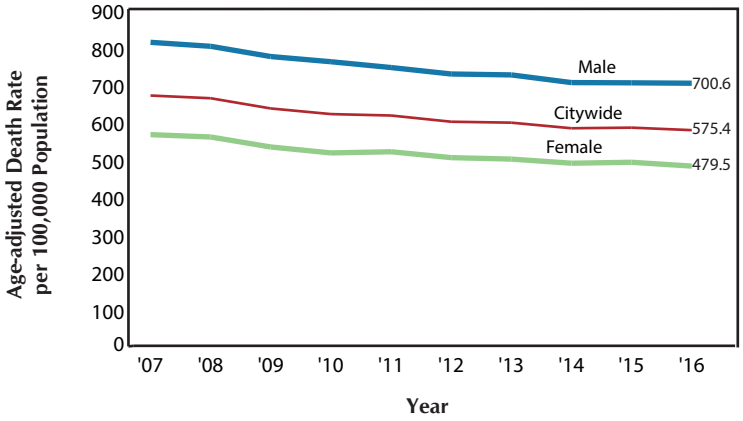
- From 2007-2016, New York City's life expectancy at birth was highest in Murray Hill and Greenwich Village/SOHO (86.2), the Upper East Side (86.1), Elmhurst/Corona (86.0), and Battery Park/Tribeca (85.9).
- From 2007-2016, life expectancy at birth was lowest in Brownsville (75.3), Morrisania (76.6), Central Harlem (76.7), The Rockaways (76.7), and Bedford Stuyvesant (77.3).

Life Expectancy at Birth by Community District (CD) of Residence, New York City, 2016

CD	MANHATTAN	Life Expectancy	CD	BRONX	Life Expectancy	CD	BROOKLYN	Life Expectancy	CD	QUEENS	Life Expectancy
MN01	Battery Park, Tribeca	85.9	BX01	Mott Haven	77.8	BK01	Williamsburg, Greenpoint	81.6	QN01	Astoria, Long Island City	83.5
MN02	Greenwich Village, SOHO	86.2	BX02	Hunts Point	79.4	BK02	Fort Greene, Brooklyn Heights	81.2	QN02	Sunnyside, Woodside	85.7
MN03	Lower East Side	82.7	BX03	Morrisania	76.6	BK03	Bedford Stuyvesant	77.3	QN03	Jackson Heights	85.2
MN04	Chelsea, Clinton	83.5	BX04	Concourse, Highbridge	79.1	BK04	Bushwick	80.8	QN04	Elmhurst, Corona	86.0
MN05	Midtown Business District	85.2	BX05	University/Morris Heights	80.2	BK05	East New York	78.9	QN05	Ridgewood, Glendale	81.6
MN06	Murray Hill	86.2	BX06	East Tremont	77.8	BK06	Park Slope	81.8	QN06	Rego Park, Forest Hills	84.6
MN07	Upper West Side	85.0	BX07	Fordham	79.7	BK07	Sunset Park	83.0	QN07	Flushing	84.4
MN08	Upper East Side	86.1	BX08	Riverdale	81.0	BK08	Crown Heights North	79.8	QN08	Fresh Meadows, Briarwood	84.1
MN09	Manhattanville	81.7	BX09	Unionport, Soundview	80.1	BK09	Crown Heights South	81.6	QN09	Woodhaven	83.1
MN10	Central Harlem	76.7	BX10	Throgs Neck	81.2	BK10	Bay Ridge	83.3	QN10	Howard Beach	81.7
MN11	East Harlem	77.5	BX11	Pelham Parkway	80.0	BK11	Bensonhurst	84.0	QN11	Bayside	84.7
MN12	Washington Heights	84.2	BX12	Williamsbridge	81.3	BK12	Borough Park	84.3	QN12	Jamaica, St. Albans	80.8
						BK13	Coney Island	80.5	QN13	Queens Village	83.0
CD	STATEN ISLAND					BK14	Flatbush, Midwood	82.5	QN14	The Rockaways	76.7
S101	Port Richmond	79.2				BK15	Sheepshead Bay	83.7			
S102	Willowbrook, South Beach	81.5				BK16	Brownsville	75.3			
S103	Tottenville	81.4				BK17	East Flatbush	82.6			
						BK18	Canarsie	82.0			

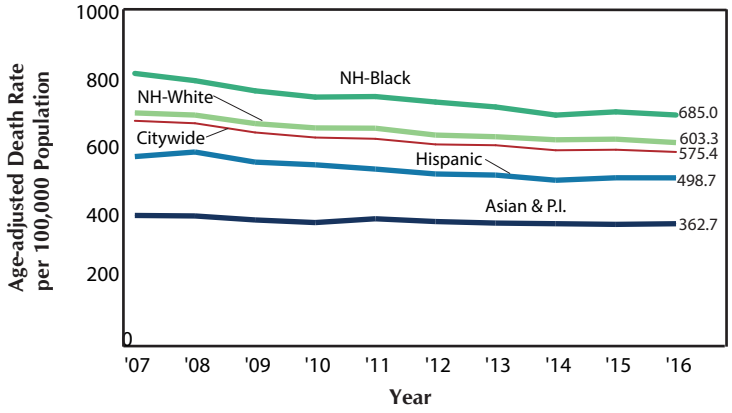
CITYWIDE MORTALITY

Figure 5. Age-adjusted Death Rates, Overall and by Sex, New York City, 2007–2016



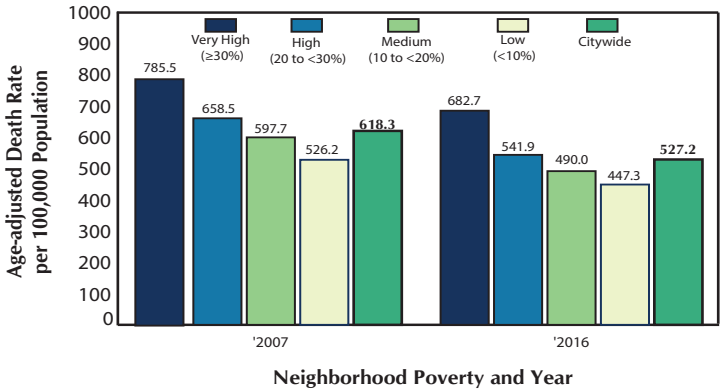
- Citywide age-adjusted death rates decreased slightly over the past year, from 582.1 per 100,000 population in 2015 to 575.4 in 2016. Over the past ten years, the age-adjusted death rate decreased by 19.6%.
- From 2007 to 2016, age-adjusted all-cause death rates decreased by 18.2% among males, and by 21.4% among females. Rates have tended to decrease among both sexes from year to year and are consistently lower for females.

Figure 6. Age-adjusted Death Rates by Racial/ Ethnic Group, New York City, 2007–2016



- Between 2007 and 2016, age-adjusted all-cause death rates decreased by 17.6% among non-Hispanic blacks, by 14.3% among Hispanics, by 15.6% among non-Hispanic whites, and by 5.6% among Asians and Pacific Islanders.
- In 2016, the death rate among non-Hispanic blacks was 14.0% higher than among non-Hispanic whites, similar to 2015. The death rate has continued to be higher among non-Hispanic blacks compared to non-Hispanic whites over time, although the gap has remained the same as 2015 (1.1 times higher).

Figure 7. Age-adjusted Death Rates by Neighborhood Poverty*, New York City Residents, 2007 and 2016

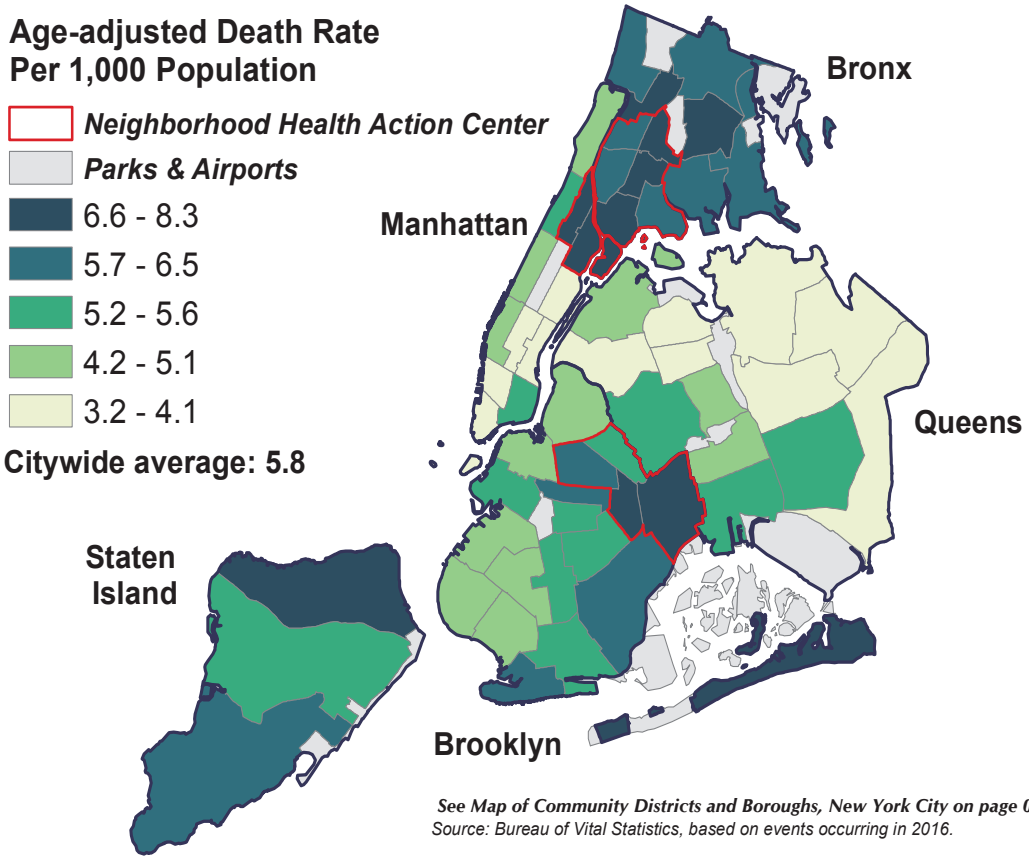


*Neighborhood poverty (based on decedent's residential census tract) defined as percent of residents with incomes below 100% of the Federal Poverty Level, per American Community Survey (ACS) 2005-2009 for 2007 data and per ACS 2011-2015 for 2016 data.

- Since 2007, age-adjusted death rates decreased across all categories of neighborhood poverty. Over that period, the rate decreased by 13.1% in very high poverty areas and by 15.0% in low poverty areas.
- The age-adjusted all-cause death rate remained 1.5 times higher in areas with very high poverty compared to areas with low poverty in 2016 as it was for 2007.

NEIGHBORHOOD MORTALITY

Figure 8. Age-adjusted Death Rates by Community District of Residence, New York City, 2016



See Map of Community Districts and Boroughs, New York City on page 05

Source: Bureau of Vital Statistics, based on events occurring in 2016.

- In 2016, Brownsville had the highest age-adjusted death rate, at 8.3 deaths per 1,000 population, followed by 7.8 in the Rockaways and Central Harlem respectively, 7.7 in East Tremont, and 7.5 in Mott Haven.
- In 2016, age-adjusted death rates were lowest in Greenwich Village/SOHO at 3.2 deaths per 1,000 population, followed by 3.5 in Bayside, and 3.7 in Elmhurst/Corona, Jackson Heights, and Upper East Side.

Age-adjusted Death Rates per 1,000 Population by Community District (CD) of Residence, New York City, 2016

CD	MANHATTAN	Age-adjusted Death Rates	CD	BRONX	Age-adjusted Death Rates	CD	BROOKLYN	Age-adjusted Death Rates	CD	QUEENS	Age-adjusted Death Rate
MN01	Battery Park, Tribeca	3.8	BX01	Mott Haven	7.5	BK01	Williamsburg, Greenpoint	5.0	QN01	Astoria, Long Island City	5.0
MN02	Greenwich Village, SOHO	3.2	BX02	Hunts Point	5.9	BK02	Fort Greene, Brooklyn Heights	4.9	QN02	Sunnyside, Woodside	3.8
MN03	Lower East Side	5.2	BX03	Morrisania	7.2	BK03	Bedford Stuyvesant	6.5	QN03	Jackson Heights	3.7
MN04	Chelsea, Clinton	4.3	BX04	Concourse, Highbridge	5.9	BK04	Bushwick	5.5	QN04	Elmhurst, Corona	3.7
MN05	Midtown Business District	3.9	BX05	University/Morris Heights	6.5	BK05	East New York	6.7	QN05	Ridgewood, Glendale	5.4
MN06	Murray Hill	3.8	BX06	East Tremont	7.7	BK06	Park Slope	5.1	QN06	Rego Park, Forest Hills	4.3
MN07	Upper West Side	4.3	BX07	Fordham	6.6	BK07	Sunset Park	4.7	QN07	Flushing	4.1
MN08	Upper East Side	3.7	BX08	Riverdale	6.2	BK08	Crown Heights North	6.1	QN08	Fresh Meadows, Briarwood	4.1
MN09	Manhattanville	5.6	BX09	Unionport, Soundview	6.2	BK09	Crown Heights South	5.6	QN09	Woodhaven	4.6
MN10	Central Harlem	7.8	BX10	Throgs Neck	6.0	BK10	Bay Ridge	5.1	QN10	Howard Beach	5.2
MN11	East Harlem	7.4	BX11	Pelham Parkway	6.6	BK11	Bensonhurst	4.6	QN11	Bayside	3.5
MN12	Washington Heights	4.9	BX12	Williamsbridge	5.9	BK12	Borough Park	4.9	QN12	Jamaica, St. Albans	5.3
						BK13	Coney Island	6.4	QN13	Queens Village	3.8
CD	STATEN ISLAND					BK14	Flatbush, Midwood	5.4	QN14	The Rockaways	7.8
S101	Port Richmond	6.8				BK15	Sheepshead Bay	5.2			
S102	Willowbrook, South Beach	5.6				BK16	Brownsville	8.3			
S103	Tottenville	6.4				BK17	East Flatbush	5.5			
						BK18	Canarsie	5.8			

LEADING CAUSES OF DEATH

Table 1. Ten Leading Causes of Death, Crude Death Rates per 100,000 Population, New York City, 2016, 2015, and 2007

	2016		2015			2007		
Cause	Rank	Crude Death Rate	Rank	Crude Death Rate	Change to 2016 (%)	Rank	Crude Death Rate	Change to 2016 (%)
Diseases of Heart*	1	201.0	1	200.3	0.3%	1	259.1	-22.4%
Malignant Neoplasms	2	158.5	2	155.8	1.7%	2	160.1	-1.0%
Influenza and Pneumonia	3	23.6	3	24.5	-3.7%	3	27.2	-13.2%
Cerebrovascular Diseases	4	21.6	5	21.6	0.0%	4	18.9	14.3%
Diabetes Mellitus	5	21.0	4	21.7	-3.2%	5	18.9	11.1%
Chronic Lower Respiratory Diseases	6	19.5	6	20.6	-5.3%	6	17.2	13.4%
Use of or Poisoning by Psychoactive Substance†	7	17.5	10	12.3	42.3%	9	10.3	69.9%
Essential Hypertension and Renal Diseases	8	13.2	7	12.9	2.3%	10	9.6	37.5%
Alzheimer's Disease	9	12.9	8	12.6	2.4%	17	3.4	279.4%
Accidents Except Drug Poisoning	10	11.7	9	12.4	-5.6%	8	12.5	-6.4%

*See the *2010 Summary of Vital Statistics: Mortality – Special Section: Cause of Death Quality Improvement Initiative* for information on the recent trends in cause of death reporting, particularly heart disease.

†Appendix B Technical Notes: Drug-Related Deaths.

- Heart disease and malignant neoplasms (cancer) continue to rank as the top leading causes of death, with crude rates that far exceed all other causes. Compared to influenza/pneumonia—the third leading cause of death in 2016—crude death rates related to heart disease were 8.5 times higher, and crude rates related to cancer were 6.7 times higher.
- The top 10 leading causes of deaths in New York City remained the same as 2015, but the order of rankings changed.
- Compared to 10 years ago, HIV disease has dropped out from the top 10 leading causes and Alzheimer's disease has risen from the 17th leading cause in 2007 to the 9th in 2016.
- Despite a slight increase from 2015, the rate for heart disease has decreased substantially by 22.4% from 10 years ago, which may be partially due to an heart disease over-reporting intervention (see note under Table 1). The rate for influenza/pneumonia continues to decline, 13.2% since 2007. While the rate for chronic lower respiratory disease has decreased since 2015, it is still higher than 10 years ago. The rate for essential hypertension continues to increase substantially; the rate increased by 2.3% since 2015 and by 37.5% since 2007.
- The mortality rate for Alzheimer's disease increased dramatically over the past ten years, and over the past year, reflecting the aging of the population. However, sharp increases in Alzheimer's disease observed since 2009 can be partially attributed to efforts to improve cause of death reporting.
- The rate for deaths attributed to non-drug related accidents declined by 6.4% since 2007.
- The mortality rate related to use of or poisoning by a psychoactive substance increased by 42.3% since 2015, and by 69.9% since 2007.
- Diabetes mellitus ranked as the 5h leading cause of death in 2016, down from 4th in 2015.

LEADING CAUSES OF DEATH

Table 2. Leading Causes of Death by Sex, New York City, 2016*

Rank	Male	Female
1	Diseases of Heart	Diseases of Heart
2	Malignant Neoplasms	Malignant Neoplasms
3	Use of or Poisoning by Psychoactive Substance	Cerebrovascular Diseases
4	Influenza and Pneumonia	Influenza and Pneumonia
5	Diabetes Mellitus	Diabetes Mellitus†
6	Cerebrovascular Diseases	Chronic Lower Respiratory Diseases†
7	Chronic Lower Respiratory Diseases	Alzheimer's Disease
8	Accidents Except Poisoning by Psychoactive Substance	Essential Hypertension and Hypertensive Renal Disease
9	Essential Hypertension and Hypertensive Renal Disease	Accidents Except Poisoning by Psychoactive Substance
10	Chronic Liver Disease and Cirrhosis	Use of or Poisoning by Psychoactive Substance

* Counts and percentages for this table can be found in Table M7.

† Tied ranking

- Heart disease and malignant neoplasms (cancer) are the leading causes of death among both males and females.
- Use of or poisoning by a psychoactive substance is the third leading cause of death among males but ranks 10th among females. In 2015, it was ranked 7th for males and was not in the top 10 for females.
- Cerebrovascular disease is the 3rd leading cause of death among females but ranks 6th among males.
- Chronic liver disease is a leading cause of death among males only (10th).
- Alzheimer's Disease is ranked as a leading cause of death among females only (7th).

LEADING CAUSES OF DEATH

Table 3. Leading Causes of Death by Racial/Ethnic Group*, New York City, 2016†

Rank	Puerto Rican	Other Hispanic	Asian and Pacific Islander	Non-Hispanic White	Non-Hispanic Black
1	Diseases of Heart	Diseases of Heart	Malignant Neoplasms	Diseases of Heart	Diseases of Heart
2	Malignant Neoplasms	Malignant Neoplasms	Diseases of Heart	Malignant Neoplasms	Malignant Neoplasms
3	Diabetes Mellitus	Use of or Poisoning by Psychoactive Substance	Cerebrovascular Diseases	Influenza and Pneumonia	Diabetes Mellitus
4	Influenza and Pneumonia	Diabetes Mellitus	Influenza and Pneumonia	Chronic Lower Respiratory Diseases	Cerebrovascular Diseases
5	Use of or Poisoning by Psychoactive Substance	Cerebrovascular Diseases	Diabetes Mellitus	Cerebrovascular Diseases	Influenza and Pneumonia
6	Chronic Lower Respiratory Diseases	Influenza and Pneumonia	Chronic Lower Respiratory Diseases	Use of or Poisoning by Psychoactive Substance	Chronic Lower Respiratory Diseases
7	Cerebrovascular Diseases	Accidents Except Poisoning by Psychoactive Substance	Essential Hypertension and Hypertensive Renal Disease	Alzheimer's Disease	Essential Hypertension and Hypertensive Renal Disease
8	Alzheimer's Disease	Alzheimer's Disease	Accidents Except Poisoning by Psychoactive Substance	Diabetes Mellitus	Use of or Poisoning by Psychoactive Substance
9	Essential Hypertension and Hypertensive Renal Disease	Chronic Lower Respiratory Diseases	Alzheimer's Disease	Accidents Except Poisoning by Psychoactive Substance	Accidents Except Poisoning by Psychoactive Substance
10	Chronic Liver Disease and Cirrhosis	Essential Hypertension and Hypertensive Renal Disease	Intentional Self-harm (Suicide)	Essential Hypertension and Hypertensive Renal Disease	Human Immunodeficiency Virus (HIV) Disease

* Decedents of other or multiple races or with unknown ethnicities are not shown.

† Counts and percentages for this table can be found in Table M8.

- Heart disease and malignant neoplasms (cancer) are the leading causes of death among all racial/ethnic groups. Among Asians and Pacific Islanders, cancer is ranked first and heart disease is ranked second.
- Diabetes mellitus is the 3rd leading cause of death among Puerto Ricans and non-Hispanic blacks; it ranks 4th among Other Hispanics, 5th among Asians and Pacific Islanders, and 8th among non-Hispanic whites.
- HIV is a leading cause of death among non-Hispanic blacks (10th) and is not ranked as a leading cause of death among all other racial/ethnic groups.
- Use of or poisoning by psychoactive substance (drug-related deaths) is a leading cause of death among Puerto Ricans (5th), Other Hispanics (3rd), non-Hispanic whites (6th), and non-Hispanic blacks (8th).
- Essential hypertension and hypertensive renal disease is a leading cause of death among all groups. It ranks 9th among Puerto Ricans, 7th among non-Hispanic blacks and Asians and Pacific Islanders, and 10th among Other Hispanics and non-Hispanic whites.
- Intentional self-harm (suicide) is a leading cause of death among Asians and Pacific Islanders only (10th).

PREMATURE DEATH

Table 4. Ten Leading Causes of Premature Death (Age <65 Years), Crude Death Rates per 100,000 Population, New York City, 2016, 2015, and 2007

	2016		2015			2007		
Cause	Rank	Crude Death Rate	Rank	Crude Death Rate	Change to 2016 (%)	Rank	Crude Death Rate	Change to 2016 (%)
Malignant Neoplasms	1	57.5	1	56.4	2.0%	1	63.5	-9.4%
Diseases of Heart*	2	40.0	2	39.7	0.8%	2	46.5	-14.0%
Use of or Poisoning by Psychoactive Substance†	3	19.2	3	13.4	43.3%	4	11.4	68.4%
Accidents Except Drug Poisoning	4	7.2	4	7.2	0.0%	5	8.0	-10.0%
Diabetes Mellitus	5	6.9	5	7.1	-2.8%	7	6.4	7.8%
Intentional Self-harm (Suicide)	6	5.9	6	6.0	-1.7%	8	5.5	7.3%
Cerebrovascular Diseases	7	4.8	8	5.1	-5.9%	9	5.4	-11.1%
Human Immunodeficiency Virus (HIV) Disease	8	4.7	7	5.2	-9.6%	3	14.4	-67.4%
Assault (Homicide)	9	4.6	10	4.8	-4.2%	6	6.9	-33.3%
Chronic Lower Respiratory Diseases	10	4.3	11	4.3	0.0%	12	3.8	13.2%

*See the *2010 Summary of Vital Statistics: Mortality – Special Section: Cause of Death Quality Improvement Initiative* for information on the recent trends in cause of death reporting, particularly heart disease.

†Appendix B Technical Notes: Drug-Related Deaths.

- Malignant neoplasms (cancer) and heart diseases continue to rank as the top leading causes of premature death, with crude rates that far exceed all other causes. Compared to use of or poisoning by psychoactive substances—the third leading cause of premature death in 2016—crude premature death rates related to cancer were 3.0 times higher, and crude premature rates related to heart disease were 2.1 times higher.
- Chronic lower respiratory disease has risen from the 11th leading cause in 2015 to the 10th in 2016. Chronic Liver Disease and Cirrhosis dropped from the top ten leading causes of premature death.
- Despite a slight increase since 2015, the rate for heart disease has decreased substantially by 14.0% from 10 years ago; while the rate for HIV Disease continues to decline, 67.4% since 2007. The rate for chronic lower respiratory disease has remained the same since 2015 and is higher than 10 years ago. The rate for assault (homicide) continues to decline, by 4.2% since 2015 and by 33.3% since 2007.
- The rate for premature deaths attributed to non-drug related accidents declined by 10.0% since 2007. The premature mortality rate for cerebrovascular diseases decreased by 5.9% since 2015, and by 11.1% since 2007.
- The premature mortality rate related to use of or poisoning by a psychoactive substance increased dramatically over the past year (43.3%), reflecting an ongoing national epidemic, and over the past ten years (68.4%).

PREMATURE DEATH

Table 5. Leading Causes of Premature Death (Age <65 Years) by Sex, New York City, 2016*

Rank	Male	Female
1	Malignant Neoplasms	Malignant Neoplasms
2	Diseases of Heart	Diseases of Heart
3	Use of or Poisoning by Psychoactive Substance	Use of or Poisoning by Psychoactive Substance
4	Accidents Except Poisoning by Psychoactive Substance	Diabetes Mellitus
5	Intentional Self-harm (Suicide)	Chronic Lower Respiratory Diseases
6	Diabetes Mellitus	Cerebrovascular Diseases
7	Assault (Homicide)	Intentional Self-harm (Suicide)
8	Chronic Liver Disease and Cirrhosis	Accidents Except Poisoning by Psychoactive Substance
9	Human Immunodeficiency Virus (HIV) Disease	Human Immunodeficiency Virus (HIV) Disease†
10	Cerebrovascular Diseases	Influenza and Pneumonia†

* Counts and percentages for this table can be found in Table M9.
† Tied ranking

- Heart disease and malignant neoplasms (cancer) are the leading causes of premature death among both males and females.
- Use of or poisoning by a psychoactive substance is the 3rd leading cause of premature death among males and females.
- Assault (homicide) is a leading cause of premature death among males only (7th). Chronic lower respiratory disease is ranked as a leading cause among females only (5th).

PREMATURE DEATH

Table 6. Leading Causes of Premature Death (Age < 65 Years) by Racial/Ethnic Group, New York City, 2016

Rank	Puerto Rican	Other Hispanic	Asian and Pacific Islander	Non-Hispanic White	Non-Hispanic Black
1	Malignant Neoplasms	Malignant Neoplasms	Malignant Neoplasms	Malignant Neoplasms	Malignant Neoplasms
2	Diseases of Heart	Diseases of Heart	Diseases of Heart	Diseases of Heart	Diseases of Heart
3	Use of or Poisoning by Psychoactive Substance	Use of or Poisoning by Psychoactive Substance	Intentional Self-harm (Suicide)	Use of or Poisoning by Psychoactive Substance	Use of or Poisoning by Psychoactive Substance
4	Diabetes Mellitus	Accidents Except Poisoning by Psychoactive Substance	Cerebrovascular Diseases	Intentional Self-harm (Suicide)	Diabetes Mellitus
5	Human Immunodeficiency Virus (HIV) Disease	Chronic Liver Disease and Cirrhosis	Accidents Except Poisoning by Psychoactive Substance	Accidents Except Poisoning by Psychoactive Substance	Human Immunodeficiency Virus (HIV) Disease
6	Chronic Liver Disease and Cirrhosis	Diabetes Mellitus	Diabetes Mellitus	Diabetes Mellitus	Assault (Homicide)
7	Chronic Lower Respiratory Diseases	Cerebrovascular Diseases	Use of or Poisoning by Psychoactive Substance‡	Chronic Liver Disease and Cirrhosis	Accidents Except Poisoning by Psychoactive Substance
8	Influenza and Pneumonia	Assault (Homicide)	Influenza and Pneumonia	Influenza and Pneumonia	Chronic Lower Respiratory Diseases
9	Accidents Except Poisoning by Psychoactive Substance‡	Intentional Self-harm (Suicide)	Chronic Liver Disease and Cirrhosis	Chronic Lower Respiratory Diseases	Cerebrovascular Diseases
10	Viral Hepatitis‡	Human Immunodeficiency Virus (HIV) Disease	Congenital Malformations, Deformations	Mental Disorder Due to Use of Alcohol	Influenza and Pneumonia

* Decedents of other or multiple races or with unknown ethnicities are not shown.

† Counts and percentages for this table can be found in Table M10.

- Heart disease and malignant neoplasms (cancer) are the leading causes of premature death among all racial/ethnic groups. Among Asians and Pacific Islanders, cancer is ranked first and heart disease is ranked second.
- Use of or poisoning by psychoactive substance (drug-related deaths) is the 3rd leading cause of premature death among all racial/ethnic groups except Asians and Pacific Islanders (7th).
- Suicide is the 3rd leading cause of premature death for Asians and Pacific Islanders; it ranks 9th among Other Hispanics, 4th among non-Hispanic whites. It is not ranked as a leading cause of premature death among Puerto Ricans and non-Hispanic blacks.
- HIV is a leading cause of premature death among Puerto Ricans (5th), Other Hispanics (10th), and non-Hispanic blacks (5th). It is not ranked as a leading cause of premature death among Asians and Pacific Islanders and non-Hispanic whites.
- Assault (homicide) is a leading cause of premature death among Other Hispanics (8th) and non-Hispanic blacks (6th), but is not among other racial/ethnic groups in leading causes.

PREMATURE DEATH

- OneNYC, Mayor De Blasio's plan for a strong and just city, seeks to reduce premature deaths to 143.3 deaths per 100,000 population by 2040 and to decrease disparities among racial/ethnic groups.
- The age-adjusted premature death rate increased to 189.4 per 100,000 population in 2016, a 2.7% increase since 2015 and a 13.6% decrease since 2007.

Figure 9. Age-adjusted Premature Death (Age <65 years) Rates, Overall and by Sex, New York City, 2007–2016

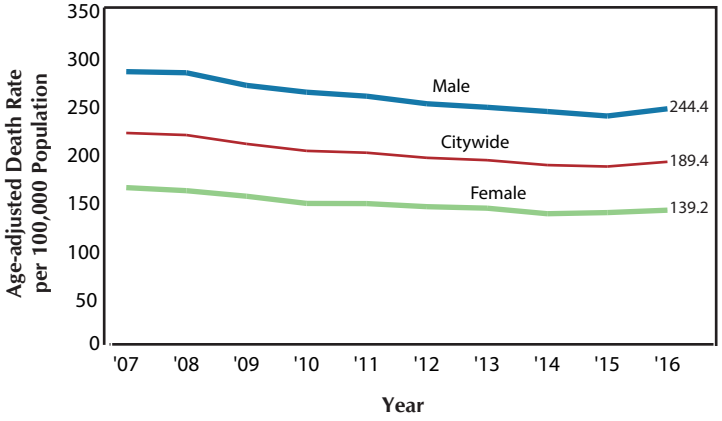
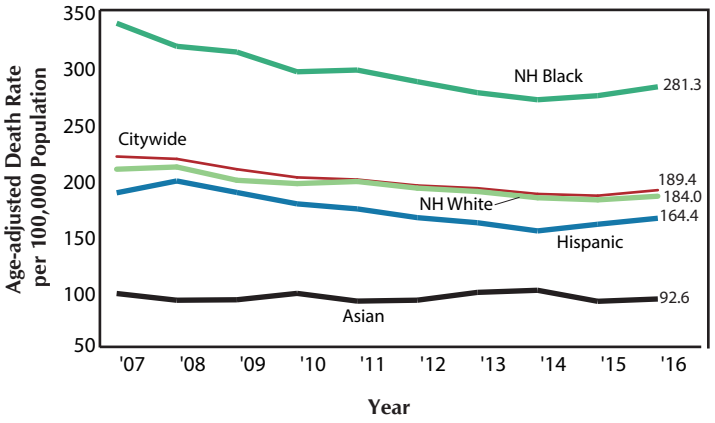
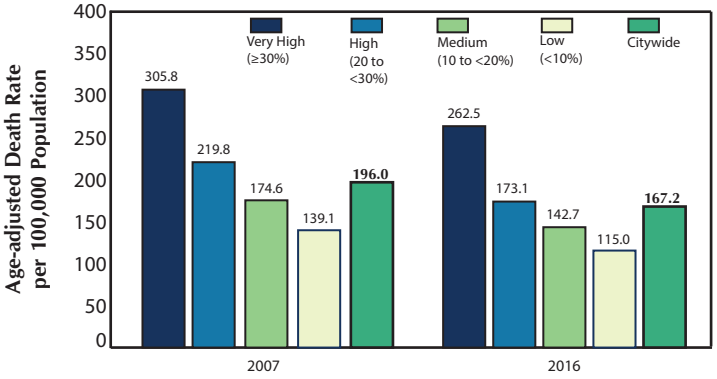


Figure 10. Age-adjusted Premature Death (Age <65 years) Rates by Racial/Ethnic Group, New York City, 2007–2016



- From 2007 to 2016, age-adjusted premature death (age <65 years) rates declined by 16.7% among non-Hispanic blacks, 12.1% among Hispanics, 11.5% among non-Hispanic whites, and 5.0% among Asians and Pacific Islanders.
- Non-Hispanic blacks had the highest age-adjusted premature death rate, 52.9% higher than non-Hispanic whites, and were the only racial/ethnic group above the citywide average.
- Rates have been increasing for all groups except Asians/Pacific Islanders since 2014.

Figure 11. Age-adjusted Premature Death (Age <65 years) Rates by Neighborhood Poverty*, New York City Residents, 2007 and 2016

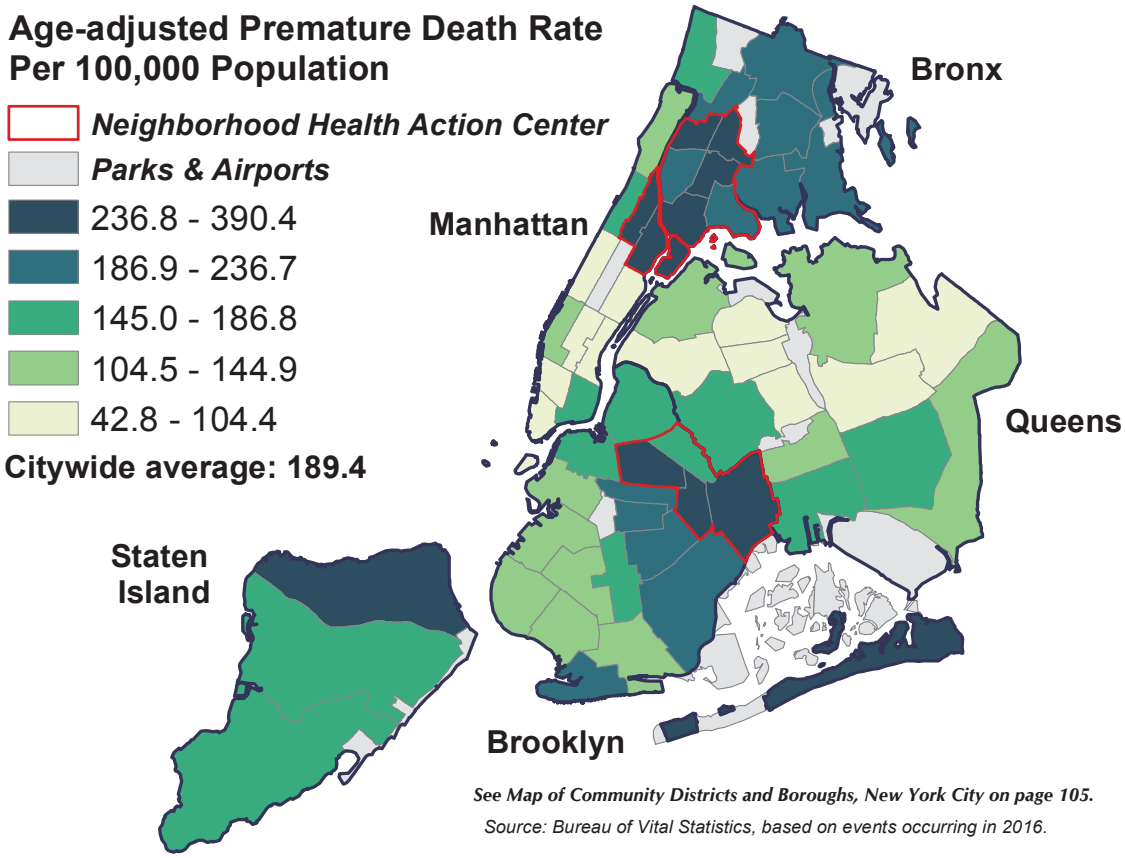


- The age-adjusted premature mortality rate decreased across all categories of neighborhood poverty between 2007 and 2016. Over that time, it decreased by 17.4% in low poverty neighborhoods, 18.2% in medium poverty neighborhoods, 21.2% in high poverty neighborhoods, and 14.2% in very high poverty neighborhoods.
- Despite declines, the gap between very high and low poverty neighborhoods remains pronounced. High poverty neighborhoods experienced an age-adjusted premature mortality rate that was 2.3 times higher than that in low poverty neighborhoods in 2016. This disparity has increased slightly from 2015 (2.2 times).

*Neighborhood poverty (based on decedent's residential census tract) defined as percent of residents with incomes below 100% of the Federal Poverty Level, per American Community Survey (ACS) 2005-2009 for 2007 data and per ACS 2011-2016 for 2016 data.

PREMATURE DEATH

Figure 12. Age-adjusted Premature Death (Age <65 years) Rates by Community District of Residence, New York City, 2016



See Map of Community Districts and Boroughs, New York City on page 105.

Source: Bureau of Vital Statistics, based on events occurring in 2016.

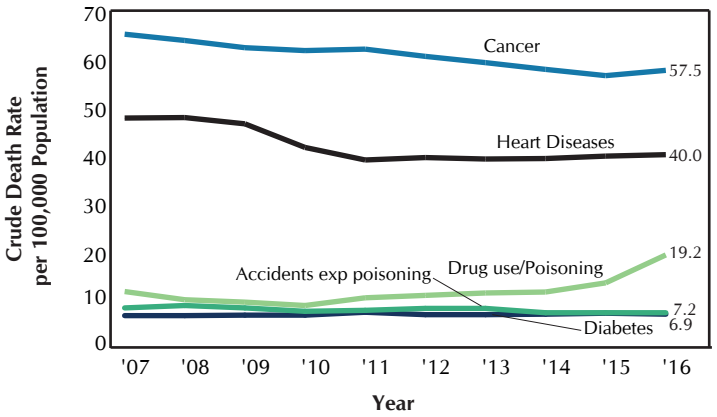
- In 2016, New York City age-adjusted premature death rates were highest in Brownsville at 390.4 deaths per 100,000 population, followed by 371.6 in Mott Haven, 318.9 in East Tremont, 316.3 in Morrisania, and 288.7 in the Rockaways.
- In 2016, age-adjusted premature death rates were lowest in Battery Park/Tribeca at 42.7 deaths per 100,000 population, followed by 62.2 in Greenwich Village/SOHO, 79.5 in the Upper East Side, 80.6 in Bayside, and 85.3 in Jackson Heights.

Age-adjusted Premature Death Rates per 100,000 Population by Community District (CD) of Residence, New York City, 2016

CD	MANHATTAN	Age-adjusted Premature Death Rate	CD	BRONX	Age-adjusted Premature Death Rate	CD	BROOKLYN	Age-adjusted Premature Death Rate	CD	QUEENS	Age-adjusted Premature Death Rate
MN01	Battery Park, Tribeca	42.7	BX01	Mott Haven	371.6	BK01	Williamsburg, Greenpoint	155.2	QN01	Astoria, Long Island City	145.3
MN02	Greenwich Village, SOHO	62.2	BX02	Hunts Point	237.5	BK02	Fort Greene, Brooklyn Heights	151.7	QN02	Sunnyside, Woodside	102.0
MN03	Lower East Side	170.1	BX03	Morrisania	316.3	BK03	Bedford Stuyvesant	259.8	QN03	Jackson Heights	85.3
MN04	Chelsea, Clinton	118.7	BX04	Concourse, Highbridge	233.8	BK04	Bushwick	176.8	QN04	Elmhurst, Corona	102.4
MN05	Midtown Business District	94.2	BX05	University/Morris Heights	246.8	BK05	East New York	288.0	QN05	Ridgewood, Glendale	149.3
MN06	Murray Hill	93.8	BX06	East Tremont	318.9	BK06	Park Slope	123.8	QN06	Rego Park, Forest Hills	99.3
MN07	Upper West Side	104.0	BX07	Fordham	228.7	BK07	Sunset Park	136.7	QN07	Flushing	111.9
MN08	Upper East Side	79.5	BX08	Riverdale	181.5	BK08	Crown Heights North	232.4	QN08	Fresh Meadows, Briarwood	103.9
MN09	Manhattanville	164.7	BX09	Unionport, Soundview	210.6	BK09	Crown Heights South	195.9	QN09	Woodhaven	130.3
MN10	Central Harlem	257.1	BX10	Throgs Neck	194.6	BK10	Bay Ridge	143.5	QN10	Howard Beach	169.3
MN11	East Harlem	279.9	BX11	Pelham Parkway	229.2	BK11	Bensonhurst	144.1	QN11	Bayside	80.6
MN12	Washington Heights	121.7	BX12	Williamsbridge	208.7	BK12	Borough Park	122.2	QN12	Jamaica, St. Albans	188.3
						BK13	Coney Island	197.2	QN13	Queens Village	110.3
CD	STATEN ISLAND					BK14	Flatbush, Midwood	167.0	QN14	The Rockaways	288.7
S101	Port Richmond	243.0				BK15	Sheepshead Bay	125.6			
S102	Willowbrook, South Beach	164.0				BK16	Brownsville	390.4			
S103	Tottenville	159.5				BK17	East Flatbush	213.1			
						BK18	Canarsie	187.8			

PREMATURE DEATH

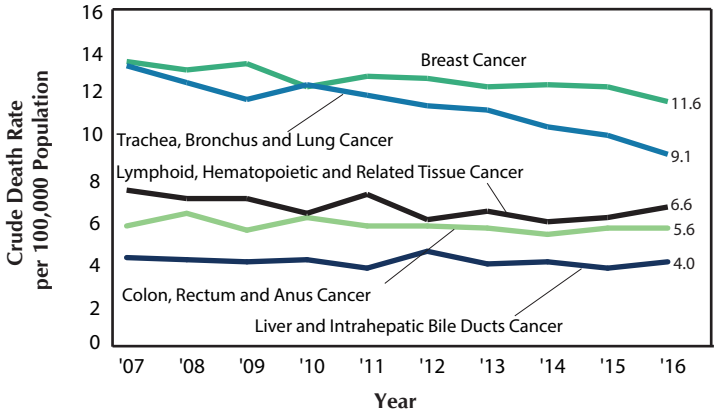
Figure 13. Leading Causes of Premature Death (Age < 65 years), New York City, 2007–2016



*See the 2010 Summary of Vital Statistics: Mortality – Special Section: *Cause of Death Quality Improvement Initiative.*

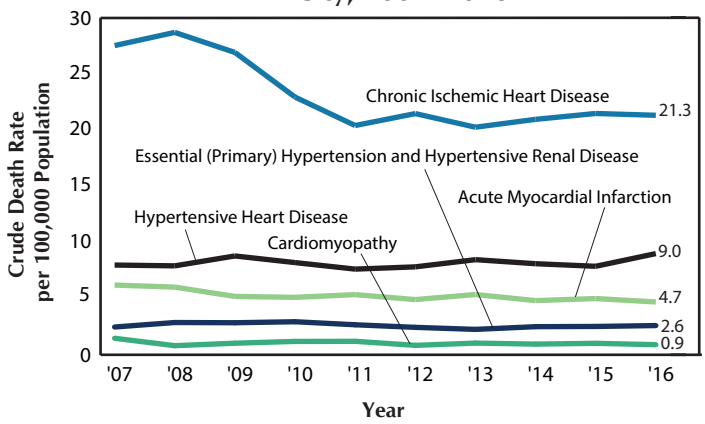
- In 2016, cancer and heart disease-related premature death rates were higher than rates for any other causes (57.5 and 40.0 per 100,000 population, respectively). Over the past ten years, rates have declined for both (by 11.5% and 15.9%, respectively). The sharper decline in heart disease death rates from 2009 to 2011 was partly due to improved cause of death reporting*.
- Drug use/poisoning accidents unrelated to poisoning, and diabetes accounted for the third, fourth and fifth leading causes of premature death in 2016, consistent with prior recent years.
- The rate of premature drug-related deaths increased over the past year by 43.3%, and 65.1% over the past ten years. These trends are consistent with national reports.
- Other accident-related deaths declined over the past ten years and were the same in 2016 as they were in 2015 (7.2 per 100,000 population). Rates for diabetes increased slightly since 2007 (5.0%) and declined slightly over the past year by 2.8%.

Figure 14. Leading Causes of Premature Cancer Deaths (Age < 65 years), New York City, 2007–2016



- Breast (female) and lung cancers account for the highest cancer-related death rates in New York City, at 11.6 and 9.1 deaths per 100,000 population respectively. Breast (female) cancer and lung cancer death rates declined by 13.8% and 31.4%, respectively, since 2007.
- Lymph and blood, colon, and liver cancers account for the third, fourth and fifth highest rates of cancer-related death, at 6.6, 5.6, and 4.0 deaths per 100,000 population, respectively. Death rates for these cancers have declined modestly since 2007.

Figure 15. Leading Causes of Premature Heart Disease Deaths (Age < 65 years), New York City, 2007–2016



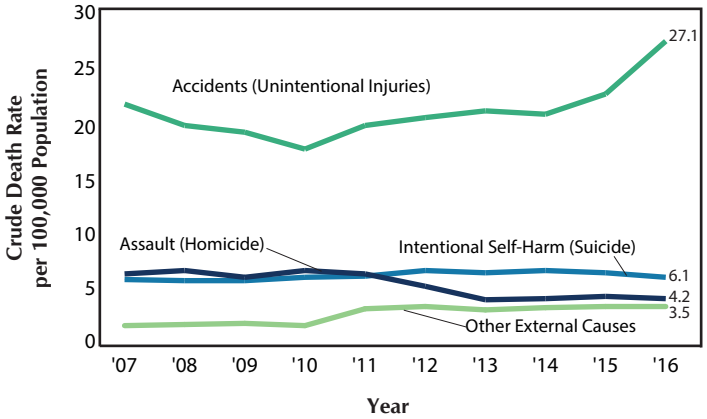
†See the 2010 Summary of Vital Statistics: Mortality – Special Section: *Cause of Death Quality Improvement Initiative.*

- The crude rate of the leading cause of premature heart disease deaths, chronic ischemic heart disease, decreased 22.5% since 2007. The sharper decline from 2009 to 2011 was partly due to efforts to improve the accuracy of cause of death reporting.†
- Since 2007, hypertensive heart disease increased 12.8%, acute myocardial infarction decreased 24.2%, and cardiomyopathy decreased 38.8%.

EXTERNAL CAUSES OF DEATH

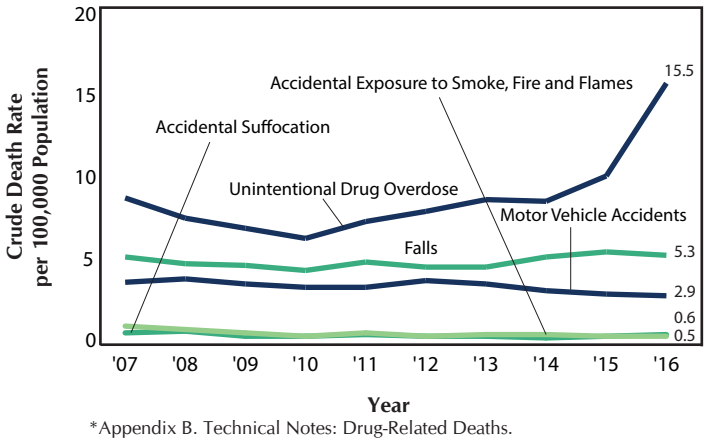
- Deaths due to accidents continued to account for the largest share of deaths due to external causes. After an 18.6% decline between 2007 and 2010, the accident-related death rate has been rising, and in 2016, it exceeded rates from ten years ago (27.1 per 100,000 population in 2016 vs. 21.5 per 100,000 population in 2007).
- The rate of deaths due to homicide declined over the past ten years (34.4%).
- The suicide rate has risen over the past ten years from 5.9 per 100,000 population in 2007 to 6.1 per 100,000 population in 2016. The rate has declined slightly since 2014.
- The death rate due to all other external causes combined was higher in 2016 (3.5 per 100,000 population) than ten years ago (1.8 per 100,000 population). The rate has been between 3.0 and 3.5 per 100,000 population since 2011.

Figure 16. Crude Death Rates for External Causes of Death*, New York City, 2007–2016



*Appendix B. Technical Notes: Deaths, Cause of Death International Classification of Disease (ICD) Coding.
†Other external causes include medical and/or surgical care complications and deaths due to undetermined intent.

Figure 17. Crude Death Rates for Selected Accidental Causes of Death, New York City, 2007–2016

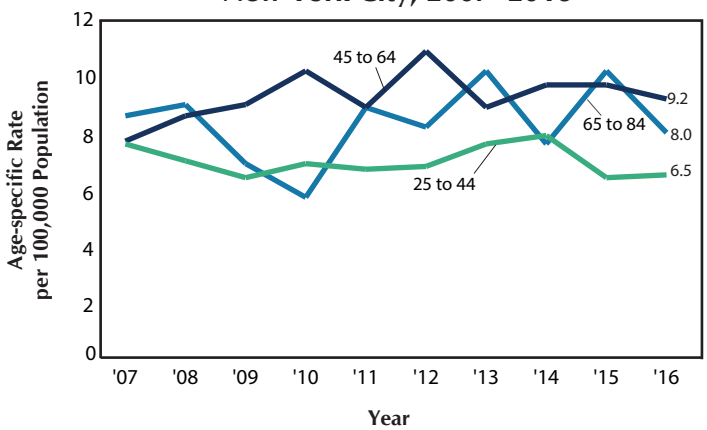


*Appendix B. Technical Notes: Drug-Related Deaths.

- The unintentional drug overdose rate increased dramatically by 55% from 2015 (10.0 per 100,000 population in 2015 vs. 15.5 in 2016).
- Unintentional drug overdose exceeds all other causes, with crude rates in 2016 that were 5.3 times that of motor vehicle accidents and 2.9 times that of fall-related deaths.
- The death rate due to motor vehicle accidents declined over the past ten years, from 3.7 deaths per 100,000 population in 2007 to 2.9 per 100,000 population in 2016, a decrease of 21.6%. The falls-related crude death rate was similar to the rate from ten years ago (5.3 per 100,000 population in 2016 vs. 5.2 per 100,000 population in 2007).

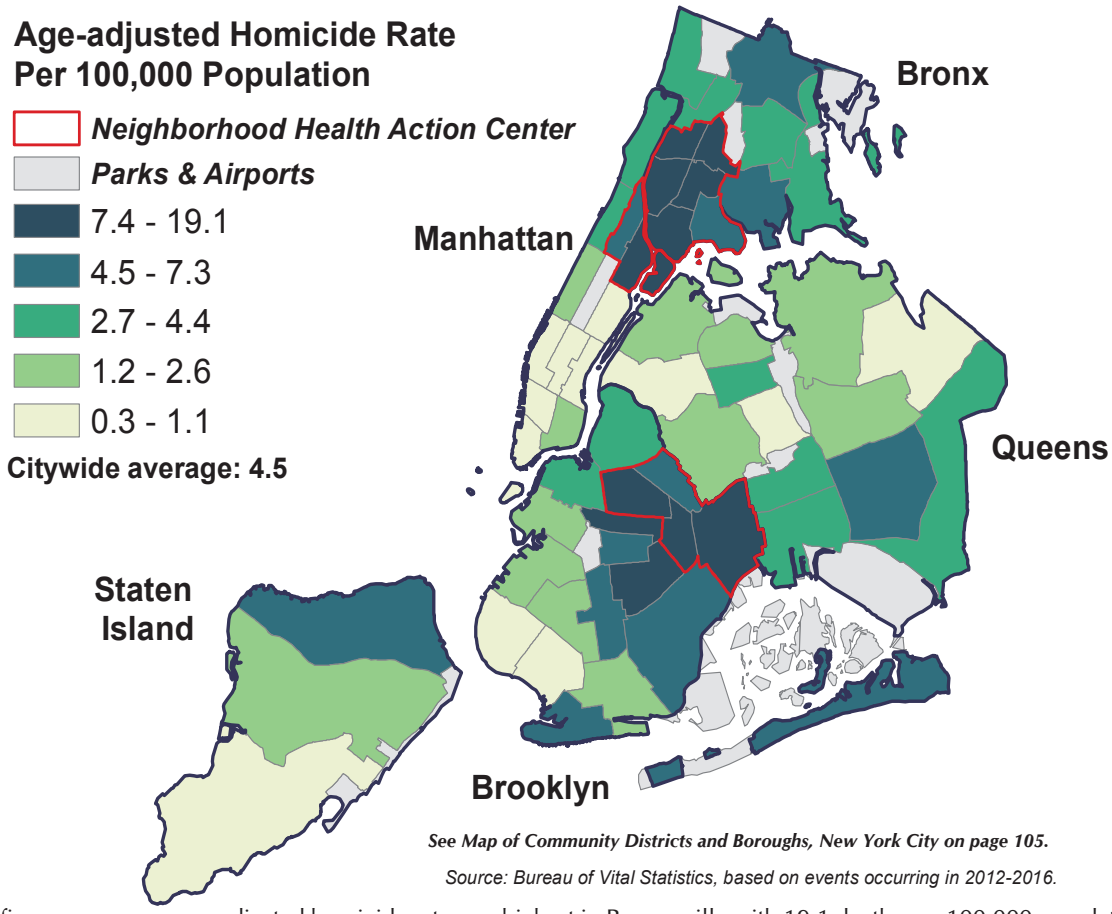
- Death rates due to suicide were highest among the age group 45 to 64 at 9.2 deaths per 100,000 population in 2016.
- The rate of suicide deaths among adults aged 25-44 was 6.5 per 100,000 population in 2016, 14.5% lower than the rate in 2007. Compared to 2007, rates increased by 19.5% among the age group 45-64 and decreased by 7.0% among the age group 65-84.

Figure 18. Age-specific Suicide Death Rates, New York City, 2007–2016



EXTERNAL CAUSES OF DEATH

Figure 19. Age-adjusted Homicide Death Rates (Five-year-averages) by Community District of Residence, New York City, 2012-2016



See Map of Community Districts and Boroughs, New York City on page 105.

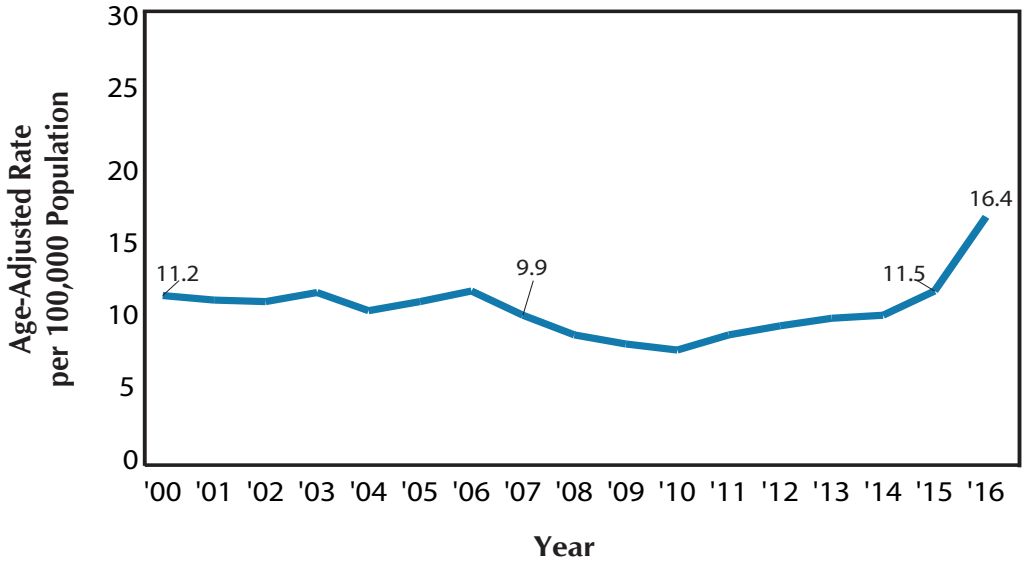
Source: Bureau of Vital Statistics, based on events occurring in 2012-2016.

- The five-year average age-adjusted homicide rate was highest in Brownsville with 19.1 deaths per 100,000 population, followed by Morrisania at 11.4, Mott Haven at 11.1, East Flatbush at 10.8, and Bedford Stuyvesant at 9.7.
- In eight community districts, five-year average rates were less than 1.0 per 100,000 population: Battery Park/Tribeca, the Upper East Side, Bay Ridge, Bayside, Greenwich Village/SOHO, Murray Hill, Midtown Business District, and Tottenville.
- This figure uses five years of data due to the small number of homicide deaths in each community district per year.

Age-adjusted Homicide Death Rates (Five-year-averages) per 100,000 Population by Community District (CD) of Residence, New York City, 2012-2016

CD	MANHATTAN	Age-adjusted Homicide Death Rates	CD	BRONX	Age-adjusted Homicide Death Rates	CD	BROOKLYN	Age-adjusted Homicide Death Rates	CD	QUEENS	Age-adjusted Homicide Death Rates
MN01	Battery Park, Tribeca	0.6	BX01	Mott Haven	11.1	BK01	Williamsburg, Greenpoint	2.9	QN01	Astoria, Long Island City	1.9
MN02	Greenwich Village, SOHO	0.3	BX02	Hunts Point	7.1	BK02	Fort Greene, Brooklyn Heights	3.3	QN02	Sunnyside, Woodside	1.0
MN03	Lower East Side	2.5	BX03	Morrisania	11.4	BK03	Bedford Stuyvesant	9.7	QN03	Jackson Heights	1.7
MN04	Chelsea, Clinton	1.1	BX04	Concourse, Highbridge	9.2	BK04	Bushwick	5.8	QN04	Elmhurst, Corona	2.8
MN05	Midtown Business District	0.9	BX05	University/Morris Heights	9.5	BK05	East New York	9.1	QN05	Ridgewood, Glendale	1.4
MN06	Murray Hill	0.9	BX06	East Tremont	7.8	BK06	Park Slope	2.6	QN06	Rego Park, Forest Hills	1.0
MN07	Upper West Side	1.5	BX07	Fordham	4.4	BK07	Sunset Park	1.8	QN07	Flushing	1.6
MN08	Upper East Side	0.3	BX08	Riverdale	3.0	BK08	Crown Heights North	8.3	QN08	Fresh Meadows, Briarwood	1.9
MN09	Manhattanville	3.2	BX09	Unionport, Soundview	6.1	BK09	Crown Heights South	5.0	QN09	Woodhaven	2.9
MN10	Central Harlem	7.2	BX10	Throgs Neck	3.1	BK10	Bay Ridge	0.8	QN10	Howard Beach	3.5
MN11	East Harlem	7.4	BX11	Pelham Parkway	4.3	BK11	Bensonhurst	1.1	QN11	Bayside	0.4
MN12	Washington Heights	2.8	BX12	Williamsbridge	6.3	BK12	Borough Park	1.2	QN12	Jamaica, St. Albans	7.3
						BK13	Coney Island	7.1	QN13	Queens Village	4.4
CD	STATEN ISLAND					BK14	Flatbush, Midwood	4.6	QN14	The Rockaways	6.5
S101	Port Richmond	5.3				BK15	Sheepshead Bay	1.5			
S102	Willowbrook, South Beach	2.1				BK16	Brownsville	19.1			
S103	Tottenville	0.9				BK17	East Flatbush	10.8			
						BK18	Canarsie	6.1			

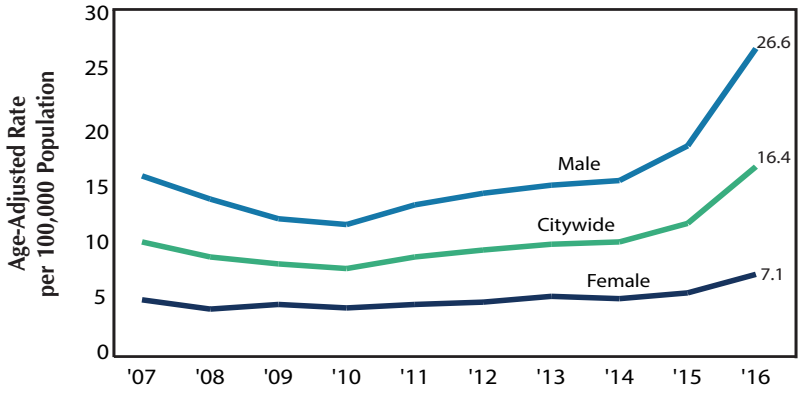
SPECIAL SECTION
DRUG-RELATED MORTALITY



- The special section focuses on drug-related (use of or poisoning by psychoactive substance) deaths which include deaths due to chronic substance use and drug overdose. All manners of death are included in drug-related deaths. The National Center for Health Statistics utilizes this definition for categorizing the leading causes of death.
- Drug-related deaths were the seventh leading cause of mortality and the third leading cause of premature mortality (age < 65 years) in 2016.
- The age-adjusted mortality rate of drug-related deaths has risen by 42.6% since 2015 and 65.7% since 2007.
- Unintentional drug overdose deaths account for 88% of drug-related deaths; the crude mortality rate for unintentional drug overdose has risen by 55% since 2015.
- The dramatic increase in deaths due to unintentional drug overdose is a continuing concern for the DOHMH. Using mortality data, the Bureau of Alcohol and Drug Use Prevention, Care and Treatment (BADUCPT) with the Health Department routinely conducts analyses to understand and address the epidemic. A recent publication regarding unintentional drug overdose data can be found in the Epi Data Brief: "Unintentional Drug Poisoning (Overdose) Deaths in New York City, 2000 to 2016." Additional BADUCPT publications regarding unintentional drug overdose can be found on the DOHMH website's Publications page.

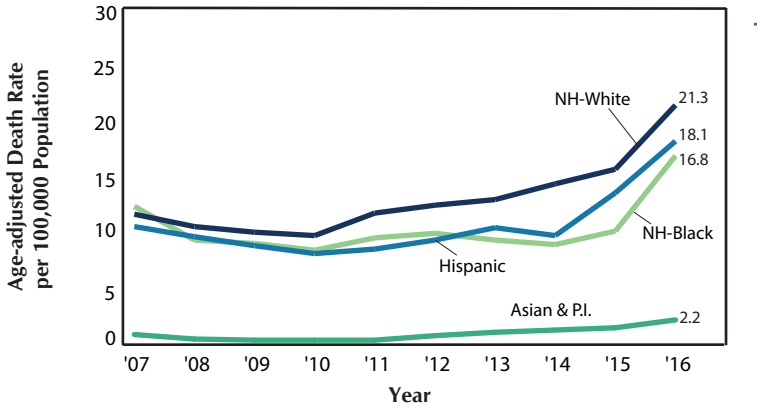
SPECIAL SECTION
DRUG-RELATED MORTALITY

Figure S1. Age-adjusted Drug-related Death Rates, Overall and by Sex, New York City, 2007-2016



- The age-adjusted drug-related death rate increased to 16.4 per 100,000 population in 2016, a 42.6% increase since 2015 and a 65.7% increase since 2007.
- Both females and males saw similar increases in age-adjusted drug-related death rates. The age-adjusted drug-related death rate for males increased to 26.6 per 100,000 population in 2016, a 36.2% increase since 2015 and a 70.5% increase since 2007. The age-adjusted drug-related death rates for females increased to 7.1 per 100,000 population in 2016, a 29.1% increase since 2015 and a 44.9% increase since 2007.

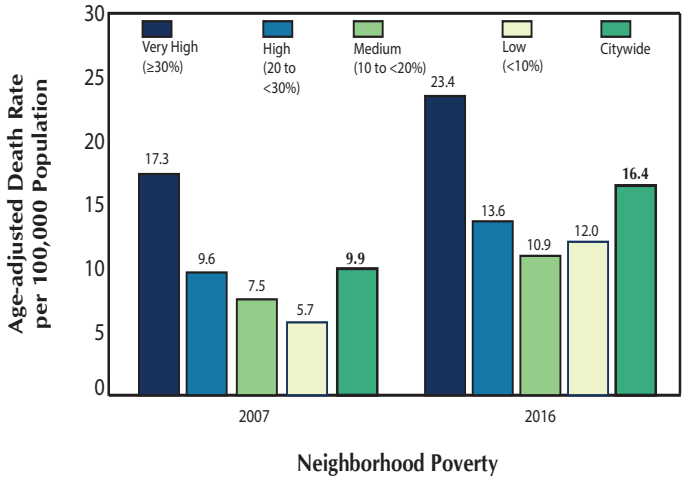
Figure S2. Age-adjusted Drug-related Deaths by Racial/Ethnic Group New York City, 2007-2016



- Between 2007 and 2016, age-adjusted drug-related death rates increased by 36.6% among non-Hispanic blacks, by 72.4% among Hispanics, by 83.6% among non-Hispanic whites, and by 144.4% among Asians and Pacific Islanders.
- In 2016, the drug-related death rate among non-Hispanic whites was 26.8% higher than among non-Hispanic blacks. The death rate has been consistently higher among non-Hispanic whites compared to all other racial/ethnic groups over time.

SPECIAL SECTION
DRUG-RELATED MORTALITY

Figure S3. Age-adjusted Drug-related Death Rates by Neighborhood Poverty*, New York City, 2007 and 2016

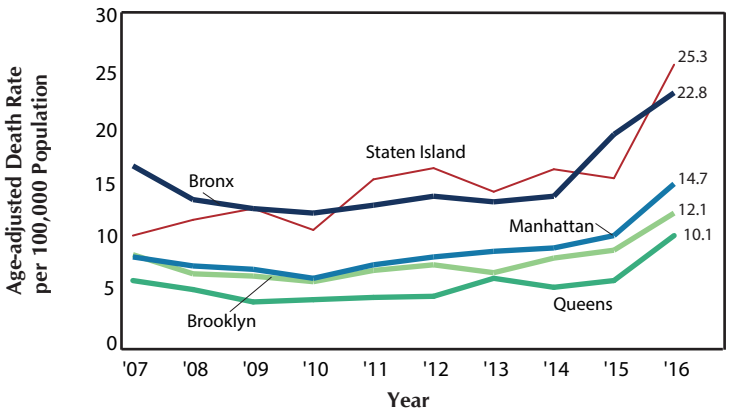


*Neighborhood poverty (based on decedent's residential census tract) defined as percent of residents with incomes below 100% of the Federal Poverty Level, per American Community Survey (ACS) 2005-2009 for 2007 data and per ACS 2011-2015 for 2016 data.

- Since 2007, age-adjusted drug-related death rates increased across all categories of neighborhood poverty. Over that period, the rate increased by 35.3% in very high poverty areas and by 110.6% in low poverty areas.
- The age-adjusted drug-related death rate was 2.0 times higher in areas with very high poverty compared to areas with low poverty in 2016. In 2007, the rate was 3.0 times higher in areas with very high poverty compared to areas with low poverty.

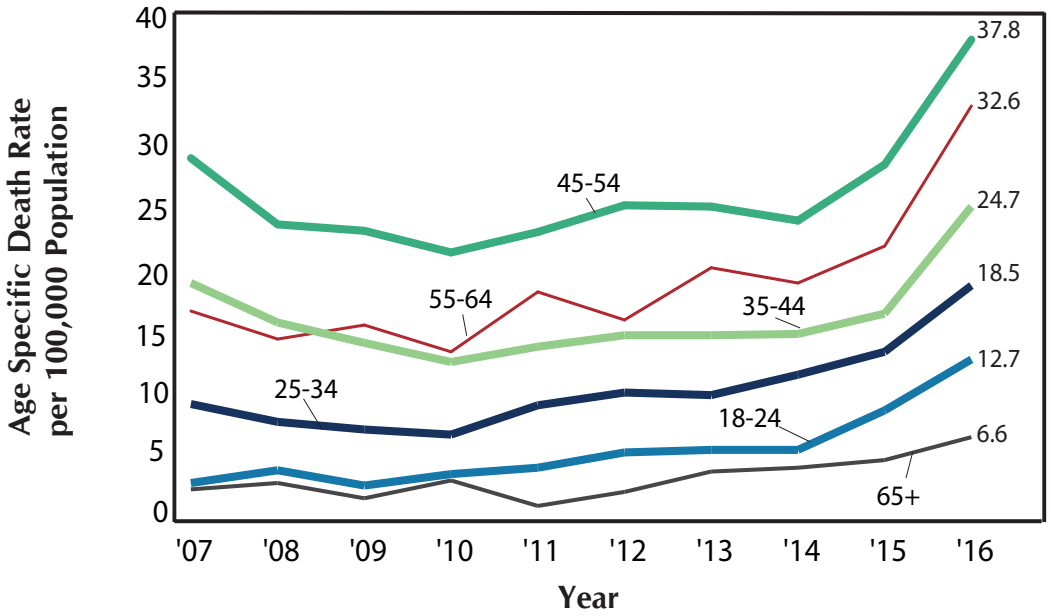
Figure S4. Age-adjusted Drug-related Death Rates by Borough of Residence, New York City, 2007-2016

- Since 2007, age-adjusted drug-related death rates increased across all boroughs.
- Over that period, age-adjusted drug-related death rates increased by 79.3% in Manhattan, by 39.9% in the Bronx, by 44.0% in Brooklyn, by 65.6% in Queens, and by 150.5% in Staten Island.
- From 2007 to 2016, the Bronx and Staten Island have consistently had higher age-adjusted drug-related death rates, compared to the other three boroughs.



SPECIAL SECTION
DRUG-RELATED MORTALITY

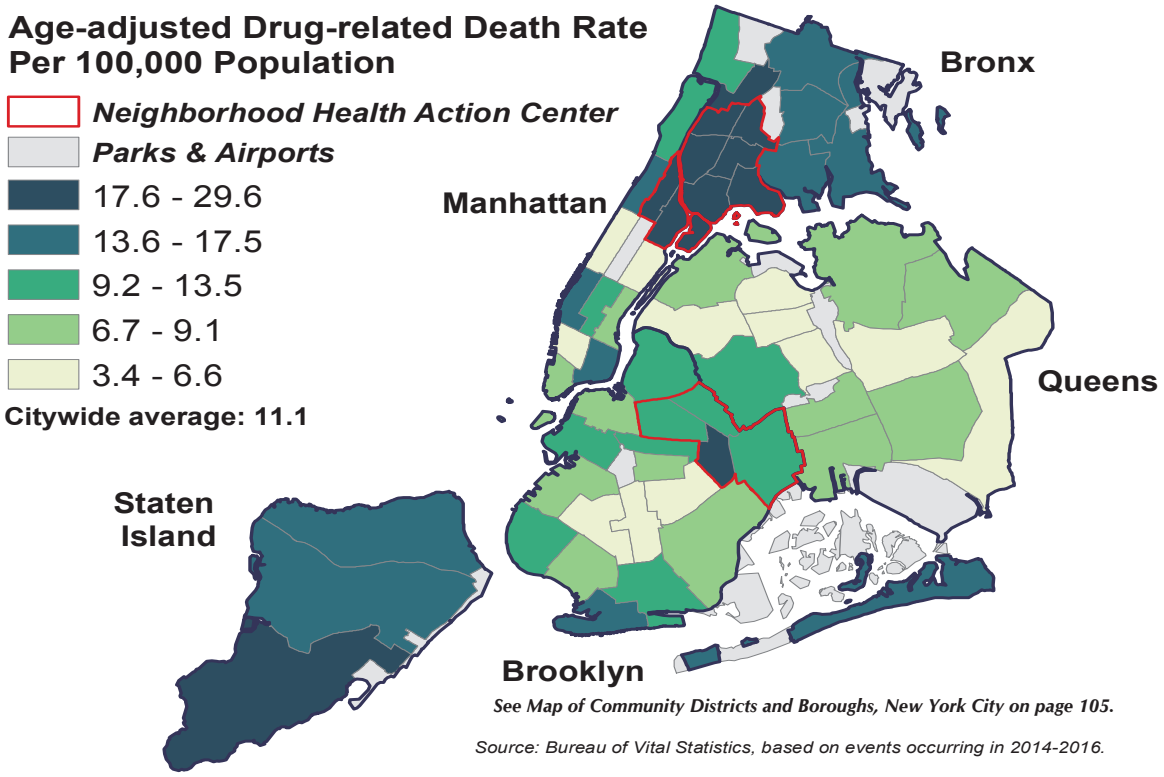
Figure S5. Age Specific Drug-related Death Rates, Ages 18+, New York City, 2007-2016



- Between 2007 and 2016, age-adjusted drug-related death rates increased for all age groups: by 323.3% for 18-24 year olds, by 101.1% for 25-34 year olds, by 32.1% for 35-44 year olds, by 32.6% for 45-54 year olds, and by 97.6% for 55-64 year olds.
- Since 2007, the drug-related death rate for 45-54 year olds remained consistently higher than all other age groups. However, the drug-related death rate increased most dramatically for 18-24 year olds in 2016.
- 94.9% of drug-related deaths were premature (<65 year olds) in 2016.

SPECIAL SECTION
DRUG-RELATED MORTALITY

Figure S6. Age-adjusted Drug-related Deaths Rates (Three-year-averages) by Community District of Residence, New York City, 2014-2016



See Map of Community Districts and Boroughs, New York City on page 105.

Source: Bureau of Vital Statistics, based on events occurring in 2014-2016.

- The three-year average age-adjusted drug-related rate was highest in Mott Haven with 29.6 deaths per 100,000 population, followed by Hunts Point at 29.1, Morrisania at 26.3, East Tremont at 25.7, and University/Morris Heights at 23.5.
- Age-adjusted drug-related death rates were lowest in Elmhurst/Corona at 3.4 deaths per 100,000 population, followed by 3.8 in Greenwich Village/SOHO, 4.9 in Queens Village, 4.9 in Jackson Heights, and 5.2 in East Flatbush.

Age-adjusted Homicide Death Rates (Five-year-averages) by Community District (CD) of Residence, New York City, 2013-2016

CD	MANHATTAN	Age-Adjusted Drug-Related Death Rate	CD	BRONX	Age-Adjusted Drug-Related Death Rate	CD	BROOKLYN	Age-Adjusted Drug-Related Death Rate	CD	QUEENS	Age-Adjusted Drug-Related Death Rate
MN01	Battery Park, Tribeca	7.4	BX01	Mott Haven	29.6	BK01	Williamsburg, Greenpoint	10.7	QN01	Astoria, Long Island City	8.6
MN02	Greenwich Village, SOHO	3.8	BX02	Hunts Point	29.1	BK02	Fort Greene, Brooklyn Heights	9.1	QN02	Sunnyside, Woodside	5.5
MN03	Lower East Side	16.8	BX03	Morrisania	26.3	BK03	Bedford Stuyvesant	13.5	QN03	Jackson Heights	4.9
MN04	Chelsea, Clinton	13.5	BX04	Concourse, Highbridge	17.9	BK04	Bushwick	9.7	QN04	Elmhurst, Corona	3.4
MN05	Midtown Business District	10.2	BX05	University/Morris Heights	23.5	BK05	East New York	13.0	QN05	Ridgewood, Glendale	10.0
MN06	Murray Hill	7.4	BX06	East Tremont	25.7	BK06	Park Slope	9.9	QN06	Rego Park, Forest Hills	6.0
MN07	Upper West Side	6.6	BX07	Fordham	18.8	BK07	Sunset Park	8.3	QN07	Flushing	7.1
MN08	Upper East Side	6.1	BX08	Riverdale	9.2	BK08	Crown Heights North	11.5	QN08	Fresh Meadows, Briarwood	5.9
MN09	Manhattanville	14.2	BX09	Unionport, Soundview	14.7	BK09	Crown Heights South	9.0	QN09	Woodhaven	8.0
MN10	Central Harlem	20.1	BX10	Throgs Neck	15.6	BK10	Bay Ridge	11.4	QN10	Howard Beach	7.6
MN11	East Harlem	22.2	BX11	Pelham Parkway	15.8	BK11	Bensonhurst	9.0	QN11	Bayside	8.9
MN12	Washington Heights	12.2	BX12	Williamsbridge	13.7	BK12	Borough Park	6.1	QN12	Jamaica, St. Albans	9.1
						BK13	Coney Island	16.1	QN13	Queens Village	4.9
CD	STATEN ISLAND					BK14	Flatbush, Midwood	6.4	QN14	The Rockaways	14.7
S101	Port Richmond	17.5				BK15	Sheepshead Bay	11.0			
S102	Willowbrook, South Beach	16.6				BK16	Brownsville	19.4			
S103	Tottenville	22.8				BK17	East Flatbush	5.2			
						BK18	Canarsie	6.9			

INFANT MORTALITY

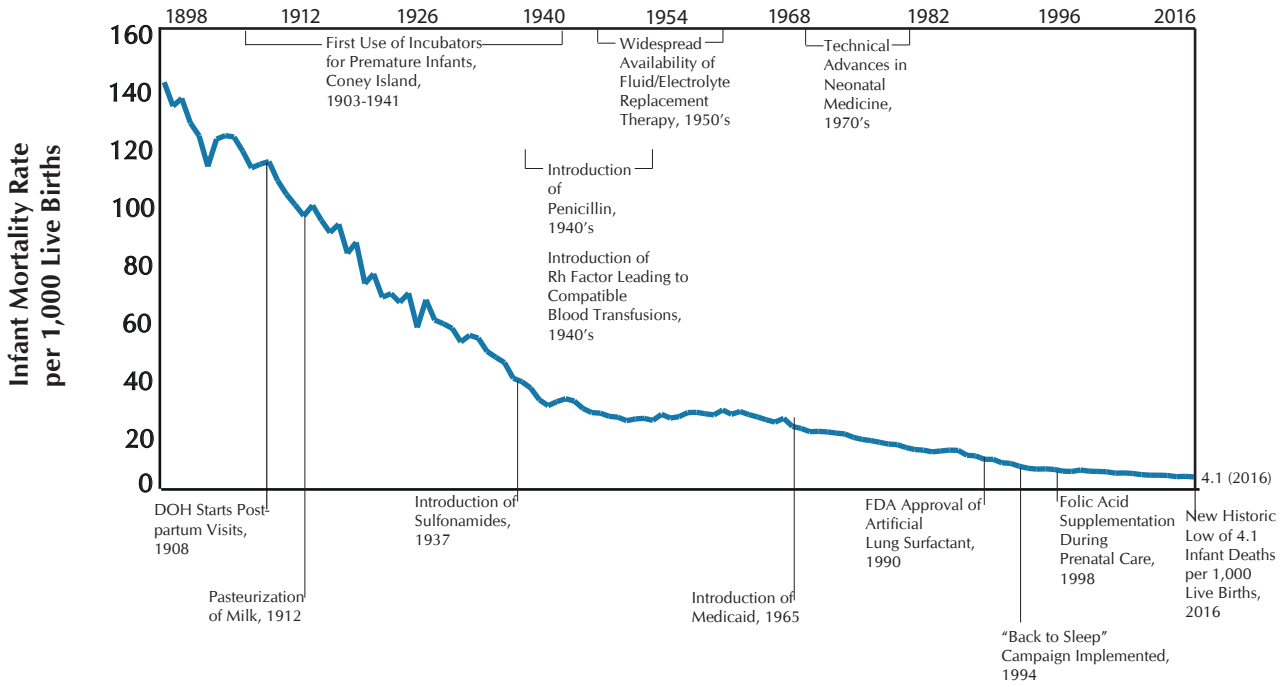
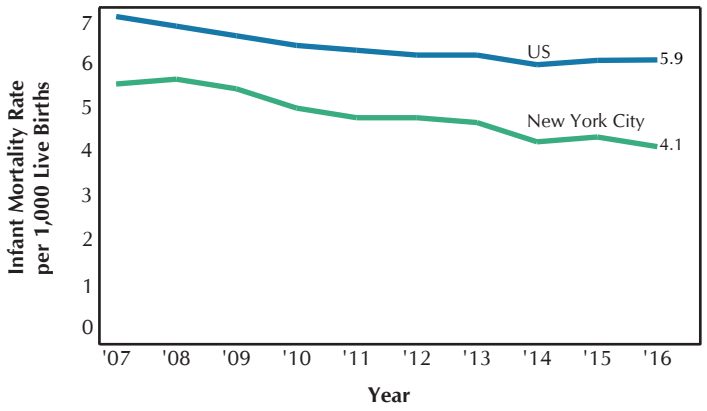


Figure 1. Infant Mortality Rate, New York City and United States, 2007–2016



Data source: National Center for Health Statistics, National Vital Statistics System.

- OneNYC, Mayor De Blasio's plan for a strong and just city, proposes achieving a historic low of 3.7 infant deaths per 1,000 live births citywide by 2040, and dramatically decreasing the racial/ethnic disparities. The city will achieve this by targeting key neighborhoods with high infant mortality rates and implementing social and structural supports before, during, and after pregnancy.
- In 2016, New York City had an infant mortality rate of 4.1 infant deaths per 1,000 live births. This is a historical low and represents a slight decrease since 2015 (4.3 per 1,000 live births). The rate has declined by 24.1% since 2007.
- In the last 10 years, New York City's infant mortality rate has improved 10.9% more than the U.S. rate.

INFANT MORTALITY

- Infant mortality rates declined from 2015 to 2016 among Puerto Ricans, other Hispanics, and non-Hispanic whites. Non-Hispanic blacks saw no change, and the rate among Asians & Pacific Islanders increased.
- Although rates fluctuate due to small numbers, they are consistently higher among some groups: the rate for non-Hispanic blacks remained 3.1 times higher than the rate for non-Hispanic whites in 2016; the rate for Puerto Ricans was 1.3 times higher than the rate for non-Hispanic whites in 2016.

Figure 2. Infant Mortality Rate by Mother's Racial/Ethnic Group, New York City, 2007–2016

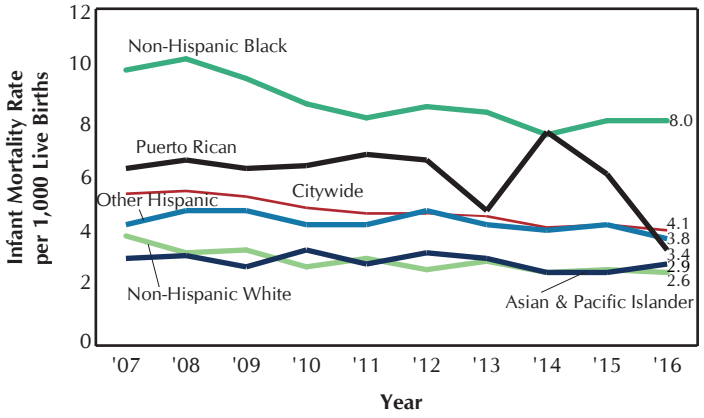
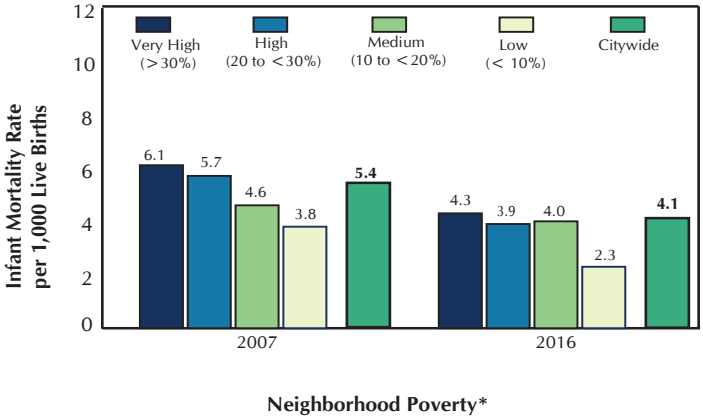


Figure 3. Infant Mortality Rate by Neighborhood Poverty*, New York City Residents, 2007 and 2016

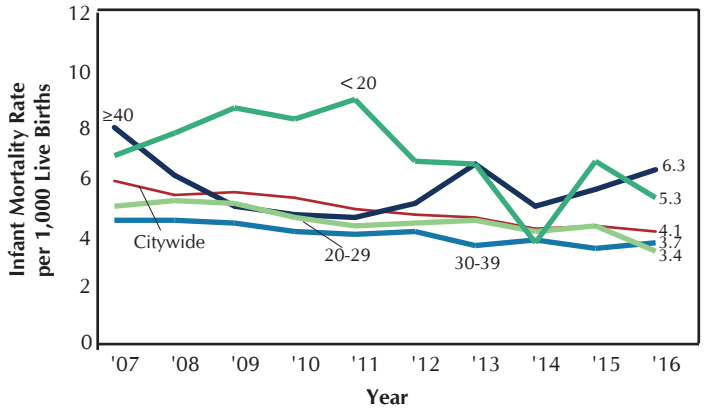


*Neighborhood poverty (based on mother's residential census tract) defined as percent of residents with incomes below 100% of the Federal Poverty Level, per American Community Survey (ACS) 2005-2009 for 2007 data and ACS 2011-2015 for 2016 data.

- From 2007 to 2016, the infant mortality rate declined in all poverty groups: by 39.5% in low poverty areas, by 13.0% in medium poverty areas, by 31.6% in high poverty areas, and by 29.5% for very high poverty areas.
- In spite of these gains, the infant mortality rate in very high poverty areas was 1.9 times higher than in low poverty areas in 2016.

- Infant mortality rates have decreased among infants born to mothers in all age groups since 2007.
- The infant mortality rate in New York City was highest among infants born to the oldest mothers (40+years of age). In 2016, the rate among this group was 6.3 infant deaths per 1,000 live births. In 2016, the infant mortality rate for teen mothers was 5.3 per 1,000 live births. The small number of infant deaths will cause the rates to fluctuate from year to year.

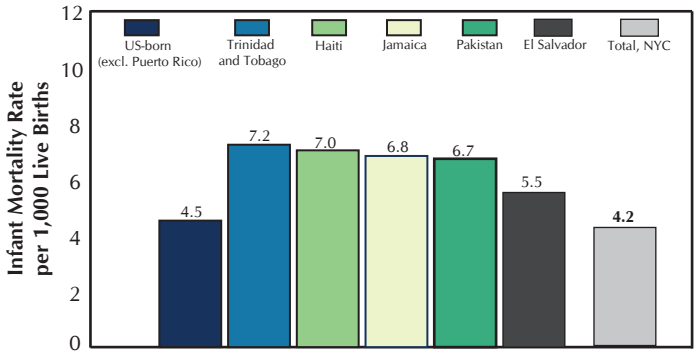
Figure 4. Infant Mortality Rate by Mother's Age*, New York City, 2007–2016



*The fluctuation in the infant mortality rate among infants born to mothers <20 and ≥40 is likely due to small numbers.

INFANT MORTALITY

Figure 5. Infant Mortality Rates by Mother's Birthplace, US-born and Countries of 5 Top IMR, 3-year Moving Average, New York City, 2014-2016



- From 2014 to 2016, the infant mortality rate among US-born mothers, not including Puerto Rico, was 4.5 infant deaths per 1,000 live births. The total city-wide infant mortality rate for the same time period was 4.2 per 1,000 live births.
- The infant mortality rate was highest among mothers born in Trinidad and Tobago at 7.2 infant deaths per 1,000 live births.
- Mothers born in Haiti had the second highest infant mortality rate at 7.0 per 1,000 births, followed by Jamaica-born mothers (6.8), Pakistan-born mothers (6.7), and El Salvador-born mothers at 5.5 infant deaths per 1,000 live births.

Table 1. Top Leading Causes by Neonatal and Post-Neonatal Deaths, 2016

	Cause of Death (ICD-10 Codes)	Total	Male		Female	
			Neonatal (<28 Days)	Post-Neonatal	Neonatal (<28 Days)	Post-Neonatal
	Total	**491**	**160**	**94**	**152**	**85**
1	HIV Infection (B20-B24)*	-	-	-	-	-
2	Diseases of the Circulatory System (I00-I99)*	6	1	1	1	3
3	Influenza and Pneumonia (J10-J18)*	3	-	-	-	3
4	Newborn Affected by Maternal Complications of Pregnancy (P01)*	8	4	1	3	-
5	Newborn Affected by Complications of Placenta, Cord, and Membranes (P02)*	20	10	1	9	-
6	Short Gestation and Low Birthweight (P07)*	77	37	9	29	2
7	Intrauterine Hypoxia and Birth Asphyxia (P20-P21)*	5	2	-	3	-
8	Respiratory Distress of Newborn (P22)*	13	7	-	6	-
9	Pulmonary Hemorrhage Originating in the Perinatal Period (P26)*	8	5	-	3	-
10	Atelectasis (P28.0-P28.1)*	3	2	-	1	-
11	Other Respiratory Conditions Originating in the Perinatal Period (P23-P28)†	8	1	1	6	-
12	Cardiovascular Disorders Originating in the Perinatal Period (P29)†	57	31	-	26	-
13	Infections Specific to the Perinatal Period (P35-P39)†	14	5	-	6	3
	Bacterial sepsis of newborn (P36)	9	3	-	6	-
14	Neonatal Hemorrhage (P50-P52, P54)*	8	3	-	5	-
15	Necrotizing Enterocolitis of Newborn (P77)*	11	7	-	3	1
16	Remainder of Conditions Originating in the Perinatal Period (Rest of P00-P99)	19	8	-	10	1
17	Congenital Malformations, Deformations (Q00-Q99)*	105	30	20	33	22
	Congenital malformations of heart (Q20-Q24)	28	3	9	4	12
18	Sudden Infant Death Syndrome (R95)*	-	-	-	-	-
19	All Other Diseases (Rest of A00-R99)	79	6	44	4	25
20	External Causes (V01-Y89)†	47	1	17	4	25

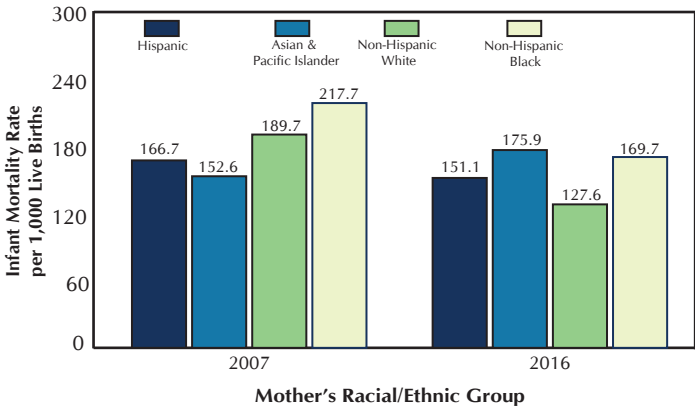
*Causes are used to rank leading causes nationally and in New York City.

†Contains causes not eligible to be ranked as a leading cause nationally but frequent in New York City. Including these groups permits recognition of important causes of infant death.

INFANT MORTALITY

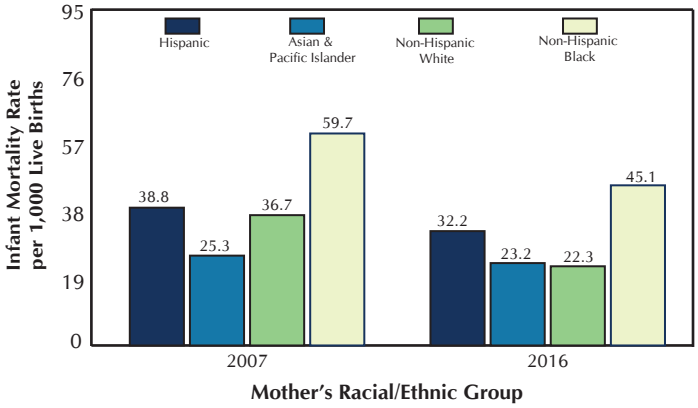
- From 2007 to 2016, infant mortality rates among very low birthweight infants (born under 1500 grams, VLBW) declined among all ethnic groups except for Asians and Pacific Islanders.
- Among VLBW infants in 2016, the infant mortality rate was highest for Asians and Pacific Islanders at 175.9 deaths per 1,000 live births, followed by non-Hispanic blacks (169.7), and Hispanics (151.1).
- The infant mortality rates for Asian/Pacific Islander VLBW infants and non-Hispanic black VLBW infants were, respectively, 1.4 and 1.3 times higher than the VLBW infant mortality rate for non-Hispanic white infants.

Figure 6. Infant Mortality Rates by Mother's Racial/Ethnic Group, Very Low Birthweight, 2007 and 2016



*Other/not stated maternal racial/ethnic groups not included in the figure.

Figure 7. Infant Mortality Rates by Mother's Racial/Ethnic Group, Low Birthweight, 2007 and 2016



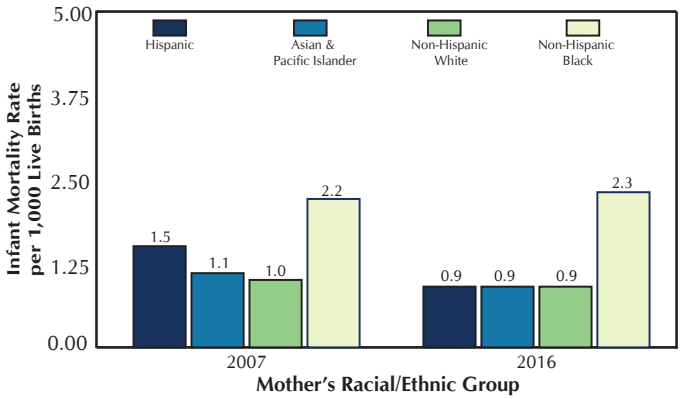
*Other/not stated maternal racial/ethnic groups not included in the figure

- From 2007 to 2016, infant mortality rates among low birthweight infants (born under 2500 grams) declined among all ethnic groups.
- Among low birthweight infants in 2016, the infant mortality rate was highest for non-Hispanic blacks at 45.1 deaths per 1,000 live births, 2.0 times that of non-Hispanic whites (22.3).

INFANT MORTALITY

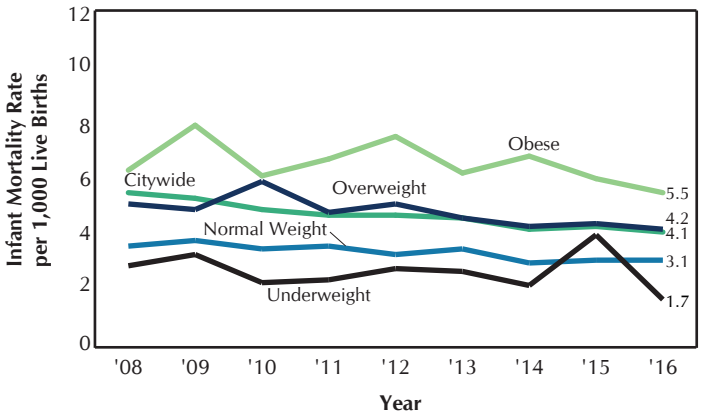
- From 2007 to 2016, infant mortality rates among normal birthweight infants (2500+ grams) declined among all ethnic groups except non-Hispanic blacks which increased slightly (2.2 infant deaths to 2.3 infant deaths per 1,000 live births).
- In 2016, Hispanic, Asian and Pacific Islander, and non-Hispanic white normal birthweight infants all had an infant mortality rate of 0.9 infant deaths per 1,000 live births.
- However, the infant mortality rate among non-Hispanic black normal birthweight infants was 2.3 per 1,000 live births, or 2.6 times that of the other three racial/ethnic groups.

Figure 8. Infant Mortality Rates by Mother's Racial/Ethnic Group, Normal Birthweight, 2007 and 2016



*Other/not stated maternal racial/ethnic groups not included in the figure

Figure 9. Infant Mortality Rates by Mother's Pre-Pregnancy Body Mass Index (BMI), 2008-2016

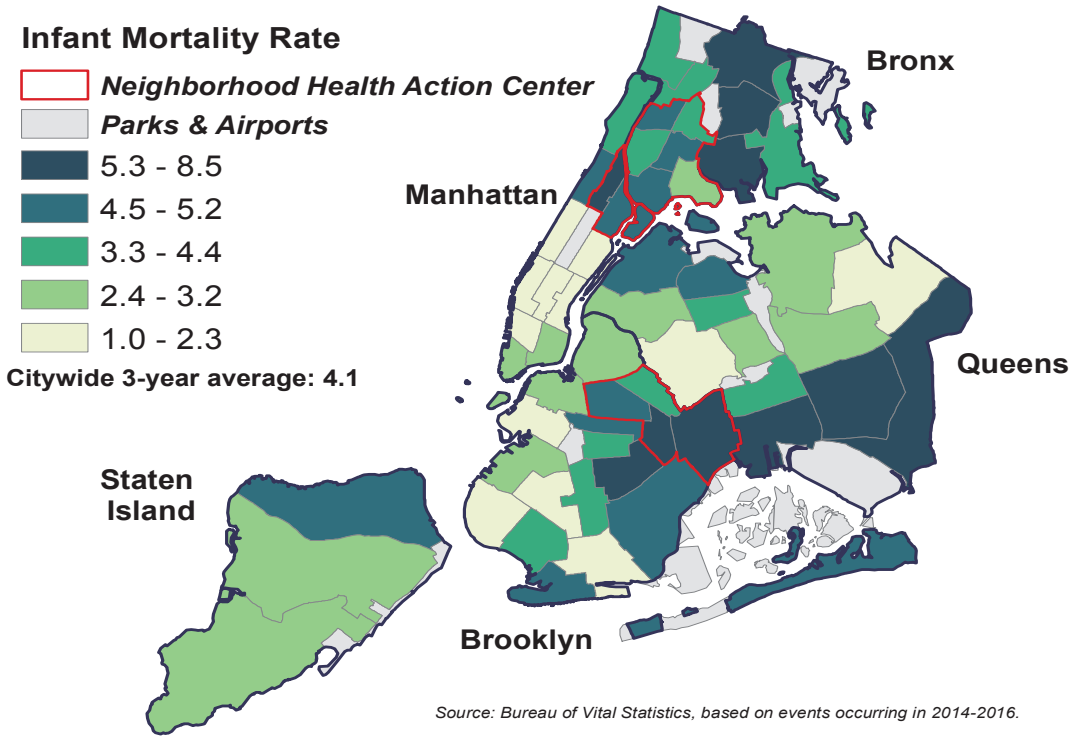


See Technical Notes for BMI definition.

- Infant mortality rates declined from 2015 to 2016 among underweight, overweight, and obese mothers while normal weight mothers saw no decline.
- Rates fluctuated over time but are consistently higher among overweight and obese mothers. The rate for overweight mothers was 1.4 times higher than the rate for normal weight mothers in 2016; the rate for obese mothers was 1.8 times higher than the rate for normal weight mothers in 2016.

INFANT MORTALITY

Figure 10. Average Infant Mortality Rate by Community District of Residence*, New York City, 2014–2016†



Source: Bureau of Vital Statistics, based on events occurring in 2014-2016.

See Map of Community Districts and Boroughs, New York City on page 105.

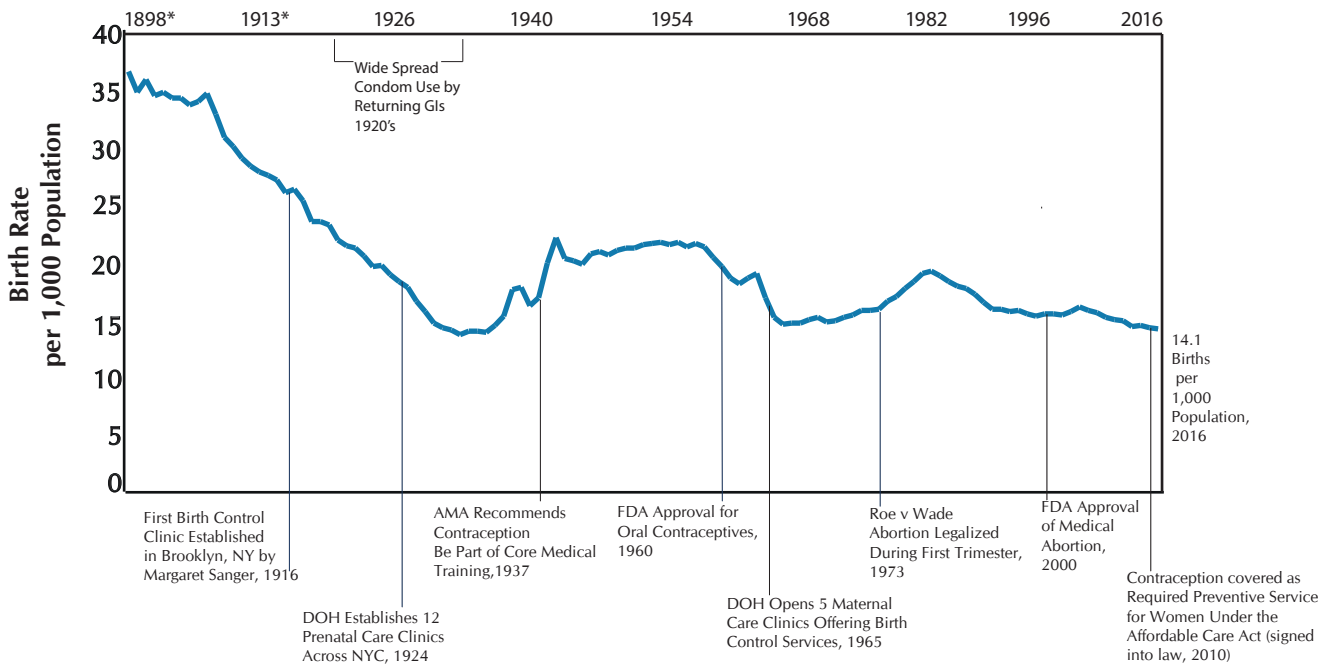
*See Technical Notes: Community District (CD).
†Due to instability in the infant mortality rates by community district, rates are presented as three-year averages.

- The three-year average infant mortality rate was highest in East Flatbush at 8.5 deaths per 1,000 live births, followed by 7.8 in Pelham Parkway, 6.7 in Central Harlem, 6.2 in Williamsbridge, and 6.2 in East New York.
- The lowest three-year average infant mortality rate was in Bay Ridge with 1.0 deaths per 1,000 live births, followed by 1.7 in Greenwich Village/SOHO, 1.8 in the Midtown Business District, Murray Hill, and the Upper East Side, 1.9 in Bayside, and 2.1 in Sheepshead Bay.

Infant Mortality Rate by 1,000 Population by Community District (CD) of Residence, New York City, 2014-2016

CD	MANHATTAN	Infant Mortality Rate	CD	BRONX	Infant Mortality Rate	CD	BROOKLYN	Infant Mortality Rate	CD	QUEENS	Infant Mortality Rate
MN01	Battery Park, Tribeca	3.0	BX01	Mott Haven	4.6	BK01	Williamsburg, Greenpoint	2.8	QN01	Astoria, Long Island City	5.0
MN02	Greenwich Village, SOHO	1.7	BX02	Hunts Point	2.7	BK02	Fort Greene, Brooklyn Heights	2.4	QN02	Sunnyside, Woodside	3.1
MN03	Lower East Side	3.2	BX03	Morrisania	4.8	BK03	Bedford Stuyvesant	4.9	QN03	Jackson Heights	4.6
MN04	Chelsea, Clinton	2.3	BX04	Concourse, Highbridge	3.4	BK04	Bushwick	3.4	QN04	Elmhurst, Corona	3.3
MN05	Midtown Business District	1.8	BX05	University/Morris Heights	4.6	BK05	East New York	6.2	QN05	Ridgewood, Glendale	2.2
MN06	Murray Hill	1.8	BX06	East Tremont	4.1	BK06	Park Slope	2.3	QN06	Rego Park, Forest Hills	2.8
MN07	Upper West Side	2.3	BX07	Fordham	4.2	BK07	Sunset Park	2.4	QN07	Flushing	3.0
MN08	Upper East Side	1.8	BX08	Riverdale	4.3	BK08	Crown Heights North	4.9	QN08	Fresh Meadows, Briarwood	2.5
MN09	Manhattanville	5.0	BX09	Unionport, Soundview	5.8	BK09	Crown Heights South	3.8	QN09	Woodhaven	4.4
MN10	Central Harlem	6.7	BX10	Throgs Neck	3.9	BK10	Bay Ridge	1.0	QN10	Howard Beach	5.5
MN11	East Harlem	5.2	BX11	Pelham Parkway	7.8	BK11	Bensonhurst	3.6	QN11	Bayside	1.9
MN12	Washington Heights	4.2	BX12	Williamsbridge	6.2	BK12	Borough Park	2.2	QN12	Jamaica, St. Albans	6.1
						BK13	Coney Island	4.7	QN13	Queens Village	5.6
CD	STATEN ISLAND					BK14	Flatbush, Midwood	4.3	QN14	The Rockaways	5.2
S101	Port Richmond	4.8				BK15	Sheepshead Bay	2.1			
S102	Willowbrook, South Beach	2.8				BK16	Brownsville	5.4			
S103	Tottenville	2.6				BK17	East Flatbush	8.5			
						BK18	Canarsie	5.0			

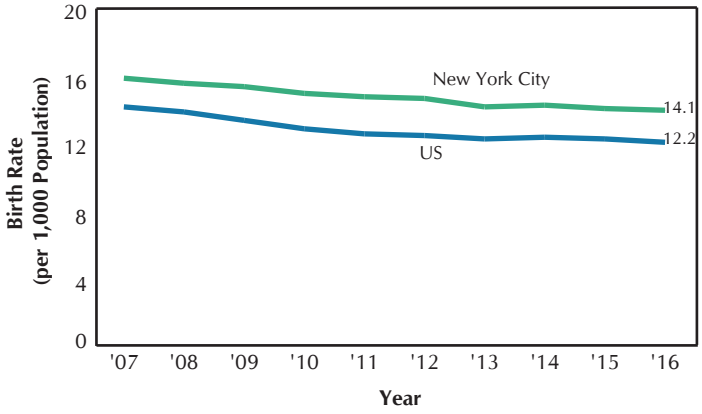
PREGNANCY OUTCOMES



*1898-1913 Birth counts are estimated as number reported was determined to be incomplete.

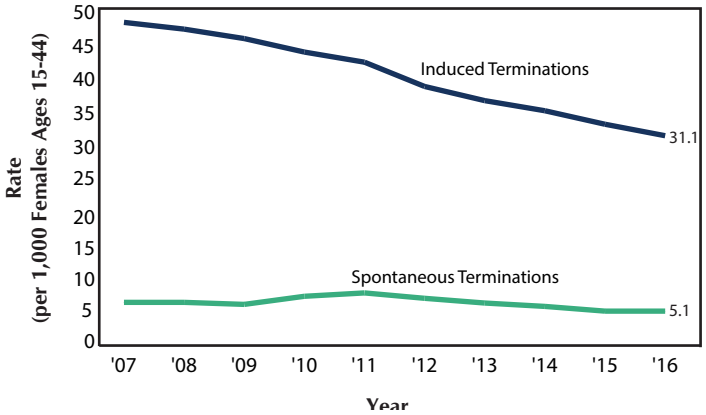
PREGNANCY OUTCOMES OVERVIEW

Figure 1. Crude Birth Rates, New York City and United States, 2007–2016



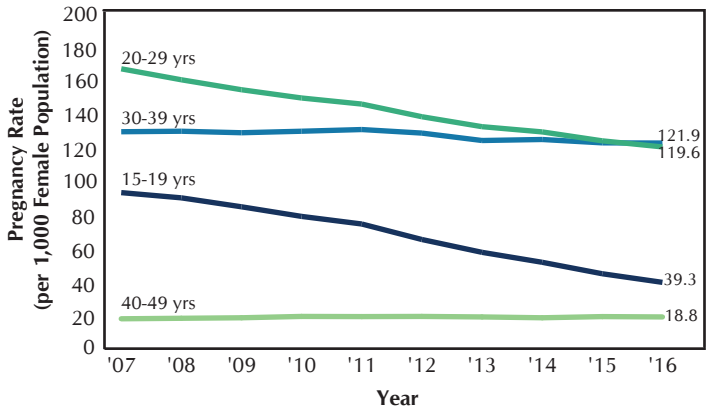
- The 2016 citywide crude birth rate was 14.1 births per 1,000 population. New York City's birth rate has experienced a modest decrease for the past ten years. It declined by 0.7% from 2015 and by 11.9% since 2007.
- New York City's 2016 crude birth rate was higher than the United States rate (14.1 vs. 12.2 nationwide), consistent with previous years.

Figure 2. Crude Spontaneous and Induced Termination of Pregnancy Rates, New York City, 2007–2016



- The 2016 citywide crude spontaneous termination of pregnancy rate (miscarriages and stillbirths) was 5.1 terminations per 1,000 females aged 15 to 44 years. The rate has remained the same since 2015 and between 5.1 and 7.8 per 1,000 since 2007.
- Changes in rates of spontaneous terminations of pregnancy are likely due to variations in the reporting of these events by facilities rather than true changes in such events. For example, some facilities may fail to report very early gestational age spontaneous terminations. DOHMH continues to conduct outreach and education of targeted medical facilities about legal reporting requirements.
- The 2016 citywide crude rate of induced terminations of pregnancy was 31.1 terminations per 1,000 females aged 15 to 44 years, continuing its decline, down 5.3% since 2015. This rate has decreased each year since 2007 by 35.1%, from 47.9 to 31.1 terminations per 1,000 females ages 15 to 44 years.

Figure 3. Pregnancy Rates* by Mother/ Woman's Age, New York City, 2007-2016

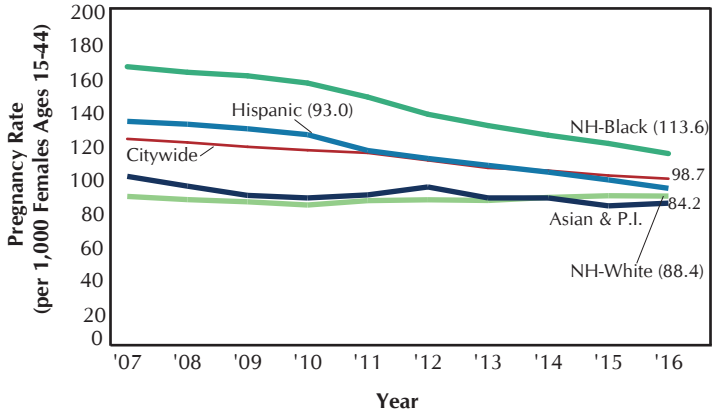


*See Technical Notes for the definition of pregnancy rate.

- In 2016, the pregnancy rate among women 30 to 39 years old continued to be highest, at 121.9 pregnancies per 1,000 females followed by women 20 to 29 years old at 119.6, then women 15 to 19 years old and 40 to 49 years old with pregnancy rates of 39.3 and 18.8, respectively.
- Since 2007, pregnancy rates have increased 6.2% among women 40-49 years old.
- Since 2007, rates have decreased by 27.9% among women aged 20-29 years old and by 5.2% among women aged 30-39 years old.
- The teen pregnancy rate (15-19 years old) decreased by 57.5% since 2007 and 11.5% since 2015.

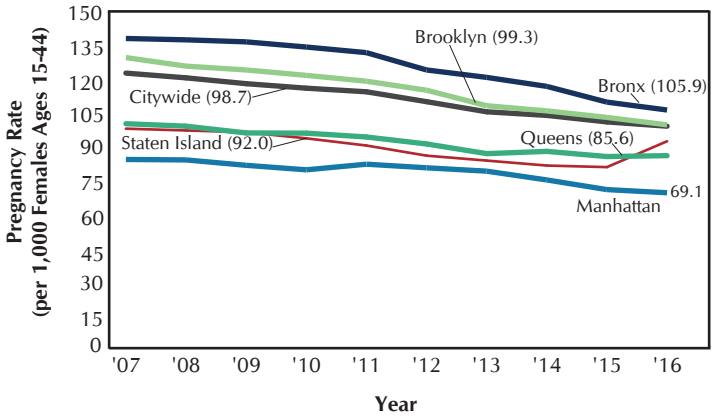
PREGNANCY OUTCOMES OVERVIEW

Figure 4. Pregnancy Rates by Mother/Woman's Racial/Ethnic Group, New York City, 2007-2016



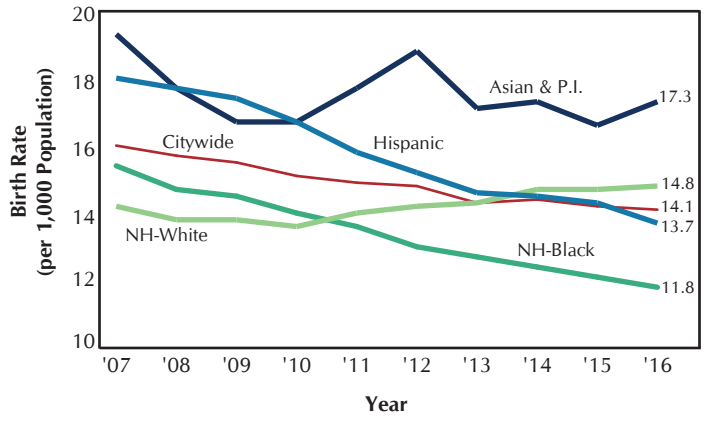
- In 2016, the pregnancy rate was highest among non-Hispanic blacks at 113.6 pregnancies per 1,000 females aged 15-44, followed by 93.0 among Hispanics, 88.4 among non-Hispanic whites, and 84.2 among Asians and Pacific Islanders..
- From 2007 to 2016, the pregnancy rate increased among non-Hispanic whites by 0.2%, and decreased among all other groups. Over the ten year period, non-Hispanic blacks experienced a 31.2% decline; Hispanics, a 29.9% decline; and Asians and Pacific Islanders, a 15.9% decline.

Figure 5. Pregnancy Rates by Mother/Woman's Borough of Residence, New York City, 2007-2016



- In 2016, the pregnancy rate in the Bronx continued to be highest, at 105.9 pregnancies per 1,000 females aged 15-44 followed by Brooklyn at 99.3, Staten Island at 92.0, Queens at 85.6, and Manhattan at 69.1.
- Since 2007, pregnancy rates have declined in all boroughs. Rates have decreased by 23.1% in both the Bronx and Brooklyn, by 17.6% in Manhattan, by 14.2% in Queens, and by 5.7% in Staten Island
- Since 2007, the city-wide pregnancy rate has declined by 19.3%, from 122.3 pregnancies per 1,000 females aged 15-44 to 98.7.

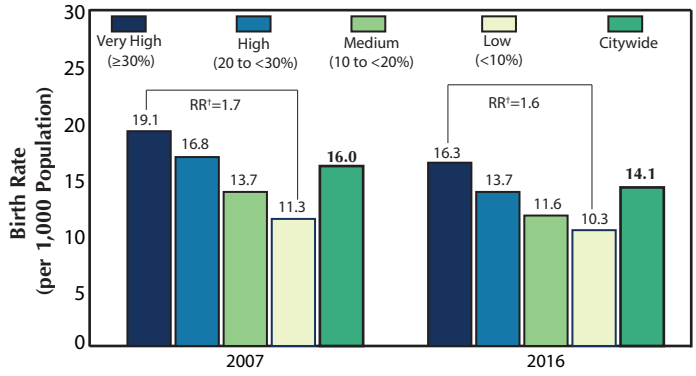
Figure 6. Birth Rates by Mother's Racial/Ethnic Group, New York City, 2007-2016



- In 2016, the birth rate was highest among Asians and Pacific Islanders at 17.3 births per 1,000 population, followed by 14.8 among non-Hispanic whites, 13.7 among Hispanics, and 11.8 among non-Hispanic blacks.
- From 2007 to 2016, the birth rate increased among non-Hispanic whites by 4.2%, and decreased among all other groups. Over the ten year period, non-Hispanic blacks experienced a 23.4% decline; Hispanics, a 23.9% decline; and Asians and Pacific Islanders, a 10.4% decline.

PREGNANCY OUTCOMES OVERVIEW

Figure 7. Birth Rates by Neighborhood Poverty*, New York City, 2007 and 2016

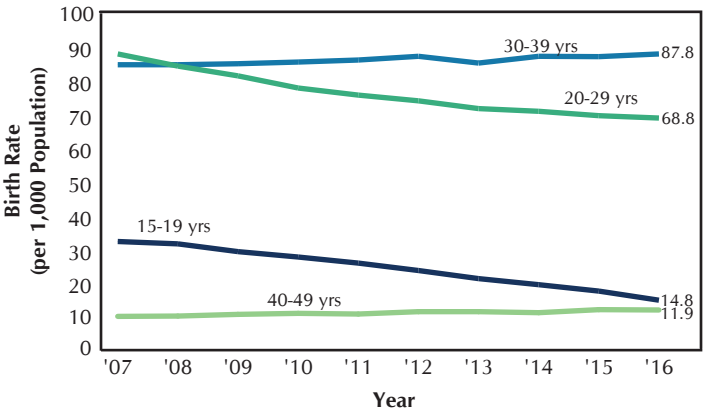


*Neighborhood poverty (based on mother's residential census tract) is defined as percent of residents with incomes below 100% of the Federal Poverty Level, per American Community Survey (ACS) 2005-2009 for 2007 data and per ACS 2011-2016 for 2016 data.

†Rate Ratio.

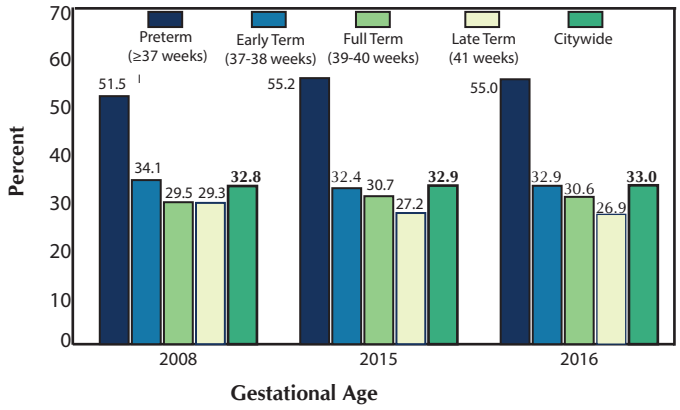
- In 2016, the birth rate was highest in the city's very high poverty neighborhoods, at 16.3 births per 1,000 population as compared to 10.3 for the low poverty neighborhoods. In 2016, birth rates were 1.6 times higher in the city's very high poverty neighborhoods compared to the city's low poverty neighborhoods, as compared to 1.7 in 2007.
- Since 2007, birth rates decreased across all neighborhood poverty groups.

Figure 8. Birth Rates by Mother's Age Group, New York City, 2007-2016



- In 2016, the birth rate among women aged 30 to 39 years of age continued to be highest, at 87.8 births per 1,000 female population followed by women 20 to 29 years ikd at 68.8, then women 15 to 19 years old and 40 to 49 years old with birth rates of 14.8 and 11.9, respectively.
- Since 2007, birth rates increased 3.8% among women aged 30-39 years old and 19.9% among women aged 40-49 years old.
- Among women 20-29 years old, the birth rate has declined by 21.6% since 2007 and 1.0% since 2015. The teen birth rate (15-19 years of age) decreased by 54.0% since 2007 and 15.4% since 2015.

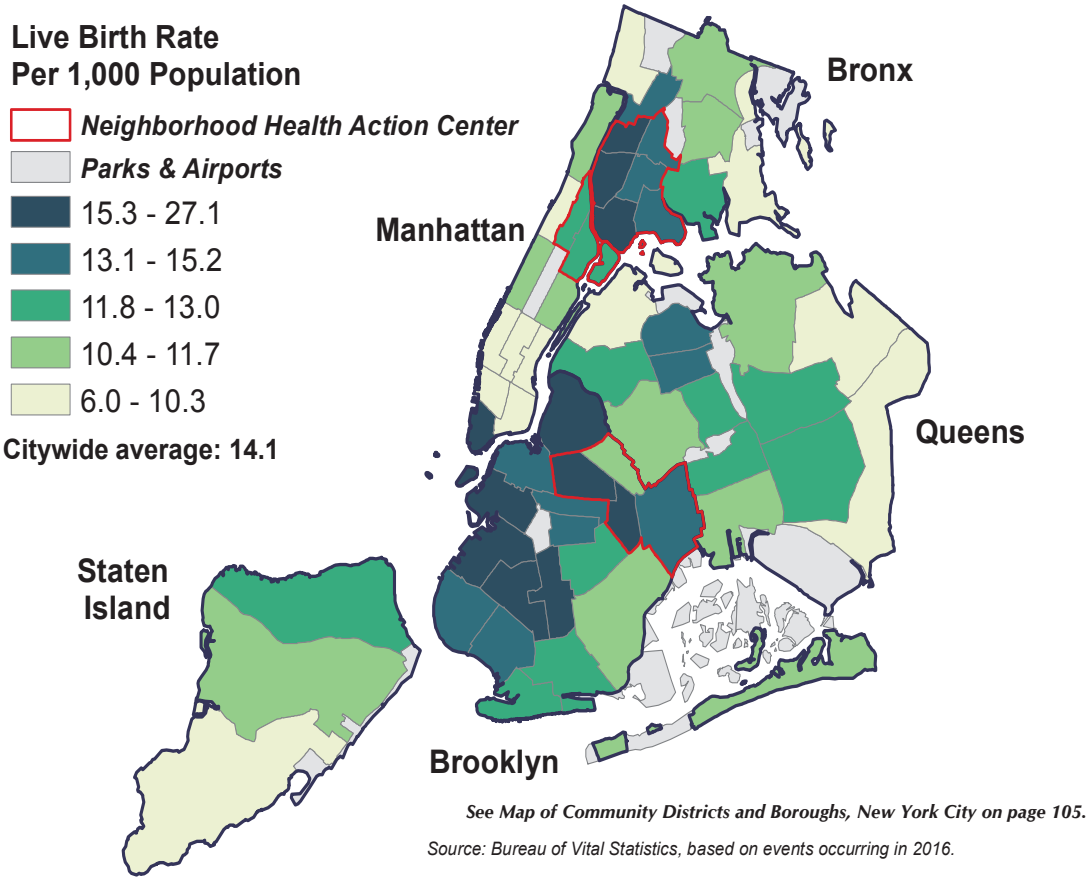
Figure 9. Percent of Cesarean Delivery by Gestational Age, New York City, 2008, 2015, 2016



- For 2008, 2015, and 2016, a majority of preterm (<37 weeks gestational age) infants were delivered by Cesarean section.
- For all three years, as gestational age increased, the percentage of delivery via Cesarean section decreased.

PREGNANCY OUTCOMES

Figure 10. Crude Birth Rates by Community District of Residence, New York City, 2016



See Map of Community Districts and Boroughs, New York City on page 105.

Source: Bureau of Vital Statistics, based on events occurring in 2016.

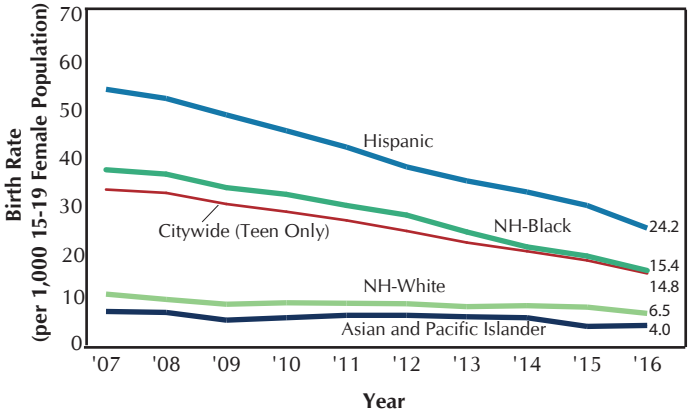
- For 2016, the community district with the highest crude birth rate was Borough Park with 27.1 births per 1,000 population, followed by 18.3 in Sunset Park, 17.9 in Williamsburg/Greenpoint and 16.7 in Mott Haven.
- The community district with the lowest crude birth rate was Bayside with 6.0 births per 1,000 population, then the Lower East Side with 7.5, Throgs Neck with 8.2, Chelsea/Clinton with 8.3, and Greenwich Village/SOHO with 8.5.

Crude Birth Rates by Community District (CD) of Residence, New York City, 2016

CD	MANHATTAN	Birth Rate	CD	BRONX	Birth Rate	CD	BROOKLYN	Birth Rate	CD	QUEENS	Birth Rate
MN01	Battery Park, Tribeca	16.6	BX01	Mott Haven	16.7	BK01	Williamsburg, Greenpoint	17.9	QN01	Astoria, Long Island City	10.0
MN02	Greenwich Village, SOHO	8.5	BX02	Hunts Point	14.5	BK02	Fort Greene, Brooklyn Heights	14.3	QN02	Sunnyside, Woodside	12.6
MN03	Lower East Side	7.5	BX03	Morrisania	15.1	BK03	Bedford Stuyvesant	15.3	QN03	Jackson Heights	13.7
MN04	Chelsea, Clinton	8.3	BX04	Concourse, Highbridge	16.1	BK04	Bushwick	11.2	QN04	Elmhurst, Corona	13.3
MN05	Midtown Business District	10.3	BX05	University/Morris Heights	16.2	BK05	East New York	15.0	QN05	Ridgewood, Glendale	11.4
MN06	Murray Hill	8.8	BX06	East Tremont	15.1	BK06	Park Slope	15.4	QN06	Rego Park, Forest Hills	12.4
MN07	Upper West Side	11.6	BX07	Fordham	15.2	BK07	Sunset Park	18.3	QN07	Flushing	11.3
MN08	Upper East Side	11.0	BX08	Riverdale	9.9	BK08	Crown Heights North	14.1	QN08	Fresh Meadows, Briarwood	12.0
MN09	Manhattanville	9.4	BX09	Unionport, Soundview	12.8	BK09	Crown Heights South	14.6	QN09	Woodhaven	12.7
MN10	Central Harlem	13.0	BX10	Throgs Neck	8.2	BK10	Bay Ridge	13.2	QN10	Howard Beach	10.5
MN11	East Harlem	12.4	BX11	Pelham Parkway	11.7	BK11	Bensonhurst	13.4	QN11	Bayside	6.0
MN12	Washington Heights	10.6	BX12	Williamsbridge	10.9	BK12	Borough Park	27.1	QN12	Jamaica, St. Albans	12.8
						BK13	Coney Island	12.1	QN13	Queens Village	8.8
CD	**STATEN ISLAND**					BK14	Flatbush, Midwood	15.5	QN14	The Rockaways	11.4
SI01	Port Richmond	12.6				BK15	Sheepshead Bay	12.9			
SI02	Willowbrook, South Beach	11.1				BK16	Brownsville	15.9			
SI03	Tottenville	9.9				BK17	East Flatbush	12.1			
						BK18	Canarsie	11.4			

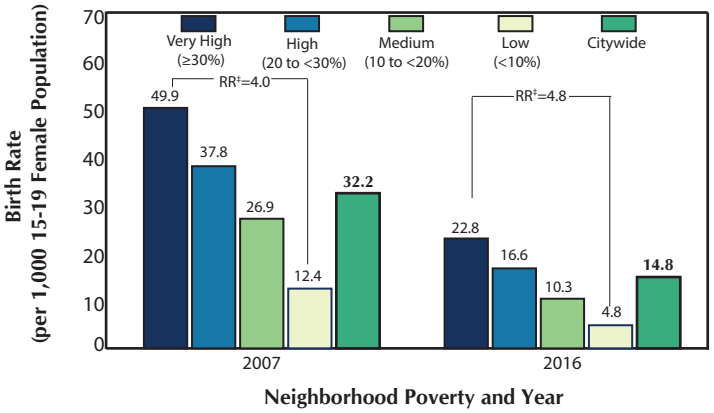
TEEN BIRTHS

Figure 11. Teen Birth Rates by Mother's Racial/ Ethnic Group, New York City, 2007–2016



- From 2007 to 2016, the teen birth rate declined by 54.1% overall. Teen birth rates also declined for all racial/ethnic groups: by 54.4% among Hispanics, 57.6% among non-Hispanic blacks, 37.8% among non-Hispanic whites, and 41.9% among Asians and Pacific Islanders.
- In 2016, the teen birth rate among non-Hispanic blacks was 2.4 times higher than among non-Hispanic whites, reflecting a narrowing of the difference in 2007, when it was 3.5 times higher.
- The teen birth rate among Hispanics remains high compared to that of non-Hispanic whites. In 2007 the teen birth rates among Hispanics were 5.1 times that of non-Hispanic whites. In 2016, the teen birth rates among Hispanics were 3.7 times that of non-Hispanic whites.

Figure 12. Teen Birth Rate by Neighborhood Poverty*, New York City Residents, 2007 and 2016

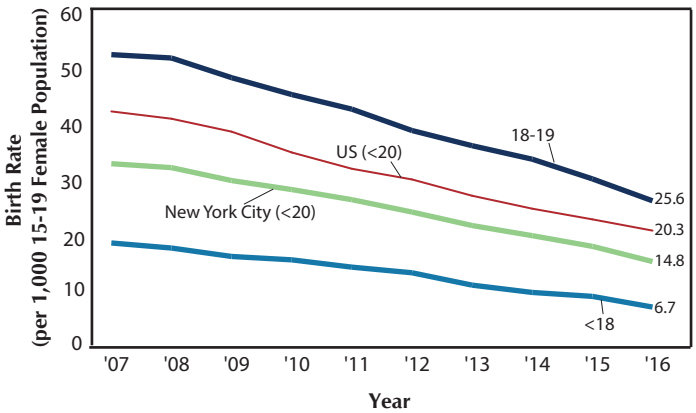


*Neighborhood poverty (based on mother's residential census tract) defined as percent of residents with incomes below 100% of the Federal Poverty Level, per American Community Survey (ACS) 2005-2009 for 2007 data and per ACS 2010-2016 for 2016 data.

‡ Rate Ratio.

- Between 2007 and 2016, teen birth rates declined across all poverty levels: by 54.3% in the city's very high poverty neighborhoods, by 56.1% in high poverty neighborhoods, by 61.7% in medium poverty neighborhoods, and by 61.3% in low poverty neighborhoods.
- Although rates have declined, the disparity between low poverty and very high poverty neighborhoods has increased. Teen birth rates remain comparatively high in the city's very high poverty neighborhoods. In 2016, the teen birth rate in very high poverty neighborhoods was 4.8 times that of low poverty neighborhoods; in 2007, it was 4.0 times that of low poverty neighborhoods.

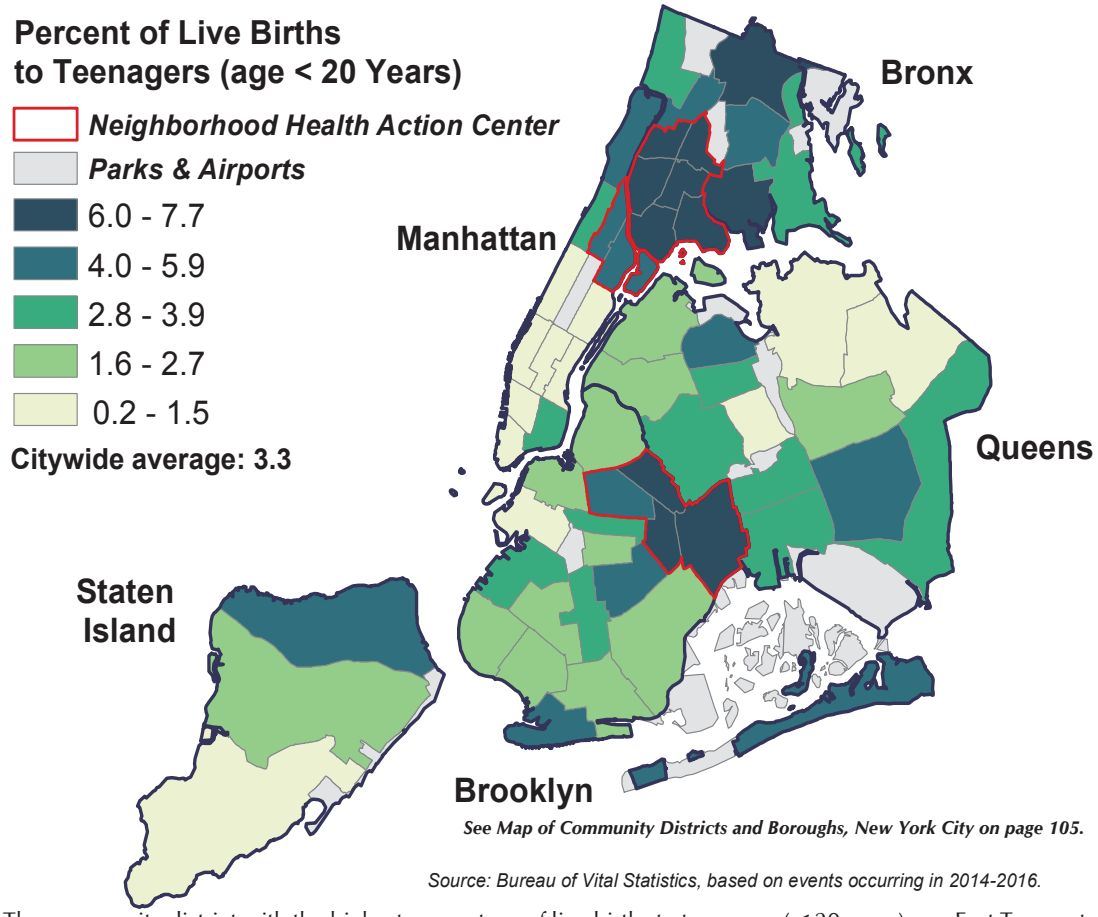
Figure 13. Teen Birth Rates by Age, New York City, 2007–2016



- From 2007 to 2016, birth rates fell among all teenagers, regardless of age. Among teens less than 18 years of age, the birth rate declined over that period by 63.0%; among teens 18-19, it declined by 50.4%. The overall rate of teen birth (births to women <20) declined by 54.1%.

TEEN BIRTHS

Figure 14. Percent of Live Births to Teenagers by Community District of Residence, New York City, 2014-2016



See Map of Community Districts and Boroughs, New York City on page 105.

Source: Bureau of Vital Statistics, based on events occurring in 2014-2016.

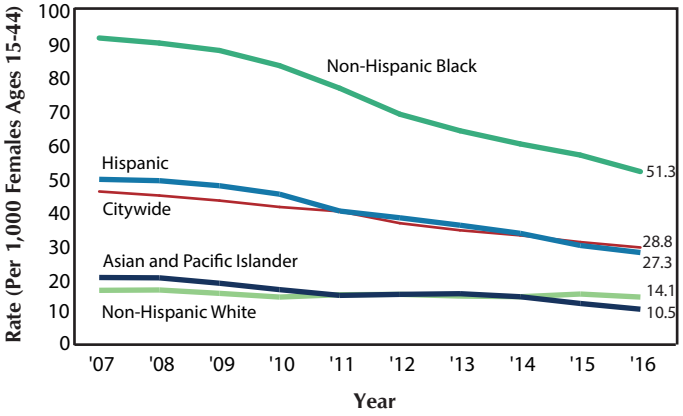
- The community district with the highest percentage of live births to teenagers (< 20 years) was East Tremont with 7.7%, followed by Brownsville with 7.5%, Mott Haven with 7.3%, Hunts Point with 7.2%, and Morrisania with 7.1%.
- The following community districts had less than 1% of live births to teenagers: Battery Park/Tribeca, Murray Hill, Greenwich Village/SOHO, Upper East Side, Midtown Business District, Upper West Side, Tottenville, Bayside, and Rego Park/Forest Hills.

Percentage of Live Births to Teens by Community District (CD) of Residence, New York City, 2014-2016

CD	MANHATTAN	Birth Percentage	CD	BRONX	Birth Percentage	CD	BROOKLYN	Birth Percentage	CD	QUEENS	Birth Percentage
MN01	Battery Park, Tribeca	0.2	BX01	Mott Haven	7.3	BK01	Williamsburg, Greenpoint	1.9	QN01	Astoria, Long Island City	2.5
MN02	Greenwich Village, SOHO	0.3	BX02	Hunts Point	7.2	BK02	Fort Greene, Brooklyn Heights	1.7	QN02	Sunnyside, Woodside	1.7
MN03	Lower East Side	3.0	BX03	Morrisania	7.1	BK03	Bedford Stuyvesant	4.8	QN03	Jackson Heights	4.6
MN04	Chelsea, Clinton	1.4	BX04	Concourse, Highbridge	6.3	BK04	Bushwick	6.7	QN04	Elmhurst, Corona	3.9
MN05	Midtown Business District	0.7	BX05	University/Morris Heights	6.7	BK05	East New York	6.8	QN05	Ridgewood, Glendale	3.3
MN06	Murray Hill	0.3	BX06	East Tremont	7.7	BK06	Park Slope	1.5	QN06	Rego Park, Forest Hills	0.7
MN07	Upper West Side	0.9	BX07	Fordham	5.9	BK07	Sunset Park	3.1	QN07	Flushing	1.5
MN08	Upper East Side	0.2	BX08	Riverdale	3.1	BK08	Crown Heights North	3.6	QN08	Fresh Meadows, Briarwood	1.5
MN09	Manhattanville	3.8	BX09	Unionport, Soundview	6.0	BK09	Crown Heights South	2.2	QN09	Woodhaven	3.5
MN10	Central Harlem	4.1	BX10	Throgs Neck	3.7	BK10	Bay Ridge	1.7	QN10	Howard Beach	3.7
MN11	East Harlem	5.4	BX11	Pelham Parkway	4.5	BK11	Bensonhurst	1.9	QN11	Bayside	0.7
MN12	Washington Heights	4.4	BX12	Williamsbridge	6.7	BK12	Borough Park	2.1	QN12	Jamaica, St. Albans	4.9
						BK13	Coney Island	4.3	QN13	Queens Village	2.9
CD	**STATEN ISLAND**					BK14	Flatbush, Midwood	3.1	QN14	The Rockaways	5.3
S101	Port Richmond	5.3				BK15	Sheepshead Bay	2.3			
S102	Willowbrook, South Beach	1.8				BK16	Brownsville	7.5			
S103	Tottenville	0.9				BK17	East Flatbush	4.3			
						BK18	Canarsie	2.7			

INDUCED TERMINATION OF PREGNANCY

Figure 15. Age-Adjusted Induced Termination of Pregnancy Rates by Mother's Racial/Ethnic Group, New York City, 2007–2016



- The 2016 citywide age-adjusted rate of induced terminations of pregnancy, at 28.8 terminations per 1,000 females aged 15 to 44 years, declined 36.6% since 2007. Similarly, age-adjusted rates among each racial/ethnic group declined: 47.2% among Asians and Pacific Islanders, 44.3% among Hispanics, 43.6% among non-Hispanic blacks, and 12.6% among non-Hispanic whites.
- The disparity between non-Hispanic white and non-Hispanic black induced termination of pregnancy rates has narrowed since 2007; the rate was 3.6 times higher among non-Hispanic blacks than non-Hispanic whites (51.3 per 1,000 females age 15-44 vs. 14.1) in 2016, compared to 5.6 in 2007.

- The 2016 crude citywide rate of induced terminations of pregnancy declined 35.1% since 2007, from 47.9 to 31.1 terminations per 1,000 females aged 15-49 years.
- Since 2007, the age-specific rate declined 59.5% among teens (15 to 19 years of age), from 57.6 terminations per 1,000 females in 2007 to 23.3 in 2016. The rate declined by 35.2% among women 20 to 29 years of age, 25.0% among women 30 to 39 years of age and 14.8% among women 40 and older.
- Rates remain the highest among women 20 to 29 years of age, followed by women 30 to 39 years of age, then teens, and women 40 and over.

Figure 16. Age-Specific Induced Termination of Pregnancy Rates by Mother's Age, New York City, 2007–2016

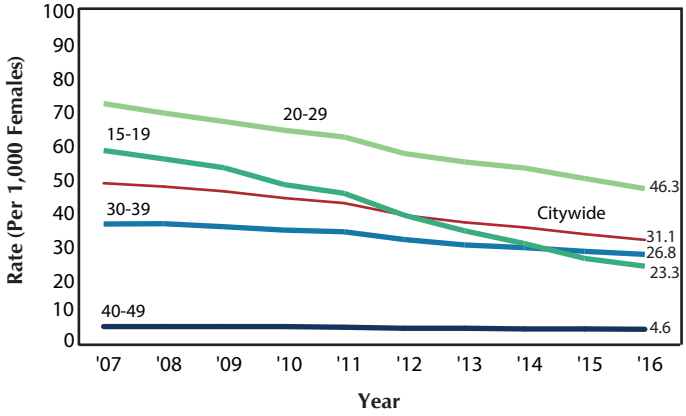
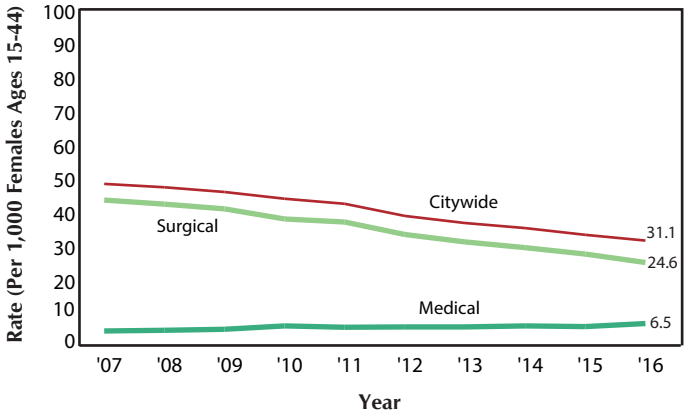


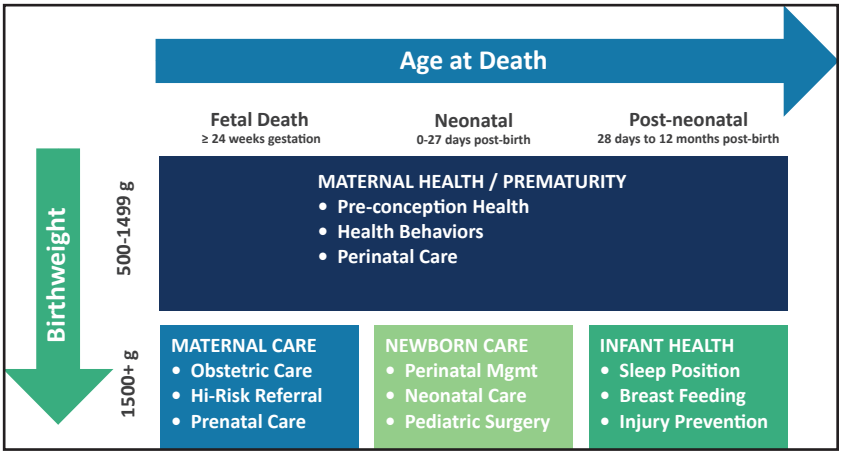
Figure 17. Crude Induced Termination of Pregnancy Rates by Medical vs. Surgical Procedure, New York City, 2007–2016



- Medication-induced abortion, using mifepristone in combination with misoprostol, is termed a "medical abortion" and may be performed up to nine weeks' gestation, rather than a surgical procedure, to terminate a pregnancy. Medical abortion is not to be confused with the morning-after pill, also known as emergency contraception, which is used to prevent pregnancy.
- Since 2007, the crude rate of medical abortion in New York City increased 51.2%, to 6.5 terminations per 1,000 females age 15-44, while the rate of surgical abortion decreased 42.9% to 24.6 terminations per 1,000 females age 15-44.

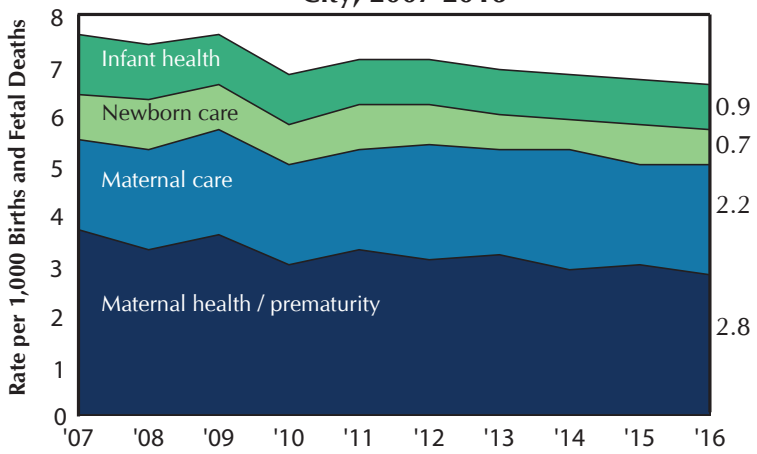
PERINATAL PERIODS OF RISK (PPOR)

Figure 1. Model of Perinatal Periods of Risk and Intervention Priorities



- Based on WHO/CDC's Periods of Risk approach (1991) to reduce fetal deaths (more commonly called miscarriages and/or stillbirths) and infant mortality, the Perinatal Periods of Risk (PPOR) methodology was developed to address the complexity of infant mortality. The framework (see above) illustrates four periods of risk based on birthweight and gestational age/age at death, and the labels indicate the primary areas of prevention.
- The PPOR model classifies fetal and infant deaths based on birth weight (500-1499 grams vs. 1500 grams or more), and gestational age or age at death. Fetal deaths occur at ≥24 weeks gestation. Among live births, neonatal deaths occur from 0-27 days and post-neonatal deaths occur from 28 days to 12 months.
- Each labeled box in the PPOR model (maternal health / prematurity; maternal care; newborn care; and infant health) represents a period of risk, and within each period, deaths are similar in terms of causes, maternal risk factors, and opportunities for prevention.
- PPOR first requires that deaths are 'mapped' to the correct period of risk based on birthweight and gestational age/age at death. The mortality rate is then calculated for each period of risk. Mortality rates from the four periods should sum to the overall mortality rate.

Figure 2. Contributions to Fetal-Infant Mortality Rates per 1,000 Births and Fetal Deaths, New York City, 2007-2016



- The overall fetal-infant mortality rate (FIMR) for New York City is 6.7 per 1,000 live births, decreasing by 11.4% since 2007, and remaining the same since 2015 at 6.7 per 1,000 births and fetal deaths.
- Figure 2 illustrates the relative contribution of risk factors to the overall FIMR. Refer to Figure 1 for specific risk factors. Deaths with a birthweight between 500-1499 grams and occurring at any gestational age or birth age contributed 41.8% to the FIMR, indicating that prevention efforts should focus on maternal health / prematurity risk factors.
- The share of FIMR attributable to the infant health period decreased from 15.7% in 2007 to 13.4% in 2016 (post-neonatal deaths with a birthweight 1500 grams or greater). The contribution of the maternal care period to FIMR increased from 23.6% in 2007 to 32.8% in 2016 (fetal deaths with a birthweight 1500 grams or greater). The share of FIMR attributable to the newborn care period decreased 9.6% between 2007 and 2016 (neonatal deaths with a birthweight 1500 grams or greater) from 11.5% to 10.4%.

PERINATAL PERIODS OF RISK (PPOR)

Table 1. Fetal-Infant Mortality Rate per 1,000 Births and Fetal Deaths by Perinatal Period of Risk, Year, and Ethnic Group, New York City, 2012-2016

	Births & Fetal Deaths*	Maternal Health/ Prematurity		Maternal Care		Newborn Care		Infant Health		Total Fetal-Infant Mortality	
Year	Number	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
2012	123,567	388	3.1	285	2.3	103	0.8	116	0.9	892	7.2
2013	120,755	383	3.2	256	2.1	87	0.7	106	0.9	832	6.9
2014	122,416	354	2.9	295	2.4	71	0.6	107	0.9	827	6.8
2015	121,966	366	3.0	238	2.0	101	0.8	107	0.9	812	6.7
2016	120,702	344	2.8	271	2.2	88	0.7	105	0.9	808	6.7
Mother's Ethnic Group, 2012-2016											
Puerto Rican	39,302	121	3.1	76	1.9	40	1.0	33	0.8	270	6.9
Other Hispanic	138,554	372	2.7	268	1.9	102	0.7	133	1.0	875	6.3
Asian and Pacific Islander	103,945	214	2.1	144	1.4	61	0.6	61	0.6	480	4.6
Non-Hispanic White	200,774	340	1.7	339	1.7	112	0.6	107	0.5	898	4.5
Non-Hispanic Black	118,622	698	5.9	405	3.4	125	1.1	201	1.7	1,429	12.0
Other or Unknown	8,209	90	-	113	-	10	-	6	-	219	-
NEW YORK CITY	609,406	1,835	3.0	1,345	2.2	450	0.7	541	0.9	4,171	6.8

*Limited to fetal deaths and live births of birthweight 500 grams or more and fetal deaths with gestation of at least 24 weeks.

Note: Borough totals may be higher than the sum of the community districts, as they may include some live births whose community district could not be determined.

Table 2. Fetal-Infant Mortality Rate per 1,000 Births and Fetal Deaths by Perinatal Period of Risk and Community District of Residence, New York City, 2012-2016

	Births & Fetal Deaths*	Maternal Health/Prematurity		Maternal Care		Newborn Care		Infant Health		Total Fetal-Infant Mortality	
Community District of Residence	Number	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
MANHATTAN	90,157	180	2.0	132	1.5	59	0.7	61	0.7	432	4.8
Battery Park, Tribeca (01)	5,713	8	1.4	7	1.2	4	0.7	2	0.4	21	3.7
Greenwich Village, SOHO (02)	3,981	3	0.8	2	0.5	3	0.8	-	-	8	2.0
Lower East Side (03)	7,436	21	2.8	10	1.3	3	0.4	3	0.4	37	5.0
Chelsea, Clinton (04)	4,983	11	2.2	5	1.0	7	1.4	5	1.0	28	5.6
Midtown Business District (05)	2,847	4	1.4	6	2.1	2	0.7	3	1.1	15	5.3
Murray Hill (06)	6,433	5	0.8	13	2.0	1	0.2	2	0.3	21	3.3
Upper West Side (07)	12,883	18	1.4	20	1.6	9	0.7	8	0.6	55	4.3
Upper East Side (08)	12,974	18	1.4	11	0.8	3	0.2	2	0.2	34	2.6
Manhattanville (09)	5,596	13	2.3	7	1.3	4	0.7	4	0.7	28	5.0
Central Harlem (10)	8,008	32	4.0	18	2.2	9	1.1	13	1.6	72	9.0
East Harlem (11)	7,787	17	2.2	13	1.7	4	0.5	10	1.3	44	5.7
Washington Heights (12)	11,516	30	2.6	20	1.7	10	0.9	9	0.8	69	6.0
BRONX	100,057	368	3.7	252	2.5	93	0.9	133	1.3	846	8.5
Mott Haven (01)	8,177	30	3.7	34	4.2	9	1.1	16	2.0	89	10.9
Hunts Point (02)	4,319	18	4.2	15	3.5	2	0.5	5	1.2	40	9.3
Morrisania (03)	7,199	30	4.2	21	2.9	10	1.4	13	1.8	74	10.3
Concourse, Highbridge (04)	12,765	42	3.3	42	3.3	15	1.2	14	1.1	113	8.9
University/Morris Heights (05)	11,416	39	3.4	11	1.0	13	1.1	14	1.2	77	6.7
East Tremont (06)	6,782	28	4.1	19	2.8	6	0.9	9	1.3	62	9.1
Fordham (07)	11,252	36	3.2	25	2.2	7	0.6	10	0.9	78	6.9
Riverdale (08)	5,637	17	3.0	6	1.1	1	0.2	5	0.9	29	5.1
Unionport, Soundview (09)	12,131	42	3.5	30	2.5	8	0.7	20	1.6	100	8.2
Throgs Neck (10)	4,946	15	3.0	10	2.0	2	0.4	4	0.8	31	6.3
Pelham Parkway (11)	6,743	30	4.4	9	1.3	9	1.3	12	1.8	60	8.9
Williamsbridge (12)	8,690	41	4.7	30	3.5	11	1.3	11	1.3	93	10.7
BROOKLYN	205,615	616	3.0	454	2.2	132	0.6	176	0.9	1,378	6.7
Williamsburg, Greenpoint (01)	18,155	37	2.0	28	1.5	13	0.7	13	0.7	91	5.0
Fort Greene, Brooklyn Heights (02)	8,395	22	2.6	13	1.5	3	0.4	3	0.4	41	4.9
Bedford Stuyvesant (03)	11,742	48	4.1	43	3.7	15	1.3	15	1.3	121	10.3
Bushwick (04)	7,494	15	2.0	23	3.1	7	0.9	14	1.9	59	7.9
East New York (05)	13,645	75	5.5	40	2.9	13	1.0	13	1.0	141	10.3
Park Slope (06)	8,985	16	1.8	17	1.9	3	0.3	6	0.7	42	4.7
Sunset Park (07)	14,052	39	2.8	28	2.0	6	0.4	5	0.4	78	5.6
Crown Heights North (08)	6,655	27	4.1	14	2.1	8	1.2	7	1.1	56	8.4
Crown Heights South (09)	7,565	24	3.2	14	1.9	5	0.7	9	1.2	52	6.9
Bay Ridge (10)	9,497	22	2.3	26	2.7	2	0.2	3	0.3	53	5.6
Bensonhurst (11)	13,190	30	2.3	15	1.1	9	0.7	11	0.8	65	4.9
Borough Park (12)	27,636	42	1.5	52	1.9	11	0.4	15	0.5	120	4.3
Coney Island (13)	6,309	23	3.6	8	1.3	4	0.6	7	1.1	42	6.7
Flatbush, Midwood (14)	13,175	47	3.6	32	2.4	6	0.5	3	0.2	88	6.7
Sheepshead Bay (15)	10,965	17	1.6	12	1.1	3	0.3	10	0.9	42	3.8
Brownsville (16)	6,864	36	5.2	21	3.1	5	0.7	15	2.2	77	11.2
East Flatbush (17)	9,914	53	5.3	38	3.8	6	0.6	17	1.7	114	11.5
Canarsie (18)	11,377	43	3.8	30	2.6	13	1.1	10	0.9	96	8.4

Continued on next page.

Table 2. Fetal-Infant Mortality Rate per 1,000 Births and Fetal Deaths by Perinatal Period of Risk and Community District of Residence, New York City, 2012-2016 (Continued)

	Births & Fetal Deaths*	Maternal Health/Prematurity		Maternal Care		Newborn Care		Infant Health		Total Fetal-Infant Mortality	
Community District of Residence	Number	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
QUEENS	134,344	354	2.6	255	1.9	87	0.6	106	0.8	802	6.0
Astoria, Long Island City (01)	10,025	32	3.2	19	1.9	11	1.1	7	0.7	69	6.9
Sunnyside, Woodside (02)	8,289	18	2.2	12	1.4	7	0.8	8	1.0	45	5.4
Jackson Heights (03)	13,145	28	2.1	23	1.7	9	0.7	14	1.1	74	5.6
Elmhurst, Corona (04)	13,364	35	2.6	24	1.8	12	0.9	10	0.7	81	6.1
Ridgewood, Glendale (05)	10,061	20	2.0	18	1.8	5	0.5	5	0.5	48	4.8
Rego Park, Forest Hills (06)	6,983	14	2.0	12	1.7	1	0.1	4	0.6	31	4.4
Flushing (07)	14,699	22	1.5	25	1.7	7	0.5	12	0.8	66	4.5
Fresh Meadows, Briarwood (08)	9,056	20	2.2	14	1.5	4	0.4	4	0.4	42	4.6
Woodhaven (09)	9,467	31	3.3	21	2.2	9	1.0	4	0.4	65	6.9
Howard Beach (10)	6,358	20	3.1	11	1.7	2	0.3	5	0.8	38	6.0
Bayside (11)	3,501	7	2.0	5	1.4	-	-	1	0.3	13	3.7
Jamaica, St. Albans (12)	14,707	62	4.2	37	2.5	11	0.7	22	1.5	132	9.0
Queens Village (13)	8,282	27	3.3	18	2.2	6	0.7	3	0.4	54	6.5
The Rockaways (14)	6,407	18	2.8	16	2.5	3	0.5	7	1.1	44	6.9
STATEN ISLAND	26,473	69	2.6	72	2.7	19	0.7	26	1.0	186	7.0
Port Richmond (01)	11,761	48	4.1	45	3.8	10	0.9	18	1.5	121	10.3
Willowbrook, South Beach (02)	7,059	13	1.8	16	2.3	5	0.7	3	0.4	37	5.2
Tottenville (03)	7,590	8	1.1	11	1.4	4	0.5	5	0.7	28	3.7
New York City Residents	556,646	1,587	2.9	1,165	2.1	390	0.7	502	0.9	3,644	6.5
Non-Residents	52,618	206	3.9	127	2.4	59	1.1	38	0.7	430	8.2
Residents Unknown	142	42	-	53	-	1	-	1	-	95	-

*Limited to fetal deaths and live births of birthweight 500 grams or more and fetal deaths with gestation of at least 24 weeks.

Note: Borough totals may be higher than the sum of the community districts, as they may include some live births whose community district could not be determined.

SUMMARY OF VITAL STATISTICS
2016
THE CITY OF NEW YORK
Appendix A

Supplemental Population, Mortality, Infant Mortality, and Pregnancy Outcomes Data Tables

Bureau of Vital Statistics, New York City Department of Health and Mental Hygiene
125 Worth Street, CN 7, New York, New York, 10013

POPULATION CHARACTERISTICS

Table PC1. Population, Live Births, Fertility Rates, Marriages, Deaths, and Infant Mortality, New York City, 1898-2016

Year	Population	Live Births		Fertility Rates	Marriages†		Deaths		Infant Mortality	
		Total Reported*	Rate per 1,000 Population	Per 1,000 Women Aged 15-44	Total Reported*	Rate per 1,000 Population	Total Reported*	Rate per 1,000 Population	Deaths Under One Year*	Rate per 1,000 Live Births
1898-1900	3,358,000	119,000	35.4		30,535	9.1	67,503	20.1	16,264	136.7
1901-1905	3,786,000	129,000	34.1		37,988	10.0	71,689	18.9	15,611	121.0
1906-1910	4,473,000	144,000	32.2		44,966	10.1	75,865	17.0	16,609	115.3
1911-1915	5,049,000	140,581	27.8		51,157	10.1	74,666	14.8	14,060	100.0
1916-1920	5,492,000	136,101	24.8		59,081	10.8	80,435	14.6	12,004	88.2
1921-1925	6,175,000	130,462	21.1		62,710	10.2	69,303	11.2	8,985	68.9
1926-1930	6,703,000	125,590	18.7		62,278	9.3	75,395	11.2	7,662	61.0
1931-1935	7,101,000	106,179	15.0		63,273	8.9	75,561	10.6	5,521	52.0
1936-1940	7,363,000	102,418	13.9		69,184	9.4	76,065	10.3	4,079	39.8
1941-1945	7,597,000	126,495	16.7		76,086	10.0	78,382	10.3	3,525	27.9
1946-1950	7,815,000	158,926	20.3		90,914	11.6	79,708	10.2	4,139	26.0
1951-1955	7,867,000	163,526	20.8		71,689	9.1	80,583	10.2	3,986	24.4
1956-1960	7,806,000	166,949	21.4		68,281	8.7	84,290	10.8	4,290	25.7
1961-1965	7,816,200	165,197	21.1		68,318	8.7	87,597	11.2	4,333	26.2
1966-1970	7,872,972	147,294	18.7		71,653	9.1	88,779	11.3	3,477	23.6
1971-1975	7,652,200	115,941	15.1		67,737	8.9	82,113	10.7	2,313	19.9
1976	7,401,000	109,995	14.9		55,829	7.5	77,538	10.5	2,092	19.0
1977	7,318,000	110,486	15.1		52,804	7.2	75,011	10.3	1,971	17.8
1978	7,236,000	106,720	14.7		54,247	7.5	73,081	10.1	1,827	17.1
1979	7,154,000	106,021	14.8		58,532	8.2	72,079	10.1	1,767	16.7
1980	7,071,639	107,066	15.1	63.6	58,637	8.3	76,625	10.8	1,719	16.1
1981	7,097,000	108,547	15.3	63.9	61,775	8.7	73,329	10.3	1,678	15.5
1982	7,122,000	111,487	15.7	65.1	66,619	9.4	73,083	10.3	1,706	15.3
1983	7,147,000	112,353	15.7	65.1	68,164	9.5	73,544	10.3	1,603	14.3
1984	7,172,000	113,332	15.8	65.1	76,336	10.6	74,278	10.4	1,540	13.6
1985	7,197,000	118,542	16.5	67.6	77,897	10.8	74,852	10.4	1,591	13.4
1986	7,222,000	122,108	16.9	69.0	82,199	11.4	75,702	10.5	1,566	12.8
1987	7,247,000	127,386	17.6	71.5	76,194	10.5	76,448	10.5	1,673	13.1
1988	7,272,000	132,226	18.2	73.6	74,137	10.2	77,817	10.7	1,770	13.4
1989	7,297,000	137,673	18.9	76.0	69,758	9.6	75,957	10.4	1,827	13.3
1990	7,322,564	139,630	19.1	76.5	71,301	9.7	73,875	10.1	1,620	11.6
1991	7,388,000	138,148	18.7	75.3	69,314	9.4	72,421	9.8	1,575	11.4
1992	7,455,000	136,002	18.2	73.8	71,947	9.7	71,001	9.5	1,390	10.2
1993	7,522,000	133,583	17.8	72.1	72,490	9.6	73,408	9.8	1,366	10.2
1994	7,590,000	133,662	17.6	71.8	70,438	9.3	71,038	9.4	1,207	9.0
1995	7,658,000	131,009	17.1	70.1	71,507	9.3	70,769	9.2	1,155	8.8
1996	7,727,000	126,901	16.4	67.5	79,361	10.3	66,784	8.6	992	7.8
1997	7,796,000	123,313	15.8	65.3	80,027	10.3	62,506	8.0	881	7.1
1998	7,866,000	124,252	15.8	65.5	53,661	6.8	61,010	7.8	843	6.8
1999	7,937,000	123,739	15.6	64.9	55,075	6.9	62,470	7.9	848	6.9
2000	8,008,278	125,563	15.7	65.5	58,291	7.3	60,839	7.6	839	6.7
2001‡	8,060,000	124,023	15.4	64.5	72,587	9.0	62,964	7.8	760	6.1
2001‡	8,060,000	Excluding World Trade Center disaster deaths					60,218	7.5		
2002‡	8,072,000	122,937	15.2	64.1	65,490	8.1	59,651	7.4	742	6.0
2003‡	8,068,000	124,345	15.4	65.1	61,101	7.6	59,213	7.3	807	6.5
2004‡	8,043,000	124,099	15.4	65.3	62,057	7.7	57,466	7.1	760	6.1
2005‡	8,013,000	122,725	15.3	65.0	66,348	8.3	57,068	7.1	732	6.0
2006‡	7,994,000	125,506	15.7	66.6	65,619	8.2	55,391	6.9	740	5.9
2007	8,014,000	128,961	16.1	68.4	66,483	8.3	54,073	6.7	697	5.4
2008	8,068,000	127,680	15.8	67.3	66,670	8.3	54,193	6.7	698	5.5
2009	8,132,000	126,774	15.6	66.5	65,542	8.1	52,881	6.5	668	5.3
2010	8,175,133	124,791	15.3	65.3	67,051	8.2	52,575	6.4	609	4.9
2011	8,244,910	123,029	14.9	64.5	71,401	8.7	52,789	6.4	577	4.7
2012	8,336,697	123,231	14.8	64.1	74,362	8.9	52,455	6.3	583	4.7
2013	8,405,837	120,457	14.3	62.6	77,678	9.2	53,409	6.4	551	4.6
2014	8,491,079	122,084	14.4	62.9	78,409	9.2	53,034	6.2	516	4.2
2015	8,550,405	121,673	14.2	62.7	77,777	9.1	54,120	6.3	526	4.3
2016	8,537,673	120,367	14.1	62.5	84,073	9.8	54,280	6.4	491	4.1

*Figures prior to 1966 are averages across the years presented; single-year figures prior to 1966 appear in the annual summaries for 1965 and earlier. Figures for 1898-1913 births are estimated.

† See Technical Notes: Births, Mother's Marital Status.

‡ Population data may vary by publication year. See Technical Notes: Population, Citywide population.

Table PC2. Population Estimates by Age, Mutually Exclusive Race and Hispanic Origin, and Sex, New York City, 2016

Age in	All			Hispanic			Non-Hispanic White			Non-Hispanic Black			Asian and Pacific Islander			Other or Multiple Races		
Years	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	8,537,673	4,074,999	4,462,674	2,489,089	1,207,779	1,281,310	2,737,163	1,336,131	1,401,032	1,899,379	859,769	1,039,610	1,247,479	593,869	653,610	164,563	77,451	87,112
Under 5	553,277	282,534	270,743	192,898	98,283	94,615	150,784	77,219	73,565	114,511	57,966	56,545	72,411	37,463	34,948	22,673	11,603	11,070
5-9	496,622	253,531	243,091	178,337	90,892	87,445	130,231	66,603	63,628	110,654	56,039	54,615	61,113	31,805	29,308	16,287	8,192	8,095
10-14	467,016	237,910	229,106	166,101	84,709	81,392	116,755	59,991	56,764	112,446	56,574	55,872	59,756	30,735	29,021	11,958	5,901	6,057
15-19	466,963	235,387	231,576	167,360	85,212	82,148	110,791	55,862	54,929	116,908	58,303	58,605	60,710	30,560	30,150	11,194	5,450	5,744
20-24	588,268	285,335	302,933	199,658	100,559	99,099	153,544	72,996	80,548	137,547	65,936	71,611	85,260	40,096	45,164	12,259	5,748	6,511
25-29	804,436	390,098	414,338	224,198	114,766	109,432	278,539	132,804	145,735	161,386	77,651	83,735	124,750	57,783	66,967	15,563	7,094	8,469
30-34	728,985	357,531	371,454	203,825	104,007	99,818	262,030	131,136	130,894	135,577	63,164	72,413	114,586	53,410	61,176	12,967	5,814	7,153
35-39	625,351	304,120	321,231	183,921	91,824	92,097	204,963	105,241	99,722	124,977	56,366	68,611	100,887	45,919	54,968	10,603	4,770	5,833
40-44	550,081	265,642	284,439	163,501	80,432	83,069	169,047	87,308	81,739	116,522	51,317	65,205	92,102	42,477	49,625	8,909	4,108	4,801
45-49	553,115	265,667	287,448	161,408	77,628	83,780	166,491	86,409	80,082	128,209	56,289	71,920	88,351	41,459	46,892	8,656	3,882	4,774
50-54	553,489	264,078	289,411	153,960	72,073	81,887	163,605	84,941	78,664	140,338	61,800	78,538	87,208	41,310	45,898	8,378	3,954	4,424
55-59	530,749	248,591	282,158	135,029	61,580	73,449	171,542	85,552	85,990	134,044	58,379	75,665	82,546	39,622	42,924	7,588	3,458	4,130
60-64	464,246	212,266	251,980	110,426	48,502	61,924	167,267	80,324	86,943	109,179	46,141	63,038	71,454	34,578	36,876	5,920	2,721	3,199
65-69	388,657	171,944	216,713	85,600	36,419	49,181	156,301	72,104	84,197	86,961	35,257	51,704	55,300	26,242	29,058	4,495	1,922	2,573
70-74	265,894	112,399	153,495	61,033	24,625	36,408	106,321	47,375	58,946	62,614	23,710	38,904	33,279	15,555	17,724	2,647	1,134	1,513
75-79	199,912	81,484	118,428	44,328	17,169	27,159	82,935	35,669	47,266	45,283	16,265	29,018	25,402	11,539	13,863	1,964	842	1,122
80-84	139,369	53,865	85,504	29,442	10,392	19,050	62,115	25,766	36,349	30,109	9,977	20,132	16,513	7,285	9,228	1,190	445	745
85 & Over	161,243	52,617	108,626	28,064	8,707	19,357	83,902	28,831	55,071	32,114	8,635	23,479	15,851	6,031	9,820	1,312	413	899

Data Source: US Census Bureau, population estimates, 2016 vintage.

Table PC3. Marriages, Births, Deaths, and Infant Deaths by Month and Average per Day, New York City, 2016

	Number				Average Per Day			
Months	Marriages*	Births	Deaths	Infant Deaths	Marriages	Births	Deaths	Infant Deaths
January	4,838	9,852	4,938	37	156	318	159	1.2
February	5,706	9,391	4,627	34	197	324	160	1.2
March	6,878	9,759	4,925	43	222	315	159	1.4
April	6,801	9,716	4,472	36	227	324	149	1.2
May	7,541	10,158	4,357	42	243	328	141	1.4
June	7,593	9,947	4,098	45	253	332	137	1.5
July	6,998	10,365	4,309	42	226	334	139	1.4
August	8,704	10,835	4,356	41	281	350	141	1.3
September	7,747	10,335	4,142	37	258	345	138	1.2
October	6,879	10,173	4,588	43	222	328	148	1.4
November	6,929	9,752	4,570	42	231	325	152	1.4
December	7,459	10,084	4,898	49	241	325	158	1.6
Total	84,073	120,367	54,280	491	230	329	148	1.3

* See Technical Notes: Births, Mother's Marital Status.

Table M1. Deaths by Selected Underlying Cause, Borough of Residence, Sex, and ICD-10/ICD-9 Comparability Ratio, New York City, 2016

New York City, 2016

	Cause (Codes from International Classification of Diseases (ICD), Tenth Revision, 1999)	Total	BOROUGH OF RESIDENCE							SEX		ICD-10/ICD-9 Comparability Ratio
			Manhattan	Bronx	Brooklyn	Queens	Staten Island	Nonresidents	Residence Unknown	Male	Female	
Total Deaths		54,280	9,380	9,233	15,279	12,360	3,580	4,301	147	27,072	27,208	
Natural Causes		50,780	8,793	8,536	14,387	11,674	3,357	3,943	90	24,564	26,216	
1.*	Tuberculosis (A16-A19)	21	2	6	6	6	-	1	-	13	8	0.88
	Respiratory tuberculosis (A16)	16	2	3	5	5	-	1	-	10	6	0.94
2.*	Septicemia (A40-A41)	452	67	108	123	87	29	38	-	220	232	1.19
3.*	Viral Hepatitis (B15-B19)	261	38	64	77	44	11	26	1	157	104	0.71
4.*	Human Immunodeficiency Virus (HIV) Disease (B20-B24)	432	74	137	134	53	15	16	3	296	136	1.08
5.	All Other Infective and Parasitic Diseases (Rest of A01-B99)	328	58	49	96	77	19	29	-	166	162	
6.*	Malignant Neoplasms (C00-C97)	13,533	2,411	2,121	3,551	2,917	848	1,673	12	6,743	6,790	1.01
	Lip, oral cavity, and pharynx (C00-C14)	218	42	42	49	40	13	31	1	150	68	0.96
	Esophagus (C15)	255	43	34	65	59	18	36	-	183	72	0.99
	Stomach (C16)	500	68	56	191	107	24	53	1	326	174	1.01
	Colon, rectum, and anus (C18-C21)	1,311	224	199	363	313	84	125	3	649	662	1.00
	Liver and intrahepatic bile ducts (C22)	739	131	165	174	156	35	78	-	517	222	0.96
	Pancreas (C25)	1,090	200	162	261	239	71	157	-	541	549	1.00
	Larynx (C32)	106	23	16	35	18	3	11	-	91	15	1.01
	Trachea, bronchus, and lung (C33-C34)	2,519	463	400	654	547	213	241	1	1,354	1,165	0.98
	Melanoma of skin (C43)	110	26	6	19	27	8	24	-	66	44	0.95
	Mesothelioma (C45)	31	2	3	9	9	4	4	-	23	8	
	Breast (C50)	1,091	208	166	312	235	56	113	1	7	1,084	1.01
	Cervix uteri (C53)	140	19	24	39	42	6	9	1	-	140	1.00
	Corpus uteri and uterus, part unspecified (C54-C55)	434	53	88	123	102	24	43	1	-	434	1.02
	Ovary (C56)	373	66	58	112	67	20	49	1	-	373	0.99
	Prostate (C61)	753	153	130	193	159	38	79	1	753	-	1.01
	Kidney and renal pelvis (C64-C65)	208	33	40	45	47	16	27	-	144	64	1.00
	Bladder (C67)	349	65	48	92	69	31	44	-	239	110	1.00
	Meninges, brain, and other parts of central nervous system (C70-C72)	307	61	44	75	73	20	34	-	168	139	0.98
	Lymphoid, hematopoietic and related tissues (C81-C96)	1,501	251	208	353	292	83	313	1	821	680	1.00
	Hodgkin's disease (C81)	28	5	6	6	4	5	2	-	17	11	1.00
	Non-Hodgkin's lymphoma (C82-C85)	515	89	71	117	114	21	102	1	281	234	0.98
	Multiple myeloma and immunoproliferative neoplasms (C88, C90)	353	60	67	91	62	17	56	-	198	155	1.04
	Leukemia (C91-C95)	599	96	63	138	111	39	152	-	322	277	1.01
7.*	In Situ or Benign Neoplasms and Neoplasms of Uncertain or Unknown Behavior (D00-D48)	286	46	48	82	58	12	40	-	146	140	1.63
8.*	Anemias (D50-D64)	73	9	8	36	13	4	3	-	34	39	0.94
9.*	Diabetes Mellitus (E10-E14)	1,796	253	389	596	372	93	89	4	883	913	1.02
10.†	Mental and Behavioral Disorders Due to Use of Alcohol (F10)	266	65	49	74	50	11	8	9	218	48	
11.	Mental and Behavioral Disorders Due to Use of Psychoactive Substance Excluding Alcohol and Tobacco (F11-F16, F18-F19) ‡	172	35	47	36	25	8	13	8	137	35	
12.	Diseases of Nervous System (G00-G98)	2,283	576	340	559	555	169	84	-	862	1,421	
*	Meningitis (G00,G03)	22	1	7	8	4	1	1	-	13	9	1.01
*	Parkinson's disease (G20-G21)	385	111	59	90	83	29	13	-	223	162	1.01
*	Alzheimer's disease (G30)	1,100	281	186	328	232	33	40	-	317	783	1.58
13.	Major Cardiovascular Diseases (I00-I78)	20,597	3,357	3,358	6,134	5,130	1,471	1,120	27	9,911	10,686	1.00
*	Diseases of heart (I00-I09, I11, I13, I20-I51)	17,163	2,753	2,692	5,224	4,283	1,307	881	23	8,381	8,782	0.99
	Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09)	56	9	11	11	10	2	13	-	21	35	0.88
	Hypertensive heart disease (I11)	2,362	443	428	809	430	155	91	6	1,155	1,207	0.80
	Hypertensive heart and renal disease (I13)	177	36	44	49	28	10	10	-	100	77	1.13
	Chronic ischemic heart disease (I20, I25)	11,104	1,650	1,594	3,399	3,069	856	521	15	5,410	5,694	1.01
	Acute myocardial infarction (I21-I22)	1,857	303	330	528	376	211	109	-	938	919	0.99
	Cardiomyopathy (I42)	133	27	26	34	29	5	12	-	95	38	

Continued on the next page.

Table M1. Deaths by Selected Underlying Cause, Borough of Residence, Sex, and ICD-10/ICD-9 Comparability Ratio, New York City, 2016 (Continued)

	Cause (Codes from International Classification of Diseases (ICD), Tenth Revision, 1999)	Total	BOROUGH OF RESIDENCE							SEX		ICD-10/ICD-9 Comparability Ratio
			Manhattan	Bronx	Brooklyn	Queens	Staten Island	Nonresidents	Residence Unknown	Male	Female	
	Heart failure (I50)	421	84	71	123	100	18	25	-	204	217	1.04
*	Essential hypertension and hypertensive renal disease (I10, I12, I15)	1,126	197	252	328	244	51	54	-	478	648	1.12
*	Cerebrovascular diseases (I60-I69)	1,842	330	334	474	484	79	139	2	821	1,021	1.05
*	Atherosclerosis (I70)	165	17	26	34	69	15	3	1	60	105	0.97
*	Aortic aneurysm and dissection (I71)	174	34	32	38	28	14	27	1	111	63	1.00
14.*	Influenza and Pneumonia (J09-J18)	2,019	247	378	631	505	154	100	4	1,048	971	0.70
15.*	Chronic Lower Respiratory Diseases (J40-J47)	1,667	293	313	417	382	160	99	3	754	913	1.04
	Emphysema (J43)	88	15	12	22	29	5	5	-	54	34	0.96
	Asthma (J45-J46)	157	15	45	55	25	6	10	1	76	81	0.89
16.	Pneumoconiosis Due to Asbestos and Other Mineral Fibres (J61)	0	-	-	-	-	-	-	-	-	-	
17.*	Pneumonitis Due to Solids and Liquids (J69)	113	18	16	42	29	4	4	-	42	71	1.10
18.*	Peptic Ulcer (K25-K28)	109	19	19	31	29	6	4	1	63	46	0.97
19.*	Chronic Liver Disease and Cirrhosis (K70, K73-K74)	522	80	112	131	94	29	69	7	363	159	1.03
	Alcoholic liver disease (K70)	369	49	80	96	66	24	47	7	276	93	1.00
20.*	Cholelithiasis and Other Disorders of Gallbladder (K80-K82)	60	12	10	21	12	2	3	-	26	34	0.96
21.*	Nephritis, Nephrotic Syndrome, and Nephrosis (N00-N07, N17-N19, N25-N27)	416	57	59	144	100	32	24	-	232	184	1.26
	Renal failure (N17-N19)	399	56	56	141	91	31	24	-	220	179	1.33
22.*	Pregnancy, Childbirth, and the Puerperium (O00-O99)	24	5	4	7	5	2	1	.	-	24	1.14
	Maternal causes (A34, O00-O95, O98-O99)§	18	5	1	6	3	2	1	-	-	18	
23.*	Certain Conditions Originating in the Perinatal Period (P00-P96)	257	25	40	76	63	8	42	3	138	119	1.08
24.*	Congenital Malformations, Deformations, and Chromosomal Abnormalities (Q00-Q99)	234	33	43	62	40	12	44	-	126	108	0.90
25.	Symptoms, Signs, and Abnormal Findings, Not Elsewhere Classified (R00-R94, R96-R99)	374	137	68	59	69	8	31	2	130	244	0.98
	Pending final determination (R99)	2	-	1	-	-	-	1	-	-	2	
26.	Sudden Infant Death Syndrome (R95)	0	-	-	-	-	-	-	-	-	-	1.06
27.	All Other Natural Causes (Rest of A00-R99)	4,485	876	750	1,262	959	250	382	6	1,856	2,629	
External Causes		3,500	587	697	892	686	223	358	57	2,508	992	
	Injury by Firearms (W32-W34, X72-X74, X93-X95, Y22-Y24, Y35.0)	269	22	64	107	38	12	24	2	240	29	1.00
28.†	Accidents (V01-X59,Y85-Y86)	2,317	395	471	551	443	167	254	36	1,668	649	1.03
	Accidental poisoning by psychoactive substances, excluding alcohol and tobacco (X40-X42, X44) ‡	1,320	230	291	296	225	114	143	21	1,016	304	1.04
†	Mental and behavioral disorders due to use of or accidental poisoning by psychoactive substance excluding alcohol and tobacco (F11-F16, F18-F19, X40-X42, X44) ‡	1,492	265	338	332	250	122	156	29	1,153	339	
†	Accidents except poisoning by psychoactive substance use	997	165	180	255	218	53	111	15	652	345	
	Motor vehicle accidents ||	245	34	45	51	51	18	41	5	158	87	0.95
	Accidental falls (W00-W19)	449	84	70	119	109	24	41	2	275	174	0.77
29.*	Intentional Self-harm (Suicide) (U03, X60-X84, Y87.0)	525	103	80	120	137	28	51	6	359	166	1.00
30.*	Assault (Homicide) (U01-U02, X85-Y09, Y87.1)	362	37	97	134	51	16	24	3	291	71	1.00
31.*	Legal Intervention (Y35, Y89.0)	6	1	3	1	-	-	1	-	5	1	0.94
32.	Events of Undetermined Intent (Y10-Y34, Y87.2, Y89.9)	259	45	41	74	52	11	24	12	170	89	0.99
33.*	Complications of Medical and Surgical Care (Y40-Y84, Y88)	31	6	5	12	3	1	4	-	15	16	0.63
34.*	Operations of War and Their Sequelae (Y36,Y89.1)	0	-	-	-	-	-	-	-	-	-	

* Eligible to be ranked as leading causes nationally and in New York City.

† The following cause groups are not ranked as leading causes nationally, but are eligible to be ranked as leading causes in New York City because of the number of deaths and their public health importance: "Mental and behavioral disorders due to use of alcohol", "Mental and behavioral disorders due to use of psychoactive substances excluding alcohol and tobacco", and "Accidents", which in NYC excludes poisoning by psychoactive substances (excluding alcohol and tobacco).

‡ See Technical Notes: Deaths, Drug-Related Deaths.

§ See Technical Notes: Deaths, Maternal Death and Maternal Mortality.

|| Motor vehicle accident codes include: V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, and V89.2.

Table M2. Deaths and Death Rates per 1,000 Population* by Age, Ethnic Group, and Sex, New York City, 2016

Age in Years	All						Hispanic						Non-Hispanic White						Non-Hispanic Black						Asian and Pacific Islander						Other/Multiple Race/Unknown		
	Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female		Total	Male	Female
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	No.	No.
All Ages	54,280	6.4	27,072	6.6	27,208	6.1	10,465	4.2	5,390	4.5	5,075	4.0	24,146	8.8	11,940	8.9	12,206	8.7	14,239	7.5	6,806	7.9	7,433	7.1	4,252	3.4	2,271	3.8	1,981	3.0	1,178	665	513
Age-Adjusted		5.8		7.2		4.8		5.1		6.4		4.2		6.1		7.3		5.0		6.9		8.8		5.8		3.8		4.5		3.1			
Under 5	563	1.0	295	1.0	268	1.0	126	0.7	62	0.6	64	0.7	132	0.9	80	1.0	52	0.7	202	1.8	105	1.8	97	1.7	54	0.7	29	0.8	25	0.7	49	19	30
5-9	47	0.1	30	0.1	17	0.1	13	0.1	7	0.1	6	0.1	12	0.1	8	0.1	4	0.1	17	0.2	14	0.2	3	0.1	5	0.1	1	0.0	4	0	0	-	-
10-14	47	0.1	29	0.1	18	0.1	12	0.1	7	0.1	5	0.1	8	0.1	6	0.1	2	0.0	25	0.2	15	0.3	10	0.2	2	0.0	1	0.0	1	0.0	0	-	-
15-19	142	0.3	99	0.4	43	0.2	52	0.3	41	0.5	11	0.1	27	0.2	18	0.3	9	0.2	49	0.4	33	0.6	16	0.3	10	0.2	5	0.2	5	0.2	4	2	2
20-24	384	0.7	278	1.0	106	0.3	102	0.5	80	0.8	22	0.2	107	0.7	79	1.1	28	0.3	135	1.0	89	1.3	46	0.6	28	0.3	18	0.4	10	0.2	12	12	-
25-29	470	0.6	324	0.8	146	0.4	118	0.5	91	0.8	27	0.2	159	0.6	104	0.8	55	0.4	149	0.9	99	1.3	50	0.6	36	0.3	24	0.4	12	0.2	8	6	2
30-34	617	0.8	416	1.2	201	0.5	183	0.9	126	1.2	57	0.6	195	0.7	141	1.1	54	0.4	189	1.4	123	1.9	66	0.9	39	0.3	21	0.4	18	0.3	11	5	6
35-39	743	1.2	478	1.6	265	0.8	217	1.2	147	1.6	70	0.8	226	1.1	150	1.4	76	0.8	228	1.8	135	2.4	93	1.4	54	0.5	34	0.7	20	0.4	18	12	6
40-44	888	1.6	562	2.1	326	1.1	259	1.6	181	2.3	78	0.9	242	1.4	167	1.9	75	0.9	289	2.5	155	3.0	134	2.1	79	0.9	45	1.1	34	0.7	19	14	5
45-49	1,413	2.6	869	3.3	544	1.9	359	2.2	237	3.1	122	1.5	423	2.5	275	3.2	148	1.8	491	3.8	265	4.7	226	3.1	107	1.2	68	1.6	39	0.8	33	24	9
50-54	2,443	4.4	1,478	5.6	965	3.3	580	3.8	367	5.1	213	2.6	717	4.4	471	5.5	246	3.1	909	6.5	500	8.1	409	5.2	178	2.0	101	2.4	77	1.7	59	39	20
55-59	3,399	6.4	2,111	8.5	1,288	4.6	776	5.7	487	7.9	289	3.9	1,046	6.1	669	7.8	377	4.4	1,235	9.2	731	12.5	504	6.7	229	2.8	152	3.8	77	1.8	113	72	41
60-64	4,035	8.7	2,381	11.2	1,654	6.6	857	7.8	531	10.9	326	5.3	1,389	8.3	830	10.3	559	6.4	1,349	12.4	734	15.9	615	9.8	320	4.5	205	5.9	115	3.1	120	81	39
65-69	4,860	12.5	2,828	16.4	2,032	9.4	895	10.5	536	14.7	359	7.3	1,999	12.8	1,160	16.1	839	10.0	1,451	16.7	811	23.0	640	12.4	388	7.0	240	9.1	148	5.1	127	81	46
70-74	5,159	19.4	2,776	24.7	2,383	15.5	1,047	17.2	586	23.8	461	12.7	2,127	20.0	1,155	24.4	972	16.5	1,488	23.8	732	30.9	756	19.4	377	11.3	234	15.0	143	8.1	120	69	51
75-79	5,700	28.5	2,994	36.7	2,706	22.8	1,123	25.3	561	32.7	562	20.7	2,414	29.1	1,308	36.7	1,106	23.4	1,594	35.2	783	48.1	811	27.9	453	17.8	269	23.3	184	13.3	116	73	43
80-84	6,334	45.4	2,950	54.8	3,384	39.6	1,239	42.1	534	51.4	705	37.0	2,966	47.8	1,465	56.9	1,501	41.3	1,474	49.0	591	59.2	883	43.9	534	32.3	294	40.4	240	26.0	121	66	55
≥85	17,036	105.7	6,174	117.3	10,862	100.0	2,507	89.3	809	92.9	1,698	87.7	9,957	118.7	3,854	133.7	6,103	110.8	2,965	92.3	891	103.2	2,074	88.3	1,359	85.7	530	87.9	829	84.4	248	90	158
Mean age at death	72.9		69.3		76.4		69.5		65.1		74.2		77.1		73.7		80.4		68.7		65.1		72.0		73.1		70.6		76.0		67.5	65.3	70.2
Median age at death	76		72		81		73		67		78		81		77		85		71		67		75		77		73		81		70	67	74

* Population data are from US Census Bureau estimates for July 1, 2016, released in 2017 vintage file. See Table PC2 on page 41.

MORTALITY

Table M3. Deaths by Ancestry* and Borough of Residence, New York City, 2016

Ancestry	Total	Borough of Residence						Residence Unknown
		Manhattan	Bronx	Brooklyn	Queens	Staten Island	Nonresidents	
Total	54,280	9,380	9,233	15,279	12,360	3,580	4,301	147
Hispanic								
Colombian	374	34	20	38	242	16	22	2
Cuban	403	122	80	53	113	12	23	-
Dominican	2,075	687	776	259	267	15	69	2
Ecuadorian	478	54	96	71	221	7	29	-
Mexican	361	35	86	100	90	18	29	3
Puerto Rican	4,738	918	1,873	1,151	472	145	172	7
Other Hispanic	2,036	343	675	436	373	51	126	32
North American and Caribbean								
African American	10,046	1,847	2,468	3,267	1,714	231	486	33
American	10,374	2,684	885	2,032	2,329	808	1,629	7
Guyanese	950	10	123	331	436	4	46	-
Haitian	832	41	16	521	188	11	55	-
Jamaican	1,022	40	231	431	239	7	74	-
Trinidadian	357	14	31	209	90	-	13	-
Other North American and Caribbean	953	80	130	545	126	10	62	-
European								
English	236	65	17	31	39	42	41	1
German	616	122	75	47	244	66	62	-
Irish	1,387	124	222	179	448	243	169	2
Italian	3,950	170	445	998	931	1,084	321	1
Polish	678	72	46	223	243	48	46	-
Russian	947	71	31	649	125	53	18	-
Other European	2,603	275	167	1007	806	209	139	-
Asian								
Asian Indian	329	23	12	22	204	17	51	-
Bangladeshi	188	9	23	37	105	3	11	-
Chinese	2,429	621	38	792	840	61	76	1
Filipino	258	38	20	15	131	25	29	-
Korean	333	18	21	13	233	16	32	-
Pakistani	165	8	6	61	53	15	21	1
Other Asian	616	93	39	159	220	41	64	-
Other								
Jewish or Hebrew	1,873	209	106	1,042	279	49	188	-
Other or Not Stated	2,673	553	475	560	559	273	198	55

* See Technical Notes: Race, Ancestry, and Ethnic Group.

Table M4. Deaths by Place of Death*, New York City, 2012-2016

	2012		2013		2014		2015		2016	
Place of Death	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%
Total	52,455	100.0	53,409	100.0	53,034	100.0	54,120	100.0	54,280	100.0
Hospital Inpatient	26,278	50.1	26,380	49.4	25,559	48.2	25,152	46.5	25,111	46.3
Emergency/Outpatient	4,286	8.2	4,435	8.3	4,423	8.3	4,457	8.2	4,584	8.4
Dead on Arrival (DOA)	582	1.1	640	1.2	585	1.1	800	1.5	706	1.3
Nursing Home/Long Term Care Facility	7,762	14.8	7,361	13.8	7,340	13.8	7,631	14.1	7,381	13.6
Hospice Facility	1,077	2.1	1,721	3.2	2,157	4.1	2,711	5.0	2,611	4.8
Decedents' Residence	11,640	22.2	12,137	22.7	12,318	23.2	12,657	23.4	13,045	24.0
Other	830	1.6	735	1.4	652	1.2	712	1.3	842	1.6
Unknown or Not Stated	-	-	-	-	-	-	-	-	-	-

* See Technical Notes: Geographical Units, Place of Death.

MORTALITY

Table M5. Deaths by Birthplace and Borough of Residence, New York City, 2016*

Birthplace	Total	Borough of Residence					Non-Residents	Residence Unknown
		Manhattan	Bronx	Brooklyn	Queens	Staten Island		
Total	54,280	9,380	9,233	15,279	12,360	3,580	4,301	147
United States & Territories	29,190	5,556	4,750	7,167	5,986	2,703	2,967	61
Puerto Rico	3,936	814	1,600	948	358	91	120	5
China	2,202	581	34	729	734	55	68	1
Dominican Republic	2,005	668	768	240	257	14	56	2
Jamaica	1,275	51	343	496	289	7	89	0
Ukraine	1,109	41	19	887	96	47	19	-
Italy	1,024	42	150	290	305	161	76	-
Guyana	1,006	20	130	363	441	5	47	-
Haiti	845	45	17	531	188	11	53	0
Poland	624	75	43	264	194	17	31	0
Trinidad and Tobago	615	33	57	364	134	3	24	-
Russia	506	53	22	298	95	24	14	-
Ecuador	464	51	98	70	208	10	27	-
Cuba	407	122	85	53	112	13	22	--
Germany	372	110	38	56	118	9	41	-
Colombia	361	31	19	40	236	15	18	2
Greece	350	31	25	58	207	10	19	-
Mexico	328	34	80	95	79	15	23	2
Korea	285	18	16	13	199	13	26	--
India	282	22	8	23	164	20	45	-
Philippines	271	36	21	19	139	28	28	-
Romania	251	40	14	87	92	8	10	-
Belarus	240	4	3	202	21	8	2	-
Barbados	231	14	24	149	33	4	7	-
Ireland	228	26	53	38	76	8	27	-
Bangladesh	223	9	25	41	131	4	13	-
Panama	213	18	23	131	31	7	3	-
Hungary	200	24	14	102	51	1	8	-
Other or Not Stated	5,237	811	754	1,525	1,386	269	418	74

* See Technical Notes: Geographical Units, Birthplace Presentation.

MORTALITY

Table M6. Deaths by Birthplace and Age, New York City, 2016

		Age in Years								
Birthplace	Total	<15	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Total	54,280	657	526	1,087	1,631	3,856	7,434	10,019	12,034	17,036
United States & Territories	29,190	637	412	732	970	2,347	4,268	5,376	5,779	8,669
Puerto Rico	3,936	-	1	12	54	162	436	922	1,161	1,188
China	2,202	1	4	19	49	103	209	294	554	969
Dominican Republic	2,005	1	16	48	64	146	323	402	486	519
Jamaica	1,275	1	6	19	37	95	201	268	315	333
Ukraine	1,109	-	1	13	13	23	62	86	299	612
Italy	1,024	-	-	-	1	13	27	144	327	512
Guyana	1,006	1	5	8	44	91	163	215	253	226
Haiti	845	1	1	5	11	51	146	166	215	249
Poland	624	-	2	4	10	29	75	84	80	340
Trinidad and Tobago	615	-	2	15	18	55	108	159	152	106
Russia	506	-	4	8	11	24	34	60	166	199
Ecuador	464	-	3	9	16	29	75	86	131	115
Cuba	407	-	-	-	2	11	40	45	116	193
Germany	372	-	-	2	5	9	13	55	59	229
Colombia	361	-	3	6	7	27	49	83	89	97
Greece	350	-	-	1	1	6	34	49	110	149
Mexico	328	-	7	50	80	66	45	37	27	16
Korea	285	-	4	4	8	21	42	56	77	73
India	282	1	5	4	11	16	47	72	55	71
Philippines	271	-	-	4	7	16	40	65	71	68
Romania	251	-	-	1	2	3	19	29	49	148
Belarus	240	-	-	3	2	5	13	18	62	137
Barbados	231	-	-	1	8	7	40	52	57	66
Ireland	228	-	--	1	2	4	10	29	100	82
Bangladesh	223	1	3	5	9	23	48	75	45	14
Panama	213	-	-	-	-	10	28	39	61	74
Hungary	200	-	-	-	-	2	13	18	34	133
Other or Not Stated	5,237	13	47	113	188	462	826	1,035	1,104	1,449

MORTALITY

Table M7. Leading Causes of Death by Age Group and Sex, New York City, 2016

		All		Male		Female	
Rank	ALL AGES	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	17,163	31.6	8,381	31.0	8,782	32.3
2	Malignant Neoplasms	13,533	24.9	6,743	24.9	6,790	25.0
3	Influenza and Pneumonia	2,019	3.7	1,048	3.9	971	3.6
4	Cerebrovascular Diseases	1,842	3.4	821	3.0	1,021	3.8
5	Diabetes Mellitus	1,796	3.3	883	3.3	913	3.4
6	Chronic Lower Respiratory Diseases	1,667	3.1	754	2.8	913	3.4
7	Use of or Poisoning by Psychoactive Substance	1,492	2.7	1,153	4.3	339	1.2
8	Essential Hypertension and Hypertensive Renal Disease	1,126	2.1	478	1.8	648	2.4
9	Alzheimer's Disease	1,100	2.0	317	1.2	783	2.9
10	Accidents Except Poisoning by Psychoactive Substance	997	1.8	652	2.4	345	1.3
	All Other Causes	11,545	21.3	5,842	21.6	5,703	21.0
	Total	54,280	100.0	27,072	100.0	27,208	100.0
Rank	< 1 YEAR	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Congenital Malformations, Deformations	105	21.4	50	19.7	55	23.2
2	Short Gestation and Low Birthweight	77	15.7	46	18.1	31	13.1
3	Cardiovascular Disorders Originating in the Perinatal Period	57	11.6	31	12.2	26	11.0
4	External Causes	47	9.6	18	7.1	29	12.2
5	Newborn Affected by Complications of Placenta	20	4.1	11	4.3	9	3.8
6	Respiratory Distress of Newborn	13	2.6	7	2.8	6	2.5
7	Necrotizing Enterocolitis Of Newborn	11	2.2	7	2.8	4	1.7
8	Bacterial Sepsis of Newborn	9	1.8	3	1.2	6	2.5
9	Pulmonary Hemorrhage in Perinatal Period	8	1.6	5	2.0	3	1.3
9	Other Respiratory Conditions of Pregnancy	8	1.6	2	0.8	6	2.5
9	Neonatal Hemorrhage	8	1.6	3	1.2	5	2.1
9	Newborn Affected by Complications of Pregnancy	8	1.6	5	2.0	3	1.3
	All Other Causes	120	24.4	66	26.0	54	22.8
	Total	491	100.0	254	100.0	237	100.0
Rank	1 - 14 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	39	23.5	20	20.0	19	28.8
2	Accidents Except Poisoning by Psychoactive Substance	18	10.8	12	12.0	6	9.1
3	Congenital Malformations, Deformations	17	10.2	10	10.0	7	10.6
4	Chronic Lower Respiratory Diseases	14	8.4	8	8.0	6	9.1
5	Assault (Homicide)	11	6.6	6	6.0	5	7.6
	All Other Causes	67	40.4	44	44.0	23	34.8
	Total	166	100.0	100	100.0	66	100.0
Rank	15 - 24 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Use of or Poisoning by Psychoactive Substance	101	19.2	84	22.3	17	11.4
2	Assault (Homicide)	95	18.1	85	22.5	10	6.7
3	Intentional Self-harm (Suicide)	61	11.6	39	10.3	22	14.8
4	Malignant Neoplasms	48	9.1	36	9.5	12	8.1
5	Accidents Except Poisoning by Psychoactive Substance	46	8.7	36	9.5	10	6.7
6	Congenital Malformations, Deformations	20	3.8	12	3.2	8	5.4
7	Chronic Lower Respiratory Diseases	10	1.9	6	1.6	4	2.7
7	Diseases of Heart	10	1.9	5	1.3	5	3.4
9	Influenza and Pneumonia	7	1.3	3	0.8	4	2.7
9	Human Immunodeficiency Virus (HIV) Disease	7	1.3	2	0.5	5	3.4
	All Other Causes	121	23.0	69	18.3	52	34.9
	Total	526	100.0	377	100.0	149	100.0
Rank	25 - 34 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Use of or Poisoning by Psychoactive Substance	283	26.0	219	29.6	64	18.4
2	Malignant Neoplasms	115	10.6	49	6.6	66	19.0
3	Assault (Homicide)	93	8.6	80	10.8	13	3.7
4	Intentional Self-harm (Suicide)	90	8.3	59	8.0	31	8.9
5	Accidents Except Poisoning by Psychoactive Substance	89	8.2	74	10.0	15	4.3
6	Diseases of Heart	82	7.5	63	8.5	19	5.5
7	Human Immunodeficiency Virus (HIV) Disease	31	2.9	24	3.2	7	2.0
8	Congenital Malformations, Deformations	20	1.8	9	1.2	11	3.2
9	Mental Disorder Due to Use of Alcohol	19	1.7	12	1.6	7	2.0
9	Diabetes Mellitus	19	1.7	11	1.5	8	2.3
	All Other Causes	246	22.6	140	18.9	106	30.5
	Total	1,087	100.0	740	100.0	347	100.0

Continued on next page.

Note: Death counts under 5 in any age groups are suppressed.

Table M7. Leading Causes of Death by Age Group and Sex, New York City, 2016 (Continued)

Rank	35 - 44 YEARS	All		Male		Female	
		Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	348	21.3	155	14.9	193	32.7
2	Use of or Poisoning by Psychoactive Substance	290	17.8	217	20.9	73	12.4
3	Diseases of Heart	189	11.6	148	14.2	41	6.9
4	Intentional Self-harm (Suicide)	87	5.3	63	6.1	24	4.1
5	Accidents Except Poisoning by Psychoactive Substance	80	4.9	62	6.0	18	3.0
6	Assault (Homicide)	66	4.0	54	5.2	12	2.0
7	Diabetes Mellitus	55	3.4	28	2.7	27	4.6
8	Human Immunodeficiency Virus (HIV) Disease	54	3.3	31	3.0	23	3.9
9	Chronic Liver Disease and Cirrhosis	48	2.9	43	4.1	5	0.8
10	Cerebrovascular Diseases	41	2.5	24	2.3	17	2.9
	All Other Causes	373	22.9	215	20.7	158	26.7
	Total	1,631	100.0	1,040	100.0	591	100.0
Rank	45 - 54 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	1,086	28.2	501	21.3	585	38.8
2	Diseases of Heart	807	20.9	562	23.9	245	16.2
3	Use of or Poisoning by Psychoactive Substance	418	10.8	317	13.5	101	6.7
4	Diabetes Mellitus	138	3.6	86	3.7	52	3.4
5	Cerebrovascular Diseases	122	3.2	73	3.1	49	3.2
6	Accidents Except Poisoning by Psychoactive Substance	114	3.0	89	3.8	25	1.7
7	Chronic Liver Disease and Cirrhosis	107	2.8	75	3.2	32	2.1
8	Human Immunodeficiency Virus (HIV) Disease	106	2.7	63	2.7	43	2.8
9	Intentional Self-harm (Suicide)	101	2.6	71	3.0	30	2.0
10	Mental Disorder Due to Use of Alcohol	76	2.0	67	2.9	9	0.6
	All Other Causes	781	20.3	443	18.9	338	22.4
	Total	3,856	100.0	2,347	100.0	1,509	100.0
Rank	55 - 64 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	2,601	35.0	1,336	29.7	1,265	43.0
2	Diseases of Heart	1,859	25.0	1,264	28.1	595	20.2
3	Use of or Poisoning by Psychoactive Substance	324	4.4	254	5.7	70	2.4
4	Diabetes Mellitus	291	3.9	161	3.6	130	4.4
5	Chronic Lower Respiratory Diseases	200	2.7	104	2.3	96	3.3
6	Influenza and Pneumonia	190	2.6	120	2.7	70	2.4
7	Cerebrovascular Diseases	172	2.3	106	2.4	66	2.2
7	Accidents Except Poisoning by Psychoactive Substance	172	2.3	121	2.7	51	1.7
9	Human Immunodeficiency Virus (HIV) Disease	150	2.0	109	2.4	41	1.4
10	Chronic Liver Disease and Cirrhosis	142	1.9	104	2.3	38	1.3
	All Other Causes	1,333	17.9	813	18.1	520	17.7
	Total	7,434	100.0	4,492	100.0	2,942	100.0
Rank	65 - 74 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	3,595	35.9	1,882	33.6	1,713	38.8
2	Diseases of Heart	2,868	28.6	1,740	31.0	1,128	25.5
3	Diabetes Mellitus	431	4.3	226	4.0	205	4.6
4	Chronic Lower Respiratory Diseases	351	3.5	180	3.2	171	3.9
5	Influenza and Pneumonia	335	3.3	201	3.6	134	3.0
6	Cerebrovascular Diseases	322	3.2	186	3.3	136	3.1
7	Essential Hypertension and Hypertensive Renal Disease	173	1.7	83	1.5	90	2.0
8	Accidents Except Poisoning by Psychoactive Substance	135	1.3	85	1.5	50	1.1
9	Chronic Liver Disease and Cirrhosis	109	1.1	77	1.4	32	0.7
10	Nephritis, Nephrotic Syndrome and Nephrosis	87	0.9	47	0.8	40	0.9
	All Other Causes	1,613	16.1	897	16.0	716	16.2
	Total	10,019	100.0	5,604	100.0	4,415	100.0
Rank	75 - 84 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	4,139	34.4	2,113	35.5	2,026	33.3
2	Malignant Neoplasms	3,278	27.2	1,656	27.9	1,622	26.6
3	Influenza and Pneumonia	534	4.4	285	4.8	249	4.1
4	Diabetes Mellitus	464	3.9	222	3.7	242	4.0
5	Cerebrovascular Disease	458	3.8	195	3.3	263	4.3
6	Chronic Lower Respiratory Diseases	452	3.8	201	3.4	251	4.1
7	Essential Hypertension and Hypertensive Renal Disease	286	2.4	126	2.1	160	2.6
8	Alzheimer's Disease	235	2.0	81	1.4	154	2.5
9	Parkinsons Disease	153	1.3	85	1.4	68	1.1
10	Accidents Except Poisoning by Psychoactive Substance	148	1.2	89	1.5	59	1.0
	All Other Causes	1,887	15.7	891	15.0	996	16.4
	Total	12,034	100.0	5,944	100.0	6,090	100.0
Rank	≥85 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	7,201	42.3	2,482	40.2	4,719	43.4
2	Malignant Neoplasms	2,417	14.2	1,103	17.9	1,314	12.1
3	Influenza and Pneumonia	855	5.0	386	6.3	469	4.3
4	Alzheimer's Disease	812	4.8	216	3.5	596	5.5
5	Cerebrovascular Diseases	709	4.2	227	3.7	482	4.4
6	Chronic Lower Respiratory Diseases	544	3.2	204	3.3	340	3.1
7	Essential Hypertension and Hypertensive Renal Disease	473	2.8	153	2.5	320	2.9
8	Diabetes Mellitus	392	2.3	146	2.4	246	2.3
9	Accidents Except Poisoning by Psychoactive Substance	186	1.1	81	1.3	105	1.0
10	Parkinsons Disease	172	1.0	93	1.5	79	0.7
	All Other Causes	3,275	19.2	1,083	17.5	2,192	20.2
	Total	17,036	100.0	6,174	100.0	10,862	100.0

MORTALITY

Table M8. Leading Causes of Death by Racial/Ethnic Group* and Sex, New York City, 2016

Rank	Puerto Rican	All		Male		Female	
		Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	1,441	30.4	674	28.9	767	31.9
2	Malignant Neoplasms	994	21.0	521	22.4	473	19.6
3	Diabetes Mellitus	213	4.5	106	4.5	107	4.4
4	Influenza and Pneumonia	203	4.3	99	4.2	104	4.3
5	Use of or Poisoning by Psychoactive Substance	194	4.1	159	6.8	35	1.5
6	Chronic Lower Respiratory Diseases	177	3.7	86	3.7	91	3.8
7	Cerebrovascular Diseases	164	3.5	66	2.8	98	4.1
8	Alzheimer's Disease	135	2.8	32	1.4	103	4.3
9	Essential Hypertension and Hypertensive Renal Disease	106	2.2	45	1.9	61	2.5
10	Chronic Liver Disease and Cirrhosis	86	1.8	55	2.4	31	1.3
	All Other Causes	1,025	21.6	487	20.9	538	22.3
	Total	4,738	100.0	2,330	100.0	2,408	100.0
Rank	Other Hispanic	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	1,462	25.5	744	24.3	718	26.9
2	Malignant Neoplasms	1,393	24.3	703	23.0	690	25.9
3	Use of or Poisoning by Psychoactive Substance	266	4.6	211	6.9	55	2.1
4	Diabetes Mellitus	236	4.1	112	3.7	124	4.6
5	Cerebrovascular Diseases	210	3.7	104	3.4	106	4.0
6	Influenza and Pneumonia	183	3.2	92	3.0	91	3.4
7	Accidents Except Poisoning by Psychoactive Substance	177	3.1	144	4.7	33	1.2
8	Alzheimer's Disease	138	2.4	38	1.2	100	3.7
9	Chronic Lower Respiratory Diseases	137	2.4	60	2.0	77	2.9
10	Essential Hypertension and Hypertensive Renal Disease	124	2.2	54	1.8	70	2.6
	All Other Causes	1,401	24.5	798	26.1	603	22.6
	Total	5,727	100.0	3,060	100.0	2,667	100.0
Rank	Asian and Pacific Islander	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	1,253	29.5	686	30.2	567	28.6
2	Diseases of Heart	1,134	26.7	603	26.6	531	26.8
3	Cerebrovascular Diseases	213	5.0	95	4.2	118	6.0
4	Influenza and Pneumonia	205	4.8	113	5.0	92	4.6
5	Diabetes Mellitus	149	3.5	76	3.3	73	3.7
6	Chronic Lower Respiratory Diseases	114	2.7	75	3.3	39	2.0
7	Essential Hypertension and Hypertensive Renal Disease	106	2.5	48	2.1	58	2.9
8	Accidents Except Poisoning by Psychoactive Substance	103	2.4	60	2.6	43	2.2
9	Alzheimer's Disease	86	2.0	37	1.6	49	2.5
10	Intentional Self-harm (Suicide)	61	1.4	32	1.4	29	1.5
	All Other Causes	828	19.5	446	19.6	382	19.3
	Total	4,252	100.0	2,271	100.0	1,981	100.0
Rank	Non-Hispanic White	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	8,361	34.6	4,055	34.0	4,306	35.3
2	Malignant Neoplasms	6,194	25.7	3,090	25.9	3,104	25.4
3	Influenza and Pneumonia	911	3.8	461	3.9	450	3.7
4	Chronic Lower Respiratory Diseases	803	3.3	332	2.8	471	3.9
5	Cerebrovascular Diseases	721	3.0	317	2.7	404	3.3
6	Use of or Poisoning by Psychoactive Substance	620	2.6	482	4.0	138	1.1
7	Alzheimer's Disease	509	2.1	148	1.2	361	3.0
8	Diabetes Mellitus	435	1.8	252	2.1	183	1.5
9	Accidents Except Poisoning by Psychoactive Substance	400	1.7	244	2.0	156	1.3
10	Essential Hypertension and Hypertensive Renal Disease	370	1.5	151	1.3	219	1.8
	All Other Causes	4,822	20.0	2,408	20.2	2,414	19.8
	Total	24,146	100.0	11,940	100.0	12,206	100.0
Rank	Non-Hispanic Black	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	4,411	31.0	2,107	31.0	2,304	31.0
2	Malignant Neoplasms	3,480	24.4	1,613	23.7	1,867	25.1
3	Diabetes Mellitus	712	5.0	313	4.6	399	5.4
4	Cerebrovascular Diseases	496	3.5	220	3.2	276	3.7
5	Influenza and Pneumonia	471	3.3	259	3.8	212	2.9
6	Chronic Lower Respiratory Diseases	401	2.8	183	2.7	218	2.9
7	Essential Hypertension and Hypertensive Renal Disease	387	2.7	161	2.4	226	3.0
8	Use of or Poisoning by Psychoactive Substance	359	2.5	258	3.8	101	1.4
9	Accidents Except Poisoning by Psychoactive Substance	241	1.7	156	2.3	85	1.1
10	Human Immunodeficiency Virus (HIV) Disease	231	1.6	140	2.1	91	1.2
	All Other Causes	3,050	21.4	1,396	20.5	1,654	22.3
	Total	14,239	100.0	6,806	100.0	7,433	100.0

* Decedents of other or multiple races or with unknown ethnicities are not shown.

Table M9. Leading Causes of Premature Death (Age < 65 Years), Overall and by Sex, New York City, 2016

Rank	Cause of Death	All		Male		Female	
		Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	4,243	27.9	2,102	22.5	2,141	36.7
	Trachea, bronchus, and lung	674	4.4	364	3.9	310	5.3
	Breast	441	2.9	3	0.0	438	7.5
	Colon, rectum, and anus	411	2.7	231	2.5	180	3.1
	Pancreas	317	2.1	186	2.0	131	2.2
	Liver and intrahepatic bile ducts	293	1.9	231	2.5	62	1.1
2	Diseases of Heart	2,955	19.5	2,046	21.9	909	15.6
3	Use of or Poisoning by Psychoactive Substance	1,416	9.3	1,091	11.7	325	5.6
4	Accidents Except Poisoning by Psychoactive Substance	528	3.5	397	4.2	131	2.2
5	Diabetes Mellitus	509	3.4	289	3.1	220	3.8
6	Intentional Self-harm (Suicide)	434	2.9	299	3.2	135	2.3
7	Cerebrovascular Diseases	353	2.3	213	2.3	140	2.4
8	Human Immunodeficiency Virus (HIV) Disease	348	2.3	229	2.4	119	2.0
9	Assault (Homicide)	342	2.3	278	3.0	64	1.1
10	Chronic Lower Respiratory Diseases	320	2.1	169	1.8	151	2.6
	All Other Causes	3,743	24.6	2,237	23.9	1,506	25.8
	Total	15,191	100.0	9,350	100.0	5,841	100.0

Note: Ten leading causes of death are listed in descending order of frequency for all premature deaths.

Table M10. Leading Causes of Premature Death (Age <65 Years) by Racial/Ethnic Group* and Sex, New York City, 2016

		All		Male		Female	
Rank	Puerto Rican	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	272	21.1	139	16.9	133	28.2
2	Diseases of Heart	264	20.4	176	21.4	88	18.7
3	Use of or Poisoning by Psychoactive Substance	183	14.2	151	18.4	32	6.8
4	Diabetes Mellitus	58	4.5	31	3.8	27	5.7
5	Human Immunodeficiency Virus (HIV) Disease	51	3.9	37	4.5	14	3.0
6	Chronic Liver Disease and Cirrhosis	45	3.5	30	3.7	15	3.2
7	Chronic Lower Respiratory Diseases	42	3.3	25	3.0	17	3.6
8	Influenza and Pneumonia	37	2.9	19	2.3	18	3.8
9	Accidents Except Poisoning by Psychoactive Substance	30	2.3	22	2.7	8	1.7
9	Viral Hepatitis	30	2.3	19	2.3	11	2.3
	All Other Causes	280	21.7	172	21.0	108	22.9
	Total	1,292	100.0	821	100.0	471	100.0
Rank	Other Hispanic	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	557	23.6	283	18.3	274	33.5
2	Diseases of Heart	371	15.7	266	17.2	105	12.8
3	Use of or Poisoning by Psychoactive Substance	263	11.1	209	13.5	54	6.6
4	Accidents Except Poisoning by Psychoactive Substance	141	6.0	119	7.7	22	2.7
5	Chronic Liver Disease and Cirrhosis	86	3.6	75	4.9	11	1.3
6	Diabetes Mellitus	85	3.6	45	2.9	40	4.9
7	Cerebrovascular Diseases	82	3.5	52	3.4	30	3.7
8	Assault (Homicide)	72	3.0	66	4.3	6	0.7
9	Intentional Self-harm (Suicide)	71	3.0	55	3.6	16	2.0
10	Human Immunodeficiency Virus (HIV) Disease	47	2.0	38	2.5	9	1.1
	All Other Causes	587	24.9	335	21.7	252	30.8
	Total	2,362	100.0	1,543	100.0	819	100.0
Rank	Asian and Pacific Islander	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	479	42.0	256	36.4	223	51.0
2	Diseases of Heart	198	17.4	150	21.3	48	11.0
3	Intentional Self-harm (Suicide)	48	4.2	25	3.6	23	5.3
4	Cerebrovascular Diseases	42	3.7	25	3.6	17	3.9
5	Accidents Except Poisoning by Psychoactive Substance	36	3.2	23	3.3	13	3.0
6	Diabetes Mellitus	29	2.5	18	2.6	11	2.5
7	Use of or Poisoning by Psychoactive Substance	28	2.5	24	3.4	4	0.9
8	Influenza and Pneumonia	22	1.9	16	2.3	6	1.4
9	Chronic Liver Disease and Cirrhosis	18	1.6	15	2.1	3	0.7
10	Congenital Malformations, Deformations	13	1.1	6	0.9	7	1.6
	All Other Causes	228	20.0	146	20.7	82	18.8
	Total	1,141	100.0	704	100.0	437	100.0
Rank	Non-Hispanic White	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	1,440	30.7	714	23.8	726	43.1
2	Diseases of Heart	886	18.9	656	21.9	230	13.6
3	Use of or Poisoning by Psychoactive Substance	589	12.6	457	15.2	132	7.8
4	Intentional Self-harm (Suicide)	201	4.3	136	4.5	65	3.9
5	Accidents Except Poisoning by Psychoactive Substance	166	3.5	127	4.2	39	2.3
6	Diabetes Mellitus	98	2.1	75	2.5	23	1.4
7	Chronic Liver Disease and Cirrhosis	96	2.0	74	2.5	22	1.3
8	Influenza and Pneumonia	86	1.8	50	1.7	36	2.1
9	Chronic Lower Respiratory Diseases	81	1.7	41	1.4	40	2.4
10	Mental Disorder Due to Use of Alcohol	76	1.6	63	2.1	13	0.8
	All Other Causes	964	20.6	605	20.2	359	21.3
	Total	4,683	100.0	2,998	100.0	1,685	100.0
Rank	Non-Hispanic Black	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	1,399	26.6	648	21.6	751	33.1
2	Diseases of Heart	1,154	21.9	736	24.5	418	18.4
3	Use of or Poisoning by Psychoactive Substance	329	6.2	232	7.7	97	4.3
4	Diabetes Mellitus	223	4.2	113	3.8	110	4.8
5	Human Immunodeficiency Virus (HIV) Disease	197	3.7	114	3.8	83	3.7
6	Assault (Homicide)	196	3.7	164	5.5	32	1.4
7	Accidents Except Poisoning by Psychoactive Substance	140	2.7	96	3.2	44	1.9
8	Chronic Lower Respiratory Diseases	134	2.5	70	2.3	64	2.8
9	Cerebrovascular Diseases	133	2.5	74	2.5	59	2.6
10	Influenza and Pneumonia	107	2.0	64	2.1	43	1.9
	All Other Causes	1,255	23.8	687	22.9	568	25.0
	Total	5,267	100.0	2,998	100.0	2,269	100.0

Table M11. Deaths and Death Rates per 100,000 Population from Selected Underlying Causes, Overall and by Ethnic Group* and Sex, New York City, 2016

Cause of Death	Total			Ethnic Group*													Sex					
				Hispanic			Non-Hispanic White			Non-Hispanic Black			Asian and Pacific Islander			Other or Unknown	Male			Female		
	No.	Crude Rate	Age-Adj. Rate	No.	Crude Rate	Age-Adj. Rate	No.	Crude Rate	Age-Adj. Rate	No.	Crude Rate	Age-Adj. Rate	No.	Crude Rate	Age-Adj. Rate	No.	No.	Crude Rate	Age-Adj. Rate	No.	Crude Rate	Age-Adj. Rate
All Causes†	54,280	6.4	5.8	10,465	4.2	5.0	24,146	8.8	6.0	14,239	7.5	6.9	4,252	3.4	3.6	1,178	27,072	6.6	7.0	27,208	6.1	4.8
Natural Causes	50,780	594.8	536.5	9,563	384.2	462.3	22,756	831.4	558.6	13,329	701.8	639.4	4,029	323.0	344.5	1,103	24,564	602.8	640.8	26,216	587.5	459.3
Human Immunodeficiency Virus (HIV) Disease	432	5.1	4.7	124	5.0	5.2	45	1.6	1.4	231	12.2	11.0	6	0.5	0.4	26	296	7.3	6.9	136	3.0	2.8
Malignant Neoplasms	13,533	158.5	145.3	2,387	95.9	112.7	6,194	226.3	164.8	3,480	183.2	165.0	1,253	100.4	100.9	219	6,743	165.5	173.4	6,790	152.2	126.6
Malignant neoplasm of stomach	500	5.9	5.4	94	3.8	4.3	161	5.9	4.3	144	7.6	6.8	95	7.6	7.8	6	326	8.0	8.3	174	3.9	3.2
Malignant neoplasms of colon, rectum, and anus	1,311	15.4	13.9	217	8.7	10.4	587	21.4	15.2	378	19.9	17.9	110	8.8	8.8	19	649	15.9	16.6	662	14.8	12.0
Malignant neoplasm of pancreas	1,090	12.8	11.7	181	7.3	8.6	532	19.4	14.2	271	14.3	12.8	93	7.5	7.5	13	541	13.3	13.8	549	12.3	10.1
Malignant neoplasms of trachea, bronchus, and lung (male)	1,354	33.2	34.9	212	17.6	25.3	615	46.0	37.4	323	37.6	39.3	177	29.8	32.2	27	1,354	33.2	34.9	-	-	-
Malignant neoplasms of trachea, bronchus, and lung (female)	1,165	26.1	21.6	159	12.4	12.8	605	43.2	28.9	287	27.6	22.1	101	15.5	14.8	13	-	-	-	1,165	26.1	21.6
Malignant neoplasm of breast (female)	1,084	24.3	20.3	177	13.8	14.1	479	34.2	23.3	322	31.0	25.3	78	11.9	11.0	28	-	-	-	1,084	24.3	20.3
Malignant neoplasm of cervix uteri (female)	140	3.1	2.8	36	2.8	2.8	41	2.9	2.4	47	4.5	3.8	14	2.1	2.0	2	-	-	-	140	3.1	2.8
Malignant neoplasm of ovary (female)	373	8.4	7.1	59	4.6	4.7	189	13.5	9.8	87	8.4	6.8	32	4.9	4.6	6	-	-	-	373	8.4	7.1
Malignant neoplasm of prostate (male)	753	18.5	20.3	124	10.3	16.8	314	23.5	18.3	268	31.2	36.5	28	4.7	5.5	19	753	18.5	20.3	-	-	-
Leukemia	599	7.0	6.5	95	3.8	4.4	339	12.4	9.2	116	6.1	5.6	39	3.1	3.2	10	322	7.9	8.3	277	6.2	5.2
Diabetes Mellitus	1,796	21.0	19.2	449	18.0	21.4	435	15.9	11.4	712	37.5	34.2	149	11.9	12.7	51	883	21.7	22.6	913	20.5	16.6
Parkinson's Disease	385	4.5	4.0	74	3.0	3.8	213	7.8	4.8	53	2.8	2.6	35	2.8	3.0	10	223	5.5	6.1	162	3.6	2.7
Alzheimer's Disease	1,100	12.9	11.0	273	11.0	14.7	509	18.6	10.4	212	11.2	10.3	86	6.9	8.3	20	317	7.8	9.0	783	17.5	12.1
Diseases of Heart	17,163	201.0	178.8	2,903	116.6	143.9	8,361	305.5	194.0	4,411	232.2	211.0	1,134	90.9	99.2	354	8,381	205.7	220.9	8,782	196.8	146.6
Hypertensive heart disease	2,362	27.7	24.8	447	18.0	21.8	878	32.1	21.7	877	46.2	41.6	121	9.7	10.5	39	1,155	28.3	29.5	1,207	27.0	20.8
Chronic ischemic heart diseases	11,104	130.1	115.4	1,758	70.6	87.9	5,742	209.8	131.8	2,620	137.9	125.5	761	61.0	67.0	223	5,410	132.8	143.7	5,694	127.6	94.0
Acute myocardial infarction	1,857	21.8	19.4	345	13.9	16.9	902	33.0	21.3	444	23.4	21.3	122	9.8	10.3	44	938	23.0	24.5	919	20.6	15.5
Essential (Primary) Hypertension and Hypertensive Renal Disease	1,126	13.2	11.7	230	9.2	11.5	370	13.5	8.6	387	20.4	18.5	106	8.5	9.5	33	478	11.7	12.6	648	14.5	11.0
Cerebrovascular Diseases	1,842	21.6	19.3	374	15.0	18.1	721	26.3	16.7	496	26.1	23.8	213	17.1	18.4	38	821	20.1	21.5	1,021	22.9	17.4
Influenza and Pneumonia	2,019	23.6	21.1	386	15.5	19.3	911	33.3	20.9	471	24.8	22.7	205	16.4	18.3	46	1,048	25.7	28.2	971	21.8	16.5
Chronic Lower Respiratory Diseases	1,667	19.5	17.7	314	12.6	15.4	803	29.3	19.6	401	21.1	19.3	114	9.1	10.3	35	754	18.5	19.9	913	20.5	16.1
Asthma	157	1.8	1.8	57	2.3	2.4	19	0.7	0.5	71	3.7	3.6	6	0.5	0.5	4	76	1.9	1.9	81	1.8	1.6
Chronic Liver Disease and Cirrhosis	522	6.1	5.6	205	8.2	8.9	175	6.4	5.2	85	4.5	3.9	35	2.8	2.7	22	363	8.9	8.7	159	3.6	3.1
External Causes	3,500	41.0	38.9	902	36.2	36.4	1,390	50.8	44.8	910	47.9	45.7	223	17.9	18.1	75	2,508	61.5	59.8	992	22.2	20.2
Motor Vehicle Accidents	245	2.9	2.7	70	2.8	2.9	79	2.9	2.6	62	3.3	3.1	29	2.3	2.3	5	158	3.9	3.8	87	1.9	1.8
Falls	449	5.3	4.7	83	3.3	3.8	211	7.7	5.4	90	4.7	4.4	59	4.7	5.1	6	275	6.7	7.1	174	3.9	3.0
Intentional Self-harm (Suicide)	525	6.1	5.9	103	4.1	4.1	263	9.6	8.6	85	4.5	4.4	61	4.9	4.7	13	359	8.8	8.5	166	3.7	3.5
Assault (Homicide)	362	4.2	4.3	103	4.1	4.1	35	1.3	1.2	204	10.7	11.2	13	1.0	1.0	7	291	7.1	7.0	71	1.6	1.6
Events of Undetermined Intent	259	3.0	3.0	44	1.8	1.8	121	4.4	4.1	62	3.3	3.3	19	1.5	1.6	13	170	4.2	4.1	89	2.0	2.0
Mental and Behavioral Disorders Due to Use of or Accidental Poisoning by Psychoactive Substances, Excluding Alcohol	1,492	17.5	16.4	460	18.5	18.1	620	22.7	21.3	359	18.8	16.8	28	2.2	2.2	25	1,153	28.3	26.6	339	7.6	7.1
Accidents Except Drug Poisoning	997	11.7	10.8	232	9.3	9.9	400	14.6	11.3	241	12.7	11.9	103	8.3	8.6	21	652	16.0	16.2	345	7.7	6.4

* See Technical Notes: Demographic Characteristics of Vital Events: Race, Ancestry, and Ethnic Group.

† For All Causes, rates are per 1,000 population and all other selected causes rates are per 100,000 population. Population data are from 2015 US Census Bureau's estimates.

Table M12. Deaths and Death Rates* per 100,000 Population from Selected Underlying Causes by Community District of Residence, New York City, 2016

		All Causes (Rate per 1,000)			Heart Diseases		Malignant Neoplasms		HIV Disease		Influenza and Pneumonia		Cerebrovascular Diseases		Chronic Lower Respiratory Diseases		Chronic Liver Disease & Cirrhosis		Diabetes Mellitus		Mental Disorders due to Substance Use & Accidental Poisoning		Accidents Except Drug Poisoning		Intentional Self-harm (Suicide)		Assault† (Homicide)		Events of Undetermined Intent	
Community District of Residence	Population 2016 Estimates	No.	Crude Rate	Age-Adjusted Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate
ALL DEATH EVENTS	8,537,673	54,280	6.4	5.8	17,163	201.0	13,533	158.5	432	5.1	2,016	23.6	1,842	21.6	1,667	19.5	522	6.1	1,796	21.0	1,492	17.5	997	11.7	525	6.1	362	4.2	259	3.0
MANHATTAN‡	1,634,421	9,335	5.7	4.7	2,738	167.5	2,397	146.7	74	4.5	245	15.0	327	20.0	293	17.9	79	4.8	248	15.2	264	16.2	165	10.1	103	6.3	37	2.3	45	2.8
Battery Park, Tribeca (01)	63,383	173	2.7	3.8	49	77.3	45	71.0	-	-	9	14.2	7	11.0	2	3.2	-	-	2	3.2	6	9.5	2	3.2	2	3.2	1	1.6	-	-
Greenwich Village, SOHO (02)	91,638	346	3.8	3.2	102	111.3	98	106.9	3	3.3	12	13.1	4	4.4	17	18.6	2	2.2	3	3.3	4	4.4	4	4.4	4	4.4	-	-	1	1.1
Lower East Side (03)	171,103	1,172	6.8	5.2	339	198.1	261	152.5	10	5.8	48	28.1	47	27.5	40	23.4	15	8.8	29	16.9	47	27.5	26	15.2	12	7.0	7	4.1	1	0.6
Chelsea, Clinton (04)	122,119	549	4.5	4.3	134	109.7	159	130.2	7	5.7	18	14.7	16	13.1	17	13.9	3	2.5	18	14.7	25	20.5	10	8.2	9	7.4	-	-	4	3.3
Midtown Business District (05)	53,120	214	4.0	3.9	69	129.9	47	88.5	3	5.6	5	9.4	7	13.2	8	15.1	2	3.8	2	3.8	5	9.4	9	16.9	6	11.3	-	-	1	1.9
Murray Hill (06)	144,591	754	5.2	3.8	233	161.1	220	152.2	3	2.1	13	9.0	23	15.9	30	20.7	1	0.7	10	6.9	19	13.1	15	10.4	7	4.8	2	1.4	3	2.1
Upper West Side (07)	214,744	1,362	6.3	4.3	414	192.8	348	162.1	8	3.7	38	17.7	51	23.7	27	12.6	16	7.5	27	12.6	20	9.3	25	11.6	19	8.8	1	0.5	13	6.1
Upper East Side (08)	225,914	1,261	5.6	3.7	365	161.6	370	163.8	5	2.2	29	12.8	42	18.6	49	21.7	5	2.2	14	6.2	14	6.2	20	8.9	19	8.4	1	0.4	6	2.7
Manhattanville (09)	111,287	610	5.5	5.6	195	175.2	154	138.4	2	1.8	10	9.0	22	19.8	21	18.9	8	7.2	19	17.1	21	18.9	10	9.0	5	4.5	5	4.5	1	0.9
Central Harlem (10)	116,345	839	7.2	7.8	236	202.8	217	186.5	8	6.9	15	12.9	24	20.6	19	16.3	8	6.9	44	37.8	33	28.4	11	9.5	5	4.3	6	5.2	7	6.0
East Harlem (11)	124,323	979	7.9	7.4	279	224.4	232	186.6	19	15.3	18	14.5	42	33.8	38	30.6	13	10.5	36	29.0	35	28.2	15	12.1	6	4.8	9	7.2	4	3.2
Washington Heights (12)	195,830	1,062	5.4	4.9	316	161.4	246	125.6	6	3.1	30	15.3	42	21.4	25	12.8	6	3.1	44	22.5	32	16.3	18	9.2	9	4.6	5	2.6	4	2.0
BRONX‡	1,457,309	9,278	6.4	6.5	2,707	185.8	2,135	146.5	137	9.4	380	26.1	337	23.1	313	21.5	113	7.8	394	27.0	339	23.3	180	12.4	80	5.5	97	6.7	41	2.8
Mott Haven (01)	98,403	638	6.5	7.5	152	154.5	129	131.1	18	18.3	24	24.4	18	18.3	18	18.3	15	15.2	33	33.5	41	41.7	13	13.2	6	6.1	14	14.2	5	5.1
Hunts Point (02)	56,144	273	4.9	5.9	71	126.5	56	99.7	8	14.2	11	19.6	12	21.4	7	12.5	6	10.7	13	23.2	13	23.2	10	17.8	1	1.8	7	12.5	1	1.8
Morrisania (03)	91,601	532	5.8	7.2	122	133.2	132	144.1	22	24.0	22	24.0	20	21.8	27	29.5	7	7.6	18	19.7	23	25.1	11	12.0	9	9.8	11	12.0	5	5.5
Concourse, Highbridge (04)	155,835	781	5.0	5.9	192	123.2	194	124.5	26	16.7	30	19.3	23	14.8	30	19.3	7	4.5	44	28.2	40	25.7	20	12.8	3	1.9	13	8.3	6	3.9
University/Morris Heights (05)	136,151	644	4.7	6.5	158	116.0	145	106.5	14	10.3	22	16.2	18	13.2	19	14.0	13	9.5	26	19.1	40	29.4	11	8.1	9	6.6	13	9.5	4	2.9
East Tremont (06)	87,476	525	6.0	7.7	132	150.9	117	133.8	12	13.7	22	25.1	16	18.3	22	25.1	8	9.1	28	32.0	26	29.7	13	14.9	5	5.7	7	8.0	4	4.6
Fordham (07)	148,163	821	5.5	6.6	246	166.0	196	132.3	6	4.0	34	22.9	24	16.2	30	20.2	11	7.4	34	22.9	32	21.6	15	10.1	6	4.0	5	3.4	3	2.0
Riverdale (08)	102,927	1,023	9.9	6.2	415	403.2	211	205.0	2	1.9	38	36.9	35	34.0	29	28.2	6	5.8	41	39.8	13	12.6	11	10.7	10	9.7	3	2.9	1	1.0
Unionport, Soundview (09)	184,105	1,100	6.0	6.2	306	166.2	265	143.9	13	7.1	46	25.0	48	26.1	35	19.0	17	9.2	48	26.1	36	19.6	24	13.0	4	2.2	9	4.9	3	1.6
Throgs Neck (10)	121,868	1,039	8.5	6.0	338	277.3	239	196.1	6	4.9	47	38.6	54	44.3	41	33.6	8	6.6	29	23.8	28	23.0	13	10.7	11	9.0	3	2.5	2	1.6
Pelham Parkway (11)	116,180	924	8.0	6.6	289	248.8	218	187.6	4	3.4	48	41.3	29	25.0	23	19.8	8	6.9	41	35.3	23	19.8	17	14.6	9	7.7	3	2.6	3	2.6
Williamsbridge (12)	156,542	973	6.2	5.9	286	182.7	230	146.9	6	3.8	36	23.0	40	25.6	32	20.4	7	4.5	39	24.9	22	14.1	22	14.1	7	4.5	9	5.7	4	2.6
BROOKLYN	2,629,150	15,279	5.8	5.6	5,224	198.7	3,551	135.1	134	5.1	631	24.0	474	18.0	417	15.9	131	5.0	596	22.7	332	12.6	255	9.7	120	4.6	134	5.1	74	2.8
Williamsburg, Greenpoint (01)	199,190	769	3.9	5.0	245	123.0	183	91.9	2	1.0	24	12.0	22	11.0	21	10.5	9	4.5	24	12.0	21	10.5	17	8.5	9	4.5	4	2.0	4	2.0
Fort Greene, Brooklyn Heights (02)	117,046	567	4.8	4.9	187	159.8	118	100.8	4	3.4	29	24.8	14	12.0	10	8.5	4	3.4	21	17.9	13	11.1	9	7.7	6	5.1	4	3.4	5	4.3
Bedford Stuyvesant (03)	152,403	896	5.9	6.5	266	174.5	209	137.1	18	11.8	40	26.2	25	16.4	25	16.4	18	11.8	49	32.2	28	18.4	17	11.2	6	3.9	14	9.2	5	3.3
Bushwick (04)	112,388	466	4.1	5.5	161	143.3	96	85.4	5	4.4	15	13.3	14	12.5	17	15.1	8	7.1	23	20.5	13	11.6	8	7.1	4	3.6	5	4.4	3	2.7
East New York (05)	181,300	1,144	6.3	6.7	333	183.7	260	143.4	12	6.6	36	19.9	44	24.3	40	22.1	10	5.5	63	34.7	37	20.4	23	12.7	7	3.9	18	9.9	5	2.8
Park Slope (06)	109,351	461	4.2	5.1	141	128.9	120	109.7	3	2.7	8	7.3	13	11.9	15	13.7	6	5.5	19	17.4	13	11.9	9	8.2	3	2.7	5	4.6	-	-
Sunset Park (07)	132,721	489	3.7	4.7	139	104.7	124	93.4	3	2.3	21	15.8	14	10.5	20	15.1	2	1.5	12	9.0	18	13.6	10	7.5	7	5.3	3	2.3	2	1.5
Crown Heights North (08)	97,130	586	6.0	6.1	185	190.5	125	128.7	15	15.4	18	18.5	26	26.8	10	10.3	3	3.1	28	28.8	12	12.4	9	9.3	4	4.1	11	11.3	3	3.1
Crown Heights South (09)	98,650	607	6.2	5.6	192	194.6	145	147.0	8	8.1	21	21.3	19	19.3	17	17.2	3	3.0	44	44.6	13	13.2	6	6.1	3	3.0	5	5.1	2	2.0
Bay Ridge (10)	142,075	878	6.2	5.1	328	230.9	211	148.5	-	-	38	26.7	29	20.4	25	17.6	8	5.6	16	11.3	21	14.8	16	11.3	12	8.4	3	-	2	1.4
Bensonhurst (11)	204,829	1,184	5.8	4.6	410	200.2	304	148.4	2	1.0	49	23.9	37	18.1	36	17.6	10	4.9	22	10.7	30	14.6	26	12.7	10	4.9	1	0.5	5	2.4
Borough Park (12)	201,640	960	4.8	4.9	302	149.8	216	107.1	2	1.0	67	33.2	24	11.9	26	12.9	5	2.5	23	11.4	12	6.0	16	7.9	5	2.5	-	-	9	4.5
Coney Island (13)	106,459	1,175	11.0	6.4	493	463.1	247	232.0	2	1.9	44	41.3	36	33.8	22	20.7	9	8.5	25	23.5	16	15.0	14	13.2	9	8.5	4	3.8	4	3.8
Flatbush, Midwood (14)	165,543	921	5.6	5.4	347	209.6	209	126.3	12	7.2	48	29.0	25	15.1	21	12.7	9	5.4	38	23.0	13	7.9	8	4.8	9	5.4	7	4.2	7	4.2
Sheepshead Bay (15)	173,961	1,296	7.4	5.2	512	294.3	314	180.5	2	1.1	61	35.1	32	18.4	39	22.4	9	5.2	31	17.8	22	12.6	20	11.5	7	4.0	5	2.9	11	6.3
Brownsville (16)	84,525	658	7.8	8.3	196	231.9	145	171.5	16	18.9	22	26.0	15	17.7	19	22.5	8	9.5	39	46.1	18	21.3	9	10.6	8	9.5	18	21.3	3	3.5
East Flatbush (17)	154,575	977	6.3	5.5	321	207.7	230	148.8	23	14.9	39	25.2	29	18.8	23	14.9	5	3.2	59	38.2	11	7.1	18	11.6	5	3.2	15	9.7	-	-
Canarsie (18)	195,264	1,239	6.3	5.8	465	238.1	295	151.1	5	2.6	50	25.6	56	28.7	31	15.9	5	2.6	60	30.7	17	8.7	20	10.2	6	3.1	12	6.1	4	2.0

Continued on next page.

Table M12. Deaths and Death Rates* per 100,000 Population from Selected Underlying Causes by Community District of Residence, New York City, 2016 (Continued)

		All Causes (Rate per 1,000)			Heart Diseases		Malignant Neoplasms		HIV Disease		Influenza and Pneumonia		Cerebrovascular Diseases		Chronic Lower Respiratory Diseases		Chronic Liver Disease & Cirrhosis		Diabetes Mellitus		Mental Disorders due to Substance Use & Accidental Poisoning		Accidents Except Drug Poisoning		Intentional Self-harm (Suicide)		Assault† (Homicide)		Events of Undetermined Intent	
Community District of Residence	Population 2016 Estimates	No.	Crude Rate	Age-Adjusted Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate
QUEENS	2,340,778	12,360	5.3	4.5	4,283	183.0	2,917	124.6	53	2.3	505	21.6	484	20.7	382	16.3	94	4.0	372	15.9	250	10.7	218	9.3	137	5.9	51	2.2	52	2.2
Astoria, Long Island City (01)	199,969	992	5.0	5.0	382	191.0	233	116.5	6	3.0	23	11.5	38	19.0	30	15.0	7	3.5	19	9.5	32	16.0	23	11.5	13	6.5	3	1.5	8	4.0
Sunnyside, Woodside (02)	135,972	516	3.8	3.8	186	136.8	128	94.1	2	1.5	21	15.4	20	14.7	17	12.5	3	2.2	9	6.6	7	5.1	10	7.4	6	4.4	2	1.5	-	-
Jackson Heights (03)	179,844	649	3.6	3.7	220	122.3	145	80.6	3	1.7	23	12.8	34	18.9	21	11.7	8	4.4	20	11.1	12	6.7	19	10.6	7	3.9	2	1.1	2	1.1
Elmhurst, Corona (04)	188,107	652	3.5	3.7	192	102.1	175	93.0	2	1.1	30	15.9	23	12.2	20	10.6	6	3.2	21	11.2	13	6.9	15	8.0	8	4.3	3	1.6	3	1.6
Ridgewood, Glendale (05)	166,924	964	5.8	5.4	309	185.1	278	166.5	5	3.0	40	24.0	36	21.6	33	19.8	10	6.0	17	10.2	25	15.0	18	10.8	10	6.0	2	1.2	4	2.4
Rego Park, Forest Hills (06)	115,119	799	6.9	4.3	265	230.2	187	162.4	1	0.9	55	47.8	32	27.8	24	20.8	3	2.6	10	8.7	9	7.8	7	6.1	7	6.1	1	0.9	7	6.1
Flushing (07)	263,039	1,623	6.2	4.1	607	230.8	382	145.2	-	-	92	35.0	52	19.8	38	14.4	9	3.4	51	19.4	23	8.7	32	12.2	16	6.1	4	1.5	4	1.5
Fresh Meadows, Briarwood (08)	156,217	851	5.4	4.1	318	203.6	188	120.3	2	1.3	48	30.7	24	15.4	18	11.5	3	1.9	26	16.6	11	7.0	17	10.9	8	5.1	4	2.6	4	2.6
Woodhaven (09)	148,465	635	4.3	4.6	201	135.4	143	96.3	2	1.3	24	16.2	33	22.2	19	12.8	7	4.7	14	9.4	18	12.1	9	6.1	7	4.7	6	4.0	1	0.7
Howard Beach (10)	125,603	701	5.6	5.2	225	179.1	154	122.6	1	0.8	26	20.7	28	22.3	25	19.9	8	6.4	31	24.7	15	11.9	13	10.4	15	11.9	6	4.8	2	1.6
Bayside (11)	119,628	636	5.3	3.5	223	186.4	160	133.7	-	-	19	15.9	30	25.1	20	16.7	4	3.3	9	7.5	13	10.9	6	5.0	12	10.0	1	0.8	1	0.8
Jamaica, St. Albans (12)	232,911	1,378	5.9	5.3	449	192.8	319	137.0	5	2.1	49	21.0	62	26.6	42	18.0	11	4.7	56	24.0	33	14.2	21	9.0	16	6.9	12	5.2	5	2.1
Queens Village (13)	193,787	945	4.9	3.8	307	158.4	237	122.3	8	4.1	24	12.4	46	23.7	17	8.8	5	2.6	41	21.2	16	8.3	15	7.7	8	4.1	2	1.0	3	1.5
The Rockaways (14)	114,390	1,014	8.9	7.8	397	347.1	188	164.4	16	14.0	31	27.1	26	22.7	58	50.7	10	8.7	48	42.0	22	19.2	11	9.6	4	3.5	3	2.6	8	7.0
STATEN ISLAND	476,015	3,580	7.5	6.2	1,307	274.6	848	178.1	15	3.2	154	32.4	79	16.6	160	33.6	29	6.1	93	19.5	122	25.6	53	11.1	28	5.9	16	3.4	11	2.3
Port Richmond (01)	181,484	1,303	7.2	6.8	460	253.5	288	158.7	12	6.6	54	29.8	31	17.1	59	32.5	19	10.5	44	24.2	45	24.8	23	12.7	8	4.4	9	5.0	5	2.8
Willowbrook, South Beach (02)	134,657	1,096	8.1	5.6	430	319.3	260	193.1	1	0.7	45	33.4	24	17.8	42	31.2	4	3.0	25	18.6	35	26.0	16	11.9	7	5.2	4	3.0	4	3.0
Tottenville (03)	159,132	1,179	7.4	6.4	417	262.0	300	188.5	2	1.3	55	34.6	24	15.1	59	37.1	5	3.1	24	15.1	42	26.4	14	8.8	13	8.2	2	1.3	2	1.3
NONRESIDENTS	-	4,301	-	-	881	-	1,673	-	16	-	100	-	139	-	99	-	69	-	89	-	156	-	111	-	51	-	24	-	24	-
RESIDENCE UNKNOWN	-	147	-	-	23	-	12	-	3	-	4	-	2	-	3	-	7	-	4	-	29	-	15	-	6	-	3	-	12	-

Note: Borough totals may be higher than the sum of the community districts, as they may include some deaths whose community district could not be determined.

* Rates are calculated based on 2015 population estimates derived by Bureau of Epi Services. See Technical Notes: Population, Community District.

† See Technical Notes: Deaths, Homicide.

‡ The northernmost Manhattan neighborhood of Marble Hill is in the Bronx under the community district system. As a result, the numbers of deaths in Manhattan and Bronx are slightly different from Table M1.

MORTALITY

Table M13. Deaths and Crude Death Rates* per 100,000

ANNUAL

Cause (ICD-10 Codes)‡‡	1901-1905	1906-1910	1911-1915	1916-1920	1921-1925	1926-1930	1931-1935	1936-1940	1941-1945	1946-1948	1949-1951	1952-1955
Infant Deaths (under 1 year)	15,611	16,609	14,060	12,004	8,895	7,662	5,521	4,079	3,828	4,298	3,882	4,021
Rate per 1,000 live births	120.8	115.2	100.0	88.2	68.9	61.0	52.0	39.8	30.3	26.8	24.5	24.6
Neonatal Deaths (under 28 days)	§§	§§	5,143	4,894	4,309	3,892	3,152	2,631	2,764	3,298	2,989	3,032
Rate per 1,000 live births			37.4	36.0	33.0	31.0	29.7	25.7	21.9	20.5	18.9	18.5
Early Neonatal Deaths (under 7 Days)	§§	§§	§§	§§	§§	§§	§§	2,110	2,338	2,845	2,604	2,713
Rate per 1,000 live births								20.5	18.5	17.7	16.4	16.6
Fetal Deaths (28 Weeks Gestation and Older)	§§	§§	§§	§§	§§	§§	§§	2,589	2,709	2,902	2,441	2,310
Ratio per 1,000 live births								25.3	21.4	18.1	15.4	14.1
Perinatal mortality ratio†	§§	§§	§§	§§	§§	§§	§§	44.7	39.1	35.1	31.3	30.2
Pregnancy, Childbirth, and the Puerperium (O00-O99)	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§
Rate per 100,000 live births												
Maternal Causes |||| (A34, O00-O95, O98-O99)	694	745	694	664	689	651	608	372	255	178	115	102
Rate per 100,000 live births	538.0	517.4	493.7	487.9	528.1	518.4	572.6	363.2	201.6	110.8	72.6	62.3
Respiratory Tuberculosis (A16)	8,154	8,832	8,745	7,915	4,937	4,574	4,068	3,680	3,281	2,932	2,173	1,178
Rate	215.4	197.5	173.2	144.1	80.0	68.2	57.3	50.0	43.2	37.7	27.4	15.0
Other Forms of Tuberculosis (A17-A19)	§§	§§	§§	§§	§§	§§	§§	§§	§§	225	174	97
Rate										2.9	2.2	1.2
HIV Disease (B20-B24)‡	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§
Rate												
Malignant Neoplasms (C00-C97)	2,621	3,334	4,256	4,993	6,229	7,637	9,062	11,257	13,169	14,627	15,556	16,553
Rate	69.2	74.5	84.3	90.9	100.9	113.9	127.6	152.9	173.3	188.2	196.0	210.6
Trachea, bronchus, and lung, male (C33-C34)	§§	§§	§§	§§	§§	§§	§§	§§	§§	828	847	1,021
Rate										21.9	22.2	27.0
Trachea, bronchus, and lung, female (C33-C34)	§§	§§	§§	§§	§§	§§	§§	§§	§§	220	179	228
Rate										5.5	4.4	5.6
Colon, rectum, and anus (C18-C21)	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§
Rate												
Breast, female (C50)	§§	§§	§§	§§	§§	§§	§§	§§	§§	1,429	1,476	1,517
Rate										35.9	36.4	37.3
Diabetes Mellitus (E10-E14)	520	690	916	1,063	1,284	1,624	2,140	2,787	3,131	3,423	1,583	1,644
Rate	13.7	15.4	18.1	19.4	20.8	24.2	30.1	37.9	41.2	44.0	19.9	20.9
Major Cardiovascular Diseases (I00-I78)	5,954	9,148	12,699	14,792	18,114	21,815	23,706	25,711	30,886	32,539	36,206	37,724
Rate	157.3	204.5	251.5	269.3	293.3	325.5	333.8	349.2	406.6	418.7	456.3	479.9
Cerebrovascular disease (I60-I69)	2,593	1,790	970	834	719	723	1,333	3,846	3,611	3,710	5,099	5,688
Rate	68.4	40.0	19.2	15.2	11.6	10.8	20.2	52.2	47.5	47.7	64.3	72.4
Influenza and Pneumonia (J09-J18)	10,425	10,985	10,528	17,136	8,935	9,989	8,205	5,337	3,453	3,014	2,469	2,664
Rate	275.4	245.6	208.5	312.0	144.7	149.0	115.5	72.5	45.5	38.8	31.2	33.9
Other Respiratory Diseases (J00-J06, J20-J99)	3,224	2,307	1,458	1,407	689	622	594	536	492	424	450	461
Rate	85.2	51.6	38.9	25.6	11.2	9.3	8.4	7.3	6.5	5.5	5.7	5.9
Chronic Liver Disease and Cirrhosis (K70, K73-K74)	814	1,076	900	500	338	413	584	922	1,052	1,500	1,500	1,440
Rate	21.5	24.1	17.8	9.1	5.5	6.2	8.2	12.5	13.8	17.5	19.2	18.3
Nephritis, Nephrosis, etc. (N00-N07, N17-N19, N25-N27)	5,752	5,600	5,499	5,676	4,108	3,411	3,608	3,675	3,081	2,574	570	556
Rate	151.9	125.2	108.9	103.4	50.9	50.8	50.9	40.6	40.6	33.1	7.2	7.1
Use of Psychoactive Substance (F11-F16, F18-F19)	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	81
Rate												1.0
Accidental Drug Poisoning (X40-X42, X44)	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§
Rate												
Motor Vehicle Accidents¶	§§	§§	253	658	929	1,175	1,167	920	728	635	600	634
Rate			5.0	12.0	15.0	17.5	16.4	12.5	9.6	8.2	7.6	8.1
Home Accidents	§§	§§	§§	§§	§§	§§	§§	1,546	1,823	1,941	1,699	1,568
Rate								21.0	24.0	25.0	21.4	19.9
Other Accidents (rest of V01-X59, Y85-Y86)	3,521	3,549	3,516	3,426	3,138	3,574	3,205	3,107	3,091	3,255	2,707	2,450
Rate	93.0	79.3	69.3	62.4	50.8	53.3	45.1	42.2	40.7	41.9	34.3	31.2
Intentional Self-harm (Suicide) (X60-X84, Y87.0)	761	825	686	742	842	1,163	1,369	1,191	907	930	863	649
Rate	20.1	18.4	17.2	13.5	13.6	17.4	19.3	16.2	11.9	12.0	10.9	8.3
Assault (Homicide) (X85-Y09, Y87.1)	143	247	293	271	334	405	522	351	265	362	318	340
Rate	3.8	5.5	5.8	4.9	5.4	6.0	7.4	4.5	3.5	4.7	4.0	4.3
Events of Undetermined Intent (Y10-Y34, Y87.2, Y89.9)	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§
Rate												
Alzheimer's Disease (G30)	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§
Rate												
Asthma (J45-J46)	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§	§§
Rate												

*Populations for calculating rates vary by year. See Technical Notes: Population, Citywide.
†See Technical Notes: Vital Events Rates.
‡AIDS was first reported as a cause of death in 1982. See the Technical Notes and Historical Technical Notes: Deaths, HIV and AIDS Mortality.
§Data for 1982-1985.
||Rate less than 0.05.
¶Motor vehicle accident codes are listed in Table M1.
**World Trade Center (WTC) disaster deaths are not included in 2001. See Special Section on WTC deaths in the 2002 Summary of Vital Statistics for detailed statistics.
††Beginning January 2007, causes of death coding was changed. See Technical Notes: Deaths, Cause of Death Coding.
‡‡ Codes following causes in parenthesis are the International Classification of Diseases, Tenth Revision.
§§Data are not available or not applicable.
||||See Technical Notes: Maternal Death and Maternal Mortality.

MORTALITY

AVERAGE

1956-1960	1961-1965	1966-1970	1971-1975	1976-1980	1981-1985	1986-1990	1991-1995	1996-2000	2001-2005**	2006-2010	2011	2012	2013	2014	2015	2016
4,290	4,333	3,477	2,312	1,875	1,624	1,691	1,339	881	760	682	577	583	551	516	526	491
25.7	26.2	23.6	19.9	17.4	14.4	12.8	10.0	7.1	6.1	5.4	4.7	4.7	4.6	4.2	4.3	4.1
3,220	3,226	2,602	1,714	1,333	1,097	1,159	912	609	512	445	378	383	377	326	342	312
19.3	19.5	17.7	14.8	12.3	9.7	8.8	6.8	4.9	4.1	3.5	3.1	3.1	3.1	2.7	2.8	2.6
2,909	2,922	2,351	1,480	1,131	927	972	753	478	394	335	293	301	283	254	242	230
17.4	17.7	16.0	12.8	10.5	8.2	7.4	5.6	3.8	3.2	2.6	2.4	2.4	2.3	2.1	2.0	1.9
2,362	2,276	1,885	1,288	835	719	698	686	518	431	388	368	379	371	401	345	388
14.1	13.8	12.8	11.1	7.7	6.4	5.3	5.1	4.2	3.5	3.1	3.0	3.1	3.1	3.3	2.8	3.2
31.1	31.0	28.4	23.6	18.1	14.5	12.6	10.6	8.0	6.7	5.7	5.4	5.5	5.4	5.3	4.8	5.1
§§	§§	§§	§§	§§	§§	§§	§§	30	32	39	37	29	30	27	39	24
								24.1	25.7	30.5	30.1	23.5	24.9	22.1	32.1	19.9
107	109	73	36	28	33	29	26	22	29	32	30	23	25	23	35	18
64.1	66.0	49.6	31.1	25.9	29.2	22.3	19.2	17.5	23.1	25.4	24.4	18.7	20.8	18.8	28.8	15.0
824	624	432	235	141	125	174	135	39	25	16	27	13	13	22	17	16
10.6	8.0	5.5	3.1	2.0	1.7	2.4	1.8	0.5	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2
52	43	39	32	22	35	55	34	14	5	5	5	3	4	9	3	5
0.7	0.6	0.5	0.4	0.3	0.5	0.8	0.5	0.2	0.1	0.1	0.1	| |	| |	0.1	| |	0.1
§§	§§	§§	§§	§§	768§	3,703	6,257	2,716	1,603	1,032	766	609	579	523	483	432
					10.7	50.9	83.2	36.4	19.9	12.7	9.3	7.3	6.9	6.2	5.6	5.1
16,869	17,398	17,814	17,315	16,549	15,889	15,612	15,191	14,335	13,717	13,185	13,443	13,405	13,362	13,380	13,318	13,533
216.1	222.1	226.3	226.3	228.7	222.3	214.7	201.9	192.2	169.9	162.1	162.6	160.8	159.0	157.6	155.8	158.5
1,157	1,294	1,890	2,434	2,387	2,217	2,201	2,083	1,849	1,713	1,565	1,538	1,585	1,569	1,405	1,453	1,354
30.9	34.8	51.0	68.1	71.0	66.7	64.4	60.6	52.7	44.8	40.5	39.1	39.9	39.1	34.7	35.6	33.2
261	303	474	777	970	1,169	1,315	1,426	1,416	1,388	1,340	1,340	1,302	1,349	1,254	1,271	1,165
6.4	7.4	11.4	19.1	25.0	30.6	33.9	36.7	35.9	32.7	31.4	30.9	29.8	30.7	28.2	28.4	26.1
§§	§§	§§	§§	§§	§§	§§	1,805	1,685	1,546	1,414	1,374	1,380	1,329	1,268	1,275	1,311
							24.0	22.6	19.2	17.4	16.6	16.6	15.8	14.9	14.9	15.4
1,573	1,694	1,787	1,723	1,622	1,533	1,537	1,510	1,354	1,266	1,111	1,090	1,122	1,080	1,098	1,049	1,084
38.7	41.3	42.9	42.3	41.9	40.1	39.6	38.9	34.3	29.8	26.0	25.1	25.7	24.6	24.7	23.5	24.3
1,581	1,789	1,867	2,064	1,547	1,436	1,198	1,348	1,659	1,770	1,662	1,770	1,813	1,844	1,798	1,852	1,796
20.3	22.9	23.7	27.0	21.4	20.1	16.5	17.9	22.2	21.9	20.4	21.4	21.7	21.9	21.2	21.7	21.0
38,988	39,943	41,981	40,639	37,978	37,818	33,527	32,074	29,330	26,663	23,414	20,044	19,808	19,967	19,715	20,502	20,597
499.5	510.2	532.4	531.1	524.8	529.1	461.0	426.4	393.2	330.3	287.9	242.4	237.6	237.5	232.2	239.8	241.2
6,013	6,174	6,277	5,433	4,174	3,194	2,927	2,256	2,058	1,807	1,555	1,750	1,647	1,707	1,787	1,847	1,842
77.0	78.9	79.7	71.0	57.7	44.7	40.2	30.0	27.6	22.4	19.1	21.2	19.8	20.3	21.0	21.6	21.6
3,459	3,394	3,562	3,164	3,000	2,740	3,354	2,810	2,548	2,726	2,372	2,492	2,245	2,472	2,220	2,096	2,019
44.3	43.4	45.2	41.4	41.5	38.3	46.1	37.4	34.2	33.8	29.2	30.1	26.9	29.4	26.1	24.5	23.6
651	960	1,425	1,627	1,583	1,941	2,507	1,943	2,025	2,037	1,909	2,278	2,209	2,355	2,425	2,386	2,238
8.3	12.3	18.1	21.3	21.9	27.2	34.5	25.8	27.1	25.2	23.5	27.5	26.5	28.0	28.6	27.9	26.2
1,858	2,386	2,936	2,440	2,185	1,789	1,289	946	697	521	493	550	534	586	589	610	522
23.8	30.5	37.3	31.9	30.2	25.0	17.7	12.6	9.3	6.5	6.1	6.7	6.4	7.0	6.9	7.1	6.1
573	509	447	372	381	383	816	311	564	654	429	453	461	464	486	437	416
7.3	6.5	5.7	4.9	5.3	5.4	11.2	4.1	7.6	8.1	5.3	5.5	5.5	5.5	5.7	5.1	4.9
96	263	551	677	414	573	787	947	875	866	262	158	152	148	170	195	172
1.2	3.4	7.0	8.8	5.7	8.0	10.8	12.6	11.7	10.7	3.2	1.9	1.8	1.8	2.0	2.3	2.0
§§	§§	§§	§§	§§	1	143	49	26	41	353	600	660	724	723	856	1,320
					| |	2.0	0.7	0.3	0.5	4.3	7.3	7.9	8.6	8.5	10.0	15.5
655	714	887	834	606	477	624	554	419	386	315	283	315	305	271	258	245
8.4	9.1	11.3	10.9	8.4	6.7	8.6	7.4	5.6	4.8	3.9	3.4	3.8	3.6	3.2	3.0	2.9
1,095	951	871	755	525	486	589	508	§§	§§	§§	§§	§§	§§	§§	§§	§§
14.0	12.1	11.1	9.9	7.3	6.8	8.1	6.8									
2,091	1,947	1,730	1,239	926	812	880	394	493	792	712	735	719	731	755	798	752
26.8	24.9	22.0	16.2	12.8	11.4	12.1	5.2	6.6	9.8	8.8	8.9	8.6	8.7	8.9	9.3	8.8
711	908	680	641	711	603	600	599	514	483	477	509	557	550	565	552	525
9.1	11.6	8.6	8.4	9.8	8.4	8.3	8.0	6.9	6.0	5.9	6.2	6.7	6.5	6.7	6.5	6.1
366	592	992	1,663	1,700	1,763	1,902	1,815	778	624	549	528	440	343	353	379	362
4.7	7.6	12.6	21.7	23.5	24.7	26.2	24.1	10.4	7.7	6.8	6.4	5.3	4.1	4.2	4.4	4.2
§§	§§	946	1,062	699	696	504	161	151	232	212	247	241	227	253	265	259
		10.9	13.9	9.7	9.7	6.9	2.0	2.0	2.9	2.6	3.0	2.9	2.7	3.0	3.1	3.0
§§	§§	§§	§§	§§	§§	§§	84	115	232	400	626	696	740	789	1,079	1,100
							1.2	1.5	2.9	4.9	7.6	8.3	8.8	9.3	12.6	12.9
§§	§§	§§	§§	§§	§§	§§	269	243	196	154	171	166	180	182	167	157
							3.7	3.3	2.4	1.9	2.1	2.0	2.1	2.1	2.0	1.8

Table M14. Alcohol-attributable Deaths Due to Excessive Alcohol Use, Age ≥ 20 Years*, New York City, 2016

Total for All Causes	Total†	Male	Female
	1,959	1,414	545
Chronic Causes*			
Acute pancreatitis	12	6	6
Alcohol abuse	68	58	10
Alcohol cardiomyopathy	9	7	2
Alcohol dependence syndrome	194	157	37
Alcohol-induced chronic pancreatitis	1	1	0
Alcoholic liver disease	369	276	93
Alcoholic psychosis	4	3	1
Breast cancer (females only)	12	0	12
Cholelithiases	0	-	-
Chronic hepatitis	< 1	< 1	< 1
Chronic pancreatitis	4	3	2
Epilepsy	5	2	2
Esophageal cancer	7	5	2
Esophageal varices	1	< 1	1
Gastroesophageal hemorrhage	1	1	-
Hypertension	91	41	49
Ischemic heart disease	20	11	9
Laryngeal cancer	5	4	1
Liver cancer	34	23	11
Liver cirrhosis unspecified	84	45	40
Low birth weight prematurity IUGR‡ death	3	1	1
Oropharyngeal cancer	7	5	1
Portal hypertension	< 1	0	< 1
Prostate cancer (males only)	4	4	-
Psoriasis	< 1	-	< 1
Stroke hemorrhagic	24	20	4
Stroke ischemic	10	7	3
Supraventricular cardiac dysrhythmia	3	1	2
Subtotal	972	681	290
Acute Causes			
Alcohol poisoning	75	56	19
Aspiration	4	3	1
Child maltreatment	3	1	2
Drowning	2	2	0
Fall injuries	142	87	55
Fire injuries	16	10	6
Homicide	163	134	29
Hypothermia	3	3	0
Motor-vehicle traffic crashes	70	54	15
Occupational and machine injuries	1	1	-
Other road vehicle crashes	5	4	< 1
Poisoning (not alcohol)	385	297	89
Suicide	120	82	38
Water transport	< 1	< 1	-
Subtotal	988	732	255

Note: Alcohol prevalence data are provided by the Bureau of Epidemiology Services. The definition of alcohol consumption levels was changed in 2014. See Technical Notes: Deaths, Alcohol and Smoking Attributable Mortality.

* Generally chronic causes of death are collected for people aged 20 years and older and acute causes of death for people aged 15 years and older. However, there are several exceptions to this rule. See Technical Notes.

† Total may not equal sum of males and females due to rounding.

‡ IUGR = Intrauterine growth restriction.

Note: Deaths due to esophageal varices were accidentally omitted in previous years. There was one such death in 2015 and 2016.

Table M15. Smoking-attributable Deaths and Age-adjusted Death Rates, Age ≥ 35 Years, New York City, 2014-2016

Disease Category	2014						2015						2016					
	Deaths			Age-adjusted Rates (per 100,000 Population)			Deaths			Age-adjusted Rates (per 100,000 Population)			Deaths			Age-adjusted Rates (per 100,000 Population)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Total	4,587	3,343	7,930	246.7	127.4	177.6	4,657	3,390	8,047	242.9	127.3	176.3	4,125	3,165	7,290	208.9	116.7	156.5
Cerebrovascular disease	54	56	111	3.1	2.2	2.6	63	57	121	3.5	2.2	2.7	54	55	109	2.8	2.0	2.4
Chronic obstructive pulmonary disease (ages 65+)	515	584	1,100	31.5	22.4	25.9	500	565	1,065	29.6	21.3	24.5	424	529	953	24.1	19.6	21.4
Coronary heart disease	1,478	1,083	2,560	79.4	41.7	58.1	1,542	1,113	2,655	80.3	42.4	59.0	1,322	1,073	2,395	66.8	40.0	52.2
Diabetes mellitus	63	30	93	3.2	1.1	2.0	62	31	93	3.1	1.1	2.0	54	33	86	2.6	1.2	1.8
Influenza, pneumonia, Tuberculosis, and COPD (ages 35-64)	215	121	336	9.0	4.3	6.5	190	126	316	7.7	4.6	6.0	197	121	318	7.9	4.3	6.0
Influenza, pneumonia, and tuberculosis (ages 65+)	186	98	284	11.2	3.8	6.7	174	93	267	10.1	3.5	6.1	157	76	233	8.8	2.8	5.2
Lung cancer	1,134	909	2,043	60.3	34.3	45.0	1,177	925	2,102	61.0	34.3	45.3	1,051	832	1,883	53.2	30.3	39.8
Other cancers	619	251	870	32.9	9.4	19.1	616	259	875	31.7	9.5	18.7	576	247	822	28.7	8.9	17.2
Other cardiovascular diseases (ages 35-64)*	191	60	250	8.3	2.4	5.1	203	68	271	8.6	2.7	5.5	180	56	237	7.8	2.2	4.9
Other heart disease (ages 65+)†	69	86	155	4.0	3.3	3.6	74	87	161	4.2	3.3	3.7	51	77	128	2.8	2.9	2.9
Other vascular diseases (ages 65+)‡	64	64	128	3.7	2.5	3.0	57	65	121	3.2	2.5	2.8	60	66	125	3.2	2.4	2.8

Notes:

Smoking prevalence rates are from New York City Community Health Survey and calculated by Bureau of Epidemiology Services, New York City Department of Health and Mental Hygiene.

Beginning 2014, the calculation of smoking-attributable deaths uses the updated CDC method. As a result, the number of smoking-attributable deaths are much higher than prior years. See Technical Notes: Deaths, Alcohol-and Smoking-attributable Mortality for methodology.

Total may differ from sum of male and female numbers due to rounding.

* Other cardiovascular diseases are comprised of other heart disease, cerebrovascular disease, other vascular diseases and diabetes mellitus.

† Other heart disease is comprised of rheumatic heart disease, pulmonary heart disease, and other forms of heart disease.

‡ Other vascular diseases are comprised of atherosclerosis, aortic aneurysm, and other arterial diseases.

MORTALITY

AGE GROUP/ETHNIC GROUP*		ALL														
		1983-2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	1983-2006	2007	2008	2009
ALL AGES	Total	75,642	1,115	1,073	933	832	766	609	579	523	483	432	57,706	711	702	603
	Puerto Rican	14,138	224	217	187	196	186	115	138	88	102	70	10,383	142	138	125
	Other Hispanic	6,735	103	118	105	72	46	37	34	43	29	54	5,487	76	84	71
	Asian & Pacific Islander	487	5	10	3	6	4	5	8	2	5	6	431	3	7	2
	Non-Hispanic White	18,860	143	129	90	100	94	80	73	62	50	45	16,401	103	104	68
	Non-Hispanic Black	31,593	625	583	537	449	421	359	311	298	277	231	21,940	377	356	329
	Other or Unknown	3,829	15	16	11	9	15	13	15	30	20	26	3,064	10	13	8
0-24	Total	2,396	21	17	15	8	16	13	8	9	8	7	1,315	10	7	6
	Puerto Rican	452	7	3	2	1	4	2	-	-	2	-	253	3	-	-
	Other Hispanic	264	5	-	3	-	-	2	-	-	1	-	162	4	-	-
	Asian & Pacific Islander	14	-	-	-	1	-	-	-	-	-	-	9	-	-	-
	Non-Hispanic White	360	1	1	3	-	-	-	1	2	1	-	220	1	1	2
	Non-Hispanic Black	1,174	8	13	7	6	12	9	7	7	4	7	605	2	6	4
	Other or Unknown	132	-	-	-	-	-	-	-	-	-	-	66	-	-	-
25-34	Total	17,109	52	77	49	37	40	34	29	28	28	31	12,326	32	48	32
	Puerto Rican	3,535	8	8	7	11	2	3	5	4	5	3	2,466	3	5	6
	Other Hispanic	1,808	4	11	3	8	8	6	4	3	2	3	1,439	4	10	2
	Asian & Pacific Islander	92	1	-	1	-	2	1	-	-	1	1	78	-	-	-
	Non-Hispanic White	4,063	3	6	5	1	3	1	2	1	1	-	3,383	2	4	5
	Non-Hispanic Black	6,715	35	52	33	17	25	23	17	19	18	24	4,287	22	29	19
	Other or Unknown	896	1	-	-	-	-	-	1	1	1	-	673	1	-	-
35-44	Total	31,631	311	246	190	142	125	90	73	60	64	54	24,242	177	144	111
	Puerto Rican	5,769	64	57	45	34	28	17	22	12	8	7	4,293	41	30	26
	Other Hispanic	2,664	27	37	28	19	8	4	3	7	5	10	2,179	17	23	16
	Asian & Pacific Islander	195	2	3	1	-	1	2	3	1	3	1	181	1	3	1
	Non-Hispanic White	8,307	46	34	18	16	12	15	7	10	4	5	7,237	32	22	12
	Non-Hispanic Black	13,103	168	113	98	71	76	49	37	28	40	30	9,076	83	65	56
	Other or Unknown	1,593	4	2	-	2	-	3	1	2	4	1	1,276	3	1	-
45-54	Total	17,364	448	425	352	330	287	217	215	167	143	106	13,921	289	275	225
	Puerto Rican	3,210	84	89	65	85	75	46	55	34	38	16	2,463	58	56	51
	Other Hispanic	1,361	43	46	46	29	15	14	14	16	9	13	1,165	32	33	35
	Asian & Pacific Islander	122	-	5	-	3	-	-	1	1	1	1	112	-	3	-
	Non-Hispanic White	4,340	61	45	35	37	41	28	28	16	15	11	3,931	40	37	25
	Non-Hispanic Black	7,459	256	231	200	173	150	123	111	87	76	58	5,496	156	139	111
	Other or Unknown	872	4	9	6	3	6	6	6	13	4	7	754	3	7	3
55-64	Total	5,531	213	231	241	239	213	169	172	174	141	150	4,621	154	173	164
	Puerto Rican	960	39	49	49	51	54	34	42	24	33	25	746	23	38	30
	Other Hispanic	488	18	15	18	11	9	5	11	13	4	21	416	13	13	12
	Asian & Pacific Islander	46	1	-	-	2	-	2	3	-	-	1	38	1	-	-
	Non-Hispanic White	1,378	22	32	21	36	30	24	21	20	16	15	1,271	19	30	17
	Non-Hispanic Black	2,397	128	131	150	136	112	101	92	106	80	78	1,919	96	88	102
	Other or Unknown	262	5	4	3	3	8	3	3	11	8	10	231	2	4	3
≥65	Total	1,610	70	77	86	76	85	86	82	85	99	84	1,280	49	55	65
	Puerto Rican	212	22	11	19	14	23	13	14	14	16	19	162	14	9	12
	Other Hispanic	150	6	9	7	5	6	6	2	4	8	7	126	6	5	6
	Asian & Pacific Islander	18	1	2	1	-	1	-	1	-	-	2	13	1	1	1
	Non-Hispanic White	412	10	11	8	10	8	12	14	13	13	14	359	9	10	7
	Non-Hispanic Black	745	30	43	49	46	46	54	47	51	59	34	557	18	29	37
	Other or Unknown	73	1	1	2	1	1	1	4	3	3	8	63	1	1	2

Note: See Technical Notes: Deaths, HIV and AIDS Mortality.

* Beginning in 2003, multiple races are included in the "Other or Unknown" category in this table. See Technical Notes: Demographic Characteristics of Vital Events: Race, Ancestry, and Ethnic Group.

MORTALITY

New York City, 1983-2016

MALE							FEMALE										
2010	2011	2012	2013	2014	2015	2016	1983-2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
574	528	402	398	359	332	296	17,936	404	371	330	258	238	207	181	164	151	136
135	123	75	94	56	68	50	3,755	82	79	62	61	63	40	44	32	34	20
54	39	28	28	36	19	44	1,248	27	34	34	18	7	9	6	7	10	10
3	2	4	5	1	3	6	56	2	3	1	3	2	1	3	1	2	-
76	75	63	53	50	40	36	2,459	40	25	22	24	19	17	20	12	10	9
297	277	223	204	196	185	140	9,653	248	227	208	152	144	136	107	102	92	91
9	12	9	14	20	17	20	765	5	3	3	-	3	4	1	10	3	6
4	13	6	6	7	5	2	1,081	11	10	9	4	3	7	2	2	3	5
-	2	-	-	-	2	-	199	4	3	2	1	2	2	-	-	-	-
-	-	1	-	-	-	-	102	1	-	3	-	-	1	-	-	1	-
1	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-
-	-	-	-	2	1	-	140	-	-	1	-	-	-	1	-	-	-
3	11	5	6	5	2	2	569	6	7	3	3	1	4	1	2	2	5
-	-	-	-	-	-	-	66	-	-	-	-	-	-	-	-	-	-
27	29	24	27	17	21	24	4,783	20	29	17	10	11	10	2	11	7	7
7	2	2	5	.	2	2	1,069	5	3	1	4	-	1	-	4	3	1
6	7	5	4	3	2	3	369	-	1	1	2	1	1	-	-	-	-
-	1	1	-	-	1	1	14	1	-	1	-	1	-	-	-	-	-
1	2	1	1	1	1	-	680	1	2	-	-	1	-	1	-	-	-
13	17	15	16	12	14	18	2,428	13	23	14	4	8	8	1	7	4	6
-	-	-	1	1	1	-	223	-	-	-	-	-	-	-	-	-	-
94	77	54	45	33	32	31	7,389	134	102	79	48	48	36	28	27	32	23
20	17	10	10	4	6	6	1,476	23	27	19	14	11	7	12	8	2	1
14	8	1	3	5	2	8	485	10	14	12	5	-	3	-	2	3	2
-	-	1	1	-	1	1	14	1	-	-	-	1	1	2	1	2	-
11	10	13	3	7	1	4	1,070	14	12	6	5	2	2	4	3	3	1
47	42	28	27	16	20	12	4,027	85	48	42	24	34	21	10	12	20	18
2	-	1	1	1	2	-	317	1	1	-	-	-	2	-	1	2	1
219	183	136	140	115	97	63	3,443	159	150	127	111	104	81	75	52	46	43
62	43	29	38	22	25	10	747	26	33	14	23	32	17	17	12	13	6
20	12	12	10	13	7	11	196	11	13	11	9	3	2	4	3	2	2
1	-	-	1	1	1	1	10	-	2	-	2	-	-	-	-	-	-
28	30	22	20	13	11	8	409	21	8	10	9	11	6	8	3	4	3
105	95	69	65	55	50	28	1,963	100	92	89	68	55	54	46	32	26	30
3	3	4	6	11	3	5	118	1	2	3	-	3	2	-	2	1	2
179	159	120	118	130	103	109	910	59	58	77	60	54	49	54	44	38	41
38	41	25	33	21	20	19	214	16	11	19	13	13	9	9	3	13	6
10	7	4	10	11	1	16	72	5	2	6	1	2	1	1	2	3	5
1	-	2	2	-	-	1	8	-	-	-	1	-	-	1	-	-	-
28	25	19	16	18	15	12	107	3	2	4	8	5	5	5	2	1	3
99	78	67	54	75	59	54	478	32	43	48	37	34	34	38	31	21	24
3	8	3	3	5	8	7	31	3	-	-	-	-	-	-	6	-	3
51	67	62	62	57	74	67	330	21	22	21	25	18	24	20	28	25	17
8	18	9	8	9	13	13	50	8	2	7	6	5	4	6	5	3	6
4	5	5	1	4	7	6	24	-	4	1	1	1	1	1	-	1	1
-	1	-	1	-	-	2	5	-	1	-	-	-	-	-	-	-	-
8	8	8	13	9	11	12	53	1	1	1	2	-	4	1	4	2	2
30	34	39	36	33	40	26	188	12	14	12	16	12	15	11	18	19	8
1	1	1	3	2	3	8	10	-	-	-	-	-	-	1	1	-	-

Table M17. Selected Characteristics of Deaths Due to Fatal Occupational Injuries, New York City, 2016*

Characteristics	All Deaths	Selected event or exposure†‡					
		Violence and other injuries by persons or animals	Transportation incidents	Fires and explosions	Falls, slips, trips	Exposure to harmful substances or environments	Contact with objects and equipment
Total	56	20	7		13	5	9
Selected Industries							
Government§ (Federal, State, Local)	9					3	
Private industry§	47	18	6		11		9
Goods producing	22	4			9		7
Construction & Manufacturing	21	3			9		7
Service providing	25	14	5				
Trade, transportation, and utilities	10	5					
Financial activities							
Professional and business services	3						
Educational and health services							
Leisure and hospitality	6	3					
Other services, except public adminstration							
Sex							
Female							
Male	54	18	7		13	5	9
Race or ethnic origin||							
Non-Hispanic white	18	6			4		4
Non-Hispanic black	14	8				3	
Hispanic	20	5			6		5
Asian	4						
Age							
< 25 years	3						
25-34 years	9	5					
35-44 years	13	6					3
45-54 years	14	4	4				
55-64 years	14	5			5		
> 65 years	3						

*Source Bureau of Labor Statistics: Fatal Occupational Injuries in New York City http://www.bls.gov/iif/oshwc/cfoi/tgs/2016/iiffw68.htm.

†Based on the BLS Occupational Injury and Illness Classification System (OIICS) 2.01 implemented for 2011 data forward

Table M18. Deaths Due to Accidents, Overall and by Age and Sex, New York City, 2016

Type	All Ages	0-4		5-9		10-14		15-19		20-24		25-34		35-44		45-54		55-64		65-74		≥75	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total	2,317	9	10	5	0	1	2	17	8	99	18	279	70	261	83	366	117	326	113	131	63	174	165
Motor Vehicle Except Injury to Pedestrian, Pedal Cyclist, and Motorcyclist	51	1	-	-	-	-	-	-	-	6	3	8	1	6	1	1	-	4	5	4	1	6	
Injury to Pedestrians	171	1	1	-	-	1	2	3	1	7	2	16	1	14	4	18	10	14	17	14	14	17	14
Collision with motor vehicle	153	1	1	-	-	-	2	1	1	7	2	13	1	9	4	15	10	12	17	13	14	16	1
Collision with railway transportation	16	-	-	-	-	1	-	1	-	-	-	3	-	5	-	2	-	2	-	1	-	1	
Other collision	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	
Injury to Pedal Cyclist	22	-	-	-	-	-	-	1	-	-	-	4	4	2	-	3	1	4	-	1	1	1	
Collision with motor vehicle	17	-	-	-	-	-	-	1	-	-	-	4	4	2	-	3	-	1	-	1	1	-	
Other collision	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	1	
Injury to Motorcyclist	17	-	-	-	-	-	-	-	-	3	-	6	-	3	-	2	-	3	-	-	-	-	
Water Transport Accidents	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	
Air and Space Transport Accidents	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other Transport Accidents	10	-	-	-	-	-	-	1	1	1	-	3	-	1	-	1	-	-	-	1	-	-	
Sequelae (Late Effects) of Transport Accidents	20	-	-	-	-	-	-	-	-	-	1	2	-	1	-	2	1	6	2	2	-	2	
Fall	449	2	1	1	-	-	-	1	1	3	1	11	3	8	4	28	6	54	11	44	26	123	12
Firearm Discharge	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Drowning and Submersion	6	-	-	1	-	-	-	2	-	-	-	2	-	-	-	-	-	1	-	-	-	-	
Smoke, Fire, and Flames	40	1	1	-	-	-	-	-	-	-	-	2	2	1	1	3	1	5	3	8	3	4	
Poisoning by Noxious Substances	1,404	-	-	-	-	-	-	8	5	75	11	218	57	213	70	292	96	218	71	48	14	7	
Poisoning by psychoactive substances*	1,320	-	-	-	-	-	-	8	5	72	11	205	55	199	65	277	92	205	62	46	13	4	
Poisoning by other noxious substances	84	-	-	-	-	-	-	-	-	3	-	13	2	14	5	15	4	13	9	2	1	3	
Exposure to Excessive Natural Heat	3	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	1	-	-	
Exposure to Excessive Natural Cold	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	3	-	1	-	-	
Suffocation	47	4	5	2	-	-	-	-	-	2	-	2	-	1	1	3	1	7	2	3	2	6	
Contact with Machinery	4	-	-	-	-	-	-	-	-	-	-	1	-	2	-	1	-	-	-	-	-	-	
Other Nontransport Accidents	52	-	2	1	-	-	-	-	-	2	-	3	2	8	1	6	1	4	2	1	2	6	1
Sequelae (Late Effects) of Nontransport Accidents	14	-	-	-	-	-	-	1	-	-	-	1	-	-	1	4	-	1	-	3	-	2	

*See Technical Notes: Deaths, Drug-Related Deaths.

Table M19. Deaths Due to Intentional Self-harm (Suicide), Overall and by Age and Sex, New York City, 2016

Method	All Ages	0-4		5-9		10-14		15-19		20-24		25-34		35-44		45-54		55-64		65-74		≥75	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total	525	0	0	0	0	3	0	12	5	27	17	59	31	63	24	71	30	64	28	35	16	25	15
Poisoning by Drug and Medicinal Substances	86	-	-	-	-	-	-	-	1	-	3	3	6	5	8	10	7	15	7	5	5	6	5
Poisoning by Other Substances	5	-	-	-	-	-	-	-	-	-	-	1	-	-	-	3	1	-	-	-	-	-	-
Hanging, Strangulation, and Suffocation	187	-	-	-	-	2	-	4	1	8	10	19	11	23	11	28	11	24	11	11	3	6	4
Drowning and Submersion	21	-	-	-	-	-	-	1	-	2	-	-	2	4	-	2	1	3	.	2	3	.	1
Firearm Discharge	56	-	-	-	-	-	-	2	-	5	-	7	3	9	-	6	1	5	.	7	2	8	1
Sharp Object	22	-	-	-	-	-	-	-	-	-	-	2	-	6	-	5	1	3	2	3	-	-	-
Blunt Object	1					-		-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Jumping From High Place	103	-	-	-	-	1	-	3	1	9	2	17	7	9	3	10	7	10	7	6	3	5	3
Jumping or Lying Before Moving Object	38	-	-	-	-	-	-	2	2	2	2	7	2	6	2	6	1	3	1	1	-	-	1
Other and Unspecified Means	4	-	-	-	-	-	-	-	-	-	-	2	-	-	-	1	-	1	-	-	-	-	-
Sequelae (Late Effects)	2	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-

Table M20. Deaths Due to Assault (Homicide) and Legal Intervention, Overall and by Age and Sex, New York City, 2016

Method	All Ages	0-4		5-9		10-14		15-19		20-24		25-34		35-44		45-54		55-64		65-74		≥75	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total	368	5	9	1	1	0	0	23	2	62	8	82	13	55	12	27	11	28	8	8	5	5	3
Poisoning by Noxious Substances	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hanging, Strangulation, and Suffocation	13	1	-	-	1	-	-	-	-	-	-	2	3	2	1	-	-	-	1	-	-	1	1
Drowning and Submersion	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Firearm Discharge	208	-	-	-	-	-	-	17	1	53	5	60	6	34	4	14	4	8	1	-	-	1	-
Smoke, Fire, and Flames	3	-	2	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Sharp Object	69	-	2	-	-	-	-	6	-	7	2	13	3	9	4	2	5	10	3	1	1	1	-
Blunt Object	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pushing From High Place	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bodily Force	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neglect, Abandonment, and Other Maltreatment	4	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other and Unspecified Means	50	3	1	-	-	-	-	-	1	1	1	2	1	7	3	5	2	7	3	7	2	2	2
Sequelae (Late Effects)	13	-	-	-	-	-	-	-	-	1	-	3	-	1	-	4	-	3	-	-	1	-	-
Legal Intervention, All*	6	-	-	-	-	-	-	-	-	-	-	2	-	1	-	2	-	-	-	-	1	-	-

* Four of 5 legal intervention deaths are from firearm discharge. See Technical Notes: Deaths, Homicide.

Table M21. Deaths Due to Events of Undetermined Intent, Overall and by Age and Sex, New York City, 2016

Method	All Ages	0-4		5-9		10-14		15-19		20-24		25-34		35-44		45-54		55-64		65-74		≥75	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total	259	17	18	0	1	3	1	4	2	16	3	28	13	16	11	40	11	24	9	13	13	9	7
Poisoning by Noxious Substances	23	-	-	-	-	-	-	-	-	-	-	5	2	2	2	3	1	1	4	1	2	-	-
Hanging, Strangulation, and Suffocation	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drowning and Submersion	12	1	-	-	-	-	-	1	-	3	1	2	-	-	-	2	1	1	-	-	-	-	-
Firearm Discharge	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smoke, Fire, and Flames	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sharp or Blunt Object	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Falling From High Place	18	-	-	-	-	-	-	1	-	4	-	4	1	4	-	3	-	-	1	-	-	-	-
Other and Unspecified Means	203	16	18	-	1	2	1	2	2	9	2	16	10	9	9	32	9	22	4	12	11	9	7
Sequelae (Late Effects)	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-

Table M22. Deaths Due to Complications of Medical and Surgical Care, Overall and by Age and Sex, New York City, 2016

Method	All Ages	0-4		5-9		10-14		15-19		20-24		25-34		35-44		45-54		55-64		65-74		≥75	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total	31	0	0	0	0	0	0	0	0	1	0	0	0	1	1	2	3	3	1	3	6	5	5
Adverse Effects From Drugs, Medicaments, Biological Substances for Therapeutic Use	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1	-
Medical Misadventures to Patients During Surgical and Medical Care	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1
Adverse Effects from Medical Devices for Therapeutic Use	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other and Unspecified Means	25	-	-	-	-	-	-	-	-	1	-	-	-	1	1	2	2	2	1	2	6	3	4
Sequelae (Late Effects)	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table M23. Deaths Due to Firearms (All Causes), Overall and by Age and Sex, New York City, 2016

Method	All Ages	0-4		5-9		10-14		15-19		20-24		25-34		35-44		45-54		55-64		65-74		≥75	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Firearms (All Causes)	269	-	-	-	-	-	-	19	1	58	5	69	9	44	4	21	5	13	1	7	3	9	1

MORTALITY

Table M24. Life Expectancy at Specified Ages, Overall and by Sex and Racial/Ethnic Group, New York City, 1999-2001 and 2009-2011*

Exact Age in Years	All							
	1999-2001†				2009-2011			
	Total	Hispanic	Non-Hispanic White	Non-Hispanic Black	Total	Hispanic	Non-Hispanic White	Non-Hispanic Black
0	77.6	79.7	77.7	73.2	80.8	81.9	81.2	76.9
1	77.1	79.0	77.3	73.0	80.2	81.2	80.5	76.6
5	73.2	75.0	73.4	59.0	76.2	77.3	76.5	72.7
10	65.2	70.0	68.5	64.2	71.3	72.3	71.5	67.8
15	63.3	65.1	63.6	59.3	66.3	67.4	66.6	62.8
20	58.4	60.2	58.7	54.5	61.5	62.5	61.7	58.0
25	53.6	55.4	53.9	49.9	56.6	57.6	56.8	53.3
30	48.8	50.5	49.0	45.2	51.8	52.8	51.9	48.6
35	44.1	45.8	44.3	40.7	47.0	48.0	47.0	43.9
40	39.5	41.2	39.6	36.3	42.2	43.2	42.2	39.3
45	35.0	36.7	35.1	32.1	37.6	38.6	37.5	34.9
50	30.7	32.4	30.7	28.2	33.1	34.1	33.0	30.7
55	26.6	28.2	26.5	24.4	28.8	29.8	28.7	26.6
60	22.6	24.1	22.4	20.8	24.7	25.6	24.5	22.9
65	18.8	20.2	18.6	17.5	20.7	21.6	20.5	19.3
70	15.3	16.7	15.1	14.5	17.0	17.8	16.7	16.0
75	12.1	13.3	11.8	11.3	13.4	14.3	13.1	12.9
80	9.2	10.4	8.9	9.3	10.3	11.0	10.0	10.1
85	6.7	7.7	6.4	7.1	7.5	8.1	7.1	7.6
Exact Age in Years	Male							
	1999-2001†				2009-2011			
	Total	Hispanic	Non-Hispanic White	Non-Hispanic Black	Total	Hispanic	Non-Hispanic White	Non-Hispanic Black
0	74.5	76.1	74.9	69.1	78.1	78.6	78.8	73.3
1	74.0	75.4	74.5	69.0	77.5	77.9	78.1	73.0
5	70.1	71.4	70.6	65.1	73.5	74.0	74.1	69.1
10	65.2	66.5	65.7	60.2	68.6	69.0	69.2	64.2
15	60.2	61.5	60.8	55.3	63.6	64.1	64.2	59.2
20	55.4	56.6	55.9	50.6	58.8	59.2	59.4	54.5
25	50.7	51.9	51.2	46.1	54.0	54.4	54.6	49.9
30	46.0	47.1	46.4	41.6	49.2	49.6	49.7	45.4
35	41.3	42.5	41.7	37.2	44.5	44.9	44.9	40.8
40	36.8	37.9	37.1	32.9	39.8	40.2	40.1	36.3
45	32.4	33.6	32.7	28.8	35.2	35.7	35.4	32.0
50	28.3	29.5	28.5	25.2	30.8	31.3	31.0	27.9
55	24.4	25.6	24.4	21.8	26.7	27.2	26.8	24.0
60	20.6	21.8	20.5	18.4	22.7	23.2	22.8	20.5
65	17.0	18.2	16.9	15.3	19.0	19.5	19.0	17.2
70	13.8	14.9	13.6	12.6	15.5	16.1	15.3	14.2
75	10.8	12.0	10.6	10.2	12.2	13.0	12.0	11.4
80	8.2	9.4	7.9	8.2	9.3	10.1	9.0	9.0
85	6.1	7.3	5.7	6.6	6.8	7.5	6.5	6.9
Exact Age in Years	Female							
	1999-2001†				2009-2011			
	Total	Hispanic	Non-Hispanic White	Non-Hispanic Black	Total	Hispanic	Non-Hispanic White	Non-Hispanic Black
0	80.2	82.6	80.4	76.5	83.2	84.7	83.4	79.8
1	79.7	81.9	79.9	76.2	82.5	84.0	82.6	79.4
5	75.8	77.9	76.0	72.3	78.6	80.0	78.7	75.5
10	70.8	72.9	71.1	67.4	73.6	75.0	73.7	70.6
15	65.9	68.0	66.1	62.4	68.7	70.1	68.7	65.6
20	61.0	63.0	61.2	57.5	63.7	65.1	63.8	60.7
25	56.1	58.1	56.4	52.7	58.8	60.2	58.9	55.8
30	51.2	53.2	51.4	47.9	53.9	55.3	53.9	51.0
35	46.4	48.4	46.6	43.3	49.0	50.4	49.0	46.2
40	41.7	43.7	41.8	38.8	44.2	45.6	44.1	41.5
45	37.1	39.1	37.2	34.4	39.5	40.8	39.4	37.0
50	32.6	34.5	32.6	30.3	34.9	36.2	34.8	32.7
55	28.3	30.0	28.2	26.3	30.5	31.7	30.3	28.5
60	24.1	25.7	23.9	22.4	26.1	27.3	25.9	24.5
65	20.1	21.5	19.9	18.8	21.9	23.0	21.6	20.7
70	16.4	17.7	16.1	15.5	18.0	18.9	17.7	17.1
75	12.9	14.1	12.6	12.5	14.2	15.1	13.9	13.7
80	9.7	10.8	9.4	9.8	10.8	11.5	10.5	10.6
85	7.0	7.9	6.7	7.3	7.8	8.4	7.5	7.8

Note: Three-year average death data are used to estimate above decennial life expectancy to smooth the outcome. See Technical Notes: Life Expectancy.

* US Census population data for 2000 and 2010 are used to calculate 1999-2001 and 2009-2011 life expectancy, respectively. See Technical Notes: Population.

† World Trade Center (WTC) disaster deaths are excluded. See Special Section in 2002 Summary of Vital Statistics, Table WTC10, for the impact of WTC deaths on life expectancy in New York City.

MORTALITY

Table M25. Life Expectancy at Specified Ages, Overall and by Sex, New York City, 2007-2016

Age in years	Total									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
0	80.1	80.2	80.6	80.9	80.9	81.1	81.1	81.3	81.2	81.2
1	79.6	79.6	80.0	80.3	80.3	80.5	80.4	80.6	80.5	80.5
5	75.6	75.7	76.1	76.3	76.3	76.5	76.5	76.6	76.6	76.5
10	70.7	70.7	71.1	71.4	71.4	71.6	71.5	71.7	71.6	71.6
15	65.7	65.8	66.2	66.4	66.4	66.6	66.6	66.8	66.7	66.6
20	60.8	60.9	61.3	61.6	61.5	61.7	61.6	61.8	61.7	61.7
25	56.0	56.1	56.4	56.7	56.7	56.9	56.8	57.0	56.9	56.8
30	51.2	51.3	51.6	51.9	51.9	52.0	51.9	52.1	52.1	52.0
35	46.3	46.5	46.8	47.1	47.1	47.2	47.1	47.3	47.3	47.2
40	41.6	41.7	42.0	42.3	42.3	42.5	42.4	42.6	42.5	42.5
45	37.0	37.1	37.4	37.6	37.6	37.8	37.7	37.9	37.8	37.8
50	32.6	32.7	33.0	33.1	33.2	33.3	33.1	33.3	33.2	33.2
55	28.4	28.4	28.7	28.8	28.8	28.9	28.8	28.9	28.9	28.9
60	24.3	24.3	24.6	24.7	24.7	24.7	24.6	24.7	24.6	24.7
65	20.4	20.4	20.6	20.8	20.7	20.7	20.6	20.7	20.6	20.6
70	16.6	16.7	16.9	17.0	17.0	17.0	16.9	17.0	16.9	17.0
75	13.1	13.2	13.4	13.5	13.4	13.5	13.4	13.6	13.5	13.6
80	10.0	10.0	10.2	10.3	10.3	10.4	10.4	10.5	10.5	10.6
85	7.4	7.3	7.5	7.5	7.4	7.5	7.4	7.5	7.4	7.6
Age in years	Male									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
0	77.3	77.5	77.8	78.1	78.2	78.4	78.3	78.5	78.6	78.5
1	76.8	76.9	77.3	77.5	77.6	77.8	77.7	77.9	77.9	77.8
5	72.9	73.0	73.3	73.6	73.6	73.9	73.8	74.0	74.0	73.8
10	67.9	68.0	68.4	68.6	68.7	68.9	68.8	69.0	69.0	68.9
15	62.9	63.1	63.4	63.6	63.8	64.0	63.9	64.1	64.1	63.9
20	58.1	58.2	58.6	58.8	58.9	59.1	59.0	59.2	59.2	59.0
25	53.4	53.5	53.8	54.1	54.2	54.3	54.2	54.4	54.4	54.2
30	48.6	48.7	49.1	49.3	49.4	49.6	49.4	49.6	49.6	49.4
35	43.8	44.0	44.3	44.5	44.6	44.8	44.6	44.9	44.9	44.7
40	39.1	39.3	39.6	39.8	39.9	40.1	39.9	40.2	40.2	40.1
45	34.7	34.8	35.0	35.2	35.3	35.5	35.3	35.5	35.5	35.5
50	30.4	30.5	30.7	30.8	30.9	31.1	30.9	31.1	31.0	31.0
55	26.3	26.4	26.6	26.7	26.7	26.9	26.6	26.8	26.8	26.7
60	22.4	22.5	22.6	22.7	22.8	22.8	22.6	22.8	22.7	22.7
65	18.7	18.7	18.9	19.0	19.1	19.1	18.8	19.0	18.8	18.8
70	15.1	15.3	15.4	15.5	15.5	15.6	15.4	15.6	15.5	15.5
75	11.8	12.1	12.2	12.2	12.3	12.3	12.2	12.4	12.2	12.3
80	9.0	9.1	9.3	9.3	9.4	9.4	9.4	9.5	9.5	9.6
85	6.7	6.7	6.8	6.8	6.8	6.8	6.7	6.7	6.7	6.7
Age in years	Female									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
0	82.5	82.6	83.0	83.3	83.2	83.4	83.4	83.6	83.5	83.5
1	81.9	82.0	82.3	82.7	82.6	82.7	82.7	82.9	82.8	82.8
5	78.0	78.0	78.4	78.7	78.6	78.8	78.8	79.0	78.8	78.9
10	73.0	73.1	73.4	73.8	73.7	73.8	73.8	74.0	73.9	73.9
15	68.1	68.1	68.5	68.8	68.7	68.9	68.9	69.0	68.9	68.9
20	63.1	63.2	63.5	63.9	63.8	63.9	63.9	64.1	63.9	64.0
25	58.2	58.3	58.6	58.9	58.9	59.0	59.0	59.2	59.0	59.1
30	53.3	53.4	53.7	54.0	53.9	54.1	54.1	54.3	54.1	54.2
35	48.4	48.5	48.8	49.1	49.1	49.2	49.2	49.4	49.3	49.3
40	43.6	43.7	44.0	44.3	44.2	44.4	44.4	44.6	44.5	44.5
45	38.9	39.0	39.3	39.6	39.5	39.6	39.6	39.8	39.7	39.8
50	34.4	34.5	34.8	35.0	34.9	35.0	35.0	35.1	35.1	35.1
55	30.0	30.0	30.4	30.5	30.5	30.5	30.5	30.6	30.5	30.6
60	25.7	25.7	26.0	26.2	26.1	26.2	26.1	26.2	26.2	26.2
65	21.6	21.6	21.9	22.0	21.9	22.0	21.9	22.0	21.9	22.0
70	17.6	17.6	17.9	18.1	18.0	18.0	18.0	18.0	17.9	18.0
75	13.9	13.9	14.2	14.4	14.2	14.3	14.3	14.3	14.3	14.5
80	10.6	10.6	10.8	10.9	10.8	11.0	11.0	11.1	11.1	11.2
85	7.7	7.6	7.8	7.8	7.7	7.8	7.8	7.9	7.8	8.0

Note: Population data from 2007-2009 are interpolated based on 2000 and 2010 Census counts. Population data for 2011-2016 are extrapolated from 2000 and 2010 US Census since the life tables are derived from complete life table which require single year of age population data. See Technical Notes: Population.

Table M26. Years of Potential Life Lost (YPLL)* Before Age 75, Overall and by Sex and Selected Causes of Death, New York City, 2016

	All		Male		Female	
Cause of Death	YPLL	%	YPLL	%	YPLL	%
Total	444,750	100.0	273,550	100.0	171,200	100.0
Malignant Neoplasms	108,429	24.4	53,990	19.7	54,439	31.8
Trachea, bronchus, and lung	16,311	3.7	8,926	3.3	7,385	4.3
Breast	11,218	2.5	60	0.0	11,158	6.5
Colon, rectum, and anus	10,383	2.3	5,722	2.1	4,661	2.7
Pancreas	7,775	1.7	4,606	1.7	3,169	1.9
Liver & intrahepatic bile ducts	6,940	1.6	5,488	2.0	1,452	0.8
Heart Disease	73,999	16.6	50,786	18.6	23,213	13.6
Use of or Poisoning by Psychoactive Substance	44,912	10.1	34,679	12.7	10,233	6.0
Accidents Except Poisoning by Psychoactive Substance	17,640	4.0	13,253	4.8	4,387	2.6
Motor vehicle	6,163	1.4	4,514	1.7	1,649	1.0
Intentional Self-harm (Suicide)	15,005	3.4	10,260	3.8	4,745	2.8
Assault (Homicide)	14,530	3.3	11,762	4.3	2,768	1.6
Diabetes Mellitus	13,141	3.0	7,379	2.7	5,762	3.4
Cerebrovascular Diseases	9,593	2.2	5,741	2.1	3,852	2.3
HIV Disease	8,978	2.0	5,834	2.1	3,144	1.8
Chronic Lower Respiratory Diseases	8,956	2.0	4,850	1.8	4,106	2.4
Influenza and Pneumonia	8,086	1.8	4,669	1.7	3,417	2.0
Chronic Liver Disease and Cirrhosis	8,036	1.8	5,919	2.2	2,117	1.2
Mental and Behavioral Disorders Due to Use of Alcohol	5,745	1.3	4,658	1.7	1,087	0.6
Viral Hepatitis	3,338	0.8	2,115	0.8	1,223	0.7
All Other Causes	104,362	23.5	57,655	21.1	46,707	27.3

*See Technical Notes: Deaths, Years of Potential Life Lost for detailed calculation.

Table M27. Death Rates by Poverty Level Indicator, New York City, 2007 and 2016

Age-adjusted Death Rates	Low (<10%)			Medium (10 to <20%)			High (20 to <30%)			Very High (≥30%)		
	2016	2007	Chg 2007 to 2016 (%)	2016	2007	Chg 2007 to 2016 (%)	2016	2007	Chg 2007 to 2016 (%)	2016	2007	Chg 2007 to 2016 (%)
All Causes	447.3	526.2	-15.0%	490.0	597.7	-18.0%	541.9	658.5	-17.7%	682.7	785.5	-13.1%
Premature Deaths	115.0	139.1	-17.3%	142.7	174.6	-18.3%	173.1	219.8	-21.2%	262.5	305.8	-14.2%
10 Leading Causes												
Diseases of Heart	146.3	219.9	-33.5%	161.9	259.2	-37.5%	180.0	262.6	-31.5%	204.0	284.0	-28.2%
Malignant Neoplasms	117.9	140.1	-15.8%	119.3	137.9	-13.5%	125.3	147.6	-15.1%	152.6	168.5	-9.4%
Influenza and Pneumonia	15.0	22.4	-33.0%	19.9	26.8	-25.7%	22.8	29.0	-21.4%	25.3	30.1	-15.9%
Cerebrovascular Diseases	14.6	15.1	-3.3%	17.5	16.4	6.7%	18.0	20.0	-10.0%	22.8	23.6	-3.4%
Diabetes Mellitus	9.8	11.1	-11.7%	17.3	16.4	5.5%	20.2	23.3	-13.3%	30.7	33.9	-9.4%
Chronic Lower Respiratory Diseases	14.8	15.8	-6.3%	13.9	15.7	-11.5%	16.7	16.2	3.1%	23.0	22.5	2.2%
Use of or Poisoning by Psychoactive Substance	12.0	5.7	110.5%	10.9	7.5	45.3%	13.6	9.6	41.7%	23.4	17.3	35.3%
Essential Hypertension and Hypertensive Renal Diseases	8.3	6.8	22.1%	9.7	7.8	24.4%	12.4	12.2	1.6%	16.7	14.9	12.1%
Alzheimers	9.3	3.3	181.8%	9.4	2.9	224.1%	11.5	3.0	283.3%	14.1	4.1	243.9%
Accidents Except Poisoning by Psychoactive Substances	7.6	8.4	-9.5%	7.6	12.2	-37.7%	11.5	13.2	-12.9%	12.3	13.7	-10.2%

Note: The 2007 poverty level is based on 2005-2009 US Census Bureau American Community Survey and the 2016 poverty level is based on 2010-2016 US Census Bureau American Community Survey.

MORTALITY

M28. Top 10 Leading Causes of Death, New York City, 2016, 2015 and 2007

Cause	Rank	Crude Death Rate	Rank	Crude Death Rate	Change to 2016 (%)	Rank	Crude Death Rate	Change to 2016 (%)
Diseases of Heart*	1	201.0	1	200.3	0.3%	1	259.1	-22.4%
Malignant Neoplasms	2	158.5	2	155.8	1.7%	2	160.1	-1.0%
Influenza and Pneumonia	3	23.6	3	24.5	-3.7%	3	27.2	-13.2%
Cerebrovascular Diseases	4	21.6	5	21.6	0.0%	4	18.9	14.3%
Diabetes Mellitus	5	21.0	4	21.7	-3.2%	5	18.9	11.1%
Chronic Lower Respiratory Diseases	6	19.5	6	20.6	-5.3%	6	17.2	13.4%
Use of or Poisoning by Psychoactive Substance†	7	17.5	10	12.3	42.3%	9	10.3	69.9%
Essential Hypertension and Renal Diseases	8	13.2	7	12.9	2.3%	10	9.6	37.5%
Alzheimer's Disease	9	12.9	8	12.6	2.4%	17	3.4	279.4%
Accidents Except Drug Poisoning	10	11.7	9	12.4	-5.6%	8	12.5	-6.4%

*See the *2010 Summary of Vital Statistics: Mortality – Special Section: Cause of Death Quality Improvement Initiative* for information on the recent trends in cause of death reporting, particularly heart disease.

†Appendix B Technical Notes: Drug-Related Deaths.

INFANT MORTALITY

Table IM1. Infant Deaths by Cause, Sex, and Age, New York City, 2016

	Cause of Death (ICD-10 Codes)	Total	Male		Female	
			Neonatal (<28 Days)	Post-Neonatal	Neonatal (<28 Days)	Post-Neonatal
	Total	**491**	**160**	**94**	**152**	**85**
1	HIV Infection (B20-B24)*	-	-	-	-	-
2	Diseases of the Circulatory System (I00-I99)*	6	1	1	1	3
3	Influenza and Pneumonia (J10-J18)*	3	-	-	-	3
4	Newborn Affected by Maternal Complications of Pregnancy (P01)*	8	4	1	3	-
5	Newborn Affected by Complications of Placenta, Cord, and Membranes (P02)*	20	10	1	9	-
6	Short Gestation and Low Birthweight (P07)*	77	37	9	29	2
7	Intrauterine Hypoxia and Birth Asphyxia (P20-P21)*	5	2	-	3	-
8	Respiratory Distress of Newborn (P22)*	13	7	-	6	-
9	Pulmonary Hemorrhage Originating in the Perinatal Period (P26)*	8	5	-	3	-
10	Atelectasis (P28.0-P28.1)*	3	2	-	1	-
11	Other Respiratory Conditions Originating in the Perinatal Period (P23-P28)†	8	1	1	6	-
12	Cardiovascular Disorders Originating in the Perinatal Period (P29)†	57	31	-	26	-
13	Infections Specific to the Perinatal Period (P35-P39)†	14	5	-	6	3
	Bacterial sepsis of newborn (P36)	9	3	-	6	-
14	Neonatal Hemorrhage (P50-P52, P54)*	8	3	-	5	-
15	Necrotizing Enterocolitis of Newborn (P77)*	11	7	-	3	1
16	Remainder of Conditions Originating in the Perinatal Period (Rest of P00-P99)	19	8	-	10	1
17	Congenital Malformations, Deformations (Q00-Q99)*	105	30	20	33	22
	Congenital malformations of heart (Q20-Q24)	28	3	9	4	12
18	Sudden Infant Death Syndrome (R95)*	-	-	-	-	-
19	All Other Diseases (Rest of A00-R99)	79	6	44	4	25
20	External Causes (V01-Y89)†	47	1	17	4	25

*Causes are used to rank leading causes nationally and in New York City.

†Contains causes not eligible to be ranked as a leading cause nationally but frequent in New York City. Including these groups permits recognition of important causes of infant death.

Table IM2. Live Births and Infant Deaths by Mother's Racial/Ethnic Group and Characteristics of Infant, New York City, 2016

Characteristics	Live Births					Infant Deaths																			
						Total					Early-neonatal (< 7 days)					Neonatal (< 28 days)					Post-Neonatal (≥ 28 days)				
	Total	Hispanic	Non-H White	Non-H Black	Asian & P.I.	Total	Hispanic	Non-H White	Non-H Black	Asian & P.I.	Total	Hispanic	Non-H White	Non-H Black	Asian & P.I.	Total	Hispanic	Non-H White	Non-H Black	Asian & P.I.	Total	Hispanic	Non-H White	Non-H Black	Asian & P.I.
Total	120,367	34,074	40,633	22,465	21,566	491	126	105	180	62	230	58	48	76	37	312	82	65	109	43	179	44	40	71	19
Sex of Child																									
Male	61,632	17,360	20,973	11,220	11,198	254	60	57	96	35	117	30	27	38	18	160	39	38	57	22	94	21	19	39	13
Female	58,735	16,714	19,660	11,245	10,368	237	66	48	84	27	113	28	21	38	19	152	43	27	52	21	85	23	21	32	6
Birthweight at Delivery (Grams)																									
Low birthweight (< 2,500)	9,963	2,732	2,515	2,748	1,809	321	88	56	124	42	187	49	35	63	31	245	69	44	88	33	76	19	12	36	9
Very low birthweight (< 1,500)	1,654	470	337	595	216	260	71	43	101	38	164	43	27	59	29	213	62	35	78	31	47	9	8	23	7
2,500-4,000	102,868	29,041	35,002	18,560	18,894	128	26	36	44	18	35	5	11	12	5	55	8	18	18	9	73	18	18	26	9
Above 4,000	7,531	2,301	3,115	1,156	862	4	2	-	2	-	1	1	-	-	-	1	1	-	-	-	3	1	-	2	-
Not stated	5	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unmatched*	-	-	-	-	-	38	10	13	10	2	7	3	2	1	1	11	4	3	3	1	27	6	10	7	1
Gestational Age (Weeks)																									
Preterm (< 37)	10,727	3,162	2,953	2,750	1,707	309	90	54	115	41	76	19	12	36	9	243	70	43	87	34	66	20	11	28	7
Very preterm (< 32)	1,710	518	328	615	209	259	72	40	102	37	162	43	27	57	28	211	62	33	78	30	48	10	7	24	7
Full-term	109,626	30,911	37,679	19,708	19,858	143	26	38	54	19	34	6	11	10	4	57	8	19	18	8	86	18	19	36	11
Not stated	14	1	1	7	1	1	-	-	1	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-
Unmatched*	-	-	-	-	-	38	10	13	10	2	7	3	2	1	1	11	4	3	3	1	27	6	10	7	1
Plurality																									
Singletons	116,047	33,041	38,986	21,514	20,951	384	94	77	150	48	183	45	35	65	27	247	63	49	90	32	137	31	28	60	16
Multiples	4,320	1,033	1,647	951	615	69	22	15	20	12	40	10	11	10	9	54	15	13	16	10	15	7	2	4	2
Unmatched*	-	-	-	-	-	38	10	13	10	2	7	3	2	1	1	11	4	3	3	1	27	6	10	7	1
Plurality unknown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Infants who died in New York City who were born elsewhere are classified as unmatched.

Table IM3. Infant Mortality Rate by Mother's Racial/Ethnic Group and Characteristics of Infant, New York City, 2016

Characteristics	Total					Early-neonatal (< 7 days)					Neonatal (< 28 days)					Post-Neonatal (≥ 28 days)				
	Total	Hispanic	Non-H White	Non-H Black	Asian & P.I.	Total	Hispanic	Non-H White	Non-H Black	Asian & P.I.	Total	Hispanic	Non-H White	Non-H Black	Asian & P.I.	Total	Hispanic	Non-H White	Non-H Black	Asian & P.I.
Total	4.1	3.7	2.6	8.0	2.9	1.9	1.7	1.2	3.4	1.7	2.6	2.4	1.6	4.9	2.0	1.5	1.3	1.0	3.2	0.9
Sex of Child																				
Male	4.1	3.5	2.7	8.6	3.1	1.9	1.7	1.3	3.4	1.6	2.6	2.2	1.8	5.1	2.0	1.5	1.2	0.9	3.5	1.2
Female	4.0	3.9	2.4	7.5	2.6	1.9	1.7	1.1	3.4	1.8	2.6	2.6	1.4	4.6	2.0	1.4	1.4	1.1	2.8	0.6
Birthweight at Delivery (Grams)																				
Low birthweight (<2,500)	32.2	32.2	22.3	45.1	23.2	18.8	17.9	13.9	22.9	17.1	24.6	25.3	17.5	32.0	18.2	7.6	7.0	4.8	13.1	5.0
Very low birthweight (<1,500)	157.2	151.1	127.6	169.7	175.9	99.2	91.5	80.1	99.2	134.3	128.8	131.9	103.9	131.1	143.5	28.4	19.1	23.7	38.7	32.4
2,500-4,000	1.2	0.9	1.0	2.4	1.0	0.3	0.2	0.3	0.6	0.3	0.5	0.3	0.5	1.0	0.5	0.7	0.6	0.5	1.4	0.5
Above 4,000	0.5	0.9	-	1.7	-	0.1	0.4	-	-	-	0.1	0.4	-	-	-	0.4	0.4	-	1.7	-
Gestational Age (Weeks)																				
Preterm (<37)	28.8	28.5	18.3	41.8	24.0	7.1	6.0	4.1	13.1	5.3	22.7	22.1	14.6	31.6	19.9	6.2	6.3	3.7	10.2	4.1
Very preterm (<32)	151.5	139.0	122.0	165.9	177.0	94.7	83.0	82.3	92.7	134.0	123.4	119.7	100.6	126.8	143.5	28.1	19.3	21.3	39.0	33.5
Full-term	1.3	0.8	1.0	2.7	1.0	0.3	0.2	0.3	0.5	0.2	0.5	0.3	0.5	0.9	0.4	0.8	0.6	0.5	1.8	0.6
Plurality																				
Singletons	3.3	2.8	2.0	7.0	2.3	1.6	1.4	0.9	3.0	1.3	2.1	1.9	1.3	4.2	1.5	1.2	0.9	0.7	2.8	0.8
Multiples	16.0	21.3	9.1	21.0	19.5	9.3	9.7	6.7	10.5	14.6	12.5	14.5	7.9	16.8	16.3	3.5	6.8	1.2	4.2	3.3

INFANT MORTALITY

Table IM4. Live Births and Infant Mortality, Overall and by Mother's Racial/Ethnic Group, New York City, 2012–2016

Mother's Ethnic Group	2012	2013	2014	2015	2016
Live Births, Total	**123,231**	**120,457**	**122,084**	**121,673**	**120,367**
Puerto Rican	8,673	7,960	7,897	7,561	7,159
Other Hispanic	27,969	27,621	27,753	27,994	26,915
Asian and Pacific Islander	21,149	19,767	20,746	20,535	21,566
Non-Hispanic White	39,112	39,573	40,443	40,607	40,633
Non-Hispanic Black	24,758	24,108	23,680	23,116	22,465
Other or Unknown	1,570	1,428	1,565	1,860	1,629
Infant Deaths (< 1 year), Total	583	551	516	526	491
Puerto Rican	57	38	60	46	24
Other Hispanic	133	120	113	119	102
Asian and Pacific Islander	70	62	53	54	62
Non-Hispanic White	104	117	107	110	105
Non-Hispanic Black	211	201	177	186	180
Other or Unknown	8	13	6	11	18
Infant Mortality Rate, Total	4.7	4.6	4.2	4.3	4.1
Puerto Rican	6.6	4.8	7.6	6.1	3.4
Other Hispanic	4.8	4.3	4.1	4.3	3.8
Asian and Pacific Islander	3.3	3.1	2.6	2.6	2.9
Non-Hispanic White	2.7	3.0	2.6	2.7	2.6
Non-Hispanic Black	8.5	8.3	7.5	8.0	8.0
Neonatal Deaths (< 28 days), Total	383	377	326	342	312
Puerto Rican	42	28	40	34	17
Other Hispanic	90	72	66	80	65
Asian and Pacific Islander	45	50	37	33	43
Non-Hispanic White	67	85	75	75	65
Non-Hispanic Black	135	132	103	112	109
Neonatal Mortality Rate, Total	3.1	3.1	2.7	2.8	2.6
Puerto Rican	4.8	3.5	5.1	4.5	2.4
Other Hispanic	3.2	2.6	2.4	2.9	2.4
Asian and Pacific Islander	2.1	2.5	1.8	1.6	2.0
Non-Hispanic White	1.7	2.1	1.9	1.8	1.6
Non-Hispanic Black	5.5	5.5	4.3	4.8	4.9

INFANT MORTALITY

Table IM5. Infant Mortality Rate by Mother's Birthplace*†, New York City, 2010–2016

Birthplace†	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016
Total, New York City	**4.8**	**4.7**	**4.5**	**4.4**	**4.2**
Trinidad and Tobago	6.1	5.3	7.3	6.7	7.2
Haiti	5.4	6.0	6.2	7.4	7.0
Jamaica	7.0	6.7	7.9	6.1	6.8
Pakistan	6.1	5.6	5.2	5.5	6.7
El Salvador	3.0	3.2	4.2	5.0	5.5
Puerto Rico‡	8.4	6.5	5.3	4.8	5.5
Colombia	2.9	3.8	3.0	3.4	4.6
United States‡	5.2	5.0	4.8	4.8	4.5
Guyana	6.7	6.2	4.9	4.8	4.3
Dominican Republic	3.8	4.0	4.4	4.1	3.9
Ecuador	3.7	3.2	3.2	3.7	3.8
Ghana	4.0	3.9	2.9	3.3	3.8
Yemen Arab Republic	8.5	6.6	3.7	2.7	3.8
Honduras	8.3	7.2	6.8	4.4	3.5
Egypt	1.7	1.5	2.8	3.5	3.4
Bangladesh	4.1	4.1	3.5	3.6	3.1
Canada	2.0	3.6	3.0	4.1	3.0
India	5.2	5.8	6.1	3.2	2.8
Japan	1.3	2.0	1.3	2.0	2.8
Israel	0.3	0.7	2.2	2.6	2.7
Korea	1.1	3.4	3.6	5.0	2.6
Mexico	4.0	4.2	3.7	2.8	2.4
Guatemala	6.4	3.6	1.6	2.0	2.4
Russia	2.0	1.4	1.3	1.0	2.0
Philippines	3.9	1.7	2.3	1.9	1.9
China	1.7	1.4	1.5	1.5	1.6
Poland	1.6	2.1	1.8	1.4	1.5
Uzbekistan	1.4	2.0	1.7	1.8	1.1
Ukraine	0.8	0.4	-	0.4	1.1
Nigeria	7.1	7.4	4.5	2.8	0.9
United Kingdom	1.8	1.2	1.3	1.3	0.6

*The infant mortality rate is listed only for countries with 500 or more live births in any year from 2010-2016.

†Foreign countries are listed according to the descending order of infant mortality rates in the most current period.

‡See Technical Notes: Geographical Units, Birthplace Presentation.

INFANT MORTALITY

Table IM6. Infant and Neonatal Mortality Rates by Community District of Residence, New York City, 2012–2016

Community District		2012–2014*		2013–2015*		2014–2016*	
		Infant Mortality Rate	Neonatal† Mortality Rate	Infant Mortality Rate	Neonatal† Mortality Rate	Infant Mortality Rate	Neonatal† Mortality Rate
	NEW YORK CITY	**4.5**	**3.0**	**4.4**	**2.9**	**4.2**	**2.7**
	MANHATTAN	**3.1**	**2.1**	**3.4**	**2.3**	**3.3**	**2.2**
101	Battery Park, Tribeca	2.0	1.4	3.2	2.6	3.0	2.7
102	Greenwich Village, SOHO	0.8	0.8	0.9	0.9	1.7	1.7
103	Lower East Side	2.1	1.5	3.0	1.6	3.2	2.4
104	Chelsea, Clinton	5.1	3.4	4.0	3.3	2.3	1.3
105	Midtown Business District	5.2	2.9	2.3	1.2	1.8	1.2
106	Murray Hill	1.0	0.8	2.1	1.6	1.8	1.6
107	Upper West Side	2.8	1.9	2.6	1.7	2.3	1.3
108	Upper East Side	0.8	0.4	0.8	0.4	1.8	0.9
109	Manhattanville	4.1	3.5	4.5	3.3	5.0	3.8
110	Central Harlem	6.7	4.1	7.2	4.6	6.7	3.8
111	East Harlem	5.7	4.2	5.9	4.2	5.2	3.0
112	Washington Heights	3.5	2.1	4.3	3.0	4.2	3.2
	BRONX	**5.5**	**3.6**	**5.4**	**3.5**	**4.8**	**2.9**
201	Mott Haven	6.4	3.3	5.1	2.3	4.6	2.2
202	Hunts Point	6.0	3.0	4.2	2.3	2.7	2.3
203	Morrisania	5.4	3.7	6.4	4.3	4.8	2.3
204	Concourse, Highbridge	4.7	2.9	3.8	2.2	3.4	2.4
205	University/Morris Heights	4.8	3.2	5.4	3.7	4.6	3.1
206	East Tremont	8.7	6.5	5.8	4.3	4.1	3.0
207	Fordham	4.2	2.7	3.6	2.4	4.2	2.7
208	Riverdale	4.1	2.3	4.4	2.6	4.3	3.0
209	Unionport, Soundview	5.0	3.1	6.0	3.7	5.8	3.3
210	Throgs Neck	2.8	2.1	4.3	3.7	3.9	2.6
211	Pelham Parkway	6.9	4.9	8.1	5.6	7.8	4.2
212	Williamsbridge	8.4	5.7	7.7	5.4	6.2	4.1
	BROOKLYN	**3.8**	**2.4**	**3.6**	**2.3**	**3.7**	**2.3**
301	Williamsburg, Greenpoint	2.3	1.5	2.4	1.0	2.8	1.4
302	Fort Greene, Brooklyn Heights	2.2	1.2	2.8	2.0	2.4	1.6
303	Bedford Stuyvesant	5.3	3.5	5.7	3.3	4.9	2.6
304	Bushwick	5.3	2.5	3.8	1.1	3.4	1.7
305	East New York	7.4	4.3	6.2	3.7	6.2	4.2
306	Park Slope	2.5	1.3	1.8	0.9	2.3	1.1
307	Sunset Park	1.8	1.5	2.0	1.6	2.4	1.6
308	Crown Heights North	8.5	4.8	5.4	3.6	4.9	3.1
309	Crown Heights South	2.8	1.5	3.5	2.2	3.8	2.0
310	Bay Ridge	2.0	1.4	0.9	0.7	1.0	0.9
311	Bensonhurst	3.5	2.7	3.7	3.1	3.6	2.6
312	Borough Park	1.9	1.0	2.2	1.6	2.2	1.4
313	Coney Island	5.7	3.2	5.6	3.7	4.7	3.7
314	Flatbush, Midwood	3.8	2.9	4.1	2.9	4.3	2.9
315	Sheepshead Bay	2.5	1.2	2.9	1.7	2.1	1.0
316	Brownsville	6.1	3.4	4.9	3.2	5.4	3.2
317	East Flatbush	7.0	4.7	7.1	4.0	8.5	4.9
318	Canarsie	5.1	3.1	4.3	2.6	5.0	3.2
	QUEENS	**4.4**	**3.1**	**4.0**	**2.8**	**4.0**	**2.7**
401	Astoria, Long Island City	4.3	3.5	4.3	3.3	5.0	4.0
402	Sunnyside, Woodside	4.5	3.1	4.0	2.6	3.1	2.0
403	Jackson Heights	4.5	2.9	4.2	2.7	4.6	2.7
404	Elmhurst, Corona	4.3	2.8	3.7	2.7	3.3	2.5
405	Ridgewood, Glendale	2.3	1.6	1.8	1.2	2.2	1.2
406	Rego Park, Forest Hills	3.2	1.9	3.1	1.7	2.8	1.6
407	Flushing	3.1	2.3	2.6	1.7	3.0	1.8
408	Fresh Meadows, Briarwood	3.0	2.2	2.8	2.0	2.5	1.8
409	Woodhaven	3.2	2.3	4.1	2.7	4.4	3.5
410	Howard Beach	5.8	4.8	4.8	4.0	5.5	4.2
411	Bayside	1.9	1.5	3.4	2.0	1.9	0.9
412	Jamaica, St. Albans	7.5	4.5	6.2	3.7	6.1	3.4
413	Queens Village	5.9	4.6	5.7	4.0	5.6	4.0
414	The Rockaways	6.4	4.8	6.3	5.5	5.2	3.9
	STATEN ISLAND	**4.7**	**3.2**	**4.5**	**2.8**	**3.6**	**2.3**
501	Port Richmond	7.2	4.5	6.9	3.9	4.8	2.7
502	Willowbrook, South Beach	2.7	2.2	2.9	2.2	2.8	2.1
503	Tottenville	2.6	2.0	2.4	1.8	2.6	1.7

*Due to instability in the infant mortality rates by community district, rates are presented in rolling three-year averages.

†Neonatal infants are those less than 28 days old.

INFANT MORTALITY

Table IM7. Live Births and Infant Mortality Rate by Characteristics of Mother and Infant, New York City, 2016

Characteristics	Live Births		Infant Mortality Rate (IMR) per 1,000 Live Births					
			All		Neonatal*		Post-Neonatal*	
	Number	Percent	Deaths	Rate	Deaths	Rate	Deaths	Rate
Total	120,367	100.0	491	4.1	312	2.6	179	1.5
Race/Ethnicity								
Puerto Rican	7,159	5.9	24	3.4	17	2.4	7	1.0
Other Hispanic	26,915	22.4	102	3.8	65	2.4	37	1.4
Asian and Pacific Islander	21,566	17.9	62	2.9	43	2.0	19	0.9
Non-Hispanic White	40,633	33.8	105	2.6	65	1.6	40	1.0
Non-Hispanic Black	22,465	18.7	180	8.0	109	4.9	71	3.2
Other and Unknown	1,629	1.4	18	-	13	-	5	-
Borough of Residence								
Manhattan	17,199	14.3	49	2.8	33	1.9	16	0.9
Bronx	19,474	16.2	86	4.4	44	2.3	42	2.2
Brooklyn	40,125	33.3	144	3.6	98	2.4	46	1.1
Queens	26,794	22.3	109	4.1	72	2.7	37	1.4
Staten Island	5,357	4.5	16	3	10	1.9	6	1.1
Non-NYC residents	11,411	9.5	83	7.3	52	4.6	31	2.7
Unknown	7	-	4	-	3	-	1	-
Age of Mother								
Age < 18	889	0.7	8	9.0	6	6.7	2	2.2
Age 18-19	2,536	2.1	10	3.9	7	2.8	3	1.2
Age 20-29	49,331	41.0	166	3.4	106	2.1	60	1.2
Age 30-39	60,792	50.5	226	3.7	152	2.5	74	1.2
Age ≥ 40	6,819	5.7	43	6.3	30	4.4	13	1.9
Age unknown	-	-	-	-	-	-	-	-
Unmatched†	-	-	38	-	11	-	27	-
Mother's Education								
11th grade or less/12th grade, no diploma	20,414	17.0	88	4.3	50	2.4	38	1.9
High school graduate or GED	26,810	22.3	121	4.5	83	3.1	38	1.4
Some college/associate degree	25,903	21.5	120	4.6	71	2.7	49	1.9
Bachelor's degree	26,076	21.7	75	2.9	54	2.1	21	0.8
Master's degree or higher	20,841	17.3	37	1.8	32	1.5	5	0.2
Mother's education unknown	323	0.3	12	-	11	-	1	-
Unmatched†	-	-	38	-	11	-	27	-
Marital Status of Mother‡								
Not married	44,940	37.3	241	5.4	161	3.6	80	1.8
Married	75,427	62.7	212	2.8	140	1.9	72	1.0
Unmatched†	-	-	38	-	11	-	27	-
Mother's Birthplace§								
US born, including territories	57,714	47.9	237	4.1	163	2.8	74	1.3
Foreign born	62,593	52.0	210	3.4	132	2.1	78	1.2
Birthplace unknown	60	-	6	-	6	-	-	-
Unmatched†	-	-	38	-	11	-	27	-
Primary Payer for This Birth								
Medicaid/Family Plus/Child PlusB/other govt	70,615	58.7	289	4.1	178	2.5	111	1.6
Other	49,219	40.9	154	3.1	113	2.3	41	0.8
Coverage unknown	533	0.4	10	-	10	-	-	-
Unmatched†	-	-	38	-	11	-	27	-
Plurality								
Singletons	116,047	96.4	384	3.3	247	2.1	137	1.2
Multiples	4,320	3.6	69	16.0	54	12.5	15	3.5
Unmatched†	-	-	38	-	11	-	27	-
First Prenatal Care Visit								
No prenatal care	471	0.4	10	21.2	8	17.0	2	4.2
First trimester (1-3 months)	88,924	73.9	286	3.2	202	2.3	84	0.9
Second trimester (4-6 months)	20,914	17.4	84	4.0	47	2.2	37	1.8
Late (7-9 months)	7,513	6.2	22	2.9	9	1.2	13	1.7
Prenatal care unknown	2,545	2.1	51	-	35	-	16	-
Unmatched†	-	-	38	-	11	-	27	-
Pre-pregnancy Body Mass Index (BMI)								
Underweight (BMI < 18.5)	6,617	5.5	11	1.7	6	0.9	5	0.8
Normal weight (18.5 ≤ BMI < 25)	63,899	53.1	197	3.1	126	2.0	71	1.1
Overweight (25 ≤ BMI < 30)	29,191	24.3	122	4.2	77	2.6	45	1.5
Obese (BMI ≥ 30)	20,158	16.7	110	5.5	79	3.9	31	1.5
Pre-pregnancy BMI unknown	502	0.4	13	-	13	-	-	-
Unmatched†	-	-	38	-	11	-	27	-
Birthweight								
Very low birthweight	1,654	1.4	260	157.2	213	128.8	47	28.4
Low birthweight	8,309	6.9	61	7.3	32	3.9	29	3.5
Normal birthweight	110,399	92	132	1.2	56	0.5	76	0.7
Birthweight unknown	5	-	-	-	-	-	-	-
Unmatched†	-	-	38	-	11	-	27	-

*Neonatal infants are those less than 28 days old; postneonatal infants are those 28 days to less than 1 year old.

†Infants who died in New York City who were born elsewhere were classified as unmatched.

‡See Technical Notes: Births, Mother's Marital Status.

§See Technical Notes: Geographical Units, Birthplace Presentation.

PREGNANCY OUTCOMES

Table PO1. Live Births by Borough of Birth* and Institution, New York City, 2016

Borough and Institution	Births
Manhattan	
New York-Presbyterian/The Allen Hospital	2,052
Bellevue Hospital Center	1,421
Mount Sinai Beth Israel	3,369
New York-Presbyterian/Columbia University Medical Center	4,628
Harlem Hospital Center	958
Lenox Hill Hospital	4,058
Metropolitan Hospital Center	946
Mount Sinai Hospital	7,891
New York-Presbyterian/Lower Manhattan Hospital	3,067
New York Weill Cornell Medical Center	5,357
NYU Langone - Tisch Hospital	5,917
Mount Sinai West	4,970
Mount Sinai St. Luke's	2
Home†	128
Places other than a hospital or home‡	40
Bronx	
Bronx Lebanon Hospital	2,052
Jack D. Weiler Hospital	3,984
Jacobi Medical Center	1,922
Lincoln Medical and Mental Health Center	2,093
Montefiore Medical Center (Henry & Lucy Moses Division)	5
Montefiore Medical Center - Wakefield Hospital	2,244
North Central Bronx Hospital	1,296
St. Barnabas Hospital	984
Home†	105
Places other than a hospital or home‡	9
Brooklyn	
Brookdale University Hospital and Medical Center	1,055
Brooklyn Birthing Center	130
Brooklyn Hospital Center	2,151
Coney Island Hospital	1,226
Interfaith Medical Center	1
Kings County Hospital Center	2,112
NYU Langone Hospital - Brooklyn	3,878
Maimonides Medical Center	8,389
New York Methodist Hospital	5,729
University Hospital of Brooklyn	1,184
Woodhull Medical and Mental Health Center	1,546
Wyckoff Heights Medical Center	1,402
Home†	377
Places other than a hospital or home‡	46
Queens	
Elmhurst Hospital Center	2,782
Flushing Hospital Medical Center	3,105
Long Island Jewish Forest Hills	1,748
Jamaica Hospital Medical Center	2,257
Long Island Jewish Medical Center	9,078
Mount Sinai Hospital of Queens	1
New York Hospital Medical Center of Queens	4,343
Queens Hospital Center	1,659
St. Johns Episcopal Hospital South Shore	663
Home†	110
Places other than a hospital or home‡	24
Staten Island	
Richmond University Medical Center	2,951
Staten Island University Hospital	2,906
Home†	14
Places other than a hospital or home‡	2
New York City Total	120,367

* Live births are presented by borough of birth beginning 2010; in prior years, they were reported by borough of report.

† See Technical Notes: Geographical Units, Birthplace Presentation.

‡ Places other than a hospital or home include ambulances, taxis, and airplanes.

PREGNANCY OUTCOMES

Table PO2. Live Births by Ancestry of Mother and Borough of Residence, New York City, 2016

Ancestry of Mother	Total	Borough of Residence						
		Manhattan	Bronx	Brooklyn	Queens	Staten Island	Non-Residents	Residence Unknown
Total	120,367	17,199	19,474	40,125	26,794	5,357	11,411	7
Hispanic								
Colombian	1,174	99	69	125	714	40	127	-
Cuban	341	85	59	58	58	14	67	-
Dominican	10,984	1,946	5,318	1,629	1,503	138	450	-
Ecuadorian	3,047	159	446	479	1,820	57	86	-
Mexican	5,619	535	1,431	1,677	1,523	345	108	-
Puerto Rican	7,159	882	2,885	1,580	943	469	399	1
Other Hispanic	5,750	694	1,314	1,315	1,729	197	500	1
North American and the Caribbean								
African American	12,843	1,247	3,293	5,236	1,923	381	761	2
American	12,777	2,829	356	5,616	1,333	985	1,658	-
Guyanese	1,698	14	113	474	993	11	93	-
Haitian	1,635	49	52	976	379	8	171	-
Jamaican	1,830	36	381	696	528	25	164	-
Trinidadian	718	15	23	357	261	12	50	-
Other North American and the Caribbean	1,541	213	156	758	273	23	118	-
European								
English	1,041	455	15	349	82	8	132	-
German	777	232	15	199	127	21	183	-
Irish	1,611	395	37	372	263	131	413	-
Italian	3,217	489	97	652	427	773	778	1
Polish	1,078	157	19	271	386	82	163	-
Russian	1,802	288	27	725	437	128	197	-
Other European	4,660	902	284	1,743	803	379	549	-
Asian								
Asian Indian	2,188	424	70	175	914	43	562	-
Bangladeshi	2,876	52	515	606	1,634	20	49	-
Chinese	9,492	1,158	59	3,935	3,499	226	615	-
Filipino	897	108	50	141	399	50	149	-
Korean	1,075	347	21	171	377	18	141	-
Pakistani	1,830	76	107	783	538	110	216	-
Other Asian	6,371	973	400	2,570	1,680	237	510	1
Other								
Jewish or Hebrew	5,303	433	33	4,077	113	58	589	-
Other or not stated	9,033	1,907	1,829	2,380	1,135	368	1,413	1

See Technical Notes: Demographic Characteristics of Vital Events: Race, Ancestry, and Ethnic Group.

Table PO3. Live Births by Mother's Ethnic Group and Age, New York City, 2016

Ethnic Group	Total	Age of Mother (Years)						
		<18	18-19	20-24	25-29	30-34	35-39	≥40
Total	120,367	889	2,536	18,235	31,096	36,837	23,955	6,819
Puerto Rican	7,159	161	380	1,822	2,038	1,590	922	246
Other Hispanic	26,915	425	1,026	5,437	7,493	6,938	4,365	1,231
Asian and Pacific Islander	21,566	11	109	1,980	6,621	7,407	4,343	1,095
Non-Hispanic white	40,633	31	326	4,825	8,461	14,297	9,888	2,805
Non-Hispanic black	22,465	250	654	3,958	6,092	6,133	4,039	1,339
Non-Hispanic other	455	4	10	67	133	116	99	26
Non-Hispanic of two or more races	1,079	6	25	123	235	344	281	65
Not stated	95	1	6	23	23	12	18	12

PREGNANCY OUTCOMES

Table PO4. Selected Characteristics of Live Births, Overall and by Age of Mother, New York City, 2016

	Total	Age of Mother (Years)						
		< 18	18-19	20-24	25-29	30-34	35-39	≥ 40
Total Live Births	120,367	889	2,536	18,235	31,096	36,837	23,955	6,819
Sex								
Male	61,632	438	1,284	9,370	16,011	18,838	12,246	3,445
Female	58,735	451	1,252	8,865	15,085	17,999	11,709	3,374
First Live Birth								
Yes	51,583	850	2,166	11,149	13,510	14,538	7,394	1,976
No	68,763	39	368	7,082	17,583	22,294	16,555	4,842
Unknown	21	-	2	4	3	5	6	1
Pre-pregnancy Body Mass Index (BMI)								
Underweight (BMI < 18.5)	6,617	72	216	1,316	1,991	1,836	954	232
Normal weight (18.5 ≤ BMI < 25)	63,899	503	1,371	9,458	15,815	20,298	12,941	3,513
Overweight (25 ≤ BMI < 30)	29,191	215	555	4,360	7,662	8,732	5,886	1,781
Obese (BMI ≥ 30)	20,158	92	368	2,996	5,499	5,854	4,084	1,265
Unknown	502	7	26	105	129	117	90	28
Birthweight at Delivery (Grams)								
< 1500	1,654	20	37	237	362	526	333	139
1500-2499	8,309	75	199	1,255	2,002	2,364	1,800	614
2500-3999	102,734	760	2,196	15,891	26,849	31,392	20,053	5,593
≥ 4000	7,665	34	104	852	1,882	2,554	1,766	473
Not stated	5	-	-	-	1	1	3	-
Gestational Age (Weeks)*								
< 32	1,710	23	43	251	374	513	358	148
32-36	9,017	67	175	1,121	2,132	2,618	2,118	786
≥ 37	109,626	799	2,318	16,859	28,588	33,701	21,476	5,885
Unknown	14	-	-	4	2	5	3	-
Plurality								
Single	116,034	877	2,476	17,805	30,148	35,513	22,773	6,442
Twin	4,254	12	60	418	930	1,299	1,165	370
Triplet	75	-	-	12	18	21	17	7
Quadruplet	4	-	-	-	-	4	-	-
Apgar Score at 5 Minutes								
≤ 6	1,052	16	26	163	257	312	195	83
7	995	9	19	134	248	304	217	64
8	5,402	42	103	794	1,327	1,604	1,130	402
9	111,897	813	2,366	16,981	29,038	34,294	22,198	6,207
10	769	7	13	115	166	256	165	47
Not stated	252	2	9	48	60	67	50	16
Method of Delivery								
Vaginal	77,751	725	2,005	13,806	21,123	23,334	13,528	3,230
Vaginal after any prior C-section	2,924	1	12	302	813	911	699	186
Primary C-section	23,243	157	466	3,074	5,485	7,033	5,086	1,942
Repeat C-section	16,443	6	53	1,053	3,674	5,556	4,640	1,461
Unknown	6	-	-	-	1	3	2	-
Place of Birth								
Home	732	4	10	65	149	246	200	58
Voluntary hospital	101,421	619	1,798	14,518	25,559	32,073	20,930	5,924
Municipal hospital	17,961	266	727	3,611	5,322	4,450	2,763	822
Birthing center	132	-	-	21	38	31	33	9
Other	121	-	1	20	28	37	29	6
Attendant								
Physician	108,434	723	2,089	15,642	27,698	33,784	22,173	6,325
Certified nurse midwife	11,277	161	431	2,474	3,229	2,873	1,647	462
Other	656	5	16	119	169	180	135	32
Primary Payer for this Birth†								
Medicaid/Family Plus/Child Health Plus B/Other govt	70,615	797	2,271	15,374	22,302	17,365	9,695	2,811
Private	47,179	59	188	2,466	8,039	18,737	13,824	3,866
Self-pay	1,271	22	40	180	373	377	209	70
Other	769	2	20	139	247	210	114	37
Not stated	533	9	17	76	135	148	113	35
First Visit for Prenatal Care								
First trimester (1-3 months)	88,924	378	1,376	11,977	22,442	28,737	18,850	5,164
Second trimester (4-6 months)	20,914	313	721	4,186	5,674	5,401	3,465	1,154
Late (7-9 months)	7,513	137	296	1,392	2,188	1,968	1,197	335
No care	471	20	29	129	111	103	54	25
Not stated	2,545	41	114	551	681	628	389	141
Marital Status of Mother‡								
Not married	44,940	867	2,083	10,478	13,116	10,126	6,188	2,082
Married	75,427	22	453	7,757	17,980	26,711	17,767	4,737
Education Level								
11th grade or less/12th grade no diploma	20,414	802	1,250	4,382	5,363	4,652	2,995	970
High school graduate or GED	26,810	80	917	6,987	8,094	5,987	3,654	1,091
Some college/associate degree	25,903	4	344	5,198	8,366	6,926	3,900	1,165
Bachelor's degree	26,076	-	5	1,312	6,144	10,302	6,592	1,721
Master's degree or higher	20,841	-	-	292	3,055	8,899	6,756	1,839
Not stated	323	3	20	64	74	71	58	33
Birthplace of Mother§								
United States, including its territories	57,714	608	1,667	10,556	13,556	17,053	11,269	3,005
Foreign	62,593	280	864	7,666	17,524	19,772	12,678	3,809
Not stated	60	1	5	13	16	12	8	5

*See Technical Notes: Births, Gestational Age.
†See Technical Notes: Births, Birth Reporting.
‡See Technical Notes: Births, Mother's Marital Status.
§See Technical Notes: Geographical Units, Birthplace Presentation.

PREGNANCY OUTCOMES

Table PO5. Selected Characteristics of Live Births by Mother's Ethnic Group, New York City, 2016

	Total	Racial/Ethnic Group of Mother*							
		Puerto Rican	Other Hispanic	Asian	Non-Hispanic White	Non-Hispanic Black	Other	Non-Hispanic Two or More Races	Not Stated
Total Live Births	120,367	7,159	26,915	21,566	40,633	22,465	455	1,079	95
Sex									
Male	61,632	3,668	13,692	11,198	20,973	11,220	226	596	59
Female	58,735	3,491	13,223	10,368	19,660	11,245	229	483	36
First Live Birth									
Yes	51,583	2,882	10,420	10,272	17,950	9,255	193	583	28
No	68,763	4,277	16,489	11,292	22,680	13,206	262	496	61
Unknown	21	-	6	2	3	4	-	-	6
Pre-pregnancy Body Mass Index (BMI)									
Underweight (BMI < 18.5)	6,617	257	755	2,414	2,369	749	23	48	2
Normal weight (18.5 ≤ BMI < 25)	63,899	2,610	11,811	14,038	26,453	8,131	230	606	20
Overweight (25 ≤ BMI < 30)	29,191	1,974	8,446	3,818	7,801	6,778	110	256	8
Obese (BMI ≥ 30)	20,158	2,297	5,780	1,264	3,940	6,614	88	166	9
Unknown	502	21	123	32	70	193	4	3	56
Birthweight at Delivery (Grams)									
< 1500	1,654	132	338	216	337	595	11	21	4
1500-2499	8,309	593	1,669	1,593	2,178	2,153	38	78	7
2500-3999	102,734	5,957	23,040	18,881	34,937	18,549	382	912	76
≥ 4000	7,665	477	1,868	875	3,180	1,167	24	68	6
Not stated	5	-	-	1	1	1	-	-	2
Gestational Age (Weeks)†									
< 32	1,710	140	378	209	328	615	14	23	3
32-36	9,017	682	1,962	1,498	2,625	2,135	29	77	9
≥ 37	109,626	6,337	24,574	19,858	37,679	19,708	412	979	79
Unknown	14	-	1	1	1	7	-	-	4
Plurality									
Single	116,034	6,883	26,153	20,950	38,986	21,507	435	1,032	88
Twin	4,254	273	748	607	1,607	945	20	47	7
Triplet	75	3	14	9	36	13	-	-	-
Quadruplet	4	-	-	-	4	-	-	-	-
Apgar Score at 5 Minutes									
≤ 6	1,052	81	230	130	239	352	1	16	3
7	995	78	186	125	265	323	4	13	1
8	5,402	363	1,156	794	1,606	1,416	24	41	2
9	111,897	6,574	25,120	20,391	38,143	20,172	417	996	84
10	769	46	165	104	330	109	7	8	-
Not stated	252	17	58	22	50	93	2	5	5
Method of Delivery									
Vaginal	77,751	4,478	16,964	13,895	28,160	13,198	303	698	55
Vaginal after any prior C-section	2,924	156	622	434	1,196	486	10	18	2
Primary C-section	23,243	1,478	4,800	4,070	7,299	5,247	73	258	18
Repeat C-section	16,443	1,047	4,529	3,166	3,977	3,533	69	105	17
Unknown	6	-	-	1	1	1	-	-	3
Place of Birth									
Home	732	38	93	47	385	139	9	14	7
Voluntary hospital	101,421	5,875	20,155	19,106	38,788	16,122	362	965	48
Municipal hospital	17,961	1,239	6,640	2,395	1,336	6,137	81	96	37
Birthing center	132	4	10	3	68	37	3	4	3
Other	121	3	17	15	56	30	-	-	-
Attendant									
Physician	108,434	6,332	23,552	20,380	36,859	19,844	406	996	65
Certified nurse midwife	11,277	765	3,202	1,111	3,643	2,407	45	79	25
Other	656	62	161	75	131	214	4	4	5
Primary Payer for this Birth‡									
Medicaid/Family Plus/Child Health Plus B/Other govt	70,615	5,090	21,371	12,750	15,033	15,612	292	399	68
Private	47,179	1,966	5,067	8,304	25,109	5,912	143	659	19
Self-pay	1,271	50	209	317	264	416	8	7	-
Other	769	37	134	148	179	251	8	12	-
Not stated	533	16	134	47	48	274	4	2	8
First Visit for Prenatal Care									
First trimester (1-3 months)	88,924	4,945	18,669	16,586	33,737	13,843	280	816	48
Second trimester (4-6 months)	20,914	1,607	5,666	3,470	5,005	4,862	106	178	20
Late (7-9 months)	7,513	357	1,868	1,259	1,173	2,752	43	51	10
No care	471	57	104	34	67	203	1	2	3
Not stated	2,545	193	608	217	651	805	25	32	14
Marital Status of Mother§									
Not married	44,940	5,344	16,242	3,339	4,672	14,687	174	409	73
Married	75,427	1,815	10,673	18,227	35,961	7,778	281	670	22
Education Level									
11th grade or less/12th grade, no diploma	20,414	1,792	8,542	3,605	2,800	3,519	66	84	6
High school graduate or GED	26,810	1,954	6,601	4,244	7,734	6,003	123	147	4
Some college/associate degree	25,903	2,307	7,002	3,630	5,386	7,198	127	248	5
Bachelor's degree	26,076	731	3,247	5,763	12,160	3,788	74	307	6
Master's degree or higher	20,841	370	1,463	4,302	12,467	1,884	62	291	2
Not stated	323	5	60	22	86	73	3	2	72
Birthplace of Mother									
United States, including its territories	57,714	7,105	7,704	2,445	27,399	12,069	182	765	45
Foreign	62,593	53	19,206	19,115	13,222	10,384	273	314	26
Not stated	60	1	5	6	12	12	-	-	24

* See Technical Notes: Demographic Characteristics of Vital Events, Race, Ancestry and Ethnic Group.
† See Technical Notes: Births, Gestational Age.
‡ See Technical Notes: Births, Birth Reporting.
§ See Technical Notes: Birth Mother's Marital Status.

PREGNANCY OUTCOMES

Table PO6. Live Births by Selected Characteristics and Mother's Ancestry, New York City, 2016

Ancestry of Mother	Live Births	Percent of Total Live Births with Specified Characteristics									
		Foreign-born Mother*	First Live Birth	Low Birth Weight (<2,500 Grams)	Preterm Birth† (<37 Weeks)	Late or No Prenatal Care	Mother Not Married	On Medicaid‡	Pre-pregency Obesity	Teenage Mother (<20 Years)	Exclusive Breast Feeding
Total	120,367	52.0	42.9	8.3	8.9	6.8	37.3	58.9	16.8	2.8	40.3
Hispanic											
Colombian	1,174	69.5	48.8	6.1	7.9	6.0	45.5	58.1	14.8	2.3	44.6
Cuban	341	15.3	50.7	7.9	10.6	2.7	41.3	37.8	21.2	2.6	50.3
Dominican	10,984	71.0	43.4	7.8	8.7	8.1	60.4	81.3	21.8	5.6	25.5
Ecuadorian	3,047	81.6	33.9	7.4	9.1	8.7	54.1	83.6	16.7	5.3	37.1
Mexican	5,619	77.0	27.7	6.2	7.9	6.6	68.1	90.4	23.4	6.0	34.4
Puerto Rican	7,159	0.7	40.3	10.1	11.5	5.9	74.6	71.3	32.2	7.6	30.3
Other Hispanic	5,750	64.8	40.4	8.2	9.3	7.2	60.1	71.5	23.2	5.3	36.6
North America and the Caribbean											
African American	12,843	18.1	42.4	12.8	12.7	9.1	75.6	70.3	32.3	5.5	29.8
American	12,777	2.9	43.4	6.8	7.7	1.4	15.5	33.4	11.3	1.1	58.6
Guyanese	1,698	88.8	44.3	14.5	11.3	14.1	44.1	63.9	18.6	3.2	38.1
Haitian	1,635	81.6	42.6	12.7	13.5	17.4	43.7	68.3	26.4	1.8	33.6
Jamaican	1,830	91.4	41.6	11.7	12.1	18.4	64.3	68.5	27.1	3.1	38.5
Trinidadian	718	90.5	40.9	13.6	13.1	14.2	50.3	60.5	23.4	1.8	35.8
Other North America and the Caribbean	1,541	88.0	47.4	8.7	10.1	15.5	43.4	53.4	19.5	1.6	48.3
European											
English	1,041	35.7	59.7	5.4	7.2	2.8	11.0	7.1	5.5	0.0	78.5
German	777	22.1	60.5	6.2	7.3	2.2	13.6	9.7	7.7	0.5	70.4
Irish	1,611	9.7	54.6	6.0	8.6	2.0	14.2	9.3	10.6	0.2	62.6
Italian	3,217	7.2	56.3	7.0	8.7	1.5	17.7	14.2	15.3	0.8	50.8
Polish	1,078	62.6	50.7	7.9	8.6	2.4	17.3	28.3	8.3	0.5	55.9
Russian	1,802	80.5	48.2	5.7	6.5	3.9	24.1	39.9	6.7	0.3	59.2
Other European	4,660	70.0	53.0	5.2	6.9	4.7	16.1	35.7	8.7	0.5	59.3
Asian											
Asian Indian	2,188	80.9	54.1	12.0	10.0	4.9	6.4	34.5	7.8	0.2	51.3
Bangladeshi	2,876	98.2	41.2	12.1	8.5	8.9	3.4	83.7	10.3	0.7	33.9
Chinese	9,492	90.9	47.5	5.9	6.6	4.4	22.3	66.1	1.8	0.3	27.5
Filipino	897	77.4	50.4	7.9	10.5	5.4	19.7	26.9	8.0	0.4	47.2
Korean	1,075	73.6	58.1	4.5	5.2	3.5	8.2	25.1	2.9	0.0	61.8
Pakistani	1,830	91.9	35.4	10.8	10.1	10.1	3.4	75.8	15.7	0.9	26.6
Other Asian	6,371	87.6	42.7	7.0	7.4	7.5	12.1	58.0	7.9	1.9	43.6
Other											
Jewish or Hebrew	5,303	14.0	26.3	5.2	5.8	1.3	3.8	65.3	10.0	1.2	43.6
Other or Not Stated	9,033	56.6	40.7	8.3	8.6	13.0	21.7	49.0	15.5	0.9	40.5

Note: See Technical Notes: Demographic Characteristics of Vital Events: Race, Ancestry, and Ethnic Group.

* Beginning in 2006, US Virgin Islands and Guam are not included in the Foreign-born Mother category.

† Clinical gestational age <37 completed weeks.

‡ Due to revision of the birth certificate, since 2008 "On Medicaid" also includes Family Health Plus, Other government, and Child Health Plus B.

PREGNANCY OUTCOMES

Table PO7. Live Births by Selected Characteristics and Community District of Residence, New York City, 2016

Community District of Residence	Live Births	Rate*	Hispanic Mother	Foreign-born Mother†	First Live Birth	Low Birthweight (<2,500 Grams)	Preterm Birth‡ (<37 weeks)	Late or No Prenatal Care	On Medicaid §	Pre-pregnancy Obesity	Exclusive Breast Feeding
NEW YORK CITY	120,367	14.1	29.3	52.0	42.9	8.3	8.9	6.8	58.9	16.8	40.3
MANHATTAN	17,109	10.5	27.5	41.5	54.4	7.9	8.4	4.8	33.2	11.4	56.8
Battery Park, Tribeca (01)	1,052	16.6	9.0	38.6	56.9	6.8	8.9	2.5	4.3	2.9	76.6
Greenwich Village, SOHO (02)	781	8.5	7.5	38.1	62.6	6.7	7.0	1.6	10.3	1.7	73.8
Lower East Side (03)	1,286	7.5	28.9	52.0	49.8	6.8	7.8	4.0	62.5	12.3	49.9
Chelsea, Clinton (04)	1,015	8.3	19.9	45.5	64.5	9.8	9.0	4.1	19.4	6.9	67.9
Midtown Business District (05)	547	10.3	9.0	42.1	65.5	7.0	7.0	3.2	9.2	3.7	68.6
Murray Hill (06)	1,275	8.8	9.5	42.5	64.0	7.1	7.8	2.2	8.6	4.0	75.0
Upper West Side (07)	2,496	11.6	13.8	32.9	56.2	8.1	8.1	3.2	12.0	5.9	67.9
Upper East Side (08)	2,496	11.0	7.0	32.7	59.6	6.4	7.3	1.2	5.5	3.6	71.0
Manhattanville (09)	1,045	9.4	51.6	50.9	49.0	6.8	9.3	8.9	61.4	20.8	38.2
Central Harlem (10)	1,509	13.0	25.7	40.3	43.7	9.5	9.3	12.1	59.6	23.6	40.1
East Harlem (11)	1,539	12.4	49.9	37.8	42.0	10.9	11.6	9.9	67.3	26.0	33.6
Washington Heights (12)	2,068	10.6	71.9	54.7	50.0	7.7	8.0	5.6	67.3	19.3	32.9
BRONX	19,560	13.4	60.0	55.6	39.5	9.4	9.6	11.0	82.6	26.1	25.5
Mott Haven (01)	1,648	16.7	66.2	45.6	34.9	9.6	10.7	11.8	88.1	32.4	23.1
Hunts Point (02)	816	14.5	68.5	48.4	35.8	10.2	10.9	13.4	88.2	31.0	20.6
Morrisania (03)	1,382	15.1	53.8	47.7	35.0	10.7	11.2	12.4	86.9	30.4	20.8
Concourse, Highbridge (04)	2,502	16.1	65.0	64.1	38.7	9.5	9.2	13.2	87.2	25.6	20.0
University/Morris Heights (05)	2,202	16.2	69.7	61.5	39.3	9.6	10.0	10.0	88.8	27.0	19.4
East Tremont (06)	1,322	15.1	68.3	44.9	37.6	9.4	9.8	10.2	88.7	29.1	19.8
Fordham (07)	2,247	15.2	70.5	66.2	39.9	9.0	8.4	8.8	85.3	21.9	29.6
Riverdale (08)	1,018	9.9	59.5	46.1	46.8	8.6	9.3	5.4	54.1	18.0	35.3
Unionport, Soundview (09)	2,363	12.8	59.7	56.0	41.4	9.7	10.0	11.1	82.5	23.2	28.0
Throgs Neck (10)	999	8.2	51.2	50.7	43.5	9.5	8.3	8.4	66.1	21.1	34.0
Pelham Parkway (11)	1,361	11.7	49.3	56.6	40.6	8.4	7.5	9.4	75.6	23.5	35.0
Williamsbridge (12)	1,700	10.9	28.4	56.1	41.6	9.3	9.7	15.4	80.2	30.4	26.7
BROOKLYN	40,124	15.3	17.6	48.4	39.5	7.7	8.5	6.1	65.3	15.8	41.0
Williamsburg, Greenpoint (01)	3,574	17.9	13.8	18.8	36.1	6.2	6.4	2.4	62.3	11.5	49.4
Fort Greene, Brooklyn Heights (02)	1,679	14.3	11.2	28.3	60.1	7.2	7.7	2.0	18.0	8.0	70.5
Bedford Stuyvesant (03)	2,339	15.3	18.0	26.4	38.5	8.8	9.3	6.7	68.9	21.0	40.0
Bushwick (04)	1,257	11.2	73.9	54.9	39.1	8.7	9.9	7.4	77.0	24.1	33.7
East New York (05)	2,715	15.0	40.1	52.6	37.9	10.8	10.2	11.1	80.1	26.9	37.5
Park Slope (06)	1,679	15.4	13.4	26.0	53.5	5.4	7.3	2.3	16.8	7.8	74.3
Sunset Park (07)	2,432	18.3	29.5	74.8	42.2	5.5	7.1	3.3	75.4	7.3	31.2
Crown Heights North (08)	1,373	14.1	12.4	35.9	46.0	9.7	10.9	7.7	50.3	18.8	51.6
Crown Heights South (09)	1,444	14.6	6.8	44.8	42.2	6.1	7.4	8.5	69.6	17.5	49.1
Bay Ridge (10)	1,882	13.2	16.4	68.7	43.2	6.8	8.4	3.8	57.4	12.2	36.9
Bensonhurst (11)	2,748	13.4	17.2	81.7	40.6	7.5	7.7	4.9	72.6	10.3	33.1
Borough Park (12)	5,463	27.1	7.5	36.5	26.9	5.6	6.2	2.6	78.8	9.7	34.0
Coney Island (13)	1,289	12.1	20.1	67.9	38.6	6.7	9.0	9.3	76.5	19.0	34.9
Flatbush, Midwood (14)	2,558	15.5	15.2	57.7	38.0	8.6	9.5	7.3	66.5	16.3	39.5
Sheepshead Bay (15)	2,249	12.9	9.8	64.9	39.2	7.1	7.3	5.7	59.0	11.1	40.6
Brownsville (16)	1,345	15.9	23.0	37.8	38.6	13.2	13.5	13.2	80.1	31.5	32.4
East Flatbush (17)	1,874	12.1	8.0	61.9	43.5	9.9	12.1	13.3	71.6	29.0	31.9
Canarsie (18)	2,224	11.4	8.6	51.0	39.1	10.3	10.9	10.5	57.9	24.3	38.3
QUEENS	26,794	11.4	31.3	70.1	43.8	8.3	8.6	8.2	64.5	15.8	39.2
Astoria, Long Island City (01)	1,997	10.0	24.2	54.1	52.4	7.2	7.5	7.3	48.3	14.6	51.6
Sunnyside, Woodside (02)	1,717	12.6	27.9	66.4	54.7	6.9	7.1	6.5	46.2	8.9	51.8
Jackson Heights (03)	2,472	13.7	68.9	79.4	38.5	7.2	8.3	8.8	81.4	17.0	32.7
Elmhurst, Corona (04)	2,493	13.3	54.3	87.7	38.6	7.1	7.9	8.9	83.3	13.4	27.9
Ridgewood, Glendale (05)	1,898	11.4	45.1	62.4	42.6	6.5	9.2	6.6	59.0	16.9	38.1
Rego Park, Forest Hills (06)	1,430	12.4	12.8	70.6	48.3	6.7	7.6	3.0	34.8	7.8	46.7
Flushing (07)	2,970	11.3	16.9	86.9	47.4	5.8	7.1	7.6	75.0	7.9	26.1
Fresh Meadows, Briarwood (08)	1,879	12.0	17.5	70.5	40.5	7.9	7.6	7.2	59.6	14.6	38.0
Woodhaven (09)	1,892	12.7	40.2	73.8	42.6	9.3	7.9	8.0	69.8	17.6	48.1
Howard Beach (10)	1,322	10.5	28.0	65.4	39.7	11.6	10.7	9.0	61.8	20.4	41.8
Bayside (11)	722	6.0	11.1	71.8	46.1	5.7	7.3	4.6	51.6	6.9	32.8
Jamaica, St. Albans (12)	2,981	12.8	22.8	65.7	43.0	12.3	11.4	12.5	69.3	25.2	46.7
Queens Village (13)	1,713	8.8	13.4	62.3	43.8	12.6	11.3	9.9	59.2	23.1	38.6
The Rockaways (14)	1,308	11.4	28.5	39.1	35.4	8.5	8.6	9.6	66.3	23.6	34.3
STATEN ISLAND	5,357	11.3	23.7	38.9	39.5	7.4	8.8	2.8	43.8	19.9	31.0
Port Richmond (01)	2,287	12.6	37.2	43.6	38.6	8.8	10.1	3.4	59.3	23.0	27.8
Willowbrook, South Beach (02)	1,490	11.1	16.2	48.2	39.1	6.9	8.5	2.9	42.2	16.3	32.4
Tottenville (03)	1,570	9.9	11.0	23.4	41.3	5.7	7.2	1.7	23.0	18.7	33.8
NEW YORK CITY RESIDENTS	108,949	12.8	30.6	53.5	42.9	8.2	8.7	7.1	62.1	17.2	39.8
NON-RESIDENTS	11,411	-	16.6	38.3	42.84	9.3	10.8	3.5	28.9	13.6	45.6
RESIDENCE UNKNOWN	12	-	27.3	10.0	16.7	33.3	33.3	50.0	66.7	40.0	16.7

Note: Borough totals may be higher than the sum of the community districts as they may include some live births whose community district could not be determined. Borough was defined using community district and will be slightly different from the pre-existing borough variable used for other tables and figures.

* Rate per 1,000 population. For population information, see Technical Notes: Population, Community District, Population Estimates.

† See Technical Notes: Geographical Units, Birthplace Presentation.

‡ Clinical gestational age < 37 completed weeks.

§ Due to revision of the birth certificate, since 2008 "On Medicaid" also includes Family Health Plus, Other government, and Child Health Plus B.

PREGNANCY OUTCOMES

Table PO8. Live Births by Mother's Birthplace and Borough of Residence, New York City, 2016

Birthplace	Total	Borough of Residence					Non-Residents	Residence Unknown
		Manhattan	Bronx	Brooklyn	Queens	Staten Island		
United States	56,839	9,954	8,203	20,530	7,905	3,243	7,000	4
China	8,313	832	49	3,561	3,231	172	468	-
Dominican Republic	7,870	1,277	4,113	1,163	997	69	251	-
Mexico	4,366	384	1,110	1,270	1,243	286	73	-
Bangladesh	2,863	59	525	598	1,612	19	50	-
Ecuador	2,515	124	366	372	1,568	34	51	-
Jamaica	2,328	51	564	848	643	28	194	-
Guyana	1,834	20	130	581	998	11	94	-
Pakistan	1,641	51	93	733	482	99	183	-
India	1,562	213	45	91	747	37	429	-
Haiti	1,451	36	39	930	315	4	127	-
Uzbekistan	1,332	15	3	855	412	23	24	-
Russia	1,017	178	17	477	158	81	106	-
Trinidad and Tobago	926	22	40	496	297	13	58	-
Ukraine	888	87	10	541	82	82	86	-
Puerto Rico	876	105	440	165	93	29	44	-
Nigeria	858	23	206	267	198	78	86	-
Egypt	854	44	11	303	256	129	111	-
Israel	836	177	20	425	98	19	97	-
Colombia	828	70	45	89	527	27	70	-
El Salvador	823	35	117	149	402	10	110	-
Yemen	815	53	217	375	131	25	14	-
Honduras	750	32	298	163	181	32	44	-
Guatemala	738	12	101	277	288	24	36	-
Korea	736	233	17	95	281	13	97	-
Other or Not Stated	16,508	3,112	2,695	4,771	3,649	770	1,508	3
Total	120,367	17,199	19,474	40,125	26,794	5,357	11,411	7

Table PO9. Live Births by Mother's Birthplace and Age, New York City, 2016

Birthplace	Total	Age of Mother (Years)					
		< 20	20-24	25-29	30-34	35-39	≥ 40
United States	56,839	2,210	10,356	13,336	16,847	11,124	2,966
China	8,313	27	656	3,231	2,830	1,240	329
Dominican Republic	7,870	367	1,717	2,370	1,873	1,196	347
Mexico	4,366	116	551	1,182	1,418	857	242
Bangladesh	2,863	15	541	1,107	799	334	67
Ecuador	2,515	87	409	636	720	495	168
Jamaica	2,328	52	335	599	662	500	180
Guyana	1,834	51	299	524	476	370	114
Pakistan	1,641	14	235	567	549	235	41
India	1,562	1	104	465	618	319	55
Haiti	1,451	20	107	322	478	384	140
Uzbekistan	1,332	49	344	446	322	137	34
Russia	1,017	1	33	274	435	209	65
Trinidad and Tobago	926	10	88	209	322	231	66
Ukraine	888	2	55	265	350	164	52
Puerto Rico	876	65	200	221	206	145	39
Nigeria	858	.	32	211	346	208	61
Egypt	854	2	98	318	265	139	32
Israel	836	11	90	176	290	193	76
Colombia	828	12	86	193	266	211	60
El Salvador	823	64	156	225	197	148	33
Yemen	815	40	231	238	149	112	45
Honduras	750	45	138	203	201	132	31
Guatemala	738	55	130	226	194	117	16
Korea	736	.	7	81	297	262	89
Other or Not Stated	16,508	109	1,237	3,471	5,727	4,493	1,471
Total	120,367	3,425	18,235	31,096	36,837	23,955	6,819

PREGNANCY OUTCOMES

Table PO10. Live Births and Pregnancy Rates* to Teenagers (Age 15-19 Years) by Ethnic Group and Borough of Residence, New York City, 2016

	Age of Woman (Years)†	Live Births	Spontaneous Terminations	Induced Terminations	Total	Population Women	Birth Rate per 1,000 Women	Pregnancy Rate Per 1,000 Women
New York City‡	15-17	889	79	1,889	2,857	132,409	6.7	21.6
	18-19	2,536	200	3,511	6,247	99,167	25.6	63.0
	Age 15-19	3,425	279	5,400	9,104	231,576	14.8	39.3
Ethnic Group‡								
Hispanic	15-17	586	30	678	1,294	48,266	12.1	26.8
	18-19	1,406	70	1,156	2,632	33,882	41.5	77.7
	Age 15-19	1,992	100	1,834	3,926	82,148	24.2	47.8
Asian and Pacific Islander	15-17	11	2	42	55	16,806	0.7	3.3
	18-19	109	4	130	243	13,344	8.2	18.2
	Age 15-19	120	6	172	298	30,150	4.0	9.9
Non-Hispanic White	15-17	31	6	135	172	29,265	1.1	5.9
	18-19	326	28	313	667	25,664	12.7	26.0
	Age 15-19	357	34	448	839	54,929	6.5	15.3
Non-Hispanic Black	15-17	250	23	839	1,112	34,790	7.2	32.0
	18-19	654	47	1,520	2,221	23,815	27.5	93.3
	Age 15-19	904	70	2,359	3,333	58,605	15.4	56.9
NYC Events to NYC Residents§	15-17	865	77	1,767	2,709	132,409	6.5	20.5
	18-19	2,427	192	3,229	5,848	99,167	24.5	59.0
	Age 15-19	3,292	269	4,996	8,557	231,576	14.2	37.0
Ethnic Group§								
Hispanic	15-17	573	30	654	1,257	48,266	11.9	26.0
	18-19	1,367	68	1,100	2,535	33,882	40.3	74.8
	Age 15-19	1,940	98	1,754	3,792	82,148	23.6	46.2
Asian and Pacific Islander	15-17	11	2	40	53	16,806	0.7	3.2
	18-19	107	4	118	229	13,344	8.0	17.2
	Age 15-19	118	6	158	282	30,150	3.9	9.4
Non-Hispanic White	15-17	30	6	121	157	29,265	1.0	5.4
	18-19	285	24	258	567	25,664	11.1	22.1
	Age 15-19	315	30	379	724	54,929	5.7	13.2
Non-Hispanic Black	15-17	242	21	774	1,037	34,790	7.0	29.8
	18-19	628	46	1,394	2,068	23,815	26.4	86.8
	Age 15-19	870	67	2,168	3,105	58,605	14.8	53.0
Borough of Residence								
Manhattan	15-17	84	12	241	337	16,899	5.0	19.9
	18-19	236	24	445	705	20,314	11.6	34.7
	Age 15-19	320	36	686	1,042	37,213	8.6	28.0
Bronx	15-17	305	14	520	839	28,730	10.6	29.2
	18-19	732	50	863	1,645	20,094	36.4	81.9
	Age 15-19	1,037	64	1,383	2,484	48,824	21.2	50.9
Brooklyn	15-17	258	31	569	858	42,673	6.0	20.1
	18-19	836	67	998	1,901	29,157	28.7	65.2
	Age 15-19	1,094	98	1,567	2,759	71,830	15.2	38.4
Queens	15-17	183	17	363	563	35,439	5.2	15.9
	18-19	531	41	772	1,344	24,016	22.1	56.0
	Age 15-19	714	58	1,135	1,907	59,455	12.0	32.1
Staten Island	15-17	35	3	74	112	8,667	4.0	12.9
	18-19	92	10	151	253	5,587	16.5	45.3
	Age 15-19	127	13	225	365	14,254	8.9	25.6
NYC Events to Non-NYC Residents	15-17	24	2	122	148	-	N.A.	N.A.
	18-19	109	8	282	399	-	N.A.	N.A.
	Age 15-19	133	10	404	547	0	N.A.	N.A.

* Population data used to calculate rates are from 2010 Census population estimates. See Technical Notes: Population.

† From 2011, the number of events to 15-17 year old females and to 15-19 year old females include events to females <18 and <20 years of age, respectively. See Technical Notes: Pregnancy Outcome Rates.

‡ Includes all events occurring in NYC regardless of residence; other/unknown ethnicities are not presented.

§ Numbers and rates are limited to events occurring in NYC to NYC residents only; other/unknown ethnicities are not presented.

N.A. Not applicable.

PREGNANCY OUTCOMES

Table PO11. Live Births to Teenagers (Age < 20 Years), Overall and by Selected Characteristics, New York City, 2012-2016

	Year				
	2012	2013	2014	2015	2016
Total Live Births	123,231	120,457	122,084	121,673	120,367
Percent to Teenagers (Age < 20)	4.7	4.2	3.7	3.3	2.8
Population* (Female Age 15-19)	245,424	238,442	235,417	232,369	231,576
Birth Rate† (Age 15-19)	23.6	21.2	19.4	17.5	14.8
Births to Teenagers	5,795	5,046	4,572	4,073	3,425
Percent of Births with					
Specified Characteristics:					
Hispanic	57.3	58.1	58.5	59.0	59.0
Foreign-born Mother‡	29.5	29.8	30.0	31.8	33.5
First Live Birth	86.8	85.3	85.9	86.1	88.1
< 2,500 grams	9.9	10.4	9.6	10.5	9.7
Preterm§	9.7	9.5	9.3	10.0	9.0
Prenatal Care in First or Second					
Trimester of Pregnancy	85.5	84.0	85.4	84.7	85.3
Not Married	90.1	88.4	88.4	86.8	86.1
On Medicaid||	88.6	88.3	90.3	91.0	90.3
Pre-pregnancy Obesity	14.1	13.4	13.6	13.9	13.6
Infant Mortality Rate¶	6.6	6.5	3.7	6.6	5.3

* For denominator information, see Technical Notes: Population.

† Births to women age < 20 years per 1,000 female population age 15 to 19. See Technical Notes: Vital Event Rates.

‡ See Technical Notes: Geographical Units, Birthplace Presentation

§ Clinical gestational age < 37 completed weeks.

|| See Technical Notes: Births, Birth Reporting.

¶ Infant mortality rate per 1,000 live births to teenagers.

PREGNANCY OUTCOMES

Table PO12. Live Births to Teenagers (Age < 20 Years) by Selected Characteristics by Community District of Residence, New York City, 2014-2016*

			Percent of Total Live Births with Specified Characteristics								
Community District of Residence	Live Births	Percent of Total Live Births	Mother's Ancestry Hispanic	Foreign Born Mother	First Live Birth	Low Birth Weight (<2,500 Grams)	Preterm Birth (<37 Weeks)	Late or No Prenatal Care	Mother Not Married	On Medicaid†	Exclusive Breast Feeding
NEW YORK CITY	12,070	3.3	58.8	31.6	86.6	10.0	9.4	14.9	87.2	90.5	25.8
MANHATTAN	1,149	2.2	68.9	24.9	88.2	10.5	11.3	13.8	93.8	91.6	23.7
Battery Park, Tribeca (01)	7	0.2	57.1	57.1	100.0	14.3	14.3	28.6	71.4	71.4	0.0
Greenwich Village, SoHo (02)	7	0.3	28.6	0.0	71.4	0.0	0.0	28.6	85.7	85.7	14.3
Lower East Side (03)	125	3.0	62.8	17.1	84.8	11.2	16.8	11.7	94.4	93.3	36.0
Chelsea, Clinton (04)	44	1.4	60.5	15.9	81.8	9.1	9.1	17.5	100.0	93.0	29.5
Midtown Business District (05)	12	0.7	25.0	16.7	66.7	16.7	16.7	9.1	83.3	91.7	25.0
Murray Hill (06)	11	0.3	36.4	18.2	90.9	18.2	9.1	33.3	90.9	60.0	18.2
Upper West Side (07)	67	0.9	71.2	9.0	88.1	7.5	9.0	13.6	97.0	88.1	23.9
Upper East Side (08)	17	0.2	35.3	17.6	76.5	5.9	5.9	12.5	94.1	93.8	23.5
Manhattanville (09)	122	3.8	77.7	27.9	92.6	4.9	9.0	19.1	92.6	93.3	24.6
Central Harlem (10)	198	4.1	42.8	14.6	88.4	11.6	10.1	16.2	94.4	87.3	31.5
East Harlem (11)	247	5.4	66.0	11.3	85.4	17.4	17.8	11.1	93.9	93.0	18.7
Washington Heights (12)	292	4.4	94.5	51.4	92.5	6.8	6.5	11.5	93.2	94.2	17.1
BRONX	3,665	6.1	73.7	30.6	86.0	10.3	9.0	17.7	93.5	93.1	21.7
Mott Haven (01)	363	7.3	73.3	27.0	87.1	11.6	10.2	17.3	95.3	94.5	20.4
Hunts Point (02)	184	7.2	78.1	23.4	84.2	8.7	9.8	20.7	95.7	92.9	23.4
Morrisania (03)	308	7.1	69.2	24.4	82.8	9.4	8.5	22.5	95.8	92.2	18.6
Concourse, Highbridge (04)	479	6.3	79.7	36.7	85.0	9.2	10.6	14.7	93.1	93.5	19.9
University/Morris Heights (05)	452	6.7	82.6	36.7	86.0	9.5	8.4	13.8	93.6	94.0	15.3
East Tremont (06)	304	7.7	74.8	22.0	83.8	10.2	9.5	12.8	95.4	94.1	21.7
Fordham (07)	395	5.9	86.1	37.5	88.6	10.1	6.8	17.6	92.7	93.1	26.8
Riverdale (08)	102	3.1	93.1	40.2	89.2	15.7	9.8	17.7	92.2	94.9	15.7
Unionport, Soundview (09)	437	6.0	72.7	28.6	86.7	10.5	9.4	18.5	93.4	93.6	28.2
Throgs Neck (10)	111	3.7	71.3	22.5	89.2	10.8	8.1	13.6	87.4	89.2	26.1
Pelham Parkway (11)	185	4.5	63.2	35.1	85.9	10.8	7.6	26.8	84.9	89.2	27.6
Williamsbridge (12)	345	6.7	42.2	26.7	86.4	11.0	8.7	20.8	94.8	91.9	18.6
BROOKLYN	3,915	3.2	41.9	30.5	87.2	10.3	10.2	12.7	80.7	89.7	25.5
Williamsburg, Greenpoint (01)	205	1.9	50.2	13.2	91.2	6.8	6.3	7.1	65.4	90.7	31.9
Fort Greene, Brooklyn Heights (02)	87	1.7	41.2	8.1	90.8	16.1	21.8	2.3	95.4	88.5	17.4
Bedford Stuyvesant (03)	330	4.8	36.4	15.2	87.6	11.8	13.3	12.9	85.5	91.8	23.1
Bushwick (04)	274	6.7	84.1	37.0	83.9	6.2	6.9	11.0	95.3	93.4	21.2
East New York (05)	548	6.8	47.9	28.1	85.6	13.3	11.1	15.1	95.1	88.5	36.6
Park Slope (06)	79	1.5	53.8	17.7	83.5	13.9	16.5	5.1	93.7	92.4	21.8
Sunset Park (07)	247	3.1	78.5	44.1	81.8	8.5	8.1	8.6	86.2	93.9	15.0
Crown Heights North (08)	142	3.6	29.6	16.9	87.3	11.3	8.5	16.9	92.3	91.4	21.1
Crown Heights South (09)	97	2.2	18.6	48.5	90.7	9.3	12.4	11.0	86.6	86.5	23.2
Bay Ridge (10)	96	1.7	57.3	57.3	85.4	7.3	3.1	10.4	70.8	91.7	15.6
Bensonhurst (11)	155	1.9	53.5	54.8	85.8	9.0	10.3	10.4	74.2	91.6	24.2
Borough Park (12)	350	2.1	24.3	30.1	92.9	6.0	5.7	5.8	34.9	87.4	25.4
Coney Island (13)	166	4.3	42.8	27.1	83.1	12.0	11.4	16.7	78.9	93.9	17.0
Flatbush, Midwood (14)	241	3.1	38.8	45.2	88.8	10.0	11.6	16.2	70.1	91.7	21.7
Sheepshead Bay (15)	155	2.3	21.6	45.2	85.2	6.5	9.7	17.5	43.2	85.8	24.5
Brownsville (16)	304	7.5	34.8	16.8	87.2	13.2	11.8	18.4	96.4	87.2	32.2
East Flatbush (17)	252	4.3	11.5	33.7	90.5	13.9	11.5	14.3	95.2	88.7	23.9
Canarsie (18)	187	2.7	17.7	28.3	86.1	9.1	10.7	17.7	90.9	81.3	31.7
QUEENS	2,467	3.1	62.1	42.0	85.3	8.8	8.4	16.7	87.5	90.2	34.9
Astoria, Long Island City (01)	147	2.5	66.2	25.9	81.6	8.8	8.2	23.8	90.5	91.8	22.6
Sunnyside, Woodside (02)	85	1.7	80.0	37.6	78.8	5.9	5.9	19.0	87.1	96.5	21.2
Jackson Heights (03)	353	4.6	93.5	54.4	85.6	7.6	7.6	18.0	87.3	92.6	31.1
Elmhurst, Corona (04)	306	3.9	89.5	53.6	85.0	8.5	8.2	14.2	89.9	95.1	22.9
Ridgewood, Glendale (05)	197	3.3	78.1	35.0	81.7	6.1	10.2	17.6	82.7	91.3	27.0
Rego Park, Forest Hills (06)	28	0.7	28.6	78.6	92.9	10.7	7.1	10.7	60.7	92.9	25.0
Flushing (07)	132	1.5	72.5	54.5	84.8	4.5	6.8	10.7	82.6	90.9	37.9
Fresh Meadows, Briarwood (08)	84	1.5	39.8	34.5	88.1	10.7	7.1	13.8	76.2	88.1	36.9
Woodhaven (09)	196	3.5	60.5	46.4	80.6	11.7	9.2	14.7	81.6	89.8	43.4
Howard Beach (10)	141	3.7	38.3	38.3	88.7	11.3	8.5	19.7	87.2	87.9	44.0
Bayside (11)	14	0.7	57.1	57.1	85.7	7.1	7.1	14.3	71.4	85.7	35.7
Jamaica, St. Albans (12)	436	4.9	38.7	37.0	87.4	10.8	9.6	18.2	91.3	86.5	49.3
Queens Village (13)	144	2.9	18.9	38.2	91.7	9.7	5.6	14.5	92.4	82.6	43.8
The Rockaways (14)	204	5.3	46.0	24.0	85.8	7.4	9.8	16.4	94.1	89.2	28.9
STATEN ISLAND	483	3.0	56.1	20.5	85.9	7.9	7.5	6.5	89.4	83.6	19.1
Port Richmond (01)	366	5.3	60.1	20.3	83.9	7.4	7.4	7.2	91.8	86.3	17.9
Willowbrook, South Beach (02)	75	1.8	50.7	22.7	92.0	6.7	4.0	4.0	84.0	80.0	21.3
Tottenville (03)	42	0.9	31.0	19.0	92.9	14.3	14.3	4.8	78.6	66.7	26.2
NEW YORK CITY RESIDENTS	11,679	3.5	59.4	32.0	86.5	9.9	9.4	14.9	87.8	90.8	25.9
NON-RESIDENTS	386	1.2	40.3	19.4	90.9	11.9	9.8	11.9	69.7	82.4	24.2
RESIDENCE UNKNOWN	5	-	-	-	-	-	-	-	-	-	-

Note: Borough totals may be higher than the sum of the community districts, as they may include some live births whose community district could not be determined.
Map of percent of live births to teenagers by community district of residence is presented on PO Figure 14.

*Three years of data were combined because of the relatively small number of live births per year for teenage mothers.

† Due to revision of the birth certificate, since 2008, "On Medicaid" also includes Family Health Plus, Other government, and Child Health Plus B.

PREGNANCY OUTCOMES

Table PO13. Live Births, Spontaneous Terminations, and Induced Terminations of Pregnancy, Overall and by Borough of Residence and Age of Woman, New York City, 2016

Borough of Residence / Pregnancy Outcome	Total	Age of Woman (Years)							
		<18	18-19	20-24	25-29	30-34	35-39	≥40	Unknown or Not Stated
NEW YORK CITY	190,052	2,857	6,247	35,677	50,073	51,051	33,380	10,765	2
Live Births	120,367	889	2,536	18,235	31,096	36,837	23,955	6,819	-
Spontaneous Terminations	9,831	79	200	1,224	1,973	2,607	2,444	1,304	-
Induced Terminations	59,854	1,889	3,511	16,218	17,004	11,607	6,981	2,642	2
MANHATTAN	28,679	337	705	4,250	6,209	8,859	6,156	2,163	-
Live Births	17,199	84	236	1,509	3,011	6,389	4,564	1,406	-
Spontaneous Terminations	1,632	12	24	156	239	478	466	257	-
Induced Terminations	9,849	241	445	2,585	2,959	1,992	1,126	500	1
BRONX	34,519	839	1,645	8,455	10,025	7,577	4,576	1,402	-
Live Births	19,474	305	732	4,215	5,770	4,762	2,858	832	-
Spontaneous Terminations	1,474	14	50	237	363	356	313	141	-
Induced Terminations	13,571	520	863	4,003	3,892	2,459	1,405	429	-
BROOKLYN	59,772	858	1,901	11,965	16,078	15,418	10,293	3,258	1
Live Births	40,125	258	836	7,162	10,756	11,368	7,597	2,148	-
Spontaneous Terminations	3,102	31	67	452	635	760	759	398	-
Induced Terminations	16,545	569	998	4,351	4,687	3,290	1,937	712	1
QUEENS	42,011	563	1,344	7,490	11,909	11,446	7,015	2,244	-
Live Births	26,794	183	531	3,704	7,805	8,336	4,922	1,313	-
Spontaneous Terminations	2,144	17	41	261	465	583	494	283	-
Induced Terminations	13,073	363	772	3,525	3,639	2,527	1,599	648	-
STATEN ISLAND	8,472	112	253	1,384	2,329	2,474	1,497	423	-
Live Births	5,357	35	92	639	1,486	1,841	1,035	229	-
Spontaneous Terminations	548	3	10	51	123	160	132	69	-
Induced Terminations	2,567	74	151	694	720	473	330	125	-
NON-RESIDENTS	16,577	147	399	2,131	3,515	5,274	3,840	1,271	-
Live Births	11,411	23	109	1,006	2,264	4,140	2,979	890	-
Spontaneous Terminations	917	2	8	65	144	268	277	153	-
Induced Terminations	4,249	122	282	1,060	1,107	866	584	228	-
RESIDENCE UNKNOWN	21	1	-	2	8	3	3	4	-
Live Births	7	1	-	-	4	1	-	1	-
Spontaneous Terminations	14	-	-	2	4	2	3	3	-
Induced Terminations	-	-	-	-	-	-	-	-	-

Note: See Technical Notes: Spontaneous and Induced Terminations of Pregnancy Reporting.

PREGNANCY OUTCOMES

Table PO14. Spontaneous Terminations of Pregnancy by Gestational Age and Age of Woman, New York City, 2016

Gestational Age (Weeks)	Total	Age of Woman (Years)						
		<18	18-19	20-24	25-29	30-34	35-39	≥40
Total	9,831	79	200	1,224	1,973	2,607	2,444	1,304
<13	7,614	57	150	920	1,489	1,996	1,914	1,088
13-15	576	5	13	66	121	152	148	71
16-19	702	8	11	105	146	208	160	64
20-27	551	7	13	73	131	158	127	42
≥28	388	2	13	60	86	93	95	39

See Technical Notes: Spontaneous and Induced Terminations of Pregnancy.

Table PO15. Selected Characteristics of Spontaneous Terminations of Pregnancy, ≥28 Weeks Gestation, Overall and by Age of Woman, New York City, 2016

	Total	Age of Woman (Years)						
		<18	18-19	20-24	25-29	30-34	35-39	≥40
Total	388	2	13	60	86	93	95	39
Sex								
Male	179	1	6	25	38	42	51	16
Female	189	1	5	33	45	45	40	20
Undetermined	20	-	2	2	3	6	4	3
Weight at Delivery (Grams)								
<500	10	-	-	2	2	3	1	2
500-999	30	-	3	4	6	6	8	3
1,000-1,499	61	1	4	10	16	10	16	4
1,500-1,999	61	-	1	17	15	10	12	6
2,000-2,499	54	-	1	4	10	22	11	6
≥2,500	154	1	4	21	31	37	42	18
Not stated	18	-	-	2	6	5	5	-

See Technical Notes: Spontaneous and Induced Terminations of Pregnancy Reporting.

PREGNANCY OUTCOMES

Table PO16. Selected Characteristics of Spontaneous Terminations of Pregnancy, ≥28 Weeks Gestation, Overall and by Ethnic Group of Women, New York City, 2016

	Racial/Ethnic Group of Women							
	Total	Puerto Rican	Other Hispanic	Asian and Pacific Islander	Non-Hispanic White	Non-Hispanic Black	Other	Not Stated
Total	388	19	73	48	90	126	2	30
Sex								
Male	179	9	33	28	38	59	1	11
Female	189	10	35	19	43	64	1	17
Undetermined	20	-	5	1	9	3	-	2
Weight at Delivery (Grams)								
<500	10	1	3	-	1	4	-	1
500-999	30	1	8	7	8	4	-	2
1,000-1,499	61	3	12	13	6	18	-	9
1,500-1,999	61	4	14	5	9	25	-	4
2,000-2,499	54	1	8	10	11	21	-	3
≥2,500	154	9	26	11	48	51	1	8
Not stated	18	-	2	2	7	3	1	3

See Technical Notes: Spontaneous and Induced Terminations of Pregnancy Reporting.

Table PO17. Live Births, Spontaneous Terminations of ≥28 Weeks Gestation, and Induced Terminations of Pregnancy by Borough of Residence and Occurrence, New York City, 2016

Borough of Residence / Pregnancy Outcome	Total	Borough of Occurrence				
		Manhattan	Bronx	Brooklyn	Queens	Staten Island
NEW YORK CITY	180,609	69,631	24,804	40,572	39,594	6,008
Live Births	120,367	44,804	14,694	29,226	25,770	5,873
Spontaneous Terminations	388	120	76	93	75	24
Induced Terminations	59,854	24,707	10,034	11,253	13,749	111
MANHATTAN	27,095	24,917	1,225	426	507	20
Live Births	17,199	16,562	279	218	122	18
Spontaneous Terminations	47	46	1	-	-	-
Induced Terminations	9,849	8,309	945	208	385	2
BRONX	33,130	10,156	21,890	456	615	13
Live Births	19,474	5,495	13,521	217	228	13
Spontaneous Terminations	85	18	67	-	-	-
Induced Terminations	13,571	4,643	8,302	239	387	-
BROOKLYN	56,793	16,910	342	34,982	3,315	1,244
Live Births	40,125	11,342	119	25,990	1,437	1,237
Spontaneous Terminations	123	22	1	89	7	4
Induced Terminations	16,545	5,546	222	8,903	1,871	3
QUEENS	39,941	7,305	241	2,457	29,907	31
Live Births	26,794	4,760	94	1,560	20,349	31
Spontaneous Terminations	74	15	-	2	57	-
Induced Terminations	13,073	2,530	147	895	9,501	-
STATEN ISLAND	7,943	1,920	111	1,244	179	4,489
Live Births	5,357	327	10	626	28	4,366
Spontaneous Terminations	19	1	-	-	-	18
Induced Terminations	2,567	1,592	101	618	151	105
NON-RESIDENTS	15,699	8,528	991	899	5,070	211
Live Births	11,411	6,317	667	613	3,606	208
Spontaneous Terminations	39	18	7	2	10	2
Induced Terminations	4,249	2,193	317	284	1,454	1
RESIDENCE UNKNOWN	8	1	4	2	1	-
Live Births	7	1	4	2	-	-
Spontaneous Terminations	1	-	-	-	1	-
Induced Terminations	-	-	-	-	-	-

See Technical Notes: Spontaneous and Induced Terminations of Pregnancy Reporting.

Table PO18. Induced Terminations of Pregnancy by Selected Characteristics and Age of Woman, New York City, 2016

	Total	Age of Woman (Years)							
		<18	18-19	20-24	25-29	30-34	35-39	≥40	Not Stated
Induced Termination of Pregnancy, All	59,854	1,889	3,511	16,218	17,004	11,607	6,981	2,642	2
Ethnic Group									
Hispanic	16,718	678	1,156	4,899	4,767	2,971	1,673	574	-
Asian and Pacific Islander	3,490	42	130	767	973	764	570	244	-
Non-Hispanic white	9,139	135	313	2,017	2,639	2,052	1,384	598	1
Non-Hispanic black	23,209	839	1,520	6,664	6,569	4,330	2,455	831	1
Other	1,711	69	123	492	463	286	179	99	-
Unknown	5,587	126	269	1,379	1,593	1,204	720	296	-
Marital Status									
Married	8,763	20	79	1,080	2,272	2,421	2,001	890	-
Not married	45,053	1,735	3,153	13,744	13,063	7,862	4,101	1,393	2
Other/Unknown	6,038	134	279	1,394	1,669	1,324	879	359	-
Gestational Age (Weeks)									
≤6	23,711	555	1,185	6,230	7,141	4,799	2,799	1,001	1
7 - 8	17,842	520	1,000	4,892	5,110	3,453	2,083	783	1
9 - 10	7,666	287	503	2,173	2,107	1,416	858	322	-
11 - 12	3,792	149	304	1,084	958	719	413	165	-
13 - 15	2,917	136	201	789	732	494	383	182	-
16 - 20	2,552	151	224	695	597	474	284	127	-
≥21	1,328	89	90	346	351	242	152	58	-
Unknown	46	2	4	9	8	10	9	4	-
Type of Primary Termination Procedure									
Suction curettage	41,373	1,226	2,335	11,016	11,844	8,147	4,931	1,872	2
Sharp curettage / D+C	1,711	44	71	362	426	382	263	163	-
Dilatation and evacuation	4,186	235	311	1,122	1,013	774	509	222	-
Intrauterine instillation	44	-	-	5	8	12	15	4	-
Hysterotomy / hysterectomy	6	-	-	1	1	-	3	1	-
Medical (non-surgical)	12,491	384	792	3,706	3,700	2,280	1,252	377	-
Other	43	-	2	6	12	12	8	3	-

See Technical Notes: Spontaneous and Induced Terminations of Pregnancy.

Table PO19. Induced Terminations of Pregnancy by Woman's Marital Status, Age, and Ethnic Group, New York City, 2012-2016

	2012	2013	2014	2015	2016
Marital Status (Percent)					
Married	16.2	15.0	13.9	14.7	14.6
Not married	75.2	79.1	73.6	72.8	75.3
Other/Unknown	8.6	6.0	12.6	12.6	10.1
Age of Woman (Years)					
<20	9,417	8,063	7,067	5,908	5,400
20 - 24	22,048	20,956	19,764	18,049	16,218
25 - 29	18,917	18,066	18,345	17,499	17,004
30 - 34	13,061	12,734	12,462	11,979	11,607
35 - 39	7,472	7,175	7,262	7,108	6,981
≥40	2,897	2,846	2,718	2,705	2,642
Unknown	3	-	2	2	2
Ethnic Group					
Hispanic	22,917	21,555	20,371	18,139	16,718
Asian and Pacific Islander	4,493	4,615	4,547	4,012	3,490
Non-Hispanic white	9,704	9,422	9,401	9,652	9,139
Non-Hispanic black	31,328	29,007	27,367	25,515	23,209
Other	2,555	2,591	2,477	2,155	1,711
Unknown	2,818	2,650	3,457	3,777	5,587
Total	73,815	69,840	67,620	63,250	59,854

See Technical Notes: Spontaneous and Induced Terminations of Pregnancy Reporting.

PREGNANCY OUTCOMES

Table PO20. Most Popular Baby Names by Sex, New York City, Selected Years

Rank	Girls											
	1898	1928	1948	1980	1990	2000	2005	2010	2013	2014	2015	2016
1	Mary	Mary	Linda	Jennifer	Stephanie	Ashley	Emily	Isabella	Sophia	Sophia	Olivia	Olivia
2	Catherine	Marie	Mary	Jessica	Jessica	Samantha	Ashley	Sophia	Isabella	Isabella	Sophia	Sophia
3	Margaret	Annie	Barbara	Melissa	Ashley	Kayla	Kayla	Olivia	Emma	Olivia	Emma/Mia	Emma
4	Annie	Margaret	Patricia	Nicole	Jennifer	Emily	Sarah	Emily	Olivia	Mia	Isabella	Isabella
5	Rose	Catherine	Susan	Michelle	Amanda	Brianna	Isabella	Madison	Mia	Emma	Leah	Mia
6	Marie	Gloria	Kathleen	Elizabeth	Samantha	Sarah	Samantha	Mia	Emily	Emily	Emily	Ava
7	Esther	Helen	Carol	Lisa	Nicole	Jessica	Sophia	Emma	Leah	Leah	Ava	Emily
8	Sarah	Teresa	Nancy	Christina	Christina	Nicole	Nicole	Leah	Sofia	Ava	Chloe	Leah
9	Frances	Joan	Margaret	Tiffany	Melissa	Michelle	Olivia	Sarah	Madison	Sofia	Madison	Sarah
10	Ida	Barbara	Diane	Maria	Michelle	Amanda	Rachel	Chloe	Chloe	Chloe	Sarah	Madison

Rank	Boys											
	1898	1928	1948	1980	1990	2000	2005	2010	2013	2014	2015	2016
1	John	John	Robert	Michael	Michael	Michael	Michael	Jayden	Jayden	Ethan	Ethan	Liam
2	William	William	John	David	Christopher	Justin	Daniel	Ethan	Ethan	Jacob	Liam	Jacob
3	Charles	Joseph	James	Jason	Jonathan	Christopher	Joshua	Daniel	Jacob	Liam	Noah	Ethan
4	George	James	Michael	Joseph	Anthony	Matthew	David	Jacob	Daniel	Jayden	Jacob	Noah
5	Joseph	Richard	William	Christopher	David	Daniel	Justin	David	David	Noah	Jayden	Aiden
6	Edward	Edward	Richard	Anthony	Daniel	Anthony	Matthew	Justin	Noah	Daniel	Matthew	Matthew
7	James	Robert	Joseph	John	Joseph	Joshua	Anthony	Michael	Michael	Michael	David	Daniel
8	Louis	Thomas	Thomas	Daniel	Matthew	David	Christopher	Matthew	Matthew	Alexander	Daniel/Dylan	Lucas
9	Francis	George	Stephen	Robert	John	Joseph	Joseph	Joseph	Alexander	David	Aiden	Michael
10	Samuel	Louis	David	James	Andrew	Kevin	Nicholas	Joshua	Liam	Matthew	Michael	Dylan

Table PO21. Most Popular Baby Names by Sex and Mother's Ethnic Group, New York City, 2016

	Girls					Boys				
Rank	Overall	Hispanic	NH-Black	NH-White	Asian & P.I.	Overall	Hispanic	NH-Black	NH-White	Asian & P.I.
1	Olivia	Isabella	Ava	Olivia	Olivia	Liam	Liam	Noah	Joseph	Ethan
2	Sophia	Sophia	Madison	Rachel	Chloe	Jacob	Jacob	Aiden	Michael	Ryan
3	Emma	Mia	Skylar	Esther	Sophia	Ethan	Dylan	Elijah	David	Muhammad
4	Isabella	Emma	Riley	Sarah	Emily*	Noah	Matthew	Liam	Moshe	Lucas
5	Mia	Camila	Aaliyah	Emma	Emma*	Aiden	Noah	Ethan	Jacob	Jayden
6	Ava	Sofia	Savannah	Charlotte	Mia	Matthew	Sebastian	Jeremiah	James	Aiden
7	Emily	Emily	Chloe	Chaya	Charlotte	Daniel	Ethan	Amir	Benjamin	Daniel
8	Leah	Valentina	Olivia	Leah	Sarah	Lucas	Jayden	Joshua	Alexander	Evan
9	Sarah	Abigail	Abigail*	Ava	Hannah*	Michael	Lucas	Josiah*	Daniel*	Jason*
10	Madison	Leah*	Fatoumata*	Chana	Isabella*	Dylan	Aiden	Mason*	Henry*	Liam*
		Victoria*								

* Tied ranks

NH = Non-Hispanic; P.I. = Pacific Islander. Mothers of other, multiple race, or unknown ethnic group not shown.

PREGNANCY OUTCOMES

Table PO22. Characteristics of Birth and Pregnancy Outcomes by Neighborhood Poverty*†, New York City, 2007, 2016

	Low (<10%)			Medium (10 to <20%)			High (20 to <30%)			Very High (≥30%)		
Birth Characteristics	2016	2007	Chg 2007 to 2016 (%)	2016	2007	Chg 2007 to 2016 (%)	2016	2007	Chg 2007 to 2016 (%)	2016	2007	Chg 2007 to 2016 (%)
Births	22,509	28,728	-21.6	29,396	32,372	-9.2	24,935	25,977	-4.0	32,115	30,615	4.9
Population	2,193,265	2,535,034	-13.5	2,540,287	2,363,154	7.5	1,825,735	1,546,140	18.1	1,968,368	1,600,539	23.0
Birth Rate (per 1,000 population)	10.3	11.3	-9.4	11.6	13.7	-15.5	13.7	16.8	-18.7	16.3	19.1	-14.7
Preterm Live Births (%)	8.2	9.4	-11.9	8.6	9.2	-6.5	8.8	9.5	-6.8	9.0	9.6	-6.2
Low Birth Weight (%)	7.7	8.3	-8.0	7.9	8.3	-4.5	8.2	8.7	-6.1	8.7	8.8	-1.4
Body Mass Indicator‡												
Normal (%)	63.2		-	55.1		-	49.5		-	45.8		-
Overweight/Obese (%)	30.7		-	39.0		-	45.2		-	49.2		-
C-section (%)§	34.4	35.5	§	33.3	32.3	§	33.4	29.9	§	30.5	27.6	§
Multiple Births (%)	4.4	5.1	-15.0	3.3	3.2	2.8	3.0	3.1	-1.9	3.2	2.9	11.2
Breastfed Only (%)‡	54.6		-	44.0		-	36.1		-	28.3		-
Late or No Prenatal Care (%)	4.5	4.3	4.7	6.9	7.0	-1.7	8.0	6.9	16.4	8.5	6.5	30.2
Foreign Born (%)||	43.9	46.8	-6.2	60.2	63.5	-5.3	62.4	60.4	3.4	47.1	44.1	6.7

*Birth with missing census tracts are excluded. New York City resident births only.

†See Technical Notes: Neighborhood Poverty. Neighborhood poverty (based on census tract) defined as percent of residents with incomes below 100% of the Federal Poverty Level.

‡Prior to 2008, data needed to compute these variables were not collected on the New York City certificate of birth.

§2007 C-section data is not comparable to 2016 due to 2008 birth certificate revisions. Historical Technical Notes: Births.

||See Technical Notes: Geographical Units, Birthplace Presentation.

PREGNANCY OUTCOMES

Table PO23. Pregnancy Outcomes, Pregnancy Outcome Rates*, and Pregnancy Rates* by Mother's Age Group, Racial/Ethnic Group, and Borough of Residence, New York City, 2016

	Age of Woman†	Live Births		Spontaneous Terminations		Induced Terminations		Pregnancy	
	Years	Counts‡	Rates per 1,000	Counts‡	Rates per 1,000	Counts‡	Rates per 1,000	Counts‡	Rates per 1,000
New York City§	15-19	3,425	14.8	279	1.2	5,400	23.3	9,104	39.3
	20-29	49,331	68.8	3,197	4.5	33,222	46.3	85,750	119.6
	30-39	60,792	87.8	5,051	7.3	18,588	26.8	84,431	121.9
	40-49	6,819	11.9	1,304	2.3	2,642	4.6	10,765	18.8
	Total	120,367	14.1	9,831	5.1	59,854	31.1	190,052	98.7
Racial/Ethnic Group§||									
Hispanic	15-19	1,992	24.2	100	1.2	1,834	22.3	3,926	47.8
	20-29	16,790	80.5	683	3.3	9,666	46.4	27,139	130.1
	30-39	13,815	72.0	816	4.3	4,644	24.2	19,275	100.4
	40-49	1,477	8.9	233	1.4	574	3.4	2,284	13.7
	Total	34,074	13.7	1,832	3.2	16,718	29.6	52,624	93.0
Asian and Pacific Islander	15-19	120	4.0	6	0.2	172	5.7	298	9.9
	20-29	8,601	76.7	285	2.5	1,740	15.5	10,626	94.8
	30-39	11,750	101.2	496	4.3	1,334	11.5	13,580	116.9
	40-49	1,095	11.3	98	1.0	244	2.5	1,437	14.9
	Total	21,566	17.3	885	2.9	3,490	11.3	25,941	84.2
Non-Hispanic White	15-19	357	6.5	34	0.6	448	8.2	839	15.3
	20-29	13,286	58.7	657	2.9	4,656	20.6	18,599	82.2
	30-39	24,185	104.9	1,619	7.0	3,436	14.9	29,240	126.8
	40-49	2,805	17.3	390	2.4	598	3.7	3,793	23.4
	Total	40,633	14.8	2,700	4.5	9,139	15.4	52,472	88.4
Non-Hispanic Black	15-19	904	15.4	70	1.2	2,359	40.3	3,333	56.9
	20-29	10,050	64.7	760	4.9	13,233	85.2	24,043	154.8
	30-39	10,172	72.1	955	6.8	6,785	48.1	17,912	127.0
	40-49	1,339	9.8	259	1.9	831	6.1	2,429	17.7
	Total	22,465	11.8	2,044	4.9	23,209	55.2	47,718	113.6
Borough of Residence¶									
Manhattan	15-19	320	8.6	36	1.0	686	18.4	1,042	28.0
	20-29	4,520	26.9	395	2.4	5,544	33.0	10,459	62.3
	30-39	10,953	70.0	944	6.0	3,118	19.9	15,015	96.0
	40-49	1,406	13.2	257	2.4	500	4.7	2,163	20.3
	Total	17,199	10.5	1,632	3.9	9,849	23.7	28,680	69.1
Bronx	15-19	1,037	21.2	64	1.3	1,383	28.3	2,484	50.9
	20-29	9,985	82.0	600	4.9	7,895	64.8	18,480	151.8
	30-39	7,620	70.7	669	6.2	3,864	35.9	12,153	112.8
	40-49	832	8.5	141	1.4	429	4.4	1,402	14.3
	Total	19,474	13.4	1,474	4.5	13,571	41.6	34,519	105.9
Brooklyn	15-19	1,094	15.2	98	1.4	1,567	21.8	2,759	38.4
	20-29	17,918	81.0	1,087	4.9	9,038	40.9	28,043	126.8
	30-39	18,965	86.0	1,519	6.9	5,227	23.7	25,711	116.6
	40-49	2,148	12.3	398	2.3	712	4.1	3,258	18.7
	Total	40,125	15.3	3,102	5.2	16,545	27.5	59,772	99.3
Queens	15-19	714	12.0	58	1.0	1,135	19.1	1,907	32.1
	20-29	11,509	65.9	726	4.2	7,164	41.0	19,399	111.0
	30-39	13,258	74.6	1,077	6.1	4,126	23.2	18,461	103.9
	40-49	1,313	8.2	283	1.8	648	4.0	2,244	14.0
	Total	26,794	11.5	2,144	4.4	13,073	26.6	42,011	85.6
Staten Island	15-19	127	8.9	13	0.9	225	15.8	365	25.6
	20-29	2,125	66.7	174	5.5	1,414	44.4	3,713	116.5
	30-39	2,876	94.7	292	9.6	803	26.5	3,971	130.8
	40-49	229	6.9	69	2.1	125	3.8	423	12.8
	Total	5,357	11.3	548	6.0	2,567	27.9	8,472	92.0

Note: Population data used to calculate rates are 2016 estimates from US Census Bureau. See Technical Notes: Population.

*See Technical Notes: Population, Vital Event Rates.

†The denominators for total rates are females ages 15-44 except for total birth rates which are all population.

‡Counts for females age 15 to 19 are the number of events to females age < 20; counts for females age 40 to 49 are the number of events to females age 40 and over. See Technical Notes: Vital Event Rates.

§Includes all events occurring in NYC regardless of residence.

||Other/unknown ethnicities are excluded.

¶Numbers and rates are limited to events occurring in NYC to NYC residents only.

SUMMARY OF VITAL STATISTICS
2016
THE CITY OF NEW YORK
Appendix B

Technical Notes and
New York City Vital Event Certificates

Bureau of Vital Statistics, New York City Department of Health and Mental Hygiene
125 Worth Street, CN 7, New York, New York, 10013

POPULATION

CITYWIDE POPULATION

The 2016 New York City (NYC) population estimates used in tables and figures are based on the US Census Bureau 2016 Vintage population estimate as extracted from the Census website (https://www2.census.gov/programs-surveys/popest/datasets/2010-2016/counties/asrh/cc-est2016-alldata-36.csv). The 2016 US Census population estimate for NYC is 8,537,673. See Table PC2 on page 49 for 2016 NYC population estimates by age, mutually exclusive race and Hispanic origin, and sex. Population data used to compute rate trends (2007-2016), regardless of NYC geography presented, was estimated by DOHMH Epidemiology Services, using the methodology found below under Community District Population Estimates. Population estimates for 2012-2016 are from Census Bureau Vintage files from each year, respectively.

RACE/ETHNICITY CATEGORIES

According to the definition of race categories used in the 2010 Census, "White" refers to a person having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicated their race(s) as "White" or reported entries such as Irish, German, Italian, Lebanese, Arab, Moroccan, or Caucasian. "Black or African American" refers to a person having origins in any of the Black racial groups of Africa. It includes people who indicated their race(s) as "Black, African American, or Negro". "American Indian or Alaska Native" refers to a person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment. This category includes people who indicated their race(s) as "American Indian or Alaska Native" or reported their enrolled or principal tribe. "Asian" refers to a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. It includes people who indicated their race(s) as "Asian" or reported entries such as "Asian Indian," "Chinese," "Filipino," "Korean," "Japanese," "Vietnamese," and "Other Asian" or provided other detailed Asian responses. "Native Hawaiian or Other Pacific Islander" refers to a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who indicated their race(s) as "Pacific Islander" or reported entries such as "Native Hawaiian," "Guamanian or Chamorro," "Samoan," and "Other Pacific Islander" or provided other detailed Pacific Islander responses. "Some Other Race" includes all other responses not included in the White, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander race categories described above. Respondents reporting entries such as multiracial, mixed, interracial, or a Hispanic or Latino group (for example, Mexican, Puerto Rican, Cuban, or Spanish) in response to the race question are included in this category.

Hispanics or Latinos are those people who classified themselves in one of the specific Spanish, Hispanic, or Latino categories listed on the Census 2010 questionnaire - "Mexican," "Puerto Rican," or "Cuban" -as well as those who indicate that they are "another Hispanic, Latino, or Spanish origin." People who do not identify with one of the specific origins listed on the questionnaire but indicate that they are "another Hispanic, Latino, or Spanish origin" are those whose origins are from Spain, the Spanish-speaking countries of Central or South America, or the Dominican Republic. The terms "Hispanic," "Latino," and "Spanish" are used interchangeably.

Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States.

People who identify their origin as Spanish, Hispanic, or Latino may be of any race. Thus, the percent Hispanic should not be added to percentages for racial categories.

COMMUNITY DISTRICT POPULATION ESTIMATES

Community districts were established by City Charter in 1969 for the delivery of city services. Population data for these districts are compiled by the Department of City Planning from census tract and census block data. The sum of the community district populations in each borough may not equal the borough population or the citywide population because community districts may cross borough boundaries.

2016 Community District Estimates

The 2016 Community District estimates were calculated based on the Census postcensal estimate for 2016 released in June 2017 (See Historical Technical Notes for previous years' methods).

LIFE EXPECTANCY

For life expectancy computations, single-year age group populations were based on decennial census counts. Life expectancies for 2001-2009 have been updated from the previous Summary using linear interpolation of single-year age group populations based on 2000 and 2010 Census counts. Citywide life expectancies by sex and race/ethnicity for 2010 are calculated based on 2010 Census population. Population data for life expectancies for 2011-2016 were extrapolated based on single-year age groups of Census population, 2000 and 2010. Life expectancy for Asians and Pacific Islanders is not displayed because the required single year of age population denominators are too small to produce reliable estimates. Also See Technical Notes: Deaths, Life Expectancy.

AGE CATEGORIES

Since 2010, rates of teen events (ages 15-17, 18-19) require population data with 22 age groups as opposed to the standard 18 provided by the Census. As a result, 22-age group population estimates are calculated and provided by Bureau of Epidemiology Services based on Census Bureau's estimates.

DEMOGRAPHICS/CHARACTERISTICS OF VITAL EVENTS

AGE AT DEATH

For ages greater than one year, decedent's age is based on age at last birthday. Unknown ages are recoded to mean age at death but are extremely rare.

RACE, ANCESTRY, AND ETHNIC GROUP

Race and ancestry are two separate items on the certificates. A relative of the decedent usually reports this information to the funeral director for the death certificate. As of 2003 and 2008, the death and birth certificates respectively allow for the selection of multiple races. Responses are coded following rules from the National Center for Health Statistics (NCHS). The ordered selection rules for defining ethnic group first assign Puerto Rican or other Hispanic ethnicities based on ancestry, regardless of race. Then, those of other or unknown ancestries are classified by race as Asian and Pacific Islander, non-Hispanic white, non-Hispanic black, and other/multiple race/unknown.

NCHS defines ancestry as the nationality, lineage, or country where the subject's ancestors were born before their arrival in the United States. If a religious group is reported, NCHS instructions are to ask for the country of origin or nationality. New York City receives enough certificates reporting Jewish or Hebrew ancestry to warrant inclusion in these tables, notwithstanding the religious meaning of the terms. Persons whose race is black and whose ancestry is American are classified as being of African American ancestry.

Infant Mortality

An infant's ethnic group is determined from mother's ancestry and race reported on the infant's birth certificate. In the absence of a corresponding birth certificate for an infant death, the infant's race and ancestry information on the infant's death certificate is used to assign an ethnic group. When rates are computed by infant characteristics (e.g. sex of infant or hospital/location of death), such characteristics are drawn from the death certificate, except for those characteristics that are either not indicated on the death certificate or only available on the child's birth certificate (e.g. mother's prenatal care, infant's birth weight, and gestational age). In the absence of a birth certificate, demographics are limited to those available on the death certificate. Infants who died in New York City who were born elsewhere are classified as unmatched in Appendix A: Tables IM2 and IM7.

GEOGRAPHICAL UNITS

RESIDENCY STATUS IN DATA PRESENTATION

Tables that stratify by location of residence (e.g., borough) separate data for nonresidents and residence-unknown categories. See Appendix A: Table M1 as an example. Tables that do not stratify by location of residence combine all deaths registered in New York City, regardless of residence.

Vital events that occurred to New York City residents while outside of New York City are not included in this report, with the exception of Life Expectancy. Life expectancy calculations use national data from the NCHS (Summary Figures 1-2; Appendix A Tables M24-M25) or New York State of Health (Summary Figures 3-4), including deaths to New York City residents that occurred outside of New York City. For more information, see Life Expectancy.

BIRTHPLACE PRESENTATION

Mortality Data

Decedent's birthplace is reported by country. American Samoa, Northern Mariana Islands, US Virgin Islands and Guam are included in United States.

Mother's Birthplace (used for births and infant mortality data)

Starting in 2006, mother's birthplace is categorized as: "United States, including its territories" (Puerto Rico, the US Virgin Islands, American Samoa, Northern Mariana Islands, and Guam), "Foreign," or "Not Stated." When mother's birthplace is classified by country-specific categories, Puerto Rico is categorized apart from the United States.

BOROUGH OF RESIDENCE

Borough of residence and other geographic classifications are based on the usual residence reported on the certificate.

COMMUNITY DISTRICT (CD)

Community districts were established by City Charter in 1969 for the delivery of city services. There are 59 community districts in New York City. Since 1985, assignments to geographic areas smaller than borough, such as community district, are made through the Geosupport Program, which is developed and maintained by the Department of City Planning. Additional information on community district geography can be found at Community Portal (http://www1.nyc.gov/site/planning/community/community-portal.page).

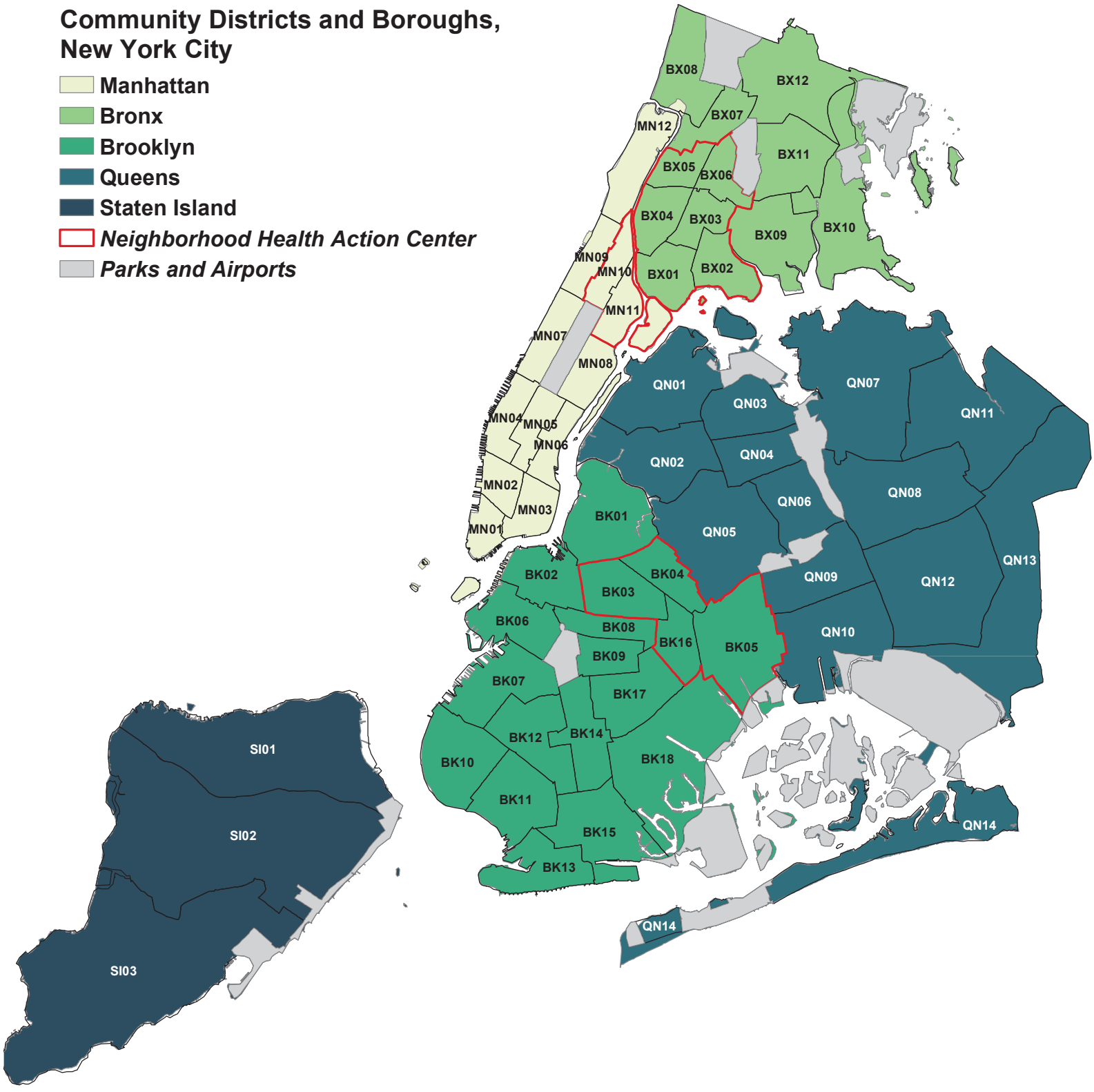
NEIGHBORHOOD POVERTY INDICATOR

Since 2012, neighborhood poverty disparities have been presented in the Summary of Vital Statistics. The neighborhood poverty indicator is the agency-recommended indicator for monitoring socioeconomic health disparities. The summary reports poverty at the census tract level. Each census tract is assigned to a neighborhood poverty category based on the percent of the census tract population living below the federal poverty level. The four neighborhood poverty categories are:

Low:	Medium:	High:	Very High:
< 10% of the population below poverty	10-19% of the population below poverty	20-29% of the population below poverty	≥ 30% of the population below poverty

The denominator of any rate by neighborhood poverty category contains the combined populations of census tracts falling within a category. The numerator contains the summed number of vital events occurring to residents of the census tracts falling within a category. Additional information on poverty indicator can be found at http://www.hsph.harvard.edu/thegeocodingproject/.

Community Districts and Boroughs, New York City



VITAL EVENT RATES

Death Rates

Death Rate, all causes per 1,000 population	Death Rate, specified causes per 100,000 population
$\frac{\text{Deaths to all causes}}{\text{Population}} \times 1{,}000$	$\frac{\text{Deaths to specific causes (specified ICD-10 codes)}}{\text{Population}} \times 100{,}000$
Death Rate, age and sex specific per 1,000 population	**Death Rate, age -adjusted per 100,000 population**
$\frac{\text{Deaths to persons of specified age group and sex}}{\text{Population, specified age group and sex}} \times 1{,}000$	The number of deaths per 100,000 population. Sex and race/ethnicity specific death rates are adjusted using the US standard population age distribution eliminating the effect of differences in population age composition, and allowing comparisons over time and between geographic areas. In this publication, 5 age groups are used for calculation: 0-24, 25-44, 45-64, 65-84, 85+, except for Appendix Table M2 which uses the age groups in the table.

Maternal Mortality Ratio – World Health Organization Definition (Appendix A Table M13)

$$\frac{\text{Deaths due to complications of pregnancy, childbirth and the puerperium occurring within 42 days of delivery}}{\text{Live births}} \times 100{,}000$$

*Death of a woman while pregnant or within 42 days of termination of pregnancy from any cause related to or aggravated by pregnancy or its management (ICD10 codes: A34, O00-O95, O98-O99)

Perinatal Mortality Ratio

$$\frac{\text{Fetal deaths 28 weeks and over + infant deaths under 7 days}}{\text{Fetal deaths 28 weeks and over + live births}} \times 1{,}000$$

Infant Mortality Rates

Infant Mortality Rate	Neonatal Mortality Rate
$\frac{\text{Deaths to infants < 1 yr old}}{\text{Number of live births}} \times 1{,}000$	$\frac{\text{Deaths to infants < 28 days of life}}{\text{Number of live births}} \times 1{,}000$
Early Neonatal Mortality Rate	**Late Neonatal Mortality Rate**
$\frac{\text{Deaths to infants < 7 days of life}}{\text{Number of live births}} \times 1{,}000$	$\frac{\text{Deaths to infants 7-27 days of life}}{\text{Number of live births}} \times 1{,}000$

Infant deaths counted in the numerator and live births counted in the denominator are defined by the same calendar year. Some infants counted in the numerator were born in the preceding year and some counted in the denominator may die in the following year.

Pregnancy Outcome Rates

Fertility Rate	Pregnancy Rate
$\frac{\text{Live births}}{\text{Female population aged 15 to 44 years}} \times 1{,}000$	$\frac{\sum \text{(Births, Spontaneous, Induced Terminations)}}{\text{Female population aged 15 to 44 years}} \times 1{,}000$

Birth Rates	
Total birth rate	Age-specific birth rate
$\frac{\text{Total births}}{\text{Total population regardless of age or sex}} \times 1{,}000$	$\frac{\text{Births among specific age group}}{\text{Female population of specific age group}} \times 1{,}000$

Total spontaneous termination rate	Age-specific spontaneous termination rate
$\frac{\text{Total spontaneous terminations}}{\text{Female population ages 15 to 44 years}} \times 1{,}000$	$\frac{\text{Spontaneous terminations among specific aged females}}{\text{Female population of specified age group}} \times 1{,}000$

Total induced termination of pregnancy rate	Age-specific induced termination of pregnancy rate
$\frac{\textit{Total induced terminations}}{\textit{Female population age 15 to 44 years}} \times 1{,}000$	$\frac{\textit{Induced terminations among specific aged females}}{\textit{Female population of specified age group}} \times 1{,}000$

Fetal-infant Mortality Rate (FIMR)
$\frac{\textit{[Fetal deaths (weight} \geq \textit{500 grams and gestational age} \geq \textit{24 weeks) + infant deaths (under 1 year old)]}}{\textit{[Live births (birthweight} \geq \textit{500 grams)]}} \times 1{,}000$

Pregnancy Outcome Counts and Rates

Pregnancy outcome (birth, spontaneous termination, or induced termination) counts and rate numerators use the number of events to women of all ages. For example, the birth rate includes all births in a population, regardless of the mother's age. The denominator for these rates differs by event, consistent with national standards. The birth rate denominator is the number of males and females of all ages. The denominator for spontaneous or induced termination rates is the number of females aged 15-44 years. The counts and numerator used in age-specific pregnancy outcome rates for the youngest age category (teens 15-19), is the number of events to women in the population under age 20, relative to the denominator of women in the population ages 15 to 19 (Table PO23, Appendix A). Similarly, the numerator of the oldest age category (40-49) includes events to all women in the population over the age of 40, relative to the denominator of women in the population ages 40-49. NYC first reported these age-specific rates in the 2011 Pregnancy Outcomes Report and applied a denominator of women in the population ages 40-49 as opposed to 40-44 due to the increased number of events occurring among women ages 45-49. The numerator used for the youngest age category for teen pregnancy outcomes (15-17 in Table PO10 Appendix A) is the number of events to women in the population under age 17, relative to the denominator or women in the population ages 15-17.

DEATHS

DEATH CERTIFICATE (see copies in back of Appendix B)

There are two forms, one for natural causes and one for medical examiner cases. The current revisions of the death certificate, implemented in 2003, is based on the recommended 2003 US Standard Certificate of Death http://www.cdc.gov/nchs/data/dvs/DEATH11-03final-ACC.pdf

Natural cause practitioner certificates – Most deaths are due to natural causes.

Medical examiner certificate of death – When the cause of death is an accident, homicide, suicide, or is unattended or due to certain other circumstances (approximately 15% of deaths), the New York City Office of the Chief Medical Examiner (OCME) completes the medical examiner certificate of death and supplementary report.

For natural cause certificates, the Electronic Vital Events Registration System's (EVERS) Electronic Death Registration System (EDRS) became available for voluntary use by hospitals in 2005. In January 2010, EDRS reporting became mandatory for medical examiner certificates. In April 2010, EDRS reporting became mandatory for hospitals reporting > 25 deaths/year.

The two forms are similar. Both collect important information pertaining to the fact of death (person, place, and time of death). Both collect "personal particulars" which include items such as decedent's Social Security number, address, birth place, education, marital status, informant's information, and place of disposition. The personal particulars are typically provided by a family member of the decedent through the funeral home. Both collect cause of death, which is completed by the physician or a medical examiner. On the natural cause certificate, the cause of death is entered on the confidential medical report. On the OCME certificate, the cause of death is entered on the death certificate itself. In addition to cause of death, the OCME certificate collects information on the circumstances of external causes of death. The OCME certificate indicates manner of death: natural, accident, homicide, suicide, or undetermined. The confidential medical report information is for the compilation of public health statistics and scientific purposes only.

DEATH REPORTING

The death events reported are based on certificates filed with the New York City Department of Health and Mental Hygiene (DOHMH) for vital events occurring in or in-route to New York City, regardless of individual residency status, in a particular year. Any events registered after file closure (typically occurring within 5 months of year-end) are excluded from this report. Such late registrations are rare.

Death certificates must be filed within 72 hours of death or finding the body. During 2016, 95% of death certificates were filed electronically using the Electronic Vital Events Registration System (EVERS). Additional information on EVERS is available at: www.nyc.gov/evers. Since the June 1993 revision of the death certificate, decedent race and ancestry information is reported by funeral directors.

DEATH RATES

See Vital Event Rates

Type of Place of Death

"Hospital" includes residential units and other special facilities within the hospital. "Nursing home" includes only sites licensed as Extended Care Facilities by New York State. "Home" refers to the decedent's residence, and includes private houses and apartments, group quarters for

special populations, homes for adults, and other long-term residential sites.

Cause of Death Reporting

The cause of death on the death certificate is completed by a physician, medical examiner or, as of January 16, 2012, by a nurse practitioner. The clinician is required to provide the complete sequence of events and/or medical conditions leading to the death. These include the following:

immediate cause – the specific condition that directly preceded the death.

intermediate cause(s) – the significant condition(s) that preceded and gave rise to the immediate cause of death.

underlying cause – the disease or condition that set off the chain of events leading to death.

For further information on how cause of death should be documented, visit www.nyc.gov/evers.

Cause of Death-Quality Improvement Initiative

The Office of Vital Statistics initiated a program to improve quality of cause of death data in 2009, affecting mortality trends by causes of death. See the NYC Summary of Vital Statistics 2010, Special Section, for more information.

Cause of Death Coding

Since 2008, the reported causes of death are coded using the NCHS automated coding software package SuperMICAR, which classifies conditions according to the International Classification of Diseases (ICD) published by the World Health Organization. A single underlying cause is assigned based on the reported chain of events leading to death. Standardized codes allow for national and international comparisons. Causes of death that cannot be coded by SuperMICAR are investigated and coded by nosologists.

Prior to 2007, a large proportion of accidental drug related deaths (X40-X42, X44) were miscoded as chronic drug use (F11-F16, F18-F19). For a full explanation, see the 2007 Annual Summary of Vital Statistics-Special Report: NYC Changes from Manual to Automated Cause of Death Coding, pages 73-75.

Table M1 is based on the NCHS List of 113 Selected Causes of Death. Some causes have been added to or dropped from these tables based on their number and importance in New York City.

Death trends across ICD code revision years may change as an artifact of the change in ICD codes and coding rules. These should be interpreted with caution.

Comparability Ratio

National comparability ratios, last updated in 2003, reflect discontinuities in trends for the cause of death when a new version of the ICD is implemented. They are presented in the Appendix A Table M1 to explain changes in following the implementation of the ICD-10 coding system in January 1999.

Comparability ratios measure the net effect of ICD-10 on each cause of death. NCHS determined the causes of death under ICD-10 and ICD-9 for more than 2.3 million 1996 US mortality records and calculated the ratio:

$$\frac{\textit{Deaths from cause ICD10}}{\textit{Deaths from cause ICD9}}$$

More information on the ICD-10/ICD-9 comparability ratio can be found at Comparability of Cause-of-death Between ICD Revisions (http://www.cdc.gov/nchs/nvss/mortality/comparability_icd.htm).

Smoking- and Alcohol-attributable Mortality

Smoking- and alcohol-attributable deaths represent the number of New York City deaths attributed to exposure to smoking and alcohol respectively.

Smoking-attributable mortality (SAM)

SAM was calculated using CDC's Adult SAMMEC (Smoking-Attributable Mortality, Morbidity, and Economic Costs) program using an attributable fraction formula. New York City sex-specific smoking prevalence was estimated from the New York City DOHMH Community Health Survey (CHS) and computed by the Bureau of Epidemiology. The relative risks (RR) of death for current and former smokers ≥35 years of age for 19 smoking-related diseases was estimated from American Cancer Society's Cancer Prevention Study. The smoking-attributable fraction (SAF) for each smoking-related disease and sex is calculated using the following formula:

$$\mathbf{SAF = [(p_0 + p_1(RR_1) + p_2(RR_2)) - 1] / [p_0 + p_1(RR_1) + p_2(RR_2)]}$$

where p0 is the percentage of adult never-smokers in New York City; p1 is the percentage of adult current smokers in New York City; p2 is the percentage of adult former-smokers in New York City; RR1 is the relative risk of death for adult current smokers relative to adult never-smokers; and RR2 is the relative risk of death for adult former-smokers relative to adult never-smokers.

To estimate the SAM, the age- and sex-specific SAFs are multiplied by the number of deaths for each smoking-related disease. Specifically, the number of deaths for each sex and 5-year age category was multiplied by the SAF:

$$\mathbf{SAM = Number\ of\ deaths \times SAF}$$

Summing across age categories provides the sex-specific estimate of SAM for each disease. Total SAM is the sum of the sex-specific SAM estimates. A detailed description of the methodology is available at https://chronicdata.cdc.gov/Health-Consequences-and-Costs/Smoking-

Attributable-Mortality-Morbidity-and-Econo/w47j-r23n/data.

Beginning 2014, substantial changes in SAM calculation were made based on the 2014 Surgeon General Report that used more age strata and updated relative risks. Four new conditions were also added – colorectal cancer (C18-C20), liver cancer (C22), diabetes (E10-E14) and tuberculosis (A16-A19). In addition, C66 (cancer of ureter) to kidney cancer was added – this was inadvertently omitted when CDC analyses began being based on ICD-10 several years ago. See chapter 12 of the 2014 Surgeon General Report at the following link:

http://www.surgeongeneral.gov/library/reports/50-years-of-progress/sgr50-chap-12.pdf

Alcohol-Attributable Mortality (Appendix A Table M14)

Alcohol-attributable deaths in Appendix A Table M14 represent the number of New York City deaths attributed to alcohol. Alcohol-attributable mortality (AAM) was calculated using the Alcohol-Related Disease Impact (ARDI) program by applying an alcohol-attributable fraction (AAF). For conditions that, by definition, are caused by alcohol use, the AAF was set equal to 1.0. For other conditions, especially injuries, ARDI directly estimated the AAF based on direct observations about the relationship between alcohol and a given health outcome. For most chronic conditions, the AAF was indirectly estimated using New York City alcohol prevalence data from the CHS combined with pooled risk estimates from large meta-analyses using the following formula:

$$AAF = [p(RR - 1)] / [1 + (p(RR - 1)]$$

where p is the percentage of New York City men and women age 20 years and older who consume alcohol at a specified level of average daily alcohol consumption within a given year, and RR is the likelihood of death from a particular condition at a specified level of average daily alcohol consumption. To estimate AAM, AAFs were multiplied by the number of New York City deaths for specific causes defined by the CDC's National Center for Chronic Disease Prevention and Health Promotion. A detailed description of the methodology is available at http://nccd.cdc.gov/DPH_ARDI/default/default.aspx.

Beginning in 2014, the cut points of average drinks per day to define alcohol consumption as "Low", "Medium", and "High" were revised slightly based on Ridolfo and Stevenson's study in 2001 and Bagnardi et al.'s study in 2001. The death data are stratified by sex and five-year age groups. Generally chronic causes of death are collected for people aged 20 years and older and acute causes of death for people aged 15 years and older. However, there are several exceptions to this rule. See Alcohol Related Disease Impact (ARDI) Custom Data User Manual at the following link for details: http://nccd.cdc.gov/DPH_ARDI/Info/ARDI_Custom_Data_User_Manual_2014.pdf

Complications of Medical and Surgical Care (Appendix A Tables M1, M22)

With the 10th revision of the ICD coding system, complications of medical and surgical care are no longer classified as accidents and are now shown separately from accidents.

Drug-Related Deaths

"Mental and behavioural disorders due to the use of or poisoning by psychoactive substance excluding alcohol and tobacco" is based on NCHS standard cause of death definitions using underlying causes as a basis for categorizing deaths and presented among the leading causes of death. It is also called "Use of or poisoning by psychoactive substance" or "Drug Use/Poisoning" combining underlying chronic drug-use ICD-10 codes (F11-F16, F18-F19) and accidental (unintentional) drug-poisoning ICD-10 codes (X40-X42, X44) to estimate overall drug-related deaths. This definition is found in Mortality Tables 1-4, Figure 13, Appendix A Tables M1, M7-M12, and M26. "Accidental poisoning by psychoactive substances, excluding alcohol and tobacco," the "accidental" subset of underlying codes (X40-X42, X44) are reported in Appendix A Tables M1, M13, and M18. "Mental and behavioural disorders due to the use of psychoactive substance excluding alcohol and tobacco," the "chronic" subset of underlying codes (F11-F16, F18-F19) is found in Appendix A Table M1 and M13. However, please use "accidental" (unintentional) and "chronic" subset trend data with caution as changes from manual to automated ICD coding resulted in a redistribution of chronic causes to acute in 2007 and going forward. For more information on coding error, please see Cause of Death Coding.

External Causes of Death (Mortality Figures 16-19; Appendix A Tables M18-M23)

External causes of death include accidents, suicide, assault, legal intervention, events of undetermined intent, operations of war and their sequelae, and complications of medical and surgical care. The Office of Chief Medical Examiner determines the cause and manner of death in such cases. For the purpose of statistical analysis, whether a cause is defined as external depends on the ICD code assigned as the underlying cause of death and may not agree with the manner of death reported.

Sometimes a cause of death has not been established when the statistical file is closed. Such deaths are classified as "pending final determination" and may later be classified.

Deaths classified as "events of undetermined intent" are considered due to external causes for the purpose of statistical analysis.

Information on errors in coding external causes of death prior to 2007 is described above: Cause of Death Coding.

Fatal Occupational Injuries (Appendix A Table M17)

Appendix A, Table M17 is based on US. Department of Labor's Bureau of Labor Statistics. These deaths, unlike NYC Vital statistics, are based on the location of the injury, regardless of the residence of the decedents or location of the death. Note that these deaths may or may not occur at the time of injury, they can occur subsequently. The industry in which the decedent worked and was injured is coded based on the North American Industry Classification System (NAICS). Comparisons by industry before and after 2003 are discouraged because of the substantial coding differences.

For all NYC occurring deaths due to external causes, the Bureau of Vital Statistics (BVS) reviews autopsy and other reports to determine if the injury occurred at work. Definitions and terminology are based on US Department of Labor's Bureau of Labor Statistics, which may differ from other definitions used in vital statistics.

Heart Disease Deaths

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.

HIV and AIDS Mortality

Beginning 1999, with the 10th revision of the ICD code, deaths due to HIV disease (ICD-10 codes B20-B24) are characterized by the resulting disease or condition, replacing AIDS and other HIV infections in ICD 9th revision.

Homicide (Mortality Figure 19; Appendix A Table M20)

A homicide is defined as the action of one person causing the death of another regardless of intent (e.g., whether self-defense or justifiable legal intervention). Annual counts of homicides reported by the New York City Police Department (NYPD) differ from those of the Bureau of Vital Statistics (BVS) for a number of reasons outlined below. Nonetheless, reported trends are similar. All homicides are Medical Examiner (ME) cases.

NYPD reports homicides as counts of Murder and Non-Negligent Manslaughter using rules and procedures from the Federal Bureau of Investigation's Uniform Crime Reporting System (UCR). The count includes deaths determined to be both criminal and satisfying the UCR guidelines. NYPD judges some homicides as justifiable and reports these separately to the FBI. BVS reports a death as a homicide based on the ICD-10 system. ICD-10 defines legal intervention as "injuries inflicted by police or other law-enforcing agents ... in the course of arresting or attempting to arrest ... and other legal action." Since 2003, deaths from legal intervention have been reported separately in Appendix A, Tables M1 and M20 and are excluded from the homicide counts in Tables M11 and M12.

NYPD Murder and Non-Negligent Manslaughter statistics count all murder crimes known to have been committed in New York City regardless of where the death occurred. Note that the crime may or may not have occurred at the time of death; death can occur subsequently and therefore potentially in a different jurisdiction than the murder crime. BVS reports all homicide deaths known to have occurred in New York City regardless of where the crime was committed.

In its annual count, the NYPD includes homicides known to have occurred within that calendar year by the second week of January of the following year. Any death determined to be a criminal murder outside of that period will be counted in the year that the determination is made. BVS reports homicide by the date of the death and the annual count includes any cases reported until the file closes for the year (approximately 5 months after the end of the year).

Sometimes death results from a crime many years after the crime was committed. Other times, a death may be determined a crime years after the death. In either situation, the ME may determine the death a homicide. If classified as a criminal homicide, NYPD will count the death in the year that the determination is made. However BVS will report the homicide by the date of death. In cases where a death is reclassified a homicide after the file closes, the death will be recorded as a homicide on the death certificate, but this change will not be reflected in any counts of homicides for the year of death or any other years.

Life Expectancy (Mortality Figures 1-4; Appendix A Tables M24, M25)

Life expectancy tables summarize the effect of mortality rates prevailing at a specific time on persons being born or living at that time. Tables may be computed for population subgroups, most often males, females, and race groups. The calculation requires counts and mortality figures for the desired subgroups. Life expectancy is estimated by ethnic group instead of race to ascertain differences among Hispanics, non-Hispanic whites and non-Hispanic blacks. Life expectancy tables by race/ethnicity for New York City are generally presented for census years when accurate population data are available. The mortality experience for the census year, the year before, and the year after is used to smooth statistical variation (Table M24). However, due to the increasing interest in disparities by race/ethnicity in life expectancy and changes in the population in New York City, we began calculating annual life expectancy by race/ethnicity in 2011. Life expectancies in Figures 1-2, Appendix A Tables M24, M25 are calculated by complete life tables (for a single year of age). Life expectancies in Figures 3-4 are calculated by abridged life tables (age groups). The number of Asian and Pacific Islander deaths is too small to generate reliable life expectancies and therefore are not presented either in Mortality Figure 2 or Appendix A Table M24.

The World Trade Center disaster deaths are not included in calculation of life expectancy.

Appendix A, Table M25 presents annual life expectancy by age and sex providing trend information.

Historical Hispanic ancestry data and life expectancy estimates should be interpreted with caution. In addition to changes in collection of Hispanic ancestry information, Hispanic immigration patterns may result in overestimated life expectancy if Hispanics move out of the US before death at a greater rate than other ethnic groups. The Hispanic population tends to be younger than other ethnic groups, which may lead to underestimates of Hispanic death rates and overestimates of Hispanic life expectancy.

Maternal Death and Maternal Mortality (Appendix A M13)

Deaths due to "Maternal Causes" meet the World Health Organization's definition of maternal mortality: "death of a woman while pregnant or within 42 days of termination of pregnancy from any cause related to or aggravated by the pregnancy or its management ..." With the 10th revision of the ICD coding system, this category includes codes A34 (obstetrical tetanus), O00-O95, O98-O99. "Pregnancy, childbirth and the puerperium" (O00-O99) includes deaths to women that occur outside of the time limitation defined by the World Health Organization (WHO).

Motor Vehicle Deaths (Mortality: Figure 17, Appendix A Table M18)

The Bureau of Vital Statistics (BVS) methodology for counting Motor Vehicle Deaths differs from that of the Department of Transportation (DOT) and NYPD in several ways. First, DOT and NYPD include deaths resulting from motor vehicle crashes that happen within NYC city limits, regardless of where the death occurred, whereas BVS reports deaths that happen within NYC city limits, regardless of where the crash occurred. Second, in cases where serious injury suffered during a motor vehicle crash results in death from injury sequelae (e.g., death occurs one month later) the fatality will be counted by DOT and NYPD for the month during which the crash occurred. However, BVS will report that same death by the actual date of death, not the date of injury occurrence. Third, DOT and NYPD do not include deaths resulting from illness while operating a motor vehicle in their traffic fatality count, while BVS does, consistent with the standardized NCHS approach. Lastly, DOT and NYPD reports do not include deaths which occur on private roadways, such as driveways, while BVS reports do include these. All of the above distinctions apply to counts of non-motor vehicle-involved bicyclist deaths, as well.

Premature Deaths (Mortality: Figures 9-15, Tables 4-6; Appendix A Tables M9, M10)

Premature deaths are deaths that occur before a person reaches an expected age, for instance, age 65 or age 75. Premature death rates in the NYC Annual Summary of Vital Statistics use 65 as the expected age. The number of deaths or deaths by select cause(s) relative to the ≤ 65 population in the same geographic area are used to calculate the premature death rate.

World Trade Center (WTC) Deaths

Since 2008, any deaths during the reporting year identified as late-effect WTC deaths are counted in the year of the confirmed death report and in Appendix A, Table M1 under Assault (homicide): ICD-10 Code U02. The total number of WTC deaths is 2,752. The number does not include 3 deaths that occurred outside of NYC. Unless otherwise specified, WTC deaths occurring in 2001 are generally not included in Summary tables and figures due to the effect this large number would have on year-to-year trends.

Years of Potential Life Lost (Mortality Appendix A Table M26)

Years of potential life lost (YPLL) measures years lost due to premature death. In contrast to mortality measures, YPLL emphasizes the effect of premature mortality on a population. YPLL is often calculated using a cutoff age, 65 or 75, as follows:

$$\mathbf{YPLL = \sum [(cutoff\ age - i)] \times d_i}$$

where i is the midpoint of the grouped year of age at death and d_i is the number of deaths at grouped year of age i. YPLL can be calculated for specified causes of death. In Table M26, age 75 is used as the cut off age and single year of age is used in calculation. Therefore i is single year of age younger than 75. See also Premature Deaths.

PREGNANCY OUTCOMES

BIRTHS

Birth Certificate (see copy in back of Appendix B)

The birth certificate comprises two parts: the certificate of birth and the confidential medical report of birth. The current revision of the birth certificate, implemented in 2008, is based on the recommended 2003 US Standard Certificate of Live Birth http://www.cdc.gov/nchs/data/dvs/birth11-03final-ACC.pdf. The 2008 revision coincided with the January 2008 electronic filing requirement.

The certificate of birth is the legal record. Each certificate is authenticated by the medical provider (physician or midwife) or his or her representative and filed with the New York City Department of Health and Mental Hygiene.

The confidential medical report, used for the compilation of public health statistics and scientific purposes, includes parents' demographic information, mother's prenatal history and care, information on financial coverage, maternal morbidity, labor and delivery, and condition and treatment of the infant during and immediately after birth. These data are collected from the mother, the mother's and infant's medical records, and medical providers.

Birth Reporting

The birth events reported are based on certificates filed with the New York City Department of Health and Mental Hygiene (DOHMH) for vital events occurring in or in-route to New York City, regardless of individual residency status, in a particular year. Births must be filed within five business days of the event. Birth data are generally collected using two worksheets: mother/parent and facility worksheets. Guides for completion of the birth certificate and data entry can be found at http://www.nyc.gov/evers. Effective January 2008, BVS requires all hospitals registering more than 100 births per year to use the Electronic Vital Events Registration System (EVERS). After 2012, more than 99% of all births were registered electronically through EVERS. Any events registered after file closure (typically occurring within 5 months of year-end) are excluded from this report. Such late registrations are rare.

Birth Rates

See Vital Event Rates, page 106.

Data Presentation

Starting with the 2007 summary, items with unknown/not stated values are excluded from the denominator when calculating percentages. This affects Appendix A Tables PO6, PO7, PO11, PO12 and Map PO Figure 14.

Breast Feeding (Appendix A Tables PO6, PO7, PO12)

Breast feeding has been reported on the birth certificate since 2008. It includes infant feeding practices through the first five days of life. New York City births must be filed with the DOHMH within five business days of the event.

Place of Birth

Since 1996, home births in Appendix A Tables PO4 and PO5 include all events for which "Home" was selected as the "Type of Place" regardless of whether the certificate was filed through a hospital. Home births in Table PO1 include events for which "Home" was selected as "Type of Place" and the certificate was not filed by an institution; typically, these events were filed by the person who attended to the birth at home.

Appendix A Table PO1 describes the live births according to the borough in which the birth occurred. Prior to 2010, Table PO1 reported births according to the borough in which the reporting office was located. This primarily affects the frequency of "places other than a hospital or home" and "home births," which occur citywide but are frequently reported by the Bureau of Vital Statistics in Manhattan.

Mother's Marital Status

The New York City DOHMH is prohibited by local law from recording mother's marital status on the record or report of birth. As a result, marital status is estimated and should be interpreted with caution. Since 1997, marital status is computed using the following algorithm: certificates without the father's name and those with the father's name that are accompanied by an Acknowledgment of Paternity are categorized as non-married; all others are categorized as married. Married parents have a right to have both their names on their child's birth certificate. This applies equally to married opposite-sex parents and same-sex parents. Some hospitals require proof of marriage. If the mother is not married, a father's name may be added through an Acknowledgment of Paternity or court order.

Teen Births

See Age-specific birth rate under VITAL EVENT RATES, page 106.

Gestational Age

Gestational age, or clinical estimate of gestation, is defined as the best obstetric estimate of the infant's gestation in completed weeks based on the birth attendant's final estimate of gestation. Characteristics of live births and/or infant deaths in the Appendix A Tables PO4-PO7, PO11, and PO12, respectively, include either gestational age categories or a dichotomous indicator of preterm (< 37 weeks gestation) birth.

Beginning 2007, the range for valid gestational age was changed from 20-44 weeks to 17-47 weeks.

SPONTANEOUS AND INDUCED TERMINATIONS OF PREGNANCY REPORTING

SPONTANEOUS TERMINATION OF PREGNANCY CERTIFICATE (see copy in back of Appendix B)

Like the birth certificate, the spontaneous termination of pregnancy certificate has two parts, the certificate and the confidential medical report. The certificate is available to the mother. The confidential medical report information is collected for the compilation of public health statistics and scientific purposes.

INDUCED TERMINATION OF PREGNANCY CERTIFICATE (see copy in back of Appendix B)

Certificates of induced termination of pregnancy are not issued. Data are collected for the compilation of public health statistics and scientific purpose.

The spontaneous and induced termination of pregnancy events reported are based on certificates filed with the New York City Department of Health and Mental Hygiene (DOHMH) for vital events occurring in or in-route to New York City, regardless of individual residency status, in a particular year. By law, all terminations of pregnancy are to be reported within 5 business days of the event, unless a permit to dispose of the conceptus is required (≥ 24 week gestation) or requested (any gestational age). In such a case, the event must be reported within 24 hours. However, the number of induced and spontaneous terminations filed depends to some extent on the outreach conducted by BVS. Effective January 1, 2011, all facilities that report births electronically to the DOHMH pursuant to Public Health Law 203, are required to report spontaneous terminations electronically via the Electronic Vital Events Registration System (EVERS); the Chief Medical Examiner and all facilities reporting 100 or more induced terminations of pregnancy per year also are required to file electronically via EVERS; all facilities that have commenced reporting electronically, regardless of number of events reported are required to do so electronically. After 2010, 99.8% of induced terminations of pregnancy and 99.7% of spontaneous terminations of pregnancy were filed electronically. Otherwise, paper forms authorized by the department may be used for reporting such events.

SPONTANEOUS AND INDUCED TERMINATION OF PREGNANCY RATES

See VITAL EVENT RATES, page 106.

PERINATAL PERIODS OF RISK (PPOR)

Perinatal Periods of Risk (PPOR) is both a community approach and an analytic framework for investigating and reducing infant mortality rates in urban settings. It examines fetal and infant deaths by age at death (fetal, neonatal, post-neonatal) and birthweight (500-1,499 grams, ≥1,500 grams). It then groups age at death and birthweight into four categories that identify where the risk factors are that led to the death: "Maternal Health and Prematurity," "Maternal Care," "Newborn Care," and "Infant Health." Communities should be able to use the information from PPOR to mobilize and prioritize prevention efforts.

HISTORICAL TECHNICAL NOTES

POPULATION

POPULATION ESTIMATES

2011-2015

Tables and figures with 2013-2015 data use intercensal population estimates determined by Census Bureau in 2013-2015 vintage files, respectively. Tables and figures with 2007-2012 data use intercensal population estimates determined by Census Bureau released as of September 2012.

2010-2015

Tables and figures with single-year data use 2010 Census population counts. Tables and figures with 2001-2010 data use intercensal population estimates determined by the NYC Department of City Planning as of July 1, 2010. Single-year population data after 2010 are extrapolated based on 2000 and 2010 Census population counts.

2007-2009

The 2007-2009 Annual Summaries used the respective year's pre-challenged US Census Bureau's population estimates. As a result, city and borough-wide estimates overall and by age, ethnicity and sex may vary from those presented in prior summaries.

2005-2006

The 2005-2006 Annual Summaries used post 2000 Census estimates for citywide, county (borough), 5-year age group, ethnic group, and sex population counts. The Summary year population counts used pre-challenged census estimates; prior year population counts presented in the Summaries used post-challenged census estimates in addition to Census 2000 data.

2000-2004

Population counts used US Census citywide decennial population counts.

Intercensal years between 1990 and 2000

Intercensal counts were estimated using an exponential formula, which assumes that the growth rate was the same throughout the decade:

$$= ert$$

where r is a constant growth rate and t is the time interval.

Intercensal years through 1989

Intercensal counts were estimated using a linear interpolation.

1960, 1970, 1980, 1990, 2000

The population counts for years 1960, 1970, 1980, 1990 and 2000 were US Census counts.

COMMUNITY DISTRICT

2013-2015

Community District population estimates for 2013-2015 were based on Census intercensal estimates by county, age, race, and sex, and 2013-2015 vintages, respectively, and interpolated by Bureau of Epidemiology Services. See following description of 2012 data for details.

2012

Community District population estimates for the years 2010-2012 are based on population estimates from 2010 to 2012. Census intercensal estimates by county, age, race, and sex. The 2010 number is adjusted to account for undercount in Brooklyn and Queens as documented by the Department of City Planning. To calculate individual year's Community District estimates beginning with July 1, 2000, an interpolation by Community District, age, race, and sex was adjusted to the county, age, race, and sex numbers using an iterative proportional fitting procedure. Each year through 2009 was constructed from an interpolation based on the previous year, the modified Census 2010, and the intercensal numbers for that year. The July 1, 2010 numbers were then extrapolated using July 1, 2009 and Census 2010 and then adjusted to the July 1st intercensal numbers. These estimates differ from the 2001-2011 estimates used in the 2010 and 2011 Summary because the 2010 and 2011 Summary estimates were adjusted to official intercensal estimates consistent with Census 2010 released in October 2012.

2011

Community District population estimates for the years 2000-2010 used in 2011 Summary use population estimates from Census 2000 and Census 2010 and the official Census intercensal estimates by county, age, race, and sex. To calculate individual year's Community District estimates beginning with July 1, 2000, an interpolation by Community District, age, race, and sex was adjusted to the county, age, race, and sex numbers using an iterative proportional fitting procedure. Each year through 2009 was constructed from an interpolation based on the previous year and Census 2010. The July 1, 2010 numbers were then extrapolated using July 1, 2009 and Census 2010 and then adjusted to the July 1 intercensal numbers. These estimates differ from the 2000-2010 estimates used in the 2010 Summary because they are adjusted to official intercensal estimates released by Census in October 2012 vintage.

2010

Community district population estimates by sex and 18 age groups were derived by the New York City Department of City Planning. For community district data by race/ethnicity and 22 age groups for the same period, DOHMH Bureau of Epidemiology Services constructed estimates from the Department of City Planning data and available Census 2000 and 2010 data, ensuring consistency with marginal totals from the Census Intercensal Estimates program. Postcensal estimates as well as the official 2010 modified race summary files were used. Because the 2010 modified race summary file was not available from the Census for single-year age by modified race groups, DOHMH used Census summary file 1 and adjusted the dataset to match the Census modified race summary file. To create the modified race groups, the "some other race" group was removed and race is imputed. While the modified race summary file created by the Census used information from other members of the same household, the DOHMH used race information from the corresponding Census tract. The race distribution was then modified to match the 2010 modified race summary file.

2008-2009

Community District population estimates for intercensal years use United States Census Bureau Population Estimate Program and housing unit data from the New York City Department of City Planning. The "housing unit method" of estimation allocates the population to Community Districts. The method multiplies the estimated number of households in a given area by an estimate of the population per household. In the intercensal context, housing unit growth, measured by housing permit data, determines the locations of growth. Because these estimates are calibrated to equal United States Census-borough-specific population totals, the borough population per household is fixed. New population estimates are derived using the iterative proportional fitting procedure (IPFP) implemented in SAS® Version 9.2. The validity of these estimates depends on vacancy rates, housing unit loss rates, percentage of permits actually constructed, and time to complete construction, which are assumed consistent at the borough level and thus have no effect on the allocation of growth. The method is sensitive to the quality of the housing permit data, which does not identify residential conversions to multiple units. Demographic characteristics are allocated assuming those at the location of growth. Therefore, this approach does not capture intercensal demographic changes at the neighborhood level including change due to migration.

2005-2006

Year 2000 census counts were used for defining smaller geographic units such as Community Districts or single-year age groups.

HEALTH CENTER DISTRICT

Through 2007

Population estimates for Health Center District (HCD) were not computed in time for the release of 2008 report and have not been presented since 2007. As a result, Health Center District tables were either replaced (Table 7) or did not present rates (Table 34). Health Center district data were presented in Summary Reports. Populations for geographic area smaller than borough were based on decennial census data.

2005-2006

Year 2000 Census counts were used for defining smaller geographic units such as Community Districts or single-year age groups.

RACE/ETHNIC GROUP

2000-2001

Census data were used to define race and ethnic distribution; in 2002, the Census Bureau issued the modified Race File resulting in a 65% reduction in Other and Multiple Race, a 6% increase in Asian and Pacific Islander, and 3% increases for non-Hispanic white and non-Hispanic black. There was no change for Hispanic population.

DEMOGRAPHIC CHARACTERISTICS OF VITAL EVENTS

RACE, ANCESTRY AND ETHNIC GROUP

Through 2007

The birth certificate allowed the selection of one race category.

1991-2005

Mother's birthplace was reported in four categories: United States other than Puerto Rico, Puerto Rico, Foreign and Not Stated. US Virgin Islands and Guam are included in the "Foreign" category.

Through 2002

The death certificate allowed the selection of one race category.

1999

The meaning of ancestry was clarified with hospitals, resulting in a notable increase in Hebrew and Jewish ancestry and a decrease in American ancestry.

BIRTHPLACE

2000-2005

Decedent's birthplace was first reported by country in 2000. US Virgin Islands and Guam were included in the "Other" category.

GEOGRAPHICAL UNITS

COMMUNITY DISTRICT

Prior to 2003

Community districts were referred to by number through 2002 and by name after.

PLACE OF BIRTH

Through 1995

Through 1995, all reports of home births included only events filed outside the hospital.

DEATHS

DEATH REPORTING

Through 1992

Medical certifier provided race and ancestry information.

RACE/ETHNICITY

1993 – present

The death certificate was revised in June 1993 to require funeral directors to provide ancestry information, presumably from decedents' family members.

Through 1992

Medical certifier provided ancestry information.

CAUSE OF DEATH CODING

Through 2006

ICD-coding was conducted manually by an NCHS certified nosologist.

ALCOHOL-RELATED DEATHS: ICD CODING

2008 – present

Following increasing deaths due to binge drinking, the ICD codes for alcohol-related deaths were re-evaluated by the World Health Organization's Mortality Reference Group and coding was implemented in 2008. Core changes included recoding F10.0 (acute alcohol intoxication) and F10.2 (alcohol dependence) to X45 (alcohol poisoning). This resulted in an increase in alcohol liver disease and alcohol poisoning and a decrease in alcohol dependence syndrome. A subsequent decrease in alcohol liver disease between 2008 and 2009 is, in part, a result of further corrections to coding applied in 2009. Similar changes are seen in US data.

HIV AND AIDS

1987 to 1999

In 1987, NCHS introduced code 042 for AIDS and 043-044 for other HIV disease deaths. Additional information on historical HIV coding can be found in the 1997 and 1998 Annual Summaries.

1983 to 1986

AIDS was recognized as a cause of death and coded as ICD-9 code 279.1.

EXTERNAL CAUSES

Through 1999

External Causes were not shown separately.

DRUG-RELATED DEATHS: ICD CODING

2008-2015

Unintentional Drug-related Overdose Deaths (Mortality: Figure 17), a definition used in Take Care New York (TCNY) was reported in the Summary from 2008 to 2015. The definition had changed after an extensive review of drug-related cases. Starting in 2011 Summary, the definition of Unintentional Drug-related Overdose Deaths has 2 modifications from "Drug Use/Poisoning": (i) restricted to deaths among individuals ages 15 to 84; and (ii) restricted to manner of deaths confirmed by medical examiner to be accidental.

Through 2006

Through 2006, a large proportion of accidental drug related deaths (X40-X42, X44) were miscoded as chronic drug use (F11-F16, F18-F19). For a full explanation, please see the 2007 Annual Summary of Vital Statistics-Special Report: NYC Changes from Manual to Automated Cause of Death Coding, pages 73-75. NCHS coded data is often substituted when presenting external causes of death trends that span 2006 to 2007.

MATERNAL DEATHS AND MATERNAL MORTALITY

Through 1998

Currently labeled "Maternal deaths" were "Complications of pregnancy, childbirth and the puerperium" through 1998.

ACCIDENTS (UNINTENTIONAL)

Through 1999

Complications of medical care and surgical care were classified as accidents per ICD-9.

Through 1998

The site of accidents (home and public place) has been dropped due to unreliable reporting.

SMOKING-ATTRIBUTABLE MORTALITY (SAM)

2011-2012

Due to the concern of underestimating smoking-attributable mortality caused by the rapid decrease in smoking prevalence in New York City, data were presented by "Deaths and age-adjusted death rates for selected smoking-related causes of death per 100,000 population (35 years and over)."

Through 2010, 2013

SAM was calculated using CDC's Adult SAMMEC (Smoking-Attributable Mortality, Morbidity, and Economic Costs) program using an attributable fraction formula. New York City sex-specific smoking prevalence was estimated from the New York City DOHMH Community Health Survey (CHS) and computed by the Bureau of Epidemiology. The relative risks (RR) of death for current and former smokers ≥ 35 years of age for 19 smoking-related diseases were estimated from the American Cancer Society's Cancer Prevention Study. The smoking-attributable fraction (SAF) for each smoking-related disease and sex is calculated using the following formula:

$$SAF = [(p_0 + p_1(RR_1) + p_2(RR_2)) - 1] / [p_0 + p_1(RR_1) + p_2(RR_2)]$$

where p_0 is the percentage of adult never-smokers in New York City; p_1 is the percentage of adult current smokers in New York City; p_2 is the percentage of adult former smokers in New York City; RR_1 is the relative risk of death for adult current smokers relative to adult never-smokers; and the RR_2 is the relative risk of death for adult former-smokers relative to adult never-smokers.

To estimate the SAM, the age- and sex-specific SAFs are multiplied by the number of deaths for each smoking-related disease. Specifically, the number of deaths for each sex and 5-year age category was multiplied by the SAF:

$$SAM = \text{Number of deaths} \times SAF$$

Summing across age categories provides the sex-specific estimate of SAM for each disease. Total SAM is the sum of the sex-specific SAM estimates.

WORLD TRADE CENTER DEATHS

2008 – present

See Technical Notes, 2009 regarding late effect WTC-deaths.

2007, 2008

In 2007, a 2002 death was reclassified as a WTC death.

In 2008, a 2001 death was reclassified as a WTC death.

In 2008, a missing person was classified as a 2001 WTC death per New York State Supreme Court.

2002

In 2002, the number of WTC deaths included in 2001 deaths was updated from 2,740 to 2,749. This new number included six additional death certificates filed through October 31, 2003 and three deaths that occurred outside of New York City (See 2002 Special Section for details).

FATAL OCCUPATIONAL INJURIES

Through 2002

The industry in which the decedent worked and was injured was coded based on the Standard Industrial Classification (SIC).

WORLD TRADE CENTER DEATHS AND LIFE EXPECTANCY

2002 (Special Section)

Impact of World Trade Center deaths on life expectancy.

BIRTHS

AGE-SPECIFIC BIRTH RATES

Through 2010

Until 2011, the youngest age-specific birth rates included events within the specific age range (e.g. age-specific birth rates to females 15 to 19 include births to females in that age group; age-specific births to females 15-17 include births to females in that age group). See current technical notes for change after 2010.

AGE-SPECIFIC BIRTH RATES

Through 2010

Until 2011, the oldest age-specific birth rate presented was 40 to 44. See current technical notes for change after 2010.

TRIMESTER OF FIRST PRENATAL CARE VISIT (LATE OR NO PRENATAL CARE)

2008-2009

Following the 2008 transition to EVERS, the magnitude of births registered without information used to calculate Trimester of First Prenatal Care Visit was great and data were suppressed. By 2010 reporting improved such that data could be released and included in the Summary.

ANCESTRY, OTHER

2008-2010

Following the 2008 transition to EVERS, the number of births registered with an "other" or unknown ancestry increased.

MOTHER'S MARITAL STATUS

Through 1996

Mother's Marital Status was computed using an algorithm developed by NCHS. A 1996 review of marital status indicated that the number of non-marital births was being overestimated. See Special Note on Mother's Marital Status in the 1997 Annual Summary for details.

2008 REVISED NYC BIRTH CERTIFICATE

2008

For comprehensive information on the 2008 revision of the NYC birth certificate, please see the Technical Notes from the 2008 Summary of Vital Statistics http://www1.nyc.gov/assets/doh/downloads/pdf/vs/2008sum.pdf.

SPONTANEOUS AND INDUCED TERMINATION OF PREGNANCY

REPORTING

Through 2007

Spontaneous and induced terminations of pregnancies registered after the annual file closed were added to the following year's data.

VR-6S
(Rev. 12/09)

DATE FILED

THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE

CERTIFICATE OF BIRTH

CERTIFICATE NO.

Cert. No.

Place:

Died: Date:

THIS CERTIFICATE NOT VALID UNLESS FILED IN THE DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Typewrite or print with black fine point ink. Certificates containing alterations or omissions are unacceptable.

Please complete the following:
Has parent approved assignment of SSN for child? YES ☐ NO ☐

Father/Parent's SSN:

Mother/Parent's SSN:

1. NAME OF CHILD (First, Middle, Last)

2. SEX

3a. NUMBER DELIVERED of this pregnancy

3b. If more than one, number of this child in order of delivery

4a. DATE OF CHILD'S BIRTH (Month) (Day) (Year - yyyy)

4b. TIME ☐ AM ☐ PM

5. PLACE OF BIRTH

5a. NEW YORK CITY BOROUGH

5b. Name of Hospital or other facility (if not facility, street address)

5c. TYPE OF PLACE ☐ Hospital ☐ Freestanding Birthing Center ☐ Clinic/Doctor's Office ☐ Home Delivery: Planned to deliver at home? ☐ Yes ☐ No ☐ Unknown

☐ Other-specify: _____

6a. MOTHER/PARENT'S NAME (Prior to first marriage) (First, Middle, Last) SEX ___M ___F

6b. MOTHER/PARENT'S DATE OF BIRTH (Month) (Day) (Year - yyyy)

6c. MOTHER/PARENT'S BIRTHPLACE City & State or foreign country

7. MOTHER/PARENT'S USUAL RESIDENCE a. State b. County

7c. City or town

7d. Street and number Apt. No. ZIP Code

7e. Inside city limits of 7c? Yes ☐ No ☐

8a. FATHER/PARENT'S NAME (Prior to first marriage) (First, Middle, Last) SEX ___M ___F

8b. FATHER/PARENT'S DATE OF BIRTH (Month) (Day) (Year - yyyy)

8c. FATHER/PARENT'S BIRTHPLACE City & State or foreign country

9a. NAME OF ATTENDANT AT DELIVERY ☐ M.D. ☐ D.O. ☐ Lic. Midwife ☐ RPA ☐ R.N. ☐ Other-Specify _____

9b. I CERTIFY THAT THIS CHILD WAS BORN ALIVE AT THE PLACE, DATE AND TIME GIVEN ☐ M.D. ☐ D.O. ☐ Hosp. Admin. ☐ Lic. Midwife ☐ RPA ☐ R.N. ☐ Other-Specify _____

Signed _____

Name of Signer _____ (Type or Print)

Address _____

Date Signed _____, Year - yyyy _____

Mother/Parent's Current (First, Middle, Last) Legal Name _____

Address _____ Apt. _____

City _____ State _____ ZIP _____

VR-6S
(Rev. 12/09)

THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE

(Each question MUST be answered)

CONFIDENTIAL MEDICAL REPORT OF BIRTH (1 of 2)

Only for scientific purposes approved by the Commissioner. Not open to inspection or subject to compelled disclosure.

NAME OF CHILD _____ CHILD'S MEDICAL RECORD NO. _____ CERTIFICATE NO. _____

MOTHER'S/PARENT'S MEDICAL RECORD NO. _____ MOTHER'S/PARENT'S TELEPHONE NUMBERS: Day ( ) _____ Evening ( ) _____

10. PARENT'S RACE

Race as defined by the U.S. Census
(Check **one or more** to indicate what the parent considers her/himself to be)

a. Mother/Parent		**b. Father/Parent**
☐	White	☐
☐	Black or African American	☐
☐	American Indian or Alaska Native	☐

Name of enrolled or principal tribe

_____ (Mother/Parent) _____ (Father/Parent)

☐	Asian Indian	☐
☐	Chinese	☐
☐	Filipino	☐
☐	Japanese	☐
☐	Korean	☐
☐	Vietnamese	☐
☐	Other Asian	☐

Specify

_____ (Mother/Parent) _____ (Father/Parent)

☐	Native Hawaiian	☐
☐	Guamanian or Chamorro	☐
☐	Samoan	☐
☐	Other Pacific Islander	☐

Specify

_____ (Mother/Parent) _____ (Father/Parent)

☐	Other	☐

Specify

_____ (Mother/Parent) _____ (Father/Parent)

11. PARENT'S ANCESTRY

(Check **one** box and specify what the parent considers her/himself to be)

a. Mother/Parent		**b. Father/Parent**
☐	Hispanic (Mexican, Puerto Rican, Cuban, Dominican, etc.)	☐

Specify

_____ (Mother/Parent) _____ (Father/Parent)

☐	NOT Hispanic (Italian, African American, Haitian, Pakistani, Ukranian, Nigerian, Taiwanese, etc.)	☐

Specify

_____ (Mother/Parent) _____ (Father/Parent)

12. PARENT'S LENGTH OF TIME IN US

a. Mother/Parent: If born outside of the United States, how long lived in U.S.?
years _____ **or** if < 1 yr, months _____

b. Father/Parent: If born outside of the United States, how long lived in U.S.?
years _____ **or** if < 1 yr, months _____

13. PARENT'S EDUCATION

(Check the box that best describes the highest degree or level of school completed at time of delivery)

a. Mother/Parent		**b. Father/Parent**
☐	8th grade or less; none	☐
☐	9th-12th grade, no diploma	☐
☐	High school graduate or GED	☐
☐	Some college credit, but no degree	☐
☐	Associate degree (e.g., AA, AS)	☐
☐	Bachelor's degree (e.g., BA, AB, BS)	☐
☐	Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA)	☐
☐	Doctorate (e.g., PhD, EdD) or Professional degree (e.g., MD, DDS, DVM, LLB, JD)	☐

14. PARENT'S OCCUPATION

a. Was mother/parent employed during pregnancy? Yes ☐ No ☐

	1. Current/most recent occupation	2. Kind of business or industry
b. Mother/Parent		
c. Father/Parent		

15. PRENATAL HISTORY

a. 1. Total Number of Previous Live Births _____ ☐ None
2. Number Born Alive and Now Living _____ ☐ None
3. Number Born Alive and Now Dead _____ ☐ None

b. Those born alive may have been Preterm, Low Birth Weight or both. Please indicate:
1. Number Preterm (< 37 wks.) _____ ☐ None
2. Number Low Birth Weight (< 2500 grams or 5 lbs. 8 oz.) _____ ☐ None

c. 1. Total Number of other Pregnancy Outcomes (Spontaneous or Induced Terminations): _____ ☐ None
2. Number of Spontaneous Terminations of Pregnancy less than 20 Weeks _____ ☐ None
3. Number of Spontaneous Terminations of Pregnancy 20 Weeks or More _____ ☐ None
4. Number of Induced Terminations of Pregnancy _____ ☐ None

d. Date of First Live Birth (mm/yyyy) _____/_____

e. Date of Last Live Birth (mm/yyyy) _____/_____

f. Date of Last other Pregnancy Outcome (mm/yyyy) _____/_____

g. Date Last Normal Menses began (mm/dd/yyyy) ____/____/____

16. PRENATAL CARE

a. Total Number of Prenatal Visits for this Pregnancy
☐ None _____

b. Date of First Prenatal Care Visit
(mm/dd/yyyy) _____/_____/_____

c. Date of Last Prenatal Care Visit
(mm/dd/yyyy) _____/_____/_____

d. Primary Prenatal Care Provider Type
(Check **one**)
☐ MD/DO
☐ C(N)M/NP/PA/Other Midwife
☐ Clinic
☐ No Provider
☐ No Information
☐ Other

e. Risk Factors in this Pregnancy
(Check **all** that apply)
☐ Pre-pregnancy diabetes
☐ Gestational diabetes
☐ Pre-pregnancy hypertension
☐ Gestational hypertension
☐ Cardiac disease:
  ☐ Structural defect
  ☐ Functional defect
☐ Other serious chronic illness
☐ Anemia (Hct.<30/Hgb.<10)
☐ Asthma/Acute or chronic lung disease
☐ Rh sensitization
☐ Polyhydramnios
☐ Oligohydramnios
☐ Hemoglobinopathy
☐ Abruptio placenta
☐ Eclampsia
☐ Other previous poor pregnancy outcome
☐ Prelabor referral for high risk care
☐ Other vaginal bleeding
☐ Previous cesarean section: Number _____
☐ Infertility treatment:
  ☐ Fertility drugs, artificial/intrauterine insemination
  ☐ Assisted reproductive technology (e.g., IVF, GIFT)
  Number of embryos implanted (if applicable) _____
☐ Fetal reduction
☐ None of the above

f. Infections Present and/or Treated During Pregnancy
(Check **all** that apply)
☐ Gonorrhea
☐ Syphilis
☐ Herpes Simplex (HSV)
☐ Chlamydia
☐ Hepatitis B
☐ Hepatitis C
☐ Tuberculosis
☐ Rubella
☐ Bacterial Vaginosis
☐ None of the above

g. 1. Cigarette Smoking in the 3 Months Before or During Pregnancy?
☐ Yes ☐ No

If Yes, Average Number of Cigarettes or Packs/Day (enter 0 if None)

	Cigarettes **or** Packs/Day
2. 3 mo. before pregnancy	_____ **or** _____
3. First 3 mo. of pregnancy	_____ **or** _____
4. Second 3 mo. of pregnancy	_____ **or** _____
5. Third trimester of pregnancy	_____ **or** _____

h. Alcohol Use During This Pregnancy?
☐ Yes ☐ No

i. Illicit and other Drugs Used During This Pregnancy?
☐ Yes ☐ No
If yes, check **all** that apply
☐ Heroin
☐ Cocaine
☐ Methadone
☐ Methamphetamine
☐ Marijuana
☐ Sedatives
☐ Tranquilizers
☐ Anticonvulsants

j. Mother/Parent Pre-Pregnancy Weight _____ pounds

k. Mother/Parent Height _____ feet _____ inches

l. Obstetric Procedures
(Check **all** that apply)
☐ Cervical cerclage
☐ Tocolysis
☐ External cephalic version:
  ☐ Successful
  ☐ Failed
☐ Fetal genetic testing
☐ None of the above

m. If woman was 35 or over, was fetal genetic testing offered?
☐ Yes ☐ No, Too Late ☐ No, Other Reason

17. FINANCIAL COVERAGE

a. Primary Payor
(Check **one**)
☐ Medicaid/Family Health Plus
☐ Private Insurance
☐ Other govt/CHPlusB
☐ CHAMPUS/TRICARE
☐ Other
☐ Self-pay
☐ Unknown

b. Is the mother/parent enrolled in an HMO or other managed care plan?
☐ Yes ☐ No

c. Did mother/parent participate in WIC?
☐ Yes ☐ No

18. MATERNAL MORBIDITY

(Check **all** that apply)
☐ Maternal transfusion
☐ Perineal laceration (3rd or 4th degree)
☐ Ruptured uterus
☐ Unplanned hysterectomy
☐ Admit to ICU
☐ Unplanned operating room procedure following delivery
☐ Hemorrhage
☐ Postpartum transfer to a higher level of care
☐ None of the above

VR-6S
(Rev. 12/09)

THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE

(Each question MUST be answered)

CONFIDENTIAL MEDICAL REPORT OF BIRTH (2 of 2)

Only for scientific purposes approved by the Commissioner. Not open to inspection or subject to compelled disclosure.

NAME OF CHILD _____ CERTIFICATE NO. _____

19. LABOR AND DELIVERY

a. If birth occured in hospital, was mother/parent transferred in before giving birth?

If yes, name of facility transferred from

☐ Yes _____

☐ No

b. Mother/Parent Weight at Delivery

_____ pounds

c. Onset of Labor
(Check **all** that apply)

☐ Prolonged rupture of membranes (12 hours or more)
☐ Prolonged labor (20 hours or more)
☐ Premature rupture of membranes (prior to labor)
☐ None of the above
☐ Precipitous labor (less than 3 hours)

d. Characteristics of Labor & Delivery
(Check **all** that apply)

☐ Induction of Labor-AROM
☐ Induction of Labor-Medicinal
☐ Augmentation of Labor
☐ Placenta previa
☐ Other excessive bleeding
☐ Steroids
☐ Antibiotics
☐ Chorioamnionitis
☐ Febrile (>100.4F or 38C)
☐ Meconium staining
☐ Fetal intolerance
☐ External electronic fetal monitor
☐ Internal electronic fetal monitor
☐ None of the above

e. 1. Anesthesia
(Check **all** that apply)

☐ Epidural
☐ General inhalation
☐ General intravenous
☐ Spinal
☐ Paracervical
☐ Pudendal
☐ Local
☐ None of the above

2. Complications from any of the above?

☐ Yes ☐ No

Method of Delivery

f. Fetal Presentation at Birth

☐ Cephalic
☐ Breech
☐ Other

g. Final route and method of delivery (Check **one**)

☐ Vaginal/Spontaneous
☐ Vaginal/Forceps
☐ Vaginal/Vacuum
☐ Cesarean

1. If cesarean, was trial of labor attempted?

☐ Yes ☐ No

2. Indications for C-Section ☐ Unknown
(Select **all** that apply)

☐ Failure to progress
☐ Malpresentation
☐ Previous C-Section
☐ Fetus at risk/NFS
☐ Maternal condition-not pregnancy related
☐ Maternal condition-pregnancy related
☐ Refused VBAC
☐ Elective
☐ Other

3. Was delivery with forceps attempted but unsuccessful?

☐ Yes ☐ No

4. Indications for Forceps ☐ Unknown
(Select **all** that apply)

☐ Failure to progress
☐ Fetus at Risk
☐ Other

5. Was delivery with vacuum extraction attempted but unsuccessful?

☐ Yes ☐ No

6. Indications for Vacuum ☐ Unknown
(Select **all** that apply)

☐ Failure to progress
☐ Fetus at Risk
☐ Other

h. Other Procedures Performed at Delivery (Check **all** that apply)

☐ Episiotomy & repair
☐ Sterilization
☐ Repair of lacerations
☐ None of the above

20. INFANT

a. Birthweight

_____ Pounds _____ Ounces or _____ Grams

b. If birth weight < 1250 grams (2 lbs. 12 oz.), reason(s) for delivery at a less than level III hospital: *(Only if applicable)*

☐ None ☐ Unknown at this time
(Select **all** that apply)

☐ Rapid/Advanced Labor
☐ Bleeding
☐ Fetus at Risk
☐ Severe pre-eclampsia
☐ Woman Refused Transfer
☐ Other-*specify* _____

c. Apgar Score at

1. 1 minute _____ **2.** 5 minutes _____ **3.** 10 minutes _____

d. Clinical Estimate of Gestation

Completed Weeks: _____

e. Infant Transferred

Within 24 hours of Delivery ☐ After 24 hours ☐ Not Transferred ☐

f. If transferred, name of facility transferred to:

_____

g. Abnormal Conditions of the Newborn
(Check **all** that apply)

☐ Assisted ventilation required immediately following delivery
☐ Assisted ventilation required for more than six hours
☐ NICU admission
☐ Newborn given surfactant replacement therapy
☐ Antibiotics received by the newborn for suspected neonatal sepsis
☐ Seizure or serious neurologic dysfunction
☐ Significant birth injury (skeletal fracture(s), peripheral nerve injury, and/or soft tissue/solid organ hemorrhage which requires intervention)
☐ None of the above

h. Hepatitis B Inoculation

1. Immunization administered?
☐ Yes Date: (mm/dd/yyyy) _____/_____/_____
☐ No

2. Immunoglobulin administered?
☐ Yes Date: (mm/dd/yyyy) _____/_____/_____
☐ No

i. Is infant living at time of report?

☐ Yes ☐ No

j. How is infant being fed? (Check **one**)

☐ Breast milk ☐ Both
☐ Formula ☐ Neither

Congenital Anomalies

k. Select all that apply	Yes	No	l. Diagnosed Prenatally? Yes	No	m. If Yes, please indicate all methods used:
1. Anencephaly	☐	☐	☐	☐	☐ Level II Ultrasound ☐ MSAFP/Triple Screen ☐ Amniocentesis ☐ Other ☐ Unknown
2. Meningomyelocele/ Spina Bifida	☐	☐	☐	☐	☐ Level II Ultrasound ☐ MSAFP/Triple Screen ☐ Amniocentesis ☐ Other ☐ Unknown
3. Cyanotic Congenital Heart Disease	☐	☐	☐	☐	☐ Level II Ultrasound ☐ Other ☐ Unknown
4. Congenital Diaphragmatic Hernia	☐	☐	☐	☐	☐ Level II Ultrasound ☐ Other ☐ Unknown
5. Omphalocele	☐	☐	☐	☐	☐ Level II Ultrasound ☐ Other ☐ Unknown
6. Gastroschisis	☐	☐	☐	☐	☐ Level II Ultrasound ☐ Other ☐ Unknown
7. Limb Reduction Defect	☐	☐	☐	☐	☐ Level II Ultrasound ☐ Other ☐ Unknown
8. Cleft lip with or without Cleft Palate	☐	☐	☐	☐	☐ Level II Ultrasound ☐ Other ☐ Unknown
9. Cleft Palate alone	☐	☐	☐	☐	☐ Level II Ultrasound ☐ Other ☐ Unknown
10. Down Syndrome ☐ Karyotype confirmed ☐ Karyotype pending	☐	☐	☐	☐	☐ Level II Ultrasound ☐ MSAFP/Triple Screen ☐ CVS ☐ Amniocentesis ☐ Other ☐ Unknown
11. Other Chromosomal Disorder ☐ Karyotype confirmed ☐ Karyotype pending	☐	☐	☐	☐	☐ Level II Ultrasound ☐ MSAFP/Triple Screen ☐ CVS ☐ Amniocentesis ☐ Other ☐ Unknown
12. Hypospadias	☐	☐	☐	☐	☐ Level II Ultrasound ☐ Other ☐ Unknown

13. None of those listed above ☐

DATE FILED THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE

CERTIFICATE OF DEATH

Certificate No.

1. DECEDENT'S LEGAL NAME _____
(First, Middle, Last)

MEDICAL CERTIFICATE OF DEATH
(To be filled in by the Physician)

Place Of Death

2a. New York City
2b. Borough

2c. Type of Place
1 ❑ Hospital Inpatient
2 ❑ Emergency Dept./Outpatient
3 ❑ Dead on Arrival
4 ❑ Nursing Home/Long Term Care Facility
5 ❑ Hospice Facility
6 ❑ Decedent's Residence
7 ❑ Other Specify _____

2d. Any Hospice care in last 30 days
1 ❑ Yes
2 ❑ No
3 ❑ Unknown

2e. Name of hospital or other facility (if not facility, street address)

Date and Time of Death

3a. (Month) (Day) (Year-yyyy)

3b. Time ❑ AM ❑ PM

4. Sex

5. Date last attended by a Physician mm dd yyyy

6. Certifier: I certify that death occurred at the time, date and place indicated and that to the best of my knowledge traumatic injury or poisoning DID NOT play any part in causing death, and that death did not occur in any unusual manner and was due entirely to NATURAL CAUSES. **See instructions on reverse of certificate.**

Name of Physician _____ (Type or Print)

Signature _____ D.O. M.D.

Address _____

License No. _____ Date _____

PERSONAL PARTICULARS
(To be filled in by Funeral Director or, in case of City Burial, by Physician)

7a. Usual Residence State

7b. County

7c. City or Town

7d. Street and Number Apt. No. ZIP Code

7e. Inside City Limits? 1 ❑ Yes 2 ❑ No

8. Date of Birth (Month) (Day) (Year-yyyy)

9. Age at last birthday (years) 1

Under 1 Year: Months 2 Days 3

Under 1 Day: Hours 4 Minutes 5

10. Social Security No.

11a. Usual Occupation (Type of work done during most of working life. Do not use "retired")

11b. Kind of business or industry

12. Aliases or AKAs

13. Birthplace (City & State or Foreign Country)

14. Education (Check the box that best describes the highest degree or level of school completed at the time of death)
1 ❑ 8th grade or less; none
2 ❑ 9th – 12th grade; no diploma
3 ❑ High school graduate or GED
4 ❑ Some college credit, but no degree
5 ❑ Associate degree (e.g., AA, AS)
6 ❑ Bachelor's degree (e.g., BA, AB, BS)
7 ❑ Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA)
8 ❑ Doctorate (e.g., PhD, EdD) or Professional degree (e.g., MD, DDS, DVM, LLB, JD)

15. Ever in U.S. Armed Forces? 1 ❑ Yes 2 ❑ No

16. Marital/Partnership Status at time of death
1 ❑ Married
2 ❑ Domestic Partnership
3 ❑ Divorced
4 ❑ Married, but separated
5 ❑ Never Married
6 ❑ Widowed
7 ❑ Other, Specify _____
8 ❑ Unknown

17. Surviving Spouse's/Partner's Name (If wife, name prior to first marriage)(First, Middle, Last)

18. Father's Name (First, Middle, Last)

19. Mother's Maiden Name (Prior to first marriage) (First, Middle, Last)

20a. Informant's Name

20b. Relationship to Decedent

20c. Address (Street and Number Apt. No. City & State ZIP Code)

21a. Method of Disposition
1 ❑ Burial
2 ❑ Cremation
3 ❑ Entombment
4 ❑ City Cemetery
5 ❑ Other Specify _____

21b. Place of Disposition (Name of cemetery, crematory, other place)

21c. Location of Disposition (City & State or Foreign Country)

21d. Date of Disposition mm dd yyyy

22a. Funeral Establishment

22b. Address (Street and Number City & State ZIP Code)

VR 15 (Rev. 01/09)

THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE

CONFIDENTIAL MEDICAL REPORT

VR 15 (Rev. 01/09)

To be filled in by **FUNERAL DIRECTOR** or, in case of City Burial, by Physician

Certificate No.

23. Ancestry (Check one box and specify)

❑ Hispanic (Mexican, Puerto Rican, Cuban, Dominican, etc.)

Specify _____

❑ NOT Hispanic (Italian, African American, Haitian, Pakistani, Ukrainian, Nigerian, Taiwanese, etc.)

Specify _____

24. Race as defined by the U.S. Census (Check one or more to indicate what the decedent considered himself or herself to be)

01 ❑ White
02 ❑ Black or African American
03 ❑ American Indian or Alaska Native (Name of enrolled or principal tribe) _____
04 ❑ Asian Indian
05 ❑ Chinese
06 ❑ Filipino
07 ❑ Japanese
08 ❑ Korean
09 ❑ Vietnamese
10 ❑ Other Asian–Specify _____
11 ❑ Native Hawaiian
12 ❑ Guamanian or Chamorro
13 ❑ Samoan
14 ❑ Other Pacific Islander–Specify _____
15 ❑ Other–Specify _____

DECEDENT'S LEGAL NAME (Type or Print)

CAUSE OF DEATH–Enter the chain of events—diseases, complications or abnormalities–that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology.

IMMEDIATE CAUSE → FINAL disease or condition resulting in death.

Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease that initiated the events resulting in death) LAST.

OPERATION-Enter in Part II information on operation or procedure related to disease or conditions listed in Part I.

SUBSTANCE USE Include the use of tobacco, alcohol or other substance if this caused or contributed to death. SPECIFY IN PART I or PART II.

25. CAUSE OF DEATH – List only one cause on each line. DO NOT ABBREVIATE.

		APPROXIMATE INTERVAL: ONSET TO DEATH
PART I	a. IMMEDIATE CAUSE	
	b. DUE TO OR AS A CONSEQUENCE OF	
	c. DUE TO OR AS A CONSEQUENCE OF	
	d. DUE TO OR AS A CONSEQUENCE OF	
PART II	OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH but not resulting in the underlying cause given in Part I. Include operation information.	

26a. Was an autopsy performed? 1 ❑ Yes 2 ❑ No

26b. Were autopsy findings available to complete the cause of death? 1 ❑ Yes 2 ❑ No

27a. If Female
1 ❑ Not pregnant within 1 year of death
2 ❑ Pregnant at time of death
3 ❑ Not pregnant at death, but pregnant within 42 days of death
4 ❑ Not pregnant at death, but pregnant 43 days to 1 year before death
5 ❑ Unknown if pregnant within 1 year of death

27b. If pregnant within one year of death, outcome of pregnancy
1 ❑ Live Birth
2 ❑ Spontaneous Termination/ Ectopic Pregnancy
3 ❑ Induced Termination 4 ❑ None

27c. Date of Outcome: mm | dd | yyyy

28. Was this case referred to OCME? 1 ❑ Yes 2 ❑ No

29. Did tobacco use contribute to death? 1 ❑ Yes 2 ❑ No 3 ❑ Probably 4 ❑ Unknown

30. For infant under one year: Name and address of hospital or other place of birth

I am submitting herewith a confidential report of the cause of death.

SIGNATURE _____ D.O. M.D. ADDRESS _____ LICENSE NO. _____

VOID

DATE FILED THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE

CERTIFICATE OF DEATH

Certificate No.

❑ New
❑ Corr/Amend
❑ Replacement

DOHMH USE ONLY

BOR | INST | MANNER | RESIDENCE | CODE | BP | LDIS | H | ANC | NH | ANC | ICD | AUT

THIS CERTIFICATE NOT VALID UNLESS FILED IN THE DEPARTMENT OF HEALTH AND MENTAL HYGIENE

1. DECEDENT'S LEGAL NAME _____ (First, Middle, Last)

MEDICAL CERTIFICATE OF DEATH (To be filled in by the OCME)

Place Of Death — 2a. New York City / 2b. Borough

2c. Type of Place: 1 ❑ Hospital Inpatient; 2 ❑ Emergency Dept./Outpatient; 3 ❑ Dead on Arrival; 4 ❑ Nursing Home/Long Term Care Facility; 5 ❑ Hospice Facility; 6 ❑ Decedent's Residence; 7 ❑ Other Specify _____

2d. Any Hospice care in last 30 days: 1 ❑ Yes 2 ❑ No 3 ❑ Unknown

2e. Name of hospital or other facility (if not facility, street address)

Date and Time of Death or Found Dead — 3a. (Month) (Day) (Year-yyyy) — 3b. Time ❑ AM ❑ PM — 4. Sex — 5. OCME Case No.

6. CAUSE OF DEATH

PART I
a. Immediate cause
b. Due to or as a consequence of
c. Due to or as a consequence of

APPROXIMATE INTERVAL: ONSET TO DEATH

PART II
Other significant conditions contributing to death but not resulting in the underlying cause given in Part I. Include operation information.

7a. Injury Date (mm dd yyyy) — 7b. Time ❑ AM ❑ PM — 7c. At Work 1 ❑ Yes 2 ❑ No — 7d. Place of Injury – At home, factory, street, etc. — 7e. Location

7f. How Injury Occurred

7g. If Transportation Injury Specify: ❑ Driver/Operator ❑ Pedestrian ❑ Passenger ❑ Other Specify _____

8. Manner of Death: ❑ Pending further study ❑ Natural ❑ Homicide ❑ Accident ❑ Suicide ❑ Undetermined

9. Autopsy: ❑ Yes ❑ No Autopsy Pursuant to Law ❑ No Autopsy

10. On the basis of examination and/or investigation, in my opinion, death occurred due to the causes and manner as stated:
Certifier Signature _____ D.O. M.D. Date _____
Certifier Name (Print) _____ (Medical Investigator) (Deputy Chief) (Chief) (Medical Examiner)

PERSONAL PARTICULARS (To be filled in by Funeral Director or, in case of City Burial, by OCME)

11a. Usual Residence State — 11b. County — 11c. City or Town — 11d. Street and Number Apt. No. ZIP Code — 11e. Inside City Limits? 1 ❑ Yes 2 ❑ No

12. Date of Birth (Month) (Day) (Year-yyyy) — 13. Age at last birthday (years) 1 — Under 1 Year: Months 2 Days 3 — Under 1 Day: Hours 4 Minutes 5 — 14. Social Security No.

15a. Usual Occupation (Type of work done during most of working life. Do not use "retired") — 15b. Kind of business or industry — 16. Aliases or AKAs

17. Birthplace (City & State or Foreign Country)

18. Education (Check the box that best describes the highest degree or level of school completed at the time of death)
1 ❑ 8th grade or less; none
2 ❑ 9th – 12th grade; no diploma
3 ❑ High school graduate or GED
4 ❑ Some college credit, but no degree
5 ❑ Associate degree (e.g., AA, AS)
6 ❑ Bachelor's degree (e.g., BA, AB, BS)
7 ❑ Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA)
8 ❑ Doctorate (e.g., PhD, EdD) or Professional degree (e.g., MD, DDS, DVM, LLB, JD)

19. Ever in U.S. Armed Forces? 1 ❑ Yes 2 ❑ No

20. Marital/Partnership Status at time of death: 1 ❑ Married 2 ❑ Domestic Partnership 3 ❑ Divorced 4 ❑ Married, but separated 5 ❑ Never Married 6 ❑ Widowed 7 ❑ Other, Specify _____ 8 ❑ Unknown

21. Surviving Spouse's/Partner's Name (If wife, name prior to first marriage)(First, Middle, Last)

22. Father's Name (First, Middle, Last) — 23. Mother's Maiden Name (Prior to first marriage) (First, Middle, Last)

24a. Informant's Name — 24b. Relationship to Decedent — 24c. Address (Street and Number Apt. No. City & State ZIP Code)

25a. Method of Disposition: 1 ❑ Burial 2 ❑ Cremation 3 ❑ Entombment 4 ❑ City Cemetery 5 ❑ Other Specify _____

25b. Place of Disposition (Name of cemetery, crematory, other place)

25c. Location of Disposition (City & State or Foreign Country) — 25d. Date of Disposition mm dd yyyy

26a. Funeral Establishment — 26b. Address (Street and Number City & State ZIP Code)

VR 16 (Rev. 01/09)

THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE

MEDICAL EXAMINER'S SUPPLEMENTARY REPORT

VR 16 (Rev. 01/09)

Certificate No.

To be filled in by **FUNERAL DIRECTOR** or, in case of City Burial, by OCME

27. Ancestry (Check one box and specify)

❑ Hispanic (Mexican, Puerto Rican, Cuban, Dominican, etc.)

Specify _____

❑ NOT Hispanic (Italian, African American, Haitian, Pakistani, Ukrainian, Nigerian, Taiwanese, etc.)

Specify _____

28. Race as defined by the U.S. Census (Check one or more to indicate what the decedent considered himself or herself to be)

01 ❑ White 02 ❑ Black or African American

03 ❑ American Indian or Alaska Native (Name of enrolled or principal tribe) _____

04 ❑ Asian Indian 05 ❑ Chinese

06 ❑ Filipino 07 ❑ Japanese

08 ❑ Korean 09 ❑ Vietnamese

10 ❑ Other Asian–Specify _____

11 ❑ Native Hawaiian 12 ❑ Guamanian or Chamorro

13 ❑ Samoan

14 ❑ Other Pacific Islander–Specify _____

15 ❑ Other–Specify _____

DECEDENT'S LEGAL NAME (Type or Print)

29a. If Female

1 ❑ Not pregnant within 1 year of death
2 ❑ Pregnant at time of death
3 ❑ Not pregnant at death, but pregnant within 42 days of death
4 ❑ Not pregnant at death, but pregnant 43 days to 1 year before death
5 ❑ Unknown if pregnant within 1 year of death

29b. If pregnant within one year of death, outcome of pregnancy

1 ❑ Live Birth
2 ❑ Spontaneous Termination / Ectopic Pregnancy
3 ❑ Induced Termination 4 ❑ None

29c. Date of Outcome

mm	dd	yyyy

30. Did tobacco use contribute to death?

1 ❑ Yes 2 ❑ No 3 ❑ Probably 4 ❑ Unknown

31. For infant under one year: Name and address of hospital or other place of birth

Cleared For Cremation If Family Requests

_____
M.E. Signature

I certify that I personally examined the body on

_____ (Date) at _____ (Location)

SIGNATURE: _____
(Medical Investigator) (Deputy Chief) (Chief) (Medical Examiner)

or

I did not personally examine the body after death.

SIGNATURE: _____
(Deputy Chief) (Chief) (Medical Examiner)

DATE FILED

THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE

CERTIFICATE OF SPONTANEOUS TERMINATION OF PREGNANCY

VR-17
(REV. 01/10)

CERTIFICATE NO.

THIS CERTIFICATE NOT VALID UNLESS FILED IN THE DEPARTMENT OF HEALTH AND MENTAL HYGIENE

1. Typewrite or print with black fine point ink.
2. Certificates containing alterations or omissions are unacceptable.
3. Items "Date filed," "Certificate No." and this space, reserved for the Department of Health and Mental Hygiene use only.

☐ **I CERTIFY THAT I HAVE IN MY POSSESSION AN AFFIDAVIT OF AUTHORIZATION FOR CREMATION** ____ FD Initials

Did heart beat after delivery? _____
Was there movement of voluntary muscle? _____

If answer to either is yes, do not use this form. Case must be reported by filing a certificate of birth and a certificate of death.

FETUS

1. NAME *(Optional):* (First, Middle, Last, Suffix)

2a. DATE OF DELIVERY *(Month) (Day) (Year-yyyy)*

2b. TIME _____ ☐ AM ☐ PM ☐ Unknown

3. SEX ☐ Male ☐ Unknown ☐ Female

4. OBSTETRIC ESTIMATE OF GESTATION _____ # of weeks

5a. NUMBER DELIVERED THIS PREGNANCY _____

IF MORE THAN ONE
5b. Number in order of delivery _____ 5c. Number born alive _____

FETUS Place of Delivery

6a. TYPE OF PLACE
☐ Hospital – ER/ED ☐ Freestanding Birthing Center
☐ Hospital – Amb. Surg. ☐ Home
☐ Hospital – Labor/Labor and Delivery ☐ Clinic/Doctor's Office
☐ Hospital – Other ☐ Other, Specify _____
☐ Unknown

6b. FACILITY NAME/ADDRESS

If not in facility, street address: (Street Number and Name, City or Town, County, State, Country, Zip Code)

MOTHER/PARENT

7. CURRENT LEGAL NAME: (First, Middle, Last, Suffix)

9. DATE OF BIRTH *(Month) (Day) (Year-yyyy)*

12. BIRTHPLACE City State Country

8. NAME PRIOR TO FIRST MARRIAGE: (First, Middle, Last, Suffix)

10. AGE

11. SEX ☐ Male ☐ Female

13. RESIDENCE ADDRESS: (Street Number and Name, Apt. No., City or Town, County, State, Country, Zip Code)

14. INSIDE CITY LIMITS? ☐ Yes ☐ Unknown ☐ No

FATHER/PARENT

15. NAME PRIOR TO FIRST MARRIAGE: (First, Middle, Last, Suffix)

16. DATE OF BIRTH *(Month) (Day) (Year-yyyy)*

19. BIRTHPLACE City State Country

17. AGE

18. SEX ☐ Male ☐ Female

ATTENDANT/CERTIFIER

20. ATTENDANT NAME AT DELIVERY: ☐ MD ☐ DO ☐ LIC. Midwife ☐ RPA ☐ Other, *(specify)*
_____ _____
(First, Middle, Last, Suffix)

21. CERTIFIER: I HEREBY CERTIFY THAT THIS EVENT OCCURRED AT THE TIME AND ON THE DATE INDICATED AND THAT ALL FACTS STATED IN THIS CERTIFICATE ARE TRUE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.
☐ MD ☐ DO

_____
Signature of Physician Certifier

_____
Name of Physician Certifier

_____
Address

_____ ____/____/____
License No. *Date*

FUNERAL DIRECTOR'S CERTIFICATE

FUNERAL DIRECTOR'S CERTIFICATE

I hereby certify that I have been employed as Funeral Director by _____
(Name of person in control of disposition)

of _____. This statement is made to obtain a disposition permit
(Address)

for this fetus _____
(Signature of Funeral Director) *(License No.)*

Funeral Establishment _____ Business Registration No. _____

Address _____

NAME OF CEMETERY OR CREMATORY (OR DESTINATION)	CITY OR COUNTY AND STATE	DATE OF DISPOSITION *(Month) (Day) (Year-yyyy)*

VR-17
(REV. 01/10)

THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE

(Each question MUST be answered)

CONFIDENTIAL MEDICAL REPORT OF SPONTANEOUS TERMINATION OF PREGNANCY (1 of 2)

Only for scientific purposes approved by the Commissioner. Not subject to compelled disclosure.

Mother/Parent Medical Record No. _____ CERTIFICATE NO.

22. Date Last Normal Menses Began: _____/_____/_____ (mm dd yyyy)

23. PARENT'S EDUCATION

(Check the box that best describes the highest degree or level of school completed at time of delivery)

a. Mother/Parent		b. Father/Parent
☐	8th grade or less; none	☐
☐	9th-12th grade, no diploma	☐
☐	High school graduate or GED	☐
☐	Some college credit, but no degree	☐
☐	Associate degree (e.g., AA, AS)	☐
☐	Bachelor's degree (e.g., BA, AB, BS)	☐
☐	Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA)	☐
☐	Doctorate (e.g., PhD, EdD) or Professional degree (e.g., MD, DDS, DVM, LLB, JD)	☐
☐	Unknown	☐

24. PARENT'S OCCUPATION

a. Was mother/parent employed during pregnancy? ☐ Yes ☐ No

	1. Current/most recent occupation	2. Kind of business or industry
b. Mother/Parent		
c. Father/Parent		

25. PARENT'S ANCESTRY

(Check **one** box and specify what the parent considers her/himself to be)

a. Mother/Parent		b. Father/Parent
	Hispanic (Mexican, Puerto Rican,	
☐	Cuban, Dominican, etc.)	☐
	Specify	
_____	*(Mother/Parent)*	_____ *(Father/Parent)*
	NOT Hispanic (Italian, African American, Haitian, Pakistani, Ukranian,	
☐	Nigerian, Taiwanese, etc.)	☐
	Specify	
_____	*(Mother/Parent)*	_____ *(Father/Parent)*
☐	Unknown	☐

26. PARENT'S RACE

Race as defined by the U.S. Census
(Check **one or more** to indicate what the parent considers her/himself to be)

a. Mother/Parent		b. Father/Parent
☐	White	☐
☐	Black or African American	☐
☐	American Indian or Alaska Native	☐
	Name of enrolled or principal tribe	
_____	*(Mother/Parent)*	_____ *(Father/Parent)*
☐	Asian Indian	☐
☐	Chinese	☐
☐	Filipino	☐
☐	Japanese	☐
☐	Korean	☐
☐	Vietnamese	☐
☐	Other Asian	☐
	Specify	
_____	*(Mother/Parent)*	_____ *(Father/Parent)*
☐	Native Hawaiian	☐
☐	Guamanian or Chamorro	☐
☐	Samoan	☐
☐	Other Pacific Islander	☐
	Specify	
_____	*(Mother/Parent)*	_____ *(Father/Parent)*
☐	Other	☐
	Specify	
_____	*(Mother/Parent)*	_____ *(Father/Parent)*
☐	Unknown	☐

27. PARENT'S LENGTH OF TIME IN U.S.

a. Mother/Parent		b. Father/Parent
☐	Never lived in United States	☐
	If born outside of the United States, how long lived in U.S.?	
_____	years	_____
_____	*(Mother/Parent)*	_____ *(Father/Parent)*
	or if <1 yr, months	
_____	*(Mother/Parent)*	_____ *(Father/Parent)*

28. CAUSE/CONDITIONS CONTRIBUTING TO FETAL DEATH

a. Initiating Cause/Condition

(Among the choices below, please select the **one** that most likely began the sequence of events resulting in the death of the fetus).

- ☐ Maternal Conditions/Diseases (Specify) _____
- ☐ Complications of Placenta, Cord, or Membranes
  - ☐ Rupture of membranes prior to onset of labor
  - ☐ Abruptio placenta
  - ☐ Placental insufficiency
  - ☐ Prolapsed cord
  - ☐ Chorioamnionitis
  - ☐ Other (Specify) _____
- ☐ Other Obstetrical or Pregnancy Complications (Specify) _____
- ☐ Fetal Anomaly (Specify) _____
- ☐ Fetal Injury (Please consult with OCME) _____
- ☐ Fetal Infection (Specify) _____
- ☐ Other Fetal Conditions/Disorders (Specify) _____
- ☐ Unknown

b. Other Significant Causes or Conditions

(Select or specify **all** other conditions contributing to death).

- ☐ Maternal Conditions/Diseases (Specify) _____
- ☐ Complications of Placenta, Cord, or Membranes
  - ☐ Rupture of membranes prior to onset of labor
  - ☐ Abruptio placenta
  - ☐ Placental insufficiency
  - ☐ Prolapsed cord
  - ☐ Chorioamnionitis
  - ☐ Other (Specify) _____
- ☐ Other Obstetrical or Pregnancy Complications (Specify) _____
- ☐ Fetal Anomaly (Specify) _____
- ☐ Fetal Injury (Please consult with OCME) _____
- ☐ Fetal Infection (Specify) _____
- ☐ Other Fetal Conditions/Disorders (Specify) _____
- ☐ Unknown

c. Was this case referred to OCME? ☐ Yes ☐ No ☐ Unknown If yes, ME Case Number: _____

FOR GESTATION OF 20 WEEKS OR MORE: ALL ITEMS BELOW MUST BE COMPLETED (except OCME cases).

29. PRENATAL

a. Primary Payor (Check **one**)

- ☐ Medicaid
- ☐ Self-pay
- ☐ Other govt. insurance
- ☐ None
- ☐ Private insurance
- ☐ Unknown

b. Total Number of Prenatal Visits for this Pregnancy

☐ None _____

c. Date of First Prenatal Care Visit

(mm/dd/yyyy) _____/_____/_____

d. Date of Last Prenatal Care Visit

(mm/dd/yyyy) _____/_____/_____

e. Previous Live Births

1. Total Number of Previous Live Births _____ ☐ None
2. Number Born Alive and Now Living _____ ☐ None
3. Number Born Alive and Now Dead _____ ☐ None

f. Date of First Live Birth (mm/yyyy) _____/_____

g. Date of Last Live Birth (mm/yyyy) _____/_____

h. Total Number of Other Pregnancy Outcomes _____ ☐ None
(Spontaneous or Induced losses or ectopic pregnancies) Do not include this fetus

i. Date of Last Other Pregnancy Outcome (mm/yyyy) _____/_____

30. MOTHER/PARENT HEALTH

a. Height _____ feet _____ inches

b. Pre-Pregnancy Weight _____ pounds

c. Weight Immediately Prior to Event _____ pounds

d. Cigarette Smoking

1. Cigarette smoking in the 3 months before or during pregnancy?
   ☐ Yes ☐ No ☐ Unknown

If yes, average number of cigarettes or packs/day (enter 0 if None)

	Cigarettes	or	Packs/Day
2. 3 mo. before pregnancy	_____	or	_____
3. First 3 mo. of pregnancy	_____	or	_____
4. Second 3 mo. of pregnancy	_____	or	_____
5. Third trimester of pregnancy	_____	or	_____

e. Alcohol use during this pregnancy?

☐ Yes ☐ No ☐ Unknown

f. Illicit and other drugs used during this pregnancy?

☐ Yes ☐ No ☐ Unknown

If yes, check **all** that apply

- ☐ Heroin
- ☐ Cocaine
- ☐ Methadone
- ☐ Methamphetamine
- ☐ Marijuana
- ☐ Sedatives
- ☐ Tranquilizers
- ☐ Anticonvulsants
- ☐ Other
- ☐ Unknown

31. PREGNANCY FACTORS

a. Risk Factors in this Pregnancy (Check **all** that apply)

- ☐ Diabetes – Prepregnancy
- ☐ Diabetes – Gestational
- ☐ Hypertension – Pre-pregnancy
- ☐ Hypertension – Gestational
- ☐ Hypertension – Eclampsia
- ☐ Previous Preterm Birth
- ☐ Other previous poor pregnancy outcome
- ☐ Infertility Treatment – Fertility-enhancing drugs, Artificial/Intrauterine insemination
- ☐ Infertility Treatment – Assisted Reproductive Technology
- ☐ Mother had a Previous Cesarean Delivery

If yes, how many? _____

- ☐ Other
- ☐ None
- ☐ Unknown

VR-17
(REV. 01/10)

THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE (Each question MUST be answered)

CONFIDENTIAL MEDICAL REPORT OF SPONTANEOUS TERMINATION OF PREGNANCY (2 of 2)

Only for scientific purposes approved by the Commissioner. Not subject to compelled disclosure.

Mother/Parent Medical Record No. _____ CERTIFICATE NO.

FOR GESTATION OF 20 WEEKS OR MORE: ALL ITEMS BELOW MUST BE COMPLETED (except OCME cases).

31. PREGNANCY FACTORS (cont.)

b. Infection Present and/or Treated During Pregnancy
(Check **all** that apply)

- ☐ Gonorrhea
- ☐ Syphilis
- ☐ Herpes Simplex (HSV)
- ☐ Chlamydia
- ☐ Bacterial Vaginosis
- ☐ Hepatitis B
- ☐ Hepatitis C
- ☐ Listeria
- ☐ Group B Strep
- ☐ Tuberculosis
- ☐ Rubella
- ☐ Cytomegalovirus
- ☐ Parvovirus
- ☐ Toxoplasmosis
- ☐ Other
- ☐ None
- ☐ Unknown

32. DELIVERY

a. Method of Delivery

1. Was delivery with forceps attempted but unsuccessful?
☐ Attempted and successful ☐ Attempted and unsuccessful
☐ Forceps were not used ☐ Unknown

2. Was delivery with vacuum extraction attempted but unsuccessful?
☐ Attempted and successful ☐ Attempted and unsuccessful
☐ Vacuum extraction was not used ☐ Unknown

3. Fetal presentation at delivery
- ☐ Cephalic
- ☐ Breech
- ☐ Other
- ☐ Unknown

4. Final route and method of delivery
(Check **one**)
- ☐ Vaginal/Spontaneous
- ☐ Vaginal/Forceps
- ☐ Vaginal/Vacuum
  Vaginal delivery after a previous C-section?
  ☐ Yes ☐ No ☐ Unknown
- ☐ Primary Cesarean
- ☐ Repeat Cesarean
  If cesarean, was a trial of labor attempted?
  ☐ Yes ☐ No ☐ Unknown

5. Hysterotomy/Hysterectomy
☐ Yes ☐ No ☐ Unknown

b. Maternal Morbidity (Check **all** that apply)
(Complications associated with labor and delivery)

- ☐ Maternal transfusion
- ☐ Third or fourth degree perineal laceration
- ☐ Ruptured uterus
- ☐ Unplanned hysterectomy
- ☐ Admission to intensive care unit
- ☐ Unplanned operating room procedure following delivery
- ☐ Hemorrhage
- ☐ Postpartum transfer to a higher level of care
- ☐ Other
- ☐ None
- ☐ Unknown

c. Was mother transferred for maternal medical or fetal indication prior to delivery?
☐ Yes ☐ No ☐ Unknown

If yes, name of facility transferred from:

_____

33. FETAL ATTRIBUTES

a. Weight of Fetus (grams preferred, specify unit)

_____ ☐ lb/oz _____ ☐ grams

b. Estimated Time of Fetal Death
- ☐ Death at time of first assessment, no labor ongoing
- ☐ Death at time of first assessment, labor ongoing
- ☐ Died during labor, after first assessment
- ☐ Unknown time of fetal death

c. Was an autopsy performed?
☐ Yes ☐ No ☐ Planned

d. Was a histological placental examination performed?
☐ Yes ☐ No ☐ Planned

e. Were autopsy or histological placental examination results used in determining the cause of fetal death?
☐ Yes ☐ No ☐ Unknown

f. Congenital Anomalies of the Fetus
(Check **all** that apply)

- ☐ Anencephaly
- ☐ Meningomyelocele/Spina bifida
- ☐ Cyanotic congenital heart disease
- ☐ Congenital diaphragmatic hernia
- ☐ Omphalocele
- ☐ Gastroschisis
- ☐ Limb reduction defect (excluding congenital amputation and dwarfing syndromes)
- ☐ Cleft lip with or without cleft palate
- ☐ Cleft palate alone
- ☐ Down syndrome
  - ☐ Karyotype confirmed
  - ☐ Karyotype pending
- ☐ Suspected chromosomal disorder
  - ☐ Karyotype confirmed
  - ☐ Karyotype pending
- ☐ Hypospadias
- ☐ Other
- ☐ None
- ☐ Unknown

DATE FILED
(For Health Dept. Use Only)

THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE

CERTIFICATE OF INDUCED TERMINATION OF PREGNANCY

Use this form *ONLY* for induced terminations whether surgical or medical.

Only for scientific purposes approved by the Commissioner; not subject to compelled disclosure.

CERTIFICATE NO.
(For Health Dept. Use Only)

FACILITY

1. DATE OF PROCEDURE FOR TERMINATION *(Month) (Day) (Year-yyyy)*

2. FACILITY TYPE
☐ Hospital ☐ Shared Facility
☐ Clinic (Article 28) ☐ Doctor's Office
☐ Clinic (non-Article 28) ☐ Unknown
☐ Other type _____

3A. FACILITY NAME

3B. FACILITY ADDRESS
Street Number and Name Apt. #, Suite #, etc.

City or Town | County | State | Country | ZIP Code

4. PRIMARY FINANCIAL COVERAGE THIS TERMINATION
☐ Medicaid ☐ Self Pay
☐ Other Govt. Insurance ☐ Unknown
☐ Private Insurance

PATIENT

5. PATIENT'S LEGAL NAME
First Name _____|_____ Last Name _____|_____
(First two letters) (First two letters)

6. PATIENT'S DATE OF BIRTH *(Month) (Day) (Year-yyyy)*

7. PATIENT'S BIRTHPLACE
City or Town | State | Country

8. NEVER LIVED IN UNITED STATES ☐
If born outside of the United States, how long lived in U.S.? _____ (years)
Or if less than 1 year, _____ (months)

9. PATIENT'S USUAL RESIDENCE (COMPLETE ONLY ONE)
☐ **New York City** ZIP Code ____|____|____|____|____
☐ Manhattan ☐ Bronx ☐ Brooklyn ☐ Queens ☐ Staten Island
☐ Unknown
☐ **New York State (Outside NYC)**
City or Town | County | ZIP Code
☐ **Outside NYS** _____ (U.S. State)
☐ **Outside U.S.** _____ (Foreign Country)

PATIENT ATTRIBUTES

10. EDUCATION
☐ 8th grade or less; none
☐ 9th–12th grade, no diploma
☐ High school graduate or GED completed
☐ Some college credit, but no degree
☐ Associate degree
☐ Bachelor's degree
☐ Master's degree
☐ Doctorate or Professional degree
☐ Unknown

11. ANCESTRY (CHECK ONE BOX AND SPECIFY)
☐ Hispanic *(Mexican, Puerto Rican, Cuban, Dominican, etc.)*
Specify _____
☐ NOT Hispanic *(Italian, African American, Haitian, Pakistani, Ukranian, Nigerian, Taiwanese, etc.)*
Specify _____
☐ Unknown

12. RACE
Race as defined by the U.S. Census. (Check one or more to indicate what the patient considers herself to be.)
☐ White
☐ Black or African American
☐ American Indian or Alaska Native (specify tribe) _____
☐ Asian Indian
☐ Chinese
☐ Filipino
☐ Japanese
☐ Korean
☐ Vietnamese
☐ Other Asian (specify) _____
☐ Native Hawaiian
☐ Guamanian or Chamorro
☐ Samoan
☐ Other Pacific Islander (specify) _____
☐ Other (specify) _____
☐ Unknown

13. MARITAL/PARTNERSHIP STATUS
☐ Married
☐ Domestic Partnership
☐ Divorced
☐ Married, but separated
☐ Never Married
☐ Widowed
☐ Other, Specify _____
☐ Unknown

MEDICAL

14. DATE LAST NORMAL MENSES BEGAN *(Month) (Day) (Year-yyyy)*

15. OBSTETRIC ESTIMATE OF GESTATION
_____ completed weeks

16. PREVIOUS PREGNANCIES
a. Total Number of Previous Live Births _____ ☐ None
b. Born Alive Now Living _____ ☐ None
c. Born Alive Now Dead _____ ☐ None
d. Total Number of Other Pregnancy Outcomes _____ ☐ None
e. Number of Spontaneous Terminations _____ ☐ None
f. Number of Induced Terminations _____ ☐ None

17. TERMINATION PROCEDURE

17A. PRIMARY PROCEDURE (CHECK ONLY ONE)
☐ Suction Curettage
☐ Sharp Curettage (D&C)
☐ Dilation and Evacuation (D&E)
☐ Intra-Uterine Instillation
☐ Hysterotomy/Hysterectomy
☐ Misoprostol
☐ Mifepristone and Misoprostol
☐ Methotrexate and Misoprostol
☐ Other Medical (nonsurgical) Specify Medications _____
☐ Other, Specify _____

17B. ADDITIONAL PROCEDURES (CHECK ALL THAT APPLY)
☐ None
☐ Suction Curettage
☐ Sharp Curettage (D&C)
☐ Dilation and Evacuation (D&E)
☐ Intra-Uterine Instillation
☐ Hysterotomy/Hysterectomy
☐ Misoprostol
☐ Mifepristone and Misoprostol
☐ Methotrexate and Misoprostol
☐ Other Medical (nonsurgical) Specify Medications _____
☐ Other, Specify _____

18. CONTRACEPTIVE METHOD PRESCRIBED AND/OR DISPENSED AFTER THIS PROCEDURE (Check all that apply)
☐ None Offered ☐ Oral Contraceptive Pills ☐ Injection ☐ Contraceptive Patch ☐ Diaphragm ☐ Emergency Contraception
☐ Offered but Declined ☐ Condoms ☐ Contraceptive Implant ☐ Cervical Vaginal Ring ☐ IUD ☐ Other, Specify _____

19. ATTENDANT NAME AT TERMINATION:
_____ (First, Middle, Last, Suffix)
☐ MD ☐ DO ☐ NP

ATTENDANT/CERTIFIER

20. CERTIFIER: I HEREBY CERTIFY THAT THIS EVENT OCCURRED AT THE TIME AND ON THE DATE INDICATED AND THAT ALL FACTS STATED IN THIS CERTIFICATE ARE TRUE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.
☐ MD ☐ DO ☐ NP
_____ *Signature of Certifier*
_____ *Name of Certifier*
_____ *Address*
_____ *License No.* _____/_____/_____ *Date*

VOID

VR-18
(REV. 01/13)