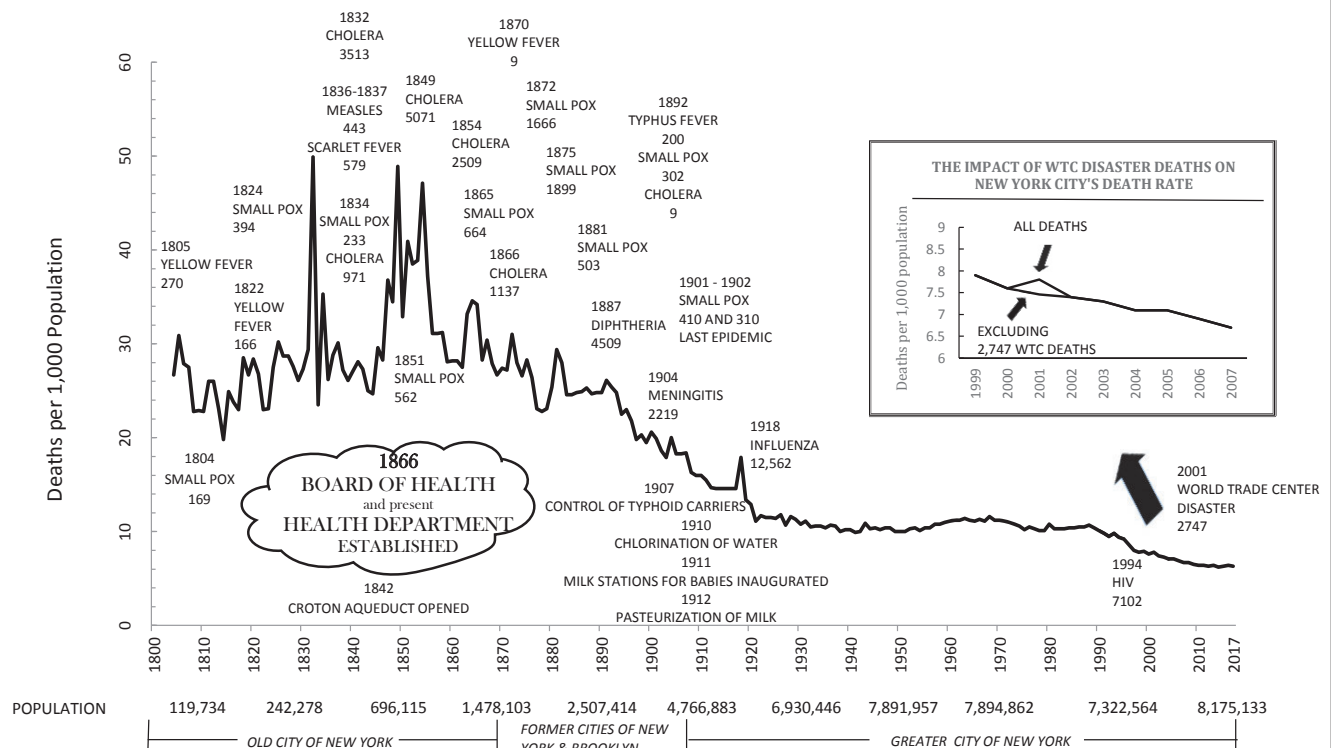# SUMMARY OF VITAL STATISTICS 2017
THE CITY OF NEW YORK

The Conquest of Pestilence in New York City

...As Shown by the Death Rate as Recorded in the Official Records of the Department of Health and Mental Hygiene.

Deaths per 1,000 Population

1832
CHOLERA
3513

1870
YELLOW FEVER
9

1836-1837
MEASLES
443
SCARLET FEVER
579

1849
CHOLERA
5071

1872
SMALL POX
1666

1892
TYPHUS FEVER
200
SMALL POX
302
CHOLERA
9

1854
CHOLERA
2509

1875
SMALL POX
1899

1824
SMALL POX
394

1834
SMALL POX
233
CHOLERA
971

1865
SMALL POX
664

1805
YELLOW FEVER
270

1822
YELLOW FEVER
166

1866
CHOLERA
1137

1881
SMALL POX
503

1851
SMALL POX
562

1887
DIPHTHERIA
4509

1901 - 1902
SMALL POX
410 AND 310
LAST EPIDEMIC

1904
MENINGITIS
2219

1804
SMALL POX
169

1918
INFLUENZA
12,562

2001
WORLD TRADE CENTER
DISASTER
2747

1866
BOARD OF HEALTH
and present
HEALTH DEPARTMENT
ESTABLISHED

1907
CONTROL OF TYPHOID CARRIERS

1910
CHLORINATION OF WATER

1911
MILK STATIONS FOR BABIES INAUGURATED

1912
PASTEURIZATION OF MILK

1994
HIV
7102

1842
CROTON AQUEDUCT OPENED

THE IMPACT OF WTC DISASTER DEATHS ON NEW YORK CITY'S DEATH RATE

Deaths per 1,000 population

ALL DEATHS

EXCLUDING
2,747 WTC DEATHS

POPULATION

| 119,734 | 242,278 | 696,115 | 1,478,103 | 2,507,414 | 4,766,883 | 6,930,446 | 7,891,957 | 7,894,862 | 7,322,564 | 8,175,133 |

OLD CITY OF NEW YORK

FORMER CITIES OF NEW YORK & BROOKLYN

GREATER CITY OF NEW YORK

Bill de Blasio, Mayor   Oxiris Barbot, MD, Commissioner

SUMMARY OF VITAL STATISTICS 2017 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, 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
Wenhui Li, PhD, Director, Statistical Analysis and Reporting Unit

July 2019

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

TABLE OF CONTENTS (CONTINUED)

TABLE OF CONTENTS (CONTINUED)

NEW YORK CITY DEPARTMENT OF

HEALTH AND MENTAL HYGIENE

Oxiris Barbot, MD

Commissioner

Dear Fellow New Yorker:

Every year the New York City Department of Health and Mental Hygiene's *Summary of Vital Statistics* highlights trends in the births and deaths that occur in New York City. These trends are used to inform our programs and policies.

Highlights from our 2017 report, which begins on the next page, include:

- Citywide, life expectancy remained the same as 2016 at 81.2 years, representing a 1.0 year increase since 2008.
- In NYC, Non-Hispanic blacks have the lowest life expectancy among racial/ethnic groups at 77.3 years, while Hispanics have the highest at 82.4 years. In 1998, the overall New York City life expectancy at birth was 77.3 years, the same as the current life expectancy at birth for Non-Hispanic blacks.
- From 2016 to 2017, the citywide age-adjusted mortality rate dropped from 575.4 per 100,000 population to 545.7 per 100,000 population. The age-adjusted mortality rate has declined by 17.4% since 2008.
- New York City's age-adjusted premature death rate (age <65 years) has declined by 14.9% since 2008. There was a slight decrease in the age-adjusted premature death rate from 189.4 per 100,000 population in 2016 to 184.9 per 100,000 population in 2017.
- Deaths due to unintentional drug overdose continued to rise with a 4.5% increase from 2016.
- The 2017 infant mortality rate was 4.3 per 1,000 live births, slightly higher than 2016.
- The infant mortality rate for non-Hispanic black New Yorkers was 3.3 times the rate for non-Hispanic whites.

These data illustrate the persistence of racial/ethnic and neighborhood disparities, which are the long-term result of structural racism. The DOHMH remains committed to identifying the root causes of these disparities and addressing them by sharing data which inform our programmatic priorities.

Sincerely,

Oxiris Barbot, MD
Commissioner

KEY FINDINGS

Life Expectancy at Birth
- New York City's life expectancy at birth in 2017 was 81.2 years, remaining the same since 2016 and increasing by 1.0 year since 2008.
- The New York City 2017 life expectancy at birth was 82.4 years among Hispanics, 81.3 years among non-Hispanic whites, and 77.3 years among non-Hispanic blacks (which is the same as the overall New York City 1998 life expectancy at birth of 77.3 years). From 2016 to 2017, life expectancy increased 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 575.4 per 100,000 population in 2016 to 545.7 in 2017 (5.2% decrease). From 2016 to 2017, the age-adjusted death rate decreased among Hispanics by 5.2%, among non-Hispanic blacks by 2.7%, among non-Hispanic whites by 6.1%, and among Asians and Pacific Islanders by 4.0%.
- Over the past ten years, the citywide age-adjusted death rate decreased by 17.4%. Between 2008 and 2017, the age-adjusted death rates decreased among non-Hispanic blacks by 15.3%, among Hispanics by 17.9%, among non-Hispanic whites by 17.2%, and among Asians and Pacific Islanders by 9.7%.
- The citywide age-adjusted premature mortality rate decreased over the past year, from 189.4 per 100,000 population in 2016 to 184.9 in 2017 (2.4% decrease). From 2016 to 2017, the age-adjusted premature mortality rate decreased among Hispanics by 1.9%, among non-Hispanic blacks by 3.0%, among non-Hispanic whites by 2.5%, and increased among Asians and Pacific Islanders by 5.4%.
- The age-adjusted premature mortality rate declined by 14.9% citywide over the past ten years. From 2008 to 2017, age-adjusted premature death (age<65 years) rates declined by 14.0% among non-Hispanic blacks, 18.4% among Hispanics, 14.6% among non-Hispanic whites, and increased by 6.7% 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 16.6 per 100,000 population in 2017, a 1.2% increase since 2016 and a 93.0% increase since 2008.

Infant Mortality
- In 2017, New York City had an infant mortality rate of 4.3 infant deaths per 1,000 live births, a slight increase since 2016 (4.1 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 21.8% since 2008.
- The infant mortality rate disparity between non-Hispanic blacks and non-Hispanic whites increased from 3.1 in 2016 to 3.3 in 2017. The disparity in infant mortality rates between Puerto Ricans and non-Hispanic whites doubled in 2017 to 2.6 from 1.3 in 2016. These changes may be due to small counts from year to year.

Pregnancy Outcomes
- The 2017 citywide crude birth rate was 13.6 births per 1,000 population. New York City's birth rate decreased by 3.5% since 2016 and by 13.4% since 2008.
- In 2017, the birth rate was highest among Asians and Pacific Islanders at 15.7 births per 1,000 population, followed by 14.7 among non-Hispanic whites, 13.1 among Hispanics, and 11.6 among non-Hispanic blacks.
- For 2017, the community district with the highest crude birth rate was Borough Park with 25.1 births per 1,000 population; the community district with the lowest crude birth rate was Bayside with 5.2 births per 1,000 population.
- From 2008 to 2017, birth rates fell among all teenagers regardless of age, and the overall rate of teen birth (births to women <20) declined by 56.2%. Among teens less than 18 years of age, the birth rate declined over that period by 65.1%; among women 18-19, it declined by 52.5%.
- Teen birth rates declined for all racial/ethnic groups: by 55.2% among Hispanics, 58.2% among non-Hispanic blacks, 37.2% among non-Hispanic whites, and 44.8% among Asians and Pacific Islanders.
- Induced and spontaneous terminations of pregnancy both continued to decline from 2016 to 2017, decreasing by 9.3% and 13.7%, respectively.

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, 2008–2017
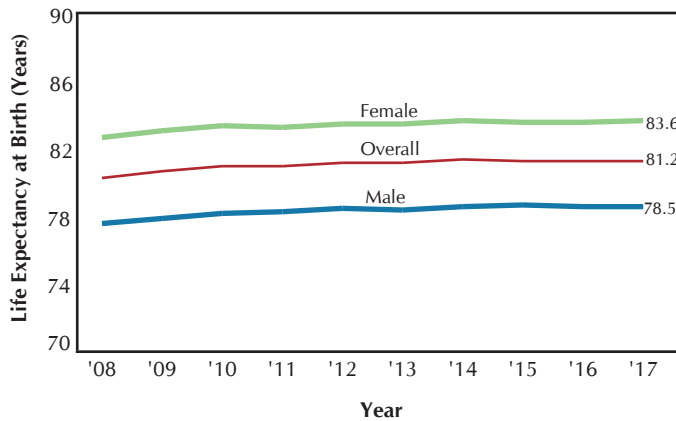
- New York City's life expectancy at birth in 2017 was 81.2 years, remaining the same since 2016, and increasing by 1.0 year since 2008.
- The life expectancy among males was 78.5 years, remaining the same since 2016, and a 1.0-year increase since 2008.
- The life expectancy among females was 83.6 years, increasing by 0.1-year since 2016, and a 1.0-year increase since 2008.

- The New York City 2017 life expectancy at birth was 82.4 years among Hispanics, 81.3 years among non-Hispanic whites, and 77.3 years among non-Hispanic blacks.
- Life expectancy increased across all racial/ethnic groups from 2008 to 2017: 1.1 years among Hispanics, 0.7 years among non-Hispanic whites, and 1.2 years among non-Hispanic blacks. From 2016 to 2017, life expectancy increased 0.1 years among non-Hispanic blacks and non-Hispanic whites, and remained the same among Hispanics.
- In 1998, the overall New York City life expectancy at birth was 77.3 years, which is the same as the current life expectancy at birth for Non-Hispanic blacks.

Figure 2. Life Expectancy at Birth by Racial/ Ethnic* Group, New York City, 2008–2017
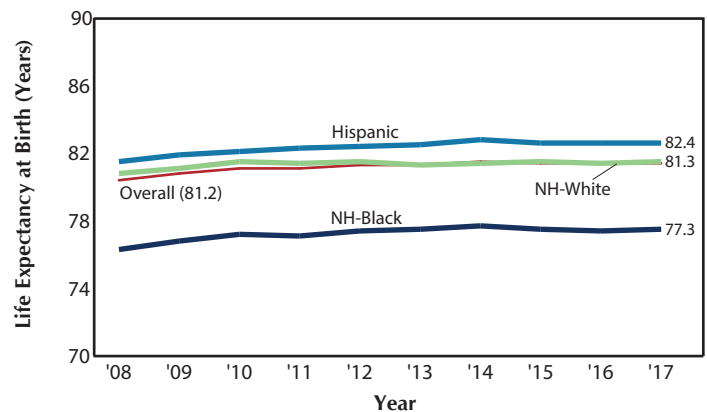
*Life expectancy among Asians and Pacific Islanders is not displayed because the required single year age population denominators are too small to produce reliable estimates (Appendix B, Technical Notes: Population, Life Expectancy).

Figure 3. Life Expectancy at Birth by Neighborhood Poverty*, New York City, 2008 and 2017
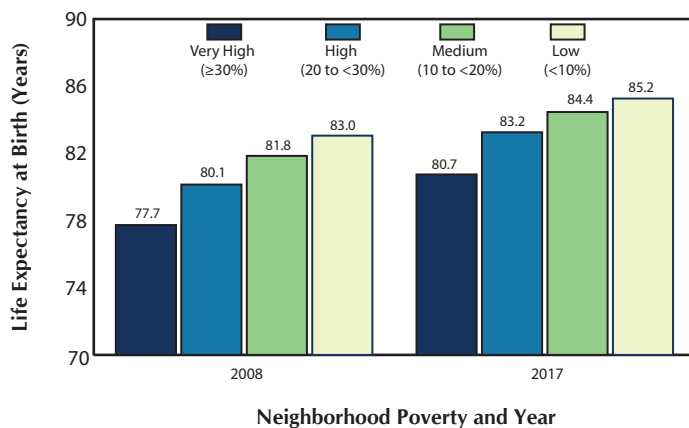
- Life expectancy increased across all categories of neighborhood poverty between 2008 and 2017. For very high poverty areas, life expectancy increased by 3.0 years as compared to 2.2 years for low poverty areas.
- The difference in life expectancy between very high and low poverty areas in 2017 was 4.5 years as compared to 5.3 years in 2008.

*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 the American Community Survey (ACS) 2005-2009 for 2008 data and per ACS 2013-2017 for 2017 data.
*Mortality data are based on NYC residents, including New York State occurrence.

LIFE EXPECTANCY

Figure 4. Life Expectancy at Birth by Community District, New York City, 2008-2017
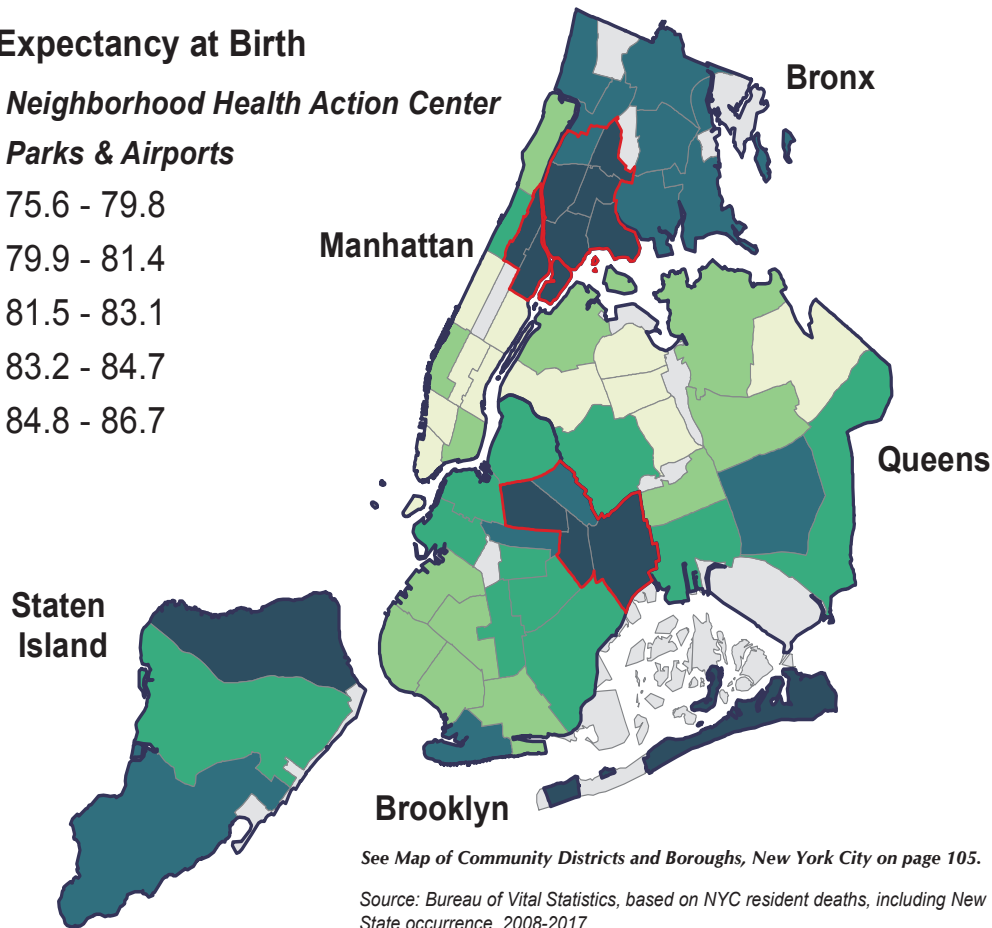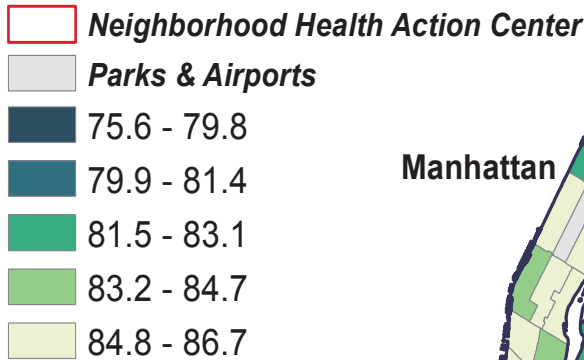
Life Expectancy at Birth

- ⬜ (red outline) *Neighborhood Health Action Center*
- ⬜ *Parks & Airports*
- 🟦 75.6 - 79.8
- 🟦 79.9 - 81.4
- 🟩 81.5 - 83.1
- 🟩 83.2 - 84.7
- 🟨 84.8 - 86.7

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

Source: Bureau of Vital Statistics, based on NYC resident deaths, including New York State occurrence, 2008-2017.

- For 2008-2017, New York City's life expectancy at birth was highest in Greenwich Village/SOHO (86.7), the Upper East Side (86.4), Murray Hill (86.3), Sunnyside/Woodside (86.3) and Elmhurst/Corona (86.3).
- For 2008-2017, life expectancy at birth was lowest in Brownsville (75.6), Morrisania (76.8), Central Harlem (76.9), the Rockaways (76.9), and East Harlem (77.9).

Life Expectancy at Birth by Community District (CD) of Residence, New York City, 2008-2017

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	78.0	BK01	Williamsburg, Greenpoint	82.2	QN01	Astoria, Long Island City	83.6
MN02	Greenwich Village, SOHO	86.7	BX02	Hunts Point	79.8	BK02	Fort Greene, Brooklyn Heights	81.6	QN02	Sunnyside, Woodside	86.3
MN03	Lower East Side	83.2	BX03	Morrisania	76.8	BK03	Bedford Stuyvesant	78.0	QN03	Jackson Heights	85.7
MN04	Chelsea, Clinton	84.1	BX04	Concourse, Highbridge	79.6	BK04	Bushwick	81.1	QN04	Elmhurst, Corona	86.3
MN05	Midtown Business District	85.6	BX05	University, Morris Heights	80.3	BK05	East New York	79.1	QN05	Ridgewood, Glendale	81.7
MN06	Murray Hill	86.3	BX06	East Tremont	78.0	BK06	Park Slope	82.0	QN06	Rego Park, Forest Hills	84.9
MN07	Upper West Side	85.2	BX07	Fordham	79.9	BK07	Sunset Park	83.3	QN07	Flushing	84.7
MN08	Upper East Side	86.4	BX08	Riverdale	81.3	BK08	Crown Heights North	80.2	QN08	Fresh Meadows, Briarwood	84.4
MN09	Manhattanville	82.1	BX09	Unionport, Soundview	80.4	BK09	Crown Heights South	82.0	QN09	Woodhaven	83.4
MN10	Central Harlem	76.9	BX10	Throgs Neck	81.4	BK10	Bay Ridge	83.7	QN10	Howard Beach	81.9
MN11	East Harlem	77.9	BX11	Pelham Parkway	80.3	BK11	Bensonhurst	84.2	QN11	Bayside	84.9
MN12	Washington Heights	84.4	BX12	Williamsbridge	81.4	BK12	Borough Park	84.4	QN12	Jamaica, St. Albans	81.1
						BK13	Coney Island	80.6	QN13	Queens Village	83.1
CD	STATEN ISLAND					BK14	Flatbush, Midwood	82.6	QN14	The Rockaways	76.9
SI01	Port Richmond	79.4				BK15	Sheepshead Bay	83.9			
SI02	Willowbrook, South Beach	81.6				BK16	Brownsville	75.6			
SI03	Tottenville	81.3				BK17	East Flatbush	82.8			
						BK18	Canarsie	82.1			

CITYWIDE MORTALITY

Figure 5. Age-adjusted Death Rates, Overall and by Sex, New York City, 2008–2017
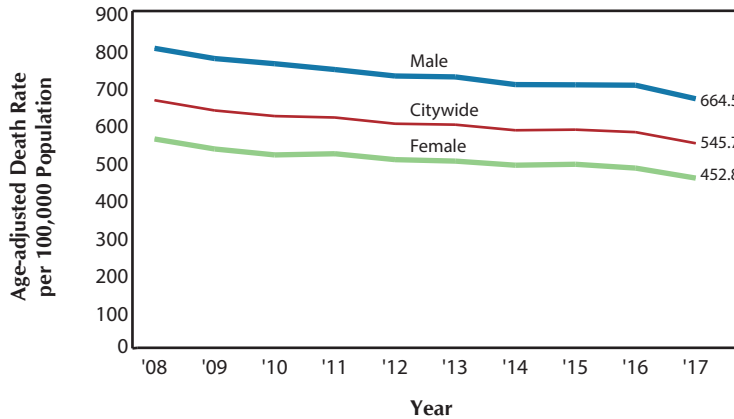
- Citywide age-adjusted death rates decreased over the past year, from 575.4 per 100,000 population in 2016 to 545.7 in 2017. Over the past ten years, the age-adjusted death rate decreased by 17.4%.

- From 2008 to 2017, age-adjusted death rates decreased by 16.8% among males, and by 18.7% among females.

- Between 2008 and 2017, age-adjusted death rates decreased by 15.3% among non-Hispanic blacks, by 17.9% among Hispanics, by 17.2% among non-Hispanic whites, and by 9.7% among Asians and Pacific Islanders.

- From 2016 to 2017, the age-adjusted death rate decreased among Hispanics by 5.2%, among non-Hispanic blacks by 2.7%, among non-Hispanic whites by 6.1%, and among Asians and Pacific Islanders by 4.0%.

- In 2017, the death rate for non-Hispanic blacks was 18.0% higher than the rate for non-Hispanic whites. The death rate has continued to be higher among non-Hispanic blacks compared to non-Hispanic whites over time, and the gap has slightly increased since 2016 (14.0% higher).

Figure 6. Age-adjusted Death Rates by Racial/Ethnic Group, New York City, 2008–2017
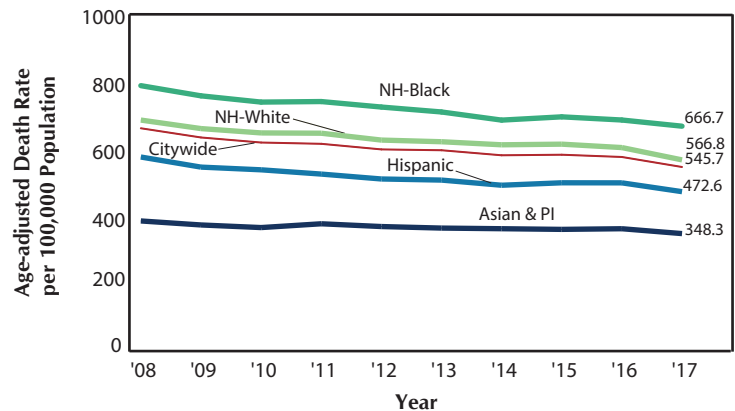
Figure 7. Age-adjusted Death Rates by Neighborhood Poverty*, New York City Residents, 2008 and 2017
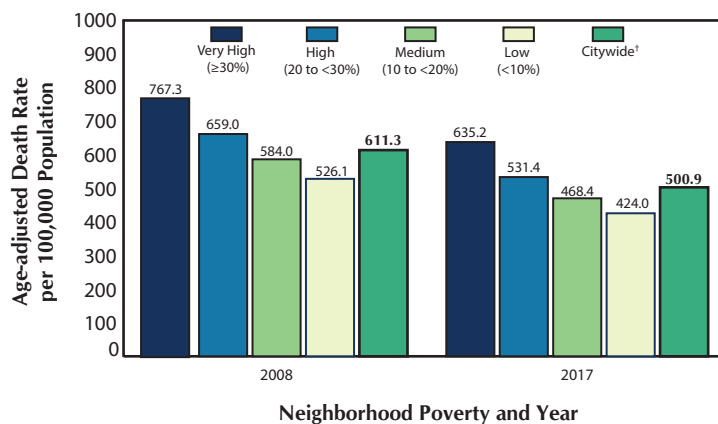
- Since 2008, age-adjusted death rates decreased across all categories of neighborhood poverty. Over that period, the rate decreased by 17.2% in very high poverty areas and by 19.4% in low poverty areas.

- The age-adjusted death rate in areas with very high poverty remained 1.5 times the rate in areas with low poverty in 2017, as it was for 2008.

*Neighborhood poverty (based on decedent's residential census tract) is defined as percent of residents with incomes below 100% of the Federal Poverty Level, per the American Community Survey (ACS) 2005-2009 for 2008 data and per ACS 2013-2017 for 2017 data.
†The citywide estimate is restricted to NYC residents.

NEIGHBORHOOD MORTALITY

Figure 8. Age-adjusted Death Rates by Community District of Residence, New York City, 2017

Age-adjusted Death Rate Per 100,000 Population

- 🔲 *Neighborhood Health Action Center*
- ⬜ *Parks & Airports*
- ⬛ 627.6 - 809.4
- 🟦 550.3 - 627.5
- 🟩 471.8 - 550.2
- 🟩 406.4 - 471.7
- ⬜ 311.7 - 406.3

Citywide average: 545.7

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

Source: Bureau of Vital Statistics, based on events occurring in 2017.
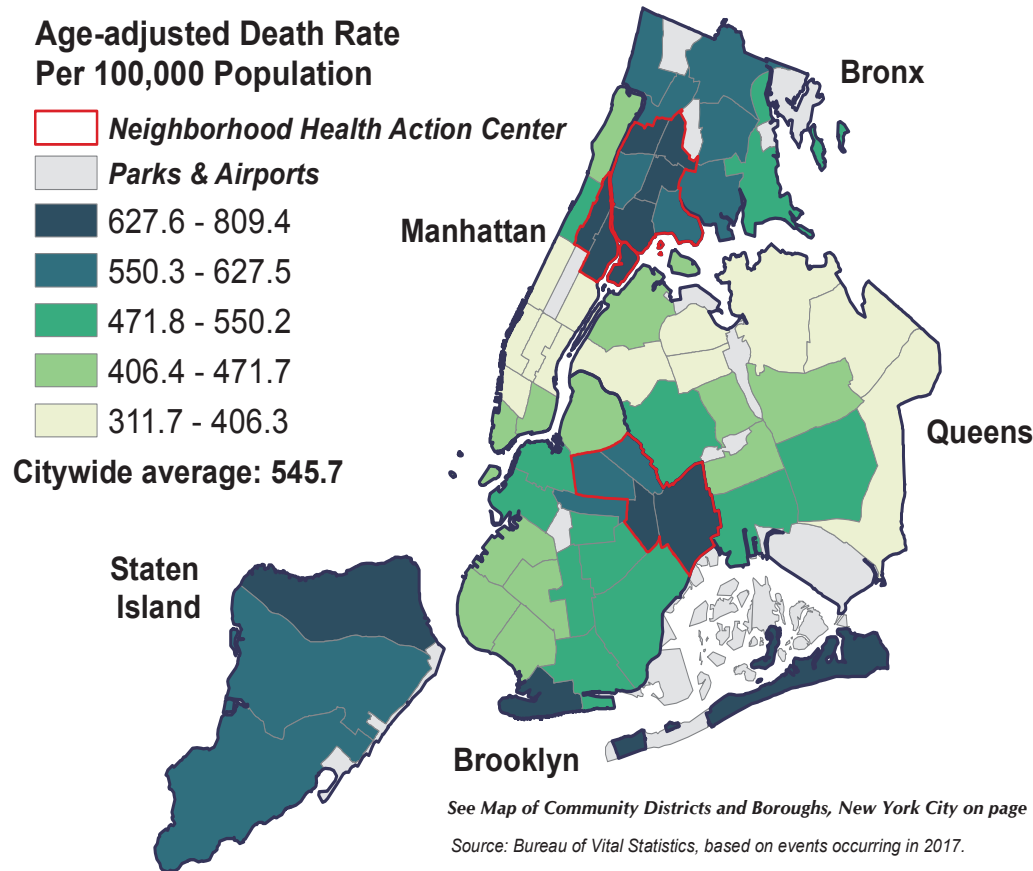
- In 2017, Brownsville had the highest age-adjusted death rate, at 809.4 deaths per 100,000 population, followed by 800.5 in Central Harlem, 738.8 in the Rockaways, 736.5 in Morrisania, and 701.7 in Mott Haven.

- In 2017, age-adjusted death rates were lowest in Greenwich Village/SOHO at 311.7 deaths per 100,000 population, followed by 320.2 in Sunnyside/Woodside, 338.9 in Bayside, 354.4 in Elmhurst/Corona, and 364.0 in the Upper East Side.

Age-adjusted Death Rates per 100,000 Population by Community District (CD) of Residence, New York City, 2017

CD	MANHATTAN	Age-adjusted Death Rates	CD	BRONX	Age-adjusted Death Rates	CD	BROOKLYN	Age-adjusted Death Rates	CD	QUEENS	Age-adjusted Death Rates
MN01	Battery Park, Tribeca	437.3	BX01	Mott Haven	701.7	BK01	Williamsburg, Greenpoint	444.8	QN01	Astoria, Long Island City	471.7
MN02	Greenwich Village, SOHO	311.7	BX02	Hunts Point	599.2	BK02	Fort Greene, Brooklyn Heights	484.2	QN02	Sunnyside, Woodside	320.2
MN03	Lower East Side	436.2	BX03	Morrisania	736.5	BK03	Bedford Stuyvesant	627.5	QN03	Jackson Heights	390.4
MN04	Chelsea, Clinton	383.3	BX04	Concourse, Highbridge	601.5	BK04	Bushwick	579.4	QN04	Elmhurst, Corona	354.4
MN05	Midtown Business District	368.5	BX05	University, Morris Heights	637.6	BK05	East New York	641.5	QN05	Ridgewood, Glendale	514.4
MN06	Murray Hill	366.1	BX06	East Tremont	694.4	BK06	Park Slope	516.6	QN06	Rego Park, Forest Hills	414.1
MN07	Upper West Side	406.3	BX07	Fordham	609.8	BK07	Sunset Park	468.7	QN07	Flushing	390.3
MN08	Upper East Side	364.0	BX08	Riverdale	557.8	BK08	Crown Heights North	604.3	QN08	Fresh Meadows, Briarwood	406.7
MN09	Manhattanville	510.9	BX09	Unionport, Soundview	552.9	BK09	Crown Heights South	550.2	QN09	Woodhaven	454.8
MN10	Central Harlem	800.5	BX10	Throgs Neck	548.6	BK10	Bay Ridge	455.5	QN10	Howard Beach	475.0
MN11	East Harlem	685.0	BX11	Pelham Parkway	582.6	BK11	Bensonhurst	441.4	QN11	Bayside	338.9
MN12	Washington Heights	415.3	BX12	Williamsbridge	581.1	BK12	Borough Park	446.3	QN12	Jamaica, St. Albans	508.6
						BK13	Coney Island	646.7	QN13	Queens Village	375.0
CD	**STATEN ISLAND**					BK14	Flatbush, Midwood	524.4	QN14	The Rockaways	738.8
SI01	Port Richmond	639.8				BK15	Sheepshead Bay	508.2			
SI02	Willowbrook, South Beach	559.3				BK16	Brownsville	809.4			
SI03	Tottenville	621.3				BK17	East Flatbush	529.5			
						BK18	Canarsie	546.2			

LEADING CAUSES OF DEATH

Figure 9. Leading Causes of Death, New York City, 2000, 2008, and 2017
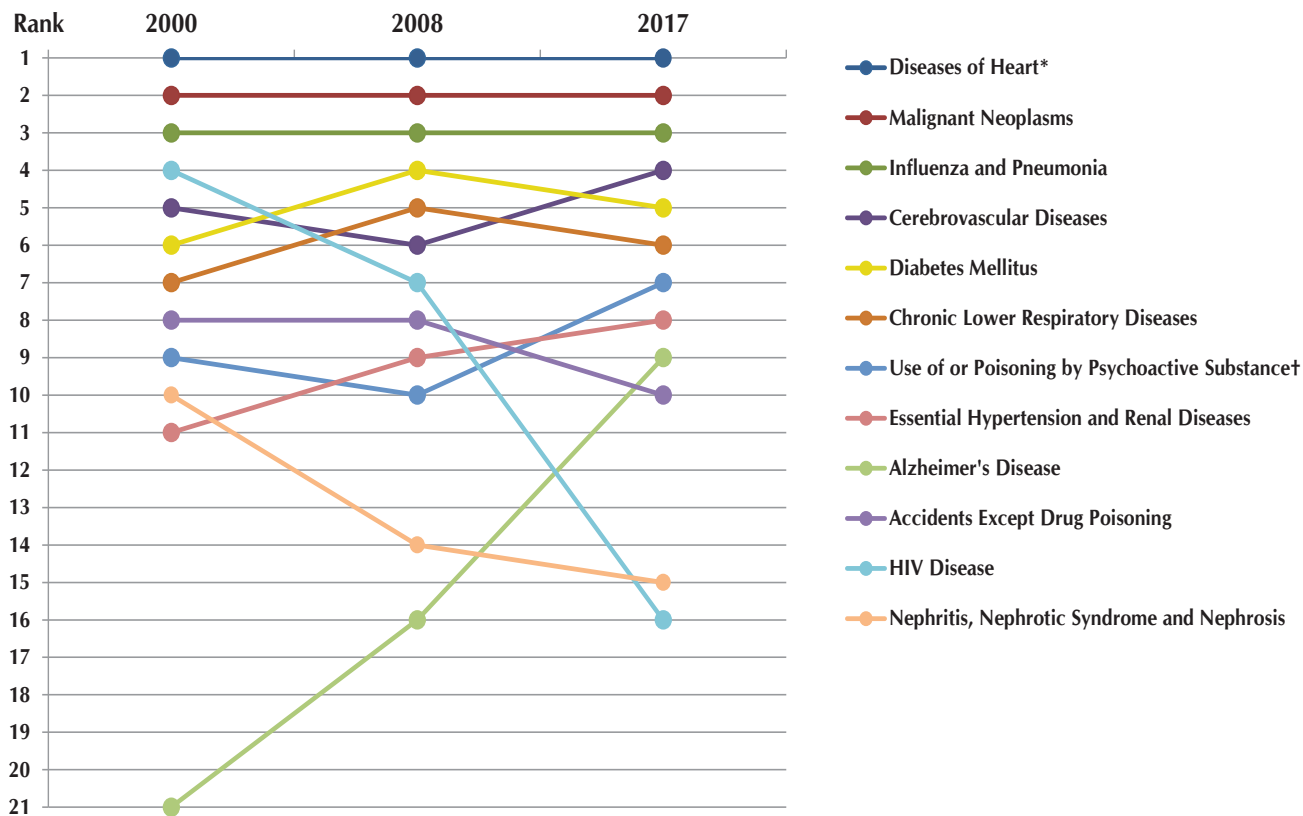
* See the 2010 Summary of Vital Statistics: Mortality - Special Section: Cause of Death Quality Improvement Initiative for information
  on the recent trends in cause of death reporting, particularly heart disease.
  †Appendix B Technical Notes: Drug-Related Deaths.

- Heart disease and malignant neoplasms (cancer) continue to rank as the top leading causes of death.
- HIV disease has dropped from the 4th leading cause in 2000, and the 7th leading cause in 2008, to the 16th in 2017.
- Nephritis, nephrotic syndrome and nephrosis dropped from the 10th leading cause in 2000, and the 14th in 2008, to the 15th in 2017.
- Alzheimer's disease has risen from the 21st leading cause in 2000, and the 16th leading cause in 2008, to the 9th in 2017. Although this change in ranking reflects the aging of the population, sharp increases in Alzheimer's disease observed since 2009 may be partly attributed to efforts to improve cause of death reporting.

LEADING CAUSES OF DEATH

Table 1. Leading Causes of Death by Sex, New York City, 2017*

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	Diabetes Mellitus	Influenza and Pneumonia
5	Influenza and Pneumonia	Chronic Lower Respiratory Diseases
6	Cerebrovascular Diseases	Diabetes Mellitus
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.

- 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.
- Cerebrovascular disease is the third 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 2. Leading Causes of Death by Racial/Ethnic Group*, New York City, 2017†

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	Chronic Lower Respiratory Diseases	Diabetes Mellitus
4	Use of or Poisoning by Psychoactive Substance	Cerebrovascular Diseases	Influenza and Pneumonia	Influenza and Pneumonia	Cerebrovascular Diseases
5	Influenza and Pneumonia	Influenza and Pneumonia	Diabetes Mellitus	Cerebrovascular Diseases	Influenza and Pneumonia
6	Cerebrovascular Diseases	Diabetes Mellitus	Accidents Except Poisoning by Psychoactive Substance‡	Use of or Poisoning by Psychoactive Substance	Use of or Poisoning by Psychoactive Substance
7	Chronic Lower Respiratory Diseases	Accidents Except Poisoning by Psychoactive Substance	Chronic Lower Respiratory Diseases‡	Alzheimer's Disease	Essential Hypertension and Hypertensive Renal Disease
8	Alzheimer's Disease	Essential Hypertension and Hypertensive Renal Disease	Essential Hypertension and Hypertensive Renal Disease	Accidents Except Poisoning by Psychoactive Substance	Chronic Lower Respiratory Diseases
9	Essential Hypertension and Hypertensive Renal Disease	Chronic Lower Respiratory Diseases‡	Alzheimer's Disease	Diabetes Mellitus	Accidents Except Poisoning by Psychoactive Substance
10	Chronic Liver Disease and Cirrhosis	Chronic Liver Disease and Cirrhosis‡	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.

‡ Tied ranking

- 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 6th among Other Hispanics, 5th among Asians and Pacific Islanders, and 9th 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 for any other racial/ethnic groups.

- Use of or poisoning by psychoactive substance (drug-related deaths) is a leading cause of death among all racial/ethnic groups except Asians and Pacific Islanders.

- Essential hypertension and hypertensive renal disease is a leading cause of death among all groups. It ranks 9th among Puerto Ricans, 8th among Other Hispanics and Asians/Pacific Islanders, 10th among non-Hispanic whites, and 7th among non-Hispanic blacks.

- Intentional self-harm (suicide) is a leading cause of death among Asians and Pacific Islanders only (10th).

PREMATURE DEATH

Figure 10. Leading Causes of Premature Death (Age <65 Years), New York City, 2000, 2008, and 2017
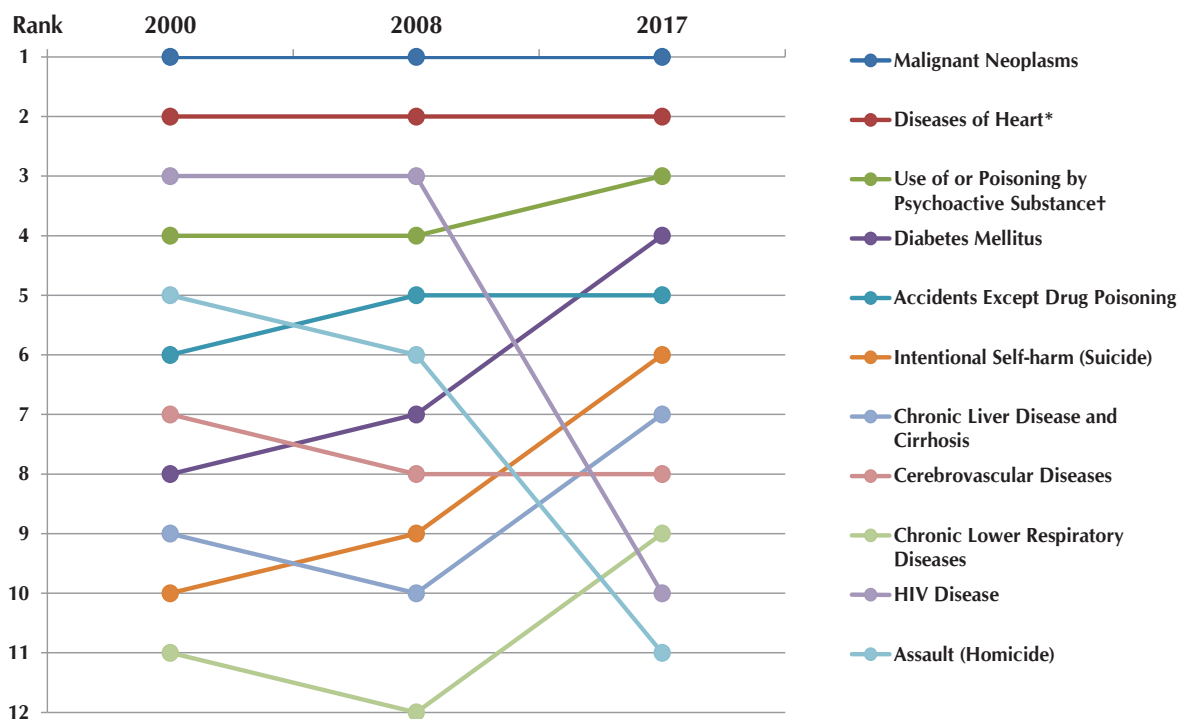
Rank	2000	2008	2017	
1	●	●	●	Malignant Neoplasms
2	●	●	●	Diseases of Heart*
3	●	●	●	Use of or Poisoning by Psychoactive Substance†
4	●	●	●	Diabetes Mellitus
5	●	●	●	Accidents Except Drug Poisoning
6	●	●	●	Intentional Self-harm (Suicide)
7	●	●	●	Chronic Liver Disease and Cirrhosis
8	●	●	●	Cerebrovascular Diseases
9	●	●	●	Chronic Lower Respiratory Diseases
10	●	●	●	HIV Disease
11	●	●	●	Assault (Homicide)
12				

* 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 disease continue to rank as the top leading causes of premature death.
- HIV disease has dropped from the 3rd leading cause of premature death in 2000 and 2008, to the 10th in 2017.
- Assault (homicide) has also dropped in ranking from the 5th leading cause of premature death in 2000, and the 6th leading cause in 2008, to the 11th in 2017.
- Diabetes has risen from the 8th leading cause of premature death in 2000, and the 7th leading cause in 2008, to the 4th in 2017.
- Chronic liver disease and cirrhosis rose from the 9th leading cause of premature death in 2000, and the 10th leading cause in 2008, to the 7th leading cause in 2017.

PREMATURE DEATH

Table 3. Leading Causes of Premature Death (Age <65 Years) by Sex, New York City, 2017*

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	Chronic Liver Disease and Cirrhosis	Intentional Self-harm (Suicide)
8	Cerebrovascular Diseases	Certain Conditions Originating in the Perinatal Period
9	Assault (Homicide)	Influenza and Pneumonia
10	Human Immunodeficiency Virus (HIV) Disease	Chronic Liver Disease and Cirrhosis

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

- Malignant neoplasms (cancer) and heart disease 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 (9th). Chronic lower respiratory diseases is ranked as a leading cause among females only (5th).

PREMATURE DEATH

Table 4. Leading Causes of Premature Death (Age <65 Years) by Racial/Ethnic Group*, New York City, 2017†

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	Accidents Except Poisoning by Psychoactive Substance	Intentional Self-harm (Suicide)	Diabetes Mellitus
5	Chronic Liver Disease and Cirrhosis	Chronic Liver Disease and Cirrhosis	Diabetes Mellitus	Accidents Except Poisoning by Psychoactive Substance	Human Immunodeficiency Virus (HIV) Disease
6	Human Immunodeficiency Virus (HIV) Disease	Cerebrovascular Diseases	Certain Conditions Originating in the Perinatal Period	Chronic Liver Disease and Cirrhosis	Assault (Homicide)
7	Accidents Except Poisoning by Psychoactive Substance	Intentional Self-harm (Suicide)	Cerebrovascular Diseases	Diabetes Mellitus	Chronic Lower Respiratory Diseases
8	Influenza and Pneumonia	Diabetes Mellitus	Use of or Poisoning by Psychoactive Substance	Chronic Lower Respiratory Diseases	Cerebrovascular Diseases
9	Cerebrovascular Diseases	Assault (Homicide)	Chronic Liver Disease and Cirrhosis	Cerebrovascular Diseases	Accidents Except Poisoning by Psychoactive Substance
10	Chronic Lower Respiratory Diseases	Certain Conditions Originating in the Perinatal Period	Congenital Malformations,Deformations	Influenza and Pneumonia	Certain Conditions Originating in the Perinatal Period

* 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.

- Malignant neoplasms (cancer) and heart disease are the leading causes of premature death among all racial/ethnic groups.
- 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 (8th).
- Suicide is the 3rd leading cause of premature death for Asians and Pacific Islanders; it ranks 7th among Other Hispanics, and 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 (6th), and non-Hispanic blacks (5th). It is not ranked as a leading cause of premature death among Asians and Pacific Islanders, Other Hispanics, and non-Hispanic whites.
- Assault (homicide) is a leading cause of premature death among Other Hispanics (9th) and non-Hispanic blacks (6th), but is not among other racial/ethnic groups in leading causes.

PREMATURE DEATH

Figure 11. Age-adjusted Premature Death (Age <65 years) Rates, Overall and by Sex, New York City, 2008–2017

- The age-adjusted premature death rate decreased to 184.9 per 100,000 population in 2017, a 2.4% decrease since 2016 and a 14.9% decrease since 2008.

- The age-adjusted premature death rate for females has been consistently lower than the rate for males.
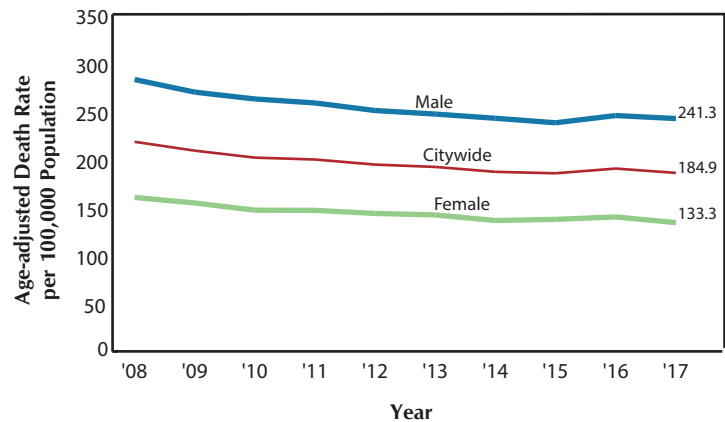
Figure 12. Age-adjusted Premature Death (Age <65 years) Rates by Racial/Ethnic Group, New York City, 2008–2017
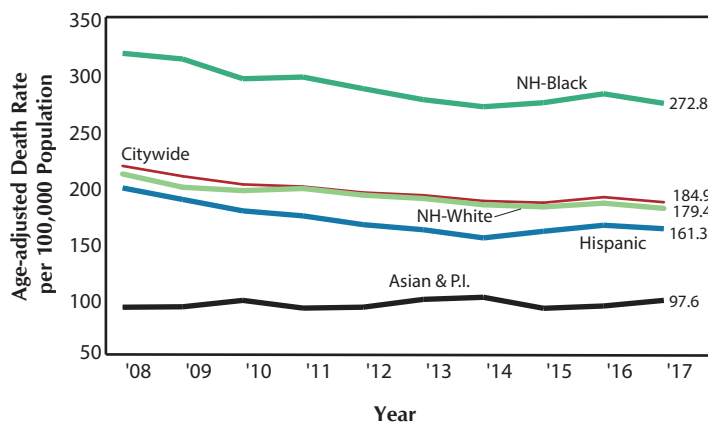
- From 2008 to 2017, age-adjusted premature death rates declined by 14.0% among non-Hispanic blacks, 18.4% among Hispanics, 14.6% among non-Hispanic whites, and increased by 6.7% among Asians and Pacific Islanders.

- From 2016 to 2017, the age-adjusted premature mortality rate decreased among Hispanics by 1.9%, among non-Hispanic blacks by 3.0%, among non-Hispanic whites by 2.5%, and increased among Asians and Pacific Islanders by 5.4%.

- Non-Hispanic blacks had the highest age-adjusted premature death rate (52.1% higher than non-Hispanic whites), and were the only racial/ethnic group above the citywide average.

- Rates have decreased for all groups, except Asians and Pacific Islanders, since 2016.

- The age-adjusted premature mortality rate decreased across all categories of neighborhood poverty between 2008 and 2017. Over that time, it decreased by 18.3% in low poverty neighborhoods, 18.1% in medium poverty neighborhoods, 20.2% in high poverty neighborhoods, and 16.7% in very high poverty neighborhoods.

- Despite declines, the gap between very high and low poverty neighborhoods remains pronounced. Very high poverty neighborhoods experienced an age-adjusted premature mortality rate that was 2.1 times that of low poverty neighborhoods in 2017. This disparity has decreased slightly from 2016 (2.3 times).

Figure 13. Age-adjusted Premature Death (Age <65 years) Rates by Neighborhood Poverty*, New York City Residents, 2008 and 2017

*Neighborhood poverty (based on decedent's residential census tract) is defined as percent of residents with incomes below 100% of the Federal Poverty Level, per the American Community Survey (ACS) 2005-2009 for 2008 data and per ACS 2013-2017 for 2017 data.
†The citywide estimate is restricted to NYC residents.

PREMATURE DEATH

Figure 14. Age-adjusted Premature Death (Age <65 years) Rates by Community District of Residence, New York City, 2017

Age-adjusted Premature Death Rate Per 100,000 Population

- ▢ (red outline) Neighborhood Health Action Center
- Parks & Airports
- 239.9 - 379.1
- 177.3 - 239.8
- 141.8 - 177.2
- 104.9 - 141.7
- 63.0 - 104.8

Citywide average: 184.9

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

Source: Bureau of Vital Statistics, based on events occurring in 2017.

- In 2017, New York City age-adjusted premature death rates were highest in Brownsville at 379.1 deaths per 100,000 population, followed by 317.0 in East Tremont, 302.7 in Morrisania, 292.5 in Mott Haven, and 285.1 in Central Harlem.

- In 2017, age-adjusted premature death rates were lowest in Greenwich Village/SOHO at 63.0 deaths per 100,000 population, followed by 80.9 in the Upper East Side, 86.0 in Bayside, 87.7 in Murray Hill, and 88.3 in Battery Park/Tribeca.

Age-adjusted Premature Death Rates per 100,000 Population by Community District (CD) of Residence, New York City, 2017

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	88.3	BX01	Mott Haven	292.5	BK01	Williamsburg, Greenpoint	150.1	QN01	Astoria, Long Island City	125.4
MN02	Greenwich Village, SOHO	63.0	BX02	Hunts Point	239.8	BK02	Fort Greene, Brooklyn Heights	156.5	QN02	Sunnyside, Woodside	95.9
MN03	Lower East Side	141.7	BX03	Morrisania	302.7	BK03	Bedford Stuyvesant	252.0	QN03	Jackson Heights	108.7
MN04	Chelsea, Clinton	113.4	BX04	Concourse, Highbridge	242.4	BK04	Bushwick	203.1	QN04	Elmhurst, Corona	102.9
MN05	Midtown Business District	104.8	BX05	University, Morris Heights	243.4	BK05	East New York	251.9	QN05	Ridgewood, Glendale	152.8
MN06	Murray Hill	87.7	BX06	East Tremont	317.0	BK06	Park Slope	158.9	QN06	Rego Park, Forest Hills	100.3
MN07	Upper West Side	89.3	BX07	Fordham	212.1	BK07	Sunset Park	133.5	QN07	Flushing	115.7
MN08	Upper East Side	80.9	BX08	Riverdale	168.7	BK08	Crown Heights North	236.7	QN08	Fresh Meadows, Briarwood	101.9
MN09	Manhattanville	177.2	BX09	Unionport, Soundview	197.4	BK09	Crown Heights South	214.4	QN09	Woodhaven	135.1
MN10	Central Harlem	285.1	BX10	Throgs Neck	186.5	BK10	Bay Ridge	116.8	QN10	Howard Beach	157.5
MN11	East Harlem	272.3	BX11	Pelham Parkway	171.2	BK11	Bensonhurst	122.5	QN11	Bayside	86.0
MN12	Washington Heights	134.9	BX12	Williamsbridge	208.7	BK12	Borough Park	100.7	QN12	Jamaica, St. Albans	191.1
						BK13	Coney Island	232.6	QN13	Queens Village	120.0
CD	**STATEN ISLAND**					BK14	Flatbush, Midwood	156.6	QN14	The Rockaways	258.5
SI01	Port Richmond	233.9				BK15	Sheepshead Bay	139.1			
SI02	Willowbrook, South Beach	155.9				BK16	Brownsville	379.1			
SI03	Tottenville	159.5				BK17	East Flatbush	206.6			
						BK18	Canarsie	168.9			

PREMATURE DEATH

Figure 15. Leading Causes of Premature Death (Age < 65 years), New York City, 2008–2017
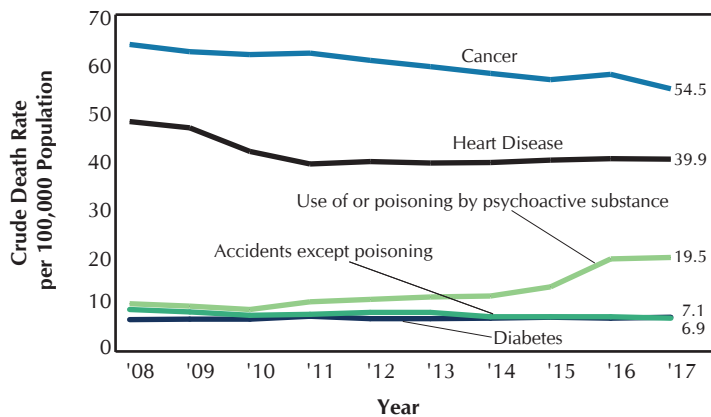
*See the 2010 Summary of Vital Statistics: Mortality – Special Section: *Cause of Death Quality Improvement Initiative.*

- In 2017, cancer and heart disease-related premature death rates were higher than rates for any other causes (54.5 and 39.9 per 100,000 population, respectively). Over the past ten years, rates have declined for both (by 14.4% and 16.4%, respectively). The sharper decline in heart disease death rates from 2009 to 2011 was partly due to improved cause of death reporting*.

- Use of or poisoning by psychoactive substance, diabetes, and accidents unrelated to poisoning accounted for the third, fourth and fifth leading causes of premature death in 2017.

- The rate of premature drug-related deaths increased over the past year by 1.6%, and 97.0% over the past ten years. These trends are consistent with national reports.

- Other accident-related deaths declined over the past ten years and declined slightly since 2016 (6.9 per 100,000 population). Rates for diabetes increased slightly since 2008 (7.6%) and declined slightly over the past year by 2.9%.

- Breast (female) and lung cancers account for the highest cancer-related death rates in New York City, at 10.7 and 8.7 deaths per 100,000 population, respectively. Breast (female) cancer and lung cancer death rates declined by 18.3% and 30.4%, respectively, since 2008.

- Lymph and blood, colon, and liver cancers account for the third, fourth and fifth highest rates of cancer-related death, at 5.9, 5.6, and 3.6 deaths per 100,000 population, respectively. Death rates for these cancers have declined modestly since 2008.

Figure 16. Leading Causes of Premature Cancer Deaths (Age < 65 years), New York City, 2008–2017

Figure 17. Leading Causes of Premature Heart Disease Deaths (Age < 65 years), New York City, 2008–2017
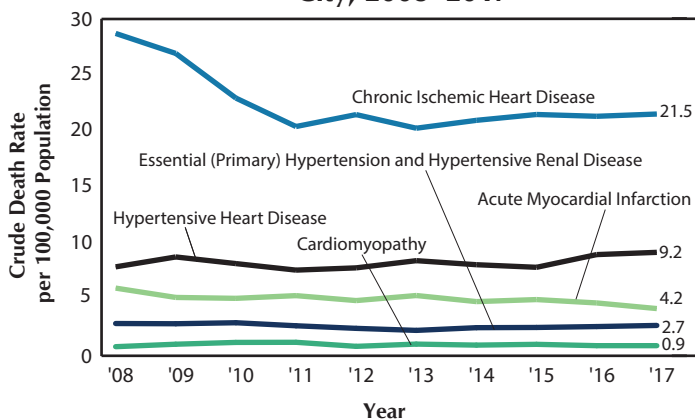
†See the 2010 Summary of Vital Statistics: Mortality – Special Section: *Cause of Death Quality Improvement Initiative.*

- The crude rate of the leading cause of premature heart disease deaths, chronic ischemic heart disease, decreased 25.1% since 2008. The sharper decline from 2009 to 2011 was partly due to efforts to improve the accuracy of cause of death reporting†.

- Since 2008, hypertensive heart disease increased by 16.5%, acute myocardial infarction decreased by 30.0%, cardiomyopathy decreased by 12.5%, and essential hypertension and hypertensive renal disease decreased by 6.9%.

21

EXTERNAL CAUSES OF DEATH

- Deaths due to accidents continued to account for the largest share of deaths due to external causes. After a 10.7% decline between 2008 and 2010, the accident-related death rate has been rising, and in 2017, it exceeded rates from ten years ago (28.4 per 100,000 population in 2017 vs. 19.6 per 100,000 population in 2008).

- The rate of deaths due to homicide declined over the past ten years by 47.8%.

- The suicide rate has risen over the past ten years from 5.8 per 100,000 population in 2008 to 6.6 per 100,000 population in 2017. The rate has increased slightly since 2016.

- The death rate due to all other external causes combined was higher in 2017 (3.3 per 100,000 population) than ten years ago (1.9 per 100,000 population)†. The rate has been between 3.2 and 3.5 per 100,000 population since 2011.

Figure 18. Crude Death Rates for External Causes of Death*, New York City, 2008–2017
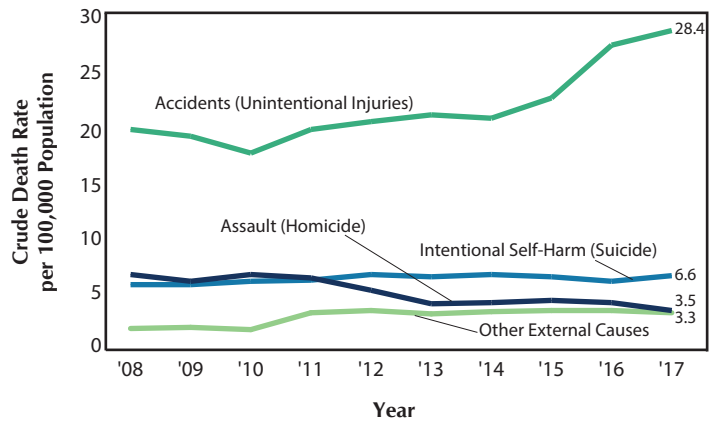
*Appendix B. Technical Notes: Deaths, Cause of Death International Classification of Disease (ICD) Coding.
†Other external causes include medical and/or surgical care complications and deaths due to undetermined intent.

Figure 19. Crude Death Rates for Selected Accidental Causes of Death, New York City, 2008–2017
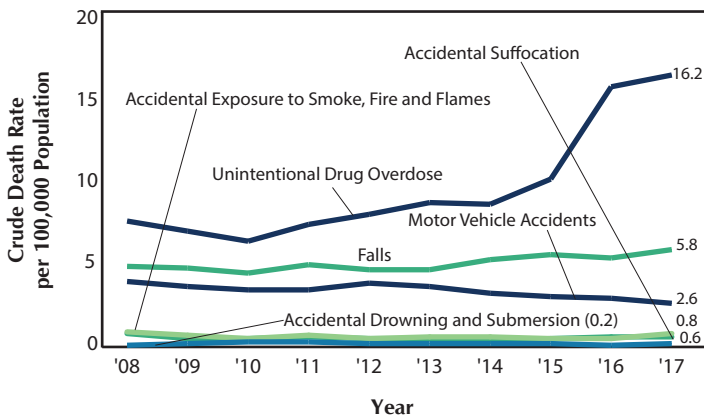
*Appendix B. Technical Notes: Drug-Related Deaths.

- The unintentional drug overdose rate increased by 4.5% from 2016 (15.5 per 100,000 population in 2016 vs. 16.2 in 2017)*.

- Unintentional drug overdose exceeds all other causes, with a crude rate in 2017 that was 6.2 times that of motor vehicle accidents, and 2.8 times that of fall-related deaths.

- The death rate due to motor vehicle accidents declined over the past ten years, from 3.9 deaths per 100,000 population in 2008 to 2.6 per 100,000 population in 2017, a decrease of 33.3%. The falls-related crude death rate has increased by 20.8% since 2008 (5.8 per 100,000 population in 2017 vs. 4.8 per 100,000 population in 2008).

- Death rates due to accidental suffocation and accidental exposure to smoke, fire, and flames declined over the past ten years by 25.0% and 11.1%, respectively. The death rate due to accidental drowning and submersion increased by 100.0%.

- Death rates due to suicide were highest among the age group 45 to 64 at 9.7 deaths per 100,000 population in 2017.

- The rate of suicide deaths among adults aged 25-44 was 7.9 per 100,000 population in 2017, 12.9% higher than the rate in 2008. Compared to 2008, rates increased by 12.8% among the age group 45-64, and decreased by 20.0% among the age group 65-84.

Figure 20. Age-specific Suicide Death Rates, New York City, 2008–2017
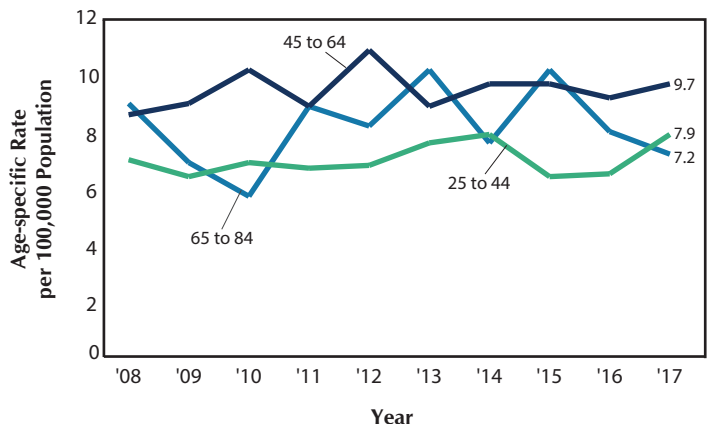
EXTERNAL CAUSES OF DEATH

Figure 21. Age-adjusted Homicide Death Rates (Five-year averages) by Community District of Residence, New York City, 2013-2017

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

Source: Bureau of Vital Statistics, based on events occurring in 2013-2017.
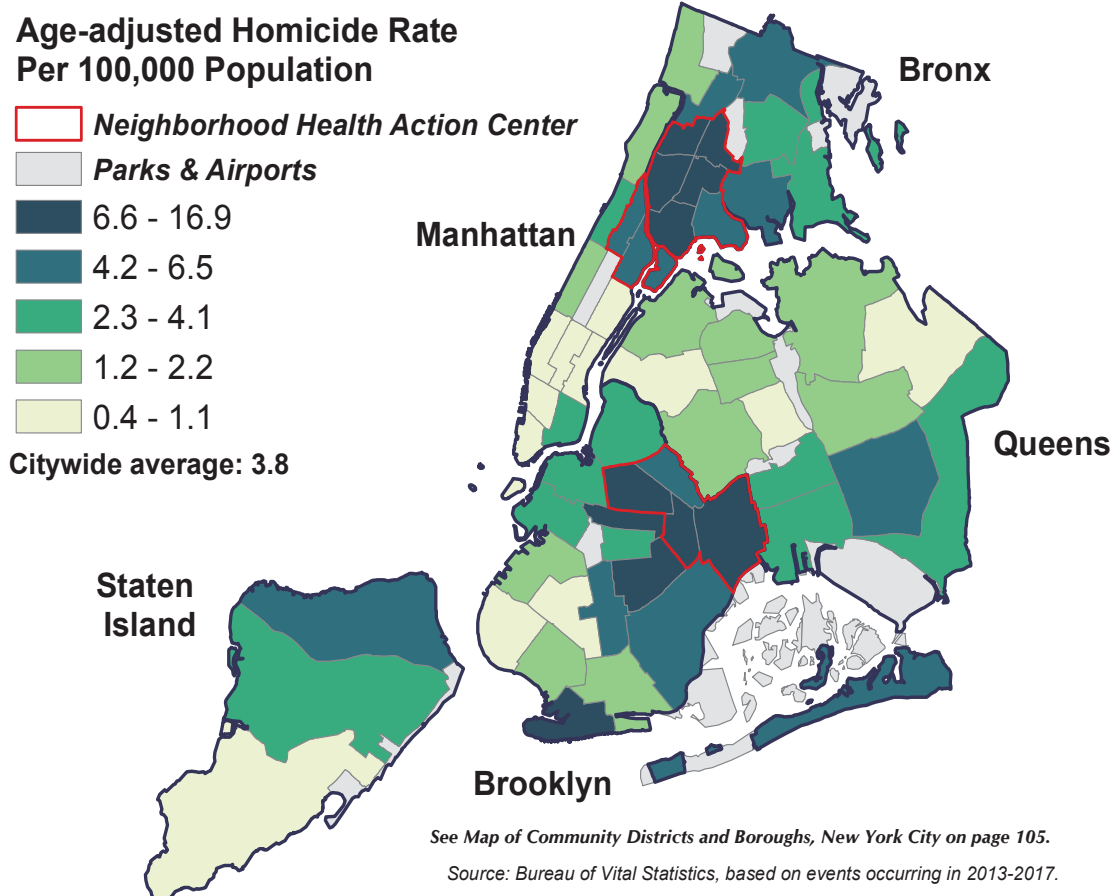
- The five-year average age-adjusted homicide rate was highest in Brownsville with 16.9 deaths per 100,000 population, followed by East Flatbush at 10.4, Morrisania at 9.6, Mott Haven at 9.4, and East New York at 9.3.

- In ten community districts, five-year average rates were less than 1.0 per 100,000 population: Battery Park/Tribeca, Greenwich Village/SOHO, Chelsea/Clinton, Midtown Business District, Murray Hill, Upper East Side, Sunnyside/Woodside, Rego Park/Forest Hills, Bayside, 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, 2013-2017

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	9.4	BK01	Williamsburg, Greenpoint	2.9	QN01	Astoria, Long Island City	1.5
MN02	Greenwich Village, SOHO	0.6	BX02	Hunts Point	5.6	BK02	Fort Greene, Brooklyn Heights	3.6	QN02	Sunnyside, Woodside	0.8
MN03	Lower East Side	2.4	BX03	Morrisania	9.6	BK03	Bedford Stuyvesant	8.9	QN03	Jackson Heights	1.4
MN04	Chelsea, Clinton	0.9	BX04	Concourse, Highbridge	7.8	BK04	Bushwick	5.2	QN04	Elmhurst, Corona	2.1
MN05	Midtown Business District	0.9	BX05	University, Morris Heights	8.9	BK05	East New York	9.3	QN05	Ridgewood, Glendale	1.3
MN06	Murray Hill	0.8	BX06	East Tremont	7.4	BK06	Park Slope	2.7	QN06	Rego Park, Forest Hills	0.6
MN07	Upper West Side	1.2	BX07	Fordham	4.4	BK07	Sunset Park	1.5	QN07	Flushing	1.5
MN08	Upper East Side	0.4	BX08	Riverdale	2.2	BK08	Crown Heights North	8.9	QN08	Fresh Meadows, Briarwood	1.7
MN09	Manhattanville	3.6	BX09	Unionport, Soundview	5.5	BK09	Crown Heights South	4.1	QN09	Woodhaven	2.9
MN10	Central Harlem	6.2	BX10	Throgs Neck	3.2	BK10	Bay Ridge	1.1	QN10	Howard Beach	3.6
MN11	East Harlem	6.5	BX11	Pelham Parkway	3.5	BK11	Bensonhurst	1.2	QN11	Bayside	0.4
MN12	Washington Heights	2.2	BX12	Williamsbridge	5.5	BK12	Borough Park	1.0	QN12	Jamaica, St. Albans	6.3
						BK13	Coney Island	7.0	QN13	Queens Village	4.0
CD	**STATEN ISLAND**					BK14	Flatbush, Midwood	4.2	QN14	The Rockaways	5.5
SI01	Port Richmond	5.1				BK15	Sheepshead Bay	1.9			
SI02	Willowbrook, South Beach	2.3				BK16	Brownsville	16.9			
SI03	Tottenville	0.9				BK17	East Flatbush	10.4			
						BK18	Canarsie	6.0			

SPECIAL SECTION
DRUG-RELATED MORTALITY

Overview

Age-Adjusted Rate per 100,000 Population vs Year

11.2 ... 8.6 ... 16.4 ... 16.6
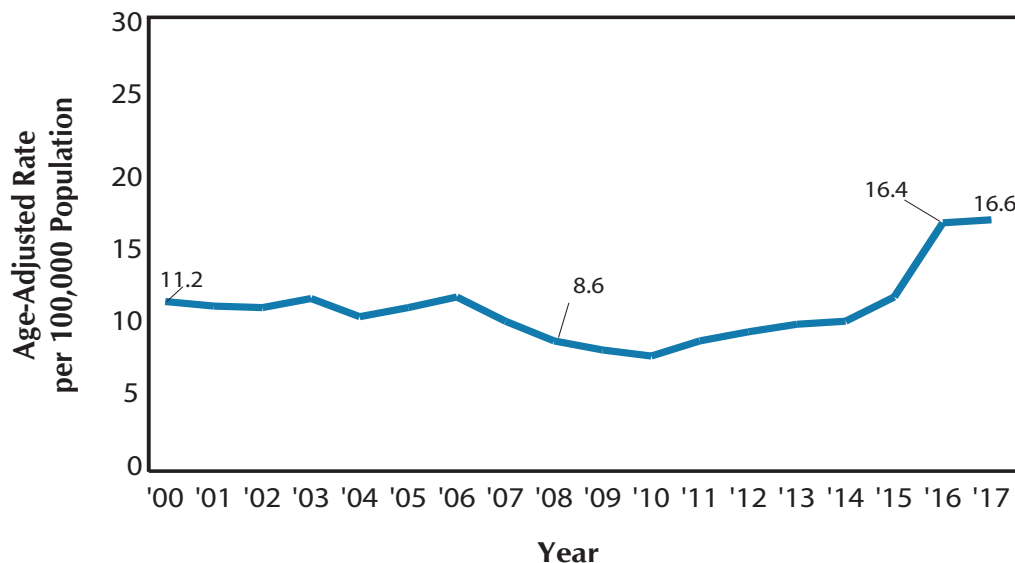
- The special section focuses on drug-related (use of or poisoning by psychoactive substance) deaths which include deaths due to chronic substance use and drug overdose. All manners of death are included in drug-related deaths. The National Center for Health Statistics utilizes this definition for categorizing 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 2017.
- The age-adjusted mortality rate of drug-related deaths has risen by 1.2% since 2016 and 93.0% since 2008.
- Unintentional drug overdose deaths account for 91% of drug-related deaths. The crude mortality rate for unintentional drug overdose has risen by 4.5% since 2016.
- 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 (BADUPCT) 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 2017." Additional BADUPCT 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, 2008-2017**
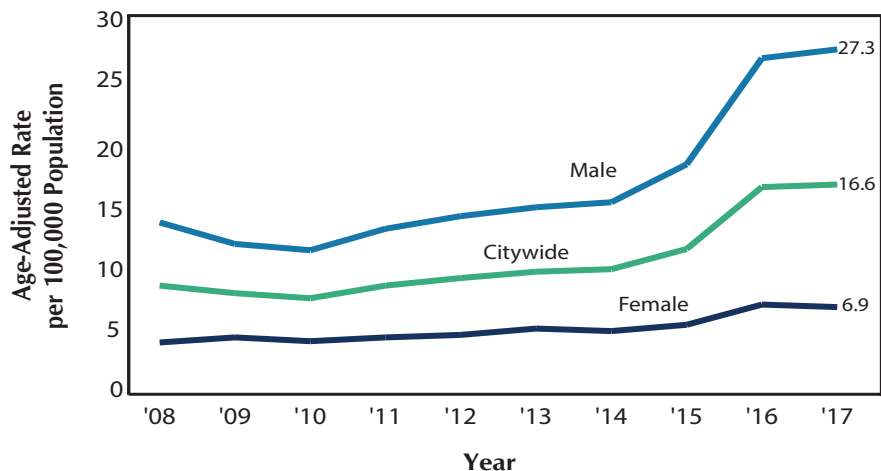
- The age-adjusted drug-related death rate increased to 16.6 per 100,000 population in 2017, a 1.2% increase since 2016 and a 93.0% increase since 2008.

- The age-adjusted drug-related death rate for males increased to 27.3 per 100,000 population in 2017, a 2.6% increase since 2016 and a 100.7% increase since 2008. The age-adjusted drug-related death rate for females decreased to 6.9 per 100,000 population in 2017, a 2.8% decrease since 2016 and a 68.3% increase since 2008.

**Figure S2. Age-adjusted Drug-related Deaths by Racial/Ethnic Group
New York City, 2008-2017**
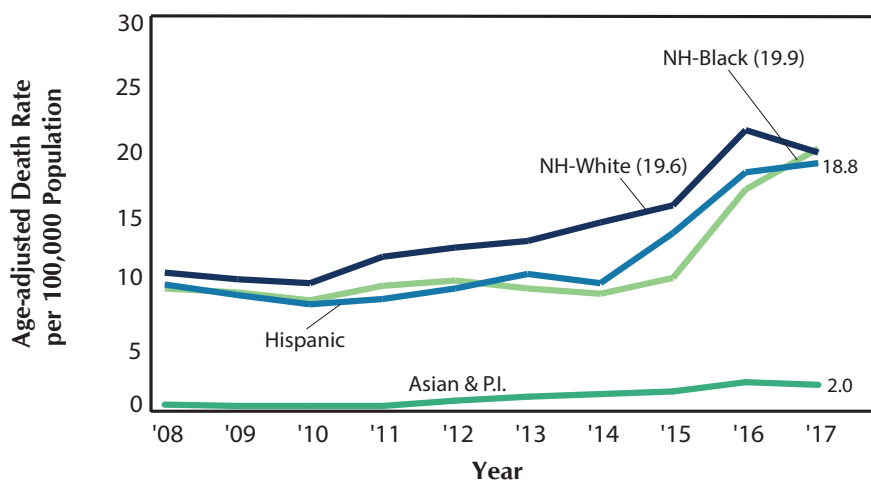
- Between 2008 and 2017, age-adjusted drug-related death rates increased by 114.0% among non-Hispanic blacks, by 95.8% among Hispanics, by 86.7% among non-Hispanic whites, and by 300.0% among Asians and Pacific Islanders.

- In 2017, the drug-related death rate among non-Hispanic blacks was 1.5% higher than the rate for non-Hispanic whites, a change from previous years in which the death rate for non-Hispanic whites was higher than that for non-Hispanic blacks.

25

SPECIAL SECTION
DRUG-RELATED MORTALITY

Figure S3. Age-adjusted Drug-related Death Rates by Neighborhood Poverty*, New York City, 2008 and 2017
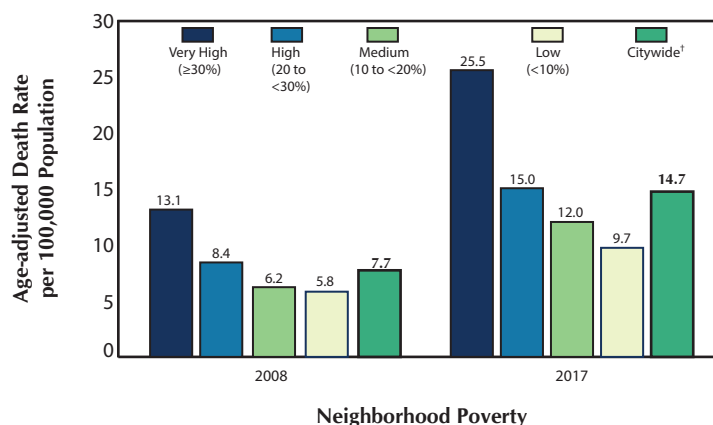
- Since 2008, age-adjusted drug-related death rates increased across all categories of neighborhood poverty. Over that period, the rate increased by 94.7% in very high poverty areas and by 67.2% in low poverty areas.

- The age-adjusted drug-related death rate in areas with very high poverty was 2.6 times the rate in areas with low poverty in 2017. In 2008, the rate in areas with very high poverty was 2.3 times the rate of areas with low poverty.

*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 the American Community Survey (ACS) 2005-2009 for 2008 data and per ACS 2013-2017 for 2017 data.
†The citywide estimate is restricted to NYC residents.

Figure S4. Age-adjusted Drug-related Death Rates by Borough of Residence, New York City, 2008-2017

- Since 2008, age-adjusted drug-related death rates have increased across all boroughs.

- Over that period, age-adjusted drug-related death rates increased by 75.7% in Manhattan, by 89.5% in the Bronx, by 94.0% in Brooklyn, by 101.9% in Queens, and by 92.2% in Staten Island.

- From 2008 to 2017, the Bronx and Staten Island have consistently had higher age-adjusted drug-related death rates, compared to the other three boroughs.
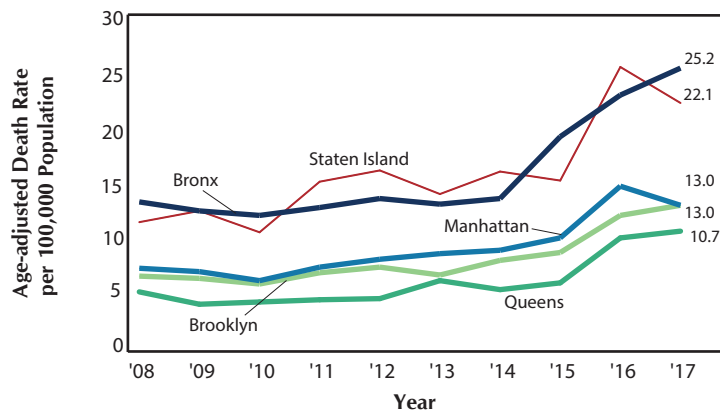
SPECIAL SECTION
DRUG-RELATED MORTALITY

Figure S5. Age Specific Drug-related Death Rates, Ages 18-64, New York City, 2008-2017
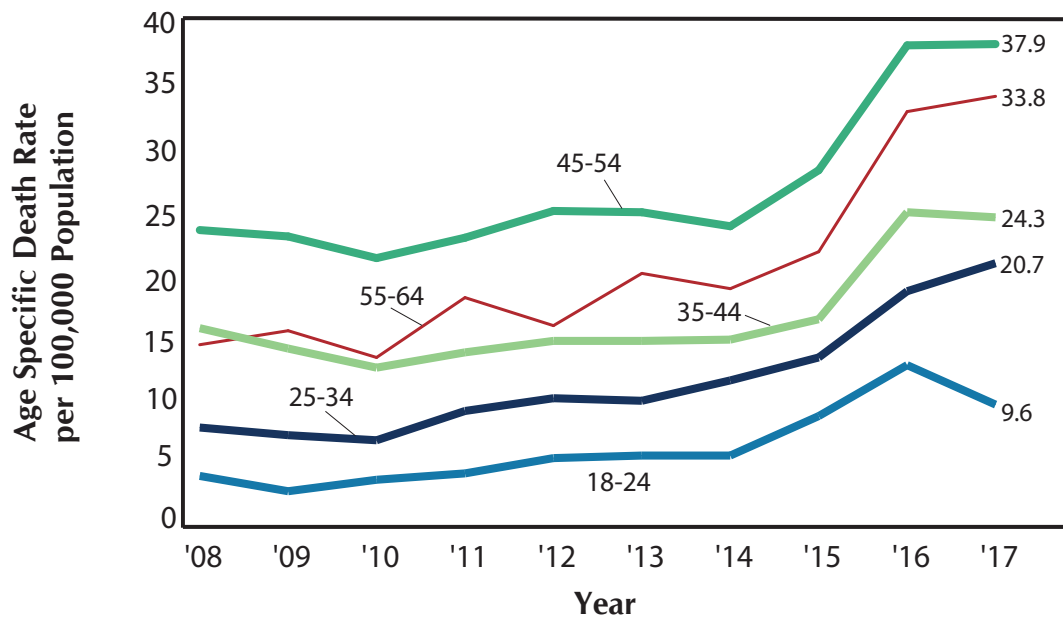
- Between 2008 and 2017, age-adjusted drug-related death rates increased for all age groups: by 140.0% for 18-24 year olds, by 165.4% for 25-34 year olds, by 55.8% for 35-44 year olds, by 62.7% for 45-54 year olds, and by 136.4% for 55-64 year olds.

- Since 2008, 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 25-34 year olds in 2017.

- 94.0% of drug-related deaths were premature (<65 year olds) in 2017.

SPECIAL SECTION
DRUG-RELATED MORTALITY

Figure S6. Age-adjusted Drug-related Death Rates (Three-year-averages) by Community District of Residence, New York City, 2015-2017

Age-adjusted Drug-related Death Rate Per 100,000 Population

- Neighborhood Health Action Center
- Parks & Airports
- 20.9 - 40.4
- 15.3 - 20.8
- 11.2 - 15.2
- 7.9 - 11.1
- 4.9 - 7.8

Citywide average: 13.0
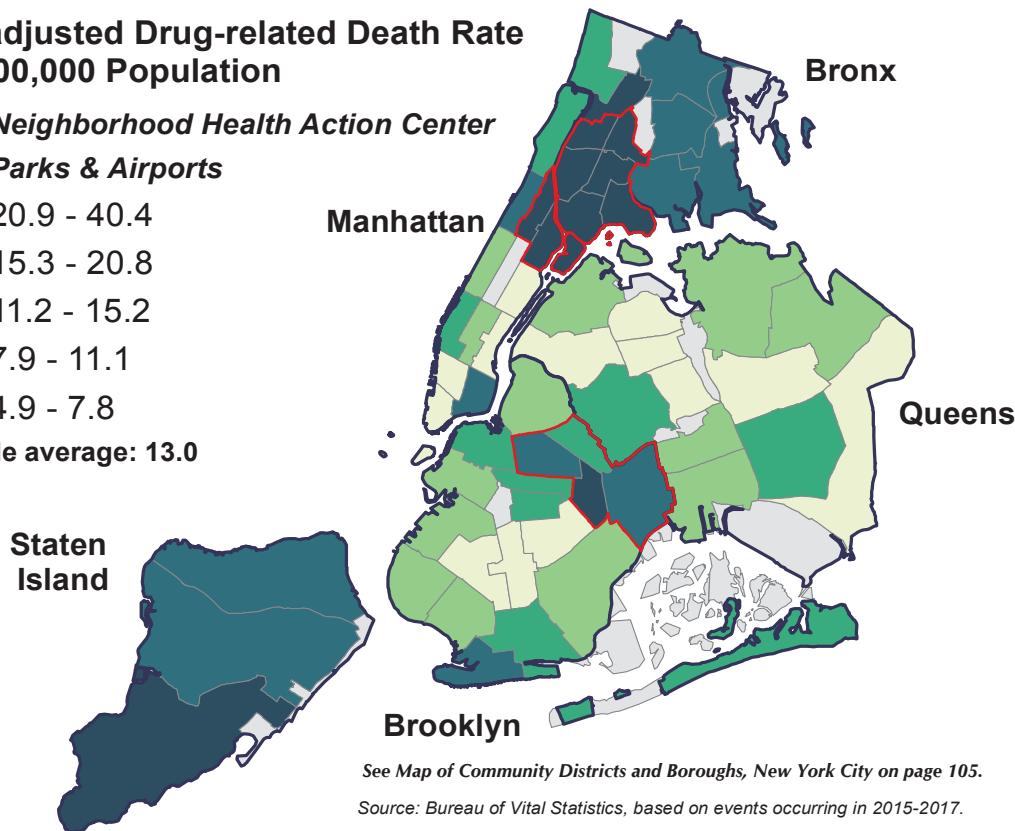
See Map of Community Districts and Boroughs, New York City on page 105.

*Source: Bureau of Vital Statistics, based on events occurring in 2015-2017.*

- The three-year average age-adjusted drug-related rate was highest in Mott Haven with 40.4 deaths per 100,000 population, followed by East Tremont at 30.6, Morrisania at 29.7, University/Morris Heights at 28.3, and Hunts Point at 28.0.
- Age-adjusted drug-related death rates were lowest in the Upper East Side at 4.9 deaths per 100,000 population, followed by 5.3 in East Flatbush, 5.3 in Elmhurst/Corona, 5.4 in Queens Village, and 5.4 in Sunnyside/Woodside.

Age-adjusted Drug-Related Death Rates (Three-year-averages) by Community District (CD) of Residence, New York City, 2015-2017

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	7.2	BX01	Mott Haven	40.4	BK01	Williamsburg, Greenpoint	10.8	QN01	Astoria, Long Island City	10.3
MN02	Greenwich Village, SOHO	5.7	BX02	Hunts Point	28.0	BK02	Fort Greene, Brooklyn Heights	11.3	QN02	Sunnyside, Woodside	5.4
MN03	Lower East Side	17.0	BX03	Morrisania	29.7	BK03	Bedford Stuyvesant	16.1	QN03	Jackson Heights	6.1
MN04	Chelsea, Clinton	13.8	BX04	Concourse, Highbridge	23.3	BK04	Bushwick	15.2	QN04	Elmhurst, Corona	5.3
MN05	Midtown Business District	11.1	BX05	University, Morris Heights	28.3	BK05	East New York	17.6	QN05	Ridgewood, Glendale	14.7
MN06	Murray Hill	7.8	BX06	East Tremont	30.6	BK06	Park Slope	11.1	QN06	Rego Park, Forest Hills	7.8
MN07	Upper West Side	8.3	BX07	Fordham	22.6	BK07	Sunset Park	9.3	QN07	Flushing	9.2
MN08	Upper East Side	4.9	BX08	Riverdale	12.3	BK08	Crown Heights North	13.9	QN08	Fresh Meadows, Briarwood	7.8
MN09	Manhattanville	18.9	BX09	Unionport, Soundview	18.9	BK09	Crown Heights South	11.7	QN09	Woodhaven	10.5
MN10	Central Harlem	24.5	BX10	Throgs Neck	19.5	BK10	Bay Ridge	10.9	QN10	Howard Beach	8.8
MN11	East Harlem	25.0	BX11	Pelham Parkway	17.2	BK11	Bensonhurst	10.5	QN11	Bayside	8.6
MN12	Washington Heights	13.9	BX12	Williamsbridge	15.7	BK12	Borough Park	6.3	QN12	Jamaica, St. Albans	11.9
						BK13	Coney Island	19.5	QN13	Queens Village	5.4
CD	**STATEN ISLAND**					BK14	Flatbush, Midwood	6.7	QN14	The Rockaways	15.2
SI01	Port Richmond	20.6				BK15	Sheepshead Bay	11.9			
SI02	Willowbrook, South Beach	20.8				BK16	Brownsville	24.8			
SI03	Tottenville	21.9				BK17	East Flatbush	5.3			
						BK18	Canarsie	8.6			

INFANT MORTALITY

First Use of Incubators for Premature Infants, Coney Island, 1903-1941

Widespread Availability of Fluid/Electrolyte Replacement Therapy, 1950's

Technical Advances in Neonatal Medicine, 1970's

Introduction of Penicillin, 1940's

Introduction of Rh Factor Leading to Compatible Blood Transfusions, 1940's

DOH Starts Post-partum Visits, 1908

Introduction of Sulfonamides, 1937

FDA Approval of Artificial Lung Surfactant, 1990

Folic Acid Supplementation During Prenatal Care, 1998

New Historic Low of 4.1 Infant Deaths per 1,000 Live Births, 2016

4.3 (2017)

Pasteurization of Milk, 1912

Introduction of Medicaid, 1965

"Back to Sleep" Campaign Implemented, 1994

Figure 1. Infant Mortality Rate, New York City and United States, 2008–2017
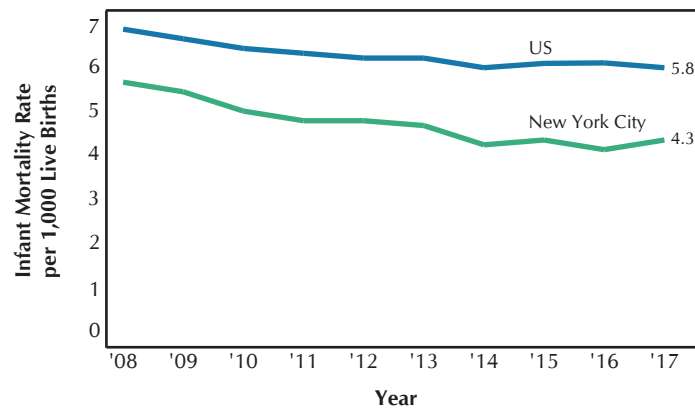
Data source: National Center for Health Statistics, National Vital Statistics System.

- In 2017, New York City had an infant mortality rate of 4.3 infant deaths per 1,000 live births. This represents a slight increase since 2016 (4.1 per 1,000 live births). The rate has declined by 21.8% since 2008.
- In the last 10 years, New York City's infant mortality rate has improved 9.7 percentage points more than the U.S. rate has.

INFANT MORTALITY

- Infant mortality rates declined from 2016 to 2017 among non-Hispanic whites and non-Hispanic blacks. The rate among Puerto Ricans, other Hispanics, and Asians & Pacific Islanders increased.

- Although rates fluctuate due to small numbers, they are consistently higher among some groups: the rate for non-Hispanic blacks was 3.3 times the rate for non-Hispanic whites in 2017; the rate for Puerto Ricans was 2.6 times the rate for non-Hispanic whites in 2017.

Figure 2. Infant Mortality Rate by Mother's Racial/Ethnic Group, New York City, 2008–2017
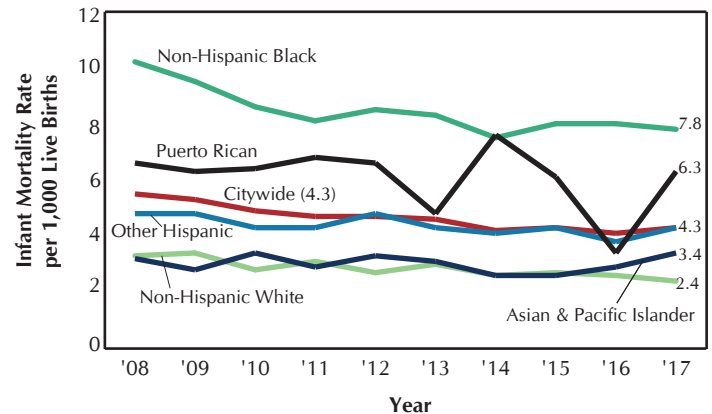
Figure 3. Infant Mortality Rate by Neighborhood Poverty*, New York City Residents, 2008 and 2017
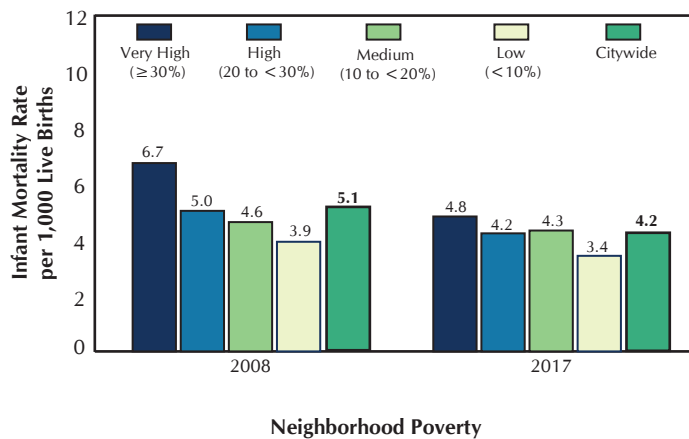
Neighborhood Poverty

*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 the American Community Survey (ACS) 2005-2009 for 2008 data and per ACS 2013-2017 for 2017 data.
†The citywide estimate is restricted to NYC residents.

- From 2008 to 2017, the infant mortality rate declined in all poverty groups: by 12.8% in low poverty areas, by 6.5% in medium poverty areas, by 16.0% in high poverty areas, and by 28.4% in very high poverty areas.

- In spite of these gains, the infant mortality rate in very high poverty areas was 1.4 times the infant mortality rate in low poverty areas in 2017.

- Infant mortality rates have decreased among infants born to mothers in all age groups since 2008.

- The infant mortality rate in New York City was highest among infants born to the youngest mothers (<20 years of age). In 2017, the rate among this group was 5.4 infant deaths per 1,000 live births. In 2017, the infant mortality rate for mothers in the ≥40 age group was 4.2 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, 2008–2017
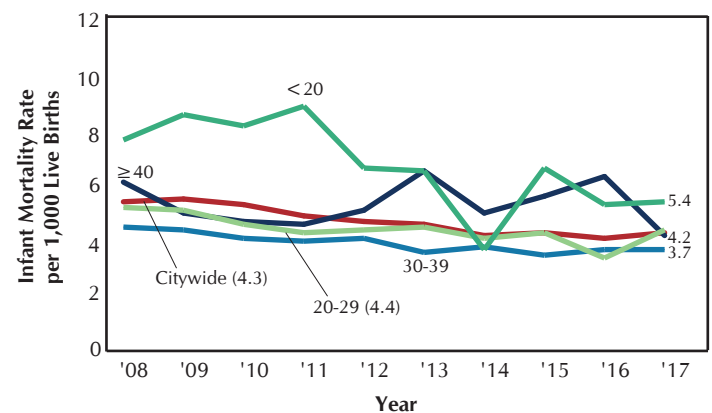
*The fluctuation in the infant mortality rate among infants born to mothers <20 and ≥40 is likely due to small numbers.

INFANT MORTALITY

Figure 5. Infant Mortality Rates by Mother's Birthplace, US-born and Countries of Top 5 IMR, 3-year Moving Average, New York City, 2015-2017

Infant Mortality Rate per 1,000 Live Births

Legend: US-born (excl. Puerto Rico), Haiti, Jamaica, Pakistan, Ghana, Puerto Rico, Total, NYC

US-born (excl. Puerto Rico): 4.4; Haiti: 7.6; Jamaica: 6.5; Pakistan: 6.4; Ghana: 6.3; Puerto Rico: 6.0; Total, NYC: 4.2
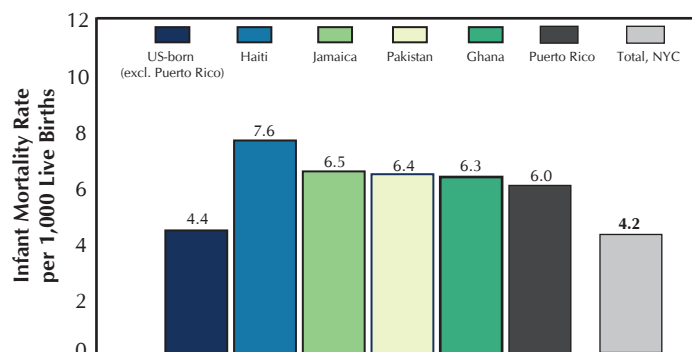
- From 2015 to 2017, the infant mortality rate among US-born mothers, not including Puerto Rico, was 4.4 infant deaths per 1,000 live births. The total city-wide infant mortality rate for the same time period was 4.2 per 1,000 live births.

- The infant mortality rate was highest among mothers born in Haiti at 7.6 infant deaths per 1,000 live births.

- Mothers born in Jamaica had the second highest infant mortality rate at 6.5 per 1,000 births, followed by Pakistan-born mothers (6.4), Ghana-born mothers (6.3), and Puerto Rico-born mothers at 6.0 infant deaths per 1,000 live births.

Table 1. Top Leading Causes by Neonatal and Post-Neonatal Deaths, 2017

	Cause of Death (ICD-10 Codes)	Total	Male Neonatal (<28 Days)	Male Post-Neonatal	Female Neonatal (<28 Days)	Female Post-Neonatal
	Total	**500**	**195**	**76**	**149**	**80**
1	HIV Infection (B20-B24)*	-	-	-	-	-
2	Diseases of the Circulatory System (I00-I99)*	14	3	3	-	8
3	Influenza and Pneumonia (J10-J18)*	3	-	1	-	2
4	Newborn Affected by Maternal Complications of Pregnancy (P01)*	9	4	-	5	-
5	Newborn Affected by Complications of Placenta, Cord, and Membranes (P02)*	10	5	1	4	-
6	Short Gestation and Low Birthweight (P07)*	86	38	7	36	5
7	Intrauterine Hypoxia and Birth Asphyxia (P20-P21)*	1	1	-	-	-
8	Respiratory Distress of Newborn (P22)*	16	9	-	6	1
9	Pulmonary Hemorrhage Originating in the Perinatal Period (P26)*	5	4	-	1	-
10	Atelectasis (P28.0-P28.1)*	1	-	-	1	-
11	Other Respiratory Conditions Originating in the Perinatal Period (P23-P28)†	6	2	1	3	-
12	Cardiovascular Disorders Originating in the Perinatal Period (P29)†	68	46	-	22	-
13	Infections Specific to the Perinatal Period (P35-P39)†	19	10	2	6	1
	Bacterial sepsis of newborn (P36)	16	10	-	6	-
14	Neonatal Hemorrhage (P50-P52, P54)*	6	5	-	1	-
15	Necrotizing Enterocolitis of Newborn (P77)*	22	15	-	6	1
16	Remainder of Conditions Originating in the Perinatal Period (Rest of P00-P99)	30	10	3	16	1
17	Congenital Malformations, Deformations (Q00-Q99)*	96	35	10	31	20
	Congenital malformations of heart (Q20-Q24)	23	2	5	7	9
18	Sudden Infant Death Syndrome (R95)*	1	-	1	-	-
19	All Other Diseases (Rest of A00-R99)	63	8	31	6	18
20	External Causes (V01-Y89)†	44	-	16	5	23

*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

Figure 6. Infant Mortality Rates by Mother's Racial/Ethnic Group*, Very Low Birthweight, 2008 and 2017

- From 2008 to 2017, infant mortality rates among very low birthweight infants (born under 1500 grams, VLBW) declined among all ethnic groups except Asians and Pacific Islanders which increased (152.0 deaths to 174.3 deaths per 1,000 live births).

- Among VLBW infants in 2017, the infant mortality rate was highest for Asians and Pacific Islanders at 174.3 deaths per 1,000 live births, followed by non-Hispanic blacks (173.8), and Hispanics (168.6).

- The infant mortality rates for Asian/Pacific Islander VLBW infants and non-Hispanic black VLBW infants were both 1.3 times the VLBW infant mortality rate for non-Hispanic white infants.
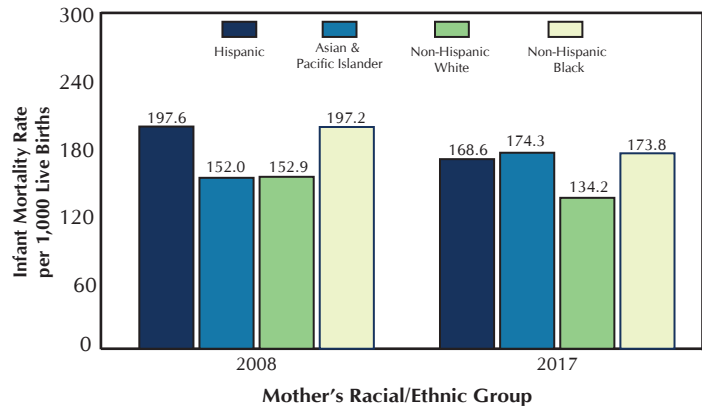
*Other/not stated maternal racial/ethnic groups not included in the figure

Figure 7. Infant Mortality Rates by Mother's Racial/Ethnic Group*, Low Birthweight, 2008 and 2017
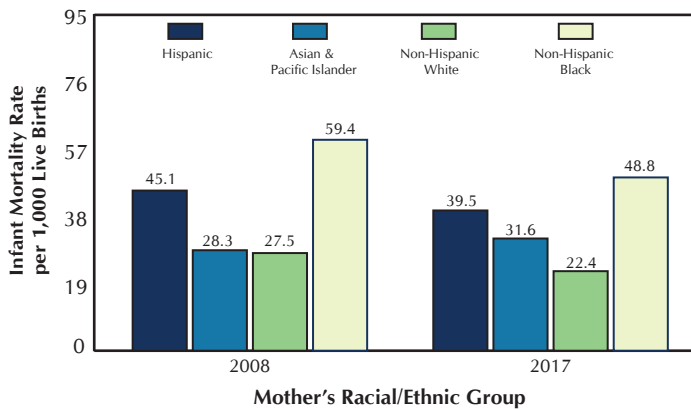
*Other/not stated maternal racial/ethnic groups not included in the figure

- From 2008 to 2017, infant mortality rates among low birthweight infants (born under 2500 grams) declined among all ethnic groups except Asians and Pacific Islanders which increased (28.3 deaths to 31.6 deaths per 1,000 live births).

- Among low birthweight infants in 2017, the infant mortality rate was highest for non-Hispanic blacks at 48.8 deaths per 1,000 live births, 2.2 times that of non-Hispanic whites (22.4).

32

INFANT MORTALITY

Figure 8. Infant Mortality Rates by Mother's Racial/Ethnic Group*, Normal Birthweight, 2008 and 2017

- From 2008 to 2017, infant mortality rates among normal birthweight infants (2500+ grams) declined among all ethnic groups.

- In 2017, Asian and Pacific Islander and non-Hispanic white normal birthweight infants both had an infant mortality rate of 0.8 infant deaths per 1,000 live births.

- However, the infant mortality rate among non-Hispanic black normal birthweight infants was 1.5 infant deaths per 1,000 live births, or 1.9 times that of Asian and Pacific Islanders and non-Hispanic whites, and 1.3 times that of Hispanics.
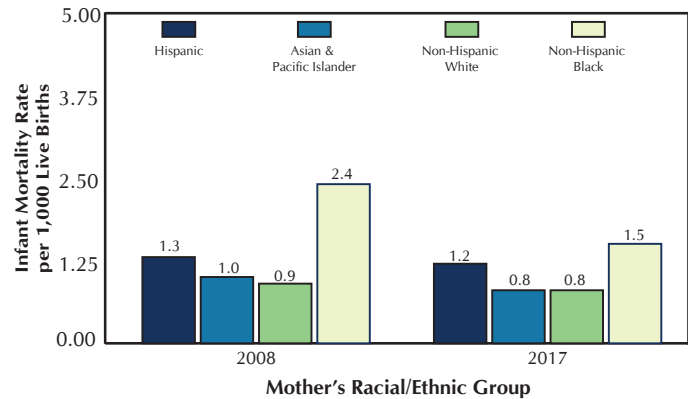
*Other/not stated maternal racial/ethnic groups not included in the figure

Figure 9. Infant Mortality Rates by Mother's Pre-Pregnancy Body Mass Index (BMI)*, 2008-2017

*See Technical Notes for BMI definition.
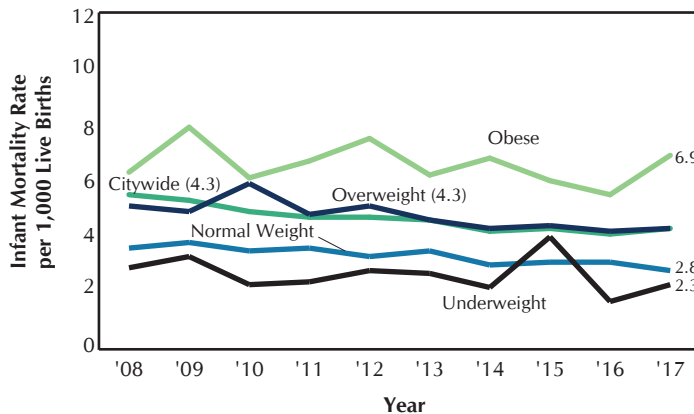
- Infant mortality rates increased from 2016 to 2017 among underweight, overweight, and obese mothers while normal weight mothers saw a decline.

- Rates fluctuated over time but are consistently higher among overweight and obese mothers. The rate for overweight mothers was 1.5 times the rate for normal weight mothers in 2017; the rate for obese mothers was 2.5 times the rate for normal weight mothers in 2017.

INFANT MORTALITY

Figure 10. Average Infant Mortality Rate by Community District of Residence*, New York City, 2015–2017†

Infant Mortality Rate

- ☐ (red outline) *Neighborhood Health Action Center*
- ☐ (gray) *Parks & Airports*
- ■ 5.6 - 6.7
- ■ 4.7 - 5.5
- ■ 3.5 - 4.6
- ■ 2.5 - 3.4
- ■ 0.6 - 2.4

Citywide 3-year average: 4.2

Source: Bureau of Vital Statistics, based on events occurring in 2015-2017.
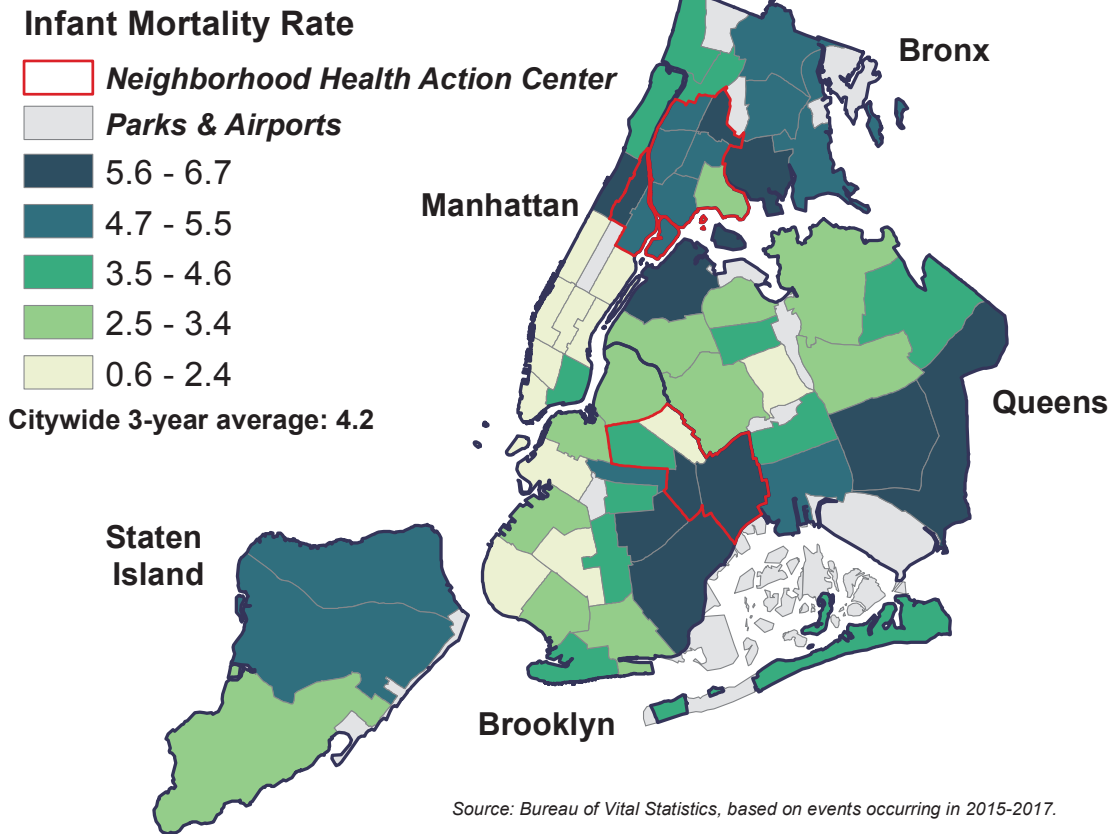
See Map of Community Districts and Boroughs, New York City on page 105.

*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, Astoria/Long Island City, and Queens Village at 6.7 deaths per 1,000 live births, followed by 6.5 in Central Harlem, 6.4 in Unionport/Soundview and Canarsie, 6.3 in East Tremont, and 6.0 in Brownsville.

- The lowest three-year average infant mortality rate was in the Midtown Business District with 0.6 deaths per 1,000 live births, followed by 0.9 in Greenwich Village/SOHO and Bay Ridge, 1.3 in Chelsea/Clinton, 1.4 in the Upper West Side, and 1.9 in Borough Park.

Average Infant Mortality Rate per 1,000 Population by Community District (CD) of Residence, New York City, 2015-2017

CD	MANHATTAN	Infant Mortality Rate	CD	BRONX	Infant Mortality Rate	CD	BROOKLYN	Infant Mortality Rate	CD	QUEENS	Infant Mortality Rate
MN01	Battery Park, Tribeca	2.4	BX01	Mott Haven	4.8	BK01	Williamsburg, Greenpoint	3.2	QN01	Astoria, Long Island City	6.7
MN02	Greenwich Village, SOHO	0.9	BX02	Hunts Point	2.9	BK02	Fort Greene, Brooklyn Heights	2.8	QN02	Sunnyside, Woodside	3.4
MN03	Lower East Side	3.9	BX03	Morrisania	5.1	BK03	Bedford Stuyvesant	4.6	QN03	Jackson Heights	3.3
MN04	Chelsea, Clinton	1.3	BX04	Concourse, Highbridge	4.7	BK04	Bushwick	2.1	QN04	Elmhurst, Corona	3.7
MN05	Midtown Business District	0.6	BX05	University, Morris Heights	5.5	BK05	East New York	5.7	QN05	Ridgewood, Glendale	2.8
MN06	Murray Hill	2.4	BX06	East Tremont	6.3	BK06	Park Slope	2.4	QN06	Rego Park, Forest Hills	2.4
MN07	Upper West Side	1.4	BX07	Fordham	4.1	BK07	Sunset Park	2.7	QN07	Flushing	3.4
MN08	Upper East Side	2.1	BX08	Riverdale	3.7	BK08	Crown Heights North	4.7	QN08	Fresh Meadows, Briarwood	3.1
MN09	Manhattanville	5.7	BX09	Unionport, Soundview	6.4	BK09	Crown Heights South	4.1	QN09	Woodhaven	4.2
MN10	Central Harlem	6.5	BX10	Throgs Neck	5.0	BK10	Bay Ridge	0.9	QN10	Howard Beach	4.7
MN11	East Harlem	5.1	BX11	Pelham Parkway	5.0	BK11	Bensonhurst	3.0	QN11	Bayside	3.9
MN12	Washington Heights	4.0	BX12	Williamsbridge	5.5	BK12	Borough Park	1.9	QN12	Jamaica, St. Albans	5.9
						BK13	Coney Island	3.7	QN13	Queens Village	6.7
CD	STATEN ISLAND					BK14	Flatbush, Midwood	4.4	QN14	The Rockaways	4.6
SI01	Port Richmond	5.4				BK15	Sheepshead Bay	2.7			
SI02	Willowbrook, South Beach	5.1				BK16	Brownsville	6.0			
SI03	Tottenville	2.6				BK17	East Flatbush	6.7			
						BK18	Canarsie	6.4			

PREGNANCY OUTCOMES

Birth Rate per 1,000 Population

| 1898* | 1913* | 1926 | 1940 | 1954 | 1968 | 1982 | 1996 | 2017 |

Widespread Condom Use by Returning GIs 1920's

13.6 Births per 1,000 Population, 2017

First Birth Control Clinic Established in Brooklyn, NY by Margaret Sanger, 1916

AMA Recommends Contraception Be Part of Core Medical Training,1937

FDA Approval for Oral Contraceptives, 1960

Roe v Wade Abortion Legalized During First Trimester, 1973

FDA Approval of Medical Abortion, 2000

DOH Establishes 12 Prenatal Care Clinics Across NYC, 1924

DOH Opens 5 Maternal Care Clinics Offering Birth Control Services, 1965

Contraception covered as Required Preventive Service for Women Under the Affordable Care Act (signed into law, 2010)

*1898-1913 birth counts are estimated, as numbers reported were determined to be incomplete.

PREGNANCY OUTCOMES OVERVIEW

Figure 1. Crude Birth Rates, New York City and United States, 2008–2017
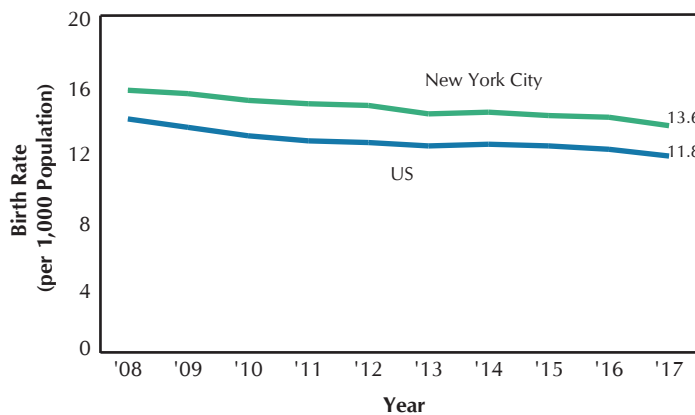
- The 2017 citywide crude birth rate was 13.6 births per 1,000 population. New York City's birth rate has experienced a modest decrease for the past ten years. It declined by 3.5% from 2016 and by 13.4% since 2008.

- New York City's 2017 crude birth rate was higher than the United States rate (13.6 vs. 11.8 nationwide), consistent with previous years.

- The 2017 citywide crude spontaneous termination of pregnancy rate (miscarriages and stillbirths) was 4.4 terminations per 1,000 females aged 15 to 44 years. The rate has decreased by 13.7% since 2016, and has been between 4.4 and 7.8 terminations per 1,000 females aged 15 to 44 years since 2008.

- 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 2017 citywide crude rate of induced terminations of pregnancy was 28.2 terminations per 1,000 females aged 15 to 44 years, continuing its decline, down 9.3% since 2016. This rate has decreased each year since 2008 by 39.9%, from 46.9 to 28.2 terminations per 1,000 females aged 15 to 44 years.

Figure 2. Crude Spontaneous and Induced Termination of Pregnancy Rates, New York City, 2008–2017
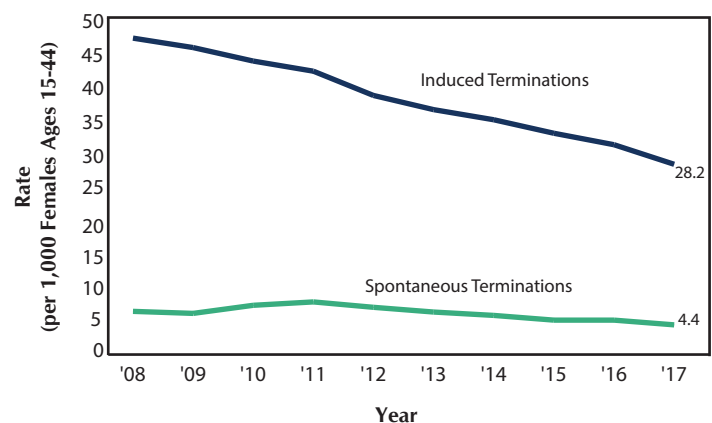
Figure 3. Pregnancy Rates* by Mother/ Woman's Age, New York City, 2008-2017
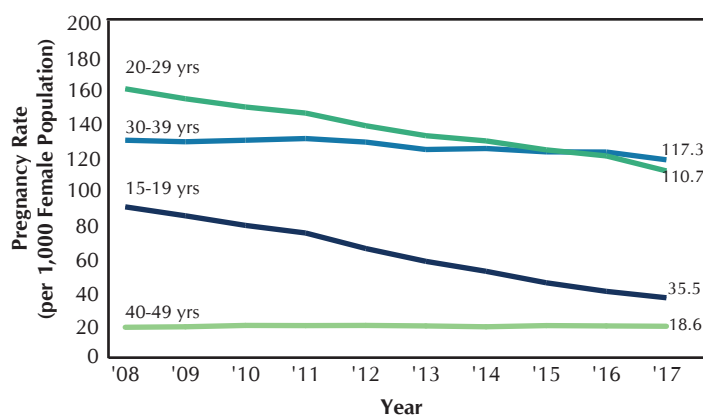
*See Technical Notes for the definition of pregnancy rate.

- In 2017, women aged 30-39 years of age had the highest rate of pregnancy at 117.3 pregnancies per 1,000 females, followed by women 20 to 29 at 110.7, then women 15 to 19 years old and 40 to 49 years old with pregnancy rates of 35.5 and 18.6, respectively.

- Since 2008, pregnancy rates have increased 3.3% among women aged 40-49 years old.

- Since 2008, rates have decreased by 30.6% among women aged 20-29 years old and by 9.0% among women aged 30-39 years old.

- The teen pregnancy rate (15-19 years of age) decreased by 60.3% since 2008 and 9.7% since 2016.

36

PREGNANCY OUTCOMES OVERVIEW

Figure 4. Pregnancy Rates by Mother/Woman's Racial/Ethnic Group, New York City, 2008-2017
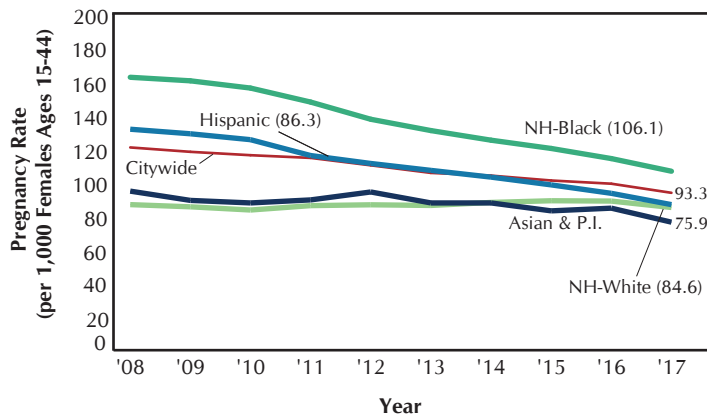
- In 2017, the pregnancy rate was highest among non-Hispanic blacks at 106.1 pregnancies per 1,000 females aged 15-44, followed by 86.3 among Hispanics, 84.6 among non-Hispanic whites, and 75.9 among Asians and Pacific Islanders.

- From 2008 to 2017, the pregnancy rate decreased among all groups. Over the ten year period, non-Hispanic blacks experienced a 34.4% decline; Hispanics, a 34.1% decline; non-Hispanic whites, a 2.0% decline; and Asians and Pacific Islanders, a 19.5% decline.

- In 2017, the pregnancy rate in the Bronx continued to be highest, at 99.3 pregnancies per 1,000 females aged 15-44, followed by Brooklyn at 93.2, Staten Island at 84.3, Queens at 80.4, and Manhattan at 66.4.

- Since 2008, pregnancy rates have declined in all boroughs. Rates have decreased by 27.6% in the Bronx, by 25.7% in Brooklyn, by 20.7% in Manhattan, by 18.5% in Queens, and by 12.9% in Staten Island.

- Since 2008, the city-wide pregnancy rate has declined by 22.4%, from 120.2 pregnancies per 1,000 females aged 15-44 to 93.3.

Figure 5. Pregnancy Rates by Mother/Woman's Borough of Residence, New York City, 2008-2017

Figure 6. Birth Rates by Mother's Racial/Ethnic Group, New York City, 2008-2017
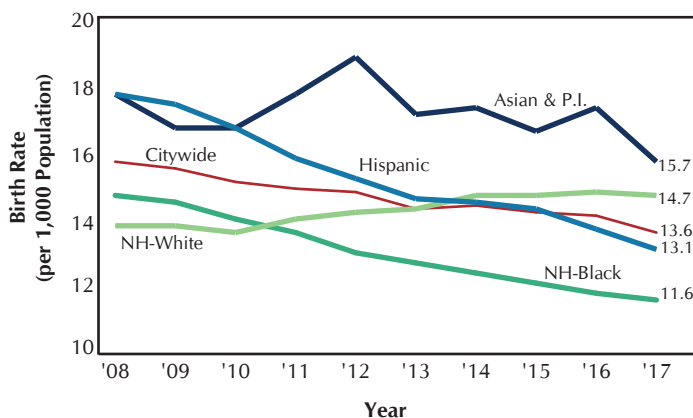
- In 2017, the birth rate was highest among Asians and Pacific Islanders at 15.7 births per 1,000 population, followed by 14.7 among non-Hispanic whites, 13.1 among Hispanics, and 11.6 among non-Hispanic blacks.

- From 2008 to 2017, the birth rate increased among non-Hispanic whites by 6.5%, and decreased among all other groups. Over the ten year period, non-Hispanic blacks experienced a 21.1% decline; Hispanics, a 26.0% decline; and Asians and Pacific Islanders, an 11.3% decline.

Figure 7. Birth Rates by Neighborhood Poverty*, New York City, 2008 and 2017

*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 the American Community Survey (ACS) 2005-2009 for 2008 data and per ACS 2013-2017 for 2017 data.
†The citywide estimate is restricted to NYC residents.
‡Rate Ratio.
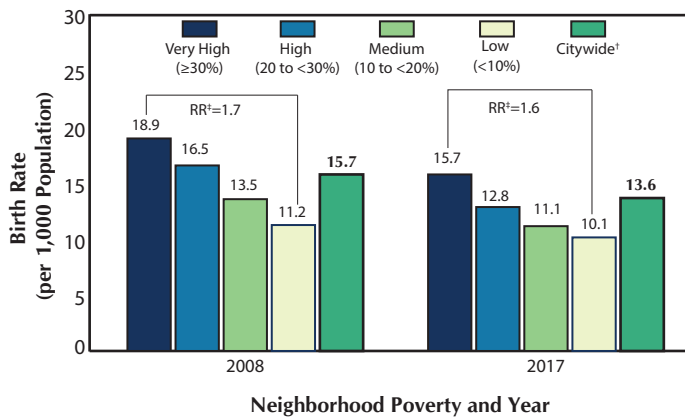
- In 2017, the birth rate was highest in the city's very high poverty neighborhoods, at 15.7 births per 1,000 population, as compared to 10.1 for the low poverty neighborhoods. In 2017, the birth rate in the city's very high poverty neighborhoods was 1.6 times the birth rate of the city's low poverty neighborhoods, as compared to 1.7 in 2008.

- Since 2008, birth rates decreased across all categories.

Figure 8. Birth Rates by Mother's Age Group, New York City, 2008-2017

- In 2017, the birth rate among women aged 30 to 39 years of age continued to be the highest, at 86.5 births per 1,000 female population, followed by women 20 to 29 at 64.8, then women 15 to 19 years old and 40 to 49 years old with birth rates of 13.8 and 12.4, respectively.

- Since 2008, birth rates increased 2.2% among women aged 30-39 years old and 22.8% among women aged 40-49 years old.

- Among women 20-29 years old, the birth rate has declined by 23.0% since 2008 and 5.8% since 2016. The teen birth rate (15-19 years of age) decreased by 56.2% since 2008 and 6.8% since 2016.
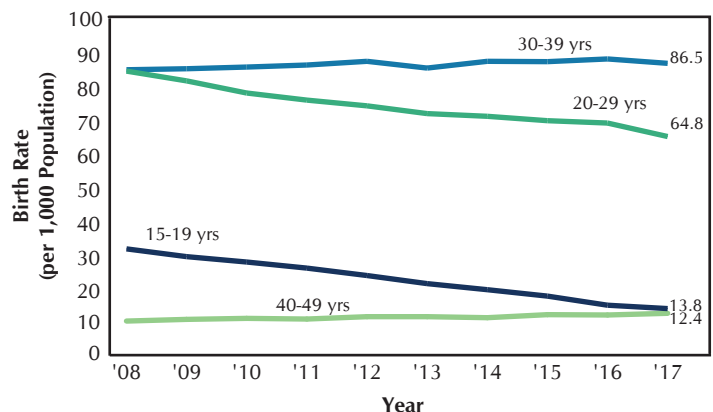
Figure 9. Percent of Cesarean Delivery by Gestational Age, New York City, 2008, 2016, 2017
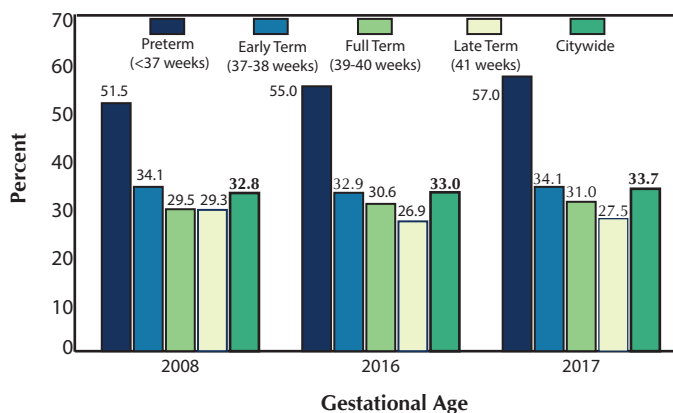
- For 2008, 2016, and 2017, a majority of preterm (<37 weeks gestational age) infants were delivered by Cesarean section.

- 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, 2017
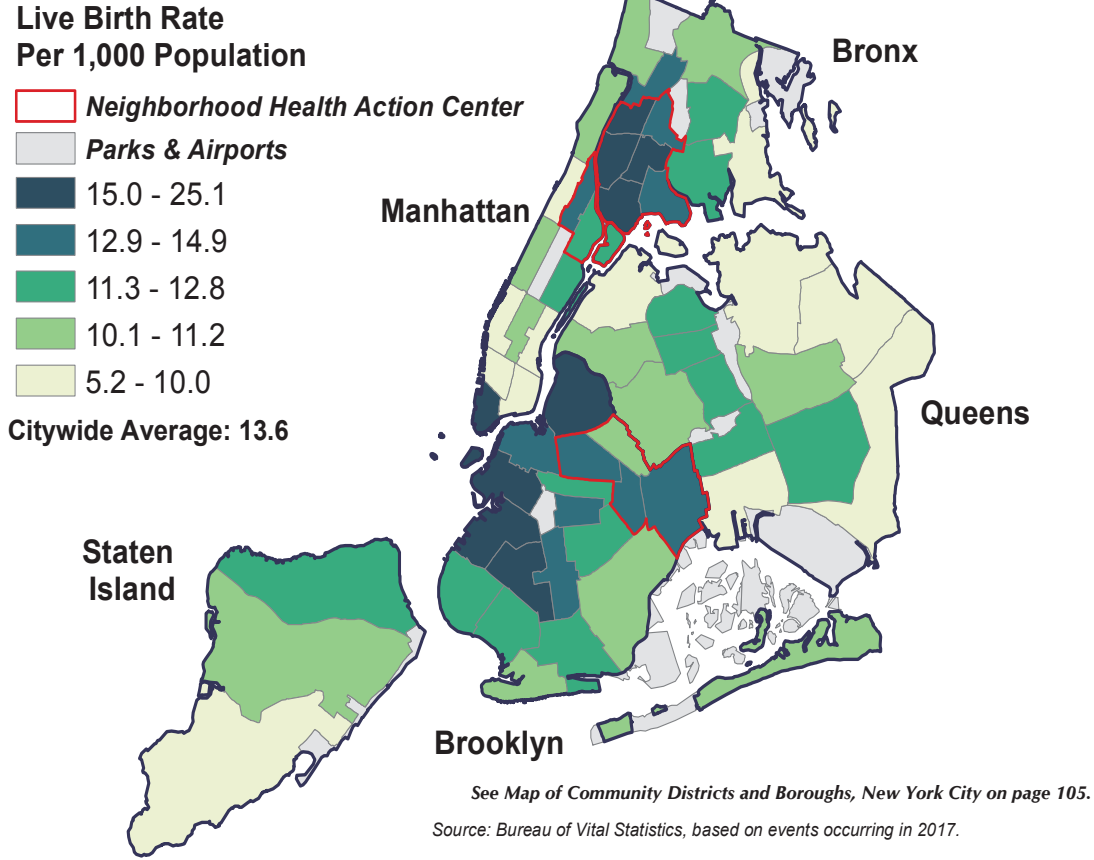
**Live Birth Rate
Per 1,000 Population**

- ▭ *Neighborhood Health Action Center*
- ▨ *Parks & Airports*
- ■ 15.0 - 25.1
- ■ 12.9 - 14.9
- ■ 11.3 - 12.8
- ■ 10.1 - 11.2
- ▨ 5.2 - 10.0

Citywide Average: 13.6

Source: Bureau of Vital Statistics, based on events occurring in 2017.

- For 2017, the community district with the highest crude birth rate was Borough Park with 25.1 births per 1,000 population, followed by 17.9 in Williamsburg/Greenpoint, 17.3 in Battery Park/Tribeca, 16.6 in Sunset Park, and 16.3 in University/Morris Heights.

- The community district with the lowest crude birth rate was Bayside with 5.2 births per 1,000 population, then the Lower East Side with 6.9, Greenwich Village/SOHO with 7.6, Chelsea/Clinton with 7.9, and Throgs Neck with 8.0.

Crude Birth Rates by Community District (CD) of Residence, New York City, 2017

CD	MANHATTAN	Birth Rate	CD	BRONX	Birth Rate	CD	BROOKLYN	Birth Rate	CD	QUEENS	Birth Rate
MN01	Battery Park, Tribeca	17.3	BX01	Mott Haven	15.1	BK01	Williamsburg, Greenpoint	17.9	QN01	Astoria, Long Island City	9.3
MN02	Greenwich Village, SOHO	7.6	BX02	Hunts Point	14.0	BK02	Fort Greene, Brooklyn Heights	13.2	QN02	Sunnyside, Woodside	11.1
MN03	Lower East Side	6.9	BX03	Morrisania	15.6	BK03	Bedford Stuyvesant	14.2	QN03	Jackson Heights	12.6
MN04	Chelsea, Clinton	7.9	BX04	Concourse, Highbridge	15.6	BK04	Bushwick	10.6	QN04	Elmhurst, Corona	12.8
MN05	Midtown Business District	10.7	BX05	University, Morris Heights	16.3	BK05	East New York	14.7	QN05	Ridgewood, Glendale	10.8
MN06	Murray Hill	8.8	BX06	East Tremont	13.7	BK06	Park Slope	15.1	QN06	Rego Park, Forest Hills	11.8
MN07	Upper West Side	11.0	BX07	Fordham	14.1	BK07	Sunset Park	16.6	QN07	Flushing	10.0
MN08	Upper East Side	11.4	BX08	Riverdale	10.3	BK08	Crown Heights North	12.5	QN08	Fresh Meadows, Briarwood	11.2
MN09	Manhattanville	9.0	BX09	Unionport, Soundview	12.5	BK09	Crown Heights South	14.7	QN09	Woodhaven	12.5
MN10	Central Harlem	12.9	BX10	Throgs Neck	8.0	BK10	Bay Ridge	12.2	QN10	Howard Beach	10.0
MN11	East Harlem	11.7	BX11	Pelham Parkway	11.6	BK11	Bensonhurst	12.8	QN11	Bayside	5.2
MN12	Washington Heights	10.4	BX12	Williamsbridge	10.9	BK12	Borough Park	25.1	QN12	Jamaica, St. Albans	12.8
						BK13	Coney Island	10.9	QN13	Queens Village	8.4
CD	**STATEN ISLAND**					BK14	Flatbush, Midwood	14.7	QN14	The Rockaways	11.2
SI01	Port Richmond	12.7				BK15	Sheepshead Bay	12.8			
SI02	Willowbrook, South Beach	10.4				BK16	Brownsville	14.9			
SI03	Tottenville	10.0				BK17	East Flatbush	12.5			
						BK18	Canarsie	11.2			

TEEN BIRTHS

Figure 11. Teen Birth Rates by Mother's Racial/Ethnic Group, New York City, 2008–2017
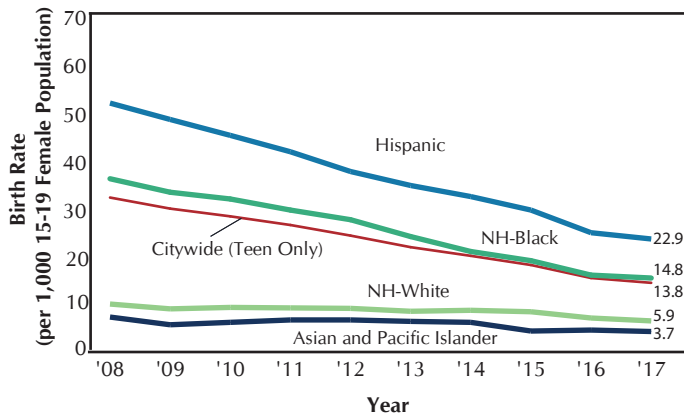
- From 2008 to 2017, the teen birth rate declined by 56.2% overall. Teen birth rates also declined for all racial/ethnic groups: by 55.2% among Hispanics, 58.2% among non-Hispanic blacks, 37.2% among non-Hispanic whites, and 44.8% among Asians and Pacific Islanders.

- In 2017, the teen birth rate among non-Hispanic blacks was 2.5 times that of non-Hispanic whites, reflecting a narrowing of the difference in 2008, when it was 3.8 times that of Non-Hispanic whites.

- The teen birth rate among Hispanics remains high compared to that of non-Hispanic whites. In 2008 the teen birth rate for Hispanics was 5.4 times that of non-Hispanic whites. In 2017, the teen birth rate for Hispanics was 3.9 times that of non-Hispanic whites.

- Between 2008 and 2017, teen birth rates declined across all poverty levels: by 54.5% in the city's very high poverty neighborhoods, by 55.8% in high poverty neighborhoods, by 66.9% in medium poverty neighborhoods, and by 63.5% 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 2017, the teen birth rate in very high poverty neighborhoods was 4.8 times that of low poverty neighborhoods; in 2008, it was 3.8 times that of low poverty neighborhoods.

Figure 12. Teen Birth Rate by Neighborhood Poverty*, New York City Residents, 2008 and 2017
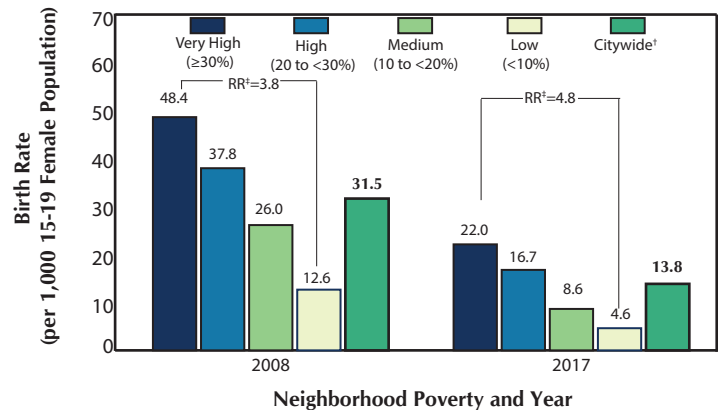
*Neighborhood poverty (based on mother's residential census tract) is defined as percent of residents with incomes below 100% of the Federal Poverty Level, per the American Community Survey (ACS) 2005-2009 for 2008 data and per ACS 2013-2017 for 2017 data.
†The citywide estimate is restricted to NYC residents.
‡ Rate Ratio.

Figure 13. Teen Birth Rates by Age, New York City, 2008–2017
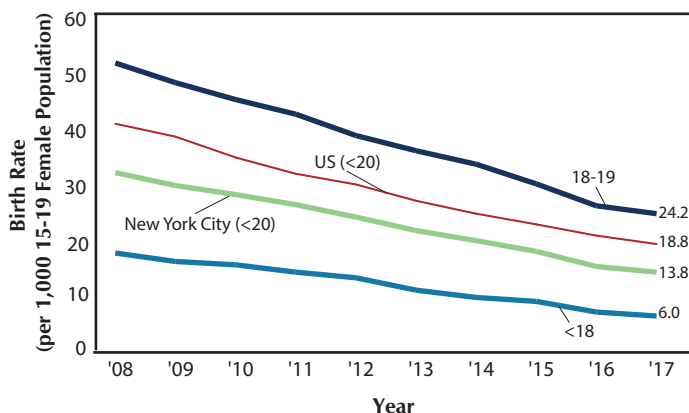
- From 2008 to 2017, birth rates fell among all teenagers, regardless of age. Among teens less than 18 years of age, the birth rate declined over that period by 65.1%; among women 18-19, it declined by 52.5%. The overall rate of teen birth (births to women <20) declined by 56.2%.

TEEN BIRTHS

Figure 14. Percent of Live Births to Teenagers by Community District of Residence, New York City, 2015-2017

Percent of Live Births to Teenagers (age < 20 Years)

- Neighborhood Health Action Center
- Parks & Airports
- 5.5 - 7.4
- 3.9 - 5.4
- 2.7 - 3.8
- 1.4 - 2.6
- 0.1 - 1.3

Citywide Average: 3.0

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

Source: Bureau of Vital Statistics, based on events occurring in 2015-2017.

- The community district with the highest percentage of live births to teenagers (<20 years) was Mott Haven with 7.4%, followed by East Tremont with 7.0%, Brownsville with 6.9%, Hunts Point with 6.6%, and University/Morris Heights with 6.3%.
- The following community districts had less than 1% of live births to teenagers: Battery Park/Tribeca, Greenwich Village/SOHO, Midtown Business District, Murray Hill, Upper West Side, Upper East Side, Rego Park/Forest Hills, Bayside, and Tottenville.

Percentage of Live Births to Teens by Community District (CD) of Residence, New York City, 2015-2017

CD	MANHATTAN	Birth Percentage	CD	BRONX	Birth Percentage	CD	BROOKLYN	Birth Percentage	CD	QUEENS	Birth Percentage
MN01	Battery Park, Tribeca	0.1	BX01	Mott Haven	7.4	BK01	Williamsburg, Greenpoint	1.7	QN01	Astoria, Long Island City	2.5
MN02	Greenwich Village, SOHO	0.2	BX02	Hunts Point	6.6	BK02	Fort Greene, Brooklyn Heights	1.5	QN02	Sunnyside, Woodside	1.3
MN03	Lower East Side	2.6	BX03	Morrisania	6.0	BK03	Bedford Stuyvesant	3.9	QN03	Jackson Heights	4.3
MN04	Chelsea, Clinton	1.4	BX04	Concourse, Highbridge	5.7	BK04	Bushwick	6.1	QN04	Elmhurst, Corona	3.5
MN05	Midtown Business District	0.6	BX05	University, Morris Heights	6.3	BK05	East New York	5.9	QN05	Ridgewood, Glendale	2.8
MN06	Murray Hill	0.4	BX06	East Tremont	7.0	BK06	Park Slope	1.0	QN06	Rego Park, Forest Hills	0.7
MN07	Upper West Side	0.7	BX07	Fordham	5.4	BK07	Sunset Park	2.9	QN07	Flushing	1.4
MN08	Upper East Side	0.2	BX08	Riverdale	2.7	BK08	Crown Heights North	3.1	QN08	Fresh Meadows, Briarwood	1.2
MN09	Manhattanville	4.3	BX09	Unionport, Soundview	5.6	BK09	Crown Heights South	1.8	QN09	Woodhaven	3.1
MN10	Central Harlem	3.8	BX10	Throgs Neck	3.3	BK10	Bay Ridge	1.3	QN10	Howard Beach	3.3
MN11	East Harlem	4.7	BX11	Pelham Parkway	4.3	BK11	Bensonhurst	1.8	QN11	Bayside	0.5
MN12	Washington Heights	4.0	BX12	Williamsbridge	6.0	BK12	Borough Park	1.8	QN12	Jamaica, St. Albans	4.6
						BK13	Coney Island	4.0	QN13	Queens Village	2.5
CD	STATEN ISLAND					BK14	Flatbush, Midwood	2.7	QN14	The Rockaways	4.9
SI01	Port Richmond	4.6				BK15	Sheepshead Bay	2.0			
SI02	Willowbrook, South Beach	1.3				BK16	Brownsville	6.9			
SI03	Tottenville	0.9				BK17	East Flatbush	3.7			
						BK18	Canarsie	2.5			

INDUCED TERMINATION OF PREGNANCY

Figure 15. Age-Adjusted Induced Termination of Pregnancy Rates by Mother's Racial/Ethnic Group, New York City, 2008–2017
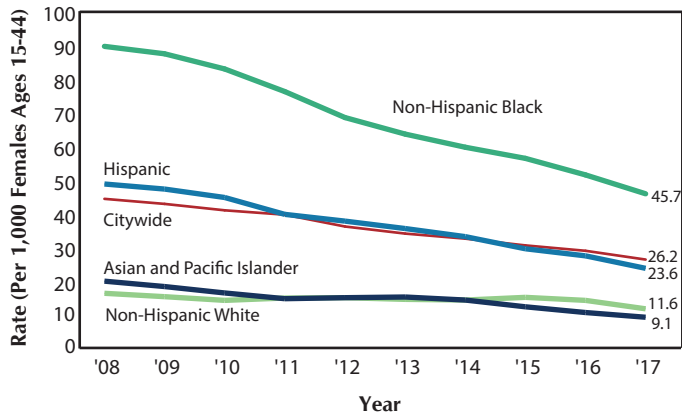
- The 2017 citywide age-adjusted rate of induced terminations of pregnancy, at 26.2 terminations per 1,000 females aged 15 to 44 years, declined 40.7% since 2008. Similarly, age-adjusted rates among each racial/ethnic group declined: 54.0% among Asians and Pacific Islanders, 51.4% among Hispanics, 48.9% among non-Hispanic blacks, and 28.4% among non-Hispanic whites.

- The disparity between non-Hispanic white and non-Hispanic black induced termination of pregnancy rates has narrowed since 2008; the rate among non-Hispanic blacks was 3.9 times that of non-Hispanic whites (45.7 terminations per 1,000 females age 15-44 vs. 11.6) in 2017, compared to 5.5 in 2008.

- The 2017 crude citywide rate of induced terminations of pregnancy declined 39.9% since 2008, from 46.9 to 28.2 terminations per 1,000 females aged 15-49 years.

- Since 2008, the age-specific rate declined 62.4% among teens (15 to 19 years of age), from 55.1 terminations per 1,000 females in 2008 to 20.7 in 2017. The rate declined by 38.7% among women 20 to 29 years of age, 31.5% among women 30 to 39 years of age and 24.1% 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, 2008–2017
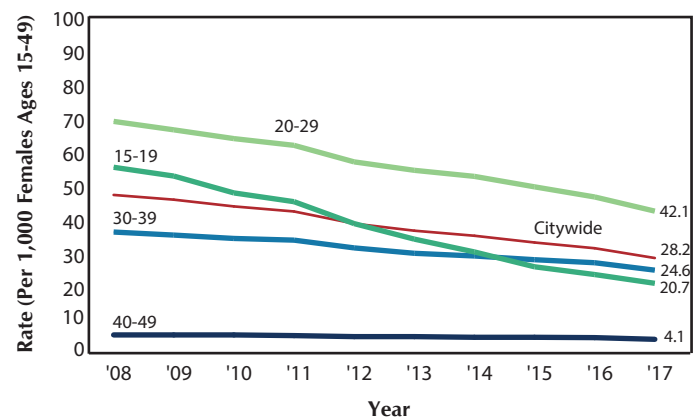
Figure 17. Crude Induced Termination of Pregnancy Rates by Medical vs. Surgical Procedure, New York City, 2008–2017
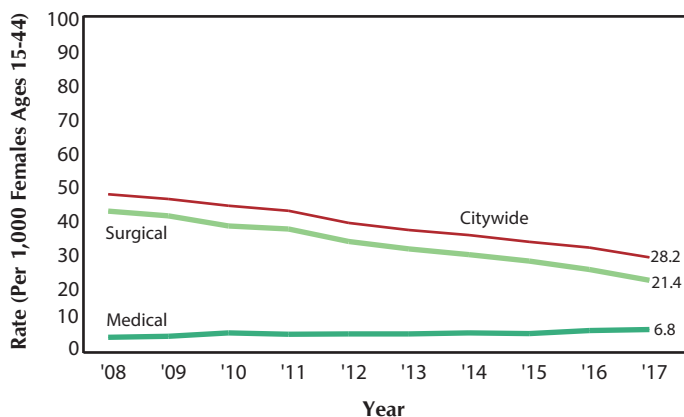
- Medication-induced abortion, using mifepristone in combination with misoprostol, is termed a "medical abortion" and may be performed up to nine weeks' gestation, rather than a surgical procedure, to terminate a pregnancy. Medical abortion is not to be confused with the morning-after pill, also known as emergency contraception, which is used to prevent pregnancy.

- Since 2008, the crude rate of medical abortion in New York City increased 51.1%, to 6.8 terminations per 1,000 females age 15-44, while the rate of surgical abortion decreased 48.9% to 21.4 terminations per 1,000 females age 15-44.

PERINATAL PERIODS OF RISK (PPOR)

Figure 1. Model of Perinatal Periods of Risk and Intervention Priorities
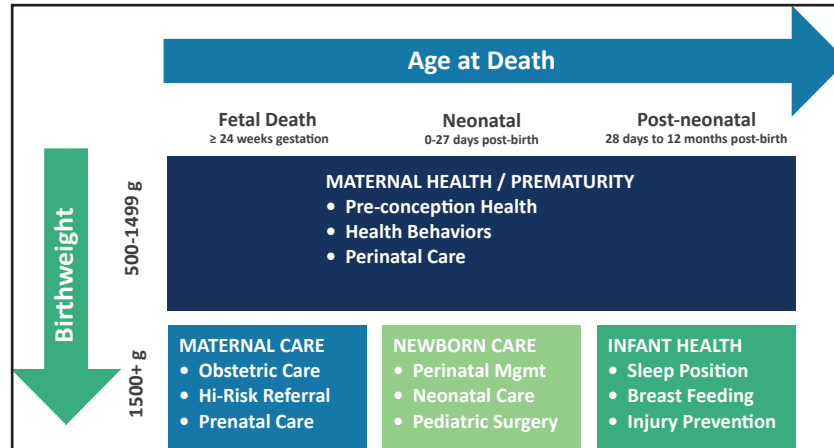
- Based on WHO/CDC's Periods of Risk approach (1991) to reduce fetal deaths (more commonly called miscarriages and/or stillbirths) and infant mortality, the Perinatal Periods of Risk (PPOR) methodology was developed to address the complexity of infant mortality. The framework (see above) illustrates 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, 2008-2017
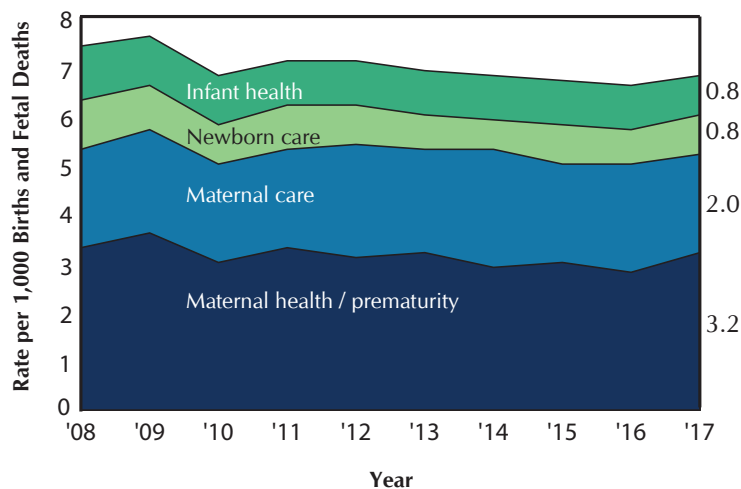
- The overall fetal-infant mortality rate (FIMR) for New York City is 6.8 per 1,000 live births, decreasing by 8.1% since 2008, and increasing by 1.5% since 2016.

- 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 47.1% 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 14.9% in 2008 to 11.8% in 2017 (post-neonatal deaths with a birthweight 1500 grams or greater). The contribution of the maternal care period to FIMR increased from 27.0% in 2008 to 29.4% in 2017 (fetal deaths with a birthweight 1500 grams or greater). The share of FIMR attributable to the newborn care period decreased 12.6% between 2008 and 2017 (neonatal deaths with a birthweight 1500 grams or greater), from 13.5% to 11.8%.

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 Mother's Ethnic Group, New York City, 2013-2017

Year	Births & Fetal Deaths* Number	Maternal Health/ Prematurity Number	Rate	Maternal Care Number	Rate	Newborn Care Number	Rate	Infant Health Number	Rate	Total Fetal-Infant Mortality Number	Rate
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
2017	117,320	376	3.2	235	2.0	93	0.8	99	0.8	803	6.8
Mother's Ethnic Group, 2013-2017											
Puerto Rican	36,935	120	3.2	73	2.0	29	0.8	32	0.9	254	6.9
Other Hispanic	137,146	382	2.8	260	1.9	91	0.7	134	1.0	867	6.3
Asian and Pacific Islander	102,899	214	2.1	144	1.4	63	0.6	58	0.6	479	4.7
Non-Hispanic White	201,999	345	1.7	315	1.6	124	0.6	106	0.5	890	4.4
Non-Hispanic Black	115,832	672	5.8	392	3.4	126	1.1	188	1.6	1,378	11.9
Other or Unknown	8,348	90	-	111	-	7	-	6	-	214	-
NEW YORK CITY	603,159	1,823	3.0	1,295	2.1	440	0.7	524	0.9	4,082	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.

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, 2013-2017

Community District of Residence	Births & Fetal Deaths* Number	Maternal Health/Prematurity		Maternal Care		Newborn Care		Infant Health		Total Fetal-Infant Mortality	
		Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
MANHATTAN	88,164	176	2.0	139	1.6	66	0.7	53	0.6	434	4.9
Battery Park, Tribeca (01)	5,627	8	1.4	8	1.4	4	0.7	3	0.5	23	4.1
Greenwich Village, SOHO (02)	3,831	3	0.8	2	0.5	3	0.8	-	-	8	2.1
Lower East Side (03)	6,896	19	2.8	14	2.0	5	0.7	3	0.4	41	5.9
Chelsea, Clinton (04)	5,033	10	2.0	6	1.2	6	1.2	2	0.4	24	4.8
Midtown Business District (05)	2,845	2	0.7	5	1.8	2	0.7	1	0.4	10	3.5
Murray Hill (06)	6,393	9	1.4	13	2.0	2	0.3	2	0.3	26	4.1
Upper West Side (07)	12,487	10	0.8	23	1.8	9	0.7	6	0.5	48	3.8
Upper East Side (08)	12,938	17	1.3	10	0.8	4	0.3	2	0.2	33	2.6
Manhattanville (09)	5,367	13	2.4	7	1.3	5	0.9	6	1.1	31	5.8
Central Harlem (10)	7,874	29	3.7	15	1.9	11	1.4	11	1.4	66	8.4
East Harlem (11)	7,740	21	2.7	15	1.9	6	0.8	9	1.2	51	6.6
Washington Heights (12)	11,133	35	3.1	21	1.9	9	0.8	8	0.7	73	6.6
BRONX	99,027	390	3.9	249	2.5	84	0.8	134	1.4	857	8.7
Mott Haven (01)	8,055	39	4.8	33	4.1	8	1.0	16	2.0	96	11.9
Hunts Point (02)	4,261	14	3.3	14	3.3	-	-	3	0.7	31	7.3
Morrisania (03)	7,221	25	3.5	23	3.2	11	1.5	13	1.8	72	10.0
Concourse, Highbridge (04)	12,617	38	3.0	38	3.0	14	1.1	18	1.4	108	8.6
University/Morris Heights (05)	11,278	44	3.9	7	0.6	14	1.2	12	1.1	77	6.8
East Tremont (06)	6,498	21	3.2	20	3.1	6	0.9	10	1.5	57	8.8
Fordham (07)	11,031	39	3.5	22	2.0	6	0.5	9	0.8	76	6.9
Riverdale (08)	5,527	18	3.3	8	1.4	-	-	4	0.7	30	5.4
Unionport, Soundview (09)	12,075	56	4.6	35	2.9	7	0.6	22	1.8	120	9.9
Throgs Neck (10)	4,987	21	4.2	12	2.4	1	0.2	5	1.0	39	7.8
Pelham Parkway (11)	6,834	29	4.2	9	1.3	10	1.5	13	1.9	61	8.9
Williamsbridge (12)	8,643	46	5.3	28	3.2	7	0.8	9	1.0	90	10.4
BROOKLYN	202,052	594	2.9	436	2.2	135	0.7	173	0.9	1338	6.6
Williamsburg, Greenpoint (01)	18,243	35	1.9	33	1.8	13	0.7	19	1.0	100	5.5
Fort Greene, Brooklyn Heights (02)	8,372	16	1.9	17	2.0	3	0.4	6	0.7	42	5.0
Bedford Stuyvesant (03)	11,446	44	3.8	36	3.1	13	1.1	15	1.3	108	9.4
Bushwick (04)	6,917	13	1.9	16	2.3	3	0.4	8	1.2	40	5.8
East New York (05)	13,468	68	5.0	42	3.1	13	1.0	15	1.1	138	10.2
Park Slope (06)	8,833	14	1.6	11	1.2	3	0.3	7	0.8	35	4.0
Sunset Park (07)	13,057	41	3.1	26	2.0	6	0.5	6	0.5	79	6.1
Crown Heights North (08)	6,461	25	3.9	14	2.2	8	1.2	3	0.5	50	7.7
Crown Heights South (09)	7,490	21	2.8	15	2.0	7	0.9	9	1.2	52	6.9
Bay Ridge (10)	9,361	21	2.2	19	2.0	1	0.1	1	0.1	42	4.5
Bensonhurst (11)	13,286	27	2.0	16	1.2	10	0.8	10	0.8	63	4.7
Borough Park (12)	27,146	47	1.7	48	1.8	15	0.6	13	0.5	123	4.5
Coney Island (13)	6,208	20	3.2	9	1.4	3	0.5	8	1.3	40	6.4
Flatbush, Midwood (14)	12,887	52	4.0	27	2.1	4	0.3	6	0.5	89	6.9
Sheepshead Bay (15)	11,037	15	1.4	18	1.6	8	0.7	10	0.9	51	4.6
Brownsville (16)	6,708	37	5.5	23	3.4	4	0.6	10	1.5	74	11.0
East Flatbush (17)	9,862	49	5.0	35	3.5	6	0.6	18	1.8	108	11.0
Canarsie (18)	11,270	49	4.3	31	2.8	15	1.3	9	0.8	104	9.2

Continued on next page.

45

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, 2013-2017 (Continued)

Community District of Residence	Births & Fetal Deaths* Number	Maternal Health/Prematurity		Maternal Care		Newborn Care		Infant Health		Total Fetal-Infant Mortality	
		Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
QUEENS	132,839	362	2.7	268	2.0	74	0.6	104	0.8	808	6.1
Astoria, Long Island City (01)	9,899	33	3.3	16	1.6	10	1.0	9	0.9	68	6.9
Sunnyside, Woodside (02)	8,277	17	2.1	14	1.7	5	0.6	7	0.8	43	5.2
Jackson Heights (03)	12,697	33	2.6	22	1.7	5	0.4	11	0.9	71	5.6
Elmhurst, Corona (04)	13,017	32	2.5	24	1.8	10	0.8	7	0.5	73	5.6
Ridgewood, Glendale (05)	9,774	22	2.3	18	1.8	2	0.2	4	0.4	46	4.7
Rego Park, Forest Hills (06)	7,036	12	1.7	8	1.1	1	0.1	4	0.6	25	3.6
Flushing (07)	14,391	26	1.8	26	1.8	5	0.3	15	1.0	72	5.0
Fresh Meadows, Briarwood (08)	9,091	21	2.3	18	2.0	4	0.4	5	0.5	48	5.3
Woodhaven (09)	9,451	37	3.9	25	2.6	9	1.0	4	0.4	75	7.9
Howard Beach (10)	6,363	20	3.1	11	1.7	2	0.3	4	0.6	37	5.8
Bayside (11)	3,395	6	1.8	3	0.9	1	0	2	0.6	12	3.5
Jamaica, St. Albans (12)	14,767	60	4.1	46	3.1	10	0.7	20	1.4	136	9.2
Queens Village (13)	8,297	27	3.3	22	2.7	7	0.8	4	0.5	60	7.2
The Rockaways (14)	6,384	16	2.5	15	2.3	3	0.5	8	1.3	42	6.6
STATEN ISLAND	26,544	76	2.9	66	2.5	24	0.9	26	1.0	192	7.2
Port Richmond (01)	11,649	45	3.9	43	3.7	14	1.2	16	1.4	118	10.1
Willowbrook, South Beach (02)	7,106	24	3.4	13	1.8	6	0.8	4	0.6	47	6.6
Tottenville (03)	7,733	7	0.9	10	1.3	4	0.5	6	0.8	27	3.5
New York City Residents	548,626	1,598	2.9	1,158	2.1	383	0.7	490	0.9	3,629	6.6
Non-Residents	54,431	196	3.6	111	2.0	56	1.0	32	0.6	395	7.3
Residents Unknown	102	29	-	26	-	1	-	2	-	58	-

*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
2017
THE CITY OF NEW YORK
Appendix A

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

POPULATION CHARACTERISTICS

Table PC1. Population, Live Births, Fertility Rates, Marriages, Deaths, and Infant Mortality, New York City, 1898-2017

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
2017	8,622,698	117,013	13.6	60.7	82,866	9.6	54,319	6.3	500	4.3

*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.

POPULATION CHARACTERISTICS

Table PC2. Population Estimates by Age, Mutually Exclusive Race and Hispanic Origin, and Sex, New York City, 2017

Age in Years	All Total	All Male	All Female	Hispanic Total	Hispanic Male	Hispanic Female	Non-Hispanic White Total	Non-Hispanic White Male	Non-Hispanic White Female	Non-Hispanic Black Total	Non-Hispanic Black Male	Non-Hispanic Black Female	Asian and Pacific Islander Total	Asian and Pacific Islander Male	Asian and Pacific Islander Female	Other or Multiple Races Total	Other or Multiple Races Male	Other or Multiple Races Female
All Ages	8,622,698	4,113,335	4,509,363	2,517,429	1,220,704	1,296,725	2,751,155	1,343,185	1,407,970	1,901,974	860,853	1,041,121	1,283,958	609,342	674,616	168,182	79,251	88,931
Under 5	552,581	282,715	269,866	191,111	97,555	93,556	152,047	77,985	74,062	113,300	57,386	55,914	73,346	38,201	35,145	22,777	11,588	11,189
5-9	494,125	252,500	241,625	179,126	91,290	87,836	128,235	65,727	62,508	107,874	54,598	53,276	61,828	32,259	29,569	17,062	8,626	8,436
10-14	463,877	236,120	227,757	165,397	84,211	81,186	116,965	60,160	56,805	109,151	54,791	54,360	60,002	30,861	29,141	12,362	6,097	6,265
15-19	461,779	232,501	229,278	165,825	84,567	81,258	110,112	55,426	54,686	114,209	56,889	57,320	60,593	30,221	30,372	11,040	5,398	5,642
20-24	573,684	277,843	295,841	193,480	97,097	96,383	150,531	71,520	79,011	132,839	63,683	69,156	84,712	39,959	44,753	12,122	5,584	6,538
25-29	812,831	394,194	418,637	227,643	116,402	111,241	275,013	131,048	143,965	165,550	79,959	85,591	128,325	59,249	69,076	16,300	7,536	8,764
30-34	740,320	364,399	375,921	205,985	105,839	100,146	265,395	132,956	132,439	137,308	64,437	72,871	118,085	54,994	63,091	13,547	6,173	7,374
35-39	630,011	306,908	323,103	185,333	93,047	92,286	204,917	105,101	99,816	125,316	56,706	68,610	103,718	47,182	56,536	10,727	4,872	5,855
40-44	549,092	264,736	284,356	164,687	80,898	83,789	167,614	86,462	81,152	115,625	50,940	64,685	92,185	42,313	49,872	8,981	4,123	4,858
45-49	550,992	264,507	286,485	161,587	78,045	83,542	165,061	85,474	79,587	125,234	54,887	70,347	90,708	42,342	48,366	8,402	3,759	4,643
50-54	548,972	261,495	287,477	154,787	72,503	82,284	160,284	83,231	77,053	137,138	60,377	76,761	88,382	41,460	46,922	8,381	3,924	4,457
55-59	531,284	249,578	281,706	137,338	62,717	74,621	168,194	84,504	83,690	134,346	58,825	75,521	83,733	40,036	43,697	7,673	3,496	4,177
60-64	478,129	219,022	259,107	115,221	50,776	64,445	166,989	80,680	86,309	113,737	48,062	65,675	75,909	36,587	39,322	6,273	2,917	3,356
65-69	397,414	176,477	220,937	89,707	38,315	51,392	154,754	71,510	83,244	88,928	36,393	52,535	59,409	28,253	31,156	4,616	2,006	2,610
70-74	295,929	125,870	170,059	67,274	27,109	40,165	121,193	54,438	66,755	66,785	25,480	41,305	37,663	17,568	20,095	3,014	1,275	1,739
75-79	214,845	87,362	127,483	48,506	18,750	29,756	88,358	38,016	50,342	48,057	17,271	30,786	27,783	12,419	15,364	2,141	906	1,235
80-84	150,604	58,693	91,911	32,438	11,683	20,755	65,746	27,460	38,286	32,145	10,775	21,370	18,954	8,269	10,685	1,321	506	815
85 & Over	176,229	58,415	117,814	31,984	9,900	22,084	89,747	31,487	58,260	34,432	9,394	25,038	18,623	7,169	11,454	1,443	465	978

Data Source: US Census Bureau, population estimates, 2017 vintage.

Table PC3. Marriages, Births, Deaths, and Infant Deaths by Month and Average per Day, New York City, 2017

Months	Number Marriages*	Number Births	Number Deaths	Number Infant Deaths	Average Per Day Marriages	Average Per Day Births	Average Per Day Deaths	Average Per Day Infant Deaths
January	5,811	9,914	5,224	34	187	320	169	1.1
February	6,685	8,904	4,464	44	239	318	159	1.6
March	7,253	9,699	4,667	31	234	313	151	1.0
April	6,715	9,238	4,394	33	224	308	146	1.1
May	7,527	9,572	4,484	51	243	309	145	1.6
June	7,836	9,673	4,149	40	261	322	138	1.3
July	6,832	10,165	4,264	30	220	328	138	1.0
August	8,123	10,125	4,347	37	262	327	140	1.2
September	7,311	10,027	4,282	48	244	334	143	1.6
October	6,973	10,097	4,544	61	225	326	147	2.0
November	5,873	9,879	4,524	38	196	329	151	1.3
December	5,927	9,720	4,976	53	191	314	161	1.7
Total	82,866	117,013	54,319	500	227	321	149	1.4

* 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, 2017

Cause (Codes from International Classification of Diseases (ICD), Tenth Revision, 1999)	Total	BOROUGH OF RESIDENCE Manhattan	Bronx	Brooklyn	Queens	Staten Island	Nonresidents	Residence Unknown	SEX Male	Female	ICD-10/ICD-9 Comparability Ratio
Total Deaths	54,319	9,399	9,046	15,496	12,481	3,566	4,194	137	27,154	27,165	
Natural Causes	50,719	8,799	8,349	14,544	11,761	3,334	3,854	78	24,523	26,196	
1.* Tuberculosis (A16-A19)	15	2	2	4	6	-	1	-	10	5	0.88
Respiratory tuberculosis (A16)	13	2	2	4	4	-	1	-	8	5	0.94
2.* Septicemia (A40-A41)	449	63	117	136	85	24	23	1	216	233	1.19
3.* Viral Hepatitis (B15-B19)	195	34	61	50	25	8	17	1	124	71	0.71
4.* Human Immunodeficiency Virus (HIV) Disease (B20-B24)	369	65	105	127	35	15	21	1	249	120	1.08
5. All Other Infective and Parasitic Diseases (Rest of A01-B99)	305	63	44	85	60	14	39	-	153	152	
6.* Malignant Neoplasms (C00-C97)	13,297	2,314	1,938	3,705	2,882	851	1,603	4	6,625	6,672	1.01
Lip, oral cavity, and pharynx (C00-C14)	224	44	39	54	52	7	28	-	152	72	0.96
Esophagus (C15)	253	48	22	66	61	19	37	-	194	59	0.99
Stomach (C16)	451	58	60	142	128	21	41	1	257	194	1.01
Colon, rectum, and anus (C18-C21)	1,304	216	198	387	297	89	115	2	643	661	1.00
Liver and intrahepatic bile ducts (C22)	688	117	109	184	162	38	78	-	471	217	0.96
Pancreas (C25)	1,069	209	143	293	238	75	110	1	519	550	1.00
Larynx (C32)	82	16	21	19	13	2	11	-	66	16	1.01
Trachea, bronchus, and lung (C33-C34)	2,467	435	386	689	528	201	228	-	1,297	1,170	0.98
Melanoma of skin (C43)	124	25	7	24	26	11	31	-	78	46	0.95
Mesothelioma (C45)	32	4	2	4	5	6	11	-	24	8	
Breast (C50)	1,042	173	179	307	208	65	110	-	10	1,032	1.01
Cervix uteri (C53)	122	23	20	38	28	4	9	-	-	122	1.00
Corpus uteri and uterus, part unspecified (C54-C55)	393	63	52	135	75	19	49	-	-	393	1.02
Ovary (C56)	377	77	39	112	83	25	41	-	-	377	0.99
Prostate (C61)	764	133	121	249	164	30	67	-	764	-	1.01
Kidney and renal pelvis (C64-C65)	253	38	36	58	64	21	36	-	181	72	1.00
Bladder (C67)	336	68	43	79	72	29	45	-	242	94	1.00
Meninges, brain, and other parts of central nervous system (C70-C72)	325	59	33	93	67	26	47	-	183	142	0.98
Lymphoid, hematopoietic and related tissues (C81-C96)	1,447	234	191	360	289	77	296	-	783	664	1.00
Hodgkin's disease (C81)	25	5	2	3	7	2	6	-	13	12	1.00
Non-Hodgkin's lymphoma (C82-C85)	520	87	69	121	105	26	112	-	289	231	0.98
Multiple myeloma and immunoproliferative neoplasms (C88, C90)	309	48	49	99	62	12	39	-	159	150	1.04
Leukemia (C91-C95)	587	93	70	136	113	37	138	-	317	270	1.01
7.* In Situ or Benign Neoplasms and Neoplasms of Uncertain or Unknown Behavior (D00-D48)	294	62	30	75	61	15	51	-	148	146	1.63
8.* Anemias (D50-D64)	69	8	19	25	11	2	3	1	28	41	0.94
9.* Diabetes Mellitus (E10-E14)	1,802	250	328	669	356	118	80	1	945	857	1.02
10.† Mental and Behavioral Disorders Due to Use of Alcohol (F10)	228	41	38	68	53	10	10	8	179	49	
11. Mental and Behavioral Disorders Due to Use of Psychoactive Substance Excluding Alcohol and Tobacco (F11-F16, F18-F19) ‡	134	27	48	25	14	5	9	6	100	34	
12. Diseases of Nervous System (G00-G98)	2,362	565	380	560	598	157	101	1	889	1,473	
* Meningitis (G00,G03)	25	5	4	4	5	3	3	1	17	8	1.01
* Parkinson's disease (G20-G21)	401	102	55	96	109	20	19	-	238	163	1.01
* Alzheimer's disease (G30)	1,116	297	214	291	242	36	36	-	315	801	1.58
13. Major Cardiovascular Diseases (I00-I78)	21,031	3,404	3,401	6,196	5,383	1,487	1,121	39	10,139	10,892	1.00
* Diseases of heart (I00-I09, I11, I13, I20-I51)	17,490	2,774	2,670	5,275	4,533	1,332	869	37	8,550	8,940	0.99
Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09)	52	9	6	16	6	-	15	-	20	32	0.88
Hypertensive heart disease (I11)	2,396	452	439	803	456	146	87	13	1,152	1,244	0.80
Hypertensive heart and renal disease (I13)	180	39	53	40	25	11	11	1	88	92	1.13
Chronic ischemic heart disease (I20, I25)	11,479	1,656	1,602	3,405	3,359	921	516	20	5,714	5,765	1.01
Acute myocardial infarction (I21-I22)	1,778	276	297	536	369	184	114	2	885	893	0.99
Cardiomyopathy (I42)	117	22	23	36	18	3	15	-	77	40	

50

MORTALITY

Table M1. Deaths by Selected Underlying Cause, Borough of Residence, Sex, and ICD-10/ICD-9 Comparability Ratio, New York City, 2017 (Continued)

Cause (Codes from International Classification of Diseases (ICD), Tenth Revision, 1999)	Total	Manhattan	Bronx	Brooklyn	Queens	Staten Island	Nonresidents	Residence Unknown	Male	Female	ICD-10/ICD-9 Comparability Ratio
Heart failure (I50)	411	83	66	139	87	16	20	-	177	234	1.04
* Essential hypertension and hypertensive renal disease (I10, I12, I15)	1,217	214	300	296	301	34	72	-	545	672	1.12
* Cerebrovascular diseases (I60-I69)	1,901	351	363	529	427	88	142	1	820	1,081	1.05
* Atherosclerosis (I70)	152	18	18	27	64	20	5	-	64	88	0.97
* Aortic aneurysm and dissection (I71)	143	23	26	33	33	7	20	1	103	40	1.00
14.* Influenza and Pneumonia (J09-J18)	1,945	253	396	650	427	120	96	3	935	1,010	0.70
15.* Chronic Lower Respiratory Diseases (J40-J47)	1,770	336	310	442	404	166	110	2	784	986	1.04
Emphysema (J43)	82	15	8	25	22	9	2	1	43	39	0.96
Asthma (J45-J46)	161	31	44	37	32	12	5	-	83	78	0.89
16. Pneumoconiosis Due to Asbestos and Other Mineral Fibres (J61)	2	-	-	2	-	-	-	-	2	-	-
17.* Pneumonitis Due to Solids and Liquids (J69)	135	26	15	54	25	6	9	-	79	56	1.10
18.* Peptic Ulcer (K25-K28)	106	19	21	27	20	14	4	1	55	51	0.97
19.* Chronic Liver Disease and Cirrhosis (K70, K73-K74)	605	90	111	161	130	28	83	2	409	196	1.03
Alcoholic liver disease (K70)	424	59	78	118	91	16	60	2	313	111	1.00
20.* Cholelithiasis and Other Disorders of Gallbladder (K80-K82)	89	18	13	25	21	5	7	-	39	50	0.96
21.* Nephritis, Nephrotic Syndrome, and Nephrosis (N00-N07, N17-N19, N25-N27)	388	72	55	149	73	18	21	-	206	182	1.26
Renal failure (N17-N19)	374	67	54	146	70	18	19	-	202	172	1.33
22.* Pregnancy, Childbirth, and the Puerperium (O00-O99)	43	3	5	15	8	5	7	-	-	43	1.14
Maternal causes (A34, O00-O95, O98-O99)§	25	3	4	11	2	1	4	-	-	25	
23.* Certain Conditions Originating in the Perinatal Period (P00-P96)	287	30	62	63	77	27	27	1	168	119	1.08
24.* Congenital Malformations, Deformations, and Chromosomal Abnormalities (Q00-Q99)	228	26	37	72	40	13	40	-	120	108	0.90
25. Symptoms, Signs, and Abnormal Findings, Not Elsewhere Classified (R00-R94, R96-R99)	304	108	58	55	50	9	22	2	129	175	0.98
26. Sudden Infant Death Syndrome (R95)	1	-	1	-	-	-	-	-	1	-	1.06
Pending final determination (R99)	6	2	1	-	1	-	1	1	4	2	
27. All Other Natural Causes (Rest of A00-R99)	4,266	920	754	1,104	917	217	349	5	1,791	2,475	
External Causes	3,600	600	697	952	720	232	340	59	2,631	969	
Injury by Firearms (W32-W34, X72-X74, X93-X95, Y22-Y24, Y35.0)	215	21	44	79	38	13	20	-	196	19	1.00
28. Accidents (V01-X59,Y85-Y86)	2,451	377	504	613	509	169	234	45	1,807	644	1.03
Accidental poisoning by psychoactive substances, excluding alcohol and tobacco (X40-X42, X44) ‡	1,398	210	332	336	258	101	131	30	1,098	300	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) ‡	1,532	237	380	361	272	106	140	36	1,198	334	
† Accidents except poisoning by psychoactive substance use	1,053	167	172	277	251	68	103	15	709	344	
Motor vehicle accidents ||	221	29	39	48	62	12	30	1	176	45	0.95
Accidental falls (W00-W19)	500	88	81	129	119	35	44	4	296	204	0.77
29.* Intentional Self-harm (Suicide) (U03, X60-X84, Y87.0)	565	145	79	131	122	34	49	5	405	160	1.00
30.* Assault (Homicide) (U01-U02, X85-Y09, Y87.1)	298	35	63	115	43	12	30	-	233	65	1.00
31.* Legal Intervention (Y35, Y89.0)	10	-	4	4	-	-	2	-	10	-	0.94
32. Events of Undetermined Intent (Y10-Y34, Y87.2, Y89.9)	245	37	40	83	41	14	21	9	163	82	0.99
33.* Complications of Medical and Surgical Care (Y40-Y84, Y88)	31	6	7	6	5	3	4	-	13	18	0.63
34.* Operations of War and Their Sequelae (Y36,Y89.1)	0	-	-	-	-	-	-	-	-	-	

† 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.

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

Table M2. Deaths and Death Rates per 1,000 Population* by Age, Ethnic Group, and Sex, New York City, 2017

Age in Years	All Total No.	All Total Rate	All Male No.	All Male Rate	All Female No.	All Female Rate	Hispanic Total No.	Hispanic Total Rate	Hispanic Male No.	Hispanic Male Rate	Hispanic Female No.	Hispanic Female Rate	NHW Total No.	NHW Total Rate	NHW Male No.	NHW Male Rate	NHW Female No.	NHW Female Rate	NHB Total No.	NHB Total Rate	NHB Male No.	NHB Male Rate	NHB Female No.	NHB Female Rate	API Total No.	API Total Rate	API Male No.	API Male Rate	API Female No.	API Female Rate	Other Total No.	Other Male No.	Other Female No.
All Ages	54,319	6.3	27,154	6.6	27,165	6.0	10,637	4.2	5,509	4.5	5,128	4.0	23,679	8.6	11,660	8.7	12,019	8.5	14,347	7.5	6,813	7.9	7,534	7.2	4,524	3.5	2,496	4.1	2,028	3.0	1,132	676	456
Age-Adjusted		5.5		6.8		4.5		4.8		6.1		3.9		5.6		6.8		4.7		6.7		8.4		5.6		3.6		4.5		2.9			
Under 5	579	1.0	317	1.1	262	1.0	147	0.8	71	0.7	76	0.8	126	0.8	72	0.9	54	0.7	199	1.8	118	2.1	81	1.4	70	1.0	35	0.9	35	1.0	37	21	16
5-9	54	0.1	36	0.1	18	0.1	17	0.1	6	0.1	11	0.1	13	0.1	11	0.2	2	0.0	16	0.1	13	0.2	3	0.1	8	0.1	6	0.2	2	0.2	0	-	.
10-14	63	0.1	36	0.2	27	0.1	20	0.1	11	0.1	9	0.1	14	0.1	7	0.1	7	0.1	19	0.2	12	0.2	7	0.1	6	0.1	4	0.1	2	0.1	4	2	2
15-19	132	0.3	91	0.4	41	0.2	40	0.2	32	0.4	8	0.1	25	0.2	15	0.3	10	0.2	49	0.4	30	0.5	19	0.3	14	0.2	10	0.3	4	0.1	4	4	.
20-24	336	0.6	244	0.9	92	0.3	103	0.5	81	0.8	22	0.2	102	0.7	73	1.0	29	0.4	100	0.8	70	1.1	30	0.4	25	0.3	16	0.4	9	0.2	6	4	2
25-29	530	0.7	370	0.9	160	0.4	126	0.6	93	0.8	33	0.3	192	0.7	132	1.0	60	0.4	160	1.0	109	1.4	51	0.6	39	0.3	26	0.4	13	0.2	13	10	3
30-34	571	0.8	396	1.1	175	0.5	157	0.8	117	1.1	40	0.4	193	0.7	138	1.0	55	0.4	174	1.3	112	1.7	62	0.9	32	0.3	19	0.3	13	0.2	15	10	5
35-39	729	1.2	489	1.6	240	0.7	208	1.1	149	1.6	59	0.6	217	1.1	151	1.4	66	0.7	237	1.9	145	2.6	92	1.3	49	0.5	31	0.7	18	0.3	18	13	5
40-44	849	1.5	548	2.1	301	1.1	254	1.5	193	2.4	61	0.7	224	1.3	148	1.7	76	0.9	282	2.4	152	3.0	130	2.0	70	0.8	48	1.1	22	0.4	19	7	12
45-49	1,378	2.5	870	3.3	508	1.8	401	2.5	271	3.5	130	1.6	359	2.2	233	2.7	126	1.6	458	3.7	275	5.0	183	2.6	113	1.2	56	1.3	57	1.2	47	35	12
50-54	2,292	4.2	1,404	5.4	888	3.1	573	3.7	374	5.2	199	2.4	623	3.9	409	4.9	214	2.8	852	6.2	462	7.7	390	5.1	184	2.1	120	2.9	64	1.4	60	39	21
55-59	3,211	6.0	1,979	7.9	1,232	4.4	715	5.2	444	7.1	271	3.6	986	5.9	641	7.6	345	4.1	1,163	8.7	668	11.4	495	6.6	260	3.1	174	4.3	86	2.0	87	52	35
60-64	4,151	8.7	2,484	11.3	1,667	6.4	863	7.5	513	10.1	350	5.4	1,444	8.6	906	11.2	538	6.2	1,391	12.2	781	16.2	610	9.3	354	4.7	217	5.9	137	3.5	99	67	32
65-69	4,674	11.8	2,689	15.2	1,985	9.0	935	10.4	546	14.3	389	7.6	1,782	11.5	1,027	14.4	755	9.1	1,460	16.4	793	21.8	667	12.7	397	6.7	251	8.9	146	4.7	100	72	28
70-74	5,277	17.8	2,859	22.7	2,418	14.2	1,101	16.4	629	23.2	472	11.8	2,148	17.7	1,173	21.5	975	14.6	1,495	22.4	712	27.9	783	19.0	403	10.7	251	14.3	152	7.6	130	94	36
75-79	5,684	26.5	2,941	33.7	2,743	21.5	1,137	23.4	574	30.6	563	18.9	2,342	26.5	1,250	32.9	1,092	21.7	1,573	32.7	736	42.6	837	27.2	490	17.6	295	23.8	195	12.7	142	86	56
80-84	6,549	43.5	3,187	54.3	3,362	36.6	1,258	38.8	571	48.9	687	33.1	3,017	45.9	1,543	56.2	1,474	38.5	1,551	48.3	669	62.1	882	41.3	622	32.8	344	41.6	278	26.0	101	60	41
≥85	17,260	97.9	6,214	106.4	11,046	93.8	2,582	80.7	834	84.2	1,748	79.2	9,872	110.0	3,731	118.5	6,141	105.4	3,168	92.0	956	101.8	2,212	88.3	1,388	74.5	593	82.7	795	69.4	250	100	150
Mean age at death	73.2		69.5		76.8		69.7		65.3		74.3		77.3		73.8		80.8		69.3		65.5		72.8		73.0		70.8		75.7		67.9	65.7	71.2
Median age at death	77		72		81		73		68		78		81		77		85		72		67		76		77		74		81		72	70	76

* Population data are from US Census Bureau estimates for July 1, 2017, released in the 2018 vintage file. See Table PC2 on page 49.

MORTALITY

Table M3. Deaths by Ancestry* and Borough of Residence, New York City, 2017

Ancestry	Total	Borough of Residence						Residence Unknown
		Manhattan	Bronx	Brooklyn	Queens	Staten Island	Nonresidents	
Total	54,319	9,399	9,046	15,496	12,481	3,566	4,194	137
Hispanic								
Colombian	361	27	22	30	246	12	22	2
Cuban	389	110	79	55	117	8	20	-
Dominican	2,131	675	781	292	282	17	83	1
Ecuadorian	511	69	96	74	231	13	28	-
Mexican	396	51	80	112	93	30	26	4
Puerto Rican	4,771	903	1,906	1,144	479	147	185	7
Other Hispanic	2,078	309	658	469	444	40	126	32
North American and Caribbean								
African American	10,020	1,899	2,393	3,298	1,695	213	494	28
American	10,157	2,705	733	2,099	2,301	789	1,524	6
Guyanese	909	15	88	330	441	4	31	-
Haitian	794	41	22	509	185	1	36	-
Jamaican	1,094	40	297	455	217	7	78	-
Trinidadian	379	12	30	215	101	4	17	-
Other North American and Caribbean	977	73	128	579	125	14	58	-
European								
English	211	56	28	37	33	32	25	-
German	630	131	74	57	226	77	65	-
Irish	1,339	114	193	167	446	277	142	-
Italian	3,705	150	401	932	897	1,031	294	-
Polish	613	87	34	167	226	57	42	-
Russian	1,017	67	23	741	106	53	26	1
Other European	2,567	278	150	980	834	187	138	-
Asian								
Asian Indian	389	41	15	32	215	15	71	-
Bangladeshi	215	6	35	48	120	1	5	-
Chinese	2,512	610	38	843	879	61	81	-
Filipino	238	33	15	20	103	35	32	-
Korean	375	36	21	15	247	16	40	-
Pakistani	190	12	6	61	81	9	21	-
Other Asian	654	108	44	176	223	41	61	1
Other								
Jewish or Hebrew	1,851	206	120	957	304	54	210	-
Other or Not Stated	2,846	535	536	602	584	321	213	55

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

Table M4. Deaths by Place of Death*, New York City, 2013-2017

Place of Death	2013		2014		2015		2016		2017	
	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%
Total	53,409	100.0	53,034	100.0	54,120	100.0	54,280	100.0	54,319	100.0
Hospital Inpatient	26,380	49.4	25,559	48.2	25,152	46.5	25,111	46.3	24,883	45.8
Emergency/Outpatient	4,435	8.3	4,423	8.3	4,457	8.2	4,584	8.4	4,646	8.6
Dead on Arrival (DOA)	640	1.2	585	1.1	800	1.5	706	1.3	682	1.3
Nursing Home/Long Term Care Facility	7,361	13.8	7,340	13.8	7,631	14.1	7,381	13.6	7,779	14.3
Hospice Facility	1,721	3.2	2,157	4.1	2,711	5.0	2,611	4.8	1,936	3.6
Decedents' Residence	12,137	22.7	12,318	23.2	12,657	23.4	13,045	24.0	13,610	25.1
Other	735	1.4	652	1.2	712	1.3	842	1.6	783	1.4
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, 2017*

Birthplace	Total	Borough of Residence					Non-Residents	Residence Unknown
		Manhattan	Bronx	Brooklyn	Queens	Staten Island		
Total	54,319	9,399	9,046	15,496	12,481	3,566	4,194	137
United States & Territories	28,892	5,574	4,625	7,196	5,968	2,676	2,825	28
Puerto Rico	3,945	776	1,625	934	370	111	125	4
China	2,268	560	36	790	765	49	68	-
Dominican Republic	2,009	646	751	269	259	13	70	1
Jamaica	1,326	51	378	524	261	9	103	-
Ukraine	1,121	37	21	903	108	41	11	-
Italy	1,003	39	122	309	293	152	88	-
Guyana	956	15	93	354	454	5	35	-
Haiti	832	48	22	532	191	1	38	-
Trinidad and Tobago	603	29	50	348	143	5	28	-
Poland	543	87	23	209	178	16	30	-
Russia	507	51	18	306	82	24	25	1
Ecuador	502	70	95	75	223	14	25	-
Cuba	383	106	83	53	113	7	21	-
Mexico	359	44	76	106	81	24	24	4
Greece	349	24	15	74	203	9	24	-
Germany	348	115	33	54	106	12	28	-
India	347	40	11	28	184	16	68	-
Colombia	344	28	22	29	232	11	20	2
Korea	313	32	17	12	206	11	35	-
Barbados	249	7	26	170	30	5	11	-
Belarus	247	12	5	202	16	11	1	-
Philippines	246	35	15	24	107	36	29	-
Ireland	237	38	41	23	93	12	30	-
Bangladesh	228	5	28	50	139	1	5	-
Other or Not Stated	6,162	930	815	1,922	1,676	295	427	97

* See Technical Notes: Geographical Units, Birthplace Presentation.

MORTALITY

Table M6. Deaths by Birthplace* and Age, New York City, 2017

Birthplace	Total	Age in Years								
		<15	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Total	54,319	696	468	1,101	1,578	3,670	7,362	9,951	12,233	17,260
United States & Territories	28,892	667	349	749	933	2,191	4,221	5,225	5,846	8,711
Puerto Rico	3,945	-	6	9	48	168	391	924	1,177	1,222
China	2,268	1	10	20	28	108	201	351	574	975
Dominican Republic	2,009	6	22	37	59	130	330	393	504	528
Jamaica	1,326	2	10	19	31	88	197	288	338	353
Ukraine	1,121	-	1	13	18	26	57	119	298	589
Italy	1,003	-	2	1	2	9	37	110	292	550
Guyana	956	1	8	10	28	74	163	208	236	228
Haiti	832	-	3	3	18	46	124	142	234	262
Trinidad and Tobago	603	-	-	8	22	58	97	150	146	122
Poland	543	-	-	10	11	23	60	75	58	306
Russia	507	1	1	11	15	8	50	66	145	210
Ecuador	502	1	4	14	23	40	70	104	119	127
Cuba	383	-	-	-	0	11	24	52	111	185
Mexico	359	-	11	42	79	91	57	29	28	22
Greece	349	-	1	1	0	7	21	56	116	147
Germany	348	-	1	1	1	7	15	54	66	203
India	347	-	2	8	16	18	47	75	108	73
Colombia	344	-	1	6	6	18	41	68	101	103
Korea	313	-	2	7	3	23	44	62	91	81
Barbados	249	-	-	-	5	8	27	58	65	86
Belarus	247	-	-	1	2	5	21	18	61	139
Philippines	246	-	-	2	3	13	39	60	71	58
Ireland	237	-	-	-	4	3	15	21	71	123
Bangladesh	228	1	2	7	10	23	67	56	48	14
Other or Not Stated	6,162	16	32	122	213	474	946	1,187	1,329	1,843

* See Technical Notes: Geographical Units, Birthplace Presentation.

Table M7. Leading Causes of Death by Age Group and Sex, New York City, 2017

		All		Male		Female	
Rank	ALL AGES	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	17,490	32.2	8,550	31.5	8,940	32.9
2	Malignant Neoplasms	13,297	24.5	6,625	24.4	6,672	24.6
3	Influenza and Pneumonia	1,945	3.6	935	3.4	1,010	3.7
4	Cerebrovascular Diseases	1,901	3.5	820	3.0	1,081	4.0
5	Diabetes Mellitus	1,802	3.3	945	3.5	857	3.2
6	Chronic Lower Respiratory Diseases	1,770	3.3	784	2.9	986	3.6
7	Use of or Poisoning by Psychoactive Substance	1,532	2.8	1,198	4.4	334	1.2
8	Essential Hypertension and Hypertensive Renal Disease	1,217	2.2	545	2.0	672	2.5
9	Alzheimer's Disease	1,116	2.1	315	1.2	801	2.9
10	Accidents Except Poisoning by Psychoactive Substance	1,053	1.9	709	2.6	344	1.3
	All Other Causes	11,196	20.6	5,728	21.1	5,468	20.1
	Total	54,319	100.0	27,154	100.0	27,165	100.0
Rank	< 1 YEAR	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Congenital Malformations, Deformations	96	19.2	45	16.6	51	22.3
2	Short Gestation and Low Birthweight	86	17.2	45	16.6	41	17.9
3	Cardiovascular Disorders Originating in the Perinatal Period	68	13.6	46	17.0	22	9.6
4	External Causes	44	8.8	16	5.9	28	12.2
5	Necrotizing Enterocolitis Of Newborn	22	4.4	15	5.5	7	3.1
6	Bacterial Sepsis of Newborn	16	3.2	10	3.7	6	2.6
6	Respiratory Distress of Newborn	16	3.2	9	3.3	7	3.1
8	Diseases of Heart	12	2.4	5	1.8	7	3.1
9	Newborn Affected by Complications of Placenta	10	2.0	6	2.2	4	1.7
10	Newborn Affected by Complications of Pregnancy	9	1.8	4	1.5	5	2.2
	All Other Causes	121	24.2	70	25.8	51	22.3
	Total	500	100.0	271	100.0	229	100.0
Rank	1 - 14 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	40	20.4	23	19.5	17	21.8
2	Congenital Malformations, Deformations	28	14.3	18	15.3	10	12.8
3	Accidents Except Poisoning by Psychoactive Substance	23	11.7	15	12.7	8	10.3
4	Chronic Lower Respiratory Diseases	13	6.6	12	10.2	1	1.3
5	Assault (Homicide)	8	4.1	3	2.5	5	6.4
5	Influenza and Pneumonia	8	4.1	5	4.2	3	3.8
	All Other Causes	76	38.8	42	35.6	34	43.6
	Total	196	100.0	118	100.0	78	100.0
Rank	15 - 24 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Assault (Homicide)	77	16.5	68	20.3	9	6.8
2	Use of or Poisoning by Psychoactive Substance	76	16.2	57	17.0	19	14.3
3	Accidents Except Poisoning by Psychoactive Substance	57	12.2	47	14.0	10	7.5
4	Intentional Self-harm (Suicide)	55	11.8	41	12.2	14	10.5
5	Malignant Neoplasms	47	10.0	32	9.6	15	11.3
6	Diseases of Heart	17	3.6	10	3.0	7	5.3
7	Chronic Lower Respiratory Diseases	14	3.0	8	2.4	6	4.5
8	Congenital Malformations, Deformations	13	2.8	7	2.1	6	4.5
9	Benign and Uncertain Neoplasms	5	1.1	3	0.9	2	1.5
10	Cerebrovascular Diseases	4	0.9	2	0.6	2	1.5
10	Influenza and Pneumonia	4	0.9	2	0.6	2	1.5
10	Pregnancy, Childbirth and the Purperium	4	0.9	0	0.0	4	3.0
	All Other Causes	95	20.3	58	17.3	37	27.8
	Total	468	100.0	335	100.0	133	100.0
Rank	25 - 34 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Use of or Poisoning by Psychoactive Substance	321	29.2	249	32.5	72	21.5
2	Intentional Self-harm (Suicide)	129	11.7	98	12.8	31	9.3
3	Malignant Neoplasms	114	10.4	57	7.4	57	17.0
4	Accidents Except Poisoning by Psychoactive Substance	79	7.2	67	8.7	12	3.6
5	Assault (Homicide)	73	6.6	60	7.8	13	3.9
6	Diseases of Heart	54	4.9	34	4.4	20	6.0
7	Human Immunodeficiency Virus (HIV) Disease	33	3.0	22	2.9	11	3.3
8	Pregnancy, Childbirth and the Purperium	25	2.3	0	0.0	25	7.5
9	Diabetes Mellitus	24	2.2	18	2.3	6	1.8
10	Influenza and Pneumonia	16	1.5	13	1.7	3	0.9
	All Other Causes	233	21.2	148	19.3	85	25.4
	Total	1,101	100.0	766	100.0	335	100.0

Continued on next page.

Table M7. Leading Causes of Death by Age Group and Sex, New York City, 2017 (Continued)

Rank	35 - 44 YEARS	All Deaths	All Percent	Male Deaths	Male Percent	Female Deaths	Female Percent
1	Malignant Neoplasms	320	20.3	151	14.6	169	31.2
2	Use of or Poisoning by Psychoactive Substance	287	18.2	241	23.2	46	8.5
3	Diseases of Heart	214	13.6	149	14.4	65	12.0
4	Intentional Self-harm (Suicide)	86	5.4	54	5.2	32	5.9
5	Accidents Except Poisoning by Psychoactive Substance	79	5.0	63	6.1	16	3.0
6	Chronic Liver Disease and Cirrhosis	67	4.2	44	4.2	23	4.3
7	Assault (Homicide)	51	3.2	42	4.1	9	1.7
8	Human Immunodeficiency Virus (HIV) Disease	46	2.9	29	2.8	17	3.1
9	Diabetes Mellitus	41	2.6	30	2.9	11	2.0
10	Mental Disorder Due to Use of Alcohol	38	2.4	32	3.1	6	1.1
	All Other Causes	349	22.1	202	19.5	147	27.2
	Total	1,578	100.0	1,037	100.0	541	100.0

Rank	45 - 54 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	1,026	28.0	476	20.9	550	39.4
2	Diseases of Heart	710	19.3	493	21.7	217	15.5
3	Use of or Poisoning by Psychoactive Substance	417	11.4	317	13.9	100	7.2
4	Diabetes Mellitus	134	3.7	86	3.8	48	3.4
5	Chronic Liver Disease and Cirrhosis	121	3.3	82	3.6	39	2.8
6	Intentional Self-harm (Suicide)	110	3.0	79	3.5	31	2.2
7	Cerebrovascular Diseases	109	3.0	69	3.0	40	2.9
8	Accidents Except Poisoning by Psychoactive Substance	106	2.9	94	4.1	12	0.9
9	Human Immunodeficiency Virus (HIV) Disease	96	2.6	62	2.7	34	2.4
10	Influenza and Pneumonia	78	2.1	48	2.1	30	2.1
	All Other Causes	763	20.8	468	20.6	295	21.1
	Total	3,670	100.0	2,274	100.0	1,396	100.0

Rank	55 - 64 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	2,477	33.6	1,276	28.6	1,201	41.4
2	Diseases of Heart	1,942	26.4	1,305	29.2	637	22.0
3	Use of or Poisoning by Psychoactive Substance	341	4.6	261	5.8	80	2.8
4	Diabetes Mellitus	325	4.4	201	4.5	124	4.3
5	Cerebrovascular Diseases	208	2.8	129	2.9	79	2.7
6	Chronic Lower Respiratory Diseases	194	2.6	102	2.3	92	3.2
7	Chronic Liver Disease and Cirrhosis	177	2.4	130	2.9	47	1.6
8	Influenza and Pneumonia	150	2.0	80	1.8	70	2.4
9	Accidents Except Poisoning by Psychoactive Substance	149	2.0	125	2.8	24	0.8
10	Essential Hypertension and Hypertensive Renal Disease	136	1.8	80	1.8	56	1.9
	All Other Causes	1,263	17.2	774	17.3	489	16.9
	Total	7,362	100.0	4,463	100.0	2,899	100.0

Rank	65 - 74 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	3,538	35.6	1,836	33.1	1,702	38.7
2	Diseases of Heart	2,960	29.7	1,776	32.0	1,184	26.9
3	Diabetes Mellitus	425	4.3	232	4.2	193	4.4
4	Chronic Lower Respiratory Diseases	338	3.4	157	2.8	181	4.1
5	Cerebrovascular Diseases	322	3.2	175	3.2	147	3.3
6	Influenza and Pneumonia	308	3.1	166	3.0	142	3.2
7	Essential Hypertension and Hypertensive Renal Disease	206	2.1	101	1.8	105	2.4
8	Accidents Except Poisoning by Psychoactive Substance	144	1.4	93	1.7	51	1.2
9	Chronic Liver Disease and Cirrhosis	134	1.3	92	1.7	42	1.0
10	Septicemia	101	1.0	52	0.9	49	1.1
	All Other Causes	1,475	14.8	868	15.6	607	13.8
	Total	9,951	100.0	5,548	100.0	4,403	100.0

Rank	75 - 84 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	4,163	34.0	2,164	35.3	1,999	32.7
2	Malignant Neoplasms	3,382	27.6	1,704	27.8	1,678	27.5
3	Chronic Lower Respiratory Diseases	511	4.2	241	3.9	270	4.4
4	Influenza and Pneumonia	506	4.1	265	4.3	241	3.9
5	Diabetes Mellitus	474	3.9	237	3.9	237	3.9
6	Cerebrovascular Disease	465	3.8	193	3.1	272	4.5
7	Essential Hypertension and Hypertensive Renal Disease	289	2.4	142	2.3	147	2.4
8	Alzheimer's Disease	236	1.9	88	1.4	148	2.4
9	Accidents Except Poisoning by Psychoactive Substance	172	1.4	96	1.6	76	1.2
10	Parkinsons Disease	146	1.2	96	1.6	50	0.8
	All Other Causes	119	1.0	52	0.8	67	1.1
	Total	12,233	100.0	6,128	100.0	6,105	100.0

Rank	≥85 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	7,416	43.0	4,803	43.5	2,613	42.1
2	Malignant Neoplasms	2,350	13.6	1,281	11.6	1,069	17.2
3	Influenza and Pneumonia	852	4.9	511	4.6	341	5.5
4	Alzheimer's Disease	820	4.8	621	5.6	199	3.2
5	Cerebrovascular Diseases	740	4.3	523	4.7	217	3.5
6	Chronic Lower Respiratory Diseases	604	3.5	380	3.4	224	3.6
7	Essential Hypertension and Hypertensive Renal Disease	519	3.0	344	3.1	175	2.8
8	Diabetes Mellitus	375	2.2	237	2.1	138	2.2
9	Accidents Except Poisoning by Psychoactive Substance	229	1.3	126	1.1	103	1.7
10	Parkinsons Disease	181	1.0	89	0.8	92	1.5
	All Other Causes	3,174	18.4	2,131	19.3	1,043	16.8
	Total	17,260	100.0	11,046	100.0	6,214	100.0

Table M8. Leading Causes of Death by Racial/Ethnic Group* and Sex, New York City, 2017

Rank	Puerto Rican	All		Male		Female	
		Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	1,391	29.2	680	28.3	711	30.0
2	Malignant Neoplasms	1,013	21.2	540	22.5	473	20.0
3	Diabetes Mellitus	225	4.7	131	5.5	94	4.0
4	Use of or Poisoning by Psychoactive Substance	208	4.4	173	7.2	35	1.5
5	Influenza and Pneumonia	197	4.1	78	3.2	119	5.0
6	Cerebrovascular Diseases	185	3.9	64	2.7	121	5.1
7	Chronic Lower Respiratory Diseases	183	3.8	82	3.4	101	4.3
8	Alzheimer's Disease	159	3.3	48	2.0	111	4.7
9	Essential Hypertension and Hypertensive Renal Disease	113	2.4	57	2.4	56	2.4
10	Chronic Liver Disease and Cirrhosis	101	2.1	61	2.5	40	1.7
	All Other Causes	996	20.9	489	20.3	507	21.4
	Total	4,771	100.0	2,403	100.0	2,368	100.0

Rank	Other Hispanic	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	1,473	25.1	747	24.1	726	26.3
2	Malignant Neoplasms	1,384	23.6	652	21.0	732	26.5
3	Use of or Poisoning by Psychoactive Substance	272	4.6	221	7.1	51	1.8
4	Cerebrovascular Diseases	253	4.3	127	4.1	126	4.6
5	Influenza and Pneumonia	208	3.5	105	3.4	103	3.7
6	Diabetes Mellitus	200	3.4	104	3.3	96	3.5
7	Accidents Except Poisoning by Psychoactive Substance	181	3.1	141	4.5	40	1.4
8	Essential Hypertension and Hypertensive Renal Disease	142	2.4	67	2.2	75	2.7
9	Chronic Lower Respiratory Diseases	140	2.4	58	1.9	82	3.0
9	Chronic Liver Disease and Cirrhosis	140	2.4	97	3.1	43	1.6
	All Other Causes	1,473	25.1	787	25.3	686	24.9
	Total	5,866	100.0	3,106	100.0	2,760	100.0

Rank	Asian and Pacific Islander	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	1,386	30.6	773	31.0	613	30.2
2	Diseases of Heart	1,267	28.0	684	27.4	583	28.7
3	Cerebrovascular Diseases	189	4.2	97	3.9	92	4.5
4	Influenza and Pneumonia	172	3.8	94	3.8	78	3.8
5	Diabetes Mellitus	166	3.7	93	3.7	73	3.6
6	Accidents Except Poisoning by Psychoactive Substance	114	2.5	78	3.1	36	1.8
7	Chronic Lower Respiratory Diseases	114	2.5	76	3.0	38	1.9
8	Essential Hypertension and Hypertensive Renal Disease	106	2.3	46	1.8	60	3.0
9	Alzheimer's Disease	98	2.2	29	1.2	69	3.4
10	Intentional Self-harm (Suicide)	63	1.4	38	1.5	25	1.2
	All Other Causes	849	18.8	488	19.6	361	17.8
	Total	4,524	100.0	2,496	100.0	2,028	100.0

Rank	Non-Hispanic White	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	8,361	35.3	4,082	35.0	4,279	35.6
2	Malignant Neoplasms	6,000	25.3	3,017	25.9	2,983	24.8
3	Chronic Lower Respiratory Diseases	876	3.7	374	3.2	502	4.2
4	Influenza and Pneumonia	827	3.5	409	3.5	418	3.5
5	Cerebrovascular Diseases	670	2.8	266	2.3	404	3.4
6	Use of or Poisoning by Psychoactive Substance	570	2.4	451	3.9	119	1.0
7	Alzheimer's Disease	523	2.2	145	1.2	378	3.1
8	Accidents Except Poisoning by Psychoactive Substance	454	1.9	290	2.5	164	1.4
9	Diabetes Mellitus	430	1.8	238	2.0	192	1.6
10	Essential Hypertension and Hypertensive Renal Disease	403	1.7	172	1.5	231	1.9
	All Other Causes	4,565	19.3	2,216	19.0	2,349	19.5
	Total	23,679	100.0	11,660	100.0	12,019	100.0

Rank	Non-Hispanic Black	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	4,629	32.3	2,143	31.5	2,486	33.0
2	Malignant Neoplasms	3,283	22.9	1,508	22.1	1,775	23.6
3	Diabetes Mellitus	736	5.1	347	5.1	389	5.2
4	Cerebrovascular Diseases	568	4.0	242	3.6	326	4.3
5	Influenza and Pneumonia	506	3.5	229	3.4	277	3.7
6	Use of or Poisoning by Psychoactive Substance	427	3.0	309	4.5	118	1.6
7	Essential Hypertension and Hypertensive Renal Disease	424	3.0	186	2.7	238	3.2
8	Chronic Lower Respiratory Diseases	421	2.9	170	2.5	251	3.3
9	Accidents Except Poisoning by Psychoactive Substance	214	1.5	138	2.0	76	1.0
10	Human Immunodeficiency Virus (HIV) Disease	201	1.4	124	1.8	77	1.0
	All Other Causes	2,938	20.5	1,417	20.8	1,521	20.2
	Total	14,347	100.0	6,813	100.0	7,534	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, 2017

Rank	Cause of Death	All Deaths	All Percent	Male Deaths	Male Percent	Female Deaths	Female Percent
1	Malignant Neoplasms	4,027	27.1	2,016	21.8	2,011	35.8
	Trachea, bronchus, and lung	640	4.3	375	4.0	265	4.7
	Colon, rectum, and anus	413	2.8	217	2.3	196	3.5
	Breast	408	2.7	4	0.0	404	7.2
	Pancreas	264	1.8	145	1.6	119	2.1
	Liver and intrahepatic bile ducts	263	1.8	195	2.1	68	1.2
2	Diseases of Heart	2,951	19.8	1,997	21.6	954	17.0
3	Use of or Poisoning by Psychoactive Substance	1,443	9.7	1,126	12.2	317	5.6
4	Diabetes Mellitus	528	3.5	338	3.6	190	3.4
5	Accidents Except Poisoning by Psychoactive Substance	508	3.4	417	4.5	91	1.6
6	Intentional Self-harm (Suicide)	481	3.2	351	3.8	130	2.3
7	Chronic Liver Disease and Cirrhosis	381	2.6	268	2.9	113	2.0
8	Cerebrovascular Diseases	374	2.5	235	2.5	139	2.5
9	Chronic Lower Respiratory Diseases	317	2.1	162	1.7	155	2.8
10	Human Immunodeficiency Virus (HIV) Disease	294	2.0	198	2.1	96	1.7
	All Other Causes	3,571	24.0	2,156	23.3	1,415	25.2
	Total	14,875	100.0	9,264	100.0	5,611	100.0

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

MORTALITY

Table M10. Leading Causes of Premature Death (Age <65 Years) by Racial/Ethnic Group* and Sex, New York City, 2017

Rank	Puerto Rican	All Deaths	All Percent	Male Deaths	Male Percent	Female Deaths	Female Percent
1	Malignant Neoplasms	250	20.0	131	16.3	119	26.6
2	Diseases of Heart	238	19.0	166	20.6	72	16.1
3	Use of or Poisoning by Psychoactive Substance	195	15.6	163	20.2	32	7.1
4	Diabetes Mellitus	62	4.9	40	5.0	22	4.9
5	Chronic Liver Disease and Cirrhosis	53	4.2	37	4.6	16	3.6
6	Human Immunodeficiency Virus (HIV) Disease	44	3.5	32	4.0	12	2.7
7	Accidents Except Poisoning by Psychoactive Substance	36	2.9	29	3.6	7	1.6
8	Influenza and Pneumonia	33	2.6	19	2.4	14	3.1
9	Cerebrovascular Diseases	31	2.5	16	2.0	15	3.3
10	Chronic Lower Respiratory Diseases	30	2.4	15	1.9	15	3.3
	All Other Causes	281	22.4	157	19.5	124	27.7
	Total	1,253	100.0	805	100.0	448	100.0
Rank	Other Hispanic	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	560	23.6	270	17.4	290	35.3
2	Diseases of Heart	371	15.6	252	16.3	119	14.5
3	Use of or Poisoning by Psychoactive Substance	258	10.9	213	13.7	45	5.5
4	Accidents Except Poisoning by Psychoactive Substance	121	5.1	110	7.1	11	1.3
5	Chronic Liver Disease and Cirrhosis	107	4.5	78	5.0	29	3.5
6	Cerebrovascular Diseases	82	3.5	56	3.6	26	3.2
7	Intentional Self-harm (Suicide)	80	3.4	68	4.4	12	1.5
8	Diabetes Mellitus	67	2.8	44	2.8	23	2.8
9	Assault (Homicide)	65	2.7	48	3.1	17	2.1
10	Certain Conditions Originating in the Perinatal Period	53	2.2	27	1.7	26	3.2
	All Other Causes	607	25.6	384	24.8	223	27.2
	Total	2,371	100.0	1,550	100.0	821	100.0
Rank	Asian and Pacific Islander	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	525	42.9	281	36.9	244	52.8
2	Diseases of Heart	201	16.4	150	19.7	51	11.0
3	Intentional Self-harm (Suicide)	54	4.4	31	4.1	23	5.0
4	Accidents Except Poisoning by Psychoactive Substance	46	3.8	37	4.9	9	1.9
5	Diabetes Mellitus	40	3.3	24	3.1	16	3.5
6	Certain Conditions Originating in the Perinatal Period	34	2.8	20	2.6	14	3.0
7	Cerebrovascular Diseases	32	2.6	18	2.4	14	3.0
8	Use of or Poisoning by Psychoactive Substance	27	2.2	22	2.9	5	1.1
9	Chronic Liver Disease and Cirrhosis	21	1.7	17	2.2	4	0.9
10	Congenital Malformations,Deformations	17	1.4	7	0.9	10	2.2
	All Other Causes	227	18.5	155	20.3	72	15.6
	Total	1,224	100.0	762	100.0	462	100.0
Rank	Non-Hispanic White	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	1,402	31.0	733	25.0	669	42.3
2	Diseases of Heart	873	19.3	655	22.3	218	13.8
3	Use of or Poisoning by Psychoactive Substance	554	12.3	440	15.0	114	7.2
4	Intentional Self-harm (Suicide)	225	5.0	160	5.4	65	4.1
5	Accidents Except Poisoning by Psychoactive Substance	154	3.4	132	4.5	22	1.4
6	Chronic Liver Disease and Cirrhosis	110	2.4	77	2.6	33	2.1
7	Diabetes Mellitus	95	2.1	69	2.4	26	1.6
8	Chronic Lower Respiratory Diseases	87	1.9	47	1.6	40	2.5
9	Cerebrovascular Diseases	74	1.6	49	1.7	25	1.6
10	Influenza and Pneumonia	70	1.5	42	1.4	28	1.8
	All Other Causes	874	19.3	532	18.1	342	21.6
	Total	4,518	100.0	2,936	100.0	1,582	100.0
Rank	Non-Hispanic Black	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	1,192	23.4	550	18.7	642	29.8
2	Diseases of Heart	1,186	23.3	717	24.3	469	21.8
3	Use of or Poisoning by Psychoactive Substance	382	7.5	267	9.1	115	5.3
4	Diabetes Mellitus	246	4.8	148	5.0	98	4.6
5	Human Immunodeficiency Virus (HIV) Disease	158	3.1	95	3.2	63	2.9
6	Assault (Homicide)	152	3.0	130	4.4	22	1.0
7	Chronic Lower Respiratory Diseases	149	2.9	77	2.6	72	3.3
8	Cerebrovascular Diseases	147	2.9	90	3.1	57	2.6
9	Accidents Except Poisoning by Psychoactive Substance	143	2.8	101	3.4	42	2.0
10	Certain Conditions Originating in the Perinatal Period	114	2.2	72	2.4	42	2.0
	All Other Causes	1,231	24.1	700	23.8	531	24.7
	Total	5,100	100.0	2,947	100.0	2,153	100.0

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

Table M11. Deaths and Death Rates per 100,000 Population from Selected Underlying Causes, Overall and by Ethnic Group* and Sex, New York City, 2017

Cause of Death	Total No.	Total Crude Rate	Total Age-Adj. Rate	Hispanic No.	Hispanic Crude Rate	Hispanic Age-Adj. Rate	Non-Hispanic White No.	NH White Crude Rate	NH White Age-Adj. Rate	Non-Hispanic Black No.	NH Black Crude Rate	NH Black Age-Adj. Rate	Asian and Pacific Islander No.	API Crude Rate	API Age-Adj. Rate	Other or Unknown No.	Male No.	Male Crude Rate	Male Age-Adj. Rate	Female No.	Female Crude Rate	Female Age-Adj. Rate
All Causes†	54,319	6.3	5.5	10,637	4.2	4.7	23,679	8.6	5.7	14,347	7.5	6.7	4,524	3.5	3.5	1,132	27,154	6.6	6.6	27,165	6.0	4.5
Natural Causes	50,863	589.9	508.1	9,730	386.5	436.3	22,289	810.2	522.7	13,468	708.1	623.1	4,308	335.5	332.0	1,068	24,632	598.6	605.6	26,231	581.7	434.2
Human Immunodeficiency Virus (HIV) Disease	369	4.3	3.8	106	4.2	4.3	45	1.6	1.5	201	10.6	9.5	5	0.4	0.3	12	249	6.1	5.7	120	2.7	2.4
Malignant Neoplasms	13,297	154.2	136.0	2,397	95.2	106.1	6,000	218.1	154.3	3,283	172.6	150.9	1,386	107.9	102.5	231	6,625	161.1	161.2	6,672	148.0	118.9
Malignant neoplasm of stomach	451	5.2	4.7	110	4.4	4.8	151	5.5	3.9	90	4.7	4.2	92	7.2	6.8	8	257	6.2	6.2	194	4.3	3.5
Malignant neoplasm of colon, rectum, and anus	1,304	15.1	13.2	248	9.9	11.0	558	20.3	14.0	343	18.0	15.7	133	10.4	9.8	22	643	15.6	15.6	661	14.7	11.6
Malignant neoplasm of pancreas	1,069	12.4	10.9	188	7.5	8.4	498	18.1	12.6	258	13.6	11.8	110	8.6	8.2	15	519	12.6	12.6	550	12.2	9.6
Malignant neoplasms of trachea, bronchus, and lung (male)	1,297	31.5	31.6	197	16.1	21.6	626	46.6	36.5	269	31.2	31.9	180	29.5	29.3	25	1,297	31.5	31.6	—	—	—
Malignant neoplasms of trachea, bronchus, and lung (female)	1,170	25.9	20.6	159	12.3	11.9	605	43.0	27.1	276	36.5	20.7	117	17.3	15.9	13	—	—	—	1,170	25.9	20.6
Malignant neoplasm of breast (female)	1,032	22.9	18.6	158	12.2	11.9	454	32.2	21.9	331	31.8	25.3	66	9.8	8.7	23	—	—	—	1,032	22.9	18.6
Malignant neoplasm of cervix uteri (female)	122	2.7	2.3	36	2.8	2.7	29	2.1	1.6	39	3.7	3.0	17	2.5	2.3	1	—	—	—	122	2.7	2.3
Malignant neoplasm of ovary (female)	377	8.4	6.9	55	4.2	4.2	198	14.1	10.1	79	7.6	6.0	37	5.5	4.9	8	—	—	—	377	8.4	6.9
Malignant neoplasm of prostate (male)	764	18.6	19.0	135	11.1	16.6	304	22.6	16.8	270	31.4	34.6	43	7.1	8.0	12	764	18.6	19.0	—	—	—
Leukemia	587	6.8	5.9	106	4.2	4.5	301	10.9	7.8	116	6.1	5.4	55	4.3	4.2	9	317	7.7	7.8	270	6.0	4.8
Diabetes Mellitus	1,802	20.9	18.3	425	16.9	19.0	430	15.6	10.8	736	38.7	34.0	166	12.9	12.6	45	945	23.0	22.8	857	19.0	14.7
Parkinson's Disease	401	4.7	3.9	80	3.2	3.8	219	8.0	4.8	52	2.7	2.4	47	3.7	3.8	3	238	5.8	6.0	163	3.6	2.5
Alzheimer's Disease	1,116	12.9	10.3	285	11.3	13.6	523	19.0	10.0	195	10.3	8.9	98	7.6	8.0	15	315	7.7	8.1	801	17.8	11.5
Diseases of Heart	17,490	202.8	171.1	2,864	113.8	130.6	8,361	303.9	184.4	4,629	243.4	212.3	1,267	98.7	98.9	369	8,550	207.9	211.5	8,940	198.3	140.3
Hypertensive heart disease	2,396	27.8	23.9	446	17.7	19.9	847	30.8	19.8	926	48.7	42.4	137	10.7	10.6	40	1,152	28.0	27.9	1,244	27.6	20.4
Chronic ischemic heart diseases	11,479	133.1	111.8	1,735	68.9	79.6	5,890	214.1	128.7	2,740	144.1	125.5	871	67.8	68.1	243	5,714	138.9	142.0	5,765	127.8	89.2
Acute myocardial infarction	1,778	20.6	17.4	332	13.2	15.1	819	29.8	18.5	440	23.1	20.1	148	11.5	11.4	39	885	21.5	21.8	893	19.8	14.0
Essential (Primary) Hypertension and Hypertensive Renal Disease	1,217	14.1	12.0	255	10.1	11.6	403	14.6	8.7	424	22.3	19.4	106	8.3	8.3	29	545	13.2	13.5	672	14.9	10.6
Cerebrovascular Diseases	1,901	22.0	18.6	438	17.4	19.8	670	24.4	14.7	568	29.9	26.1	189	14.7	14.7	36	820	19.9	20.1	1,081	24.0	17.3
Influenza and Pneumonia	1,945	22.6	19.0	405	16.1	18.5	827	30.1	18.0	506	26.6	23.4	172	13.4	13.7	35	935	22.7	23.4	1,010	22.4	16.1
Chronic Lower Respiratory Diseases	1,770	20.5	17.6	323	12.8	14.7	876	31.8	20.1	421	22.1	19.6	114	8.9	9.1	36	784	19.1	19.5	986	21.9	16.4
Asthma	161	1.9	1.7	47	1.9	2.0	29	1.1	1.1	74	3.9	3.8	8	0.6	0.6	3	83	2.0	2.0	78	1.7	1.5
Chronic Liver Disease and Cirrhosis	605	7.0	6.3	241	9.6	10.0	194	7.1	5.8	111	5.8	5.1	36	2.8	2.6	23	409	9.9	9.5	196	4.3	3.7
External Causes	3,456	40.1	37.5	907	36.0	36.3	1,390	50.5	44.1	879	46.2	43.7	216	16.8	16.3	64	2,522	61.3	58.9	934	20.7	18.5
Motor Vehicle Accidents	221	2.6	2.5	61	2.4	2.4	72	2.6	2.1	59	3.1	3.0	27	2.1	2.1	2	176	4.3	4.2	45	1.0	0.9
Falls	500	5.8	4.9	109	4.3	4.8	259	9.4	6.2	63	3.3	2.9	65	5.1	5.0	4	296	7.2	7.2	204	4.5	3.2
Intentional Self-harm (Suicide)	565	6.6	6.2	107	4.3	4.2	280	10.2	9.2	102	5.4	5.3	63	4.9	4.6	13	405	9.8	9.4	160	3.5	3.3
Assault (Homicide)	298	3.5	3.4	87	3.5	3.4	32	1.2	1.2	160	8.4	8.7	15	1.2	1.1	4	233	5.7	5.6	65	1.4	1.4
Events of Undetermined Intent	245	2.8	2.6	49	1.9	1.9	127	4.6	4.3	48	2.5	2.6	17	1.3	1.3	4	163	4.0	3.8	82	1.8	1.8
Mental and Behavioral Disorders Due to Use of or Accidental Poisoning by Psychoactive Substances, Excluding Alcohol	1,532	17.8	16.6	480	19.1	18.8	570	20.7	19.6	427	22.5	19.9	27	2.1	2.0	28	1,198	29.1	27.3	334	7.4	6.9
Accidents Except Drug Poisoning	1,053	12.2	11.0	253	10.0	10.6	454	16.5	12.2	214	11.3	10.6	114	8.9	8.9	18	709	17.2	17.1	344	7.6	6.0

* 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 the 2017 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, 2017

Community District of Residence	Population 2017 Estimates	All Causes No.	All Causes Crude Rate	All Causes Age-Adjusted (Rate per 1,000)	Heart Diseases No.	Heart Diseases Crude Rate	Malignant Neoplasms No.	Malignant Neoplasms Crude Rate	HIV Disease No.	HIV Disease Crude Rate	Influenza and Pneumonia No.	Influenza and Pneumonia Crude Rate	Cerebrovascular Diseases No.	Cerebrovascular Diseases Crude Rate	Chronic Lower Respiratory Diseases No.	Chronic Lower Respiratory Diseases Crude Rate	Chronic Liver Disease & Cirrhosis No.	Chronic Liver Disease & Cirrhosis Crude Rate	Diabetes Mellitus No.	Diabetes Mellitus Crude Rate	Mental Disorders due to Substance Use & Accidental Poisoning No.	Mental Disorders Crude Rate	Accidents Except Drug Poisoning No.	Accidents Crude Rate	Intentional Self-harm (Suicide) No.	Suicide Crude Rate	Assault† (Homicide) No.	Assault Crude Rate	Events of Undetermined Intent No.	Undetermined Crude Rate
ALL DEATH EVENTS	8,622,698	54,319	6.3	5.5	17,490	202.8	13,297	154.2	369	4.3	1,945	22.6	1,901	22.0	1,770	20.5	605	7.0	1,802	20.9	1,532	17.8	1,053	12.2	565	6.6	298	3.5	245	2.8
MANHATTAN‡	1,664,727	9,338	5.6	4.4	2,757	165.6	2,295	137.9	64	3.8	252	15.1	347	20.8	336	20.2	90	5.4	246	14.8	234	14.1	165	9.9	143	8.6	34	2.0	37	2.2
Battery Park, Tribeca (01)	63,725	213	3.3	4.4	46	72.2	60	94.2	2	3.1	7	11.0	5	7.8	10	15.7	1	1.6	1	1.6	4	6.3	7	11.0	6	9.4	-	-	-	-
Greenwich Village, SOHO (02)	92,538	355	3.8	3.1	110	118.9	101	109.1	-	-	7	7.6	8	8.6	23	24.9	2	2.2	4	4.3	8	8.6	10	10.8	4	4.3	1	1.1	2	2.2
Lower East Side (03)	175,101	1,087	6.2	4.4	330	188.5	266	151.9	7	4.0	31	17.7	47	26.8	35	20.0	7	4.0	33	18.8	21	12.0	20	11.4	21	12.0	2	1.1	4	2.3
Chelsea, Clinton (04)	128,198	543	4.2	3.8	153	119.3	141	110.0	4	3.1	20	15.6	16	12.5	23	17.9	5	3.9	19	14.8	15	11.7	7	5.5	8	6.2	2	1.6	3	2.3
Midtown Business District (05)	53,827	214	4.0	3.7	59	109.6	64	118.9	1	1.9	3	5.6	6	11.1	6	11.1	3	5.6	-	-	10	18.6	8	14.9	4	7.4	-	-	1	1.9
Murray Hill (06)	146,374	782	5.3	3.7	251	171.5	202	138.0	3	2.0	17	11.6	27	18.4	39	26.6	3	2.0	21	14.3	11	7.5	16	10.9	7	4.8	-	-	1	0.7
Upper West Side (07)	217,740	1,374	6.3	4.1	408	187.4	338	155.2	9	4.1	36	16.5	51	23.4	44	20.2	19	8.7	28	12.9	21	9.6	32	14.7	28	12.9	5	2.3	3	1.4
Upper East Side (08)	228,651	1,309	5.7	3.6	361	157.9	364	159.2	3	1.3	36	15.7	45	19.7	45	19.7	9	3.9	18	7.9	9	3.9	22	9.6	25	10.9	3	1.3	5	2.2
Manhattanville (09)	113,279	602	5.3	5.1	188	166.0	111	98.0	9	7.9	8	7.1	29	25.6	17	15.0	9	7.9	27	23.8	27	23.8	9	7.9	11	9.7	5	4.4	3	2.6
Central Harlem (10)	117,611	912	7.8	8.0	292	248.3	199	169.2	6	5.1	25	21.3	42	35.7	37	31.5	8	6.8	31	26.4	38	32.3	9	7.7	11	9.4	8	6.8	3	2.6
East Harlem (11)	126,903	968	7.6	6.8	264	208.0	226	178.1	12	9.5	30	23.6	37	29.2	32	25.2	14	11.0	39	30.7	39	30.7	14	11.0	6	4.7	4	3.2	5	3.9
Washington Heights (12)	200,754	979	4.9	4.2	295	146.9	223	111.1	8	4.0	32	15.9	34	16.9	25	12.5	10	5.0	26	13.0	31	15.4	11	5.5	12	6.0	4	2.0	7	3.5
BRONX‡	1,463,805	9,084	6.2	6.1	2,685	183.4	1,951	133.3	104	7.1	397	27.1	365	24.9	310	21.2	111	7.6	330	22.5	381	26.0	173	11.8	80	5.5	63	4.3	38	2.6
Mott Haven (01)	98,762	616	6.2	7.0	141	142.8	133	134.7	10	10.1	25	25.3	27	27.3	19	19.2	13	13.2	29	29.4	44	44.6	16	16.2	8	8.1	5	5.1	8	8.1
Hunts Point (02)	56,362	290	5.1	6.0	78	138.4	60	106.5	2	3.5	14	24.8	15	26.6	8	14.2	8	14.2	9	16.0	18	31.9	7	12.4	3	5.3	2	3.5	2	3.5
Morrisania (03)	91,736	556	6.1	7.4	157	171.1	111	121.0	13	14.2	31	33.8	13	14.2	21	22.9	11	12.0	30	32.7	31	33.8	6	6.5	7	7.6	6	6.5	2	2.2
Concourse, Highbridge (04)	156,347	823	5.3	6.0	222	142.0	177	113.2	13	8.3	33	21.1	32	20.5	29	18.5	16	10.2	40	25.6	46	29.4	19	12.2	10	6.4	4	2.6	5	3.2
University/Morris Heights (05)	136,404	660	4.8	6.4	156	114.4	151	110.7	14	10.3	29	21.3	22	16.1	25	18.3	12	8.8	33	24.2	43	31.5	15	11.0	5	3.7	10	7.3	4	2.9
East Tremont (06)	87,670	501	5.7	6.9	138	157.4	94	107.2	14	16.0	19	21.7	16	18.3	18	20.5	7	8.0	16	18.3	27	30.8	22	25.1	2	2.3	6	6.8	2	2.3
Fordham (07)	148,867	788	5.3	6.1	209	140.4	194	130.3	8	5.4	31	20.8	37	24.9	30	20.2	7	4.7	19	12.8	42	28.2	14	9.4	9	6.0	7	4.7	2	1.3
Riverdale (08)	103,776	955	9.2	5.6	385	371.0	158	152.3	5	4.8	35	33.7	20	19.3	20	19.3	3	2.9	26	25.1	16	15.4	9	8.7	14	13.5	5	4.8	3	2.9
Unionport, Soundview (09)	185,263	1,024	5.5	5.5	284	153.3	233	125.8	7	3.8	42	22.7	45	24.3	29	15.7	12	6.5	42	22.7	40	21.6	21	11.3	3	1.6	9	4.9	4	2.2
Throgs Neck (10)	122,724	1,010	8.2	5.5	333	271.3	228	185.8	2	1.6	43	35.0	51	41.6	47	38.3	5	4.1	27	22.0	27	22.0	12	9.8	9	7.3	4	3.3	1	0.8
Pelham Parkway (11)	116,972	856	7.3	5.8	270	230.8	191	163.3	3	2.6	47	40.2	31	26.5	31	26.5	13	11.1	26	22.2	15	12.8	15	12.8	7	6.0	1	0.9	1	0.9
Williamsbridge (12)	157,000	1,005	6.4	5.8	312	198.7	221	140.8	13	8.3	48	30.6	45	28.7	33	21.0	4	2.5	33	21.0	32	20.4	17	10.8	3	1.9	6	3.8	4	2.5
BROOKLYN‡	2,648,773	15,491	5.8	5.3	5,274	199.1	3,705	139.9	127	4.8	650	24.5	528	19.9	442	16.7	160	6.0	669	25.3	360	13.6	277	10.5	131	4.9	115	4.3	83	3.1
Williamsburg, Greenpoint (01)	200,724	724	3.6	4.4	222	110.6	165	82.2	3	1.5	28	13.9	22	11.0	21	10.5	9	4.5	37	18.4	26	13.0	16	8.0	6	3.0	4	2.0	7	3.5
Fort Greene, Brooklyn Heights (02)	124,837	616	4.9	4.8	195	156.2	129	103.3	11	8.8	34	27.2	18	14.4	21	16.8	8	6.4	27	21.6	19	15.2	9	7.2	7	5.6	-	-	2	1.6
Bedford Stuyvesant (03)	152,009	894	5.9	6.3	288	189.5	188	123.7	8	5.3	40	26.3	34	22.4	28	18.4	11	7.2	54	35.5	28	18.4	13	8.6	5	3.3	12	7.9	7	4.6
Bushwick (04)	112,295	517	4.6	5.8	148	131.8	112	99.7	11	9.8	24	21.4	16	14.2	13	11.6	12	10.7	25	22.3	27	24.0	8	7.1	4	3.6	3	2.7	1	0.9
East New York (05)	180,980	1,135	6.3	6.4	338	186.8	248	137.0	16	8.8	51	28.2	51	28.2	28	15.5	16	8.8	65	35.9	43	23.8	12	6.6	11	6.1	22	12.2	4	2.2
Park Slope (06)	110,406	506	4.6	5.2	153	138.6	132	119.6	1	0.9	17	15.4	18	16.3	25	22.6	7	6.3	13	11.8	15	13.6	10	9.1	7	6.3	2	1.8	3	2.2
Sunset Park (07)	133,673	520	3.9	4.7	144	107.7	153	114.5	4	3.0	17	12.7	22	16.5	19	14.2	14	10.5	14	10.5	8	6.0	11	8.2	8	6.0	-	-	3	2.2
Crown Heights North (08)	97,414	599	6.1	6.0	171	175.5	141	144.7	11	11.3	23	23.6	27	27.7	17	17.5	3	3.1	47	48.2	16	16.4	9	9.2	2	2.1	7	7.2	4	4.1
Crown Heights South (09)	98,658	626	6.3	5.5	199	201.7	155	157.1	9	9.1	24	24.3	31	31.4	17	17.2	5	5.1	51	51.7	16	16.2	8	8.1	5	5.1	3	3.0	2	2.0
Bay Ridge (10)	143,506	843	5.9	4.6	293	204.2	213	148.4	3	2.1	29	20.2	33	23.0	35	24.4	8	5.6	14	9.8	16	11.1	26	18.1	17	11.8	4	2.8	5	3.5
Bensonhurst (11)	207,638	1,219	5.9	4.4	441	212.4	314	151.2	3	1.4	59	28.4	34	16.4	34	16.4	7	3.4	26	12.5	22	10.6	25	12.0	10	4.8	3	1.4	2	1.0
Borough Park (12)	203,093	919	4.5	4.5	307	151.2	246	121.1	1	0.5	72	35.5	21	10.3	24	11.8	4	2.0	21	10.3	9	4.4	19	9.4	3	1.5	-	-	10	4.9
Coney Island (13)	107,789	1,231	11.4	6.5	531	492.6	289	268.1	4	3.7	46	42.7	30	27.8	22	20.4	14	13.0	32	29.7	26	24.1	15	13.9	8	7.4	7	6.5	2	1.9
Flatbush, Midwood (14)	166,024	947	5.7	5.2	350	210.8	218	131.3	6	3.6	43	25.9	38	22.9	24	14.5	11	6.6	29	17.5	12	7.2	19	11.4	7	4.2	5	3.0	12	7.2
Sheepshead Bay (15)	175,805	1,337	7.6	5.1	544	309.4	336	191.1	-	-	40	22.8	29	16.5	39	22.2	7	4.0	27	15.4	21	11.9	27	15.4	8	4.6	5	2.8	10	5.7
Brownsville (16)	84,318	661	7.8	8.1	202	239.6	131	155.4	10	11.9	29	34.4	25	29.6	22	26.1	7	8.3	52	61.7	29	34.4	17	20.2	12	14.2	4	4.7	-	-
East Flatbush (17)	154,307	973	6.3	5.3	314	203.5	244	158.1	14	9.1	36	23.3	34	22.0	16	10.4	9	5.8	65	42.1	8	5.2	16	10.4	6	3.9	17	11.0	4	2.6
Canarsie (18)	195,200	1,224	6.3	5.5	434	222.3	291	149.1	12	6.1	38	19.5	45	23.1	37	19.0	8	4.1	70	35.9	19	9.7	17	8.7	5	2.6	10	5.1	6	3.1

62

Table M12. Deaths and Death Rates* per 100,000 Population from Selected Underlying Causes by Community District of Residence, New York City, 2017 (Continued)

Community District of Residence	Population	All Causes (Rate per 1,000) No.	Crude Rate	Age-Adjusted Rate	Heart Diseases No.	Crude Rate	Malignant Neoplasms No.	Crude Rate	HIV Disease No.	Crude Rate	Influenza and Pneumonia No.	Crude Rate	Cerebrovascular Diseases No.	Crude Rate	Chronic Lower Respiratory Diseases No.	Crude Rate	Chronic Liver Disease & Cirrhosis No.	Crude Rate	Diabetes Mellitus No.	Crude Rate	Mental Disorders due to Substance Use & Accidental Poisoning No.	Crude Rate	Accidents Except Drug Poisoning No.	Crude Rate	Intentional Self-harm (Suicide) No.	Crude Rate	Assault† (Homicide) No.	Crude Rate	Events of Undetermined Intent No.	Crude Rate
QUEENS	2,365,938	12,477	5.3	4.3	4,533	191.6	2,882	121.8	35	1.5	427	18.0	427	18.0	404	17.1	130	5.5	355	15.0	272	11.5	249	10.5	122	5.2	42	1.8	41	1.7
Astoria, Long Island City (01)	200,334	983	4.9	4.7	379	189.2	229	114.3	-	-	28	14.0	30	15.0	41	20.5	8	4.0	18	9.0	22	11.0	25	12.5	8	4.0	2	1.0	5	2.5
Sunnyside, Woodside (02)	144,440	484	3.4	3.2	164	113.5	141	97.6	-	-	19	13.2	12	8.3	8	5.5	6	4.2	7	4.8	8	5.5	12	8.3	6	4.2	1	0.7	3	2.1
Jackson Heights (03)	181,286	732	4.0	3.9	254	140.1	155	85.5	4	2.2	33	18.2	25	13.8	21	11.6	13	7.2	15	8.3	11	6.1	23	12.7	16	8.8	2	1.1	2	1.1
Elmhurst, Corona (04)	190,252	667	3.5	3.5	209	109.9	170	89.4	1	0.5	31	16.3	29	15.2	13	6.8	10	5.3	17	8.9	16	8.4	15	7.9	2	1.1	3	1.6	2	1.1
Ridgewood, Glendale (05)	166,877	956	5.7	5.1	352	210.9	232	139.0	-	-	26	15.6	14	8.4	38	22.8	12	7.2	22	13.2	40	24.0	25	15.0	6	3.6	-	-	3	1.8
Rego Park, Forest Hills (06)	116,162	802	6.9	4.1	316	272.0	173	148.9	-	-	31	26.7	29	25.0	30	25.8	6	5.2	15	12.9	17	14.6	10	8.6	11	9.5	-	-	4	3.4
Flushing (07)	267,293	1,640	6.1	3.9	617	230.8	397	148.5	-	-	74	27.7	49	18.3	46	17.2	9	3.4	35	13.1	32	12.0	35	13.1	16	6.0	1	0.4	3	1.1
Fresh Meadows, Briarwood (08)	157,597	873	5.5	4.1	341	216.4	178	112.9	5	3.2	36	22.8	34	21.6	37	23.5	6	3.8	20	12.7	17	10.8	12	7.6	5	3.2	3	1.9	4	2.5
Woodhaven (09)	149,450	660	4.4	4.5	199	133.2	147	98.4	3	2.0	21	14.1	26	17.4	18	12.0	18	12.0	30	20.1	21	14.1	19	12.7	8	5.4	3	2.0	5	3.3
Howard Beach (10)	126,424	675	5.3	4.7	219	173.2	155	122.6	1	0.8	15	11.9	26	20.6	27	21.4	11	8.7	32	25.3	11	8.7	18	14.2	6	4.7	5	4.0	1	0.8
Bayside (11)	120,823	650	5.4	3.4	234	193.7	173	143.2	2	1.7	20	16.6	26	21.5	21	17.4	3	2.5	9	7.4	11	9.1	5	4.1	7	5.8	-	-	3	2.5
Jamaica, St. Albans (12)	234,369	1,381	5.9	5.1	505	215.5	303	129.3	5	2.1	34	14.5	52	22.2	31	13.2	11	4.7	63	26.9	38	16.2	19	8.1	11	4.7	13	5.5	1	0.4
Queens Village (13)	195,297	976	5.0	3.8	311	159.2	219	112.1	4	2.0	24	12.3	45	23.0	26	13.3	8	4.1	35	17.9	11	5.6	16	8.2	12	6.1	5	2.6	2	1.0
The Rockaways (14)	114,526	998	8.7	7.4	433	378.1	210	183.4	10	8.7	35	30.6	30	26.2	47	41.0	9	7.9	37	32.3	17	14.8	15	13.1	8	7.0	4	3.5	3	2.6
STATEN ISLAND	479,456	3,565	7.4	6.1	1,332	277.8	851	177.5	15	3.1	120	25.0	88	18.4	166	34.6	28	5.8	118	24.6	106	22.1	67	14.0	34	7.1	12	2.5	14	2.9
Port Richmond (01)	183,523	1,265	6.9	6.4	456	248.5	283	154.2	12	6.5	36	19.6	30	16.3	62	33.8	13	7.1	48	26.2	45	24.5	25	13.6	14	7.6	8	4.4	8	4.4
Willowbrook, South Beach (02)	136,167	1,112	8.2	5.6	437	320.9	234	171.8	1	0.7	46	33.8	28	20.6	57	41.9	8	5.9	44	32.3	29	21.3	15	11.0	4	2.9	3	2.2	5	3.7
Tottenville (03)	159,028	1,186	7.5	6.2	438	275.4	334	210.0	2	1.3	38	23.9	30	18.9	47	29.6	7	4.4	26	16.3	32	20.1	27	17.0	15	9.4	1	0.6	1	0.6
NONRESIDENTS	4,194		-	-	869	-	1,603	-	21	-	96	-	142	-	110	-	83	-	80	-	140	-	103	-	49	-	30	-	21	-
RESIDENCE UNKNOWN	137		-	-	37	-	4	-	1	-	3	-	1	-	2	-	2	-	1	-	36	-	15	-	5	-	-	-	9	-

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. See Technical Notes: Population, Community District.

* Rates are calculated based on 2017 population estimates derived by the 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 the Bronx are slightly different from Table M1.

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
Ratio 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 not calculated for count less than 5.
¶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

Population for Selected Causes, New York City, 1901-2017

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	2017
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	500
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	4.3
3,220	3,226	2,602	1,714	1,333	1,097	1,159	912	609	512	445	378	383	377	326	342	312	344
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	2.9
2,909	2,922	2,351	1,480	1,131	927	972	753	478	394	335	293	301	283	254	242	230	250
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	2.1
2,362	2,276	1,885	1,288	835	719	698	686	518	431	388	368	379	371	401	345	388	347
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	3.0
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	5.1
§§	§§	§§	§§	§§	§§	§§	§§	30	32	39	37	29	30	27	39	24	43
								24.1	25.7	30.5	30.1	23.5	24.9	22.1	32.1	19.9	36.7
107	109	73	36	28	33	29	26	22	29	32	30	23	25	23	35	18	25
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	21.4
824	624	432	235	141	125	174	135	39	25	16	27	13	13	22	17	16	13
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	0.2
52	43	39	32	22	35	55	34	14	5	5	5	3	4	9	3	5	2
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	0.0
§§	§§	§§	§§	§§	768§	3,703	6,257	2,716	1,603	1,032	766	609	579	523	483	432	369
					10.7	50.9	83.2	36.4	19.9	12.7	9.3	7.3	6.9	6.2	5.6	5.1	4.3
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	13,297
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	154.2
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	1,297
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	31.5
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	1,170
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	25.9
§§	§§	§§	§§	§§	§§	§§	1,805	1,685	1,546	1,414	1,374	1,380	1,329	1,268	1,275	1,311	1,304
							24.0	22.6	19.2	17.4	16.6	16.6	15.8	14.9	14.9	15.4	15.1
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	1,032
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	22.9
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	1,802
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	20.9
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	21,031
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	243.9
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	1,901
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	22.0
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	1,945
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	22.6
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	2,407
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	27.9
1,858	2,386	2,936	2,440	2,185	1,789	1,289	946	697	521	493	550	534	586	589	610	522	605
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	7.0
573	509	447	372	381	383	816	311	564	654	429	453	461	464	486	437	437	388
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	4.5
96	263	551	677	414	573	787	947	875	866	262	158	152	148	170	195	172	134
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	1.6
§§	§§	§§	§§	§§	1	143	49	26	41	353	600	660	724	723	856	1,320	1,398
					||	2.0	0.7	0.3	0.5	4.3	7.3	7.9	8.6	8.5	10.0	15.5	16.2
655	714	887	834	606	477	624	554	419	386	315	283	315	305	271	258	245	221
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	2.6
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	832
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	9.6
711	908	680	641	711	603	600	599	514	483	477	509	557	550	565	552	525	565
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	6.6
366	592	992	1,663	1,700	1,763	1,902	1,815	778	624	549	528	440	343	353	379	362	298
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	3.5
§§	§§	946	1,062	699	696	504	161	151	232	212	247	241	227	253	265	259	245
		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	2.8
§§	§§	§§	§§	§§	§§	§§	84	115	232	400	626	696	740	789	1,079	1,100	1,116
							1.2	1.5	2.9	4.9	7.6	8.3	8.8	9.3	12.6	12.9	12.9
§§	§§	§§	§§	§§	§§	§§	269	243	196	154	171	166	180	182	167	157	161
							3.7	3.3	2.4	1.9	2.1	2.0	2.1	2.1	2.0	1.8	1.9

MORTALITY

Table M14. Alcohol-attributable Deaths Due to Excessive Alcohol Use, Age ≥ 20 Years*, New York City, 2017

Total for All Causes	Total†	Male	Female
	2,129	1,507	621
Chronic Causes*			
Acute pancreatitis	14	10	4
Alcohol abuse	57	49	8
Alcohol cardiomyopathy	6	5	1
Alcohol dependence syndrome	167	128	39
Alcoholic liver disease	424	313	111
Alcoholic psychosis	4	2	2
Breast cancer (females only)	18	< 1	18
Cholelithiases	0	-	0
Chronic hepatitis	< 1	-	< 1
Chronic pancreatitis	3	1	2
Epilepsy	6	4	2
Esophageal cancer	10	8	2
Esophageal varices	2	< 1	2
Fetal alcohol syndrome	1	0	1
Gastroesophageal hemorrhage	< 1	< 1	0
Hypertension	141	64	76
Ischemic heart disease	33	20	13
Laryngeal cancer	6	5	1
Liver cancer	47	32	15
Liver cirrhosis unspecified	98	47	51
Low birth weight prematurity IUGR‡ death	4	2	2
Oropharyngeal cancer	11	8	3
Portal hypertension	1	< 1	< 1
Prostate cancer (males only)	6	6	0
Stroke hemorrhagic	39	30	9
Stroke ischemic	11	7	4
Supraventricular cardiac dysrhythmia	5	2	3
Subtotal	1,115	745	371
Acute Causes			
Alcohol poisoning	76	64	12
Aspiration	3	3	< 1
Child maltreatment	2	1	1
Drowning	4	3	1
Fall injuries	159	94	65
Fire injuries	23	13	10
Homicide	134	107	27
Hypothermia	4	3	1
Motor-vehicle traffic crashes	67	59	8
Other road vehicle crashes	5	5	< 1
Poisoning (not alcohol)	407	320	88
Suicide	129	92	36
Water transport	< 1	< 1	-
Subtotal	1,013	763	251

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.

Table M15. Smoking-attributable Deaths and Age-adjusted Death Rates, Age ≥ 35 Years, New York City, 2014-2017

Disease Category	2014						2015						2016						2017					
	Deaths			Age-adjusted Rates (per 100,000 Population)			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	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	4,734	3,363	8,097	233.0	116.7	165.3
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	70	62	132	3.5	2.1	2.7
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	494	593	1,088	26.6	20.5	22.8
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	1,680	1,141	2,821	83.2	39.9	58.2
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	63	32	95	2.9	1.1	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	167	123	290	6.8	4.3	5.5
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	183	83	266	9.8	2.9	5.6
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	1,065	857	1,922	51.3	29.5	38.5
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	669	263	932	32.7	9.0	18.8
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	205	64	269	8.7	2.4	5.4
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	70	86	156	3.7	3.0	3.3
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	70	57	127	3.7	2.0	2.7

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 diseases, cerebrovascular diseases, other vascular diseases and diabetes mellitus.

† Other heart diseases are 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.

Table M16. Deaths From HIV Disease, Overall and by Sex, Age, and Ethnic Group,

AGE GROUP/ETHNIC GROUP*		ALL														
		1983-2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	1983-2006	2007	2008
ALL AGES	Total	75,642	1,115	1,073	933	832	766	609	579	523	483	432	369	57,706	711	702
	Puerto Rican	14,138	224	217	187	196	186	115	138	88	102	70	63	10,383	142	138
	Other Hispanic	6,735	103	118	105	72	46	37	34	43	29	54	43	5,487	76	84
	Asian & Pacific Islander	487	5	10	3	6	4	5	8	2	5	6	5	431	3	7
	Non-Hispanic White	18,860	143	129	90	100	94	80	73	62	50	45	45	16,401	103	104
	Non-Hispanic Black	31,593	625	583	537	449	421	359	311	298	277	231	201	21,940	377	356
	Other or Unknown	3,829	15	16	11	9	15	13	15	30	20	26	12	3,064	10	13
0-24	Total	2,396	21	17	15	8	16	13	8	9	8	7	2	1,315	10	7
	Puerto Rican	452	7	3	2	1	4	2	-	-	2	-	-	253	3	-
	Other Hispanic	264	5	-	3	-	-	2	-	-	1	-	1	162	4	-
	Asian & Pacific Islander	14	-	-	-	1	-	-	-	-	-	-	-	9	-	-
	Non-Hispanic White	360	1	1	3	-	-	-	1	2	1	-	-	220	1	1
	Non-Hispanic Black	1,174	8	13	7	6	12	9	7	7	4	7	1	605	2	6
	Other or Unknown	132	-	-	-	-	-	-	-	-	-	-	-	66	-	-
25-34	Total	17,109	52	77	49	37	40	34	29	28	28	31	33	12,326	32	48
	Puerto Rican	3,535	8	8	7	11	2	3	5	4	5	3	2	2,466	3	5
	Other Hispanic	1,808	4	11	3	8	8	6	4	3	2	3	5	1,439	4	10
	Asian & Pacific Islander	92	1	-	1	-	2	1	-	-	1	1	2	78	-	-
	Non-Hispanic White	4,063	3	6	5	1	3	1	2	1	1	-	2	3,383	2	4
	Non-Hispanic Black	6,715	35	52	33	17	25	23	17	19	18	24	21	4,287	22	29
	Other or Unknown	896	1	-	-	-	-	-	1	1	1	-	1	673	1	-
35-44	Total	31,631	311	246	190	142	125	90	73	60	64	54	46	24,242	177	144
	Puerto Rican	5,769	64	57	45	34	28	17	22	12	8	7	4	4,293	41	30
	Other Hispanic	2,664	27	37	28	19	8	4	3	7	5	10	5	2,179	17	23
	Asian & Pacific Islander	195	2	3	1	-	1	2	3	1	3	1	2	181	1	3
	Non-Hispanic White	8,307	46	34	18	16	12	15	7	10	4	5	5	7,237	32	22
	Non-Hispanic Black	13,103	168	113	98	71	76	49	37	28	40	30	30	9,076	83	65
	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	96	13,921	289	275
	Puerto Rican	3,210	84	89	65	85	75	46	55	34	38	16	13	2,463	58	56
	Other Hispanic	1,361	43	46	46	29	15	14	14	16	9	13	17	1,165	32	33
	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	14	3,931	40	37
	Non-Hispanic Black	7,459	256	231	200	173	150	123	111	87	76	58	45	5,496	156	139
	Other or Unknown	872	4	9	6	3	6	6	6	13	4	7	7	754	3	7
55-64	Total	5,531	213	231	241	239	213	169	172	174	141	150	117	4,621	154	173
	Puerto Rican	960	39	49	49	51	54	34	42	24	33	25	25	746	23	38
	Other Hispanic	488	18	15	18	11	9	5	11	13	4	21	11	416	13	13
	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	17	1,271	19	30
	Non-Hispanic Black	2,397	128	131	150	136	112	101	92	106	80	78	61	1,919	96	88
	Other or Unknown	262	5	4	3	3	8	3	3	11	8	10	3	231	2	4
≥65	Total	1,610	70	77	86	76	85	86	82	85	99	84	75	1,280	49	55
	Puerto Rican	212	22	11	19	14	23	13	14	14	16	19	19	162	14	9
	Other Hispanic	150	6	9	7	5	6	6	2	4	8	7	4	126	6	5
	Asian & Pacific Islander	18	1	2	1	-	1	-	1	-	-	2	1	13	1	1
	Non-Hispanic White	412	10	11	8	10	8	12	14	13	13	14	7	359	9	10
	Non-Hispanic Black	745	30	43	49	46	46	54	47	51	59	34	43	557	18	29
	Other or Unknown	73	1	1	2	1	1	1	4	3	3	8	1	63	1	1

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.

New York City, 1983-2017

MALE									FEMALE											
2009	2010	2011	2012	2013	2014	2015	2016	2017	1983-2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
603	574	528	402	398	359	332	296	249	17,936	404	371	330	258	238	207	181	164	151	136	120
125	135	123	75	94	56	68	50	44	3,755	82	79	62	61	63	40	44	32	34	20	19
71	54	39	28	28	36	19	44	34	1,248	27	34	34	18	7	9	6	7	10	10	9
2	3	2	4	5	1	3	6	4	56	2	3	1	3	2	1	3	1	2	-	1
68	76	75	63	53	50	40	36	34	2,459	40	25	22	24	19	17	20	12	10	9	11
329	297	277	223	204	196	185	140	124	9,653	248	227	208	152	144	136	107	102	92	91	77
8	9	12	9	14	20	17	20	9	765	5	3	3	-	3	4	1	10	3	6	3
6	4	13	6	6	7	5	2	1	1,081	11	10	9	4	3	7	2	2	3	5	1
-	-	2	-	-	-	2	-	-	199	4	3	2	1	2	2	-	-	-	-	-
-	-	-	1	-	-	-	-	1	102	1	-	3	-	-	1	-	-	1	-	-
-	1	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	2	1	-	-	140	-	-	1	-	-	-	1	-	-	-	-
4	3	11	5	6	5	2	2	-	569	6	7	3	3	1	4	1	2	2	5	1
-	-	-	-	-	-	-	-	-	66	-	-	-	-	-	-	-	-	-	-	-
32	27	29	24	27	17	21	24	22	4,783	20	29	17	10	11	10	2	11	7	7	11
6	7	2	2	5	-	2	2	1	1,069	5	3	1	4	-	1	-	4	3	1	1
2	6	7	5	4	3	2	3	4	369	-	1	1	2	1	1	-	-	-	-	1
-	-	1	1	-	-	1	1	2	14	1	-	1	-	1	-	-	-	-	-	-
5	1	2	1	1	1	1	-	1	680	1	2	-	-	1	-	1	-	-	-	1
19	13	17	15	16	12	14	18	14	2,428	13	23	14	4	8	8	1	7	4	6	7
-	-	-	-	1	1	1	-	-	223	-	-	-	-	-	-	-	-	-	-	1
111	94	77	54	45	33	32	31	29	7,389	134	102	79	48	48	36	28	27	32	23	17
26	20	17	10	10	4	6	6	3	1,476	23	27	19	14	11	7	12	8	2	1	1
16	14	8	1	3	5	2	8	4	485	10	14	12	5	-	3	-	2	3	2	1
1	-	-	1	1	-	1	1	2	14	1	-	-	-	1	1	2	1	2	-	-
12	11	10	13	3	7	1	4	5	1,070	14	12	6	5	2	2	4	3	3	1	-
56	47	42	28	27	16	20	12	15	4,027	85	48	42	24	34	21	10	12	20	18	15
-	2	-	1	1	1	2	-		317	1	1	-	-	-	2	-	1	2	1	-
225	219	183	136	140	115	97	63	62	3,443	159	150	127	111	104	81	75	52	46	43	34
51	62	43	29	38	22	25	10	9	747	26	33	14	23	32	17	17	12	13	6	4
35	20	12	12	10	13	7	11	13	196	11	13	11	9	3	2	4	3	2	2	4
-	1	-	-	1	1	1	1		10	-	2	-	2	-	-	-	-	-	-	-
25	28	30	22	20	13	11	8	11	409	21	8	10	9	11	6	8	3	4	3	3
111	105	95	69	65	55	50	28	24	1,963	100	92	89	68	55	54	46	32	26	30	21
3	3	3	4	6	11	3	5	5	118	1	2	3	-	3	2	-	2	1	2	2
164	179	159	120	118	130	103	109	84	910	59	58	77	60	54	49	54	44	38	41	33
30	38	41	25	33	21	20	19	19	214	16	11	19	13	13	9	9	3	13	6	6
12	10	7	4	10	11	1	16	8	72	5	2	6	1	2	1	1	2	3	5	3
-	1	-	2	2	-		1		8	-	-	-	1	-	-	1	-	-	-	-
17	28	25	19	16	18	15	12	12	107	3	2	4	8	5	5	5	2	1	3	5
102	99	78	67	54	75	59	54	42	478	32	43	48	37	34	34	38	31	21	24	19
3	3	8	3	3	5	8	7	3	31	3	-	-	-	-	-	-	6	-	3	-
65	51	67	62	62	57	74	67	51	330	21	22	21	25	18	24	20	28	25	17	24
12	8	18	9	8	9	13	13	12	50	8	2	7	6	5	4	6	5	3	6	7
6	4	5	5	1	4	7	6	4	24	-	4	1	1	1	1	1	-	1	1	-
1	-	1	-	1	-		2	-	5	-	1	-	-	-	-	-	-	-	-	1
7	8	8	8	13	9	11	12	5	53	1	1	1	2	-	4	1	4	2	2	2
37	30	34	39	36	33	40	26	29	188	12	14	12	16	12	15	11	18	19	8	14
2	1	1	1	3	2	3	8	1	10	-	-	-	-	-	-	-	1	1	-	-

Table M17. Selected Characteristics of Deaths Due to Fatal Occupational Injuries, New York City, 2017*

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	87	24	11		31	14	7
Selected Industries							
Government§ (Federal, State, Local)	10	4	3				
Private industry§	77	20	8		29	13	7
Goods producing	24				12	5	5
Construction & Manufacturing	24				11	4	4
Service providing	53	18	8		17	8	
Trade, transportation, and utilities	18	4	6		4		
Financial activities	7	4					
Professional and business services	10	4			5		
Educational and health services	6	4					
Leisure and hospitality	5				3		
Other services, except public adminstration	4						
Sex							
Female	10	5	3				
Male	77	19	8		30	13	7
Race or ethnic origin‖							
Non-Hispanic white	41	11	3		16	7	4
Non-Hispanic black	9	5					
Hispanic	24	5	5		9	5	
Asian	11				5		
Age							
<25 years							
25-34 years	11	4				3	
35-44 years	18	4			4	8	
45-54 years	17	5	3		4		3
55-64 years	26	6	3		15		
>65 years	13	5			5		

*Source Bureau of Labor Statistics: Fatal Occupational Injuries in New York City https://www.bls.gov/iif/oshwc/cfoi/tgs/2017/iiffw68.htm

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

‡Totals for major categories may include subcategories not shown separately. Blank cells indicate no data reported or data that do not meet publication criteria. CFOI fatality counts exclude illness-related deaths unless precipitated by an injury event.

§Includes all fatal occupational injuries meeting this ownership criterion across all specific years, regardless on industry classification system.

‖Persons identified as Hispanic or Latino may be of any race. The race categories shown exclude data for Hispanic and Latino workers.

Note: For 2017 data, please visit https://www.bls.gov/iif/oshwc/cfoi/tgs/2017/iiffw68.htm

Table M18. Deaths Due to Accidents, Overall and by Age and Sex, New York City, 2017

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	2,451	9	13	5	2	8	2	21	6	81	22	299	78	293	58	387	101	349	95	151	62	204	205
Motor Vehicle Except Injury to Pedestrian, Pedal Cyclist, and Motorcyclist	41	-	-	-	1	-	-	4	-	5	2	7	1	4	-	7	1	4	-	1	1	1	2
Injury to Pedestrians	129	0	1	-	-	1	1	2	-	6	-	9	4	11	3	11	3	18	3	19	8	19	10
Collision with motor vehicle	110	-	1	-	-	1	-	2	-	5	-	6	4	7	3	8	3	12	3	19	8	18	10
Collision with railway transportation	18	-	-	-	-	-	1	-	-	1	-	3	-	4	-	3	-	5	-	-	-	1	-
Other collision	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Injury to Pedal Cyclist	26	-	-	-	-	1	-	1	-	3	-	5	-	2	-	4	-	1	-	4	-	3	-
Collision with motor vehicle	20	-	-	-	-	1	-	1	-	3	-	4	-	1	-	1	-	1	-	4	-	2	-
Other collision	6	-	-	-	-	-	-	-	-	-	-	1	-	1	-	3	-	-	-	-	-	1	-
Injury to Motorcyclist	33	-	-	-	-	-	-	-	-	6	-	11	-	7	-	4	-	4	-	1	-	-	-
Water Transport Accidents	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Air and Space Transport Accidents	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Transport Accidents	19	-	1	-	-	-	-	2	-	2	-	5	1	1	1	4	-	1	-	1	1	1	-
Sequelae (Late Effects) of Transport Accidents	11	-	-	-	-	-	-	-	-	-	-	3	-	1	-	1	-	2	-	1	2	-	1
Fall	500	1	-	1	-	1	-	1	-	6	-	8	2	17	3	21	4	59	6	39	26	142	163
Firearm Discharge	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drowning and Submersion	12	-	-	-	-	-	-	1	-	1	-	1	1	2	-	3	-	2	-	1	-	-	-
Smoke, Fire, and Flames	65	1	3	2	1	3	-	2	4	-	-	1	1	2	-	5	-	8	5	3	3	13	8
Poisoning by Noxious Substances	1,481	-	-	-	-	1	-	7	1	51	17	243	66	241	48	315	90	236	74	65	15	8	5
Poisoning by psychoactive substances*	1,398	-	-	-	-	1	-	5	1	50	17	232	66	230	42	293	89	224	71	58	11	5	3
Poisoning by other noxious substances	83	-	-	-	-	-	-	2	-	1	-	11	-	11	6	22	1	12	3	7	4	3	2
Exposure to Excessive Natural Heat	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1	1	1	1
Exposure to Excessive Natural Cold	9	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	1	2	2	1	1	-
Suffocation	56	6	8	-	-	-	-	2	-	1	1	1	-	4	-	4	-	8	1	7	1	7	4
Contact with Machinery	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Nontransport Accidents	51	1	-	2	-	1	-	1	-	1	-	2	-	1	1	6	2	4	2	6	3	7	11
Sequelae (Late Effects) of Nontransport Accidents	11	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	-	1	-	2	-	3	-

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

71

Table M19. Deaths Due to Intentional Self-harm (Suicide), Overall and by Age and Sex, New York City, 2017

Method	All Ages	0-4 Male	0-4 Female	5-9 Male	5-9 Female	10-14 Male	10-14 Female	15-19 Male	15-19 Female	20-24 Male	20-24 Female	25-34 Male	25-34 Female	35-44 Male	35-44 Female	45-54 Male	45-54 Female	55-64 Male	55-64 Female	65-74 Male	65-74 Female	≥75 Male	≥75 Female
Total	565	0	0	0	0	4	2	12	9	29	5	98	31	54	32	79	31	75	20	28	24	26	6
Poisoning by Drug and Medicinal Substances	78	-	-	-	-	1	1	2	1	1	-	7	11	3	8	10	12	7	4	3	5	-	2
Poisoning by Other Substances	11	-	-	-	-	-	-	-	-	1	-	-	-	2	-	3	-	2	-	-	1	2	-
Hanging, Strangulation, and Suffocation	222	-	-	-	-	2	1	3	7	8	3	48	14	21	9	33	10	31	4	8	7	12	1
Drowning and Submersion	27	-	-	-	-	-	-	3	1	3	-	4	2	3	-	2	-	4	-	2	2	1	-
Firearm Discharge	54	-	-	-	-	-	-	1	-	3	-	12	-	7	-	11	-	6	1	6	-	6	-
Sharp Object	11	-	-	-	-	-	-	-	-	-	-	1	-	-	-	5	1	-	2	2	-	-	-
Blunt Object	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jumping From High Place	124	-	-	-	-	-	-	2	-	8	2	20	3	12	13	8	6	21	7	6	8	5	3
Jumping or Lying Before Moving Object	32	-	-	-	-	1	-	1	-	3	-	5	1	5	2	6	1	4	1	1	-	-	-
Other and Unspecified Means	6	-	-	-	-	-	-	-	-	2	-	1	-	1	-	1	-	-	1	-	-	-	-
Sequelae (Late Effects)	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table M20. Deaths Due to Assault (Homicide) and Legal Intervention, Overall and by Age and Sex, New York City, 2017

Method	All Ages	0-4 Male	0-4 Female	5-9 Male	5-9 Female	10-14 Male	10-14 Female	15-19 Male	15-19 Female	20-24 Male	20-24 Female	25-34 Male	25-34 Female	35-44 Male	35-44 Female	45-54 Male	45-54 Female	55-64 Male	55-64 Female	65-74 Male	65-74 Female	≥75 Male	≥75 Female
Total	308	4	6	1	0	0	0	25	2	45	7	64	13	42	9	35	12	16	10	9	4	2	1
Poisoning by Noxious Substances	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hanging, Strangulation, and Suffocation	14	-	-	1	-	-	-	-	-	-	1	-	2	3	-	1	-	2	-	-	1	-	1
Drowning and Submersion	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Firearm Discharge	151	-	-	-	-	-	-	19	1	34	4	40	7	24	2	11	2	3	1	2	-	1	-
Smoke, Fire, and Flames	2	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-
Sharp Object	56	-	1	-	-	-	-	4	-	7	1	16	-	7	-	5	8	3	2	1	1	-	-
Blunt Object	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pushing From High Place	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Bodily Force	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neglect, Abandonment, and Other Maltreatment	6	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other and Unspecified Means	53	1	-	-	-	-	-	-	-	3	1	3	3	5	5	15	1	5	3	2	3	1	-
Sequelae (Late Effects)	13	-	-	-	-	-	-	2	-	1	-	1	-	3	-	2	-	1	-	2	-	-	-
Legal Intervention, All*	10	-	-	-	-	-	-	2	-	4	-	-	-	-	-	1	-	2	-	2	-	-	-

* Ten 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, 2017

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	245	9	18	1	1	0	0	1	2	14	5	28	7	28	13	36	10	23	11	15	4	8	11
Poisoning by Noxious Substances	20	-	-	-	1	-	-	-	1	2	1	-	1	3	2	3	2	-	2	1	1	-	-
Hanging, Strangulation, and Suffocation	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Drowning and Submersion	15	-	-	-	-	-	-	1	-	3	-	4	2	2	-	1	-	-	-	2	-	-	-
Firearm Discharge	2	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
Smoke, Fire, and Flames	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sharp or Blunt Object	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Falling From High Place	17	-	-	-	-	-	-	-	-	2	-	5	1	1	1	3	2	1	-	-	-	1	-
Other and Unspecified Means	185	9	18	1	-	0	-	-	1	7	3	17	3	21	10	28	6	20	9	12	3	6	11
Sequelae (Late Effects)	4	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	2	-	-	-	-	-

Table M22. Deaths Due to Complications of Medical and Surgical Care, Overall and by Age and Sex, New York City, 2017

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	1	0	0	0	0	0	3	3	0	0	1	1	4	4	6	1	3	4
Adverse Effects From Drugs, Medicaments, Biological Substances for Therapeutic Use	3	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	1	-	-	-
Medical Misadventures to Patients During Surgical and Medical Care	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	3	-
Adverse Effects from Medical Devices for Therapeutic Use	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other and Unspecified Means	23	-	-	-	-	1	-	-	-	-	-	2	3	-	-	1	1	3	3	4	1	-	4
Sequelae (Late Effects)	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table M23. Deaths Due to Firearms (All Causes), Overall and by Age and Sex, New York City, 2017

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)	215	-	-	-	-	-	-	22	1	37	4	56	7	31	2	23	3	10	2	10	1	7	-

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

All

Exact Age in Years	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

Male

Exact Age in Years	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

Female

Exact Age in Years	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, 2008-2017

Age in years	Total									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
0	80.2	80.6	80.9	80.9	81.1	81.1	81.3	81.2	81.2	81.2
1	79.6	80.0	80.3	80.3	80.5	80.4	80.6	80.5	80.5	80.6
5	75.7	76.1	76.3	76.3	76.5	76.5	76.6	76.6	76.5	76.6
10	70.7	71.1	71.4	71.4	71.6	71.5	71.7	71.6	71.6	71.7
15	65.8	66.2	66.4	66.4	66.6	66.6	66.8	66.7	66.6	66.7
20	60.9	61.3	61.6	61.5	61.7	61.6	61.8	61.7	61.7	61.8
25	56.1	56.4	56.7	56.7	56.9	56.8	57.0	56.9	56.8	56.9
30	51.3	51.6	51.9	51.9	52.0	51.9	52.1	52.1	52.0	52.1
35	46.5	46.8	47.1	47.1	47.2	47.1	47.3	47.3	47.2	47.3
40	41.7	42.0	42.3	42.3	42.5	42.4	42.6	42.5	42.5	42.6
45	37.1	37.4	37.6	37.6	37.8	37.7	37.9	37.8	37.8	37.9
50	32.7	33.0	33.1	33.2	33.3	33.1	33.3	33.2	33.2	33.3
55	28.4	28.7	28.8	28.8	28.9	28.8	28.9	28.9	28.9	28.9
60	24.3	24.6	24.7	24.7	24.7	24.6	24.7	24.6	24.7	24.6
65	20.4	20.6	20.8	20.7	20.7	20.6	20.7	20.6	20.6	20.6
70	16.7	16.9	17.0	17.0	17.0	16.9	17.0	16.9	17.0	16.9
75	13.2	13.4	13.5	13.4	13.5	13.4	13.6	13.5	13.6	13.6
80	10.0	10.2	10.3	10.3	10.4	10.4	10.5	10.5	10.6	10.6
85	7.3	7.5	7.5	7.4	7.5	7.4	7.5	7.4	7.6	7.6

Age in years	Male									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
0	77.5	77.8	78.1	78.2	78.4	78.3	78.5	78.6	78.5	78.5
1	76.9	77.3	77.5	77.6	77.8	77.7	77.9	77.9	77.8	77.9
5	73.0	73.3	73.6	73.6	73.9	73.8	74.0	74.0	73.8	73.9
10	68.0	68.4	68.6	68.7	68.9	68.8	69.0	69.0	68.9	69.0
15	63.1	63.4	63.6	63.8	64.0	63.9	64.1	64.1	63.9	64.0
20	58.2	58.6	58.8	58.9	59.1	59.0	59.2	59.2	59.0	59.1
25	53.5	53.8	54.1	54.2	54.3	54.2	54.4	54.4	54.2	54.3
30	48.7	49.1	49.3	49.4	49.6	49.4	49.6	49.6	49.4	49.6
35	44.0	44.3	44.5	44.6	44.8	44.6	44.9	44.9	44.7	44.9
40	39.3	39.6	39.8	39.9	40.1	39.9	40.2	40.2	40.1	40.3
45	34.8	35.0	35.2	35.3	35.5	35.3	35.5	35.5	35.5	35.6
50	30.5	30.7	30.8	30.9	31.1	30.9	31.1	31.0	31.0	31.1
55	26.4	26.6	26.7	26.7	26.9	26.6	26.8	26.8	26.7	26.8
60	22.5	22.6	22.7	22.8	22.8	22.6	22.8	22.7	22.7	22.7
65	18.7	18.9	19.0	19.1	19.1	18.8	19.0	18.8	18.8	18.8
70	15.3	15.4	15.5	15.5	15.6	15.4	15.6	15.5	15.5	15.4
75	12.1	12.2	12.2	12.3	12.3	12.2	12.4	12.2	12.3	12.3
80	9.1	9.3	9.3	9.4	9.4	9.4	9.5	9.5	9.6	9.5
85	6.7	6.8	6.8	6.8	6.8	6.7	6.7	6.7	6.7	6.8

Age in years	Female									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
0	82.6	83.0	83.3	83.2	83.4	83.4	83.6	83.5	83.5	83.6
1	82.0	82.3	82.7	82.6	82.7	82.7	82.9	82.8	82.8	83.0
5	78.0	78.4	78.7	78.6	78.8	78.8	79.0	78.8	78.9	79.0
10	73.1	73.4	73.8	73.7	73.8	73.8	74.0	73.9	73.9	74.0
15	68.1	68.5	68.8	68.7	68.9	68.9	69.0	68.9	68.9	69.1
20	63.2	63.5	63.9	63.8	63.9	63.9	64.1	63.9	64.0	64.1
25	58.3	58.6	58.9	58.9	59.0	59.0	59.2	59.0	59.1	59.2
30	53.4	53.7	54.0	53.9	54.1	54.1	54.3	54.1	54.2	54.3
35	48.5	48.8	49.1	49.1	49.2	49.2	49.4	49.3	49.3	49.4
40	43.7	44.0	44.3	44.2	44.4	44.4	44.6	44.5	44.5	44.6
45	39.0	39.3	39.6	39.5	39.6	39.6	39.8	39.7	39.8	39.8
50	34.5	34.8	35.0	34.9	35.0	35.0	35.1	35.1	35.1	35.1
55	30.0	30.4	30.5	30.5	30.5	30.5	30.6	30.5	30.6	30.6
60	25.7	26.0	26.2	26.1	26.2	26.1	26.2	26.2	26.2	26.1
65	21.6	21.9	22.0	21.9	22.0	21.9	22.0	21.9	22.0	21.9
70	17.6	17.9	18.1	18.0	18.0	18.0	18.0	17.9	18.0	17.9
75	13.9	14.2	14.4	14.2	14.3	14.3	14.3	14.3	14.5	14.4
80	10.6	10.8	10.9	10.8	11.0	11.0	11.1	11.1	11.2	11.3
85	7.6	7.8	7.8	7.7	7.8	7.8	7.9	7.8	8.0	8.0

Note: Population data from 2008-2009 are interpolated based on 2000 and 2010 Census counts. Population data for 2011-2017 are extrapolated from the 2000 and 2010 US Census since the life tables are derived from a complete life table which requires 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, 2017

Cause of Death	All YPLL	All %	Male YPLL	Male %	Female YPLL	Female %
Total	436,337	100.0	271,666	100.0	164,671	100.0
Malignant Neoplasms	103,180	23.6	51,755	19.1	51,425	31.2
Trachea, bronchus, and lung	14,957	3.4	8,618	3.2	6,339	3.8
Colon, rectum, and anus	10,459	2.4	5,644	2.1	4,815	2.9
Breast	10,045	2.3	65	0.0	9,980	6.1
Pancreas	6,688	1.5	3,604	1.3	3,084	1.9
Liver & intrahepatic bile ducts	6,540	1.5	4,761	1.8	1,779	1.1
Heart Disease	73,835	16.9	49,027	18.0	24,808	15.1
Use of or Poisoning by Psychoactive Substance	45,463	10.4	35,621	13.1	9,842	6.0
Accidents Except Poisoning by Psychoactive Substance	18,066	4.1	14,234	5.2	3,832	2.3
Motor vehicle	6,001	1.4	5,043	1.9	958	0.6
Intentional Self-harm (Suicide)	16,955	3.9	12,222	4.5	4,733	2.9
Diabetes Mellitus	13,107	3.0	8,398	3.1	4,709	2.9
Assault (Homicide)	11,894	2.7	9,507	3.5	2,387	1.4
Cerebrovascular Diseases	9,765	2.2	6,031	2.2	3,734	2.3
Chronic Liver Disease and Cirrhosis	9,562	2.2	6,744	2.5	2,818	1.7
Chronic Lower Respiratory Diseases	8,909	2.0	4,675	1.7	4,234	2.6
Influenza and Pneumonia	8,028	1.8	4,784	1.8	3,244	2.0
HIV Disease	7,717	1.8	5,124	1.9	2,593	1.6
Mental and Behavioral Disorders Due to Use of Alcohol	4,931	1.1	3,870	1.4	1,061	0.6
Viral Hepatitis	2,425	0.6	1,715	0.6	710	0.4
All Other Causes	102,500	23.5	57,959	21.3	44,541	27.0

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

Table M27. Death Rates by Poverty Level Indicator, New York City, 2008 and 2017

Age-adjusted Death Rates	Low (<10%) 2017	Low (<10%) 2008	Low (<10%) Chg 2008 to 2017 (%)	Medium (10 to <20%) 2017	Medium (10 to <20%) 2008	Medium (10 to <20%) Chg 2008 to 2017 (%)	High (20 to <30%) 2017	High (20 to <30%) 2008	High (20 to <30%) Chg 2008 to 2017 (%)	Very High (≥30%) 2017	Very High (≥30%) 2008	Very High (≥30%) Chg 2008 to 2017 (%)
All Causes	424.0	526.1	-19.4%	468.4	584.0	-19.8%	531.4	659.0	-19.4%	635.2	767.3	-17.2%
Premature Deaths	113.9	139.4	-18.3%	140.4	171.5	-18.1%	180.3	225.9	-20.2%	244.8	293.9	-16.7%
10 Leading Causes												
Diseases of Heart	141.4	217.2	-34.9%	155.7	248.6	-37.4%	172.3	261.7	-34.2%	193.1	272.3	-29.1%
Malignant Neoplasms	108.9	134.2	-18.9%	114.8	135.1	-15.0%	119.4	144.0	-17.1%	141.6	162.6	-12.9%
Influenza and Pneumonia	13.1	23.3	-43.8%	14.8	25.8	-42.6%	23.0	27.7	-17.0%	26.5	34.1	-22.3%
Diabetes Mellitus	12.5	14.6	-14.4%	16.7	15.6	7.1%	20.0	18.7	7.0%	22.7	23.3	-2.6%
Chronic Lower Respiratory Diseases	10.4	11.9	-12.6%	15.0	17.5	-14.3%	22.4	24.1	-7.1%	27.8	34.4	-19.2%
Cerebrovascular Diseases	13.7	16.7	-18.0%	16.2	16.8	-3.6%	16.8	21.0	-20.0%	20.9	23.6	-11.4%
Accidents Except Poisoning by Psychoactive Substances	9.7	5.8	67.2%	12.0	6.2	93.5%	15.0	8.4	78.6%	25.5	13.1	94.7%
Essential Hypertension and Hypertensive Renal Diseases	8.1	7.3	11.0%	10.3	9.2	12.0%	13.1	13.1	0.0%	15.8	15.3	3.3%
Use of or Poisoning by Psychoactive Substance	9.3	4.6	102.2%	8.9	3.7	140.5%	11.3	4.1	175.6%	11.7	5.0	134.0%
Alzheimers	9.6	9.7	-1.0%	8.5	11.5	-26.1%	9.8	11.8	-16.9%	11.8	12.8	-7.8%

Note: The 2008 poverty level is based on the 2005-2009 US Census Bureau American Community Survey and the 2017 poverty level is based on the 2013-2017 US Census Bureau American Community Survey.

MORTALITY

M28. Leading Causes of Death, New York City, 2017, 2016 and 2008

Cause	2017		2016			2008		
	Rank	Crude Death Rate	Rank	Crude Death Rate	Change to 2017 (%)	Rank	Crude Death Rate	Change to 2017 (%)
Diseases of Heart*	1	202.8	1	201.0	0.9%	1	253.4	-20.0%
Malignant Neoplasms	2	154.2	2	158.5	-2.7%	2	156.0	-1.2%
Influenza and Pneumonia	3	22.6	3	23.6	-4.2%	3	27.5	-17.8%
Cerebrovascular Diseases	4	22.0	4	21.6	1.9%	6	18.1	21.5%
Diabetes Mellitus	5	20.9	5	21.0	-0.5%	4	19.6	6.6%
Chronic Lower Respiratory Diseases	6	20.5	6	19.5	5.1%	5	19.2	6.8%
Use of or Poisoning by Psychoactive Substance†	7	17.8	7	17.5	1.7%	10	8.8	102.3%
Essential Hypertension and Renal Diseases	8	14.1	8	13.2	6.8%	9	10.6	33.0%
Alzheimer's Disease	9	12.9	9	12.9	0.0%	16	4.5	186.7%
Accidents Except Drug Poisoning	10	12.2	10	11.7	4.3%	8	12.5	-2.4%

*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, 2017

	Cause of Death (ICD-10 Codes)	Total	Male		Female	
			Neonatal (<28 Days)	Post-Neonatal	Neonatal (<28 Days)	Post-Neonatal
	Total	**500**	**195**	**76**	**149**	**80**
1	HIV Infection (B20-B24)*	-	-	-	-	-
2	Diseases of the Circulatory System (I00-I99)*	14	3	3	-	8
3	Influenza and Pneumonia (J10-J18)*	3	-	1	-	2
4	Newborn Affected by Maternal Complications of Pregnancy (P01)*	9	4	-	5	-
5	Newborn Affected by Complications of Placenta, Cord, and Membranes (P02)*	10	5	1	4	-
6	Short Gestation and Low Birthweight (P07)*	86	38	7	36	5
7	Intrauterine Hypoxia and Birth Asphyxia (P20-P21)*	1	1	-	-	-
8	Respiratory Distress of Newborn (P22)*	16	9	-	6	1
9	Pulmonary Hemorrhage Originating in the Perinatal Period (P26)*	5	4	-	1	-
10	Atelectasis (P28.0-P28.1)*	1	-	-	1	-
11	Other Respiratory Conditions Originating in the Perinatal Period (P23-P28)†	6	2	1	3	-
12	Cardiovascular Disorders Originating in the Perinatal Period (P29)†	68	46	-	22	-
13	Infections Specific to the Perinatal Period (P35-P39)†	19	10	2	6	1
	Bacterial sepsis of newborn (P36)	16	10	-	6	-
14	Neonatal Hemorrhage (P50-P52, P54)*	6	5	-	1	-
15	Necrotizing Enterocolitis of Newborn (P77)*	22	15	-	6	1
16	Remainder of Conditions Originating in the Perinatal Period (Rest of P00-P99)	30	10	3	16	1
17	Congenital Malformations, Deformations (Q00-Q99)*	96	35	10	31	20
	Congenital malformations of heart (Q20-Q24)	23	2	5	7	9
18	Sudden Infant Death Syndrome (R95)*	1	-	1	-	-
19	All Other Diseases (Rest of A00-R99)	63	8	31	6	18
20	External Causes (V01-Y89)†	44	-	16	5	23

*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, 2017

	Live Births					Infant Deaths — Total					Infant Deaths — Early-neonatal (< 7 days)					Infant Deaths — Neonatal (< 28 days)					Infant Deaths — Post-Neonatal (≥ 28 days)				
Characteristics	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	117,013	32,860	40,345	21,992	20,110	500	155	95	171	69	250	74	54	78	41	344	102	66	121	52	156	53	29	50	17
Sex of Child																									
Male	60,102	16,722	20,738	11,281	10,520	271	78	52	103	34	140	38	30	48	24	195	54	38	74	29	76	24	14	29	5
Female	56,911	16,138	19,607	10,711	9,590	229	77	43	68	35	110	36	24	30	17	149	48	28	47	23	80	29	15	21	12
Birthweight at Delivery (Grams)																									
Low birthweight (<2,500)	9,958	2,761	2,548	2,764	1,708	362	109	57	135	54	212	65	42	64	39	286	84	50	101	49	76	25	7	34	5
Very low birthweight (<1,500)	1,711	516	298	633	241	282	87	40	110	42	176	56	31	57	31	238	72	38	89	38	44	15	2	21	4
2,500–4,000	100,084	28,043	34,825	18,131	17,644	106	33	29	28	14	29	7	12	9	1	43	11	15	15	2	63	22	14	13	12
Above 4,000	6,968	2,055	2,972	1,096	758	6	2	3	1	-	1	-	-	1	-	2	1	-	1	-	4	1	3	-	-
Not stated	3	1	-	1	-	2	-	1	1	-	2	1	-	1	-	2	1	-	1	-	-	-	-	-	-
Unmatched*	-	-	-	-	-	24	10	6	6	1	6	1	1	3	1	11	5	1	3	1	13	5	5	3	-
Gestational Age (Weeks)																									
Preterm (<37)	10,477	3,152	2,784	2,782	1,590	346	105	59	127	48	209	65	44	65	33	279	84	52	99	42	67	21	7	28	6
Very preterm (<32)	1,765	550	334	636	225	286	88	43	112	40	183	58	35	60	29	244	75	41	90	37	42	13	2	22	2
Full-term	106,528	29,708	37,561	19,207	18,518	127	40	30	37	18	32	8	10	9	5	51	13	13	18	7	76	27	17	19	11
Not stated	8	-	-	3	2	3	-	1	1	2	3	-	-	1	2	3	-	-	1	2	-	-	-	-	-
Unmatched*	-	-	-	-	-	24	10	6	6	1	6	1	1	3	1	11	5	1	3	1	13	5	5	3	-
Plurality																									
Singletons	112,878	31,936	38,714	21,047	19,551	395	132	69	135	50	191	65	36	60	28	263	86	46	94	35	132	46	23	41	15
Multiples	4,135	924	1,631	945	559	81	13	20	30	18	53	8	18	15	12	70	11	19	24	16	11	2	1	6	2
Unmatched*	-	-	-	-	-	24	10	6	6	1	6	1	1	3	1	11	5	1	3	1	13	5	5	3	-
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, 2017

	Total					Early-neonatal (< 7 days)					Neonatal (< 28 days)					Post-Neonatal (≥ 28 days)				
Characteristics	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	4.3	4.7	2.4	7.8	3.4	2.1	2.3	1.3	3.5	2.0	2.9	3.1	1.6	5.5	2.6	1.3	1.6	0.7	2.3	0.8
Sex of Child																				
Male	4.5	4.7	2.5	9.1	3.2	2.3	2.3	1.4	4.3	2.3	3.2	3.2	1.8	6.6	2.8	1.3	1.4	0.7	2.6	0.5
Female	4.0	4.8	2.2	6.3	3.6	1.9	2.2	1.2	2.8	1.8	2.6	3.0	1.4	4.4	2.4	1.4	1.8	0.8	2.0	1.3
Birthweight at Delivery (Grams)																				
Low birthweight (<2,500)	36.4	39.5	22.4	48.8	31.6	21.3	23.5	16.5	23.2	22.8	28.7	30.4	19.6	36.5	28.7	7.6	9.1	2.7	12.3	2.9
Very low birthweight (<1,500)	164.8	168.6	134.2	173.8	174.3	102.9	108.5	104.0	90.0	128.6	139.1	139.5	127.5	140.6	157.7	25.7	29.1	6.7	33.2	16.6
2,500–4,000	1.1	1.2	0.8	1.5	0.8	0.3	0.2	0.3	0.5	0.1	0.4	0.4	0.4	0.8	0.1	0.6	0.8	0.4	0.7	0.7
Above 4,000	0.9	1.0	1.0	0.9	-	0.1	-	-	0.9	-	0.3	0.5	0.9	0.9	-	0.6	0.5	1.0	-	-
Gestational Age (Weeks)																				
Preterm (<37)	33.0	33.3	21.2	45.7	30.2	19.9	20.6	15.8	23.4	20.8	26.6	26.6	18.7	35.6	26.4	6.4	6.7	2.5	10.1	3.8
Very preterm (<32)	162.0	160.0	128.7	176.1	177.8	103.7	105.5	104.8	94.3	128.9	138.2	136.4	122.8	141.5	164.4	23.8	23.6	6.0	34.6	13.3
Full-term	1.2	1.3	0.8	1.9	1.0	0.3	0.3	0.3	0.5	0.3	0.5	0.4	0.3	0.9	0.4	0.7	0.9	0.5	1.0	0.6
Plurality																				
Singletons	3.5	4.1	1.8	6.4	2.6	1.7	2.0	0.9	2.9	1.4	2.3	2.7	1.2	4.5	1.8	1.2	1.4	0.6	1.9	0.8
Multiples	19.6	14.1	12.3	31.7	32.2	12.8	8.7	11.0	15.9	21.5	16.9	11.9	11.6	25.4	28.6	2.7	2.2	0.6	6.3	3.6

INFANT MORTALITY

Table IM4. Live Births and Infant Mortality, Overall and by Mother's Racial/Ethnic Group, New York City, 2013–2017

Mother's Ethnic Group	2013	2014	2015	2016	2017
Live Births, Total	**120,457**	**122,084**	**121,673**	**120,367**	**117,013**
Puerto Rican	7,960	7,897	7,561	7,159	6,307
Other Hispanic	27,621	27,753	27,994	26,915	26,553
Asian and Pacific Islander	19,767	20,746	20,535	21,566	20,110
Non-Hispanic White	39,573	40,443	40,607	40,633	40,345
Non-Hispanic Black	24,108	23,680	23,116	22,465	21,992
Other or Unknown	1,428	1,565	1,860	1,629	1,706
Infant Deaths (< 1 year), Total	551	516	526	491	500
Puerto Rican	38	60	46	24	40
Other Hispanic	120	113	119	102	115
Asian and Pacific Islander	62	53	54	62	69
Non-Hispanic White	117	107	110	105	95
Non-Hispanic Black	201	177	186	180	171
Other or Unknown	13	6	11	18	10
Infant Mortality Rate, Total	4.6	4.2	4.3	4.1	4.3
Puerto Rican	4.8	7.6	6.1	3.4	6.3
Other Hispanic	4.3	4.1	4.3	3.8	4.3
Asian and Pacific Islander	3.1	2.6	2.6	2.9	3.4
Non-Hispanic White	3.0	2.6	2.7	2.6	2.4
Non-Hispanic Black	8.3	7.5	8.0	8.0	7.8
Neonatal Deaths (< 28 days), Total	377	326	342	312	344
Puerto Rican	28	40	34	17	26
Other Hispanic	72	66	80	65	76
Asian and Pacific Islander	50	37	33	43	52
Non-Hispanic White	85	75	75	65	66
Non-Hispanic Black	132	103	112	109	121
Neonatal Mortality Rate, Total	3.1	2.7	2.8	2.6	2.9
Puerto Rican	3.5	5.1	4.5	2.4	4.1
Other Hispanic	2.6	2.4	2.9	2.4	2.9
Asian and Pacific Islander	2.5	1.8	1.6	2.0	2.6
Non-Hispanic White	2.1	1.9	1.8	1.6	1.6
Non-Hispanic Black	5.5	4.3	4.8	4.9	5.5

INFANT MORTALITY

Table IM5. Infant Mortality Rate by Mother's Birthplace*†, New York City, 2011–2017

Birthplace†	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017
Total, New York City	**4.7**	**4.5**	**4.4**	**4.2**	**4.2**
Haiti	6.0	6.2	7.4	7.0	7.6
Jamaica	6.7	7.9	6.1	6.8	6.5
Pakistan	5.6	5.2	5.5	6.7	6.4
Ghana	3.9	2.9	3.3	3.8	6.3
Puerto Rico‡	6.5	5.3	4.8	5.5	6.0
Trinidad and Tobago	5.3	7.3	6.7	7.2	5.2
Colombia	3.8	3.0	3.4	4.6	5.0
Guyana	6.2	4.9	4.8	4.3	4.8
Yemen Arab Republic	6.6	3.7	2.7	3.8	4.7
Bangladesh	4.1	3.5	3.6	3.1	4.5
United States‡	5.0	4.8	4.8	4.5	4.4
El Salvador	3.2	4.2	5.0	5.5	4.1
Ecuador	3.2	3.2	3.7	3.8	3.8
Egypt	1.5	2.8	3.5	3.4	3.8
Dominican Republic	4.0	4.4	4.1	3.9	3.7
Korea	3.4	3.6	5.0	2.6	3.3
Guatemala	3.6	1.6	2.0	2.4	3.1
Mexico	4.2	3.7	2.8	2.4	3.0
Japan	2.0	1.3	2.0	2.8	2.9
Canada	3.6	3.0	4.1	3.0	2.6
Philippines	1.7	2.3	1.9	1.9	2.4
India	5.8	6.1	3.2	2.8	2.4
Honduras	7.2	6.8	4.4	3.5	2.2
Poland	2.1	1.8	1.4	1.5	2.1
Russia	1.4	1.3	1.0	2.0	2.0
Uzbekistan	2.0	1.7	1.8	1.1	1.8
China	1.4	1.5	1.5	1.6	1.7
Nigeria	7.4	4.5	2.8	0.9	1.6
Ukraine	0.4	0.0	0.4	1.1	1.5
United Kingdom	1.2	1.3	1.3	0.6	1.3
Israel	0.7	2.2	2.6	2.7	1.2

*The infant mortality rate is listed only for countries with 500 or more live births in any year from 2011-2017.

†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, 2013–2017

Community District		2013–2015*		2014–2016*		2015–2017*	
		Infant Mortality Rate	Neonatal† Mortality Rate	Infant Mortality Rate	Neonatal† Mortality Rate	Infant Mortality Rate	Neonatal† Mortality Rate
	NEW YORK CITY	**4.4**	**2.9**	**4.2**	**2.7**	**4.2**	**2.8**
	MANHATTAN	**3.4**	**2.3**	**3.3**	**2.2**	**3.1**	**2.1**
101	Battery Park, Tribeca	3.2	2.6	3.0	2.7	2.4	1.8
102	Greenwich Village, SOHO	0.9	0.9	1.7	1.7	0.9	0.9
103	Lower East Side	3.0	1.6	3.2	2.4	3.9	2.8
104	Chelsea, Clinton	4.0	3.3	2.3	1.3	1.3	1.0
105	Midtown Business District	2.3	1.2	1.8	1.2	0.6	0.6
106	Murray Hill	2.1	1.6	1.8	1.6	2.4	1.6
107	Upper West Side	2.6	1.7	2.3	1.3	1.4	0.9
108	Upper East Side	0.8	0.4	1.8	0.9	2.1	1.4
109	Manhattanville	4.5	3.3	5.0	3.8	5.7	3.8
110	Central Harlem	7.2	4.6	6.7	3.8	6.5	3.7
111	East Harlem	5.9	4.2	5.2	3.0	5.1	2.9
112	Washington Heights	4.3	3.0	4.2	3.2	4.0	3.1
	BRONX	**5.4**	**3.5**	**4.8**	**2.9**	**5.0**	**3.2**
201	Mott Haven	5.1	2.3	4.6	2.2	4.8	2.3
202	Hunts Point	4.2	2.3	2.7	2.3	2.9	2.5
203	Morrisania	6.4	4.3	4.8	2.3	5.1	2.8
204	Concourse, Highbridge	3.8	2.2	3.4	2.4	4.7	2.8
205	University/Morris Heights	5.4	3.7	4.6	3.1	5.5	4.0
206	East Tremont	5.8	4.3	4.1	3.0	6.3	4.7
207	Fordham	3.6	2.4	4.2	2.7	4.1	2.9
208	Riverdale	4.4	2.6	4.3	3.0	3.7	2.1
209	Unionport, Soundview	6.0	3.7	5.8	3.3	6.4	3.4
210	Throgs Neck	4.3	3.7	3.9	2.6	5.0	3.3
211	Pelham Parkway	8.1	5.6	7.8	4.2	5.0	2.5
212	Williamsbridge	7.7	5.4	6.2	4.1	5.5	4.1
	BROOKLYN	**3.6**	**2.3**	**3.7**	**2.3**	**3.6**	**2.3**
301	Williamsburg, Greenpoint	2.4	1.0	2.8	1.4	3.2	1.6
302	Fort Greene, Brooklyn Heights	2.8	2.0	2.4	1.6	2.8	1.6
303	Bedford Stuyvesant	5.7	3.3	4.9	2.6	4.6	2.2
304	Bushwick	3.8	1.1	3.4	1.7	2.1	0.8
305	East New York	6.2	3.7	6.2	4.2	5.7	4.5
306	Park Slope	1.8	0.9	2.3	1.1	2.4	1.2
307	Sunset Park	2.0	1.6	2.4	1.6	2.7	1.9
308	Crown Heights North	5.4	3.6	4.9	3.1	4.7	3.4
309	Crown Heights South	3.5	2.2	3.8	2.0	4.1	2.3
310	Bay Ridge	0.9	0.7	1.0	0.9	0.9	0.7
311	Bensonhurst	3.7	3.1	3.6	2.6	3.0	1.7
312	Borough Park	2.2	1.6	2.2	1.4	1.9	1.5
313	Coney Island	5.6	3.7	4.7	3.7	3.7	2.9
314	Flatbush, Midwood	4.1	2.9	4.3	2.9	4.4	3.0
315	Sheepshead Bay	2.9	1.7	2.1	1.0	2.7	1.5
316	Brownsville	4.9	3.2	5.4	3.2	6.0	3.8
317	East Flatbush	7.1	4.0	8.5	4.9	6.7	4.0
318	Canarsie	4.3	2.6	5.0	3.2	6.4	4.3
	QUEENS	**4.0**	**2.8**	**4.0**	**2.7**	**4.2**	**2.9**
401	Astoria, Long Island City	4.3	3.3	5.0	4.0	6.7	5.0
402	Sunnyside, Woodside	4.0	2.6	3.1	2.0	3.4	2.8
403	Jackson Heights	4.2	2.7	4.6	2.7	3.3	2.3
404	Elmhurst, Corona	3.7	2.7	3.3	2.5	3.7	2.5
405	Ridgewood, Glendale	1.8	1.2	2.2	1.2	2.8	1.8
406	Rego Park, Forest Hills	3.1	1.7	2.8	1.6	2.4	1.7
407	Flushing	2.6	1.7	3.0	1.8	3.4	1.8
408	Fresh Meadows, Briarwood	2.8	2.0	2.5	1.8	3.1	2.2
409	Woodhaven	4.1	2.7	4.4	3.5	4.2	3.4
410	Howard Beach	4.8	4.0	5.5	4.2	4.7	3.6
411	Bayside	3.4	2.0	1.9	0.9	3.9	2.4
412	Jamaica, St. Albans	6.2	3.7	6.1	3.4	5.9	3.8
413	Queens Village	5.7	4.0	5.6	4.0	6.7	4.6
414	The Rockaways	6.3	5.5	5.2	3.9	4.6	3.1
	STATEN ISLAND	**4.5**	**2.8**	**3.6**	**2.3**	**4.5**	**3.3**
501	Port Richmond	6.9	3.9	4.8	2.7	5.4	3.9
502	Willowbrook, South Beach	2.9	2.2	2.8	2.1	5.1	3.9
503	Tottenville	2.4	1.8	2.6	1.7	2.6	2.0

*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.

Table IM7. Live Births and Infant Mortality Rate by Characteristics of Mother and Infant, New York City, 2017

| | Live Births | | Infant Mortality Rate (IMR) per 1,000 Live Births | | | | | |
| | | | All | | Neonatal* | | Post-Neonatal* | |
Characteristics	Number	Percent	Deaths	Rate	Deaths	Rate	Deaths	Rate
Total	117,013	100.0	500	4.3	344	2.9	156	1.3
Race/Ethnicity								
Puerto Rican	6,307	5.4	40	6.3	26	4.1	14	2.2
Other Hispanic	26,553	22.7	115	4.3	76	2.9	39	1.5
Asian and Pacific Islander	20,110	17.2	69	3.4	52	2.6	17	0.8
Non-Hispanic White	40,345	34.5	95	2.4	66	1.6	29	0.7
Non-Hispanic Black	21,992	18.8	171	7.8	121	5.5	50	2.3
Other and Unknown	1,706	1.5	10	-	3	-	7	-
Borough of Residence								
Manhattan	17,082	14.6	51	3.0	35	2.0	16	0.9
Bronx	18,996	16.2	103	5.4	69	3.6	34	1.8
Brooklyn	38,535	32.9	140	3.6	84	2.2	56	1.5
Queens	25,459	21.8	113	4.4	82	3.2	31	1.2
Staten Island	5,340	4.6	36	6.7	31	5.8	5	0.9
Non-NYC residents	11,593	9.9	56	4.8	43	3.7	13	1.1
Unknown	8	-	1	-	0	-	1	-
Age of Mother								
Age <18	792	0.7	5	6.3	2	2.5	3	3.8
Age 18-19	2,383	2.0	12	5.0	10	4.2	2	0.8
Age 20-29	46,304	39.6	206	4.4	135	2.9	71	1.5
Age 30-39	60,472	51.7	223	3.7	167	2.8	56	0.9
Age ≥40	7,062	6.0	30	4.2	19	2.7	11	1.6
Age unknown	-	-	-	-	-	-	-	-
Unmatched†	-	-	24	-	11	-	13	-
Mother's Education								
11th grade or less/12th grade, no diploma	19,392	16.6	79	4.1	48	2.5	31	1.6
High school graduate or GED	26,032	22.2	133	5.1	93	3.6	40	1.5
Some college/associate degree	24,732	21.1	135	5.5	96	3.9	39	1.6
Bachelor's degree	25,548	21.8	67	2.6	50	2.0	17	0.7
Master's degree or higher	21,004	18.0	47	2.2	35	1.7	12	0.6
Mother's education unknown	305	0.3	15	-	11	-	4	-
Unmatched†	-	-	24	-	11	-	13	-
Marital Status of Mother‡								
Not married	42,425	36.3	239	5.6	149	3.5	90	2.1
Married	74,588	63.7	237	3.2	184	2.5	53	0.7
Unmatched†	-	-	24	-	11	-	13	-
Mother's Birthplace§								
US born, including territories	56,814	48.6	255	4.5	175	3.1	80	1.4
Foreign born	60,150	51.4	218	3.6	156	2.6	62	1.0
Birthplace unknown	49	-	3	-	2	-	1	-
Unmatched†	-	-	24	-	11	-	13	-
Primary Payer for This Birth								
Medicaid/Family Plus/Child PlusB/other govt	68,326	58.4	324	4.7	212	3.1	112	1.6
Other	48,280	41.3	148	3.1	117	2.4	31	0.6
Coverage unknown	407	0.3	4	-	4	-	0	-
Unmatched†	-	-	24	-	11	-	13	-
Plurality								
Singletons	112,878	96.5	395	3.5	263	2.3	132	1.2
Multiples	4,135	3.5	81	19.6	70	16.9	11	2.7
Unmatched†	-	-	24	-	11	-	13	-
First Prenatal Care Visit								
No prenatal care	592	0.5	16	27.0	15	25.3	1	1.7
First trimester (1-3 months)	86,459	73.9	327	3.8	231	2.7	96	1.1
Second trimester (4-6 months)	20,138	17.2	85	4.2	52	2.6	33	1.6
Late (7-9 months)	7,032	6.0	13	1.8	9	1.3	4	0.6
Prenatal care unknown	2,792	2.4	35	-	26	-	9	-
Unmatched†	-	-	24	-	11	-	13	-
Pre-pregnancy Body Mass Index (BMI)								
Underweight (BMI<18.5)	6,036	5.2	14	2.3	13	2.2	1	0.2
Normal weight (18.5≤BMI<25)	61,144	52.3	171	2.8	120	2.0	51	0.8
Overweight (25≤BMI<30)	29,009	24.8	126	4.3	85	2.9	41	1.4
Obese (BMI≥30)	20,377	17.4	141	6.9	96	4.7	45	2.2
Pre-pregnancy BMI unknown	447	0.4	24	-	19	-	5	-
Unmatched†	-	-	24	-	11	-	13	-
Birthweight								
Very low birthweight	1,711	1.5	282	164.8	238	139.1	44	25.7
Low birthweight	8,247	7.0	80	9.7	48	5.8	32	3.9
Normal birthweight	107,052	91.5	112	1.0	45	0.4	67	0.6
Birthweight unknown	3	-	2	-	2	-	-	-
Unmatched†	-	-	24	-	11	-	13	-

*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, 2017

Borough and Institution	Births
Manhattan	
Bellevue Hospital Center	1,415
Harlem Hospital Center	941
Lenox Hill Hospital	4,146
Metropolitan Hospital Center	933
Mount Sinai Beth Israel	849
Mount Sinai Hospital	7,816
Mount Sinai St. Luke's	1
Mount Sinai West	5,947
New York Weill Cornell Medical Center	5,252
New York-Presbyterian/Columbia University Medical Center	4,877
New York-Presbyterian/Lower Manhattan Hospital	3,278
New York-Presbyterian/The Allen Hospital	2,088
NYU Langone - Tisch Hospital	6,013
Home†	100
Places other than a hospital or home‡	35
Bronx	
Bronx Lebanon Hospital Center	2,010
Jack D. Weiler Hospital	3,778
Jacobi Medical Center	1,908
Lincoln Medical and Mental Health Center	2,059
Montefiore Medical Center - Wakefield Division	2,089
Montefiore Medical Center (Henry & Lucy Moses Division)	5
North Central Bronx Hospital	1,224
St. Barnabas Hospital	923
Home†	87
Places other than a hospital or home‡	12
Brooklyn	
Brookdale University Hospital and Medical Center	973
Brooklyn Birthing Center	139
Brooklyn Hospital Center	2,431
Coney Island Hospital	1,062
Interfaith Medical Center	2
Kings County Hospital Center	1,978
Lutheran Medical Center	4,022
Maimonides Medical Center	8,327
New York-Presbyterian/Brooklyn Methodist Hospital	5,302
University Hospital of Brooklyn	1,208
Woodhull Medical and Mental Health Center	1,440
Wyckoff Heights Medical Center	1,381
Home†	399
Places other than a hospital or home‡	53
Queens	
Elmhurst Hospital Center	2,557
Flushing Hospital Medical Center	2,887
Jamaica Hospital Medical Center	2,234
Long Island Jewish Forest Hills	1,960
Long Island Jewish Medical Center	8,847
Mount Sinai Hospital of Queens	4
New York Hospital Medical Center of Queens	3,974
Queens Hospital Center	1,500
St. Johns Episcopal Hospital South Shore	664
Home†	110
Places other than a hospital or home‡	24
Staten Island	
Richmond University Medical Center	2,945
Staten Island University Hospital	2,784
Home†	16
Places other than a hospital or home‡	4
New York City Total	117,013

* 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, 2017

| Ancestry of Mother | Total | Borough of Residence | | | | | Non-Residents | Residence Unknown |
		Manhattan	Bronx	Brooklyn	Queens	Staten Island		
Total	117,013	17,082	18,996	38,535	25,459	5,340	11,593	8
Hispanic								
Colombian	1,100	84	56	125	655	41	139	-
Cuban	301	73	50	55	61	23	39	-
Dominican	10,977	1,895	5,400	1,537	1,463	126	556	-
Ecuadorian	2,933	156	400	486	1,721	56	114	-
Mexican	5,183	492	1,305	1,444	1,494	337	111	-
Puerto Rican	6,307	750	2,481	1,331	897	460	388	-
Other Hispanic	6,059	812	1,452	1,324	1,696	212	563	-
North American and the Caribbean								
African American	12,446	1,259	3,064	5,142	1,828	410	742	1
American	12,538	2,899	317	4,972	1,400	998	1,950	2
Guyanese	1,646	23	130	433	961	10	89	-
Haitian	1,597	60	41	976	312	18	190	-
Jamaican	1,838	41	388	681	545	12	171	-
Trinidadian	595	10	36	296	199	8	46	-
Other North American and the Caribbean	1,323	180	123	651	234	13	122	-
European								
English	591	220	11	233	53	3	71	-
German	704	232	15	195	94	27	141	-
Irish	1,542	394	35	325	254	125	409	-
Italian	3,081	480	68	669	374	744	746	-
Polish	912	154	13	234	321	63	127	-
Russian	1,515	282	23	607	325	104	174	-
Other European	4,545	918	265	1,734	768	307	553	-
Asian								
Asian Indian	2,067	372	45	220	815	54	561	-
Bangladeshi	2,953	56	564	596	1,665	9	63	-
Chinese	8,486	1,040	58	3,448	3,120	251	569	-
Filipino	827	113	46	125	372	55	116	-
Korean	900	328	14	159	245	21	133	-
Pakistani	1,713	65	93	751	493	116	195	-
Other Asian	6,407	935	444	2,651	1,718	255	403	1
Other								
Jewish or Hebrew	5,157	469	32	4,045	113	81	417	-
Other or not stated	10,770	2,290	2,027	3,090	1,263	401	1,695	4

*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, 2017

| Ethnic Group | Total | Age of Mother (Years) | | | | | | |
		< 18	18-19	20-24	25-29	30-34	35-39	≥ 40
Total	117,013	792	2,383	17,202	29,102	36,150	24,322	7,062
Puerto Rican	6,307	123	361	1,508	1,785	1,404	892	234
Other Hispanic	26,553	394	983	5,105	7,363	6,997	4,472	1,239
Asian and Pacific Islander	20,110	7	105	1,858	5,663	6,975	4,415	1,087
Non-Hispanic white	40,345	32	288	4,838	8,051	14,181	9,988	2,967
Non-Hispanic black	21,992	225	622	3,681	5,888	6,052	4,117	1,407
Non-Hispanic other	531	2	5	81	136	164	105	38
Non-Hispanic of two or more races	1,043	7	16	112	181	344	310	73
Not stated	132	2	3	19	35	33	23	17

PREGNANCY OUTCOMES

Table PO4. Selected Characteristics of Live Births, Overall and by Age of Mother, New York City, 2017

	Total	Age of Mother (Years)						
		<18	18-19	20-24	25-29	30-34	35-39	≥40
Total Live Births	117,013	792	2,383	17,202	29,102	36,150	24,322	7,062
Sex								
Male	60,102	377	1,186	8,780	14,983	18,585	12,628	3,563
Female	56,911	415	1,197	8,422	14,119	17,565	11,694	3,499
First Live Birth								
Yes	49,724	748	2,025	10,507	12,663	14,519	7,286	1,976
No	67,278	44	358	6,693	16,438	21,630	17,032	5,083
Unknown	11	-	-	2	1	1	4	3
Pre-pregnancy Body Mass Index (BMI)								
Underweight (BMI < 18.5)	6,036	63	213	1,221	1,685	1,729	902	223
Normal weight (18.5 ≤ BMI < 25)	61,144	439	1,229	8,835	14,464	19,570	13,092	3,515
Overweight (25 ≤ BMI < 30)	29,009	177	580	4,156	7,423	8,640	6,086	1,947
Obese (BMI ≥ 30)	20,377	104	348	2,900	5,422	6,101	4,162	1,340
Unknown	447	9	13	90	108	110	80	37
Birthweight at Delivery (Grams)								
< 1500	1,711	13	46	251	386	495	393	127
1500-2499	8,247	84	195	1,189	1,830	2,404	1,830	715
2500-3999	99,941	672	2,066	14,982	25,170	30,904	20,397	5,750
≥ 4000	7,111	23	76	780	1,716	2,345	1,702	469
Not stated	3	-	-	-	-	2	-	1
Gestational Age (Weeks)*								
< 32	1,765	15	43	248	390	519	415	135
32-36	8,712	77	200	1,058	1,895	2,588	2,081	813
≥ 37	106,528	700	2,140	15,896	26,817	33,039	21,824	6,112
Unknown	8	-	-	-	-	4	2	2
Plurality								
Single	112,878	776	2,340	16,783	28,293	34,777	23,284	6,625
Twin	3,971	16	43	410	788	1,317	991	406
Triplet	156	-	-	9	21	52	47	27
Quadruplet	8	-	-	-	-	4	-	4
Apgar Score at 5 Minutes								
≤ 6	1,034	6	27	147	238	311	230	75
7	1,019	7	31	150	208	322	221	80
8	5,576	48	135	746	1,265	1,677	1,268	437
9	108,400	723	2,172	16,021	27,151	33,550	22,386	6,397
10	703	3	6	85	167	225	163	54
Not stated	281	5	12	53	73	65	54	19
Method of Delivery								
Vaginal	74,546	643	1,872	12,910	19,787	22,562	13,483	3,289
Vaginal after any prior C-section	2,993	1	8	274	774	977	738	221
Primary C-section	23,094	145	455	2,975	5,107	7,263	5,200	1,949
Repeat C-section	16,375	3	48	1,043	3,433	5,348	4,900	1,600
Unknown	5	-	-	-	1	-	1	3
Place of Birth								
Home	709	4	7	87	152	231	177	51
Voluntary hospital	99,017	522	1,734	13,727	24,092	31,336	21,403	6,203
Municipal hospital	17,017	265	641	3,353	4,779	4,495	2,692	792
Birthing center	142	-	-	13	44	55	24	6
Other	128	1	1	22	35	33	26	10
Attendant								
Physician	106,348	626	2,023	14,988	26,129	33,356	22,594	6,632
Certified nurse midwife	10,024	160	341	2,095	2,799	2,632	1,606	391
Other	641	6	19	119	174	162	122	39
Primary Payer for this Birth†								
Medicaid/Family Plus/Child Health Plus B/Other govt	68,326	713	2,139	14,451	20,937	17,228	9,903	2,955
Private	46,682	49	193	2,468	7,641	18,303	14,037	3,991
Self-pay	1,038	14	30	142	279	309	199	65
Other	560	7	10	90	154	188	88	23
Not stated	407	9	11	51	91	122	95	28
First Visit for Prenatal Care								
First trimester (1-3 months)	86,459	340	1,265	11,283	20,896	28,092	19,178	5,405
Second trimester (4-6 months)	20,138	276	667	3,904	5,399	5,254	3,462	1,176
Late (7-9 months)	7,032	123	276	1,272	1,965	1,951	1,139	306
No care	592	22	52	145	134	133	78	28
Not stated	2,792	31	123	598	708	720	465	147
Marital Status of Mother‡								
Not married	42,425	771	1,990	9,519	12,185	9,775	6,139	2,046
Married	74,588	21	393	7,683	16,917	26,375	18,183	5,016
Education Level								
11th grade or less/12th grade no diploma	19,392	717	1,171	4,075	4,872	4,555	2,987	1,015
High school graduate or GED	26,032	66	879	6,746	7,702	5,920	3,532	1,187
Some college/associate degree	24,732	5	316	4,830	7,797	6,659	4,004	1,121
Bachelor's degree	25,548	-	10	1,203	5,820	10,022	6,768	1,725
Master's degree or higher	21,004	-	-	291	2,843	8,907	6,985	1,978
Not stated	305	4	7	57	68	87	46	36
Birthplace of Mother§								
United States, including its territories	56,814	557	1,575	9,954	13,116	17,004	11,464	3,144
Foreign	60,150	234	804	7,241	15,975	19,136	12,850	3,910
Not stated	49	1	4	7	11	10	8	8

*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.

Table PO5. Selected Characteristics of Live Births by Mother's Ethnic Group, New York City, 2017

	Total	Puerto Rican	Other Hispanic	Asian	Non-Hispanic White	Non-Hispanic Black	Other	Non-Hispanic Two or More Races	Not Stated
					Racial/Ethnic Group of Mother*				
Total Live Births	117,013	6,307	26,553	20,110	40,345	21,992	531	1,043	132
Sex									
Male	60,102	3,263	13,459	10,520	20,738	11,281	277	500	64
Female	56,911	3,044	13,094	9,590	19,607	10,711	254	543	68
First Live Birth									
Yes	49,724	2,605	10,314	9,541	17,561	8,870	229	547	57
No	67,278	3,702	16,238	10,569	22,782	13,122	302	496	67
Unknown	11	-	1	-	2	-	-	-	8
Pre-pregnancy Body Mass Index (BMI)									
Underweight (BMI<18.5)	6,036	211	751	2,036	2,233	720	27	53	5
Normal weight (18.5≤BMI<25)	61,144	2,215	11,290	12,810	26,067	7,881	264	586	31
Overweight (25≤BMI<30)	29,009	1,801	8,559	3,848	7,848	6,572	143	222	16
Obese (BMI≥30)	20,377	2,063	5,877	1,384	4,082	6,689	96	176	10
Unknown	447	17	76	32	115	130	1	6	70
Birthweight at Delivery (Grams)									
<1500	1,711	142	374	241	298	633	10	7	6
1500-2499	8,247	512	1,733	1,467	2,250	2,131	51	80	23
2500-3999	99,941	5,284	22,725	17,627	34,763	18,105	443	897	97
≥4000	7,111	368	1,721	775	3,034	1,122	27	59	5
Not stated	3	1	-	-	-	1	-	-	1
Gestational Age (Weeks)†									
<32	1,765	145	405	225	334	636	7	8	5
32-36	8,712	593	2,009	1,365	2,450	2,146	39	90	20
≥37	106,528	5,569	24,139	18,518	37,561	19,207	485	945	104
Unknown	8	-	-	2	-	3	-	-	3
Plurality									
Single	112,878	6,119	25,817	19,551	38,714	21,047	509	997	124
Twin	3,971	179	715	545	1,562	894	22	46	8
Triplet	156	9	21	14	65	47	-	-	-
Quadruplet	8	-	-	-	4	4	-	-	-
Apgar Score at 5 Minutes									
≤6	1,034	82	211	137	233	361	3	5	2
7	1,019	60	210	134	273	321	9	11	1
8	5,576	316	1,142	904	1,717	1,383	28	72	14
9	108,400	5,798	24,786	18,812	37,713	19,757	484	943	107
10	703	33	127	99	353	74	6	10	1
Not stated	281	18	77	24	56	96	1	2	7
Method of Delivery									
Vaginal	74,546	3,868	16,484	12,760	27,650	12,711	325	665	83
Vaginal after any prior C-section	2,993	158	649	359	1,258	524	13	30	2
Primary C-section	23,094	1,371	4,928	3,926	7,271	5,221	120	233	24
Repeat C-section	16,375	910	4,491	3,065	4,166	3,535	73	115	20
Unknown	5	-	1	-	-	1	-	-	3
Place of Birth									
Home	709	35	97	35	374	139	8	16	5
Voluntary hospital	99,017	5,033	20,177	17,908	38,527	15,879	465	957	71
Municipal hospital	17,017	1,230	6,242	2,149	1,333	5,894	53	63	53
Birthing center	142	7	19	5	56	45	5	3	2
Other	128	2	18	13	55	35	-	4	1
Attendant									
Physician	106,348	5,580	23,488	19,197	36,949	19,593	479	968	94
Certified nurse midwife	10,024	669	2,899	858	3,252	2,196	49	68	33
Other	641	58	166	55	144	203	3	7	5
Primary Payer for this Birth‡									
Medicaid/Family Plus/Child Health Plus B/Other govt	68,326	4,461	21,037	11,824	14,973	15,256	317	369	89
Private	46,682	1,753	5,154	7,935	24,919	6,028	204	656	33
Self-pay	1,038	39	153	273	225	338	3	5	2
Other	560	46	128	60	176	135	2	12	1
Not stated	407	8	81	18	52	235	5	1	7
First Visit for Prenatal Care									
First trimester (1-3 months)	86,459	4,295	18,414	15,755	33,461	13,287	359	823	65
Second trimester (4-6 months)	20,138	1,341	5,607	3,054	4,820	5,036	111	140	29
Late (7-9 months)	7,032	402	1,738	1,032	1,186	2,584	41	41	8
No care	592	71	160	41	69	235	3	5	8
Not stated	2,792	198	634	228	809	850	17	34	22
Marital Status of Mother§									
Not married	42,425	4,629	15,785	3,032	4,284	14,073	171	369	82
Married	74,588	1,678	10,768	17,078	36,061	7,919	360	674	50
Education Level									
11th grade or less/12th grade, no diploma	19,392	1,595	8,164	3,227	2,988	3,261	79	71	7
High school graduate or GED	26,032	1,664	6,456	3,986	7,569	6,090	135	123	9
Some college/associate degree	24,732	2,009	6,942	3,299	5,171	6,907	149	254	1
Bachelor's degree	25,548	666	3,317	5,442	11,995	3,721	100	293	14
Master's degree or higher	21,004	365	1,619	4,143	12,557	1,946	65	301	8
Not stated	305	8	55	13	65	67	3	1	93
Birthplace of Mother									
United States, including its territories	56,814	6,267	7,936	2,332	27,362	11,874	189	775	79
Foreign	60,150	36	18,614	17,778	12,977	10,109	342	267	27
Not stated	49	4	3	-	6	9	-	1	26

* 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.

Table PO6. Live Births by Selected Characteristics and Mother's Ancestry, New York City, 2017

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-pregnancy Obesity	Teenage Mother (<20 Years)	Exclusive Breast Feeding
Total	117,013	51.4	42.5	8.5	9.0	6.7	36.3	58.6	17.5	2.7	41.4
Hispanic											
Colombian	1,100	68.5	49.6	8.2	9.6	4.9	44.7	55.5	16.5	1.5	48.9
Cuban	301	15.3	50.2	11.3	9.0	6.6	44.2	41.7	15.0	3.7	52.3
Dominican	10,977	72.3	43.3	8.5	9.1	8.4	59.3	81.5	22.1	5.4	26.1
Ecuadorian	2,933	82.4	35.3	5.4	7.2	7.8	53.7	84.1	17.4	5.0	36.4
Mexican	5,183	73.9	28.3	7.4	9.3	6.0	66.7	89.4	24.9	6.3	36.8
Puerto Rican	6,307	0.6	41.3	10.4	11.7	7.7	73.4	70.8	32.8	7.7	31.9
Other Hispanic	6,059	60.0	39.1	8.4	9.8	6.6	59.8	71.2	23.7	4.7	38.6
North America and the Caribbean											
African American	12,446	17.1	42.4	13.6	13.7	9.3	75.2	70.0	33.5	5.5	29.3
American	12,538	3.3	43.4	7.2	7.6	1.7	14.9	30.8	11.5	1.0	60.9
Guyanese	1,646	89.9	44.2	15.2	12.9	14.8	44.5	68.8	18.9	3.0	35.4
Haitian	1,597	83.5	40.0	10.4	12.2	15.4	39.9	65.8	29.2	1.2	25.7
Jamaican	1,838	92.6	40.5	10.9	12.0	18.7	63.2	70.8	29.0	2.5	37.4
Trinidadian	595	89.4	40.2	10.9	13.0	14.1	51.1	61.0	25.1	2.2	33.3
Other North America and the Caribbean	1,323	88.7	49.6	9.2	8.9	13.4	37.5	52.0	20.0	1.1	49.7
European											
English	591	47.4	56.5	4.9	5.6	2.2	11.2	11.0	4.6	0.0	79.7
German	704	24.6	60.4	7.2	8.9	3.0	11.8	8.1	7.4	0.1	71.8
Irish	1,542	9.1	59.0	6.5	7.5	1.4	12.2	8.9	11.8	0.4	65.9
Italian	3,081	7.4	55.1	7.1	7.1	1.3	16.8	13.8	15.4	0.5	51.5
Polish	912	61.3	53.1	5.5	6.5	2.5	18.2	29.2	6.6	0.2	59.1
Russian	1,515	79.3	50.4	4.9	5.5	3.4	24.3	38.7	5.9	0.4	59.6
Other European	4,545	71.2	52.0	5.7	7.0	5.0	14.4	34.9	8.7	0.4	61.9
Asian											
Asian Indian	2,067	79.9	54.4	10.6	8.3	5.2	7.0	33.5	8.9	0.4	51.0
Bangladeshi	2,953	98.6	40.5	12.0	9.3	7.2	2.6	84.2	11.6	0.3	28.9
Chinese	8,486	90.1	46.7	5.6	6.1	3.7	22.1	64.8	2.4	0.3	29.2
Filipino	827	76.4	49.6	10.3	11.2	5.0	21.0	30.9	10.0	0.8	50.1
Korean	900	71.9	59.1	5.4	6.3	2.9	8.6	18.4	1.8	0.0	65.6
Pakistani	1,713	93.2	38.6	10.0	9.6	8.4	2.2	78.4	15.8	0.5	26.2
Other Asian	6,407	89.0	39.1	6.8	6.8	7.1	11.3	61.7	8.9	1.8	45.0
Other											
Jewish or Hebrew	5,157	12.6	27.2	5.5	5.3	1.4	3.3	64.1	10.5	0.8	43.0
Other or Not Stated	10,770	51.0	40.1	8.9	9.0	11.1	19.7	47.1	15.7	0.9	45.5

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, 2017

Community District of Residence	Live Births	Rate*	Percent of Total Live Births With Specified Characteristics								
			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	117,013	13.6	29.6	51.4	42.5	8.5	9.0	6.7	58.6	17.5	41.4
MANHATTAN	16,980	10.2	27.6	40.6	53.6	8.3	8.4	4.7	32.5	11.7	60.6
Battery Park, Tribeca (01)	1,104	17.3	7.6	34.4	53.3	7.2	7.2	1.9	4.1	2.2	80.9
Greenwich Village, SOHO (02)	701	7.6	6.3	36.8	59.6	4.3	5.3	1.6	9.6	2.0	79.9
Lower East Side (03)	1,203	6.9	28.1	50.7	48.6	7.1	7.3	4.3	58.4	14.2	55.1
Chelsea, Clinton (04)	1,013	7.9	17.5	44.8	63.7	8.5	8.4	4.6	20.7	9.0	70.8
Midtown Business District (05)	576	10.7	8.2	39.9	62.5	6.6	8.0	3.4	11.1	3.3	73.6
Murray Hill (06)	1,281	8.8	7.9	41.0	65.5	7.8	7.1	2.9	7.3	3.2	78.9
Upper West Side (07)	2,390	11.0	14.3	34.6	53.2	8.3	8.1	3.6	12.4	6.2	69.7
Upper East Side (08)	2,603	11.4	7.6	32.2	58.7	7.5	8.1	1.6	5.5	3.7	76.1
Manhattanville (09)	1,016	9.0	51.6	49.8	48.6	9.9	9.5	7.4	63.9	20.2	41.8
Central Harlem (10)	1,516	12.9	28.4	38.9	45.5	10.9	10.2	10.0	60.7	26.0	44.1
East Harlem (11)	1,486	11.7	50.4	37.0	41.6	10.4	11.6	9.6	64.2	24.1	36.9
Washington Heights (12)	2,091	10.4	72.0	54.0	51.3	8.5	8.3	5.4	66.2	20.0	35.1
BRONX	19,097	13.0	59.9	56.4	38.2	10.0	10.2	12.0	82.3	26.6	27.2
Mott Haven (01)	1,493	15.1	66.0	45.6	34.9	9.4	10.7	13.9	88.1	29.2	24.0
Hunts Point (02)	790	14.0	64.4	47.3	37.0	9.5	8.5	14.4	88.3	28.7	21.5
Morrisania (03)	1,432	15.6	54.1	48.6	31.1	10.5	11.0	16.3	85.8	31.3	23.6
Concourse, Highbridge (04)	2,446	15.6	66.2	64.2	36.5	9.8	9.4	12.9	88.3	26.7	23.1
University/Morris Heights (05)	2,220	16.3	70.5	63.4	37.3	10.4	11.4	11.2	88.3	25.9	21.3
East Tremont (06)	1,200	13.7	67.7	47.4	34.1	10.4	10.2	10.3	88.4	28.2	23.3
Fordham (07)	2,094	14.1	72.2	65.7	39.5	9.7	9.9	9.7	85.9	25.4	25.6
Riverdale (08)	1,071	10.3	62.3	50.1	47.3	8.3	8.6	5.8	54.8	18.1	36.3
Unionport, Soundview (09)	2,316	12.5	55.3	58.5	39.8	10.6	10.5	11.3	81.7	25.4	31.6
Throgs Neck (10)	976	8.0	50.2	49.6	41.4	8.9	9.4	9.1	67.1	24.4	36.6
Pelham Parkway (11)	1,355	11.6	49.1	58.7	40.1	8.9	9.7	11.0	74.4	24.5	38.5
Williamsbridge (12)	1,704	10.9	32.3	54.4	40.8	12.3	11.2	16.3	80.1	30.5	27.6
BROOKLYN	38,535	14.5	17.3	47.7	39.2	7.7	8.5	5.7	64.5	16.2	40.9
Williamsburg, Greenpoint (01)	3,595	17.9	13.9	18.2	36.8	4.8	5.4	2.9	59.4	11.1	55.1
Fort Greene, Brooklyn Heights (02)	1,646	13.2	12.7	31.7	59.8	6.7	8.1	2.0	17.3	7.0	72.0
Bedford Stuyvesant (03)	2,160	14.2	17.2	24.2	38.9	8.5	8.4	7.1	67.2	20.1	42.1
Bushwick (04)	1,195	10.6	72.6	53.8	39.4	8.9	11.1	8.1	77.1	22.0	32.9
East New York (05)	2,659	14.7	37.4	53.8	38.5	11.0	11.2	10.2	80.7	26.6	29.7
Park Slope (06)	1,662	15.1	13.6	27.9	55.5	6.6	7.6	2.6	16.1	7.9	76.1
Sunset Park (07)	2,225	16.6	29.7	73.7	40.3	5.6	6.7	2.2	75.4	8.8	36.2
Crown Heights North (08)	1,216	12.5	13.3	35.8	49.2	11.7	11.6	6.9	48.5	18.3	51.6
Crown Heights South (09)	1,446	14.7	6.5	44.6	41.7	7.9	8.6	8.2	64.4	19.2	47.1
Bay Ridge (10)	1,749	12.2	16.4	66.8	42.0	5.7	6.3	2.6	57.4	12.8	40.6
Bensonhurst (11)	2,656	12.8	17.9	79.9	39.3	6.9	7.9	4.9	72.0	12.3	35.4
Borough Park (12)	5,091	25.1	7.4	35.0	25.6	5.4	5.8	1.8	79.4	11.0	32.3
Coney Island (13)	1,173	10.9	18.7	66.4	40.0	8.1	8.5	7.9	75.1	18.5	37.9
Flatbush, Midwood (14)	2,435	14.7	14.4	56.9	39.9	8.0	9.0	7.2	64.6	17.2	38.4
Sheepshead Bay (15)	2,255	12.8	9.3	62.4	35.8	7.6	9.3	4.7	59.1	11.0	42.9
Brownsville (16)	1,259	14.9	19.8	37.2	36.7	11.0	12.9	11.2	80.7	33.5	23.8
East Flatbush (17)	1,923	12.5	8.0	61.2	39.9	10.9	13.1	13.9	71.3	29.1	28.0
Canarsie (18)	2,190	11.2	8.4	52.4	39.8	11.1	10.5	9.5	59.7	23.5	29.3
QUEENS	25,459	10.8	31.9	69.9	43.5	8.5	8.6	7.9	65.7	17.0	39.9
Astoria, Long Island City (01)	1,854	9.3	25.8	53.0	53.5	8.8	8.8	7.2	48.6	16.6	55.3
Sunnyside, Woodside (02)	1,603	11.1	27.7	67.6	53.6	7.7	7.7	6.2	48.0	11.2	55.6
Jackson Heights (03)	2,293	12.6	68.0	79.4	37.8	8.6	8.7	8.1	80.1	16.9	37.0
Elmhurst, Corona (04)	2,438	12.8	56.0	87.4	39.7	7.5	8.0	8.5	84.1	15.2	30.2
Ridgewood, Glendale (05)	1,804	10.8	44.4	64.6	43.5	6.6	8.0	6.2	60.9	18.5	39.6
Rego Park, Forest Hills (06)	1,368	11.8	13.9	67.9	47.2	6.9	7.0	3.9	35.7	8.6	48.2
Flushing (07)	2,669	10.0	17.9	86.2	45.7	6.3	6.7	6.6	76.2	9.6	22.1
Fresh Meadows, Briarwood (08)	1,765	11.2	17.9	69.1	41.9	8.4	9.0	6.2	59.8	14.8	35.8
Woodhaven (09)	1,870	12.5	43.9	73.0	42.6	8.9	8.8	7.4	73.0	18.8	49.3
Howard Beach (10)	1,261	10.0	25.3	68.0	43.4	11.4	9.8	9.2	64.4	18.8	40.4
Bayside (11)	628	5.2	11.7	75.3	43.6	7.5	7.3	4.3	48.9	9.7	32.6
Jamaica, St. Albans (12)	2,992	12.8	22.0	64.7	41.2	10.5	9.7	12.1	73.4	25.4	43.4
Queens Village (13)	1,633	8.4	13.7	62.5	43.5	11.5	11.1	9.7	59.6	25.0	36.1
The Rockaways (14)	1,281	11.2	29.5	40.2	34.8	8.8	10.2	10.2	65.1	23.0	41.4
STATEN ISLAND	5,340	11.1	24.0	37.4	39.8	8.6	9.3	2.2	44.4	21.3	27.7
Port Richmond (01)	2,322	12.7	37.1	41.1	38.0	9.8	10.5	2.6	57.0	24.4	25.4
Willowbrook, South Beach (02)	1,417	10.4	17.5	49.3	38.1	8.2	8.4	2.4	45.7	19.0	29.7
Tottenville (03)	1,591	10.0	10.6	21.7	43.7	7.2	8.2	1.3	25.1	18.8	29.1
NEW YORK CITY RESIDENTS	105,412	12.2	30.7	53.0	42.4	8.5	8.8	7.0	61.8	17.8	40.7
NON-RESIDENTS	11,593	-	18.6	37.2	43.4	9	9.9	3.6	29.2	14.6	47.6
RESIDENCE UNKNOWN	8	-	0.0	14.3	62.5	25.0	25.0	33.3	87.5	0.0	12.5

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.

* 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, 2017

| Birthplace | Total | Borough of Residence | | | | | Non-Residents | Residence Unknown |
		Manhattan	Bronx	Brooklyn	Queens	Staten Island		
United States	56,009	10,016	7,898	20,001	7,555	3,294	7,239	6
Dominican Republic	7,998	1,244	4,218	1,087	1,009	78	362	-
China	7,387	760	47	3,065	2,857	210	448	-
Mexico	3,880	342	992	1,047	1,191	256	52	-
Bangladesh	2,952	63	564	593	1,665	10	57	-
Ecuador	2,425	106	328	402	1,481	34	74	-
Jamaica	2,255	42	508	853	630	17	205	-
Guyana	1,767	25	131	558	952	12	89	-
Pakistan	1,568	55	84	696	460	107	166	-
India	1,512	200	28	112	694	39	439	-
Haiti	1,485	46	31	968	279	11	150	-
Uzbekistan	1,334	10	2	875	396	22	29	-
Yemen	1,155	94	298	518	200	24	21	-
Nigeria	932	30	229	282	214	94	83	-
Russia	931	178	18	414	144	72	105	-
Israel	820	173	21	399	93	25	109	-
Puerto Rico	808	113	374	127	105	46	43	-
Ukraine	805	94	6	486	66	84	69	-
El Salvador	780	42	89	146	395	12	96	-
Trinidad and Tobago	773	15	35	432	227	11	53	-
Egypt	772	43	22	255	268	106	78	-
Colombia	762	66	34	81	473	25	83	-
Honduras	762	46	312	152	175	31	46	-
Guatemala	746	25	83	293	278	36	31	-
Philippines	667	85	41	79	323	45	94	-
Other or Not Stated	15,728	3,169	2,603	4,614	3,329	639	1,372	2
Total	117,013	17,082	18,996	38,535	25,459	5,340	11,593	8

Table PO9. Live Births by Mother's Birthplace and Age, New York City, 2017

| Birthplace | Total | Age of Mother (Years) | | | | | |
		< 20	20-24	25-29	30-34	35-39	≥ 40
United States	56,009	2,079	9,785	12,901	16,816	11,329	3,099
Dominican Republic	7,998	365	1,553	2,405	1,999	1,297	379
China	7,387	26	547	2,637	2,569	1,274	334
Mexico	3,880	90	410	1,038	1,345	757	240
Bangladesh	2,952	8	599	1,005	838	429	73
Ecuador	2,425	81	392	624	664	521	143
Jamaica	2,255	46	322	548	650	491	198
Guyana	1,767	48	321	476	488	333	101
Pakistan	1,568	8	235	581	484	210	50
India	1,512	3	70	400	631	347	61
Haiti	1,485	15	92	300	523	427	128
Uzbekistan	1,334	34	409	400	321	146	24
Yemen	1,155	59	274	337	254	149	82
Nigeria	932	-	30	204	369	249	80
Russia	931	1	16	213	420	221	60
Israel	820	4	97	149	290	215	65
Puerto Rico	808	53	170	216	189	135	45
Ukraine	805	-	33	223	320	172	57
El Salvador	780	54	146	205	200	134	41
Trinidad and Tobago	773	8	55	171	288	198	53
Egypt	772	4	81	241	255	165	26
Colombia	762	10	74	162	236	222	58
Honduras	762	35	141	189	222	145	30
Guatemala	746	43	166	228	185	100	24
Philippines	667	3	20	108	234	240	62
Other or Not Stated	15,728	98	1,164	3,141	5,360	4,416	1,549
Total	117,013	3,175	17,202	29,102	36,150	24,322	7,062

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, 2017

	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	792	78	1,673	2,543	130,975	6.0	19.4
	18-19	2,383	142	3,081	5,606	98,303	24.2	57.0
	Age 15-19	3,175	220	4,754	8,149	229,278	13.8	35.5
Ethnic Group‡								
Hispanic	15-17	517	34	581	1,132	47,749	10.8	23.7
	18-19	1,344	37	983	2,364	33,509	40.1	70.5
	Age 15-19	1,861	71	1,564	3,496	81,258	22.9	43.0
Asian and Pacific Islander	15-17	7	2	38	47	16,876	0.4	2.8
	18-19	105	4	126	235	13,496	7.8	17.4
	Age 15-19	112	6	164	282	30,372	3.7	9.3
Non-Hispanic White	15-17	32	1	109	142	29,095	1.1	4.9
	18-19	288	16	274	578	25,591	11.3	22.6
	Age 15-19	320	17	383	720	54,686	5.9	13.2
Non-Hispanic Black	15-17	225	22	762	1,009	34,023	6.6	29.7
	18-19	622	31	1,283	1,936	23,297	26.7	83.1
	Age 15-19	847	53	2,045	2,945	57,320	14.8	51.4
NYC Events to NYC Residents§	15-17	780	73	1,563	2,416	130,975	6.0	18.4
	18-19	2,279	137	2,838	5,254	98,303	23.2	53.4
	Age 15-19	3,059	210	4,401	7,670	229,278	13.3	33.5
Ethnic Group§								
Hispanic	15-17	509	32	554	1,095	47,749	10.7	22.9
	18-19	1,302	37	927	2,266	33,509	38.9	67.6
	Age 15-19	1,811	69	1,481	3,361	81,258	22.3	41.4
Asian and Pacific Islander	15-17	7	2	37	46	16,876	0.4	2.7
	18-19	105	4	118	227	13,496	7.8	16.8
	Age 15-19	112	6	155	273	30,372	3.7	9.0
Non-Hispanic White	15-17	32	1	99	132	29,095	1.1	4.5
	18-19	249	14	231	494	25,591	9.7	19.3
	Age 15-19	281	15	330	626	54,686	5.1	11.4
Non-Hispanic Black	15-17	221	22	698	941	34,023	6.5	27.7
	18-19	601	31	1,172	1,804	23,297	25.8	77.4
	Age 15-19	822	53	1,870	2,745	57,320	14.3	47.9
Borough of Residence								
Manhattan	15-17	85	5	255	345	16,877	5.0	20.4
	18-19	244	16	441	701	20,423	11.9	34.3
	Age 15-19	329	21	696	1,046	37,300	8.8	28.0
Bronx	15-17	277	17	443	737	28,511	9.7	25.8
	18-19	735	41	747	1,523	19,934	36.9	76.4
	Age 15-19	1,012	58	1,190	2,260	48,445	20.9	46.7
Brooklyn	15-17	218	30	473	721	41,876	5.2	17.2
	18-19	708	47	839	1,594	28,612	24.7	55.7
	Age 15-19	926	77	1,312	2,315	70,488	13.1	32.8
Queens	15-17	167	17	329	513	35,087	4.8	14.6
	18-19	497	29	685	1,211	23,777	20.9	50.9
	Age 15-19	664	46	1,014	1,724	58,864	11.3	29.3
Staten Island	15-17	33	4	63	100	8,624	3.8	11.6
	18-19	95	4	126	225	5,557	17.1	40.5
	Age 15-19	128	8	189	325	14,181	9.0	22.9
NYC Events to Non-NYC Residents	15-17	12	5	110	127	-	N.A.	N.A.
	18-19	104	5	243	352	-	N.A.	N.A.
	Age 15-19	116	10	353	479	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, 2013-2017

	Year				
	2013	2014	2015	2016	2017
Total Live Births	120,457	122,084	121,673	120,367	117,013
Percent to Teenagers (Age < 20)	4.2	3.7	3.3	2.8	2.7
Population* (Female Age 15-19)	238,442	235,417	232,369	231,576	229,278
Birth Rate† (Age 15-19)	21.2	19.4	17.5	14.8	13.8
Births to Teenagers	5,046	4,572	4,073	3,425	3,175
Percent of Births with Specified Characteristics:					
Hispanic	58.1	58.5	59.0	59.0	59.9
Foreign-born Mother‡	29.8	30.0	31.8	33.5	32.7
First Live Birth	85.3	85.9	86.1	88.1	87.3
< 2,500 grams	10.4	9.6	10.5	9.7	10.6
Preterm§	9.5	9.3	10.0	9.0	10.6
Prenatal Care in First or Second Trimester of Pregnancy	84.0	85.4	84.7	85.3	84.3
Not Married	88.4	88.4	86.8	86.1	87.0
On Medicaid||	88.3	90.3	91.0	90.3	90.4
Pre-pregnancy Obesity	13.4	13.6	13.9	13.6	14.3
Infant Mortality Rate¶	6.5	3.7	6.6	5.3	5.4

* 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, 2015-2017*

Community District of Residence	Live Births	Percent of Total Live Births	Percent of Total Live Births with Specified Characteristics								
			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	10,673	3.0	59.3	32.6	87.1	10.3	9.8	15.2	86.6	90.6	26.0
MANHATTAN	1,022	2.0	69.8	25.1	89.6	10.9	11.6	13.3	93.3	92.9	24.7
Battery Park, Tribeca (01)	3	0.1	33.3	66.7	100.0	33.3	33.3	33.3	66.7	66.7	0.0
Greenwich Village, SoHo (02)	5	0.2	20.0	0.0	100.0	0.0	0.0	20.0	100.0	100.0	0.0
Lower East Side (03)	100	2.6	65.3	17.3	89.0	9.0	14.0	11.8	91.0	95.8	39.0
Chelsea, Clinton (04)	43	1.4	57.1	16.3	86.0	11.6	9.3	18.4	100.0	97.6	30.2
Midtown Business District (05)	10	0.6	30.0	10.0	70.0	20.0	20.0	0.0	100.0	90.0	30.0
Murray Hill (06)	15	0.4	38.5	20.0	93.3	13.3	6.7	33.3	93.3	71.4	26.7
Upper West Side (07)	53	0.7	63.5	7.7	84.9	9.4	5.7	10.6	96.2	88.7	35.8
Upper East Side (08)	13	0.2	54.5	23.1	76.9	7.7	7.7	0.0	92.3	84.6	15.4
Manhattanville (09)	135	4.3	79.1	22.2	92.6	6.7	8.9	19.4	94.8	93.3	27.4
Central Harlem (10)	174	3.8	46.2	16.7	87.9	13.8	13.8	12.6	94.3	91.9	24.7
East Harlem (11)	211	4.7	67.8	12.8	89.1	14.7	17.5	11.3	92.4	93.3	21.9
Washington Heights (12)	260	4.0	92.2	51.2	92.3	8.5	7.7	12.2	91.9	93.8	17.7
BRONX	3,305	5.6	72.7	31.8	86.3	10.4	9.3	17.4	92.7	93.3	20.4
Mott Haven (01)	353	7.4	73.6	27.5	87.5	14.2	12.5	15.9	95.8	94.8	19.9
Hunts Point (02)	160	6.6	77.2	20.6	88.1	9.4	9.4	17.2	94.4	93.8	21.3
Morrisania (03)	260	6.0	70.5	25.0	83.5	8.5	7.3	22.4	94.6	91.1	19.3
Concourse, Highbridge (04)	423	5.7	77.5	39.0	87.2	9.0	9.9	15.7	92.9	95.2	18.5
University/Morris Heights (05)	421	6.3	80.5	40.9	84.7	10.9	10.2	14.0	92.6	93.0	16.2
East Tremont (06)	268	7.0	75.6	22.8	83.1	8.6	9.0	13.7	95.5	94.4	19.8
Fordham (07)	356	5.4	85.0	43.5	87.9	8.1	7.3	17.0	93.0	94.9	24.2
Riverdale (08)	88	2.7	89.8	40.9	86.4	14.8	11.4	13.3	93.2	94.1	17.0
Unionport, Soundview (09)	396	5.6	70.6	29.3	87.1	10.4	8.6	19.6	90.7	93.4	23.2
Throgs Neck (10)	99	3.3	77.3	19.2	87.9	13.1	9.1	17.5	89.9	87.9	22.2
Pelham Parkway (11)	173	4.3	60.0	35.3	86.1	11.0	8.1	25.1	80.3	91.3	26.0
Williamsbridge (12)	308	6.0	40.7	23.4	86.4	11.7	8.8	19.8	93.8	90.9	19.2
BROOKLYN	3,342	2.8	42.2	31.8	87.9	10.1	10.3	13.4	79.8	90.3	25.2
Williamsburg, Greenpoint (01)	189	1.7	49.7	15.9	93.7	5.3	7.4	6.7	58.2	89.4	38.3
Fort Greene, Brooklyn Heights (02)	76	1.5	29.3	8.0	88.2	11.8	19.7	1.4	96.1	88.0	17.1
Bedford Stuyvesant (03)	261	3.9	37.4	18.6	87.4	12.3	10.7	13.9	82.4	93.4	21.5
Bushwick (04)	231	6.1	85.8	37.4	85.7	7.8	10.0	14.7	93.9	95.2	22.6
East New York (05)	475	5.9	48.0	28.5	85.7	13.5	10.9	16.4	96.0	89.1	33.1
Park Slope (06)	50	1.0	42.0	20.0	82.0	10.0	10.0	8.2	90.0	100.0	18.0
Sunset Park (07)	212	2.9	80.2	47.2	82.5	7.5	7.1	6.2	86.3	94.8	16.0
Crown Heights North (08)	119	3.1	25.2	10.9	85.7	10.1	9.2	21.3	94.1	91.5	18.5
Crown Heights South (09)	77	1.8	22.1	45.5	90.9	11.7	11.7	19.4	90.9	90.7	19.5
Bay Ridge (10)	74	1.3	55.4	64.9	90.5	5.4	2.7	9.5	68.9	91.8	21.6
Bensonhurst (11)	142	1.8	56.3	58.5	87.3	8.5	9.2	12.9	67.6	91.5	24.3
Borough Park (12)	287	1.8	29.1	31.0	94.8	6.3	5.2	5.7	35.5	88.9	26.8
Coney Island (13)	150	4.0	40.7	29.3	86.7	14.7	15.3	16.4	79.3	93.3	18.0
Flatbush, Midwood (14)	209	2.7	39.9	47.4	88.5	12.4	13.9	15.5	71.8	90.4	22.1
Sheepshead Bay (15)	134	2.0	19.7	47.0	84.3	6.7	10.4	16.7	38.1	84.3	27.6
Brownsville (16)	273	6.9	34.3	15.8	89.0	12.1	12.5	14.3	96.3	88.2	28.2
East Flatbush (17)	217	3.7	15.2	37.8	88.9	11.1	11.5	18.9	93.5	90.6	23.0
Canarsie (18)	166	2.5	18.2	27.7	88.0	9.6	10.2	18.2	91.0	81.3	29.1
QUEENS	2,209	2.8	62.9	43.4	86.0	9.8	9.0	17.8	87.1	89.3	38.2
Astoria, Long Island City (01)	146	2.5	66.9	27.4	82.2	10.3	10.3	21.1	89.7	90.3	29.9
Sunnyside, Woodside (02)	64	1.3	87.5	42.2	82.8	7.8	7.8	26.6	85.9	95.3	28.1
Jackson Heights (03)	314	4.3	93.9	55.7	85.7	8.3	9.2	21.4	86.6	92.0	32.1
Elmhurst, Corona (04)	268	3.5	88.8	52.6	87.7	8.6	8.2	12.6	89.2	94.0	23.1
Ridgewood, Glendale (05)	158	2.8	76.4	32.9	85.4	6.3	10.8	19.7	82.3	89.8	25.9
Rego Park, Forest Hills (06)	29	0.7	17.2	82.8	86.2	10.3	10.3	13.8	48.3	89.7	24.1
Flushing (07)	119	1.4	73.7	57.1	87.4	3.4	7.6	13.6	82.4	89.1	37.8
Fresh Meadows, Briarwood (08)	63	1.2	42.9	39.7	85.7	7.9	4.8	16.9	73.0	88.9	39.7
Woodhaven (09)	175	3.1	67.4	48.0	82.9	12.6	10.9	15.7	85.1	87.4	56.6
Howard Beach (10)	128	3.3	43.0	42.2	89.1	12.5	8.6	18.4	87.5	85.9	53.1
Bayside (11)	11	0.5	36.4	45.5	90.9	9.1	9.1	18.2	90.9	81.8	36.4
Jamaica, St. Albans (12)	415	4.6	41.5	40.7	86.3	13.3	9.4	17.4	90.6	85.7	52.5
Queens Village (13)	126	2.5	19.0	38.9	94.4	10.3	4.0	14.2	88.1	84.1	38.9
The Rockaways (14)	193	4.9	45.8	23.3	81.9	9.3	10.4	20.5	94.3	90.7	32.6
STATEN ISLAND	420	2.6	54.8	16.9	83.3	10.5	10.2	7.4	89.5	81.0	20.6
Port Richmond (01)	323	4.6	59.0	15.8	82.0	9.6	9.9	9.4	92.9	83.9	18.7
Willowbrook, South Beach (02)	57	1.3	50.9	26.3	87.7	7.0	5.3	0.0	78.9	78.9	24.6
Tottenville (03)	40	0.9	27.5	12.5	87.5	22.5	20.0	2.5	77.5	60.0	30.0
NEW YORK CITY RESIDENTS	10,298	3.2	59.7	33.0	87.0	10.2	9.8	15.4	87.2	90.9	26.2
NON-RESIDENTS	372	1.1	46.2	21.8	91.4	11.6	10.2	10.6	69.4	81.1	21.8
RESIDENCE UNKNOWN	3	-	-	-	-	-	-	-	-	-	-

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 in 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, 2017*

Borough of Residence / Pregnancy Outcome	Total	Age of Woman (Years)							Unknown or Not Stated
		< 18	18-19	20-24	25-29	30-34	35-39	≥ 40	
NEW YORK CITY	179,891	2,543	5,606	32,748	46,359	49,087	32,939	10,606	3
Live Births	117,013	792	2,383	17,202	29,102	36,150	24,322	7,062	-
Spontaneous Terminations	8,487	78	142	1,054	1,681	2,212	2,143	1,176	1
Induced Terminations	54,391	1,673	3,081	14,492	15,576	10,725	6,474	2,368	2
MANHATTAN	27,547	345	701	3,779	5,779	8,486	6,294	2,162	1
Live Births	17,082	85	244	1,371	2,903	6,305	4,696	1,478	-
Spontaneous Terminations	1,372	5	16	120	178	375	433	245	-
Induced Terminations	9,093	255	441	2,288	2,698	1,806	1,165	439	1
BRONX	32,516	737	1,523	7,499	9,493	7,434	4,457	1,372	1
Live Births	18,996	277	735	3,889	5,540	4,805	2,919	831	-
Spontaneous Terminations	1,296	17	41	206	310	303	267	152	-
Induced Terminations	12,224	443	747	3,404	3,643	2,326	1,271	389	1
BROOKLYN	56,124	721	1,594	11,158	14,649	14,763	9,941	3,298	-
Live Births	38,535	218	708	6,750	9,884	11,095	7,599	2,281	-
Spontaneous Terminations	2,622	30	47	391	531	648	634	341	-
Induced Terminations	14,967	473	839	4,017	4,234	3,020	1,708	676	-
QUEENS	39,424	513	1,211	7,004	10,887	10,656	7,008	2,145	-
Live Births	25,459	167	497	3,576	7,105	7,786	5,015	1,313	-
Spontaneous Terminations	1,843	17	29	213	411	500	422	251	-
Induced Terminations	12,122	329	685	3,215	3,371	2,370	1,571	581	-
STATEN ISLAND	7,788	100	225	1,213	2,085	2,424	1,348	393	-
Live Births	5,340	33	95	601	1,421	1,919	1,014	257	-
Spontaneous Terminations	410	4	4	48	98	111	99	46	-
Induced Terminations	2,038	63	126	564	566	394	235	90	-
NON-RESIDENTS	16,476	127	351	2,092	3,461	5,321	3,890	1,234	-
Live Births	11,593	12	103	1,013	2,246	4,238	3,079	902	-
Spontaneous Terminations	936	5	5	75	151	274	287	139	-
Induced Terminations	3,947	110	243	1,004	1,064	809	524	193	-
RESIDENCE UNKNOWN	16	-	1	3	5	3	1	2	1
Live Births	8	-	1	2	3	2	.	.	-
Spontaneous Terminations	8	-	.	1	2	1	1	2	1
Induced Terminations	-	-	-	-	-	-	-	-	-

*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, 2017*

Gestational Age (Weeks)	Total	Age of Woman (Years)							
		<18	18-19	20-24	25-29	30-34	35-39	≥40	Unknown or not stated
Total	8,487	78	142	1,054	1,681	2,212	2,143	1,176	1
<13	6,440	57	101	753	1,229	1,649	1,680	970	1
13-15	514	1	9	63	102	146	134	59	-
16-19	642	4	13	96	124	190	146	69	-
20-27	535	10	15	75	147	132	109	47	-
≥28	347	6	4	66	77	92	73	29	-
Not Stated	9	-	-	1	2	3	1	2	-

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, 2017*

	Total	Age of Woman (Years)						
		<18	18-19	20-24	25-29	30-34	35-39	≥40
Total	347	6	4	66	77	92	73	29
Sex								
Male	176	3	3	33	38	43	40	16
Female	158	3	1	30	38	46	31	9
Undetermined	13	-	-	3	1	3	2	4
Weight at Delivery (Grams)								
<500	9	-	-	1	1	3	2	2
500-999	32	-	-	8	7	8	9	-
1,000-1,499	63	1	2	11	16	15	8	10
1,500-1,999	52	1	0	10	11	15	11	4
2,000-2,499	58	0	0	11	10	19	12	6
≥2,500	123	3	2	21	30	32	29	6
Not stated	10	1	-	4	2	-	2	1

*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, 2017*

		Racial/Ethnic Group of Women						
	Total	Puerto Rican	Other Hispanic	Asian and Pacific Islander	Non-Hispanic White	Non-Hispanic Black	Other	Not Stated
Total	347	16	63	38	79	121	7	23
Sex								
Male	176	11	33	17	44	53	4	14
Female	158	5	28	20	30	63	3	9
Undetermined	13	-	2	1	5	5	-	-
Weight at Delivery (Grams)								
<500	9	-	1	1	2	3	-	2
500-999	32	3	6	2	10	9	-	2
1,000-1,499	63	3	11	3	8	31	2	5
1,500-1,999	52	3	10	4	15	15	1	4
2,000-2,499	58	.	9	6	12	26	2	3
≥2,500	123	6	25	22	30	31	2	7
Not stated	10	1	1	-	2	6	-	-

* 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, 2017*

Borough of Residence / Pregnancy Outcome	Total	Borough of Occurrence				
		Manhattan	Bronx	Brooklyn	Queens	Staten Island
NEW YORK CITY	171,751	64,827	23,209	39,154	38,722	5,839
Live Births	117,013	43,691	14,095	28,717	24,761	5,749
Spontaneous Terminations	347	98	61	96	73	19
Induced Terminations	54,391	21,038	9,053	10,341	13,888	71
MANHATTAN	26,210	23,750	1,167	608	677	8
Live Births	17,082	16,367	295	280	132	8
Spontaneous Terminations	35	32	2	1	-	-
Induced Terminations	9,093	7,351	870	327	545	-
BRONX	31,288	9,924	20,363	384	601	16
Live Births	18,996	5,703	12,840	197	240	16
Spontaneous Terminations	68	13	54	1	-	-
Induced Terminations	12,224	4,208	7,469	186	361	-
BROOKLYN	53,621	15,024	297	33,807	3,333	1,160
Live Births	38,535	10,420	118	25,417	1,427	1,153
Spontaneous Terminations	119	26	-	85	3	5
Induced Terminations	14,967	4,578	179	8,305	1,903	2
QUEENS	37,662	6,405	224	2,336	28,669	28
Live Births	25,459	4,565	124	1,614	19,129	27
Spontaneous Terminations	81	11	1	7	61	1
Induced Terminations	12,122	1,829	99	715	9,479	-
STATEN ISLAND	7,394	1,545	127	1,195	148	4,379
Live Births	5,340	345	20	647	30	4,298
Spontaneous Terminations	16	3	-	1	-	12
Induced Terminations	2,038	1,197	107	547	118	69
NON-RESIDENTS	15,566	8,175	1,030	821	5,293	247
Live Births	11,593	6,287	698	559	3,803	246
Spontaneous Terminations	26	13	3	1	8	1
Induced Terminations	3,947	1,875	329	261	1,482	-
RESIDENCE UNKNOWN	10	4	1	3	1	1
Live Births	8	4	-	3	-	1
Spontaneous Terminations	2	-	1	-	1	-
Induced Terminations	-	-	-	-	-	-

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

PREGNANCY OUTCOMES

Table PO18. Induced Terminations of Pregnancy by Selected Characteristics and Age of Woman, New York City, 2017*

	Total	< 18	18-19	20-24	25-29	30-34	35-39	≥ 40	Not Stated
					Age of Woman (Years)				
Induced Termination of Pregnancy, All	54,391	1,673	3,081	14,492	15,576	10,725	6,474	2,368	2
Ethnic Group									
Hispanic	14,443	581	983	4,237	4,132	2,606	1,408	496	-
Asian and Pacific Islander	3,047	38	126	662	801	701	481	238	-
Non-Hispanic white	7,471	109	274	1,635	2,179	1,624	1,189	461	-
Non-Hispanic black	20,569	762	1,283	5,660	6,002	3,944	2,191	725	2
Other	1,930	58	114	615	517	352	203	71	-
Unknown	6,931	125	301	1,683	1,945	1,498	1,002	377	-
Marital Status									
Married	8,315	23	80	1,055	2,044	2,329	1,931	853	-
Not married	39,654	1,512	2,741	11,881	11,800	7,027	3,565	1,126	2
Other/Unknown	6,422	138	260	1,556	1,732	1,369	978	389	-
Gestational Age (Weeks)									
≤ 6	21,705	556	1,052	5,650	6,599	4,325	2,570	952	1
7 - 8	16,117	425	941	4,303	4,588	3,233	1,922	704	1
9 - 10	6,929	240	412	1,917	1,910	1,373	828	249	-
11 - 12	3,461	133	227	967	938	634	403	159	-
13 - 15	2,556	103	159	659	629	498	365	143	-
16 - 20	2,316	132	191	632	611	401	242	107	-
≥ 21	1,247	84	97	355	287	242	136	46	-
Unknown	60	.	2	9	14	19	8	8	-
Type of Primary Termination Procedure									
Suction curettage	35,679	1,055	1,854	9,381	10,254	7,132	4,385	1,616	2
Sharp curettage / D + C	1,537	27	61	315	377	328	279	150	-
Dilation and evacuation	3,981	191	308	1,055	1,008	747	492	180	-
Intrauterine instillation	52	-	1	5	10	14	17	5	-
Hysterotomy / hysterectomy	8	-	-	-	-	5	1	2	-
Medical (non-surgical)	13,095	397	857	3,731	3,920	2,487	1,294	409	-
Other	39	3	-	5	7	12	6	6	-

*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, 2013-2017*

	2013	2014	2015	2016	2017
Marital Status (Percent)					
Married	15.0	13.9	14.7	14.6	15.3
Not married	79.1	73.6	72.8	75.3	72.9
Other/Unknown	6.0	12.6	12.6	10.1	11.8
Age of Woman (Years)					
< 20	8,063	7,067	5,908	5,400	4,754
20 - 24	20,956	19,764	18,049	16,218	14,492
25 - 29	18,066	18,345	17,499	17,004	15,576
30 - 34	12,734	12,462	11,979	11,607	10,725
35 - 39	7,175	7,262	7,108	6,981	6,474
≥ 40	2,846	2,718	2,705	2,642	2,368
Unknown	-	2	2	2	2
Ethnic Group					
Hispanic	21,555	20,371	18,139	16,718	14,443
Asian and Pacific Islander	4,615	4,547	4,012	3,490	3,047
Non-Hispanic white	9,422	9,401	9,652	9,139	7,471
Non-Hispanic black	29,007	27,367	25,515	23,209	20,569
Other	2,591	2,477	2,155	1,711	1,930
Unknown	2,650	3,457	3,777	5,587	6,931
Total	69,840	67,620	63,250	59,854	54,391

*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	2017
1	Mary	Mary	Linda	Jennifer	Stephanie	Ashley	Emily	Isabella	Sophia	Sophia	Olivia	Olivia	Emma
2	Catherine	Marie	Mary	Jessica	Jessica	Samantha	Ashley	Sophia	Isabella	Isabella	Sophia	Sophia	Olivia
3	Margaret	Annie	Barbara	Melissa	Ashley	Kayla	Kayla	Olivia	Emma	Olivia	Emma/Mia	Emma	Mia
4	Annie	Margaret	Patricia	Nicole	Jennifer	Emily	Sarah	Emily	Olivia	Mia	Isabella	Isabella	Sophia
5	Rose	Catherine	Susan	Michelle	Amanda	Brianna	Isabella	Madison	Mia	Emma	Leah	Mia	Isabella
6	Marie	Gloria	Kathleen	Elizabeth	Samantha	Sarah	Samantha	Mia	Emily	Emily	Emily	Ava	Ava
7	Esther	Helen	Carol	Lisa	Nicole	Jessica	Sophia	Emma	Leah	Leah	Ava	Emily	Leah
8	Sarah	Teresa	Nancy	Christina	Christina	Nicole	Nicole	Leah	Sofia	Ava	Chloe	Leah	Emily
9	Frances	Joan	Margaret	Tiffany	Melissa	Michelle	Michelle	Olivia	Sarah	Sofia	Madison	Sarah	Sarah
10	Ida	Barbara	Diane	Maria	Michelle	Amanda	Rachel	Chloe	Chloe	Chloe	Sarah	Madison	Abigail

Rank	Boys												
	1898	1928	1948	1980	1990	2000	2005	2010	2013	2014	2015	2016	2017
1	John	John	Robert	Michael	Michael	Michael	Michael	Jayden	Jayden	Ethan	Ethan	Liam	Liam
2	William	William	John	David	Christopher	Justin	Daniel	Ethan	Ethan	Jacob	Liam	Jacob	Noah
3	Charles	Joseph	James	Jason	Jonathan	Christopher	Joshua	Daniel	Jacob	Liam	Noah	Ethan	Jacob
4	George	James	Michael	Joseph	Anthony	Matthew	David	Jacob	Daniel	Jayden	Jacob	Noah	Ethan
5	Joseph	Richard	William	Christopher	David	Daniel	Justin	David	David	Noah	Jayden	Aiden	David
6	Edward	Edward	Richard	Anthony	Daniel	Anthony	Matthew	Justin	Noah	Daniel	Matthew	Matthew	Lucas
7	James	Robert	Joseph	John	Joseph	Joshua	Anthony	Michael	Michael	Michael	David	Daniel	Matthew
8	Louis	Thomas	Thomas	Daniel	Matthew	David	Christopher	Matthew	Matthew	Alexander	Daniel/Dylan	Lucas	Jayden
9	Francis	George	Stephen	Robert	John	Joseph	Joseph	Joseph	Alexander	David	Aiden	Michael	Aiden
10	Samuel	Louis	David	James	Andrew	Kevin	Nicholas	Joshua	Liam	Matthew	Michael	Dylan	Daniel

Table PO21. Most Popular Baby Names by Sex and Mother's Ethnic Group, New York City, 2017

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

* 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, 2008, 2017

Birth Characteristics	Low (<10%)			Medium (10 to <20%)			High (20 to <30%)			Very High (≥30%)		
	2017	2008	Chg 2008 to 2017 (%)	2017	2008	Chg 2008 to 2017 (%)	2017	2008	Chg 2008 to 2017 (%)	2017	2008	Chg 2008 to 2017 (%)
Births	22,780	28,691	-20.6	29,332	32,072	-8.5	22,646	25,650	-11.7	30,639	30,482	0.5
Population	2,247,137	2,551,267	-11.9	2,653,019	2,384,504	11.3	1,763,003	1,558,009	13.2	1,949,753	1,612,610	20.9
Birth Rate (per 1,000 population)	10.1	11.2	-9.9	11.1	13.5	-17.8	12.8	16.5	-22.0	15.7	18.9	-16.9
Preterm Live Births (%)	8.1	9.1	-11.0	8.6	9.3	-7.5	9.3	9.7	-4.1	9.3	10.3	-9.7
Low Birth Weight (%)	7.7	8.4	-8.3	8.3	8.3	0.0	8.9	8.8	1.1	8.8	9.5	-7.4
Body Mass Indicator‡												
Normal (%)	63.0	62.8	0.3	53.1	54.5	-2.6	47.7	51.0	-6.5	45.2	46.9	-3.6
Overweight/Obese (%)	31.1	31.1	0.0	41.5	39.9	4.0	47.5	43.2	10.0	49.8	48.2	3.3
C-section (%)§	35.2	36.1	-2.5	34.6	33.8	2.4	33.9	31.2	8.7	31.0	28.0	10.7
Multiple Births (%)	3.8	4.7	-19.1	3.6	3.4	5.9	3.0	2.9	3.4	3.1	2.9	6.9
Breastfed Only (%)‡	56.9	39.6	43.7	44.2	28.8	53.5	35.5	24.6	44.3	29.0	25.6	13.3
Late or No Prenatal Care (%)	4.3	§	-	6.7	§	-	8.0	§	-	8.6	§	-
Foreign Born (%)||	44.3	46.3	-4.3	60.0	62.1	-3.4	60.8	58.3	4.3	47.0	43.0	9.3

*Births 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.

§ Due to the reporting problem in 2008 when birth registration was switched to an electronic system, prenatal care variables are not presented.

\|\|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, 2017

	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	3,175	13.8	220	1.0	4,754	20.7	8,149	35.5
	20-29	46,304	64.8	2,735	3.8	30,068	42.1	79,107	110.7
	30-39	60,472	86.5	4,355	6.2	17,199	24.6	82,026	117.3
	40-49	7,062	12.4	1,176	2.1	2,368	4.1	10,606	18.6
	Total	117,013	13.6	8,487	4.4	54,391	28.2	179,891	93.3
Racial/Ethnic Group§‖									
Hispanic	15-19	1,861	22.9	71	0.9	1,564	19.2	3,496	43.0
	20-29	15,761	75.9	561	2.7	8,369	40.3	24,691	118.9
	30-39	13,765	71.5	634	3.3	4,014	20.9	18,413	95.7
	40-49	1,473	8.8	191	1.1	496	3.0	2,160	12.9
	Total	32,860	13.1	1,457	2.6	14,443	25.6	48,760	86.3
Asian and Pacific Islander	15-19	112	3.7	6	0.2	164	5.4	282	9.3
	20-29	7,521	66.1	214	1.9	1,463	12.9	9,198	80.8
	30-39	11,390	95.2	358	3.0	1,182	9.9	12,930	108.1
	40-49	1,087	11.1	85	0.9	238	2.4	1,410	14.4
	Total	20,110	15.7	663	2.1	3,047	9.7	23,820	75.9
Non-Hispanic White	15-19	320	5.9	17	0.3	383	7.0	720	13.2
	20-29	12,889	57.8	532	2.4	3,814	17.1	17,235	77.3
	30-39	24,169	104.1	1,301	5.6	2,813	12.1	28,283	121.8
	40-49	2,967	18.5	313	1.9	461	2.9	3,741	23.3
	Total	40,345	14.7	2,163	3.7	7,471	12.6	49,979	84.6
Non-Hispanic Black	15-19	847	14.8	53	0.9	2,045	35.7	2,945	51.4
	20-29	9,569	61.8	689	4.5	11,662	75.4	21,920	141.7
	30-39	10,169	71.9	853	6.0	6,135	43.4	17,157	121.3
	40-49	1,407	10.4	232	1.7	725	5.4	2,364	17.5
	Total	21,992	11.6	1,827	4.4	20,569	49.2	44,388	106.1
Borough of Residence¶									
Manhattan	15-19	329	8.8	21	0.6	696	18.7	1,046	28.0
	20-29	4,274	25.6	298	1.8	4,986	29.9	9,558	57.3
	30-39	11,001	70.1	808	5.1	2,971	18.9	14,780	94.2
	40-49	1,478	13.9	245	2.3	439	4.1	2,162	20.3
	Total	17,082	10.3	1,372	3.3	9,093	21.9	27,547	66.4
Bronx	15-19	1,012	20.9	58	1.2	1,190	24.6	2,260	46.7
	20-29	9,429	77.3	516	4.2	7,047	57.7	16,992	139.2
	30-39	7,724	70.9	570	5.2	3,597	33.0	11,891	109.1
	40-49	831	8.5	152	1.6	389	4.0	1,372	14.0
	Total	18,996	12.9	1,296	4.0	12,224	37.3	32,516	99.3
Brooklyn	15-19	926	13.1	77	1.1	1,312	18.6	2,315	32.8
	20-29	16,634	75.7	922	4.2	8,251	37.6	25,807	117.5
	30-39	18,694	83.6	1,282	5.7	4,728	21.1	24,704	110.5
	40-49	2,281	13.1	341	2.0	676	3.9	3,298	19.0
	Total	38,535	14.5	2,622	4.4	14,967	24.9	56,124	93.2
Queens	15-19	664	11.3	46	0.8	1,014	17.2	1,724	29.3
	20-29	10,681	61.4	624	3.6	6,586	37.8	17,891	102.8
	30-39	12,801	71.6	922	5.2	3,941	22.0	17,664	98.8
	40-49	1,313	8.2	251	1.6	581	3.6	2,145	13.4
	Total	25,459	10.8	1,843	3.8	12,122	24.7	39,424	80.4
Staten Island	15-19	128	9.0	8	0.6	189	13.3	325	22.9
	20-29	2,022	63.2	146	4.6	1,130	35.3	3,298	103.1
	30-39	2,933	95.5	210	6.8	629	20.5	3,772	122.8
	40-49	257	7.9	46	1.4	90	2.8	393	12.1
	Total	5,340	11.1	410	4.4	2,038	22.1	7,788	84.3

Population data used to calculate rates are 2017 estimates from US Census Bureau. See Technical Notes: Population.

*See Technical Notes: Population, Vital Event Rates.

†The denominators for total rates are females age 15-44, except for total birth rates, which are the entire 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 2017 THE CITY OF NEW YORK
Appendix B

Technical Notes and New York City Vital Event Certificates

NYC Health

POPULATION

CITYWIDE POPULATION

The 2017 NYC population estimates used in tables and figures are based on the US Census Bureau 2017 Vintage population estimate as extracted from the Census website (https://www.census.gov/data/datasets/2017/demo/popest/counties-detail.html/cc-est2017-alldata-36.csv). The 2017 US Census population estimate for New York City (NYC) is 8,622,698. See Table PC2 on page 49 for 2017 NYC population estimates by age, mutually exclusive race and Hispanic origin, and sex. Population data used to compute rate trends (2008-2017), regardless of NYC geography presented, was estimated by DOHMH, Epidemiology Services, using the methodology found below under Community District Population Estimates. Population estimates for 2012-2017 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 view 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 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.

2017 Community District estimates

The 2017 Community District population estimates were calculated based on the Census postcensal estimate for 2017 released in June 2018. 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 2011-2017 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. 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

Infant's ethnic group is determined from mother's ancestry and race reported on the infant's birth certificate. In the absence of 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: <10% of the population below poverty	Medium: 10-19% of the population below poverty	High: 20-29% of the population below poverty	Very High: ≥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

Legend:
- Manhattan
- Bronx
- Brooklyn
- Queens
- Staten Island
- Neighborhood Health Action Center
- Parks and Airports

BX08
BX12
BX07
MN12
BX05
BX06
BX11
BX04
BX03
BX09
BX10
MN09
MN10
BX01
BX02
MN11
MN07
MN08
QN01
QN07
QN03
QN11
MN04
MN05
MN06
QN02
QN04
QN08
MN02
QN06
MN03
BK01
QN05
MN01
BK02
BK04
QN09
QN13
BK03
QN12
BK06
BK08
QN10
BK16
BK09
BK05
BK07
BK17
SI01
BK12
BK14
SI02
BK10
BK18
BK11
BK15
QN14
SI03
BK13
QN14
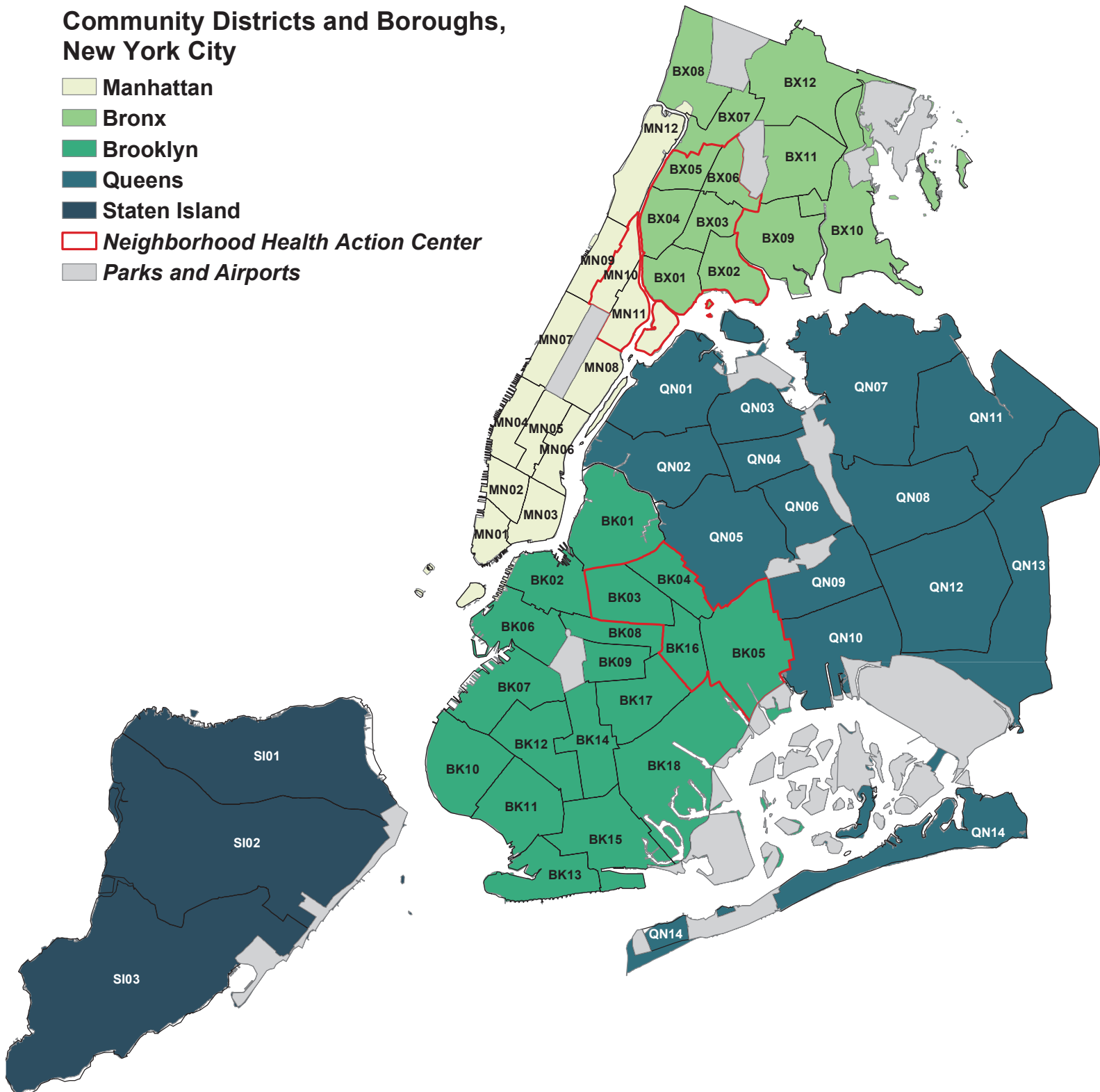
VITAL EVENT RATES

DEATH RATES

Death Rate, all causes per 1,000 population

$$\frac{\text{Deaths to all causes}}{\text{Population}} \times 1{,}000$$

Death Rate, specified causes per 100,000 population

$$\frac{\text{Deaths to specific causes (specified ICD10 codes)}}{\text{Population}} \times 100{,}000$$

Death Rate, age and sex specific per 1,000 population

$$\frac{\text{Deaths to persons of specified age group and sex}}{\text{Population, specified age group and sex}} \times 1{,}000$$

Death Rate, age -adjusted per 100,000 population

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)

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

*Deaths 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: O00-O95, O98-O99, A34)

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

$$\frac{\text{Deaths to infants < 1 yr old}}{\text{Number of live births}} \times 1{,}000$$

Neonatal Mortality Rate

$$\frac{\text{Deaths to infants < 28 days of life}}{\text{Number of live births}} \times 1{,}000$$

Early Neonatal Mortality Rate

$$\frac{\text{Deaths to infants < 7 days of life}}{\text{Number of live births}} \times 1{,}000$$

Late Neonatal Mortality Rate

$$\frac{\text{Deaths to infants 7-27 days of life}}{\text{Number of live births}} \times 1{,}000$$

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

$$\frac{\text{Live births}}{\text{Female population aged 15 to 44 years}} \times 1{,}000$$

Pregnancy Rate

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

BIRTH RATES

Total birth rate

$$\frac{\text{Total births}}{\text{Total population regardless of age or sex}} \times 1{,}000$$

Age-specific birth rate

$$\frac{\text{Births among specific age group}}{\text{Female population of specific age group}} \times 1{,}000$$

Total spontaneous termination rate

$$\frac{\text{Total spontaneous terminations}}{\text{Female population ages 15 to 44 years}} \times 1{,}000$$

Age-specific spontaneous termination rate

$$\frac{\text{Spontaneous terminations among specific aged females}}{\text{Female population of specified age group}} \times 1{,}000$$

Total induced termination of pregnancy rate

$$\frac{\text{Total induced terminations}}{\text{Female population age 15 to 44 years}} \times 1{,}000$$

Age-specific induced termination of pregnancy rate

$$\frac{\text{Induced terminations among specific aged females}}{\text{Female population of specified age group}} \times 1{,}000$$

Fetal-infant Mortality Rate (FIMR)

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

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 due to other certain 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, birthplace, 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 en-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 2017, 94% of death certificates were filed electronically using the Electronic Vital Events Registration System (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.

TECHNICAL NOTES, 2017

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 frequency and importance in New York City.

Death trends across ICD code revision years may change as a fact 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:

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

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:

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

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:

$$SAM = Number\ of\ deaths\ x\ SAF$$

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.

TECHNICAL NOTES, 2017

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 the study of Bagnardi et al. 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 15, 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 18-21; 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 on page 108: 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.

TECHNICAL NOTES, 2017

HEART DISEASE DEATHS

See the NYC Summary of Vital Statistics 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 21; 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, 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 O00-O95, O98-O99 and A34 (obstetrical tetanus). "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 19, 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 10-17, Tables 3-4; Appendix A Table M9-10)

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:

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

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 DOHMH for vital events occurring in or en-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. Effective January 2008, BVS required 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 on 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 PO6-7, PO12)

Breast feeding has been reported on the birth certificate since 2008. It includes infant feeding practices through the first 5 days of life. New York City births must be filed with the Department 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 on 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 purpose.

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 en-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 Department 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 on 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 (500-1,400 grams, $\geq 1,500$ 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.

POPULATION

POPULATION ESTIMATES

2013-2016

Tables and figures with 2013-2016 data use intercensal population estimates determined by Census Bureau in 2013-2016 vintage files. Tables and figures with 2001-2012 data use intercensal population estimates determined by Census Bureau released as of September 2012.

2010-2016

Tables and figures with single-year data use 2010 Census population count. Tables and figures with 2001-2010 data use intercensal population estimates determined by 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 Summaries' 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:

$$\frac{pop(t1)}{pop(t0)} = e^{rt}$$

(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

2013-2016

Community District population estimates for 2013-2016 were based on Census intercensal estimates by county, age, race, and sex, 2013-2016 vintages, 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 Summaries because the 2010 and 2011 Summaries' 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 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 1st intercensal numbers. These estimates differ from the 2000-2010 estimates used in the 2010 Summary because they are adjusted to official intercensal estimates consistent with Census 2010 released in October 2012.

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).

Through 2007

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 acute alcoholism (previously coded as F10.2) to X45 (alcohol poisoning), and recoding F10.0 cases as X45 cases. 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

2008-2016

Unintentional Drug-related Overdose Deaths (Mortality: Figure 17), a definition used in Take Care New York (TCNY) was reported in the Summaries from 2008 to 2016. The definition had changed after an extensive review of drug-related cases. Starting in the 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:

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

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 2001 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, 2002 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.

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.

INDUCED AND SPONTANEOUS TERMINATION OF PREGNANCY

REPORTING

Through 2007

Induced and spontaneous 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.

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:

Cert. No.:

Place:

Died: Date:

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.   ☐ RPA
☐ D.O.   ☐ R.N.
☐ Lic. Midwife
☐ Other-Specify _____

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

VOID

118

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

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

	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   ☐ No Provider
☐ C(N)M/NP/PA/Other Midwife   ☐ No Information
☐ Clinic   ☐ 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   ☐ Hepatitis C
☐ Syphilis   ☐ Tuberculosis
☐ Herpes Simplex (HSV)   ☐ Rubella
☐ Chlamydia   ☐ Bacterial Vaginosis
☐ Hepatitis B   ☐ 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   ☐ Marijuana
☐ Cocaine   ☐ Sedatives
☐ Methadone   ☐ Tranquilizers
☐ Methamphetamine   ☐ Anticonvulsants

j. Mother/Parent Pre-Pregnancy Weight _____ pounds

k. Mother/Parent Height _____ feet _____ inches

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

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   ☐ Other
☐ Private Insurance   ☐ Self-pay
☐ Other govt/CHPlusB   ☐ Unknown
☐ CHAMPUS/TRICARE

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

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

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

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

2. Complications from any of the above?

☐ Yes   ☐ No

Method of Delivery

f. Fetal Presentation at Birth

☐ Cephalic   ☐ Other
☐ Breech

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

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

1. If cesarean, was trial of labor attempted?

☐ Yes   ☐ No

2. Indications for C-Section ☐ Unknown
(Select **all** that apply)   ☐ Maternal condition-not pregnancy related
☐ Failure to progress   ☐ Maternal condition-pregnancy related
☐ Malpresentation   ☐ Refused VBAC
☐ Previous C-Section   ☐ Elective
☐ Fetus at risk/NFS   ☐ Other

3. Was delivery with forceps attempted but unsuccessful?

☐ Yes   ☐ No

4. Indications for Forceps ☐ Unknown
(Select **all** that apply)   ☐ Fetus at Risk
☐ Failure to progress   ☐ Other

5. Was delivery with vacuum extraction attempted but unsuccessful?

☐ Yes   ☐ No

6. Indications for Vacuum ☐ Unknown
(Select **all** that apply)   ☐ Fetus at Risk
☐ Failure to progress   ☐ Other

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

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

20. INFANT

a. Birthweight

_____ _____ **or** _____
Pounds Ounces   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   ☐ Severe pre-eclampsia
☐ Bleeding   ☐ Woman Refused Transfer
☐ Fetus at Risk   ☐ 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			l. Diagnosed Prenatally?		m. If Yes, please indicate all methods used:		
	Yes	No	Yes	No			
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 ☐

VOID

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 _____ Signature _____ D.O. M.D.
(Type or Print)

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)	Under 1 Year		Under 1 Day		10. Social Security No.
		Months	Days	Hours	Minutes	
	1	2	3	4	5	

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 4 ❑ Some college credit, but no degree 7 ❑ Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA) 2 ❑ 9th – 12th grade; no diploma 5 ❑ Associate degree (e.g., AA, AS) 8 ❑ Doctorate (e.g., PhD, EdD) or 3 ❑ High school graduate or GED 6 ❑ Bachelor's degree (e.g., BA, AB, BS) 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)

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.

PART I		APPROXIMATE INTERVAL: ONSET TO DEATH
	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. _____

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

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:
D.O.
Certifier Signature _____ 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		Under 1 Day	
Months	Days	Hours	Minutes
2	3	4	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)

VOID

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

_____ at _____
(Date)   (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)

This is a NYC DOHMH form VR-17 (Rev. 01/10), Certificate of Spontaneous Termination of Pregnancy.

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

VOID

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
☐ Hospital – Amb. Surg.
☐ Hospital – Labor/Labor and Delivery
☐ Hospital – Other
☐ Freestanding Birthing Center
☐ Home
☐ Clinic/Doctor's Office
☐ 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

8. NAME PRIOR TO FIRST MARRIAGE: (First, Middle, Last, Suffix)

10. AGE

11. SEX ☐ Male ☐ Female

Country

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

17. AGE

18. SEX ☐ Male ☐ Female

Country

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

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)*

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

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

	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   ☐ Sedatives
☐ Cocaine   ☐ Tranquilizers
☐ Methadone   ☐ Anticonvulsants
☐ Methamphetamine   ☐ Other
☐ Marijuana   ☐ 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

☐ Other   If yes, how many? _____
☐ None
☐ Unknown

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   ☐ Tuberculosis
☐ Syphilis   ☐ Rubella
☐ Herpes Simplex (HSV)   ☐ Cytomegalovirus
☐ Chlamydia   ☐ Parvovirus
☐ Bacterial Vaginosis   ☐ Toxoplasmosis
☐ Hepatitis B   ☐ Other
☐ Hepatitis C   ☐ None
☐ Listeria   ☐ Unknown
☐ Group B Strep

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)*

3A. FACILITY NAME

3B. FACILITY ADDRESS
Street Number and Name   Apt. #, Suite #, etc.

City or Town   County   State   Country   ZIP Code

2. FACILITY TYPE
☐ Hospital   ☐ Shared Facility
☐ Clinic (Article 28)   ☐ Doctor's Office
☐ Clinic (non-Article 28)   ☐ Unknown
☐ Other type _____

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)
_____
☐ Guamanian or Chamorro
☐ Samoan
☐ Native Hawaiian
☐ 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 _____

ATTENDANT/CERTIFIER

19. ATTENDANT NAME AT TERMINATION:

_____
(First, Middle, Last, Suffix)
☐ MD
☐ DO
☐ NP

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*

VR-18
(REV. 01/13)

128

VOID