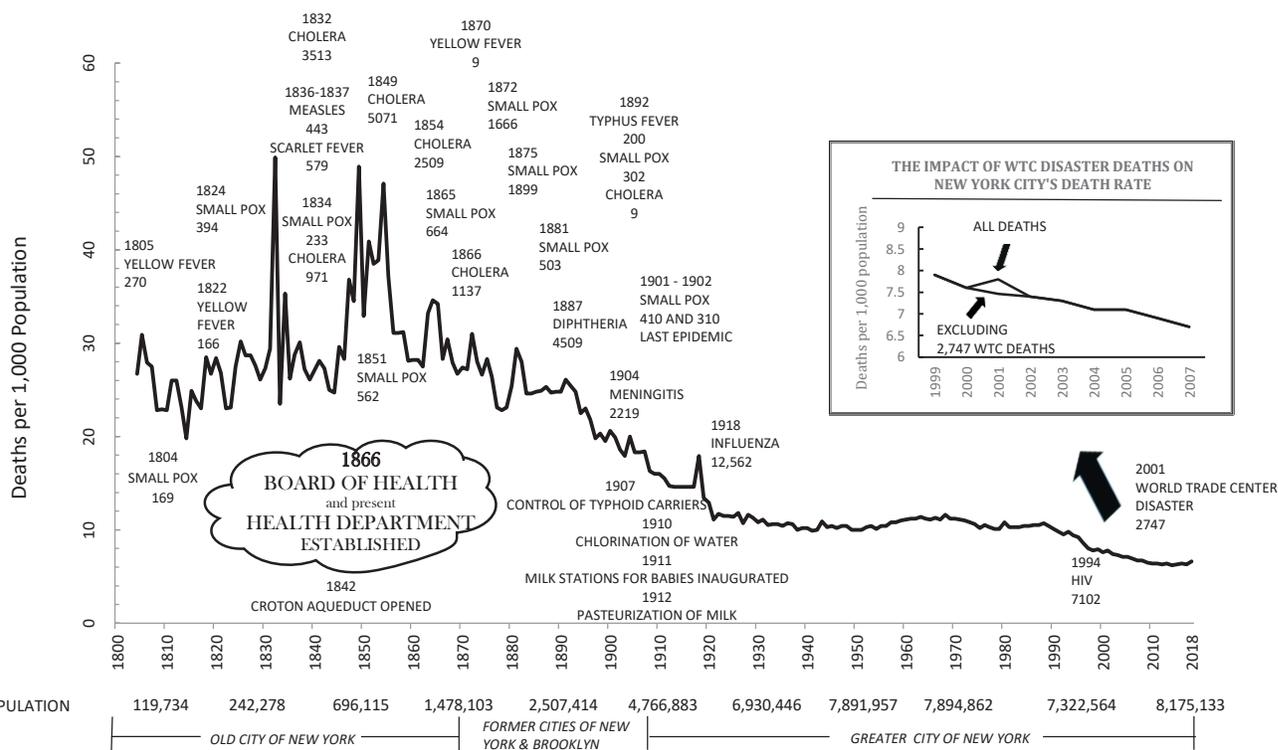


SUMMARY OF VITAL STATISTICS 2018

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.



Bill de Blasio, Mayor

Dave A. Chokshi, MD, MSc, Commissioner

SUMMARY OF VITAL STATISTICS 2018 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
Muriel Silin, MPH, Director, Quality Improvement Unit



December 2020

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NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE
Dave A. Chokshi, MD, MSc
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 2018 report, which begins on the next page, include:

- Citywide, life expectancy was 81.3 years, representing a 0.1-year increase since 2017 and a 0.7-year increase since 2009.
- Non-Hispanic Black New Yorkers had the lowest life expectancy among racial/ethnic groups at 77.2 years, while Hispanic New Yorkers had the highest at 82.4 years.
- While the citywide age-adjusted mortality rate has declined by 12.3% since 2009, from 2017 to 2018, the citywide age-adjusted mortality rate increased from 545.7 per 100,000 population to 555.1 per 100,000 population.
- New York City's age-adjusted premature death rate (age <65 years) has declined by 10.0% since 2009. There was a slight increase in the age-adjusted premature death rate from 184.9 per 100,000 population in 2017 to 187.1 per 100,000 population in 2018.
- Deaths due to unintentional drug overdose continued to rise, with a 1.2% increase from 2017.
- The 2018 citywide crude birth rate was 13.6 births per 1,000 population, the same as in 2017. From 2009 to 2018, birth rates fell among all teenagers regardless of age, and the overall rate of teen birth declined by 55.1%.
- While the infant mortality rate reached a historic low of 3.9 deaths per 1,000 live births in 2018, a 9.3% decrease from 2017, the rate for non-Hispanic Black New Yorkers was 3.4 times the rate for non-Hispanic Whites.
- Although the infant mortality rate declined in all neighborhood poverty groups from 2009 to 2018, the infant mortality rate in very high poverty areas was 1.5 times the infant mortality rate in low poverty areas in 2018.

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 addressing the root causes of these disparities, including by sharing data which inform our programmatic priorities.

Sincerely,

Dave A. Chokshi, MD, MSc
Commissioner

KEY FINDINGS

Life Expectancy at Birth

- New York City's life expectancy at birth in 2018 was 81.3 years, increasing by 0.1 years since 2017, and increasing by 0.7 years since 2009.
- The New York City 2018 life expectancy at birth was 82.4 years among Hispanics, 81.3 years among non-Hispanic Whites, and 77.2 years among non-Hispanic Blacks. From 2009 to 2018, life expectancy increased by 0.7 years among Hispanics, 0.4 years among non-Hispanic Whites, and 0.6 years among non-Hispanic Blacks.

Mortality

- The citywide age-adjusted death rate increased over the past year, from 545.7 per 100,000 population in 2017, to 555.1 in 2018 (a 1.7% increase). From 2017 to 2018, the age-adjusted death rate increased among Hispanics by 2.2%, among non-Hispanic Blacks by 3.1%, among non-Hispanic Whites by 0.3%, and among Asians and Pacific Islanders by 1.4%. The increase of rates was partially due to the 2.6% population decrease from 2017 to 2018.
- Over the past ten years, the citywide age-adjusted death rate decreased by 12.3%. Between 2009 and 2018, the age-adjusted death rates decreased by 9.1% among non-Hispanic Blacks, by 11.4% among Hispanics, by 13.8% among non-Hispanic Whites, and by 5.6% among Asians and Pacific Islanders.
- The citywide age-adjusted premature mortality rate increased over the past year, from 184.9 per 100,000 population in 2017 to 187.1 in 2018 (1.2% increase), an increase that was partially due to the 3.2% population decrease among those under the age of 65, from 2017 to 2018. From 2017 to 2018, the age-adjusted premature mortality rate increased among Hispanics by 2.6%, and among non-Hispanic Blacks by 2.0%, yet decreased among non-Hispanic Whites by 1.5%, and among Asians and Pacific Islanders by 1.9%.
- The age-adjusted premature mortality rate declined by 10.0% citywide over the past ten years. From 2009 to 2018, age-adjusted premature death (age < 65 years) rates declined by 10.9% among non-Hispanic Blacks, 11.6% among Hispanics, 10.8% among non-Hispanic Whites, and increased by 4.1% 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 was 16.6 per 100,000 population in 2018, remaining the same since 2017, and a 107.5% increase since 2009.

Infant Mortality

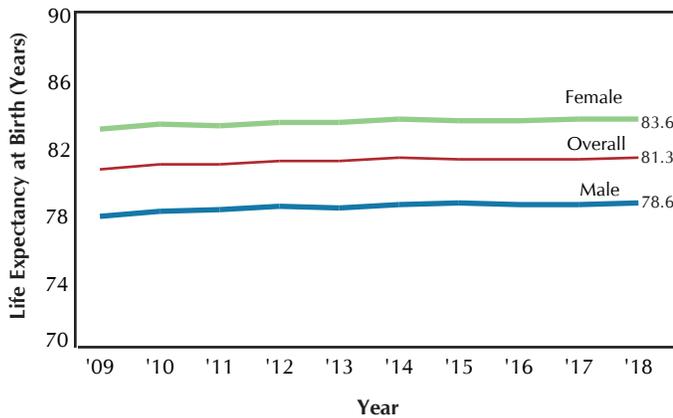
- In 2018, New York City's infant mortality rate reached a historic low of 3.9 infant deaths per 1,000 live births, a decrease since 2017 (4.3 per 1,000 live births). Due to the small number of deaths, the rate will fluctuate from year to year.
- The infant mortality rate declined by 26.4% since 2009.
- The infant mortality rate disparity between non-Hispanic Blacks and non-Hispanic Whites increased slightly from 3.3 in 2017 to 3.4 in 2018. The disparity in infant mortality rates between Puerto Ricans and non-Hispanic Whites decreased from 2.6 in 2017 to 2.3 in 2018. These changes may be due to small counts from year to year.

Pregnancy Outcomes

- The 2018 citywide crude birth rate was 13.6 births per 1,000 population. New York City's birth rate remained the same as 2017 and decreased by 12.3% since 2009.
- In 2018, the birth rate was highest among Asians and Pacific Islanders at 15.4 births per 1,000 population, followed by 15.0 among non-Hispanic Whites, 12.9 among Hispanics, and 11.4 among non-Hispanic Blacks.
- For 2018, the community district with the highest crude birth rate was Borough Park with 24.9 births per 1,000 population; the community district with the lowest crude birth rate was Bayside with 4.8 births per 1,000 population.
- From 2009 to 2018, birth rates fell among all teenagers regardless of age, and the overall rate of teen birth (births to women < 20) declined by 55.1%. Among teens less than 18 years of age, the birth rate declined over that period by 62.4%; among women 18-19, it declined by 52.4%.
- From 2009 to 2018, teen birth rates declined for all racial/ethnic groups: by 54.9% among Hispanics, 55.8% among non-Hispanic Blacks, 33.3% among non-Hispanic Whites, and 47.1% among Asians and Pacific Islanders.
- Induced and spontaneous terminations of pregnancy both continued to decline from 2017 to 2018, decreasing by 5.0% and 6.8%, respectively.

LIFE EXPECTANCY

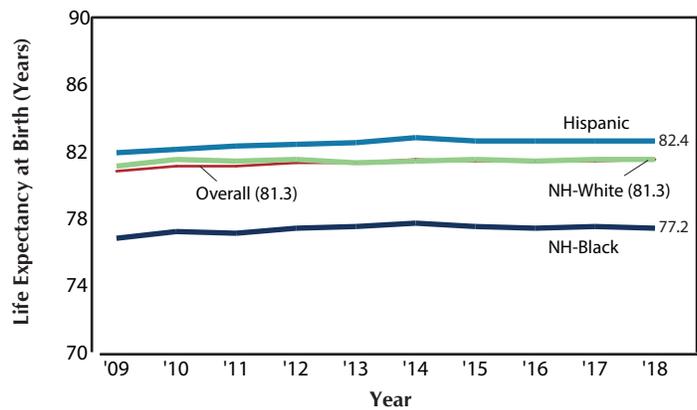
Figure 1. Life Expectancy at Birth, Overall and by Sex, New York City, 2009–2018



- New York City’s life expectancy at birth in 2018 was 81.3 years, increasing by 0.1 years since 2017, and increasing by 0.7 years since 2009.
- The life expectancy among males was 78.6 years, a 0.1-year increase since 2017, and a 0.8-year increase since 2009.
- The life expectancy among females was 83.6 years, remaining the same since 2017, and a 0.6-year increase since 2009.

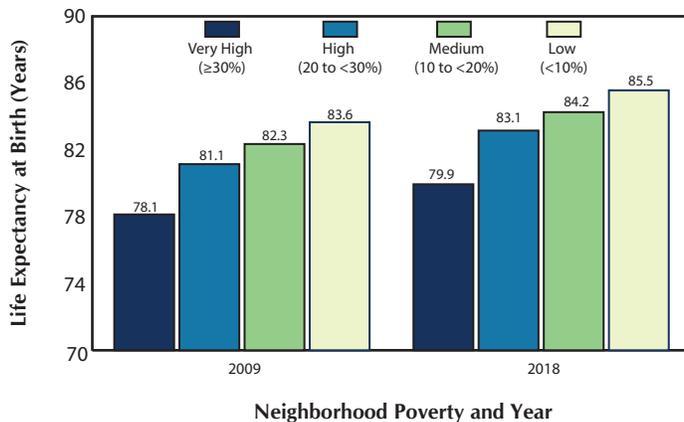
- The New York City 2018 life expectancy at birth was 82.4 years among Hispanics, 81.3 years among non-Hispanic Whites, and 77.2 years among non-Hispanic Blacks.
- Life expectancy increased across all racial/ethnic groups from 2009 to 2018: 0.7 years among Hispanics, 0.4 years among non-Hispanic Whites, and 0.6 years among non-Hispanic Blacks. From 2017 to 2018, life expectancy decreased 0.1 years among non-Hispanic Blacks, and remained the same among Hispanics and non-Hispanic Whites.
- The life expectancy estimate for Asians and Pacific Islanders is not displayed due to small single year age population denominators.

Figure 2. Life Expectancy at Birth by Racial/Ethnic* Group, New York City, 2009–2018



*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, 2009 and 2018



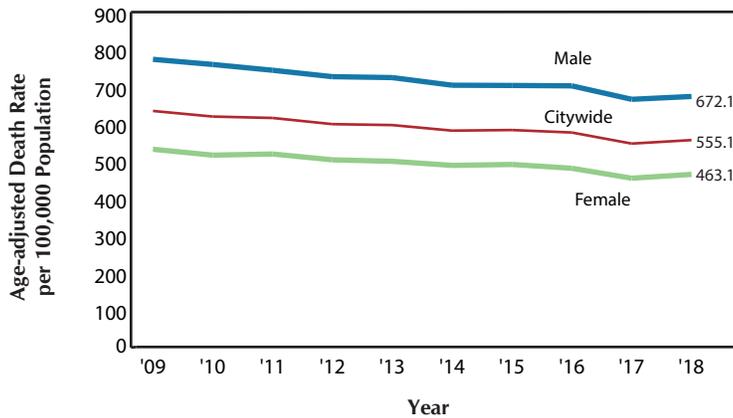
- Life expectancy increased across all categories of neighborhood poverty between 2009 and 2018. For very high poverty areas, life expectancy increased by 1.8 years, compared to 1.9 years for low poverty areas.
- The difference in life expectancy between very high and low poverty areas in 2018 was 5.6 years, compared to 5.5 years in 2009.

*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 2009 data and per ACS 2013-2017 for 2018 data.

*Mortality data are based on NYC residents, including New York State occurrence.

CITYWIDE MORTALITY

Figure 5. Age-adjusted Death Rates, Overall and by Sex, New York City, 2009–2018



- Over the past ten years, the citywide age-adjusted death rate decreased by 12.3%. The age-adjusted death rate increased over the past year, from 545.7 per 100,000 population in 2017, to 555.1 in 2018.
- From 2009 to 2018, age-adjusted death rates decreased by 12.9% among males, and by 12.7% among females.
- The increase of rates was partially due to the 2.6% population decrease from 2017 to 2018.

- Between 2009 and 2018, age-adjusted death rates decreased by 9.1% among non-Hispanic Blacks, by 11.4% among Hispanics, by 13.8% among non-Hispanic Whites, and by 5.6% among Asians and Pacific Islanders.
- From 2017 to 2018, the age-adjusted death rate increased among Hispanics by 2.2%, among non-Hispanic Blacks by 3.1%, among non-Hispanic Whites by 0.3%, and among Asians and Pacific Islanders by 1.4%.
- In 2018, the death rate for non-Hispanic Blacks was 21.0% 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 2017 (the death rate for non-Hispanic Blacks was 18.0% higher than the rate for non-Hispanic Whites in 2017).

Figure 6. Age-adjusted Death Rates by Racial/Ethnic Group, New York City, 2009–2018

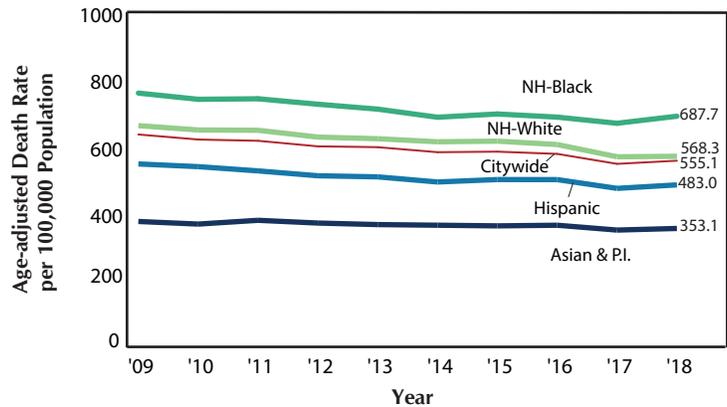
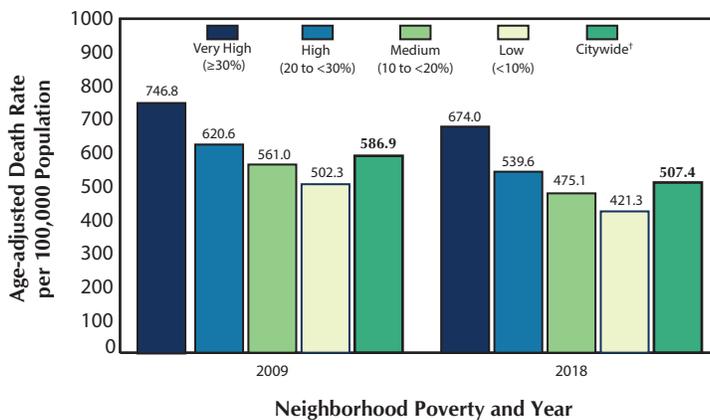


Figure 7. Age-adjusted Death Rates by Neighborhood Poverty*, New York City Residents, 2009 and 2018



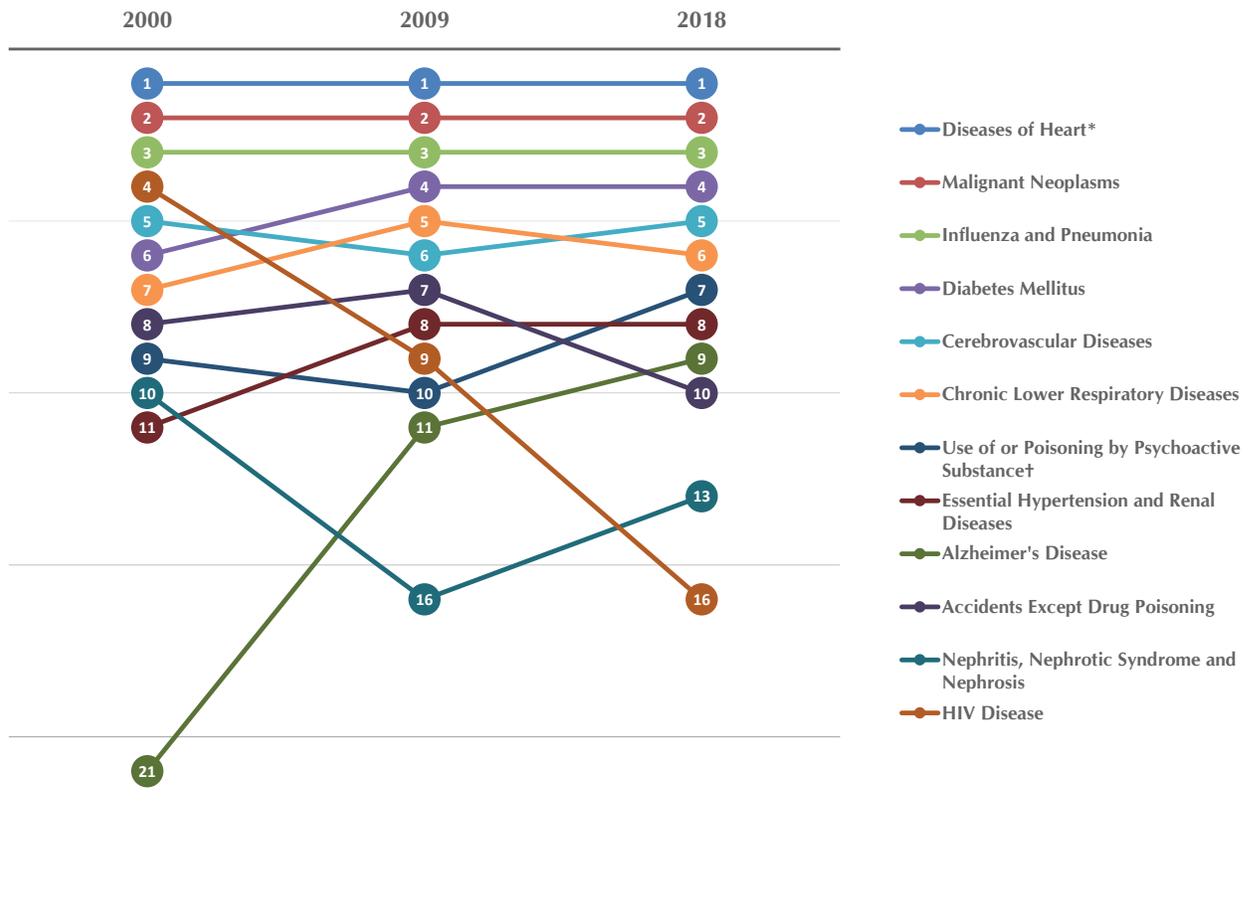
- Since 2009, age-adjusted death rates decreased across all categories of neighborhood poverty. Over that period, the rate decreased by 9.7% in very high poverty areas and by 16.1% in low poverty areas.
- The age-adjusted death rate in areas with very high poverty was 1.6 times the rate in areas with low poverty in 2018, an increase in disparity since 2009 (1.5 times the rate).

*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 2009 data and per ACS 2013-2017 for 2018 data.

†The citywide estimate is restricted to NYC residents.

LEADING CAUSES OF DEATH

Figure 9. Leading Causes of Death, New York City, 2000, 2009, and 2018



* 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 9th leading cause in 2009, to the 16th in 2018.
- Nephritis, nephrotic syndrome and nephrosis dropped from the 10th leading cause in 2000 to the 16th in 2009, then rose to the 13th in 2018.
- Alzheimer's disease has risen from the 21st leading cause in 2000, and the 11th leading cause in 2009, to the 9th in 2018. 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, 2018*

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	Chronic Lower Respiratory Diseases
5	Influenza and Pneumonia	Influenza and Pneumonia
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	Use of or Poisoning by Psychoactive Substance
10	Intentional Self-harm (Suicide)	Accidents Except 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 psychoactive substance is the 3rd leading cause of death among males but ranks 9th among females.
- Cerebrovascular disease is the 3rd leading cause of death among females but ranks 6th among males.
- Intentional self-harm (suicide) 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, 2018†

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

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

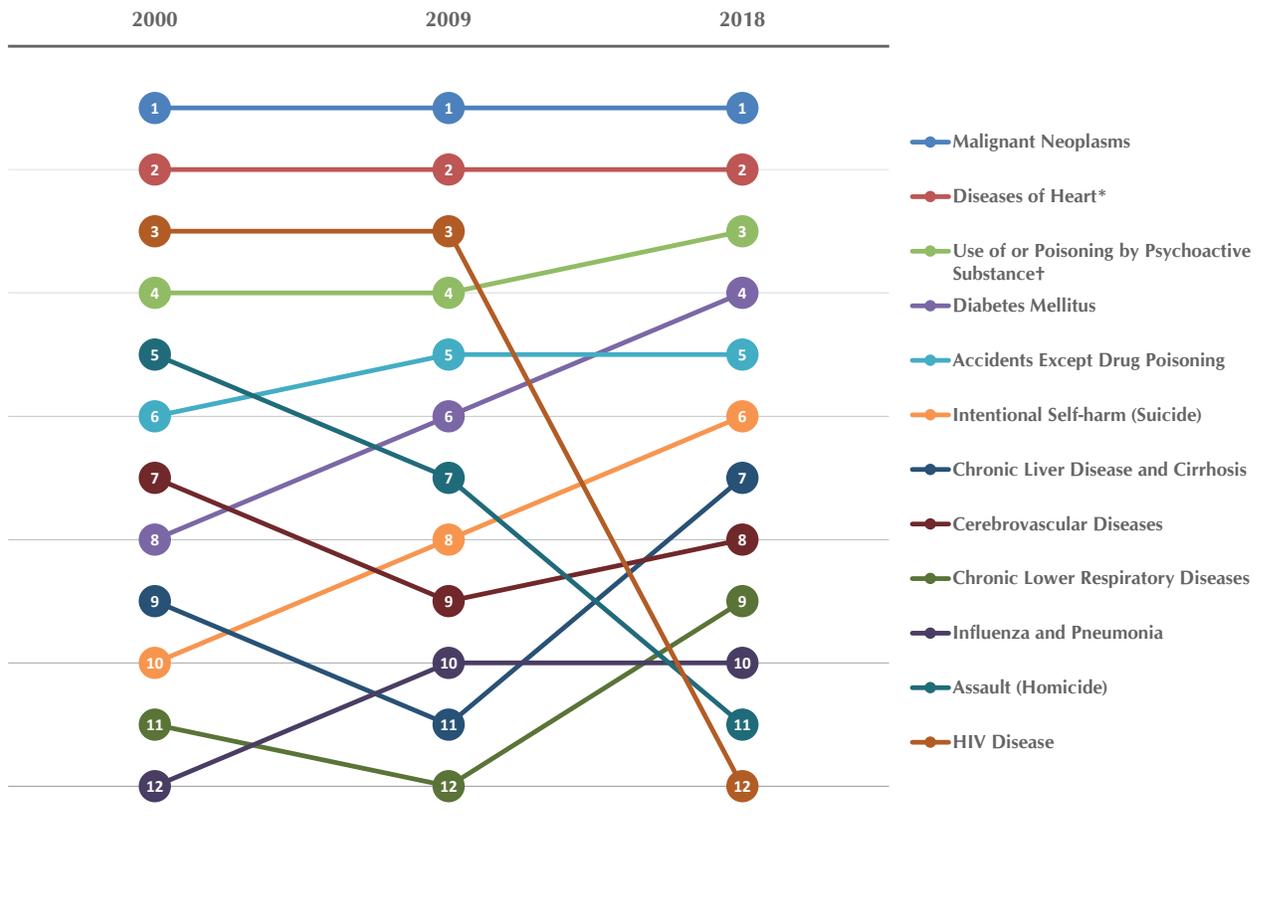
† Counts and percentages for this table can be found in Table M8.

‡ Tied ranking

- Heart disease and malignant neoplasms (cancer) are the leading causes of death among all racial/ethnic groups.
- Diabetes mellitus is the 3rd leading cause of death among non-Hispanic Blacks; it ranks 4th among Puerto Ricans and Other Hispanics, 5th among Asians and Pacific Islanders, and 8th among non-Hispanic Whites.
- 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 and non-Hispanic Whites, 8th among Other Hispanics, 6th among Asians and Pacific Islanders, 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, 2009, and 2018



* 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 2009, to the 12th in 2018.
- Assault (homicide) has also dropped in ranking from the 5th leading cause of premature death in 2000, and the 7th leading cause in 2009, to the 11th in 2018.
- Diabetes has risen from the 8th leading cause of premature death in 2000, and the 6th leading cause in 2009, to the 4th in 2018.
- Intentional self-harm (suicide) rose from the 10th leading cause of premature death in 2000, and the 8th leading cause in 2009, to the 6th in 2018.

PREMATURE DEATH

Table 3. Leading Causes of Premature Death (Age < 65 Years) by Sex, New York City, 2018*

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	Assault (Homicide)	Influenza and Pneumonia
9	Cerebrovascular Diseases	Accidents Except Poisoning by Psychoactive Substance
10	Mental Disorders Due to Use of Alcohol	Congenital Malformations, Deformations

* 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 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 (8th). 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, 2018†

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

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

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

‡ Tied ranking

- 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 (7th).
- Intentional self-harm (suicide) is the 3rd leading cause of premature death for Asians and Pacific Islanders; it ranks 8th 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 disease is a leading cause of premature death among Puerto Ricans (9th), and non-Hispanic Blacks (6th). 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 (5th), but is not a leading cause among other racial/ethnic groups.

PREMATURE DEATH

- The age-adjusted premature death rate was 187.1 per 100,000 population in 2018, a 1.2% increase since 2017, and a 10.0% decrease since 2009.
- The increase in the premature death rate was partially due to the 3.2% population decrease among those under the age of 65, from 2017 to 2018.
- The age-adjusted premature death rate for females has been consistently lower than the rate for males.

Figure 11. Age-adjusted Premature Death (Age < 65 years) Rates, Overall and by Sex, New York City, 2009–2018

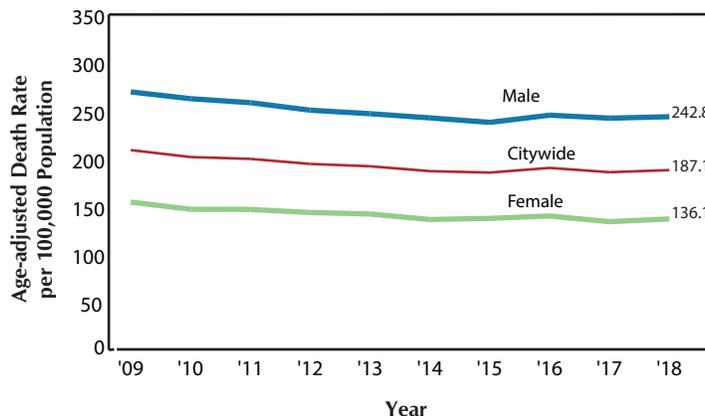
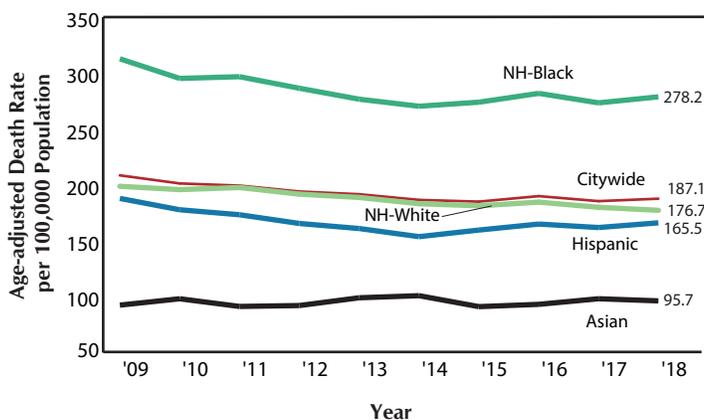


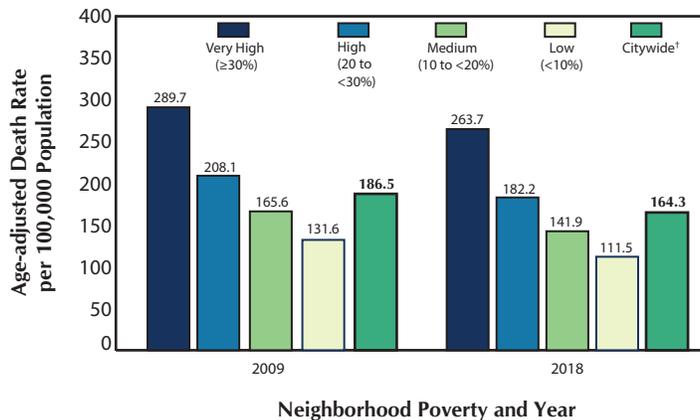
Figure 12. Age-adjusted Premature Death (Age < 65 years) Rates by Racial/Ethnic Group, New York City, 2009–2018



- From 2009 to 2018, age-adjusted premature death rates declined by 10.9% among non-Hispanic Blacks, 11.6% among Hispanics, 10.8% among non-Hispanic Whites, and increased by 4.1% among Asians and Pacific Islanders.
- From 2017 to 2018, the age-adjusted premature mortality rate increased among Hispanics by 2.6%, and among non-Hispanic Blacks by 2.0%, yet decreased among non-Hispanic Whites by 1.5%, and among Asians and Pacific Islanders by 1.9%.
- Non-Hispanic Blacks had the highest age-adjusted premature death rate (57.4% higher than non-Hispanic Whites), and were the only racial/ethnic group above the citywide average.

- The age-adjusted premature mortality rate decreased across all categories of neighborhood poverty between 2009 and 2018. Over that time, it decreased by 15.3% in low poverty neighborhoods, 14.3% in medium poverty neighborhoods, 12.4% in high poverty neighborhoods, and 9.0% 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 2.4 times that of low poverty neighborhoods in 2018. This disparity has increased slightly from 2017 (2.1 times in 2017).

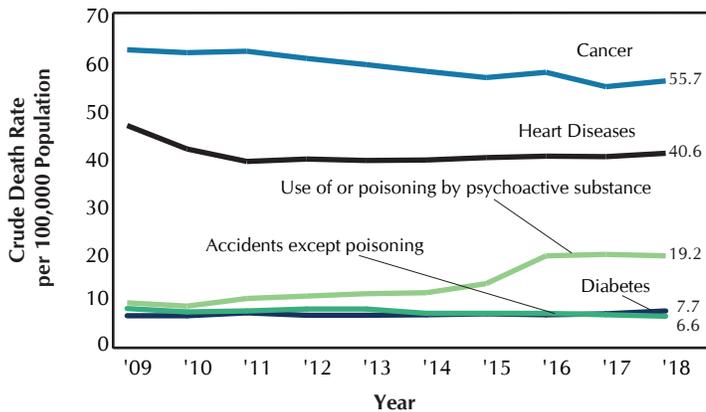
Figure 13. Age-adjusted Premature Death (Age < 65 years) Rates by Neighborhood Poverty*, New York City Residents, 2009 and 2018



*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 2009 data and per ACS 2013-2017 for 2018 data.
 †The citywide estimate is restricted to NYC residents.

PREMATURE DEATH

Figure 15. Leading Causes of Premature Death (Age < 65 years), New York City, 2009–2018



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

- In 2018, cancer and heart disease premature death rates were higher than rates for any other causes (55.7 and 40.6 per 100,000 population, respectively). Over the past ten years, rates have declined for both (by 10.5% and 12.5%, 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 except poisoning accounted for the 3rd, 4th and 5th leading causes of premature death, respectively, in 2018.
- The rate of premature drug-related deaths (use of or poisoning by psychoactive substance) decreased by 1.5% from 2017 to 2018, yet increased by 104.3% since 2009. These trends are consistent with national reports.
- Other accident deaths (accidents except poisoning) declined from 2009 to 2018 (19.5%) and declined slightly since 2017 (4.3%). Rates for diabetes deaths increased since 2009 (14.9%) and increased slightly over the past year by 8.5%.

- Breast (female) and lung cancers account for the highest cancer death rates in New York City, at 12.3 and 9.0 deaths per 100,000 population, respectively. Breast (female) cancer and lung cancer death rates declined by 8.2% and 23.1%, respectively, since 2009. The breast (female) cancer rate increased 15.0% from 2017 to 2018.
- Lymphoid and blood, colon, and liver cancers account for the 3rd, 4th, and 5th highest rates of cancer deaths, at 5.9, 5.5, and 3.3 deaths per 100,000 population, respectively. Death rates for these cancers have declined since 2009, except for colon cancer, which has remained the same.

Figure 16. Leading Causes of Premature Cancer Deaths (Age < 65 years), New York City, 2009–2018

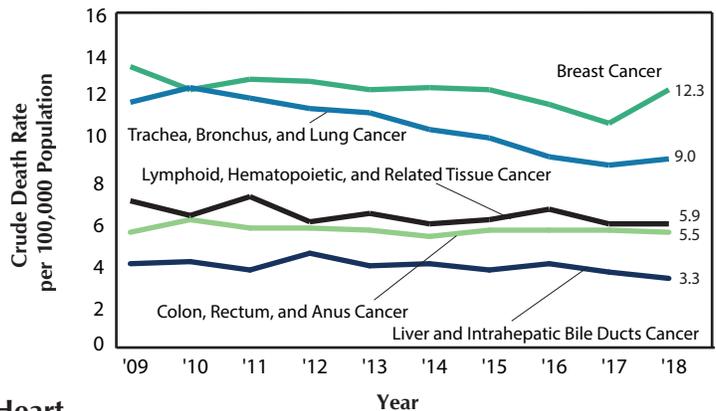
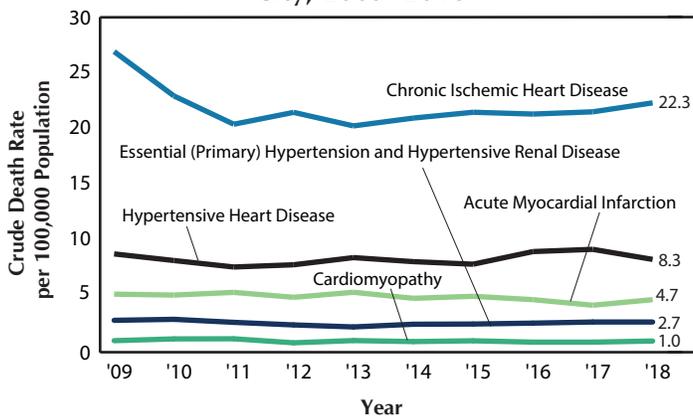


Figure 17. Leading Causes of Premature Heart Disease Deaths (Age < 65 years), New York City, 2009–2018



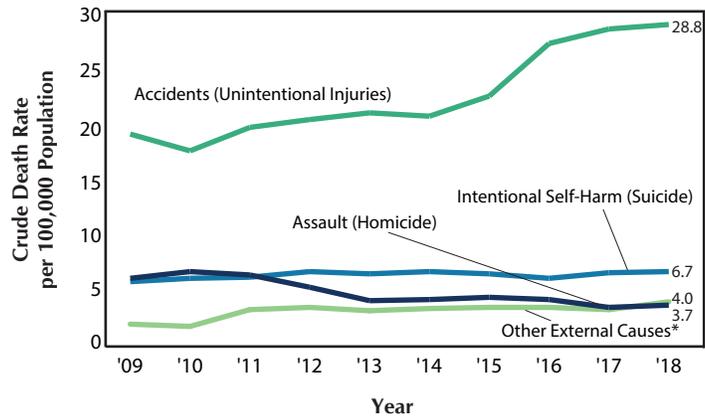
*See the 2010 Summary of Vital Statistics: Mortality – Special Section: Cause of Death Quality Improvement Initiative.

- The crude rate of the leading cause of premature heart disease deaths, chronic ischemic heart disease, has decreased 17.1% since 2009. The sharper decline from 2009 to 2011 was partly due to efforts to improve the accuracy of cause of death reporting*.
- Since 2009, hypertensive heart disease decreased by 5.7%, acute myocardial infarction decreased by 9.6%, and essential hypertension and hypertensive renal disease decreased by 6.9%. The rate for cardiomyopathy remained the same since 2009.

EXTERNAL CAUSES OF DEATH

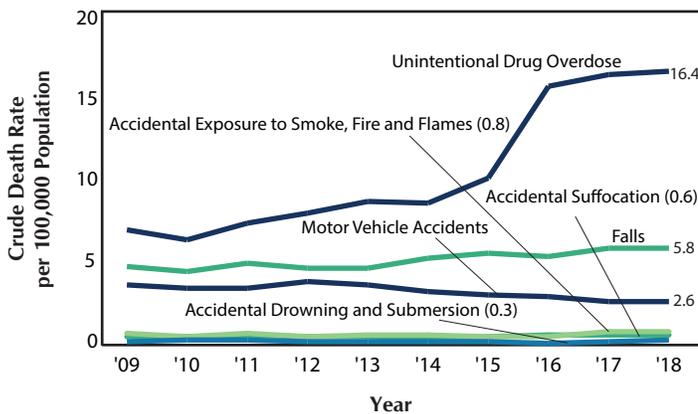
- Deaths due to accidents continued to account for the largest share of deaths due to external causes. In 2018, the accident death rate exceeded the rate from ten years ago (28.8 per 100,000 population in 2018 vs. 19.0 per 100,000 population in 2009), primarily due to the increase of drug-related deaths.
- The rate of deaths due to assault (homicide) declined over the past ten years by 39.3%.
- The suicide rate has risen over the past ten years from 5.8 per 100,000 population in 2009, to 6.7 per 100,000 population in 2018. The rate has increased slightly since 2017.
- The death rate due to all other external causes combined was higher in 2018 (4.0 per 100,000 population) than ten years ago (2.0 per 100,000 population)[†]. The rate has been between 3.2 and 4.0 per 100,000 population since 2011.

Figure 18. Crude Death Rates for External Causes of Death*, New York City, 2009–2018



*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.

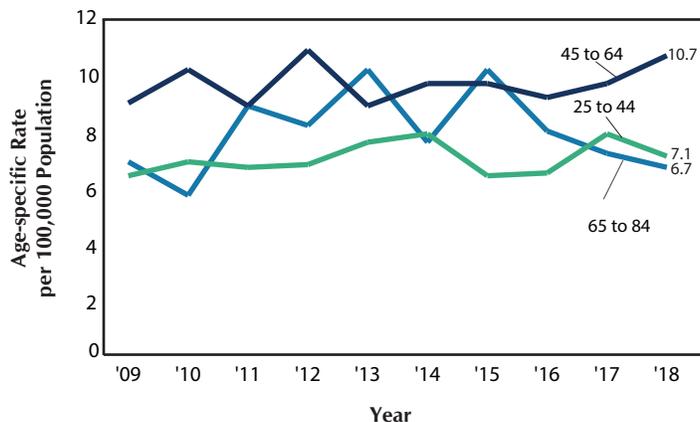
Figure 19. Crude Death Rates for Selected Accidental Causes of Death, New York City, 2009–2018



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

- The unintentional drug overdose* rate increased by 1.2% from 2017 (16.2 per 100,000 population in 2017 vs. 16.4 per 100,000 population in 2018), and by 137.7% from 2009 (6.9 per 100,000 population in 2009).
- Unintentional drug overdose exceeds all other causes, with a crude rate in 2018 that was 6.3 times that of motor vehicle accidents, and 2.8 times that of fall-related deaths.
- The crude death rate due to motor vehicle accidents declined over the past ten years, from 3.6 deaths per 100,000 population in 2009, to 2.6 per 100,000 population in 2018, a decrease of 27.8%. The falls-related crude death rate has increased by 23.4% since 2009 (5.8 per 100,000 population in 2018 vs. 4.7 per 100,000 population in 2009).
- Death rates due to accidental suffocation and accidental exposure to smoke, fire, and flames increased over the past ten years by 20.0% and 14.3%, respectively. The death rate due to accidental drowning and submersion increased by 50.0%.

Figure 20. Age-specific Suicide Death Rates, New York City, 2009–2018

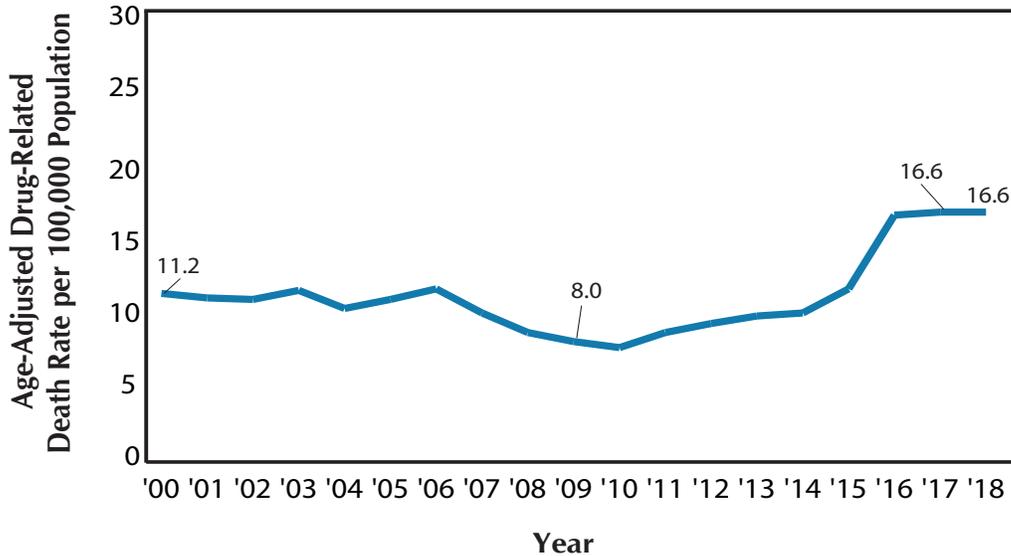


- Death rates due to suicide were highest among the age group 45 to 64, at 10.7 deaths per 100,000 population in 2018.
- The rate of suicide deaths among adults aged 25-44 was 7.1 per 100,000 population in 2018, 10.9% higher than the rate in 2009. Compared to 2009, rates increased by 18.9% among the age group 45-64, and decreased by 2.9% among the age group 65-84.

SPECIAL SECTION

DRUG-RELATED MORTALITY

Overview

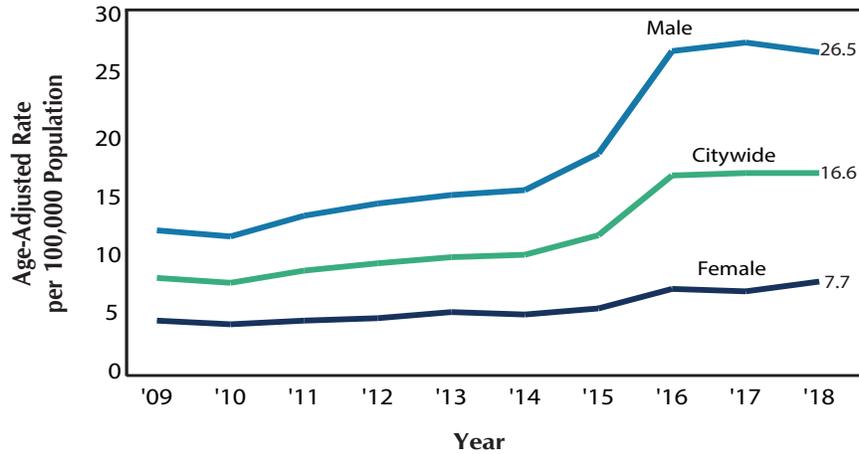


- The special section focuses on drug-related (use of or poisoning by psychoactive substance) deaths, which include deaths due to chronic substance use and drug overdose. All manners of death are included in drug-related deaths. The National Center for Health Statistics uses this definition for categorizing the leading causes of death.
- Drug-related deaths were the 7th leading cause of mortality, and the 3rd leading cause of premature mortality (age < 65 years) in 2018.
- The age-adjusted mortality rate of drug-related deaths remained the same since 2017, and increased by 107.5% since 2009.
- Unintentional drug overdose deaths account for 92% of drug-related deaths. The crude mortality rate for unintentional drug overdose has risen by 1.2% since 2017.

SPECIAL SECTION

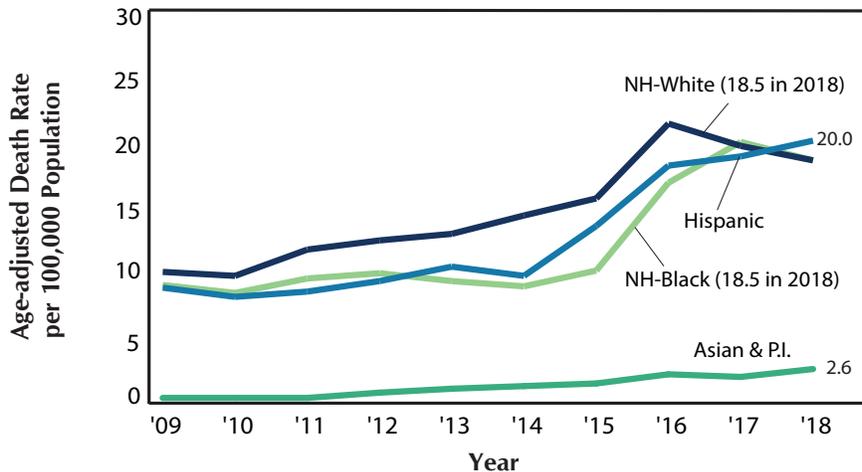
DRUG-RELATED MORTALITY

Figure S1. Age-adjusted Drug-related Death Rates, Overall and by Sex, New York City, 2009-2018



- The age-adjusted drug-related death rate was 16.6 per 100,000 population in 2018, remaining the same since 2017, and a 107.5% increase since 2009.
- The age-adjusted drug-related death rate for males decreased to 26.5 per 100,000 population in 2018, a 2.9% decrease since 2017, yet a 122.7% increase since 2009. The age-adjusted drug-related death rate for females increased to 7.7 per 100,000 population in 2018, a 11.6% increase since 2017 and a 71.1% increase since 2009.

Figure S2. Age-adjusted Drug-related Death Rates by Racial/Ethnic Group New York City, 2009-2018

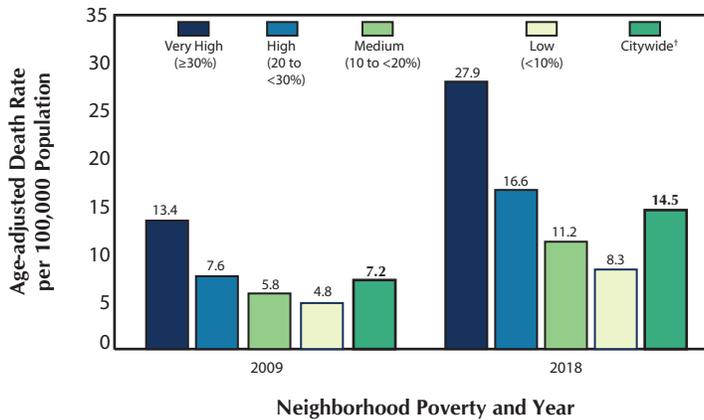


- Between 2009 and 2018, age-adjusted drug-related death rates increased by 105.6% among non-Hispanic Blacks, by 127.3% among Hispanics, by 85.0% among non-Hispanic Whites, and by 550.0% among Asians and Pacific Islanders.
- In 2018, the drug-related death rate among non-Hispanic Blacks was the same as 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 (except in 2017).

SPECIAL SECTION

DRUG-RELATED MORTALITY

Figure S3. Age-adjusted Drug-related Death Rates by Neighborhood Poverty*, New York City, 2009 and 2018



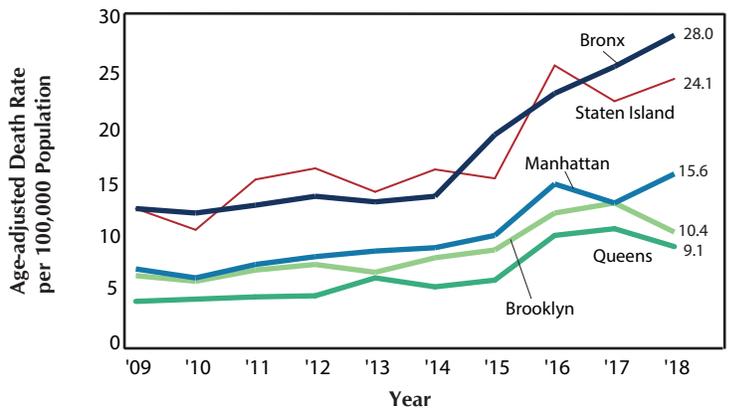
- Since 2009, age-adjusted drug-related death rates increased across all categories of neighborhood poverty. Over that period, the rate increased by 108.2% in very high poverty areas and by 72.9% in low poverty areas.
- The age-adjusted drug-related death rate in areas with very high poverty was 3.4 times the rate in areas with low poverty in 2018. In 2009, the rate in areas with very high poverty was 2.8 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 2009 data and per ACS 2013-2017 for 2018 data.

†The citywide estimate is restricted to NYC residents.

Figure S4. Age-adjusted Drug-related Death Rates by Borough of Residence, New York City, 2009-2018

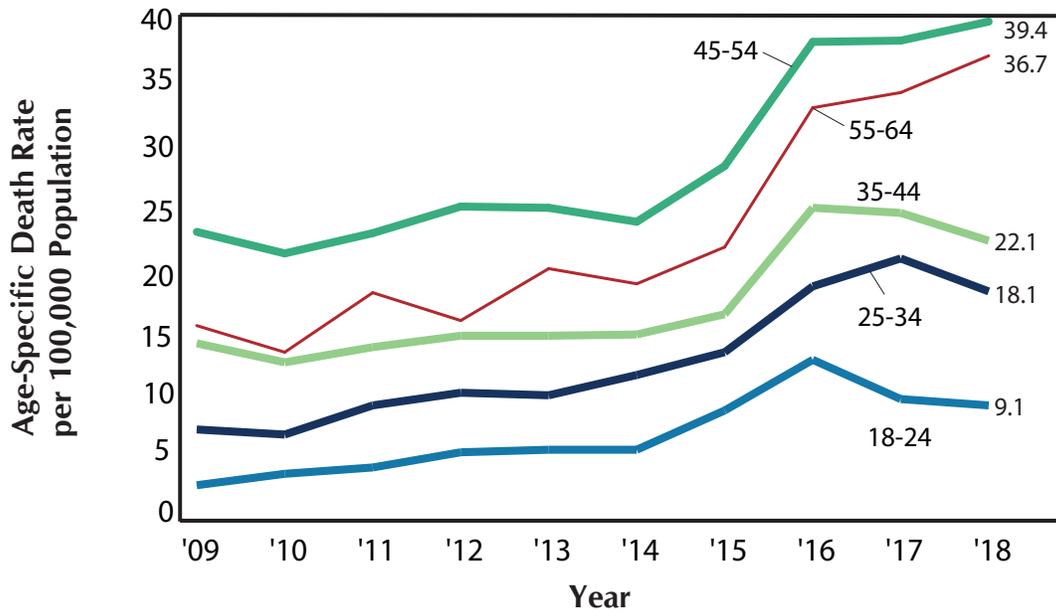
- Since 2009, age-adjusted drug-related death rates have increased across all boroughs.
- Over that period, age-adjusted drug-related death rates increased by 119.7% in Manhattan, by 124.0% in the Bronx, by 60.0% in Brooklyn, by 116.7% in Queens, and by 92.8% in Staten Island.
- From 2009 to 2018, the 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, 2009-2018

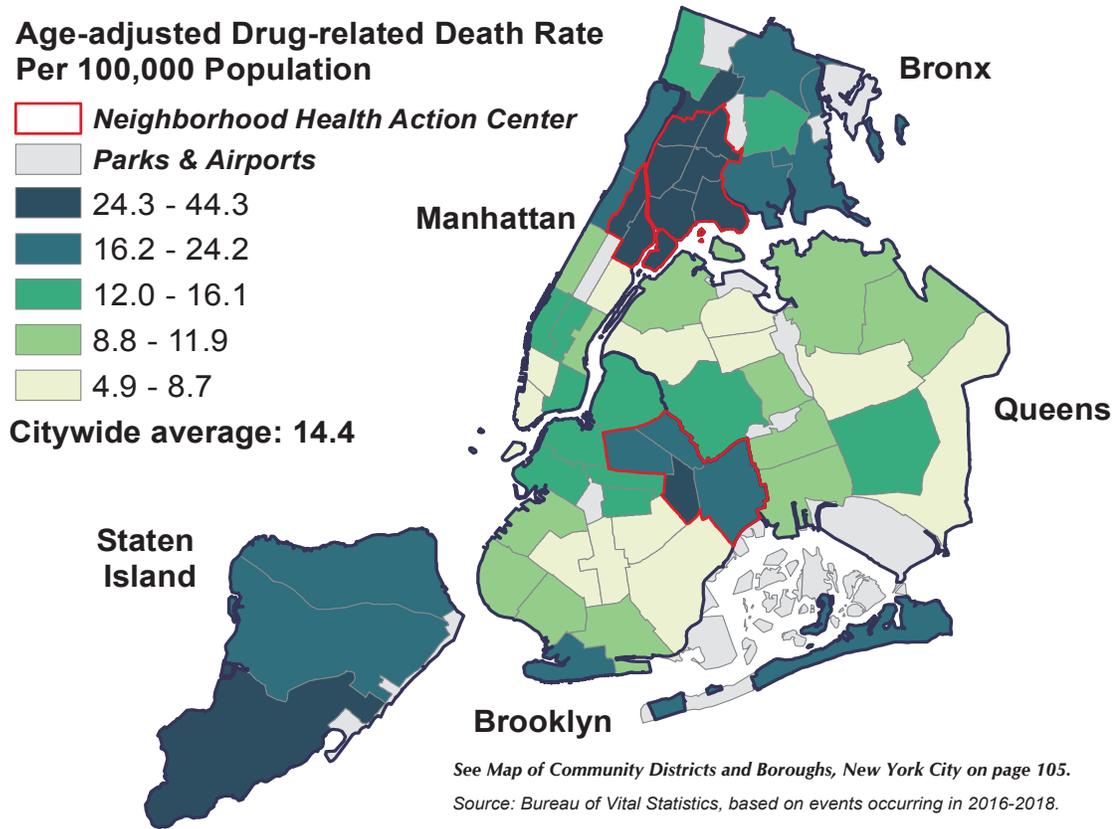


- Between 2009 and 2018, age-adjusted drug-related death rates increased for all age groups: by 225.0% for 18-24 year olds, by 151.4% for 25-34 year olds, by 57.9% for 35-44 year olds, by 72.8% for 45-54 year olds, and by 138.3% for 55-64 year olds.
- Since 2009, the drug-related death rate for 45-54 year olds remained consistently higher than all other age groups. However, the drug-related death rate increased most dramatically for 18-24 year olds during this 10-year period.
- 91.6% of drug-related deaths were premature (<65 year olds) in 2018.

SPECIAL SECTION

DRUG-RELATED MORTALITY

Figure S6. Age-adjusted Drug-related Death Rates (Three-Year Averages) by Community District of Residence, New York City, 2016-2018



- The three-year average age-adjusted drug-related death rate was highest in Mott Haven with 44.3 deaths per 100,000 population, followed by East Tremont at 39.7, University/Morris Heights at 34.4, East Harlem at 34.1, and Morrisania at 32.2.
- Age-adjusted drug-related death rates were lowest in Sunnyside/Woodside at 4.9 deaths per 100,000 population, followed by 5.2 in Borough Park, 5.5 in Greenwich Village/SOHO, 5.6 in Battery Park/Tribeca, and 5.8 in the Upper East Side.

Age-adjusted Drug-Related Death Rates (Three-Year Averages) by Community District (CD) of Residence, New York City, 2016-2018

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	5.6	BX01	Mott Haven	44.3	BK01	Williamsburg, Greenpoint	12.3	QN01	Astoria, Long Island City	11.9
MN02	Greenwich Village, SOHO	5.5	BX02	Hunts Point	31.6	BK02	Fort Greene, Brooklyn Heights	12.1	QN02	Sunnyside, Woodside	4.9
MN03	Lower East Side	16.1	BX03	Morrisania	32.2	BK03	Bedford Stuyvesant	17.2	QN03	Jackson Heights	7.2
MN04	Chelsea, Clinton	13.2	BX04	Concourse, Highbridge	24.9	BK04	Bushwick	16.3	QN04	Elmhurst, Corona	6.2
MN05	Midtown Business District	12.2	BX05	University, Morris Heights	34.4	BK05	East New York	20.3	QN05	Ridgewood, Glendale	15.7
MN06	Murray Hill	9.4	BX06	East Tremont	39.7	BK06	Park Slope	12.7	QN06	Rego Park, Forest Hills	9.2
MN07	Upper West Side	8.9	BX07	Fordham	28.0	BK07	Sunset Park	8.9	QN07	Flushing	9.8
MN08	Upper East Side	5.8	BX08	Riverdale	14.9	BK08	Crown Heights North	13.9	QN08	Fresh Meadows, Briarwood	7.1
MN09	Manhattanville	21.9	BX09	Unionport, Soundview	19.2	BK09	Crown Heights South	12.4	QN09	Woodhaven	11.5
MN10	Central Harlem	28.6	BX10	Throgs Neck	21.9	BK10	Bay Ridge	11.0	QN10	Howard Beach	9.1
MN11	East Harlem	34.1	BX11	Pelham Parkway	16.0	BK11	Bensonhurst	10.7	QN11	Bayside	10.1
MN12	Washington Heights	16.9	BX12	Williamsbridge	18.7	BK12	Borough Park	5.2	QN12	Jamaica, St. Albans	13.9
						BK13	Coney Island	20.4	QN13	Queens Village	6.8
						BK14	Flatbush, Midwood	7.7	QN14	The Rockaways	19.5
						BK15	Sheepshead Bay	10.8			
						BK16	Brownsville	25.4			
						BK17	East Flatbush	6.3			
						BK18	Canarsie	8.7			
CD	STATEN ISLAND										
SI01	Port Richmond	24.2									
SI02	Willowbrook, South Beach	21.2									
SI03	Tottenville	26.4									

INFANT MORTALITY

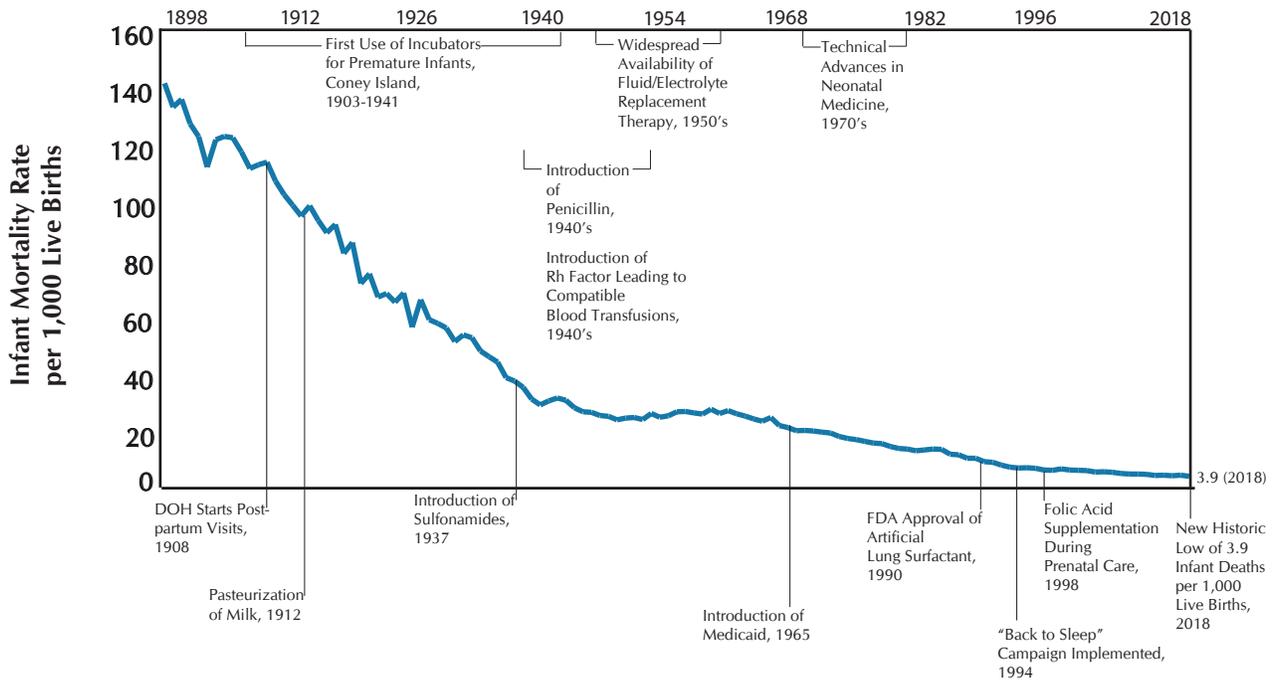
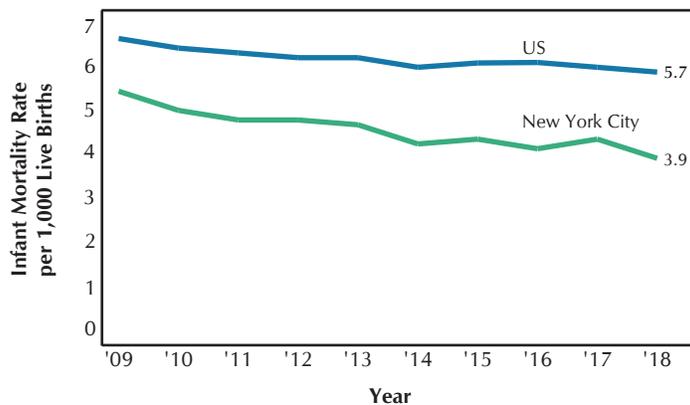


Figure 1. Infant Mortality Rate, New York City and the United States*, 2009–2018



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

- Infant mortality is the death of an infant before his or her first birthday. The infant mortality rate (IMR) is the number of infant deaths for every 1,000 live births.
- In 2018, the IMR in New York City reached a historic low of 3.9 infant deaths per 1,000 live births. This represents a decrease of 9.3% from 2017 (4.3 per 1,000 live births). The rate has declined by 26.4% since 2009. The IMR may fluctuate from year to year due to the small number of infant deaths.
- In the last 10 years, New York City's IMR has declined by 15.5 percentage points more than the U.S. rate has.

INFANT MORTALITY

- Infant mortality rates declined from 2017 to 2018 among all racial/ethnic groups, except for non-Hispanic Blacks, for which the rate slightly increased from 7.8 infant deaths per 1,000 in 2017, to 7.9 in 2018.
- Although rates fluctuate due to small numbers, they are consistently higher among some groups: the rate for non-Hispanic Blacks was 3.4 times the rate for non-Hispanic Whites in 2018; the rate for Puerto Ricans was 2.3 times the rate for non-Hispanic Whites in 2018.

Figure 2. Infant Mortality Rate by Mother's Racial/Ethnic Group, New York City, 2009–2018

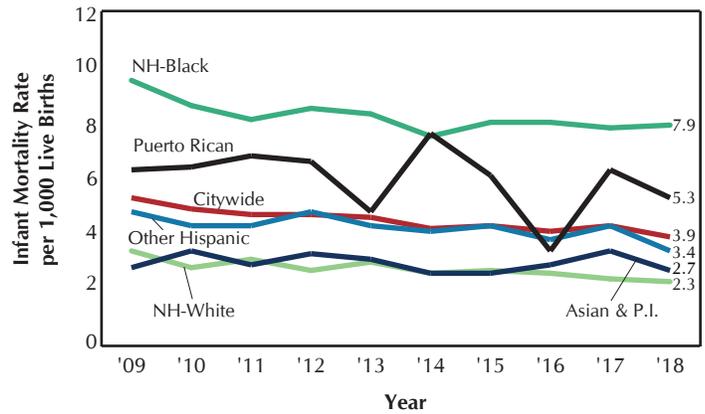
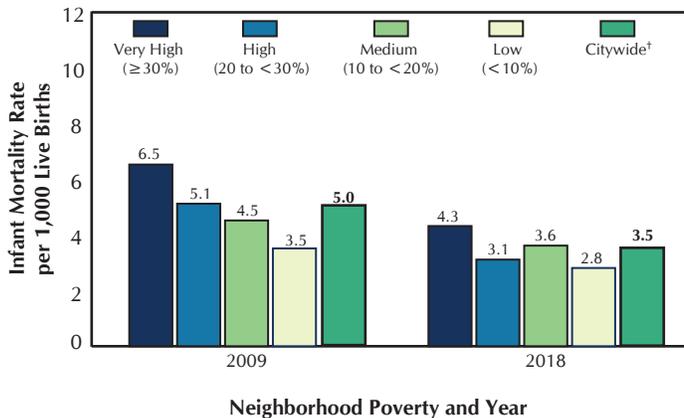


Figure 3. Infant Mortality Rate by Neighborhood Poverty*, New York City Residents, 2009 and 2018



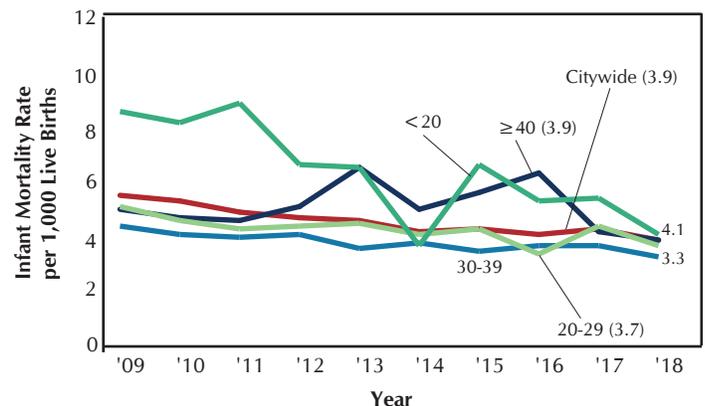
*Neighborhood poverty (based on woman's residential census tract) is defined as percent of residents with incomes below 100% of the Federal Poverty Level, per the American Community Survey (ACS) 2005-2009 for 2009 data and per ACS 2013-2017 for 2018 data.

†The citywide estimate is restricted to NYC residents.

- From 2009 to 2018, the infant mortality rate declined in all poverty groups: by 20.0% in both low and medium poverty areas, by 39.2% in high poverty areas, and by 33.8% in very high poverty areas.
- In spite of these gains, the infant mortality rate in very high poverty areas was 1.5 times the infant mortality rate in low poverty areas in 2018.

- Infant mortality rates have decreased among infants born to women in all age groups since 2009.
- The infant mortality rate in New York City was highest among infants born to the youngest women (<20 years of age). In 2018, the rate among this group was 4.1 infant deaths per 1,000 live births. In 2018, the infant mortality rate for women in the ≥40 age group was 3.9 infant deaths per 1,000 live births. The small number of infant deaths may result in fluctuating rates from year to year.

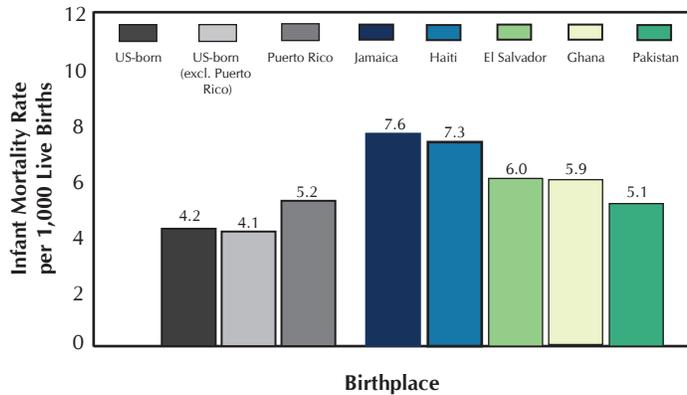
Figure 4. Infant Mortality Rate by Mother's Age Group*, New York City, 2009–2018



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

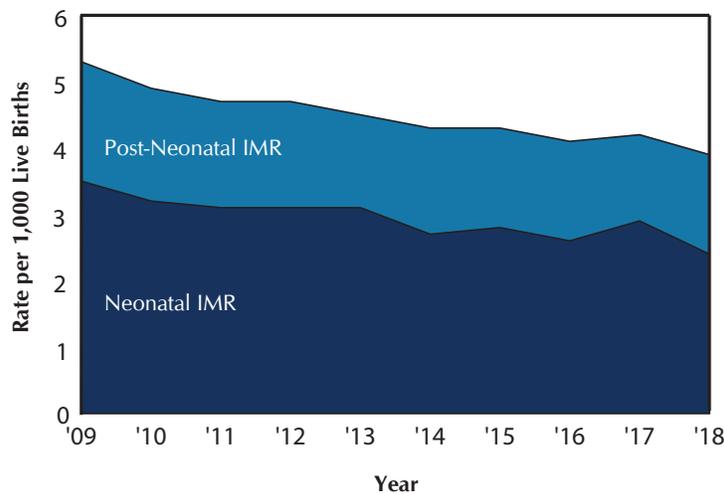
INFANT MORTALITY

Figure 5. Infant Mortality Rates by Mother’s Birthplace, US-born and Countries of Top 5 IMR, 3-year Moving Average, 2016-2018



- From 2016 to 2018, the infant mortality rate among US-born women (excluding Puerto Rico) was 4.1 infant deaths per 1,000 live births. For the same time period, the infant mortality rate for US-born women (including Puerto Rico) was 4.2 infant deaths per 1,000 live births, and for Puerto Rico-born women, the rate was 5.2 infant deaths per 1,000 live births.
- The infant mortality rate was highest among women born in Jamaica at 7.6 infant deaths per 1,000 live births.
- Women born in Haiti had the second highest infant mortality rate at 7.3 per 1,000 births, followed by El Salvador-born women (6.0), Ghana-born women (5.9), and Pakistan-born women at 5.1 infant deaths per 1,000 live births.

Figure 6. Neonatal and Post-Neonatal Infant Mortality Rate, New York City, 2009-2018

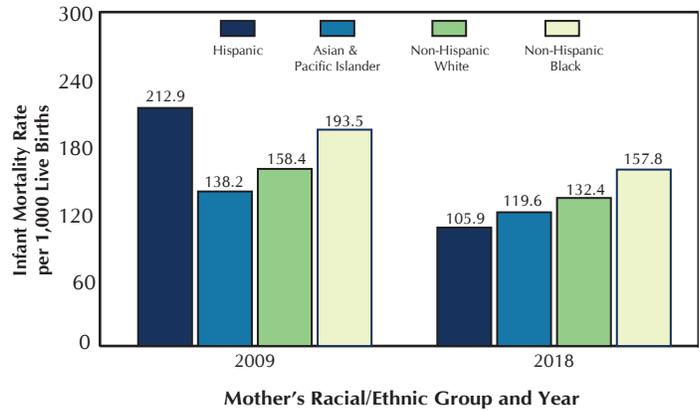


- In 2018, the neonatal (infants who are less than 28 days old) infant mortality rate was 2.4 infant deaths per 1,000 live births, and the post-neonatal (infants 28 days to less than 1 year old) IMR was 1.5 infant deaths per 1,000 live births.
- Figure 6 illustrates the share of the IMR that is attributable to neonatal and post-neonatal deaths. The share of the IMR attributable to neonatal deaths decreased from 66.0% in 2009 to 61.5% in 2018. The share of the IMR attributable to post-neonatal deaths increased from 34.0% in 2009 to 38.5% in 2018.

INFANT MORTALITY

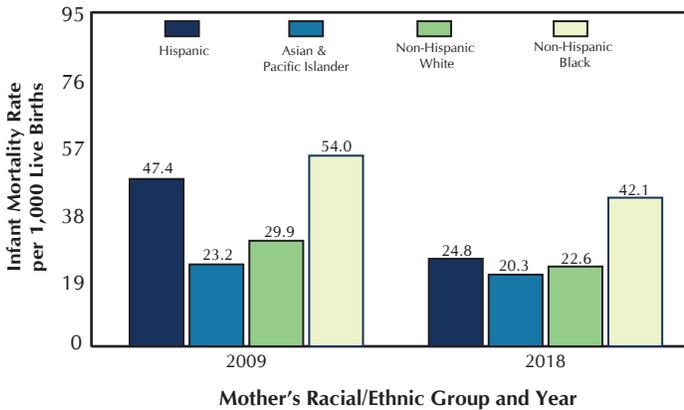
Figure 7. Infant Mortality Rates by Mother's Racial/Ethnic Group*, Very Low Birthweight, 2009 and 2018

- From 2009 to 2018, infant mortality rates among very low birthweight infants (born under 1,500 grams, VLBW) declined among all ethnic groups.
- Among VLBW infants in 2018, the infant mortality rate was highest for non-Hispanic Blacks at 157.8 deaths per 1,000 live births, followed by non-Hispanic Whites (132.4), Asians and Pacific Islanders (119.6) and Hispanics (105.9).
- In 2018, the infant mortality rates for non-Hispanic Black, Asian and Pacific Islander, and Hispanic VLBW infants were 1.2, 0.9, and 0.8 times the VLBW infant mortality rate for non-Hispanic White infants, respectively.



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

Figure 8. Infant Mortality Rates by Mother's Racial/Ethnic Group*, Low Birthweight, 2009 and 2018



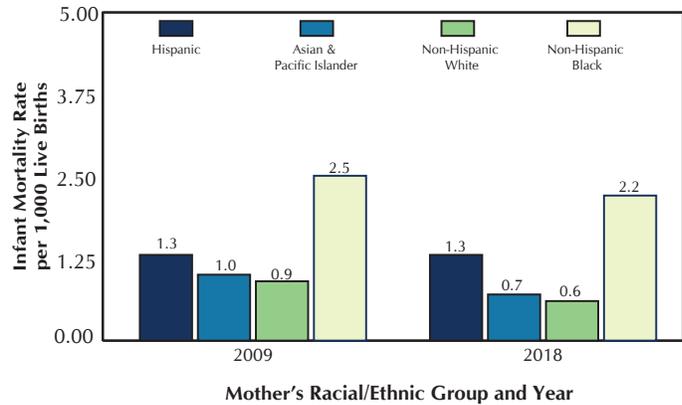
- From 2009 to 2018, infant mortality rates among low birthweight infants (born under 2,500 grams) declined among all ethnic groups.
- Among low birthweight infants in 2018, the infant mortality rate was highest for non-Hispanic Blacks at 42.1 deaths per 1,000 live births, 1.9 times that of non-Hispanic Whites (22.6).

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

INFANT MORTALITY

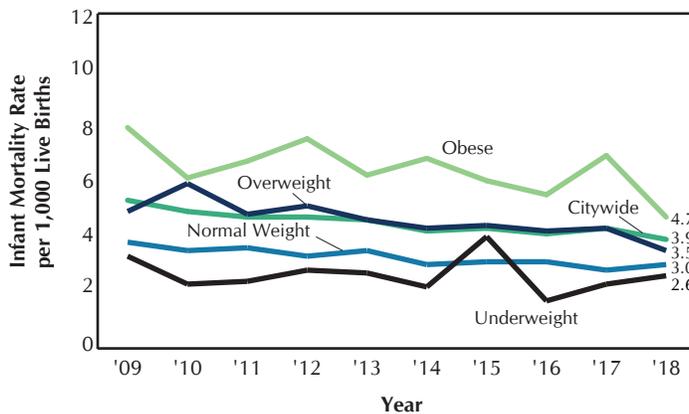
- From 2009 to 2018, infant mortality rates among normal birthweight infants ($\geq 2,500$ grams) declined among all ethnic groups except Hispanics, for which the rate remained the same.
- In 2018, Hispanic normal birthweight infants had an infant mortality rate of 1.3 infant deaths per 1,000 live births, 0.7 for Asians and Pacific Islanders, and 0.6 for non-Hispanic Whites.
- The infant mortality rate among non-Hispanic Black normal birthweight infants was 2.2 infant deaths per 1,000 live births, or 3.1 times that of Asians and Pacific Islanders, 3.7 times that of non-Hispanic Whites, and 1.7 times that of Hispanics.

Figure 9. Infant Mortality Rates by Mother's Racial/Ethnic Group*, Normal Birthweight, 2009 and 2018



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

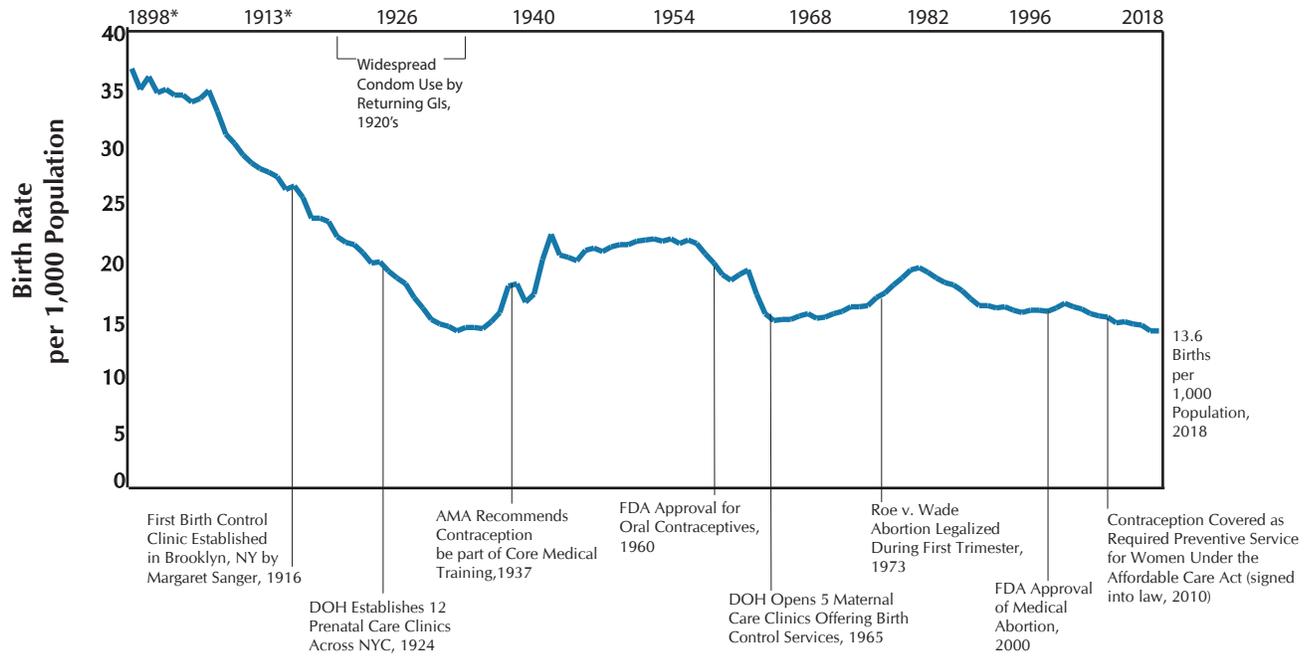
Figure 10. Infant Mortality Rates by Mother's Pre-Pregnancy Body Mass Index (BMI)*, 2009-2018



- Women are categorized as underweight if their pre-pregnancy body mass index (BMI) is less than 18.5, normal weight if their BMI is between 18.5 and 24.9, overweight if their BMI is between 25.0 and 29.9, and obese if their BMI is 30 or above.
- Infant mortality rates increased from 2017 to 2018 among underweight and normal weight women, while overweight and obese women saw a decline.
- Rates fluctuate over time but are consistently higher among overweight and obese women. The rate for overweight women was 1.2 times the rate for normal weight women in 2018; the rate for obese women was 1.6 times the rate for normal weight women in 2018.

*See Technical Notes for BMI definition.

PREGNANCY OUTCOMES



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

PREGNANCY OUTCOMES OVERVIEW

Figure 1. Birth Rates, New York City and the United States, 2009–2018



- The 2018 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, as has the United States’ birth rate.
- The 2018 citywide crude birth rate remained the same as 2017, matching the historic low in 1936. It decreased by 12.3% since 2009.
- In 2018, live births decreased by 2.3% from 2017, a fourth consecutive year decline. However, due to the population decrease from 2017 to 2018, the rate stayed the same as 2017.
- New York City’s 2018 crude birth rate was higher than the United States rate (13.6 vs. 11.6 nationwide), consistent with previous years.

- The 2018 citywide crude spontaneous termination of pregnancy rate (miscarriages and stillbirths) was 4.1 terminations per 1,000 females aged 15 to 44 years. The rate has decreased by 6.8% since 2017, and has been between 4.1 and 7.8 terminations per 1,000 females aged 15 to 44 years since 2009.
- Changes in rates of spontaneous terminations of pregnancy may be 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 2018 citywide crude rate of induced terminations of pregnancy was 26.8 terminations per 1,000 females aged 15 to 44 years, continuing its decline, down 5.0% since 2017. This rate has decreased each year since 2009. Since 2009, the rate has decreased by 41.1%, from 45.5 to 26.8 terminations per 1,000 females aged 15 to 44 years.

Figure 2. Spontaneous and Induced Termination of Pregnancy Rates, New York City, 2009–2018

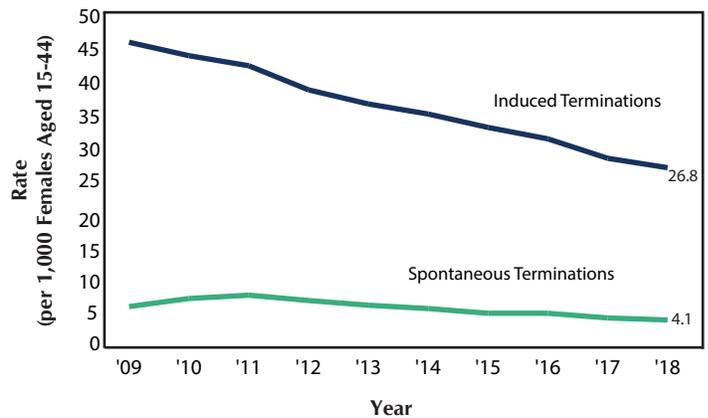
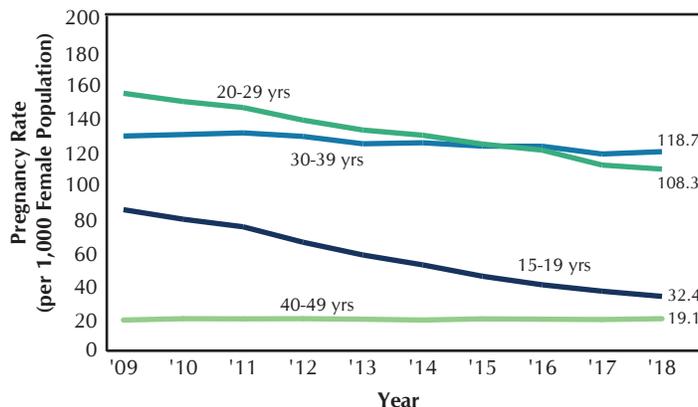


Figure 3. Pregnancy Rates* by Mother’s Age Group, New York City, 2009-2018

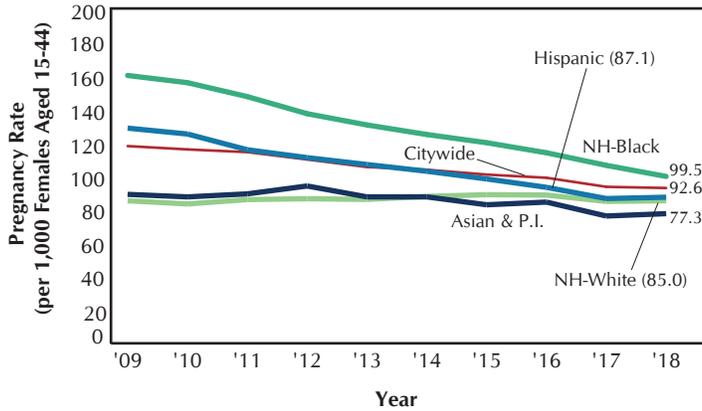


- The pregnancy rate is the number of pregnancies (live births, induced terminations, and spontaneous terminations) per 1,000 females aged 15 to 44 years.
- In 2018, women aged 30 to 39 years of age had the highest rate of pregnancy at 118.7 pregnancies per 1,000 females, followed by women 20 to 29 at 108.3, then women 15 to 19 years old and 40 to 49 years old, with pregnancy rates of 32.4 and 19.1, respectively.
- Since 2009, pregnancy rates have increased 4.4% among women aged 40-49 years old.
- Since 2009, pregnancy rates have decreased by 29.4% among women aged 20-29 years old, and by 7.3% among women aged 30-39 years old.
- The teen pregnancy rate (15-19 years of age) decreased by 61.5% since 2009, and 8.7% since 2017.

*See Technical Notes for the definition of pregnancy rate.

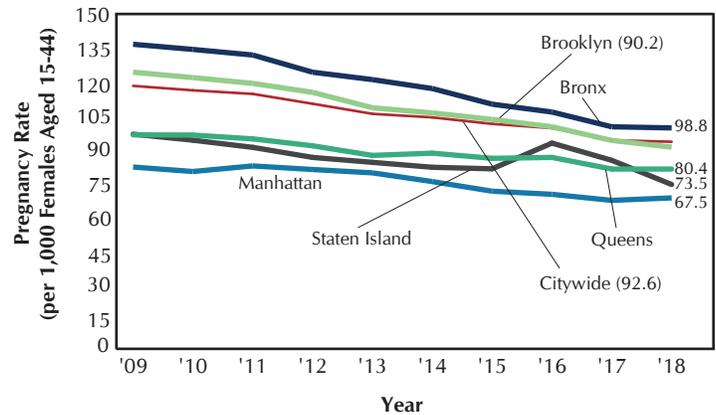
PREGNANCY OUTCOMES OVERVIEW

Figure 4. Pregnancy Rates by Mother's Racial/Ethnic Group, New York City, 2009-2018



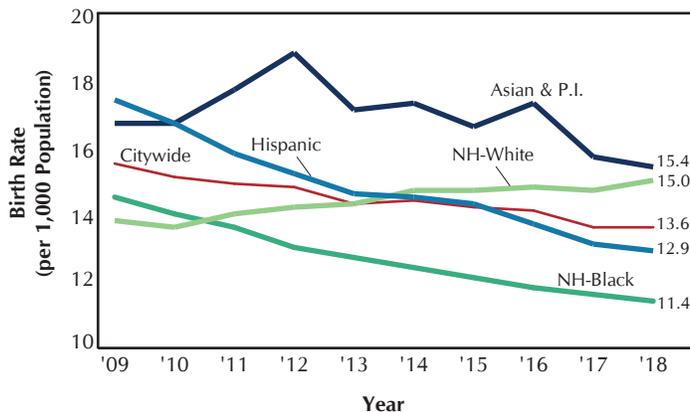
- Since 2009, the citywide pregnancy rate has declined by 21.3%, from 117.6 pregnancies per 1,000 females aged 15-44 to 92.6.
- In 2018, the pregnancy rate was highest among non-Hispanic Blacks at 99.5 pregnancies per 1,000 females aged 15-44, followed by 87.1 among Hispanics, 85.0 among non-Hispanic Whites, and 77.3 among Asians and Pacific Islanders.
- From 2009 to 2018, the pregnancy rate decreased among all groups, except for non-Hispanic Whites, for which the rate remained the same. Over the ten year period, non-Hispanic Blacks experienced a 37.7% decline; Hispanics, a 32.1% decline; and Asians and Pacific Islanders, a 13.0% decline.

Figure 5. Pregnancy Rates by Mother's Borough of Residence, New York City, 2009-2018



- In 2018, the pregnancy rate in the Bronx continued to be the highest, at 98.8 pregnancies per 1,000 females aged 15-44, followed by Brooklyn at 90.2, Queens at 80.4, Staten Island at 73.5, and Manhattan at 67.5.
- Since 2009, pregnancy rates have declined in all boroughs. Rates have decreased by 27.5% in the Bronx, by 27.1% in Brooklyn, by 17.0% in Manhattan, by 16.0% in Queens, and by 23.4% in Staten Island.

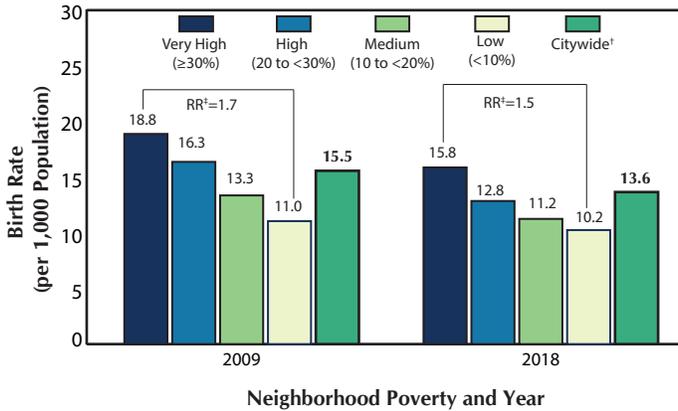
Figure 6. Birth Rates by Mother's Racial/Ethnic Group, New York City, 2009-2018



- In 2018, the birth rate was highest among Asians and Pacific Islanders at 15.4 births per 1,000 population, followed by 15.0 among non-Hispanic Whites, 12.9 among Hispanics, and 11.4 among non-Hispanic Blacks.
- From 2009 to 2018, the birth rate increased among non-Hispanic Whites by 8.7%, and decreased among all other groups. Over the ten year period, non-Hispanic Blacks experienced a 21.4% decline; Hispanics, a 25.9% decline; and Asians and Pacific Islanders, a 7.8% decline.

PREGNANCY OUTCOMES OVERVIEW

Figure 7. Birth Rates by Neighborhood Poverty*, New York City, 2009 and 2018



- In 2018, the birth rate was highest in the city’s very high poverty neighborhoods, at 15.8 births per 1,000 population, compared to 10.2 for the low poverty neighborhoods.
- In 2018, the birth rate in the city’s very high poverty neighborhoods was 1.5 times the birth rate of the city’s low poverty neighborhoods, compared to 1.7 in 2009.
- Since 2009, birth rates decreased across all categories of 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 2009 data and per ACS 2013-2017 for 2018 data.

†The citywide estimate is restricted to NYC residents.

‡Rate Ratio.

Figure 8. Birth Rates by Mother’s Age Group, New York City, 2009-2018

- In 2018, the birth rate among women aged 30 to 39 years of age continued to be the highest, at 88.8 births per 1,000 female population, followed by women 20 to 29 at 64.7, then women 15 to 19 years old and 40 to 49 years old, both with birth rates of 13.1.
- Since 2009, birth rates increased 4.6% among women aged 30-39 years old, and 23.6% among women aged 40-49 years old.
- Among women 20-29 years old, the birth rate has declined by 20.4% since 2009, and 0.2% since 2017. The teen birth rate (15-19 years of age) has decreased by 55.1% since 2009, and 5.1% since 2017.

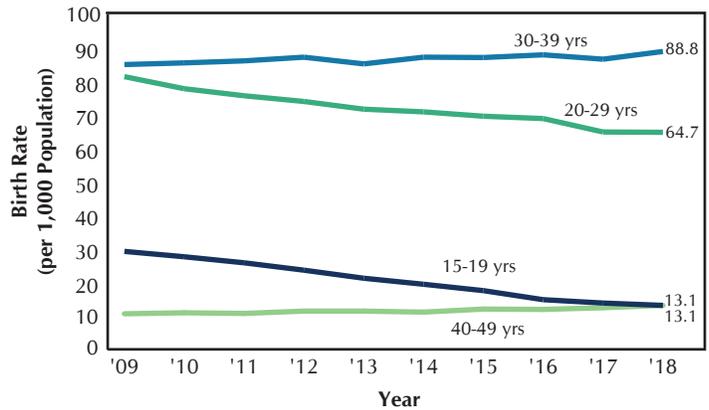
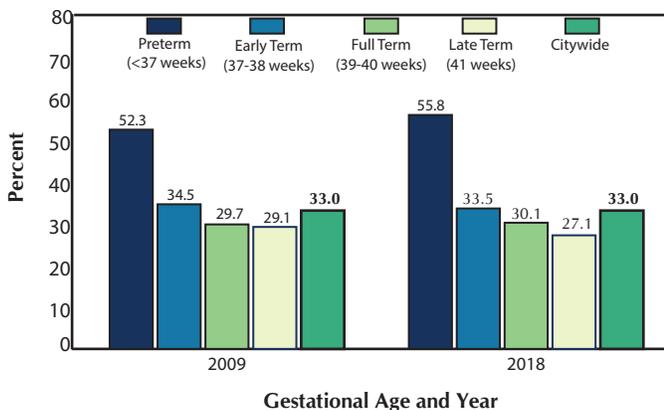


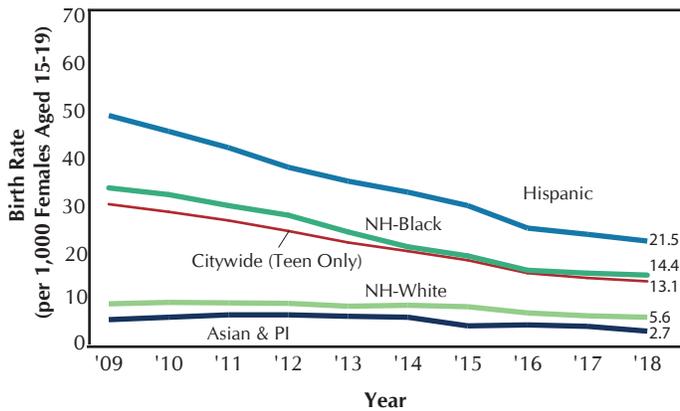
Figure 9. Percent of Cesarean Delivery by Gestational Age, New York City, 2009 and 2018



- For 2009 and 2018, a majority of preterm (<37 weeks gestational age) infants were delivered by Cesarean section.
- For both years, as gestational age increases, the percent of Cesarean delivery decreases.

TEEN BIRTHS

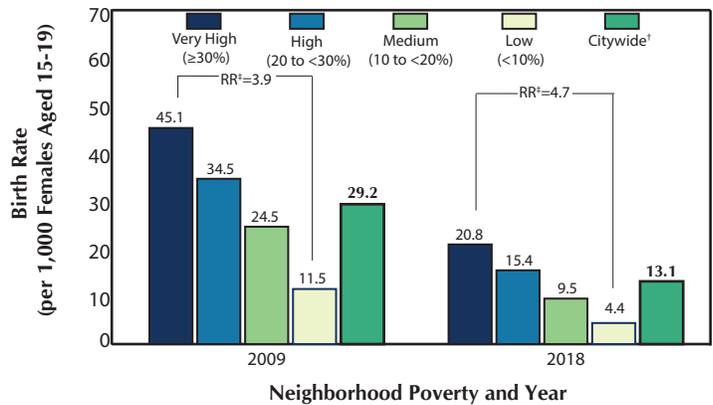
Figure 11. Teen Birth Rates by Mother's Racial/Ethnic Group, New York City, 2009–2018



- From 2009 to 2018, the teen birth rate declined by 55.1% overall. Teen birth rates also declined for all racial/ethnic groups: by 54.9% among Hispanics, 55.8% among non-Hispanic Blacks, 33.3% among non-Hispanic Whites, and 47.1% among Asians and Pacific Islanders.
- The teen birth rate among Hispanics remains high compared to that of non-Hispanic Whites. In 2009 the teen birth rate for Hispanics was 5.7 times that of non-Hispanic Whites. In 2018, the teen birth rate for Hispanics was 3.8 times that of non-Hispanic Whites.
- In 2018, the teen birth rate among non-Hispanic Blacks was 2.6 times that of non-Hispanic Whites, reflecting a narrowing of the difference since 2009, when it was 3.9 times that of non-Hispanic Whites.

- Between 2009 and 2018, teen birth rates declined across all poverty levels: by 53.9% in the city's very high poverty neighborhoods, by 55.4% in high poverty neighborhoods, by 61.2% in medium poverty neighborhoods, and by 61.7% 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 2018, the teen birth rate in very high poverty neighborhoods was 4.7 times that of low poverty neighborhoods; in 2009, it was 3.9 times that of low poverty neighborhoods.

Figure 12. Teen Birth Rate by Neighborhood Poverty*, New York City Residents, 2009 and 2018

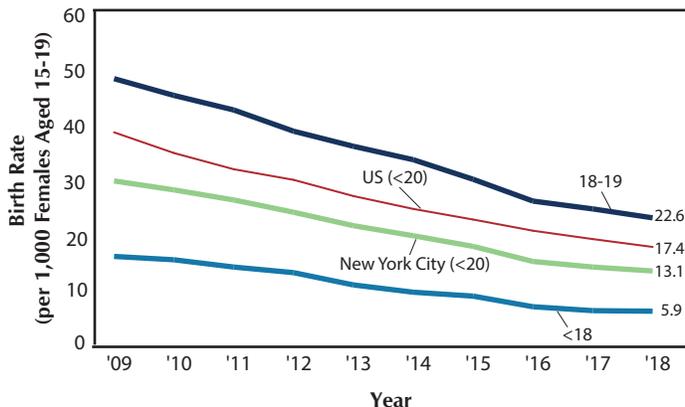


*Neighborhood poverty (based on mother's residential census tract) is defined as percent of residents with incomes below 100% of the Federal Poverty Level, per the American Community Survey (ACS) 2005-2009 for 2009 data and per ACS 2013-2017 for 2018 data.

†The citywide estimate is restricted to NYC residents.

‡ Rate Ratio.

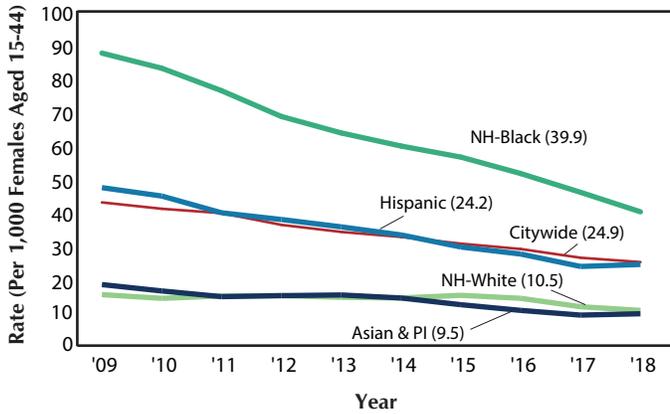
Figure 13. Teen Birth Rates by Age Group, New York City, 2009–2018



- From 2009 to 2018, birth rates declined among all teenagers, regardless of age. Among teens less than 18 years of age, the birth rate declined over this period by 62.4%; among women 18-19, it declined by 52.4%. The overall rate of teen birth (births to women <20) declined by 55.1%.

INDUCED TERMINATION OF PREGNANCY

Figure 15. Age-Adjusted Induced Termination of Pregnancy Rates by Woman’s Racial/Ethnic Group, New York City, 2009–2018



- The 2018 citywide age-adjusted rate of induced terminations of pregnancy (at 24.9 terminations per 1,000 females aged 15 to 44 years) declined by 41.7% since 2009. Similarly, age-adjusted rates among each racial/ethnic group declined: 47.8% among Asians and Pacific Islanders, 48.6% among Hispanics, 54.2% among non-Hispanic Blacks, and 30.9% among non-Hispanic Whites.
- The disparity between non-Hispanic White and non-Hispanic Black induced termination of pregnancy rates has narrowed since 2009. The rate among non-Hispanic Blacks was 3.8 times that of non-Hispanic Whites (39.9 terminations per 1,000 females aged 15-44 vs. 10.5) in 2018, compared to 5.7 times in 2009.

- The 2018 crude citywide rate of induced terminations of pregnancy declined 41.1% since 2009, from 45.5 to 26.8 terminations per 1,000 females aged 15-49 years.
- Since 2009, the age-specific rate declined 64.8% among teens (15 to 19 years of age), from 52.5 terminations per 1,000 females in 2009, to 18.5 in 2018. The rate declined by 39.4% among women 20 to 29 years of age, 31.7% 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 Woman’s Age Group, New York City, 2009–2018

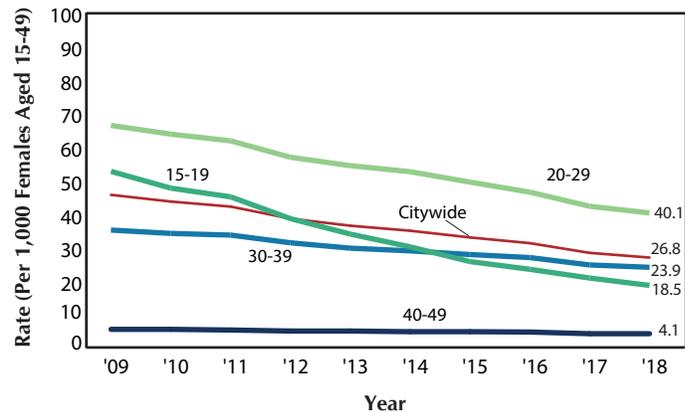
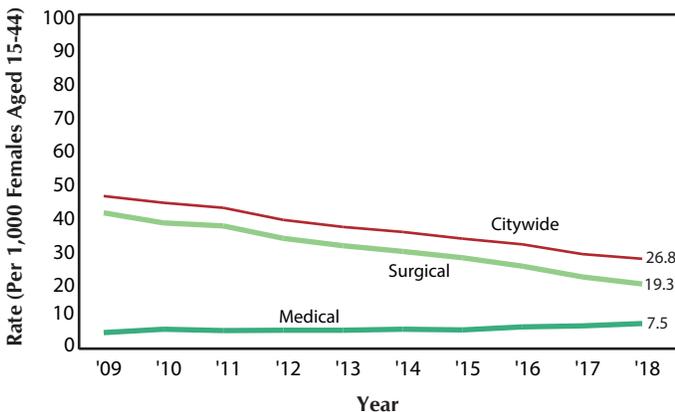


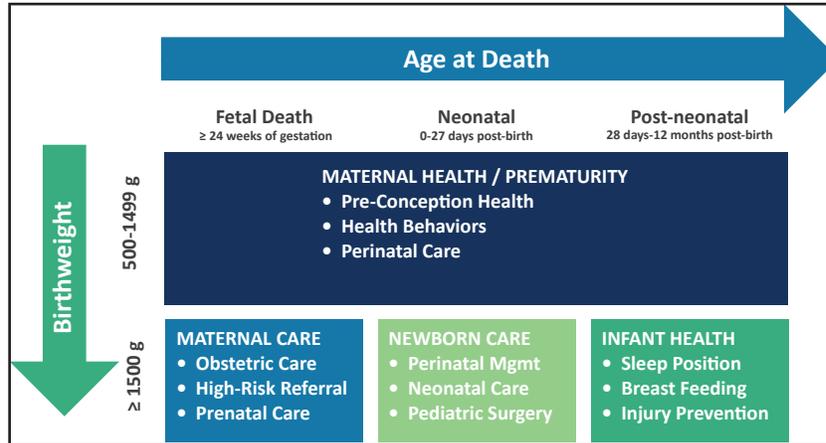
Figure 17. Induced Termination of Pregnancy Rates by Medical vs. Surgical Procedure, New York City, 2009–2018



- Medication-induced abortion, using mifepristone in combination with misoprostol, is termed a “medical abortion” and may be performed up to nine weeks of 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 2009, the crude rate of medical abortion in New York City increased 56.3%, to 7.5 terminations per 1,000 females aged 15-44, while the rate of surgical abortion decreased 52.3% to 19.3 terminations per 1,000 females aged 15-44.

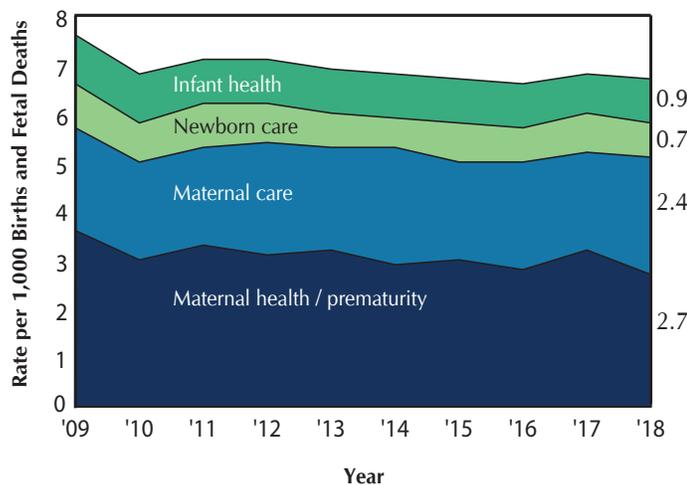
PERINATAL PERIODS OF RISK (PPOR)

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 (500-1,499 grams vs. 1,500 grams or more), and gestational age or age at death. Fetal deaths occur at ≥ 24 weeks of gestation. Among live births, neonatal deaths occur from 0-27 days post-birth and post-neonatal deaths occur from 28 days to 12 months post-birth.
- 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 up to the overall mortality rate.

Figure 2. Contributions to Fetal-Infant Mortality Rates per 1,000 Births and Fetal Deaths, New York City, 2009-2018



- The overall fetal-infant mortality rate (FIMR) for New York City is 6.7 per 1,000 live births in 2018, decreasing by 13.0% since 2009, and decreasing by 1.5% from 2017.
- 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 grams and 1,499 grams, and occurring at any gestational age or birth age, contributed 40.3% to the FIMR in 2018, indicating that prevention efforts should focus on maternal health/prematurity risk factors.
- The share of the FIMR attributable to the infant health period increased from 13.0% in 2009 to 13.4% in 2018 (post-neonatal deaths with a birthweight of 1,500 grams or greater). The contribution of the maternal care period to the FIMR increased from 27.3% in 2009 to 35.8% in 2018 (fetal deaths with a birthweight of 1,500 grams or greater). The share of the FIMR attributable to the newborn care period decreased 11.1% between 2009 and 2018 (neonatal deaths with a birthweight of 1,500 grams or greater), from 11.7% to 10.4%.

PERINATAL PERIODS OF RISK (PPOR)

Table 1. Fetal-Infant Mortality Rate per 1,000 Births and Fetal Deaths by Perinatal Period of Risk, Year, and Mother's Racial/Ethnic Group, New York City, 2014-2018

Year	Births & Fetal Deaths*	Maternal Health/ Prematurity		Maternal Care		Newborn Care		Infant Health		Total Fetal-Infant Mortality	
	Number	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
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
2018	114,641	314	2.7	274	2.4	85	0.7	100	0.9	773	6.7
Mother's Racial/Ethnic Group, 2014-2018											
Puerto Rican	34,963	115	3.3	59	1.7	32	0.9	36	1.0	242	6.9
Other Hispanic	135,224	355	2.6	252	1.9	86	0.6	127	0.9	820	6.1
Asian and Pacific Islander	102,182	213	2.1	158	1.5	60	0.6	61	0.6	492	4.8
Non-Hispanic White	202,769	334	1.6	326	1.6	129	0.6	101	0.5	890	4.4
Non-Hispanic Black	112,880	644	5.7	393	3.5	124	1.1	185	1.6	1,346	11.9
Other or Unknown	9,027	93	-	125	-	7	-	8	-	233	-
NEW YORK CITY	597,045	1,754	2.9	1,313	2.2	438	0.7	518	0.9	4,023	6.7

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

PERINATAL PERIODS OF RISK (PPOR)

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, 2014-2018

Community District of Residence	Births & Fetal Deaths*		Maternal Health/Prematurity		Maternal Care		Newborn Care		Infant Health		Total Fetal-Infant Mortality	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
MANHATTAN	86,451	1.8	158	1.6	137	1.6	62	0.7	52	0.6	409	4.7
Battery Park, Tribeca (01)	5,611	1.1	6	1.6	9	1.6	4	0.7	2	0.4	21	3.7
Greenwich Village, SOHO (02)	3,733	1.1	4	0.5	2	0.5	3	0.8	-	-	9	2.4
Lower East Side (03)	6,489	2.8	18	1.7	11	1.7	6	0.9	3	0.5	38	5.9
Chelsea, Clinton (04)	5,062	1.2	6	1.4	7	1.4	3	0.6	2	0.4	18	3.6
Midtown Business District (05)	2,819	0.7	2	1.4	4	1.4	2	0.7	-	0.0	8	2.8
Murray Hill (06)	6,464	1.5	10	1.7	11	1.7	3	0.5	2	0.3	26	4.0
Upper West Side (07)	12,264	0.6	7	2.1	26	2.1	9	0.7	5	0.4	47	3.8
Upper East Side (08)	12,834	1.6	20	1.0	13	1.0	5	0.4	2	0.2	40	3.1
Manhattanville (09)	5,134	3.1	16	0.4	2	0.4	4	0.8	6	1.2	28	5.5
Central Harlem (10)	7,808	3.2	25	1.7	13	1.7	10	1.3	12	1.5	60	7.7
East Harlem (11)	7,497	2.0	15	2.4	18	2.4	5	0.7	11	1.5	49	6.5
Washington Heights (12)	10,736	2.7	29	2.0	21	2.0	8	0.7	7	0.7	65	6.1
BRONX	97,717	3.8	373	2.6	255	2.6	73	0.7	133	1.4	834	8.5
Mott Haven (01)	7,934	4.5	36	3.7	29	3.7	8	1.0	16	2.0	89	11.2
Hunts Point (02)	4,162	2.4	10	3.4	14	3.4	1	0.2	-	-	25	6.0
Morrisania (03)	7,294	3.3	24	3.2	23	3.2	7	1.0	13	1.8	67	9.2
Concourse, Highbridge (04)	12,316	3.0	37	3.4	42	3.4	10	0.8	17	1.4	106	8.6
University/Morris Heights (05)	11,025	3.4	37	3.0	10	0.9	14	1.3	13	1.2	74	6.7
East Tremont (06)	6,343	3.0	19	3.3	21	3.3	5	0.8	11	1.7	56	8.8
Fordham (07)	10,831	4.2	45	2.3	25	2.3	5	0.5	8	0.7	83	7.7
Riverdale (08)	5,390	3.5	19	2.0	11	2.0	1	0.2	2	0.4	33	6.1
Unionport, Soundview (09)	11,968	4.6	55	3.0	30	2.5	8	0.7	25	2.1	118	9.9
Throgs Neck (10)	5,025	4.6	23	2.8	14	2.8	1	0.2	5	1.0	43	8.6
Pelham Parkway (11)	6,820	3.7	25	3.7	8	1.2	7	1.0	15	2.2	55	8.1
Williamsbridge (12)	8,609	5.0	43	3.3	28	3.3	6	0.7	8	0.9	85	9.9
BROOKLYN	199,384	2.9	586	2.3	455	2.3	143	0.7	174	0.9	1358	6.8
Williamsburg, Greenpoint (01)	18,285	1.5	28	2.2	40	2.2	11	0.6	17	0.9	96	5.3
Fort Greene, Brooklyn Heights (02)	8,508	1.4	12	3.7	19	2.2	3	0.4	5	0.6	39	4.6
Bedford Stuyvesant (03)	11,307	2.3	42	3.4	38	3.4	11	1.0	16	1.4	107	9.5
Bushwick (04)	6,409	4.9	15	2.0	13	2.0	2	0.3	4	0.6	34	5.3
East New York (05)	13,341	4.9	65	3.1	41	3.1	16	1.2	18	1.3	140	10.5
Park Slope (06)	8,615	1.6	14	1.6	10	1.6	5	0.6	7	0.8	36	4.2
Sunset Park (07)	12,236	2.9	36	2.0	20	1.6	7	0.6	7	0.6	70	5.7
Crown Heights North (08)	6,422	3.6	23	2.3	15	2.3	6	0.9	3	0.5	47	7.3
Crown Heights South (09)	7,453	3.9	29	2.5	19	2.5	7	0.9	10	1.3	65	8.7
Bay Ridge (10)	9,226	2.2	20	2.2	20	2.2	3	0.3	1	0.1	44	4.8
Bensonhurst (11)	13,306	1.9	25	1.6	21	1.6	13	1.0	10	0.8	69	5.2
Borough Park (12)	26,639	1.9	50	1.8	48	1.8	18	0.7	12	0.5	128	4.8
Coney Island (13)	6,166	2.9	18	1.6	10	1.6	5	0.8	6	1.0	39	6.3
Flatbush, Midwood (14)	12,770	4.3	55	1.8	23	1.8	6	0.5	5	0.4	89	7.0
Sheepshead Bay (15)	11,274	2.2	25	1.6	18	1.6	7	0.6	10	0.9	60	5.3
Brownsville (16)	6,578	4.9	32	3.8	25	3.8	4	0.6	12	1.8	73	11.1
East Flatbush (17)	9,601	5.3	51	4.0	38	4.0	6	0.6	18	1.9	113	11.8
Canarsie (18)	11,248	4.1	46	3.3	37	3.3	13	1.2	13	1.2	109	9.7

Continued on next page.

PERINATAL PERIODS OF RISK (PPOR)

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, 2014-2018 (Continued)

Community District of Residence	Births & Fetal Deaths*		Maternal Health/Prematurity		Maternal Care		Newborn Care		Infant Health		Total Fetal-Infant Mortality	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
QUEENS	130,639	2.7	354	2.1	270	0.6	74	0.8	107	0.8	805	6.2
Astoria, Long Island City (01)	9,834	2.9	29	1.9	19	1.2	12	1.2	12	1.2	72	7.3
Sunnyside, Woodside (02)	8,344	1.6	13	2.2	18	0.4	3	0.5	4	0.5	38	4.6
Jackson Heights (03)	12,064	2.6	31	1.7	20	0.3	4	1.2	14	1.2	69	5.7
Elmhurst, Corona (04)	12,448	2.3	29	1.6	20	0.6	8	0.3	4	0.3	61	4.9
Ridgewood, Glendale (05)	9,392	2.2	21	1.7	16	0.3	3	0.6	6	0.6	46	4.9
Rego Park, Forest Hills (06)	6,959	1.6	11	1.1	8	0.3	2	0.6	4	0.6	25	3.6
Flushing (07)	13,987	2.1	29	1.8	25	0.1	2	1.1	15	1.1	71	5.1
Fresh Meadows, Briarwood (08)	9,021	2.1	19	1.8	16	0.6	5	0.8	7	0.8	47	5.2
Woodhaven (09)	9,406	3.7	35	3.2	30	0.9	8	0.3	3	0.3	76	8.1
Howard Beach (10)	6,389	3.1	20	2.0	13	0.3	2	0.6	4	0.6	39	6.1
Bayside (11)	3,309	1.2	4	1.2	4	1	2	0.9	3	0.9	13	3.9
Jamaica, St. Albans (12)	14,796	4.1	60	3.1	46	0.7	10	1.3	19	1.3	135	9.1
Queens Village (13)	8,221	3.9	32	2.7	22	0.9	7	0.7	6	0.7	67	8.1
The Rockaways (14)	6,469	3.2	21	2.0	13	0.9	6	0.9	6	0.9	46	7.1
STATEN ISLAND	26,346	2.7	71	2.6	68	0.9	24	0.7	19	0.7	182	6.9
Port Richmond (01)	11,510	3.2	37	3.7	43	1.2	14	1.0	12	1.0	106	9.2
Willowbrook, South Beach (02)	7,084	3.8	27	1.8	13	1.0	7	0.3	2	0.3	49	6.9
Tottenville (03)	7,696	0.9	7	1.6	12	0.4	3	0.6	5	0.6	27	3.5
New York City Residents	540,537	2.6	1,384	1.9	1,048	0.6	314	0.8	433	0.8	3,179	5.9
Non-Residents	56,411	3.3	184	1.8	102	1.0	59	0.5	31	0.5	376	6.7
Residence Unknown	97	-	28	-	26	-	3	-	2	-	59	-

*Limited to fetal deaths and live births with a birthweight of 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 2018 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, 1898-2018

Year	Population	Live Births		Fertility Rates		Total Fertility Rates		Marriages†		Deaths		Infant Mortality	
		Total Reported*	Rate per 1,000 Population	Per 1,000 Women Aged 15-44	Per 1,000 Women	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	1918.4			58,291	7.3	60,839	7.6	839	6.7
2001‡	8,060,000	124,023	15.4	64.5	1884.2			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	1866.4			65,490	8.1	59,651	7.4	742	6.0
2003‡	8,068,000	124,345	15.4	65.1	1890.5			61,101	7.6	59,213	7.3	807	6.5
2004‡	8,043,000	124,099	15.4	65.3	1898.3			62,057	7.7	57,466	7.1	760	6.1
2005‡	8,013,000	122,725	15.3	65.0	1890.7			66,348	8.3	57,068	7.1	732	6.0
2006‡	7,994,000	125,506	15.7	66.6	1935.2			65,619	8.2	55,391	6.9	740	5.9
2007	8,014,000	128,961	16.1	68.4	1976.3			66,483	8.3	54,073	6.7	697	5.4
2008	8,068,000	127,680	15.8	67.3	1937.2			66,670	8.3	54,193	6.7	698	5.5
2009	8,132,000	126,774	15.6	66.5	1902.0			65,542	8.1	52,881	6.5	668	5.3
2010	8,175,133	124,791	15.3	65.3	1863.2			67,051	8.2	52,575	6.4	609	4.9
2011	8,244,910	123,029	14.9	64.5	1835.1			71,401	8.7	52,789	6.4	577	4.7
2012	8,336,697	123,231	14.8	64.1	1824.5			74,362	8.9	52,455	6.3	583	4.7
2013	8,405,837	120,457	14.3	62.6	1768.7			77,678	9.2	53,409	6.4	551	4.6
2014	8,491,079	122,084	14.4	62.9	1767.2			78,409	9.2	53,034	6.2	516	4.2
2015	8,550,405	121,673	14.2	62.7	1753.9			77,777	9.1	54,120	6.3	526	4.3
2016	8,537,673	120,367	14.1	62.5	1738.6			84,073	9.8	54,280	6.4	491	4.1
2017	8,622,698	117,013	13.6	60.7	1688.8			82,866	9.6	54,319	6.3	500	4.3
2018	8,398,748	114,296	13.6	61.7	1714.2			76,688	9.1	55,081	6.6	446	3.9

*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, 2018

Age in Years	All		Hispanic			Non-Hispanic White			Non-Hispanic Black			Asian and Pacific Islander			Other or Multiple Races		
	Total	Male	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	8,398,748	4,005,969	2,449,450	1,184,548	1,264,902	2,694,258	1,316,078	1,378,180	1,849,077	838,089	1,010,988	1,236,871	587,377	649,494	169,092	79,877	89,215
Under 5	535,240	273,556	185,851	94,507	91,344	148,747	76,529	72,218	108,715	55,094	53,621	69,805	36,238	33,567	22,122	11,188	10,934
5-9	485,720	248,478	176,302	89,977	86,325	125,932	64,646	61,286	104,065	52,785	51,280	61,526	31,989	29,537	17,895	9,081	8,814
10-14	450,993	229,697	160,972	81,827	79,145	115,563	59,321	56,242	105,152	52,976	52,176	56,644	29,248	27,396	12,662	6,325	6,337
15-19	444,167	223,219	158,486	80,432	78,054	109,910	55,251	54,659	107,749	53,488	54,261	57,049	28,571	28,478	10,973	5,477	5,496
20-24	534,372	257,674	177,735	88,246	89,489	144,188	68,049	76,139	123,527	59,183	64,344	76,761	36,566	40,195	12,161	5,630	6,531
25-29	776,107	377,117	398,990	217,541	181,449	263,078	126,091	136,987	160,578	77,849	82,729	118,509	54,942	63,567	16,401	7,591	8,810
30-34	723,193	356,269	366,924	198,976	167,948	261,561	130,629	130,932	135,786	64,494	71,292	113,061	52,852	60,209	13,809	6,308	7,501
35-39	613,975	299,914	314,061	159,792	154,269	201,902	103,341	98,561	122,055	55,728	66,327	99,607	45,669	53,938	10,803	4,981	5,822
40-44	532,840	256,675	276,165	138,456	137,709	164,615	84,712	79,903	111,997	49,559	62,438	87,720	40,049	47,671	8,716	3,899	4,817
45-49	529,007	253,777	275,230	138,000	137,230	159,715	82,435	77,280	118,274	51,764	66,510	87,607	40,757	46,850	8,340	3,817	4,523
50-54	527,046	251,324	275,722	137,128	138,594	154,320	80,084	74,236	130,535	57,624	72,911	82,813	38,741	44,072	8,091	3,747	4,344
55-59	522,675	246,047	276,628	137,342	139,286	162,626	82,487	80,139	132,371	57,882	74,489	82,770	39,350	43,420	7,566	3,438	4,128
60-64	477,320	219,423	257,897	115,768	142,129	163,499	79,261	84,238	114,947	49,044	65,903	76,541	36,787	39,754	6,565	3,027	3,538
65-69	394,415	175,747	218,668	90,196	128,472	150,835	70,177	80,658	88,935	36,692	52,243	59,817	28,442	31,375	4,632	2,044	2,588
70-74	304,703	130,134	174,569	68,544	106,025	125,307	56,425	68,882	67,383	25,655	41,728	40,201	18,677	21,524	3,268	1,376	1,892
75-79	218,228	88,597	129,631	49,795	79,836	89,481	38,498	50,983	49,288	17,646	31,642	27,464	12,333	15,131	2,200	933	1,267
80-84	153,134	59,718	93,416	33,274	60,142	66,137	27,550	38,587	32,820	10,986	21,834	19,493	8,552	10,941	1,410	537	873
85 & Over	175,613	58,603	117,010	32,910	84,100	86,842	30,592	56,250	34,900	9,640	25,260	19,483	7,614	11,869	1,478	478	1,000

Data Source: US Census Bureau, population estimates, 2018 vintage.

Table PC3. Marriages, Births, Deaths, and Infant Deaths by Month and Average per Day, New York City, 2018

Months	Number						Average Per Day					
	Marriages*	Births	Deaths	Infant Deaths	Marriages	Births	Deaths	Infant Deaths	Marriages	Births	Deaths	Infant Deaths
January	5,120	9,894	5,636	32	165	319	182	1.0	165	319	182	1.0
February	5,307	8,602	4,644	31	190	307	166	1.1	190	307	166	1.1
March	5,910	9,390	4,739	45	191	303	153	1.5	191	303	153	1.5
April	6,420	8,961	4,468	30	214	299	149	1.0	214	299	149	1.0
May	7,301	9,703	4,328	29	236	313	140	0.9	236	313	140	0.9
June	6,896	9,643	4,227	50	230	321	141	1.7	230	321	141	1.7
July	7,052	9,818	4,300	43	227	317	139	1.4	227	317	139	1.4
August	8,241	10,170	4,305	33	266	328	139	1.1	266	328	139	1.1
September	6,324	9,442	4,263	41	211	315	142	1.4	211	315	142	1.4
October	6,837	9,794	4,720	44	221	316	152	1.4	221	316	152	1.4
November	5,443	9,381	4,579	36	181	313	153	1.2	181	313	153	1.2
December	5,837	9,498	4,872	32	188	306	157	1.0	188	306	157	1.0
Total	76,688	114,296	55,081	446	210	313	151	1.2	210	313	151	1.2

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

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Table M1. Deaths by Selected Underlying Cause, Borough of Residence, Sex, and ICD-10/ICD-9 Comparability Ratio, New York City, 2018

Cause (Codes from International Classification of Diseases (ICD), Tenth Revision, 1999)	BOROUGH OF RESIDENCE										SEX		ICD-10/ICD-9 Comparability Ratio
	Total	Manhattan	Bronx	Brooklyn	Queens	Staten Island	Nonresidents	Residence Unknown	Male	Female			
Total Deaths	55,081	9,700	9,343	15,345	12,519	3,608	4,425	141	27,392	27,689			
Natural Causes	51,454	9,039	8,617	14,477	11,762	3,411	4,073	75	24,760	26,694			
1.* Tuberculosis (A16-A19)	20	5	1	5	7	1	1	-	19	1		0.88	
2.* Respiratory tuberculosis (A16)	17	5	1	3	6	1	1	-	16	1		0.94	
3.* Septicemia (A40-A41)	430	83	112	118	77	10	29	1	206	224		1.19	
4.* Viral Hepatitis (B15-B19)	165	27	41	50	19	9	19	-	98	67		0.71	
5.* Human Immunodeficiency Virus (HIV) Disease (B20-B24)	331	61	101	104	31	8	25	1	230	101		1.08	
6.* All Other Infective and Parasitic Diseases (Rest of A01-B99)	343	78	75	73	68	16	33	-	152	191			
6.* Malignant Neoplasms (C00-C97)	13,037	2,297	1,960	3,435	2,806	865	1,664	10	6,391	6,646		1.01	
Lip, oral cavity, and pharynx (C00-C14)	210	36	31	53	42	20	28	-	139	71		0.96	
Esophagus (C15)	38	38	32	45	60	22	40	-	180	57		0.99	
Stomach (C16)	425	71	59	111	116	22	46	-	241	184		1.01	
Colon, rectum, and anus (C18-C21)	1,175	190	171	351	260	86	116	1	596	579		1.00	
Liver and intrahepatic bile ducts (C22)	690	115	123	152	158	50	91	1	463	227		0.96	
Pancreas (C25)	1,075	212	142	296	208	64	152	1	520	555		1.00	
Larynx (C32)	80	8	20	22	13	7	10	-	63	17		1.01	
Trachea, bronchus, and lung (C33-C34)	2,426	430	391	636	546	184	235	4	1,272	1,154		0.98	
Melanoma of skin (C43)	104	22	10	18	19	6	29	-	67	37		0.95	
Mesothelioma (C45)	37	4	2	17	7	1	6	-	20	17			
Breast (C50)	1,133	187	158	345	261	61	120	1	12	1,121		1.01	
Cervix uteri (C53)	121	15	20	40	31	7	8	-	-	121		1.00	
Corpus uteri and uterus, part unspecified (C54-C55)	393	62	78	124	65	22	42	-	-	393		1.02	
Ovary (C56)	363	65	37	120	71	27	43	-	-	363		0.99	
Prostate (C61)	722	146	115	183	173	41	64	-	722	-		1.01	
Kidney and renal pelvis (C64-C65)	252	39	45	58	54	23	33	-	175	77		1.00	
Bladder (C67)	340	67	48	78	68	30	49	-	228	112		1.00	
Meninges, brain, and other parts of central nervous system (C70-C72)	314	56	50	76	74	19	39	-	180	134		0.98	
Lymphoid, hematopoietic and related tissues (C81-C96)	1,383	250	184	308	259	86	295	1	772	611		1.00	
Hodgkin's disease (C81)	26	3	2	11	4	2	4	-	18	8		1.00	
Non-Hodgkin's lymphoma (C82-C85)	468	101	71	90	85	25	96	-	271	197		0.98	
Multiple myeloma and immunoproliferative neoplasms (C88, C90)	291	42	49	73	55	21	51	-	153	138		1.04	
Leukemia (C91-C95)	588	102	59	131	113	38	144	1	325	263		1.01	
7.* In Situ or Benign Neoplasms and Neoplasms of Uncertain or Unknown Behavior (D00-D48)	262	55	28	73	44	15	46	1	122	140		1.63	
8.* Anemias (D50-D64)	75	10	12	28	13	2	10	-	41	34		0.94	
9.* Diabetes Mellitus (E10-E14)	1,963	307	370	668	410	132	76	-	1,033	930		1.02	
10.† Mental and Behavioral Disorders Due to Use of Alcohol (F10)	286	53	52	83	62	17	15	4	221	65			
11. Mental and Behavioral Disorders Due to Use of Psychoactive Substance Excluding Alcohol and Tobacco (F11-F16, F18-F19) ‡	125	35	43	17	11	3	11	5	85	40			
12. Diseases of Nervous System (G00-G98)	2,596	639	411	572	695	186	92	1	1,018	1,578			
Meningitis (G00-G03)	16	2	4	3	1	4	2	-	11	5		1.01	
Parkinson's disease (G20-G21)	441	131	60	106	99	27	18	-	276	165		1.01	
Alzheimer's disease (G30)	1,195	318	230	273	300	42	31	1	354	841		1.58	
13. Major Cardiovascular Diseases (I00-I78)	21,328	3,418	3,456	6,362	5,301	1,576	1,183	32	10,210	11,118		1.00	
Diseases of heart (I00-I09, I11, I13, I20-I51)	17,743	2,759	2,788	5,470	4,408	1,404	884	30	8,640	9,103		0.99	
Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09)	51	17	6	15	6	1	6	-	23	28		0.88	
Hypertensive heart disease (I11)	2,442	427	470	820	471	151	94	9	1,133	1,309		0.80	
Hypertensive heart and renal disease (I13)	197	33	52	61	34	7	10	-	114	83		1.13	
Chronic ischemic heart disease (I20, I25)	11,655	1,654	1,673	3,591	3,173	1,006	539	19	5,706	5,949		1.01	
Acute myocardial infarction (I21-I22)	1,796	294	326	536	363	173	103	1	920	876		0.99	
Cardiomyopathy (I42)	147	30	29	39	24	6	19	-	85	62			

Continued on the next page.

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Table M1. Deaths by Selected Underlying Cause, Borough of Residence, Sex, and ICD-10/ICD-9 Comparability Ratio, New York City, 2018 (Continued)

Cause (Codes from International Classification of Diseases (ICD), Tenth Revision, 1999)	BOROUGH OF RESIDENCE										SEX		ICD-10/ICD-9 Comparability Ratio
	Total	Manhattan	Bronx	Brooklyn	Queens	Staten Island	Nonresidents	Residence Unknown	Male	Female			
Heart failure (I50)	398	95	62	107	104	14	16	-	197	201	1.04		
* Essential hypertension and hypertensive renal disease (I10, I12, I15)	1,272	278	247	330	296	48	73	-	539	733	1.12		
* Cerebrovascular diseases (I60-I69)	1,888	324	355	458	475	88	186	2	812	1,076	1.05		
* Atherosclerosis (I70)	162	14	27	64	27	14	11	-	63	99	0.97		
* Aortic aneurysm and dissection (I71)	149	19	25	40	38	8	19	0	97	52	1.00		
14.* Influenza and Pneumonia (J09-J18)	2,004	291	405	641	467	94	102	4	1,013	991	0.70		
15.* Chronic Lower Respiratory Diseases (J40-J47)	1,781	317	359	449	410	132	110	4	787	994	1.04		
Emphysema (J43)	93	18	16	20	29	5	3	2	50	43	0.96		
Asthma (J45-J46)	174	35	56	43	29	5	5	1	66	108	0.89		
16. Pneumonitis Due to Asbestos and Other Mineral Fibres (I61)	0	-	-	-	-	-	-	-	-	-	-		
17.* Pneumonitis Due to Solids and Liquids (I69)	135	23	18	42	37	7	8	-	64	71	1.10		
18.* Peptic Ulcer (K25-K28)	98	23	16	24	25	4	5	1	54	44	0.97		
19.* Chronic Liver Disease and Cirrhosis (K70, K73-K74)	571	86	114	137	118	29	85	2	411	160	1.03		
Alcoholic liver disease (K70)	398	59	87	95	79	20	57	1	309	89	1.00		
20.* Cholelithiasis and Other Disorders of Gallbladder (K80-K82)	64	15	14	15	14	2	4	-	32	32	0.96		
21.* Nephritis, Nephrotic Syndrome, and Nephrosis (N00-N07, N17-N19, N25-N27)	459	83	51	192	72	27	34	-	250	209	1.26		
Renal failure (N17-N19)	441	75	50	188	70	27	31	-	243	198	1.33		
22.* Pregnancy, Childbirth, and the Puerperium (O00-O99)	32	4	7	9	5	1	6	-	-	32	1.14		
Maternal causes (A34, O00-O95, O98-O99)§	23	3	4	8	3	-	5	-	-	23	-		
23.* Certain Conditions Originating in the Perinatal Period (P00-P96)	220	20	42	65	42	10	39	2	131	89	1.08		
24.* Congenital Malformations, Deformations, and Chromosomal Abnormalities (Q00-Q99)	230	20	47	58	45	10	47	50	127	103	0.90		
25. Symptoms, Signs, and Abnormal Findings, Not Elsewhere Classified (R00-R94, R96-R99)	370	105	59	95	65	20	26	-	159	211	0.98		
Pending final determination (R99)	1	-	1	1	-	-	-	-	1	-	-		
26. Sudden Infant Death Syndrome (R95)	5	1	1	2	1	-	4	-	-	1	-		
27. All Other Natural Causes (Rest of A00-R99)	4,524	983	822	1,160	917	235	400	7	1,902	2,622	1.06		
External Causes	3,627	661	726	868	757	197	352	66	2,632	995	-		
28. Injury by Firearms (W32-W34, X72-X74, X93-X95, Y22-Y24, Y35.0)	219	13	57	85	43	9	12	-	198	21	1.00		
Accidents (V01-X59, Y85-Y86)	2,415	442	520	532	487	151	236	47	1,729	686	1.03		
Accidental poisoning by psychoactive substances, excluding alcohol and tobacco (X40-X42, X44) †	1,375	244	369	263	215	111	145	28	1,051	324	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) †	1,500	279	412	280	226	114	156	33	1,136	364	-		
† Accidents except poisoning by psychoactive substance use	1,040	198	151	269	272	40	91	19	678	362	-		
Motor vehicle accidents ††	219	21	30	59	73	11	22	3	152	67	0.95		
Accidental falls (W00-W19)	489	121	69	120	116	23	36	4	299	190	0.77		
29.* Intentional Self-Harm (Suicide) (U03, X60-X84, Y87.0)	562	122	65	133	155	31	54	2	412	150	1.00		
30.* Assault (Homicide) (U01-U02, X85-Y09, Y87.1)	311	22	98	103	54	3	28	3	258	53	1.00		
31.* Legal Intervention (Y35, Y89.0)	6	1	2	1	1	1	-	-	5	1	0.94		
32. Events of Undetermined Intent (Y10-Y34, Y87.2, Y89.9)	296	67	37	90	51	10	27	14	208	88	0.99		
33.* Complications of Medical and Surgical Care (Y40-Y84, Y88)	37	7	4	9	9	1	7	-	20	17	0.63		
34.* Operations of War and Their Sequelae (Y36, Y89.1)	0	-	-	-	-	-	-	-	-	-	-		

* Eligible to be ranked as leading causes nationally and in New York City.
† The following cause groups are not ranked as leading causes nationally, but are eligible to be ranked as leading causes in New York City because of the number of deaths and their public health importance: "Mental and behavioral disorders due to use of alcohol", "Mental and behavioral disorders due to use of psychoactive substances excluding alcohol and tobacco", and "Accidents", which in NYC excludes poisoning by psychoactive substances (excluding alcohol and tobacco).
‡ See Technical Notes: Deaths, Drug-Related Deaths.
§ See Technical Notes: Deaths, Maternal Death and Maternal Mortality.
|| Motor vehicle accident codes include: V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, and V89.2.

Table M2. Deaths and Death Rates per 1,000 Population* by Age, Ethnic Group, and Sex, New York City, 2018

Age in Years	All						Hispanic						Non-Hispanic White						Non-Hispanic Black						Asian and Pacific Islander						Other/Multiple Race/Unknown					
	Total			Male			Female			Total			Male			Female			Total			Male			Female			Total			Male			Female		
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate		
All Ages	55,081	6.6	27,392	6.8	27,689	6.3	10,941	4.5	5,620	4.7	5,321	4.2	23,412	8.7	11,490	8.7	11,922	8.7	14,785	8.0	6,988	8.3	7,797	7.7	4,655	3.8	2,521	4.3	2,134	3.3	1,288	7.3	515			
Adjusted Age-	5.6			6.7			4.8			6.0			3.9			5.7			4.8			8.5			5.8			3.5			2.9					
Under 5	520	1.0	303	1.1	217	0.8	121	0.7	61	0.6	60	0.7	125	0.8	74	1.0	51	0.7	178	1.6	118	2.1	60	1.1	49	0.7	24	0.7	25	0.7	47	26	21			
5-9	57	0.1	29	0.1	28	0.1	15	0.1	7	0.1	8	0.1	19	0.2	9	0.1	10	0.2	19	0.2	9	0.2	10	0.2	3	0.0	3	0.1	0	-	1	1				
10-14	63	0.1	33	0.1	30	0.1	21	0.1	13	0.2	8	0.1	11	0.1	3	0.1	8	0.1	22	0.2	12	0.2	10	0.2	5	0.1	4	0.1	1	0.0	4	1	3			
15-19	136	0.3	92	0.4	44	0.2	43	0.3	31	0.4	12	0.2	34	0.3	20	0.4	14	0.3	48	0.4	34	0.6	14	0.3	10	0.2	6	0.2	4	0.1	1	1				
20-24	274	0.5	194	0.8	80	0.3	89	0.5	68	0.8	21	0.2	76	0.5	48	0.7	28	0.4	71	0.6	54	0.9	17	0.3	33	0.4	20	0.5	13	0.3	5	4	1			
25-29	485	0.6	350	0.9	135	0.3	158	0.7	116	1.0	42	0.4	128	0.5	87	0.7	41	0.3	152	0.9	114	1.5	38	0.5	34	0.3	24	0.4	10	0.2	13	9	4			
30-34	577	0.8	399	1.1	178	0.5	160	0.8	122	1.2	38	0.4	197	0.8	139	1.1	58	0.4	147	1.1	94	1.5	53	0.7	42	0.4	23	0.4	19	0.3	31	21	10			
35-39	688	1.1	457	1.5	231	0.7	237	1.3	182	2.0	55	0.6	176	0.9	119	1.2	57	0.6	199	1.6	107	1.9	92	1.4	54	0.5	34	0.7	20	0.4	22	15	7			
40-44	926	1.7	570	2.2	356	1.3	264	1.7	179	2.3	85	1.0	244	1.5	154	1.8	90	1.1	317	2.8	174	3.5	143	2.3	80	0.9	47	1.2	33	0.7	21	16	5			
45-49	1,424	2.7	858	3.4	566	2.1	404	2.6	257	3.4	147	1.8	383	2.4	251	3.0	132	1.7	463	3.9	244	4.7	219	3.3	126	1.4	73	1.8	53	1.1	48	33	15			
50-54	2,193	4.2	1,328	5.3	865	3.1	534	3.5	330	4.6	204	2.5	589	3.8	387	4.8	202	2.7	836	6.4	469	8.1	367	5.0	173	2.1	102	2.6	71	1.6	61	40	21			
55-59	3,237	6.2	2,034	8.3	1,203	4.3	723	5.3	456	7.3	267	3.6	958	5.9	642	7.8	316	3.9	1,220	9.2	718	12.4	502	6.7	240	2.9	153	3.9	87	2.0	96	65	31			
60-64	4,085	8.6	2,439	11.1	1,646	6.4	868	7.5	521	10.2	347	5.4	1,381	8.4	860	10.9	521	6.2	1,402	12.2	758	15.5	644	9.8	317	4.1	218	5.9	99	2.5	117	82	35			
65-69	4,779	12.1	2,748	15.6	2,031	9.3	958	10.6	578	15.1	380	7.3	1,784	11.8	1,043	14.9	741	9.2	1,496	16.8	775	21.1	721	13.8	395	6.6	254	8.9	141	4.5	146	98	48			
70-74	5,373	17.6	2,960	22.7	2,413	13.8	1,023	14.9	559	20.0	464	11.4	2,222	17.7	1,286	22.8	936	13.6	1,537	22.8	779	30.4	758	18.2	455	11.3	256	13.7	199	9.2	136	80	56			
75-79	5,965	27.3	3,047	34.4	2,918	22.5	1,161	23.3	602	31.4	559	18.3	2,429	27.1	1,273	33.1	1,156	22.7	1,752	35.5	804	45.6	948	30.0	491	17.9	283	22.9	208	13.7	132	85	47			
80-84	6,610	43.2	3,156	52.8	3,454	37.0	1,397	42.0	625	51.7	772	36.4	2,909	44.0	1,432	52.0	1,477	38.3	1,538	46.9	681	62.0	857	39.3	632	32.4	340	39.8	292	26.7	134	78	56			
≥85	17,689	100.7	6,395	109.1	11,294	96.5	2,765	84.0	913	88.8	1,852	81.8	9,747	112.2	3,663	119.7	6,084	108.2	3,388	97.1	1,044	108.3	2,344	92.8	1,516	77.8	657	86.3	859	72.4	273	118	155			
Mean age at death	73.5		69.9		77.0		70.1		65.8		74.7		77.6		74.1		80.9		70.0		66.2		73.3		73.9		71.8		76.4		67.4		65.4		70.4	
Median age at death	77		73		81		74		68		79		81		77		85		72		68		76		78		75		81		70		68		75	

* Population data are from US Census Bureau estimates for July 1, 2018, released in the 2019 vintage file.

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Table M3. Deaths by Ancestry* and Borough of Residence, New York City, 2018

Mother's Ancestry*	Total	Borough of Residence						Residence Unknown
		Manhattan	Bronx	Brooklyn	Queens	Staten Island	Nonresidents	
Total	55,081	9,700	9,343	15,345	12,519	3,608	4,425	141
Hispanic								
Colombian	332	37	19	25	222	7	22	-
Cuban	396	119	76	52	110	10	27	2
Dominican	2,281	769	837	274	299	21	81	-
Ecuadorian	480	65	92	74	215	4	29	1
Mexican	411	53	87	114	107	28	21	1
Puerto Rican	4,850	912	1,910	1,187	488	146	197	10
Other Hispanic	2,191	355	686	470	461	65	132	22
North American and the Caribbean								
African-American	10,161	1,980	2,526	3,187	1,778	161	502	27
American	10,380	2,787	826	2,081	2,246	827	1,609	4
Guyanese	996	16	105	331	500	6	38	-
Haitian	948	48	27	608	207	4	53	1
Jamaican	1,168	36	283	526	226	8	89	-
Trinidadian	439	16	24	260	108	6	25	-
Other North American and the Caribbean	1,030	72	129	625	134	13	57	-
African								
Egyptian	112	10	3	18	37	25	18	1
Ghanaian	65	4	46	11	1	0	3	0
Nigerian	83	4	12	26	21	10	10	0
Other African	181	50	59	21	27	11	13	0
European								
English	203	54	17	29	33	29	41	0
German	615	119	74	68	223	79	52	0
Irish	1,288	95	208	158	424	259	144	0
Italian	3,580	130	372	819	843	1,077	339	0
Polish	559	62	25	172	203	58	39	0
Russian	926	65	26	640	125	52	18	0
Other European	2,544	278	153	960	804	195	152	2
Asian								
Asian Indian	361	35	20	23	198	22	62	1
Bangladeshi	246	4	52	53	123	1	13	0
Chinese	2,607	666	38	836	909	82	76	0
Filipino	266	47	11	17	133	17	41	0
Korean	372	35	17	16	258	11	34	1
Pakistani	181	6	8	66	68	10	23	0
Other Asian	650	100	55	147	234	39	74	1
Other								
Jewish or Hebrew	1,786	193	88	977	266	58	204	0
Other or Not Stated	2,393	478	432	474	488	267	187	67

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

Table M4. Deaths by Place of Death*, New York City, 2014-2018

Place of Death	2014		2015		2016		2017		2018	
	Deaths	%								
Total	53,034	100.0	54,120	100.0	54,280	100.0	54,319	100.0	55,081	100.0
Hospital Inpatient	25,559	48.2	25,152	46.5	25,111	46.3	24,883	45.8	24,964	45.3
Emergency/Outpatient	4,423	8.3	4,457	8.2	4,584	8.4	4,646	8.6	4,997	9.1
Dead on Arrival (DOA)	585	1.1	800	1.5	706	1.3	682	1.3	668	1.2
Nursing Home/Long Term Care Facility	7,340	13.8	7,631	14.1	7,381	13.6	7,779	14.3	7,945	14.4
Hospice Facility	2,157	4.1	2,711	5.0	2,611	4.8	1,936	3.6	1,387	2.5
Decedents' Residence	12,318	23.2	12,657	23.4	13,045	24.0	13,610	25.1	14,326	26.0
Other	652	1.2	712	1.3	842	1.6	783	1.4	794	1.4
Unknown or Not Stated	-	-	-	-	-	-	-	-	-	-

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

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Table M5. Deaths by Birthplace and Borough of Residence, New York City, 2018*

Birthplace	Total	Borough of Residence					Non-Residents	Residence Unknown
		Manhattan	Bronx	Brooklyn	Queens	Staten Island		
Total	55,081	9,700	9,343	15,345	12,519	3,608	4,425	141
United States	32,791	6,472	6,374	7,865	6,162	2,787	3,092	39
United States (excluding Puerto Rico)	28,822	5,684	4,744	6,904	5,803	2,689	2,967	31
Puerto Rico	3,969	788	1,630	961	359	98	125	8
China	2,376	616	33	793	799	70	65	-
Dominican Republic	2,189	747	817	264	277	20	64	-
Jamaica	1,412	50	366	576	300	9	111	-
Ukraine	1,100	39	21	860	116	48	15	1
Guyana	1,059	18	118	358	515	8	42	-
Italy	1,000	39	117	294	298	156	96	-
Haiti	966	54	29	616	217	4	46	-
Trinidad and Tobago	671	26	38	401	154	13	39	-
Poland	521	68	21	223	163	18	28	-
Russia	512	42	29	324	88	16	13	-
Ecuador	468	64	90	72	209	5	27	1
Cuba	395	115	80	53	109	14	22	2
Mexico	377	47	80	110	95	27	17	1
Germany	336	99	28	49	108	16	36	-
Greece	335	17	13	62	208	20	15	-
Korea	325	29	13	13	226	11	32	1
India	322	34	11	19	174	23	61	-
Colombia	321	37	16	25	218	7	18	-
Barbados	281	13	23	202	34	3	6	-
Philippines	273	48	10	19	140	18	38	-
Bangladesh	268	4	52	56	144	-	12	-
Ireland	245	28	53	25	86	14	39	-
Romania	232	27	8	88	91	6	11	1
Panama	220	13	16	152	26	5	8	-
Belarus	219	6	1	180	17	12	3	-
Other or Not Stated	5,867	948	886	1,646	1,545	278	469	95

* See Technical Notes: Geographical Units, Birthplace Presentation.

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Table M6. Deaths by Birthplace* and Age Group, New York City, 2018

Birthplace	Total	Age Group (Years)								
		<15	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Total	55,081	640	410	1,062	1,614	3,617	7,322	10,152	12,575	17,689
United States	32,791	609	299	740	989	2,233	4,599	6,190	7,212	9,920
United States (excluding Puerto Rico)	28,822	608	299	721	948	2,101	4,233	5,351	5,949	8,612
Puerto Rico	3,969	1	-	19	41	132	366	839	1,263	1,308
China	2,376	-	11	25	36	108	201	338	579	1,078
Dominican Republic	2,189	3	17	46	62	167	299	435	559	601
Jamaica	1,412	4	4	18	39	85	200	283	379	400
Ukraine	1,100	2	1	9	12	26	65	116	267	602
Guyana	1,059	2	4	11	26	90	148	229	282	267
Italy	1,000	-	-	-	4	13	52	119	250	562
Haiti	966	-	7	4	23	44	135	202	252	299
Trinidad and Tobago	671	1	-	9	16	49	106	162	190	138
Poland	521	-	2	2	14	26	65	70	61	281
Russia	512	-	1	7	7	19	34	69	142	233
Ecuador	468	2	2	18	24	28	54	89	116	135
Cuba	395	-	-	-	1	2	39	48	99	206
Mexico	377	-	9	40	95	89	53	33	31	27
Germany	336	-	-	2	1	8	8	47	61	209
Greece	335	-	-	1	3	4	20	57	98	152
Korea	325	-	-	1	12	18	39	59	93	103
India	322	-	2	12	14	27	49	67	79	72
Colombia	321	-	1	2	12	16	30	44	89	127
Barbados	281	-	-	-	4	7	35	60	82	93
Philippines	273	1	2	2	11	15	35	66	93	48
Bangladesh	268	-	5	7	13	37	60	80	51	15
Ireland	245	-	-	1	5	6	13	29	72	119
Romania	232	-	-	-	1	2	18	34	47	130
Panama	220	1	-	2	1	8	33	55	54	66
Belarus	219	-	-	-	2	6	15	17	47	132
Other or Not Stated	5,867	15	43	103	187	484	917	1,154	1,290	1,674

* See Technical Notes: Geographical Units, Birthplace Presentation.

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Table M7. Leading Causes of Death by Age Group and Sex, New York City, 2018

Rank	ALL AGES	All		Male		Female	
		Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	17,743	32.2	8,640	31.5	9,103	32.9
2	Malignant Neoplasms	13,037	23.7	6,391	23.3	6,646	24.0
3	Influenza and Pneumonia	2,004	3.6	1,013	3.7	991	3.6
4	Diabetes Mellitus	1,963	3.6	1,033	3.8	930	3.4
5	Cerebrovascular Diseases	1,888	3.4	812	3.0	1,076	3.9
6	Chronic Lower Respiratory Diseases	1,781	3.2	787	2.9	994	3.6
7	Use of or Poisoning by Psychoactive Substance	1,500	2.7	1,136	4.1	364	1.3
8	Essential Hypertension and Hypertensive Renal Disease	1,272	2.3	539	2.0	733	2.6
9	Alzheimer's Disease	1,195	2.2	354	1.3	841	3.0
10	Accidents Except Poisoning by Psychoactive Substance	1,040	1.9	678	2.5	362	1.3
	All Other Causes	11,658	21.2	6,009	21.9	5,649	20.4
	Total	55,081	100.0	27,392	100.0	27,689	100.0
Rank	< 1 YEAR	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Congenital Malformations, Deformations	98	22.0	51	19.1	47	26.3
2	Short Gestation and Low Birthweight	73	16.4	42	15.7	31	17.3
3	External Causes	57	12.8	38	14.2	19	10.6
4	Cardiovascular Disorders Originating in the Perinatal Period	53	11.9	32	12.0	21	11.7
5	Newborn Affected by Complications of Pregnancy	17	3.8	11	4.1	6	3.4
6	Bacterial Sepsis of Newborn	12	2.7	6	2.2	6	3.4
7	Newborn Affected by Complications of Placenta	10	2.2	7	2.6	3	1.7
8	Diseases of Heart	8	1.8	5	1.9	3	1.7
9	Influenza and Pneumonia	7	1.6	7	2.6	0	0.0
10	Respiratory Distress of Newborn	6	1.3	2	0.7	4	2.2
	All Other Causes	105	23.5	66	24.7	39	21.8
	Total	446	100.0	267	100.0	179	100.0
Rank	1 - 14 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	48	24.7	30	30.6	18	18.8
2	Congenital Malformations, Deformations	29	14.9	10	10.2	19	19.8
3	Accidents Except Poisoning by Psychoactive Substance	14	7.2	7	7.1	7	7.3
4	Diseases of Heart	10	5.2	5	5.1	5	5.2
5	Influenza and Pneumonia	9	4.6	4	4.1	5	5.2
5	Chronic Lower Respiratory Diseases	9	4.6	4	4.1	5	5.2
	All Other Causes	75	38.7	38	38.8	37	38.5
	Total	194	100.0	98	100.0	96	100.0
Rank	15 - 24 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Use of or Poisoning by Psychoactive Substance	67	16.3	47	16.4	20	16.1
2	Assault (Homicide)	65	15.9	58	20.3	7	5.6
3	Intentional Self-harm (Suicide)	59	14.4	41	14.3	18	14.5
4	Malignant Neoplasms	48	11.7	26	9.1	22	17.7
5	Accidents Except Poisoning by Psychoactive Substance	36	8.8	25	8.7	11	8.9
6	Diseases of Heart	15	3.7	10	3.5	5	4.0
7	Congenital Malformations, Deformations	13	3.2	10	3.5	3	2.4
8	Chronic Lower Respiratory Diseases	9	2.2	4	1.4	5	4.0
9	Influenza and Pneumonia	7	1.7	5	1.7	2	1.6
10	Diabetes Mellitus	6	1.5	4	1.4	2	1.6
	All Other Causes	85	20.7	56	19.6	29	23.4
	Total	410	100.0	286	100.0	124	100.0
Rank	25 - 34 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Use of or Poisoning by Psychoactive Substance	271	25.5	214	28.6	57	18.2
2	Malignant Neoplasms	121	11.4	62	8.3	59	18.8
3	Intentional Self-harm (Suicide)	102	9.6	71	9.5	31	9.9
4	Accidents Except Poisoning by Psychoactive Substance	96	9.0	78	10.4	18	5.8
5	Assault (Homicide)	91	8.6	82	10.9	9	2.9
6	Diseases of Heart	61	5.7	41	5.5	20	6.4
7	Mental Disorders Due to Use of Alcohol	24	2.3	16	2.1	8	2.6
8	Chronic Lower Respiratory Diseases	21	2.0	10	1.3	11	3.5
8	Human Immunodeficiency Virus (HIV) Disease	21	2.0	15	2	6	1.9
10	Congenital Malformations, Deformations	18	1.7	10	1.3	8	2.6
	All Other Causes	236	22.2	150	20.0	86	27.5
	Total	1,062	100.0	749	100.0	313	100.0

Continued on next page.

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Table M7. Leading Causes of Death by Age Group and Sex, New York City, 2018 (Continued)

Rank	35 - 44 YEARS	All		Male		Female	
		Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	335	20.8	149	14.5	186	31.7
2	Use of or Poisoning by Psychoactive Substance	254	15.7	204	19.9	50	8.5
3	Diseases of Heart	197	12.2	136	13.2	61	10.4
4	Intentional Self-harm (Suicide)	86	5.3	65	6.3	21	3.6
5	Accidents Except Poisoning by Psychoactive Substance	84	5.2	71	6.9	13	2.2
6	Diabetes Mellitus	64	4.0	48	4.7	16	2.7
6	Chronic Liver Disease and Cirrhosis	64	4.0	46	4.5	18	3.1
8	Assault (Homicide)	48	3.0	41	4.0	7	1.2
8	Mental Disorder Due to Use of Alcohol	48	3.0	37	3.6	11	1.9
10	Human Immunodeficiency Virus (HIV) Disease	33	2.0	19	1.9	14	2.4
	All Other Causes	401	24.8	211	20.5	190	32.4
	Total	1,614	100.0	1,027	100.0	587	100.0
Rank	45 - 54 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	979	27.1	444	20.3	535	37.4
2	Diseases of Heart	713	19.7	488	22.3	225	15.7
3	Use of or Poisoning by Psychoactive Substance	416	11.5	304	13.9	112	7.8
4	Diabetes Mellitus	167	4.6	100	4.6	67	4.7
5	Chronic Liver Disease and Cirrhosis	106	2.9	81	3.7	25	1.7
6	Cerebrovascular Diseases	103	2.8	60	2.7	43	3.0
7	Accidents Except Poisoning by Psychoactive Substance	94	2.6	75	3.4	19	1.3
8	Intentional Self-harm (Suicide)	89	2.5	66	3.0	23	1.6
9	Human Immunodeficiency Virus (HIV) Disease	83	2.3	52	2.4	31	2.2
10	Influenza and Pneumonia	73	2.0	45	2.1	28	2.0
	All Other Causes	794	22.0	471	21.5	323	22.6
	Total	3,617	100.0	2,186	100.0	1,431	100.0
Rank	55 - 64 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	2,449	33.4	1,274	28.5	1,175	41.2
2	Diseases of Heart	1,902	26.0	1,293	28.9	609	21.4
3	Use of or Poisoning by Psychoactive Substance	367	5.0	271	6.1	96	3.4
4	Diabetes Mellitus	294	4.0	180	4.0	114	4.0
5	Chronic Lower Respiratory Diseases	204	2.8	94	2.1	110	3.9
6	Cerebrovascular Diseases	180	2.5	110	2.5	70	2.5
7	Chronic Liver Disease and Cirrhosis	179	2.4	140	3.1	39	1.4
8	Influenza and Pneumonia	163	2.2	101	2.3	62	2.2
9	Accidents Except Poisoning by Psychoactive Substance	142	1.9	101	2.3	41	1.4
10	Intentional Self-harm (Suicide)	130	1.8	101	2.3	29	1.0
	All Other Causes	1,312	17.9	808	18.1	504	17.7
	Total	7,322	100.0	4,473	100.0	2,849	100.0
Rank	65 - 74 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	3,465	34.1	1,794	31.4	1,671	37.6
2	Diseases of Heart	2,968	29.2	1,778	31.1	1,190	26.8
3	Diabetes Mellitus	460	4.5	255	4.5	205	4.6
4	Chronic Lower Respiratory Diseases	362	3.6	196	3.4	166	3.7
5	Influenza and Pneumonia	349	3.4	200	3.5	149	3.4
6	Cerebrovascular Diseases	326	3.2	172	3.0	154	3.5
7	Essential Hypertension and Hypertensive Renal Disease	219	2.2	119	2.1	100	2.3
8	Accidents Except Poisoning by Psychoactive Substance	153	1.5	101	1.8	52	1.2
9	Chronic Liver Disease and Cirrhosis	132	1.3	92	1.6	40	0.9
10	Use of or Poisoning by Psychoactive Substance	106	1.0	80	1.4	26	0.6
	All Other Causes	1,612	15.9	921	16.1	691	15.5
	Total	10,152	100.0	5,708	100.0	4,444	100.0
Rank	75 - 84 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	4,409	35.1	2,255	36.4	2,154	33.8
2	Malignant Neoplasms	3,255	25.9	1,593	25.7	1,662	26.1
3	Cerebrovascular Disease	544	4.3	232	3.7	312	4.9
4	Diabetes Mellitus	507	4.0	264	4.3	243	3.8
5	Influenza and Pneumonia	505	4.0	256	4.1	249	3.9
6	Chronic Lower Respiratory Diseases	494	3.9	224	3.6	270	4.2
7	Essential Hypertension and Hypertensive Renal Disease	316	2.5	132	2.1	184	2.9
8	Alzheimer's Disease	246	2.0	86	1.4	160	2.5
9	Parkinson's Disease	175	1.4	114	1.8	61	1.0
10	Accidents Except Poisoning by Psychoactive Substance	167	1.3	94	1.5	73	1.1
	All Other Causes	119	1.0	52	0.8	67	1.1
	Total	12,575	100.0	6,203	100.0	6,372	100.0
Rank	≥ 85 YEARS	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	7,460	42.2	2,629	41.1	4,831	42.8
2	Malignant Neoplasms	2,335	13.2	1,017	15.9	1,318	11.7
3	Influenza and Pneumonia	881	5.0	236	3.7	645	5.7
4	Alzheimer's Disease	852	4.8	373	5.8	479	4.2
5	Cerebrovascular Diseases	687	3.9	208	3.3	479	4.2
6	Chronic Lower Respiratory Diseases	597	3.4	208	3.3	389	3.4
7	Essential Hypertension and Hypertensive Renal Disease	543	3.1	172	2.7	371	3.3
8	Diabetes Mellitus	446	2.5	170	2.7	276	2.4
9	Accidents Except Poisoning by Psychoactive Substance	246	1.4	122	1.9	124	1.1
10	Parkinson's Disease	196	1.1	109	1.7	87	0.8
	All Other Causes	3,446	19.5	1,151	18.0	2,295	20.3
	Total	17,689	100.0	6,395	100.0	11,294	100.0

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Table M8. Leading Causes of Death by Racial/Ethnic Group* and Sex, New York City, 2018

Rank	Puerto Rican	All		Male		Female	
		Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	1,431	29.5	693	29.1	738	29.9
2	Malignant Neoplasms	985	20.3	533	22.4	452	18.3
3	Influenza and Pneumonia	219	4.5	93	3.9	126	5.1
4	Diabetes Mellitus	217	4.5	95	4.0	122	4.9
5	Chronic Lower Respiratory Diseases	207	4.3	83	3.5	124	5.0
6	Use of or Poisoning by Psychoactive Substance	190	3.9	142	6.0	48	1.9
7	Alzheimer's Disease	181	3.7	41	1.7	140	5.7
8	Cerebrovascular Diseases	170	3.5	56	2.4	114	4.6
9	Essential Hypertension and Hypertensive Renal Disease	101	2.1	43	1.8	58	2.3
10	Chronic Liver Disease and Cirrhosis	80	1.6	60	2.5	20	0.8
	All Other Causes	1,069	22.0	541	22.7	528	21.4
	Total	4,850	100.0	2,380	100.0	2,470	100.0
Rank	Other Hispanic	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	1,542	25.3	787	24.3	755	26.5
2	Malignant Neoplasms	1,402	23.0	697	21.5	705	24.7
3	Use of or Poisoning by Psychoactive Substance	309	5.1	250	7.7	59	2.1
4	Diabetes Mellitus	255	4.2	141	4.4	114	4.0
5	Cerebrovascular Diseases	245	4.0	115	3.5	130	4.6
6	Influenza and Pneumonia	199	3.3	100	3.1	99	3.5
7	Accidents Except Poisoning by Psychoactive Substance	196	3.2	145	4.5	51	1.8
8	Essential Hypertension and Hypertensive Renal Disease	161	2.6	67	2.1	94	3.3
9	Alzheimer's Disease	154	2.5	51	1.6	103	3.6
10	Chronic Lower Respiratory Diseases	150	2.5	63	1.9	87	3.1
	All Other Causes	1,478	24.3	824	25.4	654	22.9
	Total	6,091	100.0	3,240	100.0	2,851	100.0
Rank	Asian and Pacific Islander	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	1,310	28.1	700	27.8	610	28.6
2	Malignant Neoplasms	1,301	27.9	711	28.2	590	27.6
3	Cerebrovascular Diseases	216	4.6	102	4.0	114	5.3
4	Influenza and Pneumonia	196	4.2	117	4.6	79	3.7
5	Diabetes Mellitus	184	4.0	99	3.9	85	4.0
6	Essential Hypertension and Hypertensive Renal Disease	123	2.6	57	2.3	66	3.1
7	Chronic Lower Respiratory Diseases	118	2.5	78	3.1	40	1.9
8	Accidents Except Poisoning by Psychoactive Substance	117	2.5	84	3.3	33	1.5
9	Alzheimer's Disease	91	2.0	30	1.2	61	2.9
10	Intentional Self-harm (Suicide)	74	1.6	46	1.8	28	1.3
	All Other Causes	925	19.9	497	19.7	428	20.1
	Total	4,655	100.0	2,521	100.0	2,134	100.0
Rank	Non-Hispanic White	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	8,207	35.1	3,959	34.5	4,248	35.6
2	Malignant Neoplasms	5,783	24.7	2,833	24.7	2,950	24.7
3	Chronic Lower Respiratory Diseases	841	3.6	364	3.2	477	4.0
4	Influenza and Pneumonia	827	3.5	436	3.8	391	3.3
5	Cerebrovascular Diseases	699	3.0	296	2.6	403	3.4
6	Use of or Poisoning by Psychoactive Substance	533	2.3	413	3.6	120	1.0
7	Alzheimer's Disease	530	2.3	161	1.4	369	3.1
8	Diabetes Mellitus	487	2.1	307	2.7	180	1.5
9	Essential Hypertension and Hypertensive Renal Disease	430	1.8	177	1.5	253	2.1
10	Accidents Except Poisoning by Psychoactive Substance	421	1.8	244	2.1	177	1.5
	All Other Causes	4,654	19.9	2,300	20.0	2,354	19.7
	Total	23,412	100.0	11,490	100.0	11,922	100.0
Rank	Non-Hispanic Black	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	4,802	32.5	2,250	32.2	2,552	32.7
2	Malignant Neoplasms	3,343	22.6	1,485	21.3	1,858	23.8
3	Diabetes Mellitus	764	5.2	357	5.1	407	5.2
4	Influenza and Pneumonia	516	3.5	240	3.4	276	3.5
4	Cerebrovascular Diseases	516	3.5	217	3.1	299	3.8
6	Chronic Lower Respiratory Diseases	430	2.9	173	2.5	257	3.3
7	Essential Hypertension and Hypertensive Renal Disease	420	2.8	176	2.5	244	3.1
8	Use of or Poisoning by Psychoactive Substance	394	2.7	271	3.9	123	1.6
9	Alzheimer's Disease	225	1.5	65	0.9	160	2.1
10	Accidents Except Poisoning by Psychoactive Substance	208	1.4	129	1.8	79	1.0
	All Other Causes	3,167	21.4	1,625	23.3	1,542	19.8
	Total	14,785	100.0	6,988	100.0	7,797	100.0

* Decedents of other or multiple races, or with unknown race/ethnicity, are not shown.

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Table M9. Leading Causes of Premature Death (Age < 65 Years), Overall and by Sex, New York City, 2018

Rank	Cause of Death	All		Male		Female	
		Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	3,982	27.2	1,987	21.9	1,995	35.8
	Trachea, bronchus, and lung	641	4.4	361	4.0	280	5.0
	Breast	455	3.1	5	0.1	450	8.1
	Colon, rectum, and anus	391	2.7	218	2.4	173	3.1
	Pancreas	275	1.9	160	1.8	115	2.1
	Liver and intrahepatic bile ducts	238	1.6	174	1.9	64	1.1
2	Diseases of Heart	2,906	19.8	1,978	21.8	928	16.6
3	Use of or Poisoning by Psychoactive Substance	1,375	9.4	1,040	11.4	335	6.0
4	Diabetes Mellitus	550	3.8	344	3.8	206	3.7
5	Accidents Except Poisoning by Psychoactive Substance	474	3.2	361	4.0	113	2.0
6	Intentional Self-harm (Suicide)	471	3.2	346	3.8	125	2.2
7	Chronic Liver Disease and Cirrhosis	355	2.4	273	3.0	82	1.5
8	Cerebrovascular Diseases	331	2.3	200	2.2	131	2.3
9	Chronic Lower Respiratory Diseases	328	2.2	159	1.7	169	3.0
10	Influenza and Pneumonia	298	2.0	184	2.0	114	2.0
	All Other Causes	3,595	24.5	2,214	24.4	1,381	24.8
	Total	14,665	100.0	9,086	100.0	5,579	100.0

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

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Table M10. Leading Causes of Premature Death (Age < 65 Years) by Racial/Ethnic Group* and Sex, New York City, 2018

Rank	Puerto Rican	All		Male		Female	
		Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	290	23.9	170	22.1	120	26.9
2	Diseases of Heart	232	19.1	152	19.8	80	17.9
3	Use of or Poisoning by Psychoactive Substance	168	13.8	123	16.0	45	10.1
4	Diabetes Mellitus	55	4.5	28	3.6	27	6.1
5	Chronic Lower Respiratory Diseases	48	4.0	22	2.9	26	5.8
6	Chronic Liver Disease and Cirrhosis	39	3.2	27	3.5	12	2.7
7	Influenza and Pneumonia	34	2.8	14	1.8	20	4.5
8	Accidents Except Poisoning by Psychoactive Substance	32	2.6	26	3.4	6	1.3
9	Human Immunodeficiency Virus (HIV) Disease	30	2.5	19	2.5	11	2.5
10	Cerebrovascular Diseases	21	1.7	8	1.0	13	2.9
	All Other Causes	265	21.8	179	23.3	86	19.3
	Total	1,214	100.0	768	100.0	446	100.0
Rank	Other Hispanic	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	585	24.1	281	17.8	304	35.8
2	Diseases of Heart	375	15.5	258	16.4	117	13.8
3	Use of or Poisoning by Psychoactive Substance	296	12.2	242	15.4	54	6.4
4	Accidents Except Poisoning by Psychoactive Substance	139	5.7	116	7.4	23	2.7
5	Diabetes Mellitus	87	3.6	59	3.7	28	3.3
5	Chronic Liver Disease and Cirrhosis	87	3.6	72	4.6	15	1.8
7	Cerebrovascular Diseases	68	2.8	46	2.9	22	2.6
8	Intentional Self-harm (Suicide)	67	2.8	52	3.3	15	1.8
9	Assault (Homicide)	62	2.6	49	3.1	13	1.5
10	Mental Disorders Due to Use of Alcohol	60	2.5	57	3.6	3	0.4
	All Other Causes	597	24.6	343	21.8	254	30.0
	Total	2,423	100.0	1,575	100.0	848	100.0
Rank	Asian and Pacific Islander	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	474	40.7	251	34.3	223	51.3
2	Diseases of Heart	189	16.2	148	20.2	41	9.4
3	Intentional Self-harm (Suicide)	64	5.5	39	5.3	25	5.7
4	Accidents Except Poisoning by Psychoactive Substance	41	3.5	34	4.7	7	1.6
5	Diabetes Mellitus	38	3.3	24	3.3	14	3.2
6	Cerebrovascular Diseases	35	3.0	20	2.7	15	3.4
7	Use of or Poisoning by Psychoactive Substance	31	2.7	23	3.1	8	1.8
8	Certain Conditions Originating in the Perinatal Period	23	2.0	10	1.4	13	3.0
9	Influenza and Pneumonia	22	1.9	14	1.9	8	1.8
10	Mental Disorders Due to Use of Alcohol	18	1.5	12	1.6	6	1.4
	All Other Causes	231	19.8	156	21.3	75	17.2
	Total	1,166	100.0	731	100.0	435	100.0
Rank	Non-Hispanic White	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Malignant Neoplasms	1,347	31.2	700	25.1	647	42.3
2	Diseases of Heart	804	18.6	596	21.3	208	13.6
3	Use of or Poisoning by Psychoactive Substance	496	11.5	383	13.7	113	7.4
4	Intentional Self-harm (Suicide)	222	5.1	169	6.1	53	3.5
5	Chronic Liver Disease and Cirrhosis	142	3.3	105	3.8	37	2.4
6	Accidents Except Poisoning by Psychoactive Substance	133	3.1	91	3.3	42	2.7
7	Diabetes Mellitus	100	2.3	81	2.9	19	1.2
8	Chronic Lower Respiratory Diseases	82	1.9	44	1.6	38	2.5
9	Mental Disorders Due to Use of Alcohol	77	1.8	55	2.0	22	1.4
10	Congenital Malformations, Deformations	65	1.5	37	1.3	28	1.8
	All Other Causes	853	19.7	532	19.0	321	21.0
	Total	4,321	100.0	2,793	100.0	1,528	100.0
Rank	Non-Hispanic Black	Deaths	Percent	Deaths	Percent	Deaths	Percent
1	Diseases of Heart	1,216	24.0	762	26.2	454	20.9
2	Malignant Neoplasms	1,196	23.6	534	18.4	662	30.5
3	Use of or Poisoning by Psychoactive Substance	347	6.8	235	8.1	112	5.2
4	Diabetes Mellitus	251	4.9	141	4.9	110	5.1
5	Assault (Homicide)	164	3.2	145	5.0	19	0.9
6	Human Immunodeficiency Virus (HIV) Disease	139	2.7	93	3.2	46	2.1
7	Chronic Lower Respiratory Diseases	137	2.7	57	2.0	80	3.7
8	Cerebrovascular Diseases	134	2.6	76	2.6	58	2.7
9	Accidents Except Poisoning by Psychoactive Substance	119	2.3	84	2.9	35	1.6
10	Influenza and Pneumonia	115	2.3	70	2.4	45	2.1
	All Other Causes	1,256	24.8	708	24.4	548	25.3
	Total	5,074	100.0	2,905	100.0	2,169	100.0

* Decedents of other or multiple races, or with unknown race/ethnicity, are not shown.

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Table M11. Deaths and Death Rates per 100,000 Population from Selected Underlying Causes, Overall and by Ethnic Group* and Sex, New York City, 2018

Cause of Death	Ethnic Group*												Sex									
	Total			Hispanic			Non-Hispanic White			Non-Hispanic Black			Asian and Pacific Islander			Other or Unknown		Male		Female		
	No.	Crude Rate	Age-Adj. Rate	No.	Crude Rate	Age-Adj. Rate	No.	Crude Rate	Age-Adj. Rate	No.	Crude Rate	Age-Adj. Rate	No.	Crude Rate	Age-Adj. Rate	No.	Crude Rate	Age-Adj. Rate	No.	Crude Rate	Age-Adj. Rate	
All Causes†	55,081	6.6	5.6	10,941	4.5	4.9	23,412	8.7	5.7	14,785	8.0	6.9	4,655	3.8	3.5	1,288	27,392	6.8	6.7	27,689	6.3	4.6
Natural Causes	51,454	612.6	515.0	9,975	407.2	443.6	22,037	817.9	524.5	13,873	750.3	641.9	4,392	355.1	332.6	1,177	24,760	618.1	609.2	26,694	607.7	443.2
Human Immunodeficiency Virus (HIV) Disease	331	3.9	3.6	86	3.5	3.5	48	1.8	1.6	180	9.7	8.5	3	0.2	0.2	14	230	5.7	5.4	101	2.3	2.0
Malignant Neoplasms	13,037	155.2	133.8	2,387	97.5	104.5	5,783	214.6	150.9	3,343	180.8	154.3	1,301	105.2	95.7	223	6,391	159.5	155.4	6,646	151.3	119.0
Malignant neoplasms of stomach	425	5.1	4.4	111	4.5	4.8	135	5.0	3.5	97	5.2	4.5	78	6.3	5.8	4	241	6.0	5.8	184	4.2	3.2
Malignant neoplasms of colon, rectum, and anus	1,175	14.0	12.0	208	8.5	9.1	502	18.6	13.0	344	18.6	15.9	105	8.5	7.7	16	596	14.9	14.4	579	13.2	10.2
Malignant neoplasms of pancreas	1,075	12.8	10.9	198	8.1	8.7	507	18.8	13.0	258	14.0	11.8	95	7.7	7.0	17	520	13.0	12.6	555	12.6	9.6
Malignant neoplasms of trachea, bronchus, and lung (male)	1,272	31.8	30.8	198	16.7	21.0	561	42.6	33.0	315	37.6	37.2	184	31.3	30.4	14	1,272	31.8	30.8	1,154	26.3	20.4
Malignant neoplasms of trachea, bronchus, and lung (female)	1,154	26.3	20.4	158	12.5	11.8	597	43.3	27.8	278	27.5	20.7	107	16.5	14.3	14	1,272	31.8	30.8	1,121	25.5	20.5
Malignant neoplasm of breast (female)	1,121	25.5	20.5	185	14.6	13.9	476	34.5	23.0	353	34.9	26.8	90	13.9	11.9	17	1,121	25.5	20.5	1,121	25.5	20.5
Malignant neoplasm of cervix uteri (female)	121	2.8	2.3	35	2.8	2.6	31	2.2	1.7	45	4.5	3.5	9	1.4	1.2	1	121	2.8	2.3	121	2.8	2.3
Malignant neoplasm of ovary (female)	363	8.3	6.7	67	5.3	5.0	165	12.0	8.4	100	9.9	7.6	26	4.0	3.5	5	363	8.3	6.7	363	8.3	6.7
Malignant neoplasm of prostate (male)	722	18.0	17.9	134	11.3	16.2	264	20.1	14.7	257	30.7	32.8	52	8.9	9.0	15	722	18.0	17.9	722	18.0	17.9
Leukemia	588	7.0	6.1	102	4.2	4.4	320	11.9	8.4	96	5.2	4.6	57	4.6	4.2	13	325	8.1	8.0	263	6.0	4.9
Diabetes Mellitus	1,963	23.4	20.0	472	19.3	20.9	487	18.1	12.4	764	41.3	35.4	184	14.9	13.8	56	1,033	25.8	25.1	930	21.2	16.0
Parkinson's Disease	441	5.3	4.3	84	3.4	3.9	244	9.1	5.4	62	3.4	2.8	44	3.6	3.4	7	276	6.9	6.9	165	3.8	2.6
Alzheimer's Disease	1,195	14.2	11.0	335	13.7	15.6	530	19.7	10.3	225	12.2	10.2	91	7.4	7.1	14	354	8.8	9.1	841	19.1	12.1
Diseases of Heart	17,743	211.3	173.9	2,973	121.4	133.8	8,207	304.6	183.9	4,802	259.7	219.8	1,310	105.9	99.9	451	8,640	215.7	213.4	9,103	207.2	143.4
Hypertensive heart disease	2,442	29.1	24.2	469	19.1	20.9	863	32.0	19.8	920	49.8	42.2	139	11.2	10.6	51	1,133	28.3	27.7	1,309	29.8	21.2
Chronic ischemic heart diseases	11,655	138.8	113.6	1,829	74.7	82.7	5,729	212.6	127.7	2,878	155.6	131.3	907	73.3	69.2	312	5,706	142.4	141.3	5,949	135.4	92.4
Acute myocardial infarction	1,796	21.4	17.8	319	13.0	14.3	805	29.9	18.6	472	25.5	21.6	155	12.5	11.8	45	920	23.0	22.6	876	19.9	14.0
Essential (Primary) Hypertension and Hypertensive Renal Disease	1,272	15.1	12.4	262	10.7	11.9	430	16.0	9.4	420	22.7	19.2	123	9.9	9.4	37	539	13.5	13.3	733	16.7	11.6
Cerebrovascular Diseases	1,888	22.5	18.7	415	16.9	18.7	699	25.9	15.8	516	27.9	23.7	216	17.5	16.4	42	812	20.3	20.0	1,076	24.5	17.5
Influenza and Pneumonia	204	23.9	19.7	418	17.1	18.8	827	30.7	18.1	516	27.9	23.9	196	15.8	15.1	47	1,013	25.3	25.3	991	22.6	15.9
Chronic Lower Respiratory Diseases	1,781	21.1	17.8	357	14.6	15.9	841	31.2	19.6	430	23.3	20.0	118	9.5	9.1	35	787	19.6	19.4	994	22.6	16.6
Asthma	174	2.1	1.9	66	2.7	2.8	21	0.8	0.6	73	3.9	3.7	9	0.7	0.7	5	66	1.6	1.6	108	2.5	2.1
Chronic Liver Disease and Cirrhosis	571	6.8	6.1	211	8.6	8.9	215	8.0	6.7	91	4.9	4.2	28	2.3	2.1	26	411	10.3	9.6	160	3.6	3.0
External Causes	3,627	43.2	40.1	966	39.4	39.4	1,375	51.0	43.9	912	49.3	45.8	263	21.3	20.5	111	2,632	65.7	62.9	995	22.7	20.0
Motor Vehicle Accidents	219	2.6	2.4	67	2.7	2.7	73	2.7	2.2	45	2.4	2.3	29	2.3	2.3	5	152	3.8	3.6	67	1.5	1.3
Falls	489	5.8	4.8	101	4.1	4.5	251	9.3	5.9	62	3.4	2.9	67	5.4	5.1	8	299	7.5	7.4	190	4.3	3.1
Intentional Self-harm (Suicide)	562	6.7	6.3	99	4.0	4.0	279	10.4	9.3	94	5.1	5.0	74	6.0	5.8	16	412	10.3	9.8	150	3.4	3.2
Assault (Homicide)	311	3.7	3.7	83	3.4	3.3	31	1.2	1.2	173	9.4	9.6	11	0.9	0.9	13	258	6.4	6.4	53	1.2	1.2
Events of Undetermined Intent	296	3.5	3.4	51	2.1	2.1	127	4.7	4.3	74	4.0	4.0	22	1.8	1.9	22	208	5.2	5.1	88	2.0	1.9
Mental and Behavioral Disorders Due to Use of or Accidental Poisoning by Psychoactive Substances, Excluding Alcohol	1,500	17.9	16.9	499	20.4	20.0	533	19.8	18.5	394	21.3	18.5	33	2.7	2.6	41	1,136	28.4	26.5	364	8.3	7.7
Accidents Except Drug Poisoning	1,040	12.4	10.9	271	11.1	11.4	421	15.6	11.1	208	11.2	10.2	117	9.5	8.9	23	678	16.9	16.5	362	8.2	6.4

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

† For All Causes, rates are per 1,000 population and all other selected causes rates are per 100,000 population. Population data are from the 2018 US Census Bureau's estimates.

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Table M12. Deaths and Death Rates* per 100,000 Population from Selected Underlying Causes by Community District of Residence, New York City, 2018

Community District of Residence	Population 2018 Estimates	All Causes (Rate per 1,000)		Heart Diseases		Malignant Neoplasms		HIV Disease		Influenza and Pneumonia		Cerebrovascular Diseases		Chronic Lower Respiratory Diseases		Chronic Liver Disease & Cirrhosis		Diabetes Mellitus		Mental Disorders due to Substance Use & Accidental Poisoning		Accidents Except Drug Poisoning		Intentional Self-harm (Suicide)		Assault (Homicide)		Events of Undetermined Intent						
		No.	Crude Rate	Age-Adjusted Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate				
COMMUNITY DISTRICTS	8,398,748	55,081	6.6	5.6	17.743	211.3	13,037	155.2	331	3.9	2,004	23.9	1,888	22.5	1,781	21.2	571	6.8	1,963	23.4	1,900	17.9	1,040	12.4	562	6.7	311	3.7	296	3.5				
ALL DEATH EVENTS	1,618,823	9,643	6.0	4.6	2,746	169.6	2,280	140.8	61	3.8	290	17.9	321	19.8	315	19.5	86	5.3	304	18.8	273	16.9	195	12.0	121	7.5	21	1.3	67	4.1				
MANHATTAN	62,037	195	3.1	4.0	53	85.4	54	87.0	2	3.2	6	9.7	4	6.4	6	9.7	1	1.6	4	6.4	2	3.2	10	16.1	1	1.6	1	1.6	1	1.6	1	1.6		
Battery Park, Tribeca (01)	89,452	404	4.5	3.5	124	138.6	103	115.1	-	-	12	13.4	11	12.3	19	21.2	3	3.4	9	10.1	5	5.6	5	5.6	7	7.8	2	2.2	6	6.7	6	6.7		
Greenwich Village, SOHO (02)	168,490	1,149	6.8	4.7	360	213.7	249	147.8	5	3.0	45	26.7	47	27.9	43	25.5	9	5.3	39	23.1	24	14.2	35	20.8	10	5.9	3	1.8	3	1.8	3	1.8		
Lower East Side (03)	134,313	549	4.1	3.6	158	117.6	131	97.5	2	1.5	18	13.4	16	11.9	22	16.4	6	4.5	17	12.7	17	12.7	14	10.4	11	8.2	1	0.7	7	5.2	7	5.2		
Chelsea, Clinton (04)	55,921	211	3.8	3.5	59	105.5	54	96.6	2	3.6	1	1.8	10	17.9	4	7.2	7	12.5	4	7.2	9	16.1	7	12.5	6	10.7	1	1.8	1	1.8	1	1.8		
Midtown Business District (05)	141,450	758	5.4	3.6	217	153.4	221	156.2	1	0.7	11	7.8	22	15.6	27	19.1	6	4.2	13	9.2	14	9.9	20	14.1	23	16.3	-	-	5	3.5	5	3.5		
Murray Hill (06)	210,691	1,409	6.7	4.2	416	197.4	338	160.4	8	3.8	52	24.7	48	22.8	44	20.9	11	5.2	23	10.9	22	10.4	21	10.0	6	2.8	2	0.9	7	3.3	2	0.9	7	3.3
Upper West Side (07)	221,779	1,333	6.0	3.7	396	178.6	315	142.0	4	1.8	41	18.5	35	15.8	38	17.1	9	4.1	31	14.0	19	8.6	26	11.7	20	9.0	1	0.5	8	3.6	3	3.6		
Upper East Side (08)	108,452	670	6.2	5.7	175	161.4	165	152.1	8	7.4	15	13.8	33	30.4	20	18.4	7	6.5	23	21.2	24	22.1	15	13.8	4	3.7	2	1.8	7	6.5	7	6.5		
Manhattanville (09)	113,381	895	7.9	8.0	249	219.6	217	191.4	12	10.6	26	22.9	24	22.5	9	7.9	56	49.4	35	30.9	9	7.9	9	7.9	9	7.9	1	0.9	8	7.1	8	7.1		
Central Harlem (10)	121,513	1,004	8.3	7.2	253	208.2	208	171.2	8	6.6	33	27.2	36	29.6	31	25.5	10	8.2	55	45.3	58	47.7	12	9.9	9	7.4	6	4.9	9	7.4	6	4.9		
East Harlem (11)	191,321	1,066	5.6	4.6	286	149.5	225	117.6	9	4.7	30	15.7	35	18.3	35	18.3	8	4.2	30	15.7	44	23.0	21	11.0	15	7.8	1	0.5	5	2.6	5	2.6		
Washington Heights (12)	1,434,692	9,385	6.5	6.2	2,801	195.2	1,977	137.8	101	7.0	405	28.2	358	25.0	361	25.2	114	7.9	372	25.9	412	28.7	152	10.3	65	4.5	97	6.8	37	2.6	37	2.6		
BRONX	96,949	646	6.7	7.2	178	183.6	132	136.2	13	13.4	31	32.0	27	27.8	26	26.8	18	18.6	25	25.8	38	39.2	10	10.6	6	6.2	9	9.3	4	4.1	4	4.1		
Mont Haven (01)	55,346	297	5.4	6.0	85	153.6	57	103.0	4	7.2	12	21.7	13	23.5	10	18.1	2	3.6	13	23.5	20	36.1	6	10.8	-	-	3	5.4	2	3.6	2	3.6		
Hunts Point (02)	89,843	517	5.8	6.7	133	148.0	108	120.2	9	10.0	30	33.4	14	15.6	14	15.6	6	6.7	15	16.7	30	33.4	11	12.2	4	4.5	9	10.0	5	5.6	5	5.6		
Morrisania (03)	153,378	852	5.6	6.2	230	163.0	190	123.9	11	7.2	41	26.7	29	18.9	37	24.1	7	4.6	41	26.7	31	20.2	13	8.5	3	2.0	7	4.6	3	2.0	7	4.6		
Concourse, Highbridge (04)	133,672	667	5.0	6.3	151	113.0	148	110.7	17	12.7	38	28.4	24	18.0	27	20.2	9	6.7	27	20.2	59	44.1	12	9.0	5	3.7	17	12.7	1	0.7	17	12.7		
University/Morris Heights (05)	85,916	543	6.3	7.5	128	149.0	116	135.0	13	15.1	22	25.6	13	15.1	32	37.2	6	7.0	26	30.3	41	47.7	10	11.6	5	5.8	13	15.1	5	5.8	13	15.1		
East Tremont (06)	145,864	843	5.8	6.5	221	151.5	167	114.5	6	4.1	27	18.5	38	26.1	33	22.6	15	10.3	48	32.9	52	35.6	6	4.1	8	5.5	6	4.1	-	-	-	-		
Fordham (07)	101,694	953	9.4	5.6	355	349.1	193	189.8	5	4.9	31	30.5	29	28.5	26	25.6	4	3.9	30	29.5	18	17.7	19	18.7	4	3.9	3	3.0	3	3.0	3	3.0		
Riverdale (08)	181,891	1,096	6.0	5.8	327	179.8	236	129.7	9	4.9	55	30.2	39	21.4	46	25.3	12	6.6	51	28.0	35	19.2	19	10.4	8	4.4	18	9.9	2	1.1	18	9.9		
Unionport, Soundview (09)	120,318	1,061	8.8	8.0	340	282.6	249	207.0	-	-	48	39.9	52	43.2	52	43.2	14	11.6	32	26.6	27	22.4	22	18.3	5	4.2	1	0.8	1	0.8	1	0.8		
Throgs Neck (10)	114,467	917	8.0	6.2	317	276.9	171	149.4	5	4.4	41	35.8	44	38.4	33	28.8	9	7.9	29	25.3	20	17.5	12	10.5	7	6.1	6	5.2	8	7.0	6	5.2		
Pelham Parkway (11)	153,468	993	6.5	5.7	316	205.9	210	136.8	9	5.9	29	18.9	36	23.5	25	16.3	12	7.8	35	22.8	41	26.7	12	7.8	10	6.5	5	3.3	3	2.0	3	2.0		
Williamsbridge (12)	2,382,830	15,339	5.9	5.3	5,470	211.8	3,434	133.0	104	4.0	641	24.8	458	17.7	449	17.4	137	5.3	668	25.9	280	10.8	267	10.3	133	5.1	103	4.0	90	3.5	90	3.5		
BROOKLYN	196,441	768	3.9	4.7	238	121.2	172	87.6	2	1.0	40	20.4	25	12.7	27	27.8	18	18.6	25	25.8	38	39.2	10	10.3	6	6.2	9	9.3	4	4.1	4	4.1		
Williamsburg, Greenpoint (01)	122,191	612	5.0	4.7	193	158.0	143	117.0	5	4.1	30	24.6	21	17.2	26	21.3	5	4.1	23	18.8	13	10.6	5	4.1	9	7.4	3	2.5	5	4.1	5	4.1		
Fort Greene, Brooklyn Heights (02)	147,731	886	6.0	6.2	280	189.5	167	113.0	21	14.2	36	24.4	35	23.7	28	19.0	7	4.7	67	45.4	22	14.9	11	7.4	8	5.4	19	12.9	6	4.1	6	4.1		
Bedford Stuyvesant (03)	109,042	445	4.1	5.0	143	131.1	94	86.2	3	2.8	19	17.4	18	16.5	13	11.9	13	11.9	19	17.4	15	13.8	5	4.6	7	6.4	6	5.5	3	2.8	3	2.8		
Bushwick (04)	175,613	1,224	7.0	6.9	418	238.0	260	148.1	19	10.8	35	19.9	37	21.1	26	14.8	16	9.1	77	43.8	32	18.2	30	17.1	2	1.1	11	6.3	5	2.8	5	2.8		
East New York (05)	108,330	480	4.4	5.0	147	135.7	116	107.1	2	1.8	19	17.5	16	14.8	19	17.5	4	3.7	19	17.5	11	10.2	6	5.5	2	1.8	2	1.8	-	-	-	-		
Park Slope (06)	129,838	490	3.8	4.4	143	110.1	125	96.3	1	0.8	16	12.3	15	11.6	29	22.3	4	3.1	15	11.6	10	7.7	12	9.2	12	9.2	1	0.8	4	3.1	4	3.1		
Sunset Park (07)	94,871	595	6.3	5.9	203	214.0	132	134.9	4	4.2	20	21.1	18	19.0	12	12.6	6	6.3	28	29.5	16	16.9	12	12.6	3	3.2	4	4.2	2	2.1	2	2.1		
Crown Heights North (08)	96,207	647	6.7	5.7	221	229.7	140	145.5	3	3.1	24	24.9	25	26.0	17	17.7	2	2.1	49	50.9	10	10.4	14	14.6	4	4.2	10	10.4	2	2.1	2	2.1		
Crown Heights South (09)	140,265	796	5.7	4.4	277	197.5	200	142.6	1	0.7	33	23.5	16	11.4	32	22.8	12	8.6	15	10.7	13	9.3	18	12.8	6	4.3	2	1.4	4	2.9	4	2.9		
Bay Ridge (10)	202,413	1,127	5.6	4.1	420	207.5	273	134.9	-	-	42	20.7	28	13.8	45	22.2																		

Table M12. Deaths and Death Rates* per 100,000 Population from Selected Underlying Causes by Community District of Residence, New York City, 2018 (Continued)

Community District of Residence	All Causes (Rate per 1,000)		Age-Adjusted Rate	Heart Diseases		Malignant Neoplasms	HIV Disease		Influenza and Pneumonia		Cerebrovascular Diseases		Chronic Lower Respiratory Diseases		Chronic Liver Disease & Cirrhosis		Diabetes Mellitus		Mental Disorders due to Substance Use & Accidental Poisoning		Accidents Except Drug Poisoning		Intentional Self-harm (Suicide)		Assault (Homicide)		Events of Undetermined Intent			
	No.	Crude Rate		No.	Crude Rate		No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate	No.	Crude Rate
QUEENS	2,286,224	12,517	5.5	4,408	192.8	2,806	122.7	30	1.3	467	20.4	475	20.8	410	17.9	118	5.2	410	17.9	226	9.9	272	11.9	155	6.8	54	2.4	51	2.2	
Astoria, Long Island City (01)	192,988	979	5.1	368	190.7	222	115.0	4	2.1	50	25.9	32	16.6	37	19.2	6	3.1	23	11.9	20	10.4	18	9.3	6	3.1	8	4.1	4	2.1	
Sunnyside, Woodside (02)	139,902	471	3.4	3.1	143	102.9	113	81.3	-	20	14.4	19	13.7	18	12.9	4	2.9	15	10.8	8	5.8	21	15.1	13	9.4	2	1.4	3	2.2	
Jackson Heights (03)	175,142	740	4.2	3.9	232	132.5	157	89.6	3	1.7	29	16.6	33	18.8	23	13.1	9	5.1	15	8.6	17	9.7	18	10.3	9	5.1	4	2.3	7	4.0
Elmhurst, Corona (04)	183,315	710	3.9	3.8	230	125.5	172	93.8	2	1.1	33	18.0	29	15.8	23	12.5	7	3.8	18	9.8	9	4.9	20	10.9	9	4.9	1	0.5	2	1.1
Ridgewood, Glendale (05)	161,281	910	5.6	5.0	331	205.2	212	131.4	2	1.2	30	18.6	30	18.6	34	21.1	12	7.4	22	13.6	19	11.8	26	16.1	12	7.4	1	0.6	2	1.2
Rego Park, Forest Hills (06)	112,369	750	6.7	3.9	267	237.6	187	166.4	-	35	31.1	19	16.9	18	16.0	5	4.4	12	10.7	9	8.0	15	13.3	13	11.6	-	-	3	2.7	
Flushing (07)	257,854	1,634	6.3	3.9	562	218.0	386	149.7	3	1.2	74	28.7	67	26.0	54	20.9	10	3.9	40	15.5	23	8.9	38	14.7	24	9.3	4	1.6	4	1.6
Fresh Meadows, Briarwood (08)	152,197	828	5.4	3.9	327	214.9	183	120.2	1	0.7	27	17.7	40	26.3	26	17.1	6	3.9	29	19.1	6	3.9	15	9.9	9	5.9	4	2.6	5	3.3
Woodhaven (09)	144,161	696	4.8	4.8	247	171.3	148	102.7	1	0.7	21	14.6	33	22.9	17	11.8	12	8.3	29	20.1	15	10.4	20	13.9	9	6.2	1	0.7	3	2.1
Howard Beach (10)	122,327	710	5.8	5.1	227	185.7	153	125.2	1	0.8	24	19.6	41	33.5	20	16.4	10	8.2	39	31.9	9	7.4	12	9.8	14	11.5	5	4.1	5	4.1
Bayside (11)	116,589	666	5.7	3.5	245	210.1	161	138.1	-	12	10.3	20	17.2	18	15.4	7	6.0	7	6.0	11	9.4	8	6.9	12	10.3	1	0.9	4	3.4	
Jamaica, St. Albans (12)	227,621	1,453	6.4	5.3	510	224.1	332	145.9	6	2.6	57	25.0	48	21.1	30	13.2	9	4.0	81	35.6	35	15.4	19	8.3	8	3.5	9	4.0	2	0.9
Queens Village (13)	189,526	946	5.0	3.7	309	163.0	211	111.3	2	1.1	16	8.4	33	17.4	7	3.7	31	16.4	15	7.9	25	13.2	8	4.2	8	4.2	4	2.1	4	2.1
The Rockaways (14)	111,171	1,024	9.2	7.7	410	368.8	169	152.0	5	4.5	39	35.1	31	27.9	59	53.1	14	12.6	49	44.1	30	27.0	17	15.3	9	8.1	6	5.4	3	2.7
STATEN ISLAND	476,179	3,608	7.6	6.1	1,404	294.8	865	181.7	8	1.7	94	19.7	88	18.5	132	27.7	29	6.1	132	27.7	114	23.9	40	8.4	31	6.5	3	0.6	10	2.1
Port Richmond (01)	182,379	1,297	7.1	6.5	532	291.7	290	159.0	6	3.3	17	9.3	28	15.4	44	24.1	15	8.2	63	34.5	47	25.8	16	8.8	6	3.3	3	1.6	4	2.2
Willowbrook, South Beach (02)	135,823	1,112	8.2	5.5	434	319.5	278	204.7	1	0.7	34	25.0	28	20.6	47	34.6	4	2.9	34	25.0	22	16.2	15	11.0	13	9.6	-	-	5	3.7
Tottenville (03)	157,552	1,198	7.6	6.3	438	278.5	296	188.2	1	0.6	43	27.3	32	20.3	41	26.1	10	6.4	35	22.3	45	28.6	9	5.7	12	7.6	-	-	1	0.6
NONRESIDENTS	-	-4,425	-	-	884	-	1,664	-	25	-	102	-	186	-	110	-	85	-	76	-	156	-	91	-	54	-	28	-	27	-
RESIDENCE UNKNOWN	-	141	-	-	30	-	10	-	1	-	4	-	2	-	4	-	2	-	-	-	33	-	19	-	2	-	3	-	14	-

Note: Borough totals may be higher than the sum of the community districts, as they may include some deaths whose community district could not be determined.
 * Rates are calculated based on 2018 population estimates derived by the Bureau of Epidemiology 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.

MORTALITY

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

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

*Populations for calculating rates vary by year. See Technical Notes: Population, Citywide.

†See Technical Notes: Vital Events Rates.

‡HIV disease 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.

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Population for Selected Causes, New York City, 1901-2018

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	2018	
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	446	
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	3.9	
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	278	
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	2.4	
2,909	2,922	2,351	1,480	1,131	927	972	753	478	394	335	293	301	283	254	242	230	250	219	
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	1.9	
2,362	2,276	1,885	1,288	835	719	698	686	518	431	388	368	379	371	401	345	388	347	378	
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	3.3	
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	5.2	
\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	30	32	39	37	29	30	27	39	24	43	32	
107	109	73	36	28	33	29	26	22	29	32	30	23	25	23	35	18	25	23	
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	20.1	
824	624	432	235	141	125	174	135	39	25	16	27	13	13	22	17	16	13	17	
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	0.2	
52	43	39	32	22	35	55	34	14	5	5	5	3	4	9	3	5	2	3	
0.7	0.6	0.5	0.4	0.3	0.5	0.8	0.5	0.2	0.1	0.1	0.1			0.1		0.1			
\$\$	\$\$	\$\$	\$\$	\$\$	768\$	3,703	6,257	2,716	1,603	1,032	766	609	579	523	483	432	369	331	
					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	3.9	
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	13,037	
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	155.2	
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	1,272	
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	31.8	
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	1,154	
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	26.3	
\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	1,805	1,685	1,546	1,414	1,374	1,380	1,329	1,268	1,275	1,311	1,304	1,175	
							24.0	22.6	19.2	17.4	16.6	16.6	15.8	14.9	14.9	15.4	15.1	14.0	
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	1,121	
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	25.5	
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	1,963	
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	23.4	
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	21,328	
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	253.9	
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	1,888	
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	22.5	
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	2,004	
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	23.9	
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	2,416	
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	28.8	
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	571	
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	6.8	
573	509	447	372	381	383	816	311	564	654	429	453	461	464	486	437	416	388	459	
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	5.5	
96	263	551	677	414	573	787	947	875	866	262	158	152	148	170	195	172	134	125	
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	1.5	
\$\$	\$\$	\$\$	\$\$	\$\$		1	143	49	26	41	353	600	660	724	723	856	1,320	1,398	1,375
						2.0	0.7	0.3	0.5	4.3	7.3	7.9	8.6	8.5	10.0	15.5	16.2	16.4	
655	714	887	834	606	477	624	554	419	386	315	283	315	305	271	258	245	221	219	
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	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	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	
2,091	1,947	1,730	1,239	926	812	880	394	493	792	712	735	719	731	755	798	752	832	821	
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	9.8	
711	908	680	641	711	603	600	599	514	483	477	509	557	550	565	552	525	565	562	
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	6.7	
366	592	992	1,663	1,700	1,763	1,902	1,815	778	624	549	528	440	343	353	379	362	298	311	
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	3.7	
\$\$	\$\$	946	1,062	699	696	504	161	151	232	212	247	241	227	253	265	259	245	296	
		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	3.5	
\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	84	115	232	400	626	696	740	789	1,079	1,100	1,116	1,195	
							1.2	1.5	2.9	4.9	7.6	8.3	8.8	9.3	12.6	12.9	12.9	14.2	
\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	269	243	196	154	171	166	180	182	167	157	161	174	
							3.7	3.3	2.4	1.9	2.1	2.0	2.1	2.1	2.0	1.8	1.9	2.1	

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Table M14. Alcohol-attributable Deaths Due to Excessive Alcohol Use, Age ≥ 20 Years*, New York City, 2016-2018

Total for All Causes	2016			2017			2018		
	Total†	Male	Female	Total†	Male	Female	Total†	Male	Female
	1,959	1,414	545	2,120	1,500	620	2,036	1,458	578
Chronic Causes*									
Acute pancreatitis	12	6	6	11	6	4	11	7	5
Alcohol abuse	68	58	10	57	49	8	112	88	24
Alcohol cardiomyopathy	9	7	2	6	5	1	9	8	1
Alcohol dependence syndrome	194	157	37	167	128	39	124	93	31
Alcohol-induced chronic pancreatitis	1	1	-	-	-	-	1	1	-
Alcoholic gastritis	-	-	-	-	-	-	1	1	-
Alcoholic liver disease	369	276	93	424	313	111	398	309	89
Alcoholic psychosis	4	3	1	4	2	2	50	40	10
Breast cancer (females only)	12	-	12	17	-	17	14	-	14
Chronic hepatitis	< 1	< 1	< 1	< 1	-	< 1	< 1	-	< 1
Chronic pancreatitis	4	3	2	3	1	2	3	3	-
Epilepsy	5	2	2	6	4	2	7	3	4
Esophageal cancer	7	5	2	10	8	2	6	4	1
Esophageal varices	1	< 1	1	2	< 1	2	< 1	-	< 1
Fetal alcohol syndrome	-	-	-	1	-	1	-	-	-
Gastroesophageal hemorrhage	1	1	-	< 1	< 1	-	2	1	1
Hypertension	91	41	49	139	64	75	100	38	62
Ischemic heart disease	20	11	9	32	17	15	22	10	12
Laryngeal cancer	5	4	1	6	5	1	4	3	1
Liver cancer	34	23	11	47	32	15	31	19	12
Liver cirrhosis unspecified	84	45	40	98	47	51	95	52	43
Low birth weight prematurity IUGR‡ death	3	1	1	4	2	2	2	1	1
Oropharyngeal cancer	7	5	1	11	8	3	6	4	2
Portal hypertension	< 1	-	< 1	1	< 1	< 1	4	4	-
Prostate cancer (males only)	4	4	-	6	6	-	< 1	-	< 1
Psoriasis	< 1	-	< 1	-	-	-	-	-	-
Stroke hemorrhagic	24	20	4	39	30	9	25	19	6
Stroke ischemic	10	7	3	11	7	4	11	8	4
Supraventricular cardiac dysrhythmia	3	1	2	5	2	3	3	1	2
Subtotal	972	681	290	1107	738	369	1043	716	326
Acute Causes									
Alcohol poisoning	75	56	19	76	64	12	53	45	8
Aspiration	4	3	1	3	3	< 1	4	3	1
Child maltreatment	3	1	2	2	1	1	3	2	1
Drowning	2	2	-	4	3	1	7	4	2
Fall injuries	142	87	55	159	94	65	156	96	61
Fire injuries	16	10	6	23	13	10	28	13	14
Firearm injuries	-	-	-	-	-	-	< 1	< 1	-
Homicide	163	134	29	134	107	27	139	116	23
Hypothermia	3	3	-	4	3	1	8	6	3
Motor-vehicle nontraffic crashes	-	-	-	-	-	-	< 1	< 1	-
Motor-vehicle traffic crashes	70	54	15	67	59	8	60	50	11
Occupational and machine injuries	1	1	-	-	-	-	1	1	-
Other road vehicle crashes	5	4	< 1	5	5	< 1	5	4	1
Poisoning (not alcohol)	385	297	89	407	320	88	401	307	94
Suicide	120	82	38	129	92	36	128	94	34
Suicide by and exposure to alcohol	-	-	-	-	-	-	1	1	-
Water transport	< 1	< 1	-	< 1	< 1	-	< 1	< 1	-
Subtotal	988	732	255	1013	763	251	994	742	252

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. 2017 data were revised slightly due to a glitch fix in the CDC Alcohol Related Disease Impact (ARDI) website.

* 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, 2015-2018

Disease Category	2015						2016						2017						2018					
	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	4,657	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	4,585	3,414	7,999	223.7	118.8	163.1
Cerebrovascular disease	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	66	68	134	3.3	2.3	2.7
Chronic obstructive pulmonary disease (ages ≥ 65)	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	502	577	1,079	26.3	19.8	22.4
Coronary heart disease	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	1,614	1,207	2,821	79.5	42.1	58.2
Diabetes mellitus	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	59	31	90	2.7	1.1	1.7
Influenza, pneumonia, Tuberculosis, and COPD (ages 35-64)	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	186	128	314	7.6	4.6	6.0
Influenza, pneumonia, and tuberculosis (ages ≥ 65)	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	184	90	274	9.7	3.1	5.7
Lung cancer	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	1,037	847	1,884	49.5	29.4	37.7
Other cancers	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	605	251	856	29.4	8.6	17.3
Other cardiovascular diseases (ages 35-64)*	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	199	67	266	8.6	2.7	5.5
Other heart disease (ages ≥ 65)†	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	70	82	152	3.7	2.8	3.2
Other vascular diseases (ages ≥ 65)‡	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	63	66	129	3.3	2.3	2.7

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

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

AGE GROUP & RACIAL/ETHNIC GROUP*		ALL																
		1983-2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	1983-2006	2007	2008	2009
ALL AGES	Total	75,642	1,115	1,073	933	832	766	609	579	523	483	432	369	331	57,706	711	702	603
	Puerto Rican	14,138	224	217	187	196	186	115	138	88	102	70	63	44	10,383	142	138	125
	Other Hispanic	6,735	103	118	105	72	46	37	34	43	29	54	43	42	5,487	76	84	71
	Asian & Pacific Islander	487	5	10	3	6	4	5	8	2	5	6	5	3	431	3	7	2
	Non-Hispanic White	18,860	143	129	90	100	94	80	73	62	50	45	45	48	16,401	103	104	68
	Non-Hispanic Black	31,593	625	583	537	449	421	359	311	298	277	231	201	180	21,940	377	356	329
	Other or Unknown	3,829	15	16	11	9	15	13	15	30	20	26	12	14	3,064	10	13	8
0-24	Total	2,396	21	17	15	8	16	13	8	9	8	7	2	2	1,315	10	7	6
	Puerto Rican	452	7	3	2	1	4	2	-	-	2	-	-	1	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	2
	Non-Hispanic Black	1,174	8	13	7	6	12	9	7	7	4	7	1	1	605	2	6	4
	Other or Unknown	132	-	-	-	-	-	-	-	-	-	-	-	-	66	-	-	-
25-34	Total	17,109	52	77	49	37	40	34	29	28	28	31	33	21	12,326	32	48	32
	Puerto Rican	3,535	8	8	7	11	2	3	5	4	5	3	2	-	2,466	3	5	6
	Other Hispanic	1,808	4	11	3	8	8	6	4	3	2	3	5	3	1,439	4	10	2
	Asian & Pacific Islander	92	1	-	1	-	2	1	-	-	1	1	2	1	78	-	-	-
	Non-Hispanic White	4,063	3	6	5	1	3	1	2	1	1	-	2	2	3,383	2	4	5
	Non-Hispanic Black	6,715	35	52	33	17	25	23	17	19	18	24	21	14	4,287	22	29	19
	Other or Unknown	896	1	-	-	-	-	-	1	1	1	-	1	1	673	1	-	-
35-44	Total	31,631	311	246	190	142	125	90	73	60	64	54	46	33	24,242	177	144	111
	Puerto Rican	5,769	64	57	45	34	28	17	22	12	8	7	4	6	4,293	41	30	26
	Other Hispanic	2,664	27	37	28	19	8	4	3	7	5	10	5	6	2,179	17	23	16
	Asian & Pacific Islander	195	2	3	1	-	1	2	3	1	3	1	2	-	181	1	3	1
	Non-Hispanic White	8,307	46	34	18	16	12	15	7	10	4	5	5	-	7,237	32	22	12
	Non-Hispanic Black	13,103	168	113	98	71	76	49	37	28	40	30	30	18	9,076	83	65	56
	Other or Unknown	1,593	4	2	-	2	-	3	1	2	4	1	-	3	1,276	3	1	-
45-54	Total	17,364	448	425	352	330	287	217	215	167	143	106	96	83	13,921	289	275	225
	Puerto Rican	3,210	84	89	65	85	75	46	55	34	38	16	13	13	2,463	58	56	51
	Other Hispanic	1,361	43	46	46	29	15	14	14	16	9	13	17	9	1,165	32	33	35
	Asian & Pacific Islander	122	-	5	-	3	-	-	1	1	1	1	-	-	112	-	3	-
	Non-Hispanic White	4,340	61	45	35	37	41	28	28	16	15	11	14	9	3,931	40	37	25
	Non-Hispanic Black	7,459	256	231	200	173	150	123	111	87	76	58	45	48	5,496	156	139	111
	Other or Unknown	872	4	9	6	3	6	6	6	13	4	7	7	4	754	3	7	3
55-64	Total	5,531	213	231	241	239	213	169	172	174	141	150	117	116	4,621	154	173	164
	Puerto Rican	960	39	49	49	51	54	34	42	24	33	25	25	10	746	23	38	30
	Other Hispanic	488	18	15	18	11	9	5	11	13	4	21	11	16	416	13	13	12
	Asian & Pacific Islander	46	1	-	-	2	-	2	3	-	-	1	-	1	38	1	-	-
	Non-Hispanic White	1,378	22	32	21	36	30	24	21	20	16	15	17	27	1,271	19	30	17
	Non-Hispanic Black	2,397	128	131	150	136	112	101	92	106	80	78	61	58	1,919	96	88	102
	Other or Unknown	262	5	4	3	3	8	3	3	11	8	10	3	4	231	2	4	3
≥65	Total	1,610	70	77	86	76	85	86	82	85	99	84	75	76	1,280	49	55	65
	Puerto Rican	212	22	11	19	14	23	13	14	14	16	19	19	14	162	14	9	12
	Other Hispanic	150	6	9	7	5	6	6	2	4	8	7	4	8	126	6	5	6
	Asian & Pacific Islander	18	1	2	1	-	1	-	1	-	-	2	1	1	13	1	1	1
	Non-Hispanic White	412	10	11	8	10	8	12	14	13	13	14	7	10	359	9	10	7
	Non-Hispanic Black	745	30	43	49	46	46	54	47	51	59	34	43	41	557	18	29	37
	Other or Unknown	73	1	1	2	1	1	1	4	3	3	8	1	2	63	1	1	2

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

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

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New York City, 1983-2018

MALE										FEMALE											
2010	2011	2012	2013	2014	2015	2016	2017	2018	1983-2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
574	528	402	398	359	332	296	249	230	17,936	404	371	330	258	238	207	181	164	151	136	120	101
135	123	75	94	56	68	50	44	31	3,755	82	79	62	61	63	40	44	32	34	20	19	13
54	39	28	28	36	19	44	34	30	1,248	27	34	34	18	7	9	6	7	10	10	9	12
3	2	4	5	1	3	6	4	3	56	2	3	1	3	2	1	3	1	2	-	1	-
76	75	63	53	50	40	36	34	33	2,459	40	25	22	24	19	17	20	12	10	9	11	15
297	277	223	204	196	185	140	124	122	9,653	248	227	208	152	144	136	107	102	92	91	77	58
9	12	9	14	20	17	20	9	11	765	5	3	3	-	3	4	1	10	3	6	3	3
4	13	6	6	7	5	2	1	2	1,081	11	10	9	4	3	7	2	2	3	5	1	-
-	2	-	-	-	2	-	-	1	199	4	3	2	1	2	2	-	-	-	-	-	-
-	-	1	-	-	-	-	1	-	102	1	-	3	-	-	1	-	-	1	-	-	-
1	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	2	1	-	-	-	140	-	-	1	-	-	-	1	-	-	-	-	-
3	11	5	6	5	2	2	-	1	569	6	7	3	3	1	4	1	2	2	5	1	-
-	-	-	-	-	-	-	-	-	66	-	-	-	-	-	-	-	-	-	-	-	-
27	29	24	27	17	21	24	22	15	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	-
6	7	5	4	3	2	3	4	2	369	-	1	1	2	1	1	-	-	-	-	1	1
-	1	1	-	-	1	1	2	1	14	1	-	1	-	1	-	-	-	-	-	-	-
1	2	1	1	1	1	-	1	2	680	1	2	-	-	1	-	1	-	-	-	1	-
13	17	15	16	12	14	18	14	9	2,428	13	23	14	4	8	8	1	7	4	6	7	5
-	-	-	1	1	1	-	-	1	223	-	-	-	-	-	-	-	-	-	-	1	-
94	77	54	45	33	32	31	29	19	7,389	134	102	79	48	48	36	28	27	32	23	17	14
20	17	10	10	4	6	6	3	4	1,476	23	27	19	14	11	7	12	8	2	1	1	2
14	8	1	3	5	2	8	4	4	485	10	14	12	5	-	3	-	2	3	2	1	2
-	-	1	1	-	1	1	2	-	14	1	-	-	-	1	1	2	1	2	-	-	-
11	10	13	3	7	1	4	5	-	1,070	14	12	6	5	2	2	4	3	3	1	-	-
47	42	28	27	16	20	12	15	9	4,027	85	48	42	24	34	21	10	12	20	18	15	9
2	-	1	1	1	2	-	-	2	317	1	1	-	-	-	2	-	1	2	1	-	1
219	183	136	140	115	97	63	62	52	3,443	159	150	127	111	104	81	75	52	46	43	34	31
62	43	29	38	22	25	10	9	5	747	26	33	14	23	32	17	17	12	13	6	4	8
20	12	12	10	13	7	11	13	7	196	11	13	11	9	3	2	4	3	2	2	4	2
1	-	-	1	1	1	1	-	-	10	-	2	-	2	-	-	-	-	-	-	-	-
28	30	22	20	13	11	8	11	7	409	21	8	10	9	11	6	8	3	4	3	3	2
105	95	69	65	55	50	28	24	30	1,963	100	92	89	68	55	54	46	32	26	30	21	18
3	3	4	6	11	3	5	5	3	118	1	2	3	-	3	2	-	2	1	2	2	1
179	159	120	118	130	103	109	84	88	910	59	58	77	60	54	49	54	44	38	41	33	28
38	41	25	33	21	20	19	19	9	214	16	11	19	13	13	9	9	3	13	6	6	1
10	7	4	10	11	1	16	8	13	72	5	2	6	1	2	1	1	2	3	5	3	3
1	-	2	2	-	-	1	-	-	8	-	-	-	1	-	-	1	-	-	-	-	-
28	25	19	16	18	15	12	12	17	107	3	2	4	8	5	5	5	2	1	3	5	10
99	78	67	54	75	59	54	42	44	478	32	43	48	37	34	34	38	31	21	24	19	14
3	8	3	3	5	8	7	3	4	31	3	-	-	-	-	-	-	6	-	3	-	-
51	67	62	62	57	74	67	51	54	330	21	22	21	25	18	24	20	28	25	17	24	22
8	18	9	8	9	13	13	12	12	50	8	2	7	6	5	4	6	5	3	6	7	2
4	5	5	1	4	7	6	4	4	24	-	4	1	1	1	1	1	-	1	1	-	4
-	1	-	1	-	-	2	-	1	5	-	1	-	-	-	-	-	-	-	-	1	-
8	8	8	13	9	11	12	5	7	53	1	1	1	2	-	4	1	4	2	2	2	3
30	34	39	36	33	40	26	29	29	188	12	14	12	16	12	15	11	18	19	8	14	12
1	1	1	3	2	3	8	1	1	10	-	-	-	-	-	-	1	1	-	-	-	1

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Table M17. Selected Characteristics of Deaths Due to Fatal Occupational Injuries, New York City, 2018*

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	73	11	12		17	12	19
Selected Industries							
Government§ (Federal, State, Local)	10				5		
Private industry§	63	10	11		12	11	19
Goods producing	26				7	4	12
Construction & Manufacturing	22				7	3	11
Service providing	37	9	9		5	7	7
Trade, transportation, and utilities	17	4	7				4
Financial activities							
Professional and business services	6						
Educational and health services	5						
Leisure and hospitality	4	3					
Other services, except public administration							
Sex							
Female	9				5		
Male	64	9	12		12	12	18
Race or ethnic origin 							
Non-Hispanic White	21	6	4		4	3	3
Non-Hispanic Black	13				5	4	
Hispanic	25	5	3		4	3	10
Asian	11		3		4		3
Age Group							
< 25 years							
25-34 years	14		4			3	3
35-44 years	8				4		
45-54 years	18	4			4	3	5
55-64 years	16		3		4	3	3
> 65 years	14				5		5

*Source: Bureau of Labor Statistics: Fatal Occupational Injuries in New York City <https://www.bls.gov/iif/oshwc/foi/tgs/2018/iifw68.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 of 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.

Table M18. Deaths Due to Accidents, Overall and by Age Group and Sex, New York City, 2018

Type	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																		
Total	2,415	2,415	32	32	142	142	124	124	17	17	1	1	18	18	11	11	36	36	2	2	0	0
Motor Vehicle Except Injury to Pedestrian, Pedal Cyclist, and Motorcyclist	32	32	142	142	124	124	17	17	1	1	18	18	11	11	36	36	2	2	0	0	0	0
Injury to Pedestrians	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Collision with motor vehicle	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Collision with railway transportation	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other collision	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Injury to Pedal Cyclist	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Collision with motor vehicle	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other collision	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Injury to Motorcyclist	36	36	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Water Transport Accidents	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Air and Space Transport Accidents	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Transport Accidents	17	17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sequelae (Late Effects) of Transport Accidents	11	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Fall	489	489	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Firearm Discharge	1	1	21	21	70	70	1,434	1,434	1,375	1,375	59	59	4	4	21	21	50	50	3	3	4	4
Drowning and Submersion	21	21	70	70	1,434	1,434	1,375	1,375	59	59	4	4	21	21	50	50	3	3	4	4	4	4
Smoke, Fire, and Flames	70	70	1,434	1,434	1,375	1,375	59	59	4	4	21	21	50	50	3	3	4	4	4	4	4	4
Poisoning by Noxious Substances	1,434	1,434	1,375	1,375	59	59	4	4	21	21	50	50	3	3	4	4	4	4	4	4	4	4
Poisoning by psychoactive substances*	1,375	1,375	59	59	4	4	21	21	50	50	3	3	4	4	4	4	4	4	4	4	4	4
Poisoning by other noxious substances	59	59	4	4	21	21	50	50	3	3	4	4	4	4	4	4	4	4	4	4	4	4
Exposure to Excessive Natural Heat	4	4	21	21	50	50	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Exposure to Excessive Natural Cold	21	21	50	50	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Suffocation	50	50	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Contact with Machinery	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Other Nontransport Accidents	46	46	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Sequelae (Late Effects) of Nontransport Accidents	16	16	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

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

Table M19. Deaths Due to Intentional Self-harm (Suicide), Overall and by Age Group and Sex, New York City, 2018

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	562	0	0	0	0	2	3	8	10	29	10	71	31	65	21	66	23	101	29	14	37	11	
Poisoning by Drug and Medicinal Substances	84	-	-	-	-	-	-	1	1	3	1	3	8	6	2	9	7	15	11	1	6	5	
Poisoning by Other Substances	7	-	-	-	-	-	-	1	1	-	-	-	-	-	1	1	1	2	-	-	1	-	
Hanging, Strangulation, and Suffocation	198	-	-	-	-	1	1	3	10	2	10	26	14	22	10	24	7	35	10	11	3	11	
Drowning and Submersion	26	-	-	-	-	2	2	1	2	2	1	1	6	6	2	5	2	2	1	2	2	4	
Firearm Discharge	56	-	-	-	-	-	-	1	1	1	1	8	-	9	-	8	-	14	2	4	-	9	
Sharp Object	18	-	-	-	-	-	-	-	-	-	-	3	-	2	1	2	-	5	-	3	1	1	
Blunt Object	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Jumping From High Place	117	-	-	-	-	1	2	2	1	10	3	15	7	17	4	14	6	17	4	4	2	6	
Jumping or Lying Before Moving Object	48	-	-	-	-	-	-	4	1	3	1	14	1	2	3	3	1	9	1	2	-	3	
Other and Unspecified Means	5	-	-	-	-	-	-	1	-	-	-	1	-	1	-	-	-	2	-	-	-	-	
Sequelae (Late Effects)	3	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	

Table M20. Deaths Due to Assault (Homicide) and Legal Intervention, Overall and by Age Group and Sex, New York City, 2018

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	317	10	4	2	0	0	0	28	2	31	5	82	9	41	7	35	15	14	8	15	3	5	
Poisoning by Noxious Substances	3	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-
Hanging, Strangulation, and Suffocation	9	2	-	-	-	-	1	1	-	-	-	2	-	-	1	-	-	-	2	-	-	-	1
Drowning and Submersion	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Firearm Discharge	158	-	1	1	-	-	-	19	1	20	3	61	2	23	3	9	5	5	1	2	1	1	
Smoke, Fire, and Flames	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sharp Object	72	-	-	-	-	-	-	6	1	10	1	14	2	10	1	7	6	3	4	6	1	-	
Blunt Object	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pushing From High Place	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	
Bodily Force	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	
Neglect, Abandonment, and Other Maltreatment	5	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other and Unspecified Means	38	3	1	-	-	-	-	1	-	1	-	5	1	4	1	8	1	4	1	4	1	2	
Sequelae (Late Effects)	15	-	-	-	-	-	-	-	-	-	-	1	1	4	1	4	1	1	4	1	2	-	
Legal Intervention, All*	6	-	-	-	-	-	-	1	-	-	-	-	-	-	-	3	1	-	-	1	1	-	

* Four of the six 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 Group and Sex, New York City, 2018

Method	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	296	14	0	0	1	0	4	0	6	5	11	30	11	35	11	28	10	17	19	9	15	11
Poisoning by Noxious Substances	28	-	-	-	-	-	-	-	1	1	1	2	4	4	1	3	4	3	-	1	2	1
Hanging, Strangulation, and Suffocation	2	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	1	-	-	-
Drowning and Submersion	12	1	-	-	-	-	1	-	2	2	1	2	3	3	1	1	1	1	-	-	-	-
Firearm Discharge	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smoke, Fire, and Flames	4	-	-	-	1	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-
Sharp or Blunt Object	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Falling From High Place	16	-	-	-	-	-	1	-	1	1	2	1	4	4	-	1	4	1	-	-	1	-
Other and Unspecified Means	228	26	14	-	-	-	2	-	2	3	24	5	22	10	26	6	30	13	17	7	11	10
Sequelae (Late Effects)	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	2	-

Table M22. Deaths Due to Complications of Medical and Surgical Care, Overall and by Age Group and Sex, New York City, 2018

Method	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	37	1	0	0	0	0	1	0	1	0	0	1	3	1	3	1	2	3	3	4	6	7
Adverse Effects From Drugs, Medicaments, and Biological Substances for Therapeutic Use	7	-	-	-	-	-	1	-	-	-	-	1	1	-	2	-	-	-	-	-	-	2
Medical Misadventures to Patients During Surgical and Medical Care	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-
Adverse Effects from Medical Devices for Therapeutic Use	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other and Unspecified Means	28	1	-	-	-	-	-	-	1	-	-	-	2	1	1	1	2	3	3	3	5	5
Sequelae (Late Effects)	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table M23. Deaths Due to Firearms (All Causes), Overall and by Age Group and Sex, New York City, 2018

Method	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)	219	-	1	1	-	-	21	1	21	4	69	2	32	3	19	6	19	3	6	1	10	-

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

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

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

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

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

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Table M25. Life Expectancy at Specified Ages, Overall and by Sex, New York City, 2009-2018

Age in years	Total									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	80.6	80.9	80.9	81.1	81.1	81.3	81.2	81.2	81.2	81.3
1	80.0	80.3	80.3	80.5	80.4	80.6	80.5	80.5	80.6	80.6
5	76.1	76.3	76.3	76.5	76.5	76.6	76.6	76.5	76.6	76.6
10	71.1	71.4	71.4	71.6	71.5	71.7	71.6	71.6	71.7	71.7
15	66.2	66.4	66.4	66.6	66.6	66.8	66.7	66.6	66.7	66.7
20	61.3	61.6	61.5	61.7	61.6	61.8	61.7	61.7	61.8	61.8
25	56.4	56.7	56.7	56.9	56.8	57.0	56.9	56.8	56.9	56.9
30	51.6	51.9	51.9	52.0	51.9	52.1	52.1	52.0	52.1	52.1
35	46.8	47.1	47.1	47.2	47.1	47.3	47.3	47.2	47.3	47.3
40	42.0	42.3	42.3	42.5	42.4	42.6	42.5	42.5	42.6	42.5
45	37.4	37.6	37.6	37.8	37.7	37.9	37.8	37.8	37.9	37.9
50	33.0	33.1	33.2	33.3	33.1	33.3	33.2	33.2	33.3	33.3
55	28.7	28.8	28.8	28.9	28.8	28.9	28.9	28.9	28.9	28.8
60	24.6	24.7	24.7	24.7	24.6	24.7	24.6	24.7	24.6	24.6
65	20.6	20.8	20.7	20.7	20.6	20.7	20.6	20.6	20.6	20.5
70	16.9	17.0	17.0	17.0	16.9	17.0	16.9	17.0	16.9	16.8
75	13.4	13.5	13.4	13.5	13.4	13.6	13.5	13.6	13.6	13.4
80	10.2	10.3	10.3	10.4	10.4	10.5	10.5	10.6	10.6	10.6
85	7.5	7.5	7.4	7.5	7.4	7.5	7.4	7.6	7.6	7.5
Age in years	Male									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	77.8	78.1	78.2	78.4	78.3	78.5	78.6	78.5	78.5	78.6
1	77.3	77.5	77.6	77.8	77.7	77.9	77.9	77.8	77.9	77.9
5	73.3	73.6	73.6	73.9	73.8	74.0	74.0	73.8	73.9	74.0
10	68.4	68.6	68.7	68.9	68.8	69.0	69.0	68.9	69.0	69.0
15	63.4	63.6	63.8	64.0	63.9	64.1	64.1	63.9	64.0	64.1
20	58.6	58.8	58.9	59.1	59.0	59.2	59.2	59.0	59.1	59.2
25	53.8	54.1	54.2	54.3	54.2	54.4	54.4	54.2	54.3	54.4
30	49.1	49.3	49.4	49.6	49.4	49.6	49.6	49.4	49.6	49.6
35	44.3	44.5	44.6	44.8	44.6	44.9	44.9	44.7	44.9	44.9
40	39.6	39.8	39.9	40.1	39.9	40.2	40.2	40.1	40.3	40.2
45	35.0	35.2	35.3	35.5	35.3	35.5	35.5	35.5	35.6	35.6
50	30.7	30.8	30.9	31.1	30.9	31.1	31.0	31.0	31.1	31.1
55	26.6	26.7	26.7	26.9	26.6	26.8	26.8	26.7	26.8	26.8
60	22.6	22.7	22.8	22.8	22.6	22.8	22.7	22.7	22.7	22.7
65	18.9	19.0	19.1	19.1	18.8	19.0	18.8	18.8	18.8	18.8
70	15.4	15.5	15.5	15.6	15.4	15.6	15.5	15.5	15.4	15.3
75	12.2	12.2	12.3	12.3	12.2	12.4	12.2	12.3	12.3	12.2
80	9.3	9.3	9.4	9.4	9.4	9.5	9.5	9.6	9.5	9.5
85	6.8	6.8	6.8	6.8	6.7	6.7	6.7	6.7	6.8	6.7
Age in years	Female									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0	83.0	83.3	83.2	83.4	83.4	83.6	83.5	83.5	83.6	83.6
1	82.3	82.7	82.6	82.7	82.7	82.9	82.8	82.8	83.0	82.8
5	78.4	78.7	78.6	78.8	78.8	79.0	78.8	78.9	79.0	78.9
10	73.4	73.8	73.7	73.8	73.8	74.0	73.9	73.9	74.0	73.9
15	68.5	68.8	68.7	68.9	68.9	69.0	68.9	68.9	69.1	69.0
20	63.5	63.9	63.8	63.9	63.9	64.1	63.9	64.0	64.1	64.0
25	58.6	58.9	58.9	59.0	59.0	59.2	59.0	59.1	59.2	59.1
30	53.7	54.0	53.9	54.1	54.1	54.3	54.1	54.2	54.3	54.2
35	48.8	49.1	49.1	49.2	49.2	49.4	49.3	49.3	49.4	49.3
40	44.0	44.3	44.2	44.4	44.4	44.6	44.5	44.5	44.6	44.5
45	39.3	39.6	39.5	39.6	39.6	39.8	39.7	39.8	39.8	39.7
50	34.8	35.0	34.9	35.0	35.0	35.1	35.1	35.1	35.1	35.0
55	30.4	30.5	30.5	30.5	30.5	30.6	30.5	30.6	30.6	30.5
60	26.0	26.2	26.1	26.2	26.1	26.2	26.2	26.2	26.1	26.0
65	21.9	22.0	21.9	22.0	21.9	22.0	21.9	22.0	21.9	21.7
70	17.9	18.1	18.0	18.0	18.0	18.0	17.9	18.0	17.9	17.8
75	14.2	14.4	14.2	14.3	14.3	14.3	14.3	14.5	14.4	14.2
80	10.8	10.9	10.8	11.0	11.0	11.1	11.1	11.2	11.3	11.2
85	7.8	7.8	7.7	7.8	7.8	7.9	7.8	8.0	8.0	8.0

Note: Population data from 2009 are interpolated based on 2000 and 2010 Census counts. Population data for 2011-2018 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.

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Table M26. Years of Potential Life Lost (YPLL)* Before Age 75, Overall and by Sex and Selected Causes of Death, New York City, 2018

Cause of Death	All		Male		Female	
	YPLL	%	YPLL	%	YPLL	%
Total	428,236	100.0	265,359	100.0	162,877	100.0
Malignant Neoplasms	102,693	24.0	51,263	19.3	51,430	31.6
Trachea, bronchus, and lung	15,027	3.5	8,231	3.1	6,796	4.2
Breast	11,451	2.7	130	0.0	11,321	7.0
Colon, rectum, and anus	9,521	2.2	5,327	2.0	4,194	2.6
Pancreas	6,451	1.5	3,712	1.4	2,739	1.7
Liver & intrahepatic bile ducts	5,898	1.4	4,317	1.6	1,581	1.0
Heart Disease	72,864	17.0	48,592	18.3	24,272	14.9
Use of or Poisoning by Psychoactive Substance	42,083	9.8	32,072	12.1	10,011	6.1
Accidents Except Poisoning by Psychoactive Substance	16,325	3.8	12,265	4.6	4,060	2.5
Motor vehicle	5,188	1.2	4,090	1.5	1,098	0.7
Intentional Self-harm (Suicide)	15,884	3.7	11,423	4.3	4,461	2.7
Diabetes Mellitus	14,413	3.4	9,012	3.4	5,401	3.3
Assault (Homicide)	12,339	2.9	10,501	4.0	1,838	1.1
Chronic Lower Respiratory Diseases	9,172	2.1	4,591	1.7	4,581	2.8
Cerebrovascular Diseases	9,081	2.1	5,326	2.0	3,755	2.3
Influenza and Pneumonia	8,907	2.1	5,590	2.1	3,317	2.0
Chronic Liver Disease and Cirrhosis	8,752	2.0	6,657	2.5	2,095	1.3
HIV Disease	6,449	1.5	4,359	1.6	2,090	1.3
Mental and Behavioral Disorders Due to Use of Alcohol	6,285	1.5	4,762	1.8	1,523	0.9
Viral Hepatitis	1,769	0.4	1,166	0.4	603	0.4
All Other Causes	101,220	23.6	57,780	21.8	43,440	26.7

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

Table M27. Death Rates by Poverty Level Indicator, New York City, 2009 and 2018

Age-adjusted Death Rates	Low (< 10%)			Medium (10 to <20%)			High (20 to <30%)			Very High (≥30%)		
	2018	2009	Change 2009 to 2018 (%)	2018	2009	Change 2009 to 2018 (%)	2018	2009	Change 2009 to 2018 (%)	2018	2009	Change 2009 to 2018 (%)
All Causes	421.3	502.3	-16.1%	475.1	561.0	-15.3%	539.6	620.6	-13.1%	674.0	746.8	-9.7%
Premature Deaths	111.5	131.6	-15.3%	141.9	165.6	-14.3%	182.2	208.1	-12.4%	263.7	289.7	-9.0%
10 Leading Causes												
Diseases of Heart	137.4	200.7	-31.5%	161.4	228.5	-29.4%	176.7	244.3	-27.7%	205.0	255.8	-19.9%
Malignant Neoplasms	106.3	132.9	-20.0%	111.2	136.4	-18.5%	118.0	138.9	-15.0%	139.2	167.1	-16.7%
Influenza and Pneumonia	13.5	21.6	-37.5%	16.8	26.6	-36.8%	19.9	28.4	-29.9%	30.1	30.7	-2.0%
Diabetes Mellitus	11.7	12.3	-4.9%	16.9	17.5	-3.4%	24.0	25.9	-7.3%	31.4	32.3	-2.8%
Cerebrovascular Diseases	13.0	14.1	-7.8%	15.9	15.5	2.6%	18.5	16.6	11.4%	23.3	20.7	12.6%
Chronic Lower Respiratory Diseases	13.7	16.1	-14.9%	14.5	15.4	-5.8%	17.5	17.5	0.0%	24.2	23.5	3.0%
Use of or Poisoning by Psychoactive Substances	8.3	4.8	72.9%	11.2	5.8	93.1%	16.6	7.6	118.4%	27.9	13.4	108.2%
Essential Hypertension and Hypertensive Renal Diseases	8.6	7.8	10.3%	10.9	8.7	25.3%	14.8	12.6	17.5%	15.7	17.5	-10.3%
Alzheimer's Disease	9.6	6.2	54.8%	10.1	5.0	102.0%	11.3	4.6	145.7%	13.4	7.1	88.7%
Accidents Except Poisoning by Psychoactive Substances	8.5	9.9	-14.1%	9.2	10.8	-14.8%	10.7	10.3	3.9%	11.0	12.0	-8.3%

Note: The 2009 poverty level is based on the 2005-2009 US Census Bureau American Community Survey, and the 2018 poverty level is based on the 2013-2017 US Census Bureau American Community Survey.

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M28. Leading Causes of Death, New York City, 2009, 2017 and 2018

Cause	2018		2017			2009		
	Rank	Crude Death Rate	Rank	Crude Death Rate	Change to 2018 (%)	Rank	Crude Death Rate	Change to 2018 (%)
Diseases of Heart*	1	211.3	1	202.8	4.2%	1	239.4	-11.7%
Malignant Neoplasms	2	155.2	2	154.2	0.6%	2	157.1	-1.2%
Influenza and Pneumonia	3	23.9	3	22.6	5.8%	3	27.1	-12.0%
Diabetes Mellitus	4	23.4	4	20.9	12.0%	6	20.1	16.2%
Cerebrovascular Diseases	5	22.5	5	22.0	2.3%	4	17.3	30.4%
Chronic Lower Respiratory Diseases	6	21.2	6	20.5	3.4%	5	18.2	16.4%
Use of or Poisoning by Psychoactive Substances†	7	17.9	7	17.8	0.6%	10	8.3	115.2%
Essential Hypertension and Renal Diseases	8	15.1	8	14.1	7.1%	9	11.2	35.1%
Alzheimer's Disease	9	14.2	9	12.9	10.1%	16	6.2	129.2%
Accidents Except Drug Poisoning	10	12.4	10	12.2	1.6%	8	12.0	3.7%

*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.

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Table IM1. Infant Deaths by Cause, Sex, and Age, New York City, 2018

Cause of Death (ICD-10 Codes)		Total	Male		Female	
			Neonatal (<28 Days)	Post-Neonatal	Neonatal (<28 Days)	Post-Neonatal
Total		446	164	103	114	65
1	HIV Infection (B20-B24)*	-	-	-	-	-
2	Diseases of the Circulatory System (I00-I99)*	12	1	7	1	3
3	Influenza and Pneumonia (J10-J18)*	7	-	7	-	-
4	Newborn Affected by Maternal Complications of Pregnancy (P01)*	17	11	-	5	1
5	Newborn Affected by Complications of Placenta, Cord, and Membranes (P02)*	10	6	1	2	1
6	Short Gestation and Low Birthweight (P07)*	73	39	3	29	2
7	Intrauterine Hypoxia and Birth Asphyxia (P20-P21)*	3	2	-	1	-
8	Respiratory Distress of Newborn (P22)*	6	2	-	4	-
9	Pulmonary Hemorrhage Originating in the Perinatal Period (P26)*	3	3	-	-	-
10	Atelectasis (P28.0-P28.1)*	1	-	-	1	-
11	Other Respiratory Conditions Originating in the Perinatal Period (P23-P28)†	5	1	2	1	1
12	Cardiovascular Disorders Originating in the Perinatal Period (P29)†	53	31	1	21	-
13	Infections Specific to the Perinatal Period (P35-P39)†	15	8	1	6	-
	Bacterial sepsis of newborn (P36)	12	6	-	6	-
14	Neonatal Hemorrhage (P50-P52, P54)*	4	3	-	1	-
15	Necrotizing Enterocolitis of Newborn (P77)*	4	2	-	1	1
16	Remainder of Conditions Originating in the Perinatal Period (Rest of P00-P99)	18	11	1	6	-
17	Congenital Malformations, Deformations (Q00-Q99)*	98	37	14	26	21
	Congenital malformations of heart (Q20-Q24)	33	8	9	6	10
18	Sudden Infant Death Syndrome (R95)*	5	1	3	1	-
19	All Other Diseases (Rest of A00-R99)	55	3	28	4	20
20	External Causes (V01-Y89)†	57	3	35	4	15

*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 are frequent in New York City. Including these groups permits recognition of important causes of infant death.

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Table IM2. Live Births and Infant Deaths by Mother's Racial/Ethnic Group and Characteristics of Infant, New York City, 2018

Characteristics	Live Births												Infant Deaths																			
	Total				Hispanic				NH-Black				Asian & P.I.				Total				Hispanic				NH-Black				Asian & P.I.			
	Total	Hispanic	NH-White	NH-Black	Total	Hispanic	NH-White	NH-Black	Total	Hispanic	NH-White	NH-Black	Total	Hispanic	NH-White	NH-Black	Total	Hispanic	NH-White	NH-Black	Total	Hispanic	NH-White	NH-Black	Total	Hispanic	NH-White	NH-Black	Total	Hispanic	NH-White	NH-Black
Total	114,296	31,706	40,327	21,145	19,024	446	119	94	166	51	219	53	219	53	59	70	24	278	68	69	95	33	168	51	168	51	25	71	18	18	18	
Sex of Child																																
Male	58,443	16,034	20,653	10,799	9,876	267	63	58	112	25	128	29	128	29	37	45	10	164	36	44	62	15	103	27	103	27	14	50	10	10		
Female	55,853	15,672	19,674	10,346	9,148	179	56	36	54	26	91	24	91	24	22	25	14	114	32	25	33	18	65	24	65	24	11	21	8	8		
Birthweight at Delivery (Grams)																																
Low birthweight (<2,500)	9,737	2,658	2,474	2,710	1,673	281	66	56	114	34	182	45	182	45	45	62	19	220	51	51	81	26	61	15	61	15	5	33	8	8		
Very low birthweight (<1,500)	1,563	472	272	602	184	213	50	36	95	22	145	36	145	36	30	55	14	175	39	35	72	19	38	11	38	11	1	23	3	3		
2,500-4,000	97,693	27,020	34,817	17,436	16,688	110	36	20	39	12	24	5	24	5	8	7	3	38	11	10	12	4	72	25	72	25	10	27	8	8		
Above 4,000	6,853	2,026	3,030	998	663	7	3	1	2	1	4	1	4	1	2	1	2	2	2	1	0	0	5	2	2	2	1	2	2	2		
Not stated	13	2	6	1	-	4	1	2	1	4	4	4	4	4	2	2	2	14	4	6	1	2	30	9	30	9	9	9	2	2		
Unmatched*	-	-	-	-	-	44	13	15	10	4	9	2	9	2	4	0	2	14	4	6	1	2	30	9	30	9	9	9	2	2		
Gestational Age (Weeks)																																
Preterm (<37)	10,293	3,041	2,745	2,726	1,570	273	60	52	117	32	175	43	175	43	41	63	17	213	47	48	82	25	60	13	60	13	4	35	7	7		
Very preterm (<32)	1,677	492	330	634	183	218	49	39	97	23	153	38	153	38	33	57	15	182	40	38	74	20	36	9	36	9	1	23	3	3		
Full-term	103,993	28,664	37,580	18,418	17,454	129	46	27	39	15	35	8	35	8	14	7	5	51	17	15	12	6	78	29	78	29	12	27	9	9		
Not stated	10	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Unmatched*	-	-	-	-	-	44	13	15	10	4	9	2	9	2	4	0	2	14	4	6	1	2	30	9	30	9	9	9	2	2		
Plurality																																
Singletons	110,310	30,790	38,794	20,253	18,459	349	100	55	137	44	170	46	170	46	35	57	21	221	59	42	79	30	128	41	128	41	13	58	14	14		
Multiples	3,985	916	1,533	892	565	53	6	24	19	3	40	5	40	5	20	13	1	43	5	21	15	1	10	1	10	1	3	4	2	2		
Unmatched*	-	-	-	-	-	44	13	15	10	4	9	2	9	2	4	0	2	14	4	6	1	2	30	9	30	9	9	9	2	2		
Plurality unknown	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
* 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, 2018

Characteristics	Live Births												Neonatal (< 28 days)												Post-Neonatal (≥ 28 days)											
	Total				Hispanic				NH-Black				Asian & P.I.				Total				Hispanic				NH-Black				Asian & P.I.							
	Total	Hispanic	NH-White	NH-Black	Total	Hispanic	NH-White	NH-Black	Total	Hispanic	NH-White	NH-Black	Total	Hispanic	NH-White	NH-Black	Total	Hispanic	NH-White	NH-Black	Total	Hispanic	NH-White	NH-Black	Total	Hispanic	NH-White	NH-Black	Total	Hispanic	NH-White	NH-Black				
Total	3.9	3.8	3.9	2.3	2.7	7.9	2.7	1.9	1.7	1.5	3.3	1.3	2.4	2.1	1.7	4.5	1.7	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	1.6	0.6	3.4	0.9	0.9					
Sex of Child																																				
Male	4.6	3.9	2.8	2.8	10.4	2.5	2.2	2.2	1.8	1.8	4.2	1.0	2.8	2.2	2.1	5.7	1.5	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.7	0.7	4.6	1.0	1.0						
Female	3.2	3.6	1.8	1.8	5.2	2.8	1.6	1.6	1.5	1.1	2.4	1.5	2.0	2.0	1.3	3.2	2.0	2.0	1.3	2.0	2.0	2.0	2.0	2.0	2.0	1.5	0.6	2.0	0.9	0.9						
Birthweight at Delivery (Grams)																																				
Low birthweight (<2,500)	28.9	24.8	22.6	22.9	20.3	42.1	20.3	18.7	16.9	18.2	22.9	11.4	22.6	19.2	20.6	29.9	15.5	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	5.6	2.0	12.2	4.8	4.8						
Very low birthweight (<1,500)	136.3	105.9	132.4	157.8	119.6	157.8	119.6	92.8	76.3	110.3	91.4	76.1	112.0	82.6	128.7	119.6	103.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3	23.3	3.7	38.2	16.3	16.3						
2,500-4,000	1.1	1.3	0.6	0.6	2.2	0.7	0.2	0.2	0.2	0.2	0.4	0.2	0.4	0.4	0.3	0.7	0.2	0.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.9	0.3	1.5	0.5	0.5						
Above 4,000	1.0	1.5	0.3	0.3	2.0	1.5	-	-	-	-	-	-	0.3	0.5	-	-	1.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.0	0.3	2.0	-	-						
Gestational Age (Weeks)																																				
Preterm (<37)	26.5	19.7	18.9	42.9	20.4	42.9	20.4	17.0	14.1	14.9	23.1	10.8	20.7	15.5	17.5	30.1	15.9	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	4.3	1.5	12.8	4.5	4.5						
Very preterm (<32)	130.0	99.6	118.2	153.0	125.7	153.0	125.7	91.2	77.2	100.0	89.9	82.0	108.5	81.3	115.2	116.7	109.3	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	18.3	3.0	36.3	16.4	16.4						
Full-term	1.2	1.6	0.7	0.7	2.1	0.9	0.3	0.3	0.3	0.4	0.4	0.3	0.5	0.6	0.4	0.7	0.3	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.0	0.3	1.5	0.5	0.5						
Plurality																																				
Singletons	3.2	3.2	1.4	6.8	2.4	6.8	2.4	1.5	1.5	0.9	2.8	1.1	2.0	1.9	1.1	3.9	1.6	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	0.3	2.9	0.8	0.8						
Multiples	13.3	6.6	15.7	21.3	5.3	21.3	5.3	10.0	5.5	13.0	14.6	1.8	10.8	5.5	13.7	16.8	1.8	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.1	2.0	4.5	3.5	3.5						

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Table IM4. Live Births and Infant Mortality, Overall and by Mother's Racial/Ethnic Group, New York City, 2014–2018

Mother's Racial/Ethnic Group	2014	2015	2016	2017	2018
Live Births, Total	122,084	121,673	120,367	117,013	114,296
Puerto Rican	7,897	7,561	7,159	6,307	5,995
Other Hispanic	27,753	27,994	26,915	26,553	25,711
Asian and Pacific Islander	20,746	20,535	21,566	20,110	19,024
Non-Hispanic White	40,443	40,607	40,633	40,345	40,327
Non-Hispanic Black	23,680	23,116	22,465	21,992	21,145
Other or Unknown	1,565	1,860	1,629	1,706	2,094
Infant Deaths (< 1 year), Total	516	526	491	500	446
Puerto Rican	60	46	24	40	32
Other Hispanic	113	119	102	115	87
Asian and Pacific Islander	53	54	62	69	51
Non-Hispanic White	107	110	105	95	94
Non-Hispanic Black	177	186	180	171	166
Other or Unknown	6	11	18	10	16
Infant Mortality Rate, Total	4.2	4.3	4.1	4.3	3.9
Puerto Rican	7.6	6.1	3.4	6.3	5.3
Other Hispanic	4.1	4.3	3.8	4.3	3.4
Asian and Pacific Islander	2.6	2.6	2.9	3.4	2.7
Non-Hispanic White	2.6	2.7	2.6	2.4	2.3
Non-Hispanic Black	7.5	8.0	8.0	7.8	7.9
Neonatal Deaths (< 28 days), Total	326	342	312	344	278
Puerto Rican	40	34	17	26	21
Other Hispanic	66	80	65	76	47
Asian and Pacific Islander	37	33	43	52	33
Non-Hispanic White	75	75	65	66	69
Non-Hispanic Black	103	112	109	121	95
Neonatal Mortality Rate, Total	2.7	2.8	2.6	2.9	2.4
Puerto Rican	5.1	4.5	2.4	4.1	3.5
Other Hispanic	2.4	2.9	2.4	2.9	1.8
Asian and Pacific Islander	1.8	1.6	2.0	2.6	1.7
Non-Hispanic White	1.9	1.8	1.6	1.6	1.7
Non-Hispanic Black	4.3	4.8	4.9	5.5	4.5

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Table IM5. Infant Mortality Rate by Mother's Birthplace*, New York City, 2012–2018

Birthplacet	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018
New York City	4.5	4.4	4.2	4.2	4.1
United States‡	4.8	4.8	4.5	4.4	4.2
United States (excluding Puerto Rico)	4.8	4.8	4.5	4.4	4.1
Puerto Rico	5.3	4.8	5.5	6.0	5.2
Jamaica	7.9	6.1	6.8	6.5	7.6
Haiti	6.2	7.4	7.0	7.6	7.3
El Salvador	4.2	5.0	5.5	4.1	6.0
Ghana	2.9	3.3	3.8	6.3	5.9
Pakistan	5.2	5.5	6.7	6.4	5.1
Yemen Arab Republic	3.7	2.7	3.8	4.7	4.9
Guyana	4.9	4.8	4.3	4.8	4.5
Philippines	2.3	1.9	1.9	2.4	4.5
Bangladesh	3.5	3.6	3.1	4.5	4.2
Colombia	3.0	3.4	4.6	5.0	3.9
Trinidad and Tobago	7.3	6.7	7.2	5.2	3.6
Nigeria	4.5	2.8	0.9	1.6	3.1
Guatemala	1.6	2.0	2.4	3.1	3.1
Mexico	3.7	2.8	2.4	3.0	3.1
Ecuador	3.2	3.7	3.8	3.8	3.0
Dominican Republic	4.4	4.1	3.9	3.7	2.9
Israel	2.2	2.6	2.7	1.2	2.8
Russia	1.3	1.0	2.0	2.0	2.8
Egypt	2.8	3.5	3.4	3.8	2.6
India	6.1	3.2	2.8	2.4	2.6
Japan	1.3	2.0	2.8	2.9	2.4
Honduras	6.8	4.4	3.5	2.2	2.2
Uzbekistan	1.7	1.8	1.1	1.8	2.2
Ukraine	0.0	0.4	1.1	1.5	2.0
China	1.5	1.5	1.6	1.7	1.8
Korea	3.6	5.0	2.6	3.3	1.6
Canada	3.0	4.1	3.0	2.6	1.5
Poland	1.8	1.4	1.5	2.1	1.1
United Kingdom	1.3	1.3	0.6	1.3	0.7

*The infant mortality rate is listed only for countries with 500 or more live births in any year from 2012-2018.

†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.

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Table IM6. Infant and Neonatal Mortality Rates by Community District of Residence, New York City, 2014–2018

Community District		2014–2016*		2015–2017*		2016–2018*	
		Infant Mortality Rate	Neonatal† Mortality Rate	Infant Mortality Rate	Neonatal† Mortality Rate	Infant Mortality Rate	Neonatal† Mortality Rate
	NEW YORK CITY	4.2	2.7	4.2	2.8	4.1	2.7
	MANHATTAN	3.3	2.2	3.1	2.1	2.6	1.8
101	Battery Park, Tribeca	3.0	2.7	2.4	1.8	1.5	0.9
102	Greenwich Village, SOHO	1.7	1.7	0.9	0.9	0.9	0.9
103	Lower East Side	3.2	2.4	3.9	2.8	3.8	3.0
104	Chelsea, Clinton	2.3	1.3	1.3	1.0	1.3	1.0
105	Midtown Business District	1.8	1.2	0.6	0.6	1.8	1.2
106	Murray Hill	1.8	1.6	2.4	1.6	2.8	2.1
107	Upper West Side	2.3	1.3	1.4	0.9	1.0	0.8
108	Upper East Side	1.8	0.9	2.1	1.4	1.8	1.3
109	Manhattanville	5.0	3.8	5.7	3.8	4.4	3.3
110	Central Harlem	6.7	3.8	6.5	3.7	4.0	2.0
111	East Harlem	5.2	3.0	5.1	2.9	5.0	2.5
112	Washington Heights	4.2	3.2	4.0	3.1	3.3	2.5
	BRONX	4.8	2.9	5.0	3.2	4.8	2.8
201	Mott Haven	4.6	2.2	4.8	2.3	5.7	2.6
202	Hunts Point	2.7	2.3	2.9	2.5	2.1	1.2
203	Morrisania	4.8	2.3	5.1	2.8	5.4	3.0
204	Concourse, Highbridge	3.4	2.4	4.7	2.8	5.2	2.9
205	University/Morris Heights	4.6	3.1	5.5	4.0	4.6	3.1
206	East Tremont	4.1	3.0	6.3	4.7	7.0	4.9
207	Fordham	4.2	2.7	4.1	2.9	4.1	3.0
208	Riverdale	4.3	3.0	3.7	2.1	2.9	1.6
209	Unionport, Soundview	5.8	3.3	6.4	3.4	5.9	2.9
210	Throgs Neck	3.9	2.6	5.0	3.3	3.0	1.7
211	Pelham Parkway	7.8	4.2	5.0	2.5	3.4	1.0
212	Williamsbridge	6.2	4.1	5.5	4.1	5.7	4.3
	BROOKLYN	3.7	2.3	3.6	2.3	3.5	2.3
301	Williamsburg, Greenpoint	2.8	1.4	3.2	1.6	2.6	1.4
302	Fort Greene, Brooklyn Heights	2.4	1.6	2.8	1.6	1.6	0.6
303	Bedford Stuyvesant	4.9	2.6	4.6	2.2	4.3	2.7
304	Bushwick	3.4	1.7	2.1	0.8	1.4	0.8
305	East New York	6.2	4.2	5.7	4.5	6.9	4.8
306	Park Slope	2.3	1.1	2.4	1.2	2.8	1.8
307	Sunset Park	2.4	1.6	2.7	1.9	2.5	1.6
308	Crown Heights North	4.9	3.1	4.7	3.4	4.4	3.4
309	Crown Heights South	3.8	2.0	4.1	2.3	5.9	3.7
310	Bay Ridge	1.0	0.9	0.9	0.7	1.7	1.1
311	Bensonhurst	3.6	2.6	3.0	1.7	2.8	2.1
312	Borough Park	2.2	1.4	1.9	1.5	1.5	1.2
313	Coney Island	4.7	3.7	3.7	2.9	3.6	2.2
314	Flatbush, Midwood	4.3	2.9	4.4	3.0	3.8	2.8
315	Sheepshead Bay	2.1	1.0	2.7	1.5	2.7	1.5
316	Brownsville	5.4	3.2	6.0	3.8	6.3	3.4
317	East Flatbush	8.5	4.9	6.7	4.0	5.6	3.4
318	Canarsie	5.0	3.2	6.4	4.3	6.4	3.9
	QUEENS	4.0	2.7	4.2	2.9	4.1	2.8
401	Astoria, Long Island City	5.0	4.0	6.7	5.0	6.0	3.8
402	Sunnyside, Woodside	3.1	2.0	3.4	2.8	2.8	2.4
403	Jackson Heights	4.6	2.7	3.3	2.3	2.6	1.8
404	Elmhurst, Corona	3.3	2.5	3.7	2.5	3.1	2.3
405	Ridgewood, Glendale	2.2	1.2	2.8	1.8	3.2	1.7
406	Rego Park, Forest Hills	2.8	1.6	2.4	1.7	1.7	1.2
407	Flushing	3.0	1.8	3.4	1.8	3.6	1.9
408	Fresh Meadows, Briarwood	2.5	1.8	3.1	2.2	3.2	2.2
409	Woodhaven	4.4	3.5	4.2	3.4	3.8	3.0
410	Howard Beach	5.5	4.2	4.7	3.6	4.7	3.9
411	Bayside	1.9	0.9	3.9	2.4	4.7	3.1
412	Jamaica, St. Albans	6.1	3.4	5.9	3.8	6.0	3.8
413	Queens Village	5.6	4.0	6.7	4.6	8.1	5.7
414	The Rockaways	5.2	3.9	4.6	3.1	4.4	2.1
	STATEN ISLAND	3.6	2.3	4.5	3.3	4.4	3.3
501	Port Richmond	4.8	2.7	5.4	3.9	5.3	3.8
502	Willowbrook, South Beach	2.8	2.1	5.1	3.9	5.2	4.2
503	Tottenville	2.6	1.7	2.6	2.0	2.4	1.7

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

†Neonatal infants are those less than 28 days old.

INFANT MORTALITY

Table IM7. Live Births and Infant Mortality Rate by Characteristics of Mother and Infant, New York City, 2018

Characteristics	Live Births		Infant Mortality Rate (IMR) per 1,000 Live Births					
			All		Neonatal*		Post-Neonatal*	
	Number	Percent	Deaths	Rate	Deaths	Rate	Deaths	Rate
Total	114,296	100.0	446	3.9	278	2.4	168	1.5
Race/Ethnicity								
Puerto Rican	5,995	5.2	32	5.3	21	3.5	11	1.8
Other Hispanic	25,711	22.5	87	3.4	47	1.8	40	1.6
Asian and Pacific Islander	19,024	16.6	51	2.7	33	1.7	18	0.9
Non-Hispanic White	40,327	35.3	94	2.3	69	1.7	25	0.6
Non-Hispanic Black	21,145	18.5	166	7.9	95	4.5	71	3.4
Other and Unknown	2,094	1.8	16	-	13	-	3	-
Borough of Residence								
Manhattan	16,595	14.5	35	2.1	23	1.4	12	0.7
Bronx	18,511	16.2	84	4.5	48	2.6	36	1.9
Brooklyn	37,933	33.2	125	3.3	82	2.2	43	1.1
Queens	24,325	21.3	95	3.9	57	2.3	38	1.6
Staten Island	5,067	4.4	17	3.4	11	2.2	6	1.2
Non-NYC residents	11,859	10.4	86	7.3	53	4.5	33	2.8
Unknown	6	-	4	-	4	-	0	-
Age Group								
Age <18	744	0.7	5	6.7	1	1.3	4	5.4
Age 18-19	2,148	1.9	7	3.3	2	0.9	5	2.3
Age 20-29	43,737	38.3	163	3.7	99	2.3	64	1.5
Age 30-39	60,458	52.9	199	3.3	142	2.3	57	0.9
Age ≥40	7,208	6.3	28	3.9	20	2.8	8	1.1
Age unknown	1	-	-	-	-	-	-	-
Unmatched†	-	-	44	-	14	-	30	-
Education								
11th grade or less/12th grade, no diploma	17,786	15.6	80	4.5	39	2.2	41	2.3
High school graduate or GED	25,408	22.2	122	4.8	81	3.2	41	1.6
Some college/associate degree	24,008	21.0	88	3.7	56	2.3	32	1.3
Bachelor's degree	25,364	22.2	60	2.4	45	1.8	15	0.6
Master's degree or higher	21,294	18.6	36	1.7	27	1.3	9	0.4
Woman's education unknown	436	0.4	16	-	16	-	0	-
Unmatched†	-	-	44	-	14	-	30	-
Marital Status‡								
Not married	40,981	35.9	213	5.2	127	3.1	86	2.1
Married	73,315	64.1	189	2.6	137	1.9	52	0.7
Unmatched†	-	-	-	-	-	-	-	-
Birthplaces§								
US born, including territories	57,118	50.0	222	3.9	147	2.6	75	1.3
Foreign born	57,096	50.0	169	3.0	106	1.9	63	1.1
Birthplace unknown	82	0	11	-	11	-	-	-
Unmatched†	-	-	44	-	14	-	30	-
Primary Payer for This Birth								
Medicaid/Family Plus/Child PlusB/Other govt	65,431	57.2	249	3.8	150	2.3	99	1.5
Other	48,292	42.3	149	3.1	111	2.3	38	0.8
Coverage unknown	573	0.5	4	-	3	-	1	-
Unmatched†	-	-	44	-	14	-	30	-
Plurality								
Singletons	110,311	96.5	349	3.2	221	2.0	128	1.2
Multiples	3,985	3.5	53	13.3	43	10.8	10	2.5
Unmatched†	-	-	44	-	14	-	30	-
First Prenatal Care Visit								
No prenatal care	585	0.5	10	17.1	8	13.7	2	3.4
First trimester (1-3 months)	84,015	73.5	267	3.2	176	2.1	91	1.1
Second trimester (4-6 months)	19,881	17.4	69	3.5	43	2.2	26	1.3
Third Trimester (7-9 months)	6,672	5.8	20	3.0	10	1.5	10	1.5
Prenatal care unknown	3,143	2.7	36	-	27	-	9	-
Unmatched†	-	-	44	-	14	-	30	-
Pre-pregnancy Body Mass Index (BMI)								
Underweight (BMI < 18.5)	5,778	5.1	15	2.6	9	1.6	6	1.0
Normal weight (18.5 ≤ BMI < 25)	58,574	51.2	174	3.0	108	1.8	66	1.1
Overweight (25 ≤ BMI < 30)	28,762	25.2	102	3.5	67	2.3	35	1.2
Obese (BMI ≥ 30)	20,515	17.9	96	4.7	67	3.3	29	1.4
Pre-pregnancy BMI unknown	667	0.6	15	-	13	-	2	-
Unmatched†	-	-	44	-	14	-	30	-
Birthweight								
Very low birthweight (< 1,500 grams)	1,563	1.4	213	136.3	175	112.0	38	24.3
Low birthweight (1,500-2,499 grams)	8,174	7.2	68	8.3	45	5.5	23	2.8
Normal birthweight	104,546	91.5	117	1.1	40	0.4	77	0.7
Birthweight unknown	13	-	4	-	4	-	-	-
Unmatched†	-	-	44	-	14	-	30	-

*Neonatal infants are those less than 28 days old; post-neonatal 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, Woman'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, 2018

Borough and Institution	Births
Manhattan	
Bellevue Hospital Center	1,371
Harlem Hospital Center	834
Lenox Hill Hospital	3,857
Metropolitan Hospital Center	944
Mount Sinai Hospital	8,087
Mount Sinai West	5,806
New York Weill Cornell Medical Center	5,207
New York-Presbyterian/Columbia University Medical Center	4,848
New York-Presbyterian/Lower Manhattan Hospital	3,308
New York-Presbyterian/The Allen Hospital	2,169
NYU Langone - Tisch Hospital	6,366
Home†	113
Places other than a hospital or home‡	34
Bronx	
Bronx Lebanon Hospital Center	1,903
Jack D. Weiler Hospital	3,865
Jacobi Medical Center	1,831
Lincoln Medical and Mental Health Center	1,815
Montefiore Medical Center - Wakefield Division	1,889
Montefiore Medical Center (Henry & Lucy Moses Division)	2
North Central Bronx Hospital	1,159
St. Barnabas Hospital	877
Home†	93
Places other than a hospital or home‡	18
Brooklyn	
Brookdale University Hospital and Medical Center	872
Brooklyn Birthing Center	169
Brooklyn Hospital Center	2,549
Coney Island Hospital	1,130
Kings County Hospital Center	1,741
Lutheran Medical Center	4,201
Maimonides Medical Center	8,055
New York-Presbyterian/Brooklyn Methodist Hospital	5,118
The Birthing Center of NYS	12
University Hospital of Brooklyn	1,253
Woodhull Medical and Mental Health Center	1,512
Wyckoff Heights Medical Center	1,222
Home†	383
Places other than a hospital or home‡	53
Queens	
Elmhurst Hospital Center	2,306
Flushing Hospital Medical Center	2,591
Jamaica Hospital Medical Center	2,019
Long Island Jewish Forest Hills	1,974
Long Island Jewish Medical Center	9,035
New York Hospital Medical Center of Queens	3,753
Queens Hospital Center	1,491
St. John's Episcopal Hospital South Shore	648
Zucker Hillside Hospital	1
Home†	117
Places other than a hospital or home‡	28
Staten Island	
Richmond University Medical Center	2,960
Staten Island University Hospital	2,685
Home†	17
Places other than a hospital or home‡	4
Foundling	1
New York City Total	114,296

* Live births are presented by borough of birth beginning in 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.

§ New birth center opened in 2017. In the 2017 Summary, the 3 births at this center were categorized into "Home" birth.

PREGNANCY OUTCOMES

Table PO2. Live Births by Mother's Ancestry* and Borough of Residence, New York City, 2018

Mother's Ancestry	Total	Borough of Residence						
		Manhattan	Bronx	Brooklyn	Queens	Staten Island	Non-Residents	Residence Unknown
Total	114,296	16,595	18,511	37,933	24,325	5,067	11,859	6
Hispanic								
Colombian	1,021	95	52	119	589	38	128	-
Cuban	307	75	43	71	44	18	56	-
Dominican	10,417	1,729	5,187	1,474	1,366	127	532	2
Ecuadorian	2,639	137	373	445	1,532	50	102	-
Mexican	4,899	463	1,235	1,417	1,313	344	127	-
Puerto Rican	5,995	770	2,286	1,354	821	384	380	-
Other Hispanic	6,428	791	1,616	1,467	1,765	206	583	-
North American and the Caribbean								
African-American	12,118	1,254	2,859	5,063	1,773	403	764	2
American	11,432	2,646	304	4,240	1,451	879	1,912	-
Guyanese	1,615	16	117	400	977	5	100	-
Haitian	1,409	41	41	833	335	9	150	-
Jamaican	1,715	50	417	597	480	11	160	-
Trinidadian	598	13	39	282	194	8	62	-
Other North American and the Caribbean	1,327	189	144	582	258	23	131	-
African								
Egyptian	677	41	17	230	231	90	68	-
Ghanaian	566	21	440	29	37	22	17	-
Nigerian	711	27	168	207	172	79	58	-
Other African	2,006	234	995	383	225	76	93	-
European								
English	573	212	12	208	36	10	95	-
German	617	196	14	200	73	18	116	-
Irish	1,447	360	36	365	217	116	353	-
Italian	2,707	488	59	540	338	620	662	-
Polish	849	129	15	211	293	66	135	-
Russian	1,396	256	15	588	264	117	156	-
Other European	4,434	853	291	1,729	718	301	542	-
Asian								
Asian Indian	1,942	338	53	161	810	41	539	-
Bangladeshi	2,930	56	559	596	1,643	17	59	-
Chinese	7,521	914	54	2,927	2,740	300	586	-
Filipino	747	93	52	99	343	41	119	-
Korean	856	292	12	167	244	11	130	-
Pakistani	1,669	64	103	698	453	113	238	-
Other Asian	6,469	902	469	2,663	1,734	227	474	-
Other								
Jewish or Hebrew	5,037	432	34	3,912	116	90	453	-
Other or not stated	9,222	2,418	400	3,675	740	207	1,780	2

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

Table PO3. Live Births by Mother's Racial/Ethnic Group and Age Group, New York City, 2018

Racial/Ethnic Group	Total	Age Group (Years)							Not Stated
		< 18	18-19	20-24	25-29	30-34	35-39	≥ 40	
Total	114,296	744	2,148	16,298	27,439	36,064	24,394	7,208	1
Puerto Rican	5,995	98	303	1,346	1,675	1,448	873	252	-
Other Hispanic	25,711	382	897	4,852	6,927	6,858	4,442	1,353	-
Asian and Pacific Islander	19,024	15	62	1,631	5,061	6,960	4,178	1,117	-
Non-Hispanic White	40,327	38	268	4,737	7,696	14,326	10,313	2,949	-
Non-Hispanic Black	21,145	197	582	3,477	5,627	5,823	4,052	1,387	-
Non-Hispanic Other	718	2	10	114	207	188	152	45	-
Non-Hispanic of two or more races	1,159	10	20	110	199	406	323	91	-
Not Stated	217	2	6	31	47	55	61	14	1

PREGNANCY OUTCOMES

Table PO4. Selected Characteristics of Live Births, Overall and by Mother's Age Group, New York City, 2018

	Total	Age Group (Years)							Not Stated
		< 18	18-19	20-24	25-29	30-34	35-39	≥ 40	
Total Live Births	114,296	744	2,148	16,298	27,439	36,064	24,394	7,208	1
Sex									
Male	58,443	367	1,117	8,287	14,111	18,409	12,543	3,608	1
Female	55,853	377	1,031	8,011	13,328	17,655	11,851	3,600	-
First Live Birth									
Yes	48,740	693	1,842	10,058	11,950	14,737	7,435	2,025	-
No	65,541	50	306	6,238	15,485	21,322	16,958	5,182	-
Unknown	15	1	-	2	4	5	1	1	1
Pre-pregnancy Body Mass Index (BMI)									
Underweight (BMI < 18.5)	5,778	69	147	1,207	1,660	1,617	847	231	-
Normal weight (18.5 ≤ BMI < 25)	58,574	416	1,119	8,250	13,317	19,344	12,605	3,523	-
Overweight (25 ≤ BMI < 30)	28,762	159	526	3,912	7,015	8,768	6,350	2,032	-
Obese (BMI ≥ 30)	20,515	92	344	2,817	5,283	6,168	4,444	1,367	-
Unknown	667	8	12	112	164	167	148	55	1
Birthweight at Delivery (Grams)									
< 1500	1,563	6	26	230	356	454	339	152	-
1500-2499	8,174	66	177	1,098	1,840	2,469	1,813	711	-
2500-3999	97,565	657	1,870	14,153	23,658	30,840	20,490	5,897	-
≥ 4000	6,981	15	75	815	1,581	2,296	1,751	448	-
Not Stated	13	-	-	2	4	5	1	-	1
Gestational Age (Weeks)*									
< 32	1,677	13	28	220	371	518	368	159	-
32-36	8,616	60	168	1,070	1,790	2,600	2,118	810	-
≥ 37	103,993	671	1,951	15,007	25,273	32,945	21,908	6,238	-
Unknown	10	-	1	1	5	1	-	1	1
Plurality									
Single	110,310	738	2,108	15,897	26,655	34,744	23,374	6,794	-
Twin	3,868	6	40	392	762	1,279	1,002	387	-
Triplet	114	-	-	9	22	41	15	27	-
Quadruplet	3	-	-	-	-	-	3	-	-
Unknown	1	-	-	-	-	-	-	-	1
Apgar Score at 5 Minutes									
≤ 6	1,039	8	18	164	221	327	229	72	-
7	1,095	5	19	135	249	333	269	85	-
8	5,462	26	103	716	1,238	1,750	1,195	434	-
9	105,833	701	1,995	15,176	25,533	33,380	22,479	6,569	-
10	613	2	6	61	128	209	168	39	-
Not Stated	254	2	7	46	70	65	54	9	1
Method of Delivery									
Vaginal	73,792	620	1,701	12,311	18,776	23,014	13,941	3,429	-
Vaginal after any prior C-section	2,809	1	5	242	740	923	725	173	-
Primary C-section	22,059	114	400	2,827	4,831	6,886	5,029	1,972	-
Low Risk†	11,885	82	284	1,848	2,847	3,582	2,361	881	-
Other	10,174	32	116	979	1,984	3,304	2,668	1,091	-
Repeat C-section	15,632	9	42	918	3,091	5,240	4,698	1,634	-
Unknown	4	-	-	-	1	1	1	-	1
Attendant									
Physician	104,455	625	1,827	14,271	24,735	33,470	22,759	6,768	-
Certified nurse midwife	9,264	116	310	1,935	2,535	2,439	1,517	412	-
Other	577	3	11	92	169	155	118	28	1
Primary Payer for this Birth‡									
Medicaid/Family Plus/Child Health Plus B/Other govt	65,431	677	1,916	13,615	19,451	16,934	9,813	3,025	-
Private	46,817	48	188	2,403	7,435	18,492	14,193	4,058	-
Self-pay	737	6	21	108	198	217	142	45	-
Other	738	7	13	109	204	237	131	37	-
Not Stated	573	6	10	63	151	184	115	43	1
First Visit for Prenatal Care									
First trimester (1-3 months)	84,015	332	1,120	10,595	19,499	27,919	19,045	5,505	-
Second trimester (4-6 months)	19,881	235	626	3,725	5,138	5,388	3,589	1,180	-
Third trimester (7-9 months)	6,672	119	267	1,250	1,842	1,789	1,094	311	-
No care	585	17	26	133	143	140	100	26	-
Not Stated	3,143	41	109	595	817	828	566	186	1
Marital Status§									
Not married	40,981	717	1,797	8,942	11,707	9,616	6,101	2,100	1
Married	73,315	27	351	7,356	15,732	26,448	18,293	5,108	-
Education Level									
11th grade or less/12th grade no diploma	17,786	680	1,034	3,710	4,276	4,209	2,918	959	-
High school graduate or GED	25,408	57	787	6,537	7,400	5,908	3,498	1,221	-
Some college/associate degree	24,008	4	311	4,532	7,513	6,605	3,930	1,113	-
Bachelor's degree	25,364	-	10	1,170	5,383	10,129	6,802	1,870	-
Master's degree or higher	21,294	-	-	253	2,776	9,105	7,157	2,003	-
Not Stated	436	3	6	96	91	108	89	42	1
Birthplace									
United States, including its territories	57,118	500	1,400	9,601	13,039	17,441	11,882	3,254	1
Foreign	57,096	241	746	6,684	14,377	18,607	12,491	3,950	-
Not Stated	82	3	2	13	23	16	21	4	-

* See Technical Notes: Births, Gestational Age.

† Low Risk: Primiparous, Full-term, Singleton, and Vertex/Cephalic (head first).

‡ See Technical Notes: Births, Birth Reporting.

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

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

PREGNANCY OUTCOMES

Table PO5. Selected Characteristics of Live Births by Mother's Racial/Ethnic Group, New York City, 2018

	Total	Racial/Ethnic Group*							Not Stated
		Puerto Rican	Other Hispanic	Asian	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Other	Non-Hispanic Two or More Races	
Total Live Births	114,296	5,995	25,711	19,024	40,327	21,145	718	1,159	217
Sex									
Male	58,443	3,082	12,952	9,876	20,653	10,799	350	601	130
Female	55,853	2,913	12,759	9,148	19,674	10,346	368	558	87
First Live Birth									
Yes	48,740	2,461	10,042	9,096	17,457	8,680	315	607	82
No	65,541	3,534	15,667	9,927	22,867	12,463	403	552	128
Unknown	15	-	2	1	3	2	-	-	7
Pre-pregnancy Body Mass Index (BMI)									
Underweight (BMI < 18.5)	5,778	222	666	1,857	2,231	704	31	58	9
Normal weight (18.5 ≤ BMI < 25)	58,574	2,094	10,557	11,908	25,752	7,175	353	662	73
Overweight (25 ≤ BMI < 30)	28,762	1,636	8,318	3,835	8,086	6,393	208	249	37
Obese (BMI ≥ 30)	20,515	2,011	6,056	1,387	4,068	6,659	125	185	24
Unknown	667	32	114	37	190	214	1	5	74
Birthweight at Delivery (Grams)									
< 1500	1,563	103	369	184	272	602	10	13	10
1500-2499	8,174	533	1,653	1,489	2,202	2,108	82	85	22
2500-3999	97,565	5,002	21,990	16,675	34,756	17,411	583	979	169
≥ 4000	6,981	356	1,698	676	3,091	1,023	43	82	12
Not stated	13	1	1	-	6	1	-	-	4
Gestational Age (Weeks)†									
< 32	1,677	107	385	183	330	634	15	15	8
32-36	8,616	567	1,982	1,387	2,415	2,092	69	85	19
≥ 37	103,993	5,321	23,343	17,454	37,580	18,418	634	1,059	184
Unknown	10	-	1	-	2	1	-	-	6
Plurality									
Single	110,310	5,780	25,010	18,459	38,794	20,253	687	1,121	206
Twin	3,868	208	679	556	1,490	856	31	38	10
Triplet	114	7	22	9	40	36	-	-	-
Quadruplet	3	-	-	-	3	-	-	-	-
Unknown	1	-	-	-	-	-	-	-	1
Apgar Score at 5 Minutes									
≤ 6	1,039	71	194	123	257	364	13	11	6
7	1,095	71	225	126	288	357	10	14	4
8	5,462	306	1,128	823	1,737	1,363	36	59	10
9	105,833	5,509	23,987	17,850	37,674	18,906	655	1,061	191
10	613	22	126	79	305	69	2	10	-
Not stated	254	16	51	23	66	86	2	4	6
Method of Delivery									
Vaginal	73,792	3,736	15,922	12,111	28,260	12,415	462	749	137
Vaginal after any prior C-section	2,809	131	645	356	1,188	441	23	19	6
Primary C-section	22,059	1,225	4,825	3,761	6,865	4,915	150	269	49
Low Risk‡	11,885	629	2,563	2,213	3,758	2,462	81	156	23
Other	10,174	596	2,262	1,548	3,107	2,453	69	113	26
Repeat C-section	15,632	903	4,319	2,795	4,014	3,373	83	122	23
Unknown	4	-	-	1	-	1	-	-	2
Attendant									
Physician	104,455	5,368	23,003	18,255	36,936	18,982	670	1,067	174
Certified nurse midwife	9,264	582	2,580	717	3,228	1,989	46	85	37
Other	577	45	128	52	163	174	2	7	6
Primary Payer for this Birth§									
Medicaid/Family Plus/Child Health Plus B/Other govt	65,431	4,183	20,159	10,649	15,064	14,409	454	387	126
Private	46,817	1,714	5,191	8,060	24,721	6,059	249	744	79
Self-pay	737	27	131	198	144	230	3	3	1
Other	738	45	128	77	304	165	3	16	-
Not stated	573	26	102	40	94	282	9	9	11
First Visit for Prenatal Care									
First trimester (1-3 months)	84,015	4,090	17,558	14,941	32,766	13,144	501	899	116
Second trimester (4-6 months)	19,881	1,279	5,553	2,954	5,165	4,574	136	172	48
Third trimester (7-9 months)	6,672	363	1,748	824	1,201	2,411	55	52	18
No care	585	60	127	59	121	206	3	3	6
Not stated	3,143	203	725	246	1,074	810	23	33	29
Marital Status									
Not married	40,981	4,445	15,162	2,723	4,266	13,656	240	379	110
Married	73,315	1,550	10,549	16,301	36,061	7,489	478	780	107
Education Level									
11th grade or less/12th grade, no diploma	17,786	1,411	7,479	2,815	2,892	2,994	104	74	17
High school graduate or GED	25,408	1,616	6,300	3,583	7,576	5,963	203	138	29
Some college/associate degree	24,008	1,915	6,841	3,091	5,067	6,637	178	260	19
Bachelor's degree	25,364	675	3,369	5,187	12,056	3,601	121	334	21
Master's degree or higher	21,294	371	1,670	4,328	12,594	1,848	105	352	26
Not stated	436	7	52	20	142	102	7	1	105
Birthplace¶									
United States, including its territories	57,118	5,969	8,232	2,475	27,362	11,811	300	847	122
Foreign	57,096	24	17,471	16,545	12,957	9,322	417	312	48
Not stated	82	2	8	4	8	12	1	-	47

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

† See Technical Notes: Births, Gestational Age.

‡ Low Risk: Primiparous, Full-term, Singleton, and Vertex/Cephalic (head first).

§ See Technical Notes: Births, Birth Reporting.

|| See Technical Notes: Mother's Marital Status.

¶ See Technical Notes: Geographical Units, Birthplace Presentation.

PREGNANCY OUTCOMES

Table PO6. Live Births by Selected Characteristics and Mother's Ancestry, New York City, 2018

Mother's Ancestry	Live Births	Percent of Total Live Births with Specified Characteristics									
		Foreign-born*	First Live Birth	Low Birth Weight (<2,500 Grams)	Preterm Birth (<37 Weeks)†	Late or No Prenatal Care	Not Married	On Medicaid‡	Pre-pregnancy Obesity	Teenaged (<20 Years)	Exclusive Breast Feeding
Total	114,296	50.0	42.6	8.5	9.0	6.5	35.9	57.5	18.1	2.5	42.3
Hispanic											
Colombian	1,021	67.4	53.4	7.0	7.8	5.7	43.9	53.9	16.0	2.2	48.7
Cuban	307	16.0	51.8	10.4	9.1	3.4	34.5	33.2	20.2	3.3	56.7
Dominican	10,417	72.3	42.7	8.2	9.0	9.1	59.5	81.6	23.1	5.1	27.7
Ecuadorian	2,639	80.4	34.9	5.6	8.5	7.4	50.8	82.4	20.8	4.4	34.8
Mexican	4,899	71.2	29.6	7.0	8.7	6.0	64.6	88.4	25.6	6.2	36.0
Puerto Rican	5,995	0.4	41.1	10.6	11.2	7.3	74.1	70.1	33.7	6.7	33.0
Other Hispanic	6,428	56.0	39.2	8.9	10.4	6.7	60.8	71.3	25.6	4.5	39.8
North America and the Caribbean											
African-American	12,118	16.9	42.5	13.3	13.8	8.9	75.4	69.5	33.7	5.0	30.0
American	11,432	3.1	43.1	6.9	7.1	1.8	16.1	32.1	12.9	0.9	57.1
Guyanese	1,615	89.1	44.7	14.3	12.0	12.9	41.7	63.5	21.3	2.8	37.0
Haitian	1,409	81.6	41.7	11.4	13.6	14.7	38.5	65.5	30.0	1.7	28.1
Jamaican	1,715	91.5	42.0	12.5	12.8	19.7	62.9	68.1	31.3	2.1	35.7
Trinidadian	598	89.8	40.1	12.7	13.7	17.5	50.8	62.2	27.7	2.0	38.2
Other North America and the Caribbean	1,327	86.4	48.0	10.6	9.6	15.0	39.6	54.2	19.9	1.4	46.1
African											
Egyptian	677	92.2	29.4	6.8	7.8	17.4	2.5	76.4	21.0	0.3	40.0
Ghanaian	566	97.5	29.2	12.5	11.1	20.9	47.3	73.4	29.7	0.2	31.1
Nigerian	711	95.8	37.7	10.8	11.4	24.7	28.0	62.2	27.2	0.3	38.3
Other African	2,006	96.6	32.8	9.1	7.5	19.2	31.9	81.8	21.0	1.1	36.9
European											
English	573	46.4	56.9	4.0	4.0	2.7	9.1	9.8	6.5	0.0	78.9
German	617	28.4	61.1	4.7	5.8	2.5	11.8	7.6	5.7	0.3	75.7
Irish	1,447	8.9	58.5	6.0	7.7	1.6	14.2	11.0	11.3	0.5	65.4
Italian	2,707	9.0	56.1	6.8	8.3	1.7	16.7	13.3	16.2	0.5	54.2
Polish	849	63.3	50.5	5.9	6.2	2.0	15.7	26.5	7.7	0.2	59.0
Russian	1,396	79.8	49.7	5.9	5.7	2.9	22.3	37.2	6.7	0.4	60.5
Other European	4,434	73.4	51.6	5.8	6.9	5.7	16.3	38.1	8.7	0.5	60.1
Asian											
Asian Indian	1,942	80.6	52.5	12.3	9.0	3.8	5.0	33.3	9.7	0.1	50.1
Bangladeshi	2,930	98.0	40.9	12.6	10.0	6.6	2.6	82.0	12.1	0.4	28.4
Chinese	7,521	89.0	47.7	6.0	6.8	3.0	21.6	62.4	2.6	0.2	29.2
Filipino	747	76.8	49.4	9.9	9.4	5.8	19.5	29.0	9.4	0.4	51.7
Korean	856	67.6	61.3	5.0	5.8	2.3	8.2	16.0	1.5	0.1	62.7
Pakistani	1,669	91.4	37.6	9.7	9.3	8.0	2.7	73.5	16.0	1.0	27.8
Other Asian	6,469	88.4	40.7	7.3	7.5	7.4	12.4	62.1	8.5	2.0	44.2
Other											
Jewish or Hebrew	5,037	13.1	27.0	5.7	5.9	1.2	3.4	63.8	10.4	0.8	44.0
Other or Not Stated	9,222	18.2	45.2	7.3	8.1	3.5	12.6	26.3	10.2	0.7	62.1

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 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, 2018

Community District of Residence	Live Births	Rate*	Percent of Total Live Births With Specified Characteristics							
			Foreign-Born†	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	114,296	13.6	50.0	42.6	8.5	9.0	6.5	57.5	18.1	42.3
MANHATTAN	16,500	10.2	39.1	53.3	8.2	8.8	4.5	31.0	12.2	61.4
Battery Park, Tribeca (01)	1,127	18.2	36.0	53.7	5.9	6.0	1.7	3.3	2.1	80.0
Greenwich Village, SOHO (02)	694	7.8	32.3	60.5	5.8	6.2	3.0	6.6	2.0	80.5
Lower East Side (03)	1,159	6.9	45.3	48.1	10.4	10.4	4.7	55.7	16.4	56.0
Chelsea, Clinton (04)	984	7.3	42.5	65.3	6.8	8.1	4.3	19.4	10.4	70.8
Midtown Business District (05)	576	10.3	40.2	63.9	10.1	9.5	2.9	12.5	3.9	71.4
Murray Hill (06)	1,309	9.3	39.3	62.0	8.3	7.9	2.8	6.3	4.9	76.5
Upper West Side (07)	2,337	11.1	34.3	52.8	6.7	7.2	3.2	12.1	6.2	67.8
Upper East Side (08)	2,539	11.4	31.7	56.0	7.1	8.0	1.8	5.8	5.3	74.2
Manhattanville (09)	925	8.5	45.7	51.5	7.8	9.9	7.2	60.4	20.3	45.1
Central Harlem (10)	1,491	13.2	37.9	45.3	10.7	10.1	10.3	60.1	25.7	47.9
East Harlem (11)	1,404	11.6	35.8	42.8	12.1	13.7	7.8	62.2	25.2	38.0
Washington Heights (12)	1,955	10.2	53.1	50.0	7.9	9.1	5.4	66.2	20.7	40.0
BRONX	18,606	13.0	56.0	38.2	10.0	9.8	11.6	82.2	27.7	27.6
Mott Haven (01)	1,444	14.9	44.6	34.1	10.1	11.4	11.0	86.3	32.5	25.7
Hunts Point (02)	801	14.5	51.3	37.0	10.0	12.4	15.3	88.1	27.9	22.7
Morrisania (03)	1,476	16.4	47.5	33.4	11.4	10.5	11.0	87.0	30.2	24.3
Concourse, Highbridge (04)	2,227	14.5	62.7	37.4	8.6	8.7	12.4	86.7	27.2	24.6
University/Morris Heights (05)	2,065	15.4	63.1	36.1	10.3	9.6	13.1	88.1	28.5	22.4
East Tremont (06)	1,180	13.7	46.2	35.1	10.0	9.8	11.2	89.0	30.8	24.7
Fordham (07)	2,034	13.9	65.7	41.1	9.3	8.9	10.1	84.3	23.2	25.1
Riverdale (08)	1,016	10.0	48.1	43.1	6.9	7.2	7.9	58.2	20.7	37.8
Unionport, Soundview (09)	2,314	12.7	57.1	38.6	9.7	9.1	10.5	82.3	26.2	30.9
Throgs Neck (10)	986	8.2	52.3	40.4	10.0	8.7	10.0	68.0	28.6	35.0
Pelham Parkway (11)	1,365	11.9	60.0	42.0	10.6	9.5	12.2	73.8	25.6	35.2
Williamsbridge (12)	1,698	11.1	54.8	40.5	13.1	13.0	14.7	80.5	32.2	28.2
BROOKLYN	37,930	14.7	45.6	39.9	7.8	8.6	5.7	63.4	16.5	41.7
Williamsburg, Greenpoint (01)	3,615	18.4	18.0	37.2	4.6	5.2	3.3	59.4	11.5	55.1
Fort Greene, Brooklyn Heights (02)	1,795	14.7	27.2	59.9	6.9	8.0	2.2	17.4	7.9	73.2
Bedford Stuyvesant (03)	2,183	14.8	24.6	38.1	9.2	9.2	5.7	65.9	19.6	41.9
Bushwick (04)	1,103	10.1	53.6	42.6	8.4	9.7	6.9	73.0	24.5	33.5
East New York (05)	2,595	14.8	52.5	39.5	11.0	11.6	11.4	79.6	29.6	29.6
Park Slope (06)	1,625	15.0	23.0	55.2	6.2	7.1	2.5	14.4	7.4	76.5
Sunset Park (07)	2,047	15.8	69.1	43.3	6.2	7.3	2.1	69.2	10.9	38.3
Crown Heights North (08)	1,271	13.4	34.6	48.9	11.3	12.2	7.3	47.0	17.6	54.1
Crown Heights South (09)	1,490	15.5	44.6	40.5	8.3	8.5	7.3	67.2	21.9	49.7
Bay Ridge (10)	1,691	12.1	64.8	41.9	6.9	8.5	3.8	56.7	12.3	42.1
Bensonhurst (11)	2,535	12.5	79.0	39.5	7.7	8.8	4.9	75.3	11.7	34.5
Borough Park (12)	4,946	24.9	32.4	27.0	5.2	5.8	2.1	78.5	10.3	33.7
Coney Island (13)	1,150	10.9	67.4	39.5	9.7	11.2	8.7	71.9	18.4	37.8
Flatbush, Midwood (14)	2,445	15.1	54.7	38.9	8.4	9.0	6.4	64.5	16.4	38.2
Sheepshead Bay (15)	2,273	13.2	62.1	38.0	6.7	8.0	5.2	60.9	10.7	42.2
Brownsville (16)	1,226	15.0	36.3	39.3	11.7	12.4	13.7	81.6	31.8	23.3
East Flatbush (17)	1,767	11.8	59.3	41.9	11.5	12.5	12.4	70.6	28.8	26.2
Canarsie (18)	2,173	11.4	48.4	39.4	10.2	10.4	8.5	56.8	27.1	30.8
QUEENS	24,324	10.6	68.3	43.4	8.4	8.7	7.5	63.6	17.8	40.4
Astoria, Long Island City (01)	1,972	10.2	54.1	52.3	7.0	8.3	7.4	47.0	16.8	55.4
Sunnyside, Woodside (02)	1,630	11.7	64.5	56.5	7.2	6.9	4.8	44.0	11.4	54.2
Jackson Heights (03)	2,080	11.9	79.0	39.5	7.1	8.5	5.7	78.8	19.0	36.3
Elmhurst, Corona (04)	2,081	11.4	84.1	39.3	7.0	8.4	8.0	82.9	17.6	34.2
Ridgewood, Glendale (05)	1,675	10.4	63.6	43.4	6.1	7.0	7.8	58.7	15.8	38.8
Rego Park, Forest Hills (06)	1,297	11.5	67.0	50.3	7.7	7.6	3.6	37.2	9.3	46.4
Flushing (07)	2,423	9.4	86.1	44.3	5.4	6.8	5.6	74.6	8.8	20.5
Fresh Meadows, Briarwood (08)	1,726	11.3	66.8	39.7	9.1	9.4	6.7	56.2	16.8	36.4
Woodhaven (09)	1,823	12.6	73.1	41.6	10.0	10.0	7.3	70.2	18.1	46.0
Howard Beach (10)	1,276	10.4	68.1	41.5	10.7	8.2	8.3	62.3	22.3	41.9
Bayside (11)	565	4.8	67.4	45.7	6.9	8.3	4.2	50.0	12.4	30.1
Jamaica, St. Albans (12)	2,895	12.7	65.7	39.4	12.3	11.0	12.2	70.2	26.1	44.9
Queens Village (13)	1,579	8.3	60.3	44.6	10.6	10.9	8.9	59.1	24.6	36.6
The Rockaways (14)	1,302	11.7	37.6	33.6	9.1	10.0	9.5	69.1	25.2	45.2
STATEN ISLAND	5,067	10.6	38.1	38.4	8.3	9.1	2.5	45.8	20.6	31.5
Port Richmond (01)	2,215	12.1	42.2	37.8	10.4	11.2	3.5	58.1	25.3	29.8
Willowbrook, South Beach (02)	1,364	10.0	47.8	36.6	6.8	8.1	2.1	49.7	16.7	32.8
Tottenville (03)	1,474	9.4	23.1	40.8	6.6	6.9	1.5	24.3	17.2	32.7
NEW YORK CITY RESIDENTS	102,427	12.2	51.5	42.5	8.4	8.9	6.8	60.8	18.4	41.5
NON-RESIDENTS	11,860	-	37.3	43.9	9.2	9.7	3.8	29.6	15.2	49.5
RESIDENCE UNKNOWN	9	-	37.5	14.3	12.5	12.5	0.0	100.0	12.5	22.2

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, 2018

Birthplace	Total	Borough of Residence					Non-Residents	Residence Unknown
		Manhattan	Bronx	Brooklyn	Queens	Staten Island		
United States	57,121	10,101	8,126	20,617	7,707	3,138	7,429	3
United States (excluding Puerto Rico)	56,282	9,986	7,728	20,457	7,603	3,117	7,388	3
Puerto Rico	839	115	398	160	104	21	41	-
Dominican Republic	7,616	1,146	4,062	1,048	953	69	336	2
China	6,486	688	48	2,533	2,484	253	480	-
Mexico	3,517	334	895	956	997	260	75	-
Bangladesh	2,910	56	548	601	1,631	16	58	-
Ecuador	2,140	107	298	367	1,273	26	69	-
Jamaica	2,112	54	518	766	560	16	198	-
Guyana	1,750	22	118	519	983	6	102	-
Pakistan	1,522	43	98	655	416	101	209	-
India	1,486	206	36	82	700	33	429	-
Uzbekistan	1,397	17	-	952	374	27	27	-
Haiti	1,298	34	35	819	290	5	115	-
Yemen	1,071	60	298	479	185	28	21	-
Russia	952	166	13	445	145	77	106	-
Israel	830	181	13	413	100	30	93	-
Ukraine	817	99	13	484	68	73	80	-
Guatemala	794	15	137	290	285	23	44	-
Trinidad and Tobago	784	26	44	403	232	11	68	-
Nigeria	777	31	183	242	174	87	60	-
Honduras	758	28	299	154	210	30	37	-
El Salvador	720	21	90	117	377	8	107	-
Colombia	702	71	30	88	414	22	77	-
Ghana	686	25	531	32	42	25	31	-
Egypt	668	41	20	218	238	88	63	-
Other or Not Stated	15,382	3,023	2,058	4,653	3,487	615	1,545	1
Total	114,296	16,595	18,511	37,933	24,325	5,067	11,859	6

Table PO9. Live Births by Mother's Birthplace and Age Group, New York City, 2018

Birthplace	Total	Age Group (Years)						Not Stated
		<20	20-24	25-29	30-34	35-39	≥40	
United States	57,121	1,900	9,601	13,039	17,443	11,883	3,254	1
United States (excluding Puerto Rico)	56,282	1,857	9,425	12,820	17,260	11,713	3,206	1
Puerto Rico	839	43	176	219	183	170	48	-
Dominican Republic	7,616	348	1,510	2,271	1,953	1,182	352	-
China	6,486	13	410	2,126	2,461	1,162	314	-
Mexico	3,517	84	372	801	1,174	818	268	-
Bangladesh	2,910	10	569	992	878	391	70	-
Ecuador	2,140	61	323	489	619	479	169	-
Jamaica	2,112	47	256	519	614	522	154	-
Guyana	1,750	41	324	472	455	336	122	-
Pakistan	1,522	13	206	537	510	212	44	-
India	1,486	1	56	343	666	341	79	-
Uzbekistan	1,397	28	431	415	340	151	32	-
Haiti	1,298	14	79	254	410	387	154	-
Yemen	1,071	75	250	329	234	130	53	-
Russia	952	2	15	165	461	229	80	-
Israel	830	5	100	140	271	242	72	-
Ukraine	817	0	44	184	324	215	50	-
Guatemala	794	51	154	223	217	123	26	-
Trinidad and Tobago	784	11	56	153	274	230	60	-
Nigeria	777	1	32	158	307	197	82	-
Honduras	758	45	152	172	204	143	42	-
El Salvador	720	39	156	177	177	134	37	-
Colombia	702	11	63	171	204	185	68	-
Ghana	686	2	25	146	283	149	81	-
Egypt	668	2	71	236	224	105	30	-
Other or Not Stated	15,382	88	1,043	2,927	5,361	4,448	1,515	-
Total	114,296	2,892	16,298	27,439	36,064	24,394	7,208	1

PREGNANCY OUTCOMES

Table PO10. Live Births and Pregnancy Rates* to Teenagers (Age 15-19 Years) by Racial/Ethnic Group and Borough of Residence, New York City, 2018

	Age Group (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	744	48	1,416	2,208	126,102	5.9	17.5
	18-19	2,148	132	2,676	4,956	94,846	22.6	52.3
	Age 15-19	2,892	180	4,092	7,164	220,948	13.1	32.4
Racial/Ethnic Group‡	15-17	480	18	505	1,003	45,869	10.5	21.9
	18-19	1,200	36	905	2,141	32,185	37.3	66.5
	Age 15-19	1,680	54	1,410	3,144	78,054	21.5	40.3
Asian and Pacific Islander	15-17	15	1	43	59	15,841	0.9	3.7
	18-19	62	1	102	165	12,637	4.9	13.1
	Age 15-19	77	2	145	224	28,478	2.7	7.9
Non-Hispanic White	15-17	38	3	87	128	29,058	1.3	4.4
	18-19	268	16	219	503	25,601	10.5	19.6
	Age 15-19	306	19	306	631	54,659	5.6	11.5
Non-Hispanic Black	15-17	197	11	584	792	32,200	6.1	24.6
	18-19	582	44	1,040	1,666	22,061	26.4	75.5
	Age 15-19	779	55	1,624	2,458	54,261	14.4	45.3
NYC Events to NYC Residents§	15-17	718	46	1,306	2,070	126,102	5.7	16.4
	18-19	2,060	123	2,478	4,661	94,846	21.7	49.1
	Age 15-19	2,778	169	3,784	6,731	220,948	12.6	30.5
Racial/Ethnic Group§	15-17	462	18	471	951	45,869	10.1	20.7
	18-19	1,165	36	860	2,061	32,185	36.2	64.0
	Age 15-19	1,627	54	1,331	3,012	78,054	20.8	38.6
Asian and Pacific Islander	15-17	15	1	39	55	15,841	0.9	3.5
	18-19	57	1	97	155	12,637	4.5	12.3
	Age 15-19	72	2	136	210	28,478	2.5	7.4
Non-Hispanic White	15-17	37	3	75	115	29,058	1.3	4.0
	18-19	240	14	186	440	25,601	9.4	17.2
	Age 15-19	277	17	261	555	54,659	5.1	10.2
Non-Hispanic Black	15-17	191	9	539	739	32,200	5.9	23.0
	18-19	565	41	961	1,567	22,061	25.6	71.0
	Age 15-19	756	50	1,500	2,306	54,261	13.9	42.5
Borough of Residence	15-17	69	7	197	273	16,438	4.2	16.6
	18-19	206	15	416	637	19,979	10.3	31.9
	Age 15-19	275	22	613	910	36,417	7.6	25.0
Bronx	15-17	242	10	397	649	27,413	8.8	23.7
	18-19	676	24	648	1,348	19,186	35.2	70.3
	Age 15-19	918	34	1,045	1,997	46,599	19.7	42.9
Brooklyn	15-17	204	19	365	588	40,202	5.1	14.6
	18-19	682	45	718	1,445	27,470	24.8	52.6
	Age 15-19	886	64	1,083	2,033	67,672	13.1	30.0
Queens	15-17	160	7	293	460	33,416	4.8	13.8
	18-19	416	33	616	1,065	22,651	18.4	47.0
	Age 15-19	576	40	909	1,525	56,067	10.3	27.2
Staten Island	15-17	43	3	54	100	8,633	5.0	11.6
	18-19	80	6	80	166	5,560	14.4	29.9
	Age 15-19	123	9	134	266	14,193	8.7	18.7
NYC Events to Non-NYC Residents	15-17	26	2	110	138	-	N.A.	N.A.
	18-19	88	9	198	295	-	N.A.	N.A.
	Age 15-19	114	11	308	433	-	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 race and ethnicity are not presented.

§ Numbers and rates are limited to events occurring in NYC to NYC residents only; other/unknown race and ethnicity 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, 2014-2018

	2014	2015	2016	2017	2018
Total Live Births	122,084	121,673	120,367	117,013	114,296
Percent to Teenagers (Age < 20)	3.7	3.3	2.8	2.7	2.5
Population* (Females Age 15-19)	235,417	232,369	231,576	229,278	220,948
Birth Rate† (Age 15-19)	19.4	17.5	14.8	13.8	13.1
Births to Teenagers	4,572	4,073	3,425	3,175	2,892
Percent of Births with Specified Characteristics:					
Hispanic	58.5	59.0	59.0	59.9	59.3
Foreign-born‡	30.0	31.8	33.5	32.7	34.2
First Live Birth	85.9	86.1	88.1	87.3	87.7
< 2,500 grams	9.6	10.5	9.7	10.6	9.5
Preterm§	9.3	10.0	9.0	10.6	9.3
Prenatal Care in First or Second Trimester of Pregnancy	85.4	84.7	85.3	84.3	84.4
Not Married	88.4	86.8	86.1	87.0	86.9
On Medicaid	90.3	91.0	90.3	90.4	90.2
Pre-pregnancy Obesity	13.6	13.9	13.6	14.3	15.2
Infant Mortality Rate¶	3.7	6.6	5.3	5.4	3.9

* 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 and by Community District of Residence, New York City, 2016-2018*

Community District of Residence	Live Births	Percent of Total Live Births	Foreign Born	First Live Birth	Low Birth Weight (< 2,500 Grams)	Preterm Birth (< 37 Weeks)	Late or No Prenatal Care	Not Married	On Medicaid†	Exclusive Breast Feeding
NEW YORK CITY	9,492	2.7	33.4	87.7	9.9	9.6	15.3	86.7	90.3	26.6
MANHATTAN	918	1.8	26.5	87.9	10.2	10.9	11.9	93.7	91.7	25.9
Battery Park, Tribeca (01)	1	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	0.0
Greenwich Village, SoHo (02)	5	0.2	20.0	100.0	0.0	0.0	0.0	100.0	100.0	20.0
Lower East Side (03)	89	2.4	14.9	87.6	7.9	11.4	11.1	93.3	93.0	39.3
Chelsea, Clinton (04)	35	1.2	17.1	82.9	11.4	5.7	14.3	97.1	94.1	37.1
Midtown Business District (05)	8	0.5	0.0	50.0	0.0	0.0	0.0	87.5	87.5	37.5
Murray Hill (06)	15	0.4	26.7	100.0	13.3	20.0	16.7	93.3	80.0	33.3
Upper West Side (07)	47	0.7	13.0	80.9	12.8	4.3	7.7	95.7	89.4	46.8
Upper East Side (08)	11	0.1	9.1	90.9	0.0	0.0	0.0	100.0	63.6	27.3
Manhattanville (09)	134	4.5	25.6	91.8	7.5	8.2	14.9	94.0	95.5	29.1
Central Harlem (10)	163	3.6	14.7	85.3	13.5	12.9	10.8	95.1	90.2	23.9
East Harlem (11)	177	4.0	15.8	87.0	11.9	16.9	11.0	93.2	90.9	23.2
Washington Heights (12)	233	3.8	53.6	91.0	9.0	8.6	12.8	91.8	92.7	15.9
BRONX	2,973	5.2	33.6	86.8	10.3	9.1	17.5	92.2	93.6	21.0
Mott Haven (01)	310	6.8	25.8	85.2	12.6	12.3	15.0	93.5	94.1	21.3
Hunts Point (02)	138	5.7	25.4	89.9	8.0	7.2	17.2	95.7	93.5	23.2
Morrisania (03)	237	5.5	19.4	86.1	7.6	8.0	19.2	94.9	91.6	21.9
Concourse, Highbridge (04)	394	5.5	44.2	87.6	9.4	7.6	16.0	91.9	94.6	17.8
University/Morris Heights (05)	373	5.7	41.3	85.4	11.3	10.5	15.4	91.7	93.2	15.8
East Tremont (06)	262	7.1	27.5	84.7	10.3	10.3	14.2	95.4	93.1	21.4
Fordham (07)	306	4.8	50.0	87.6	9.5	8.8	17.2	94.1	95.4	23.2
Riverdale (08)	68	2.2	42.6	91.2	13.2	8.8	17.2	92.6	95.5	20.6
Unionport, Soundview (09)	373	5.3	32.7	89.0	10.2	8.6	21.9	90.9	94.3	23.1
Throgs Neck (10)	87	2.9	16.1	93.1	14.9	9.2	17.4	87.4	88.5	23.0
Pelham Parkway (11)	155	3.8	34.8	85.8	9.7	9.7	22.2	75.5	92.9	31.0
Williamsbridge (12)	270	5.3	24.1	84.4	10.7	7.8	19.2	94.8	93.0	18.5
BROOKLYN	2,906	2.5	32.2	88.9	9.1	10.0	13.4	79.6	90.8	24.9
Williamsburg, Greenpoint (01)	162	1.5	13.6	96.3	4.9	8.0	9.9	55.6	90.1	39.8
Fort Greene, Brooklyn Heights (02)	54	1.1	15.1	88.9	13.0	16.7	2.0	98.1	84.9	13.0
Bedford Stuyvesant (03)	232	3.5	19.6	89.7	10.3	8.2	15.3	81.0	92.6	19.4
Bushwick (04)	188	5.3	33.5	91.5	6.9	9.0	16.5	96.3	94.0	22.3
East New York (05)	433	5.4	30.9	87.5	12.2	9.9	15.0	95.6	92.0	28.2
Park Slope (06)	37	0.7	24.3	86.5	10.8	10.8	11.1	89.2	97.2	18.9
Sunset Park (07)	177	2.6	50.3	82.5	5.6	9.6	8.5	84.7	96.0	21.0
Crown Heights North (08)	100	2.6	12.0	83.0	9.0	11.0	20.4	95.0	91.9	15.0
Crown Heights South (09)	63	1.4	54.0	92.1	6.3	9.5	20.0	85.7	95.1	23.8
Bay Ridge (10)	69	1.3	59.4	92.8	8.7	10.1	4.3	66.7	85.3	29.0
Bensonhurst (11)	130	1.6	60.0	89.2	8.5	10.8	10.2	62.3	92.3	29.7
Borough Park (12)	258	1.7	33.3	93.0	5.4	4.3	7.1	34.1	89.5	29.1
Coney Island (13)	135	3.7	31.1	83.7	12.6	14.1	13.3	81.5	97.0	18.5
Flatbush, Midwood (14)	173	2.3	43.9	86.7	10.4	11.0	12.5	74.6	90.1	23.8
Sheepshead Bay (15)	108	1.6	44.4	89.8	6.5	8.3	12.7	43.5	78.7	28.7
Brownsville (16)	242	6.3	15.7	90.1	9.9	11.2	15.6	97.9	89.5	24.0
East Flatbush (17)	198	3.6	37.4	87.4	11.6	15.7	22.3	94.4	90.7	20.2
Canarsie (18)	147	2.2	24.5	89.1	8.2	9.5	15.0	89.1	83.6	27.9
QUEENS	1,954	2.6	43.2	87.2	10.1	8.8	18.7	87.5	87.8	39.5
Astoria, Long Island City (01)	122	2.1	23.0	85.2	8.2	11.5	21.0	92.6	82.8	31.7
Sunnyside, Woodside (02)	55	1.1	36.4	90.9	7.3	7.3	23.6	85.5	96.4	32.7
Jackson Heights (03)	279	4.1	54.5	84.9	7.5	7.9	20.0	88.2	91.4	31.7
Elmhurst, Corona (04)	206	2.9	51.0	88.8	7.3	7.8	14.4	88.8	94.1	27.7
Ridgewood, Glendale (05)	137	2.5	35.0	91.2	8.0	10.9	23.3	83.9	85.3	24.8
Rego Park, Forest Hills (06)	30	0.7	63.3	83.3	13.3	10.0	10.0	63.3	93.1	30.0
Flushing (07)	115	1.4	60.9	92.2	5.2	7.0	10.6	81.7	87.8	32.2
Fresh Meadows, Briarwood (08)	64	1.2	42.2	85.9	7.8	3.1	19.4	68.8	84.4	34.4
Woodhaven (09)	158	2.8	44.9	83.5	12.0	10.1	16.7	86.1	88.0	58.9
Howard Beach (10)	105	2.7	52.4	89.5	12.4	5.7	17.5	83.8	83.8	62.9
Bayside (11)	10	0.5	40.0	90.0	0.0	10.0	10.0	90.0	100.0	30.0
Jamaica, St. Albans (12)	356	4.0	40.3	87.4	14.3	9.0	19.6	92.1	83.9	51.1
Queens Village (13)	125	2.5	38.4	94.4	12.0	8.0	19.7	86.4	81.5	40.8
The Rockaways (14)	192	4.9	28.1	80.2	12.0	12.0	22.3	93.8	91.1	38.0
STATEN ISLAND	378	2.4	14.6	84.6	10.6	10.8	7.8	90.5	79.5	20.2
Port Richmond (01)	291	4.3	11.3	84.2	9.3	10.7	9.1	94.5	81.4	19.0
Willowbrook, South Beach (02)	56	1.3	36.4	87.3	10.7	8.9	3.6	78.6	85.5	23.2
Tottenville (03)	30	0.6	6.7	86.7	23.3	16.7	3.3	76.7	53.3	26.7
NEW YORK CITY RESIDENTS	9,129	2.9	33.7	87.6	9.9	9.6	15.5	87.3	90.7	26.7
NON-RESIDENTS	361	1.0	26.9	91.1	11.6	10.2	10.5	71.2	79.7	24.4
RESIDENCE UNKNOWN	2	-	-	100.0	-	-	-	100.0	50.0	-

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 women.

† 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 Woman's Age Group, New York City, 2018*

Borough of Residence / Pregnancy Outcome	Total	Age Group (Years)							Unknown or Not Stated
		< 18	18-19	20-24	25-29	30-34	35-39	≥ 40	
NEW YORK CITY	171,731	2,208	4,956	29,995	43,210	48,411	32,399	10,548	4
Live Births	114,296	744	2,148	16,298	27,439	36,064	24,394	7,208	1
Spontaneous Terminations	7,676	48	132	864	1,512	2,109	1,958	1,052	1
Induced Terminations	49,759	1,416	2,676	12,833	14,259	10,238	6,047	2,288	2
MANHATTAN	27,198	273	637	3,534	5,566	8,713	6,338	2,137	-
Live Births	16,595	69	206	1,240	2,653	6,264	4,731	1,432	-
Spontaneous Terminations	1,278	7	15	74	175	421	390	196	-
Induced Terminations	9,325	197	416	2,220	2,738	2,028	1,217	509	-
BRONX	31,088	649	1,348	6,930	9,041	7,402	4,255	1,463	-
Live Births	18,511	242	676	3,752	5,357	4,800	2,789	895	-
Spontaneous Terminations	1,106	10	24	159	283	266	226	138	-
Induced Terminations	11,471	397	648	3,019	3,401	2,336	1,240	430	-
BROOKLYN	52,468	588	1,445	9,947	13,281	14,131	9,886	3,189	1
Live Births	37,932	204	682	6,446	9,315	11,055	7,857	2,373	-
Spontaneous Terminations	2,259	19	45	306	441	587	559	302	-
Induced Terminations	12,277	365	718	3,195	3,525	2,489	1,470	514	1
QUEENS	37,245	460	1,065	6,455	9,963	10,460	6,661	2,181	-
Live Births	24,325	160	416	3,255	6,512	7,727	4,883	1,372	-
Spontaneous Terminations	1,838	7	33	229	417	480	419	253	-
Induced Terminations	11,082	293	616	2,971	3,034	2,253	1,359	556	-
STATEN ISLAND	6,697	100	166	937	1,751	2,193	1,208	342	-
Live Births	5,067	43	80	551	1,304	1,841	996	252	-
Spontaneous Terminations	370	3	6	34	74	115	98	40	-
Induced Terminations	1,260	54	80	352	373	237	114	50	-
NON-RESIDENTS	16,948	137	288	2,175	3,587	5,489	4,037	1,235	-
Live Births	11,860	26	88	1,054	2,297	4,373	3,138	884	-
Spontaneous Terminations	823	2	8	62	122	240	266	123	-
Induced Terminations	4,266	109	192	1,059	1,168	876	633	228	1
RESIDENCE UNKNOWN	86	1	7	17	21	23	14	1	2
Live Births	6	-	-	-	1	4	-	-	1
Spontaneous Terminations	2	-	1	-	-	-	-	-	1
Induced Terminations	78	1	6	17	20	19	14	1	-

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

PREGNANCY OUTCOMES

**Table PO14. Spontaneous Terminations of Pregnancy by Gestational Age and Woman's Age Group
New York City, 2018**

Gestational Age (Weeks)	Age Group (Years)								
	Total	< 18	18-19	20-24	25-29	30-34	35-39	≥ 40	Unknown or not stated
Total	7,676	48	132	864	1,512	2,109	1,958	1,052	1
< 13	5,727	34	100	604	1,051	1,566	1,522	850	-
13-15	488	1	4	56	113	140	117	57	-
16-19	586	7	5	72	143	171	124	64	-
20-27	495	5	17	80	114	135	101	43	-
≥ 28	378	1	6	52	91	96	94	38	-
Not Stated	2	-	-	-	-	1	-	-	1

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

**Table PO15. Selected Characteristics of Spontaneous Terminations of Pregnancy, ≥ 28 Weeks Gestation,
Overall and by Woman's Age Group, New York City, 2018**

	Age Group (Years)								
	Total	< 18	18-19	20-24	25-29	30-34	35-39	≥ 40	
Total	378	1	6	52	91	96	94	38	
Sex									
Male	193	-	5	30	42	53	46	17	
Female	176	1	1	21	46	42	46	19	
Undetermined	9	-	-	1	3	1	2	2	
Weight at Delivery (Grams)									
< 500	12	-	-	1	4	3	3	1	
500-999	36	-	1	7	9	6	10	3	
1,000-1,499	46	-	3	5	13	7	13	5	
1,500-1,999	60	1	-	10	12	17	14	6	
2,000-2,499	70	-	1	7	20	23	15	4	
≥ 2,500	139	-	1	19	31	35	35	18	
Not stated	15	-	-	3	2	5	4	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 Woman's Racial/Ethnic Group, New York City, 2018*

	Racial/Ethnic Group							
	Total	Puerto Rican	Other Hispanic	Asian and Pacific Islander	Non-Hispanic White	Non-Hispanic Black	Other	Not Stated
Total	378	7	58	47	102	105	12	47
Sex								
Male	193	4	35	23	45	58	7	21
Female	176	2	23	24	53	44	5	25
Undetermined	9	1	-	-	4	3	-	1
Weight at Delivery (Grams)								
< 500	12	1	1	1	4	4	-	1
500-999	36	1	6	4	5	17	-	3
1,000-1,499	46	1	3	5	12	16	3	6
1,500-1,999	60	-	10	7	10	23	1	9
2,000-2,499	70	1	12	9	19	17	4	8
$\geq 2,500$	139	2	25	19	45	28	4	16
Not stated	15	1	1	2	7	-	-	4

*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, 2018*

Borough of Residence / Pregnancy Outcome	Total	Borough of Occurrence				
		Manhattan	Bronx	Brooklyn	Queens	Staten Island
NEW YORK CITY	164,433	65,182	21,686	34,708	37,077	5,780
Live Births	114,296	42,945	13,452	28,270	23,963	5,666
Spontaneous Terminations	378	137	45	111	71	14
Induced Terminations	49,759	22,100	8,189	6,327	13,043	100
MANHATTAN	25,963	23,709	1,040	516	687	11
Live Births	16,595	15,893	295	271	126	10
Spontaneous Terminations	43	40	1	2	-	-
Induced Terminations	9,325	7,776	744	243	561	1
BRONX	30,051	9,960	19,183	348	538	22
Live Births	18,511	5,756	12,262	240	231	22
Spontaneous Terminations	69	26	39	4	-	-
Induced Terminations	11,471	4,178	6,882	104	307	-
BROOKLYN	50,359	15,237	227	30,242	3,388	1,265
Live Births	37,932	10,048	96	25,065	1,473	1,250
Spontaneous Terminations	150	43	1	97	4	5
Induced Terminations	12,277	5,146	130	5,080	1,911	10
QUEENS	35,483	6,635	216	1,879	26,718	35
Live Births	24,325	4,556	106	1,479	18,150	34
Spontaneous Terminations	76	13	1	5	57	-
Induced Terminations	11,082	2,066	109	395	8,511	1
STATEN ISLAND	6,339	1,028	30	1,011	101	4,169
Live Births	5,067	291	11	662	30	4,073
Spontaneous Terminations	12	2	-	1	-	9
Induced Terminations	1,260	735	19	348	71	87
NON-RESIDENTS	16,153	8,556	985	701	5,634	277
Live Births	11,860	6,400	681	551	3,952	276
Spontaneous Terminations	27	13	3	1	10	-
Induced Terminations	4,266	2,143	301	149	1,672	1
RESIDENCE UNKNOWN	85	57	5	11	11	1
Live Births	6	1	1	2	1	1
Spontaneous Terminations	1	-	-	1	-	-
Induced Terminations	78	56	4	8	10	-

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

PREGNANCY OUTCOMES

Table PO18. Induced Terminations of Pregnancy by Selected Characteristics and Woman's Age Group, New York City, 2018*

	Total	Age Group (Years)							Not Stated
		< 18	18-19	20-24	25-29	30-34	35-39	≥ 40	
Induced Termination of Pregnancy, All	49,759	1,416	2,676	12,833	14,259	10,238	6,047	2,288	2
Racial/Ethnic Group									
Hispanic	14,114	505	905	4,088	4,029	2,653	1,436	498	-
Asian and Pacific Islander	2,998	43	102	646	819	697	509	182	-
Non-Hispanic White	6,593	87	219	1,310	1,866	1,573	1,086	452	-
Non-Hispanic Black	17,252	584	1,040	4,696	5,137	3,382	1,794	618	1
Other	949	21	64	277	278	168	95	46	-
Unknown	7,853	176	346	1,816	2,130	1,765	1,127	492	1
Marital Status									
Married	7,888	17	89	980	2,015	2,259	1,768	760	-
Not married	34,943	1,254	2,312	10,365	10,405	6,348	3,199	1,059	1
Other/Unknown	6,928	145	275	1,488	1,839	1,631	1,080	469	1
Gestational Age (Weeks)									
≤ 6	21,637	504	1,067	5,417	6,531	4,565	2,586	967	-
7 - 8	14,083	366	726	3,599	4,045	2,925	1,766	656	-
9 - 10	5,712	171	338	1,585	1,582	1,142	659	235	-
11 - 12	2,923	117	199	807	779	535	341	145	-
13 - 15	2,119	83	122	557	520	422	295	120	-
16 - 20	2,033	101	142	573	506	377	228	106	-
≥ 21	1,171	73	81	277	283	246	157	53	1
Unknown	81	1	1	18	13	26	15	6	1
Type of Primary Termination Procedure									
Suction curettage	31,075	826	1,603	7,780	8,905	6,551	3,908	1,501	1
Sharp curettage / D+C	1,190	30	35	230	273	265	236	121	-
Dilation and evacuation	3,497	158	230	940	862	664	458	185	-
Intrauterine instillation	23	.	.	2	4	10	4	3	-
Hysterotomy / hysterectomy	15	.	2	5	5	2	1	.	-
Medical (non-surgical)	13,836	399	803	3,860	4,191	2,708	1,407	468	-
Other	58	2	1	4	10	15	18	8	-
Procedure Missing	65	1	2	12	9	23	15	2	1

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

Table PO19. Induced Terminations of Pregnancy by Woman's Marital Status, Age Group, and Racial/Ethnic Group, New York City, 2014-2018*

	2014	2015	2016	2017	2018
Marital Status (Percent)					
Married	13.9	14.7	14.6	15.3	15.9
Not married	73.6	72.8	75.3	72.9	70.2
Other/Unknown	12.6	12.6	10.1	11.8	13.9
Age Group (Years)					
< 20	7,067	5,908	5,400	4,754	4,092
20 - 24	19,764	18,049	16,218	14,492	12,833
25 - 29	18,345	17,499	17,004	15,576	14,259
30 - 34	12,462	11,979	11,607	10,725	10,238
35 - 39	7,262	7,108	6,981	6,474	6,047
≥ 40	2,718	2,705	2,642	2,368	2,288
Unknown	2	2	2	2	2
Racial/Ethnic Group					
Hispanic	20,371	18,139	16,718	14,443	14,114
Asian and Pacific Islander	4,547	4,012	3,490	3,047	2,998
Non-Hispanic White	9,401	9,652	9,139	7,471	6,593
Non-Hispanic Black	27,367	25,515	23,209	20,569	17,252
Other	2,477	2,155	1,711	1,930	949
Unknown	3,457	3,777	5,587	6,931	7,853
Total	67,620	63,250	59,854	54,391	49,759

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

PREGNANCY OUTCOMES

Table PO20. Characteristics of Birth and Pregnancy Outcomes by Neighborhood Poverty*†, New York City, 2009 and 2018

Birth Characteristics	Low (< 10%)			Medium (10 to <20%)			High (20 to <30%)			Very High (≥ 30%)		
	2018	2009	Chg 2009 to 2018 (%)	2018	2009	Chg 2009 to 2018 (%)	2018	2009	Chg 2009 to 2018 (%)	2018	2009	Chg 2009 to 2018 (%)
Births	23,582	28,380	-16.9	29,508	32,150	-8.2	22,262	25,654	-13.2	26,990	30,542	-11.6
Population	2,317,327	2,568,779	-9.8	2,631,852	2,409,595	9.2	1,733,143	1,571,814	10.3	1,707,264	1,626,937	4.9
Birth Rate (per 1,000 population)	10.2	11.0	-7.9	11.2	13.3	-16.0	12.8	16.3	-21.3	15.8	18.8	-15.8
Preterm Live Births (%)	8.0	9.0	-11.1	9.0	9.2	-2.2	9.5	9.7	-2.1	9.2	10.1	-8.9
Low Birth Weight (%)	7.5	8.4	-10.7	8.4	8.4	0.0	9.1	8.4	8.3	8.8	9.5	-7.4
Body Mass Indicator												
Normal (%)	61.5	63.1	-2.5	52.0	53.9	-3.5	47.0	51.0	-7.8	43.8	46.9	-6.6
Overweight/Obese (%)	32.8	30.8	6.5	42.9	40.5	5.9	48.1	43.0	11.9	51.2	48.0	6.7
C-section (%)	34.0	36.2	-6.1	33.9	34.3	-1.2	33.9	31.3	8.3	29.7	29.0	2.4
Multiple Births (%)	3.7	4.9	-24.5	3.4	3.4	0.0	3.3	3.1	6.5	3.1	3.0	3.3
Breastfed Exclusively (%)	56.4	39.7	42.1	43.9	29.8	47.3	36.2	26.7	35.6	30.2	28.2	7.1
Late or No Prenatal Care (%)	4.4			6.6			7.8			8.5		
Foreign Born (%)‡	44.0	45.7	-3.7	59.0	61.4	-3.9	58.6	58.8	-0.3	43.9	42.8	2.6

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

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

‡See Technical Notes: Geographical Units, Birthplace Presentation.

PREGNANCY OUTCOMES

Table PO21. Pregnancy Outcomes, Pregnancy Outcome Rates*, and Pregnancy Rates* by Woman's Age Group, Racial/Ethnic Group, and Borough of Residence, New York City, 2018

	Age Group†	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	2,892	13.1	180	0.8	4,092	18.5	7,164	32.4
	20-29	43,737	64.7	2,376	3.5	27,092	40.1	73,205	108.3
	30-39	60,458	88.8	4,067	6.0	16,285	23.9	80,810	118.7
	40-49	7,208	13.1	1,052	1.9	2,288	4.1	10,548	19.1
	Total	114,296	13.6	7,676	4.1	49,759	26.8	171,731	92.6
Racial/Ethnic Group§ 									
Hispanic	15-19	1,680	21.5	54	0.7	1,410	18.1	3,144	40.3
	20-29	14,800	75.4	514	2.6	8,117	41.3	23,431	119.3
	30-39	13,621	73.1	645	3.5	4,089	21.9	18,355	98.5
	40-49	1,605	9.9	175	1.1	498	3.1	2,278	14.1
	Total	31,706	12.9	1,388	2.6	14,114	26.0	47,208	87.1
Asian and Pacific Islander	15-19	77	2.7	2	0.1	145	5.1	224	7.9
	20-29	6,692	64.5	183	1.8	1,465	14.1	8,340	80.4
	30-39	11,138	97.6	416	3.6	1,206	10.6	12,760	111.8
	40-49	1,117	11.8	108	1.1	182	1.9	1,407	14.9
	Total	19,024	15.4	709	2.4	2,998	10.2	22,731	77.3
Non-Hispanic White	15-19	306	5.6	19	0.3	306	5.6	631	11.5
	20-29	12,433	58.3	505	2.4	3,176	14.9	16,114	75.6
	30-39	24,639	107.4	1,326	5.8	2,659	11.6	28,624	124.7
	40-49	2,949	18.8	307	2.0	452	2.9	3,708	23.6
	Total	40,327	15.0	2,157	3.7	6,593	11.4	49,077	85.0
Non-Hispanic Black	15-19	779	14.4	55	1.0	1,624	29.9	2,458	45.3
	20-29	9,104	61.9	589	4.0	9,833	66.9	19,526	132.8
	30-39	9,875	71.8	689	5.0	5,176	37.6	15,740	114.4
	40-49	1,387	10.8	192	1.5	618	4.8	2,197	17.0
	Total	21,145	11.4	1,525	3.8	17,252	43.0	39,922	99.5
Borough of Residence¶									
Manhattan	15-19	275	7.6	22	0.6	613	16.8	910	25.0
	20-29	3,893	24.3	249	1.6	4,958	30.9	9,100	56.8
	30-39	10,995	71.6	811	5.3	3,245	21.1	15,051	98.0
	40-49	1,432	13.8	196	1.9	509	4.9	2,137	20.6
	Total	16,595	10.2	1,278	3.2	9,325	23.1	27,198	67.5
Bronx	15-19	918	19.7	34	0.7	1,045	22.4	1,997	42.9
	20-29	9,109	79.2	442	3.8	6,420	55.8	15,971	138.8
	30-39	7,589	71.3	492	4.6	3,576	33.6	11,657	109.6
	40-49	895	9.6	138	1.5	430	4.6	1,463	15.6
	Total	18,511	12.9	1,106	3.5	11,471	36.5	31,088	98.8
Brooklyn	15-19	886	13.1	64	0.9	1,083	16.0	2,033	30.0
	20-29	15,761	75.5	747	3.6	6,720	32.2	23,228	111.2
	30-39	18,912	86.2	1,146	5.2	3,959	18.1	24,017	109.5
	40-49	2,373	14.1	302	1.8	514	3.0	3,189	18.9
	Total	37,932	14.7	2,259	3.9	12,277	21.1	52,468	90.2
Queens	15-19	576	10.3	40	0.7	909	16.2	1,525	27.2
	20-29	9,767	60.9	646	4.0	6,005	37.4	16,418	102.3
	30-39	12,610	73.7	899	5.3	3,612	21.1	17,121	100.1
	40-49	1,372	8.9	253	1.6	556	3.6	2,181	14.2
	Total	24,325	10.7	1,838	4.0	11,082	23.9	37,245	80.4
Staten Island	15-19	123	8.7	9	0.6	134	9.4	266	18.7
	20-29	1,855	59.7	108	3.5	725	23.3	2,688	86.5
	30-39	2,837	92.6	213	7.0	351	11.5	3,401	111.0
	40-49	252	7.9	40	1.3	50	1.6	342	10.7
	Total	5,067	10.6	370	4.1	1,260	13.8	6,697	73.5

Population data used to calculate rates are 2018 estimates from the US Census Bureau. See Technical Notes: Population.

*See Technical Notes: Population, Vital Event Rates.

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

‡Counts for females ages 15 to 19 are the number of events to females age <20; counts for females ages 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 race and ethnicity are excluded.

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

PREGNANCY OUTCOMES

Table PO22. 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	2018
1	Mary	Mary	Linda	Jennifer	Stephanie	Ashley	Emily	Isabella	Sophia	Sophia	Olivia	Olivia	Emma	Emma
2	Catherine	Marie	Mary	Jessica	Jessica	Samantha	Ashley	Sophia	Isabella	Isabella	Sophia	Sophia	Olivia	Isabella
3	Margaret	Annie	Barbara	Melissa	Ashley	Kayla	Kayla	Olivia	Emma	Olivia	Emma/Mia	Emma	Mia	Sophia
4	Annie	Margaret	Patricia	Nicole	Jennifer	Emily	Sarah	Emily	Olivia	Mia	Isabella	Isabella	Sophia	Mia
5	Rose	Catherine	Susan	Michelle	Amanda	Brianna	Isabella	Madison	Mia	Emma	Leah	Mia	Isabella	Olivia
6	Marie	Gloria	Kathleen	Elizabeth	Samantha	Sarah	Samantha	Mia	Emily	Emily	Emily	Ava	Ava	Ava
7	Esther	Helen	Carol	Lisa	Nicole	Jessica	Sophia	Emma	Leah	Leah	Ava	Emily	Leah	Leah
8	Sarah	Teresa	Nancy	Christina	Christina	Nicole	Nicole	Leah	Sofia	Ava	Chloe	Leah	Emily	Sarah
9	Frances	Joan	Margaret	Tiffany	Melissa	Michelle	Olivia	Sarah	Madison	Sofia	Madison	Sarah	Sarah	Amelia
10	Ida	Barbara	Diane	Maria	Michelle	Amanda	Rachel	Chloe	Chloe	Chloe	Sarah	Madison	Abigail	Chloe

Rank	Boys													
	1898	1928	1948	1980	1990	2000	2005	2010	2013	2014	2015	2016	2017	2018
1	John	John	Robert	Michael	Michael	Michael	Michael	Jayden	Jayden	Ethan	Ethan	Liam	Liam	Liam
2	William	William	John	David	Christopher	Justin	Daniel	Ethan	Ethan	Jacob	Liam	Jacob	Noah	Noah
3	Charles	Joseph	James	Jason	Jonathan	Christopher	Joshua	Daniel	Jacob	Liam	Noah	Ethan	Jacob	Ethan
4	George	James	Michael	Joseph	Anthony	Matthew	David	Jacob	Daniel	Jayden	Jacob	Noah	Ethan	Jacob
5	Joseph	Richard	William	Christopher	David	Daniel	Justin	David	David	Noah	Jayden	Aiden	David	Aiden
6	Edward	Edward	Richard	Anthony	Daniel	Anthony	Matthew	Justin	Noah	Daniel	Matthew	Matthew	Lucas	David
7	James	Robert	Joseph	John	Joseph	Joshua	Anthony	Michael	Michael	Michael	David	Daniel	Matthew	Lucas
8	Louis	Thomas	Thomas	Daniel	Matthew	David	Christopher	Matthew	Matthew	Alexander	Daniel/Dylan	Lucas	Jayden	Matthew
9	Francis	George	Stephen	Robert	John	Joseph	Joseph	Joseph	Alexander	David	Aiden	Michael	Aiden	Daniel
10	Samuel	Louis	David	James	Andrew	Kevin	Nicholas	Joshua	Liam	Matthew	Michael	Dylan	Daniel	Alexander

Table PO23. Most Popular Baby Names by Sex and Mother's Racial/Ethnic Group, New York City, 2018

Rank	Girls					Boys				
	Overall	Hispanic	NH-Black	NH-White	Asian & P.I.	Overall	Hispanic	NH-Black	NH-White	Asian & P.I.
1	Emma	Isabella	Ava	Esther	Chloe	Liam	Liam	Noah	David	Muhammad
2	Isabella	Emma	Madison	Leah	Olivia	Noah	Noah	Liam	Joseph	Ethan
3	Sophia	Sophia	Olivia	Sarah	Mia	Ethan	Matthew	Aiden	Michael	Jasper
4	Mia	Mia	Skylar	Olivia	Sophia	Jacob	Dylan	Jeremiah	Moshe	Aiden
5	Olivia	Camila	Amelia	Chaya	Emma	Aiden	Sebastian	Josiah*	Jacob	Ryan
6	Ava	Sofia	Zuri	Emma	Amelia	David	Jacob	Logan*	Benjamin	Lucas
7	Leah	Luna	Riley	Rachel	Emily	Lucas	Jayden	Amir†	Alexander	Jayden
8	Sarah	Valentina	Chloe	Charlotte	Evelyn	Matthew	Ethan	Ethan†	James	Liam
9	Amelia	Abigail	Isabella	Chana	Grace*	Daniel	Lucas	Elijah	William	Noah
10	Chloe	Amelia	Zoey	Sophia	Isabella*	Alexander	Aiden	Jayden	Jack	Daniel

* Tied ranks

† Tied ranks

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

SUMMARY OF VITAL STATISTICS
2018
THE CITY OF NEW YORK
Appendix B

Technical Notes and
New York City Vital Event Certificates



POPULATION

CITYWIDE POPULATION

The 2018 NYC population estimates used in tables and figures are based on the US Census Bureau 2018 Vintage population estimate as extracted from the Census website (<https://www.census.gov/data/datasets/2018/demo/popest/counties-detail.html/cc-est2018-alldata-36.csv>). The 2018 US Census population estimate for New York City (NYC) is 8,398,748. See Table PC2 for 2018 NYC population estimates by age, mutually exclusive race and Hispanic origin, and sex. Population data used to compute rate trends (2009-2018), regardless of NYC geography presented, was estimated by DOHMH, Epidemiology Services, using the methodology found below under Community District Population Estimates. Population estimates for 2012-2018 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 "other Hispanic, Latino, or Spanish origin." People who do not identify with one of the specific origins listed on the questionnaire but indicate that they are "another Hispanic, Latino, or Spanish origin" are those whose origins are from Spain, the Spanish-speaking countries of Central or South America, or the Dominican Republic. The terms "Hispanic," "Latino," and "Spanish" are used interchangeably.

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

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

COMMUNITY DISTRICT POPULATION ESTIMATES

Community districts were established by City Charter in 1969 for the delivery of city services. Population data for these districts are compiled by 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.

2018 Community District estimates

The 2018 Community District population estimates were calculated based on the Census postcensal estimate for 2018 released in June 2019 (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 2011-2018 were extrapolated based on single-year age groups of Census population, 2000 and 2010. Life expectancy for Asians and Pacific Islanders is not displayed because the required single year of age population denominators are too small to produce reliable estimates. Also See Technical Notes: Deaths, Life Expectancy.

AGE CATEGORIES

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

DEMOGRAPHICS/CHARACTERISTICS OF VITAL EVENTS

AGE AT DEATH

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

RACE, ANCESTRY, AND ETHNIC GROUP

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

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

Infant Mortality

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. Puerto Rico, 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 included in the United States counts, as well as reported individually so as to identify any emergent health issues.

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:

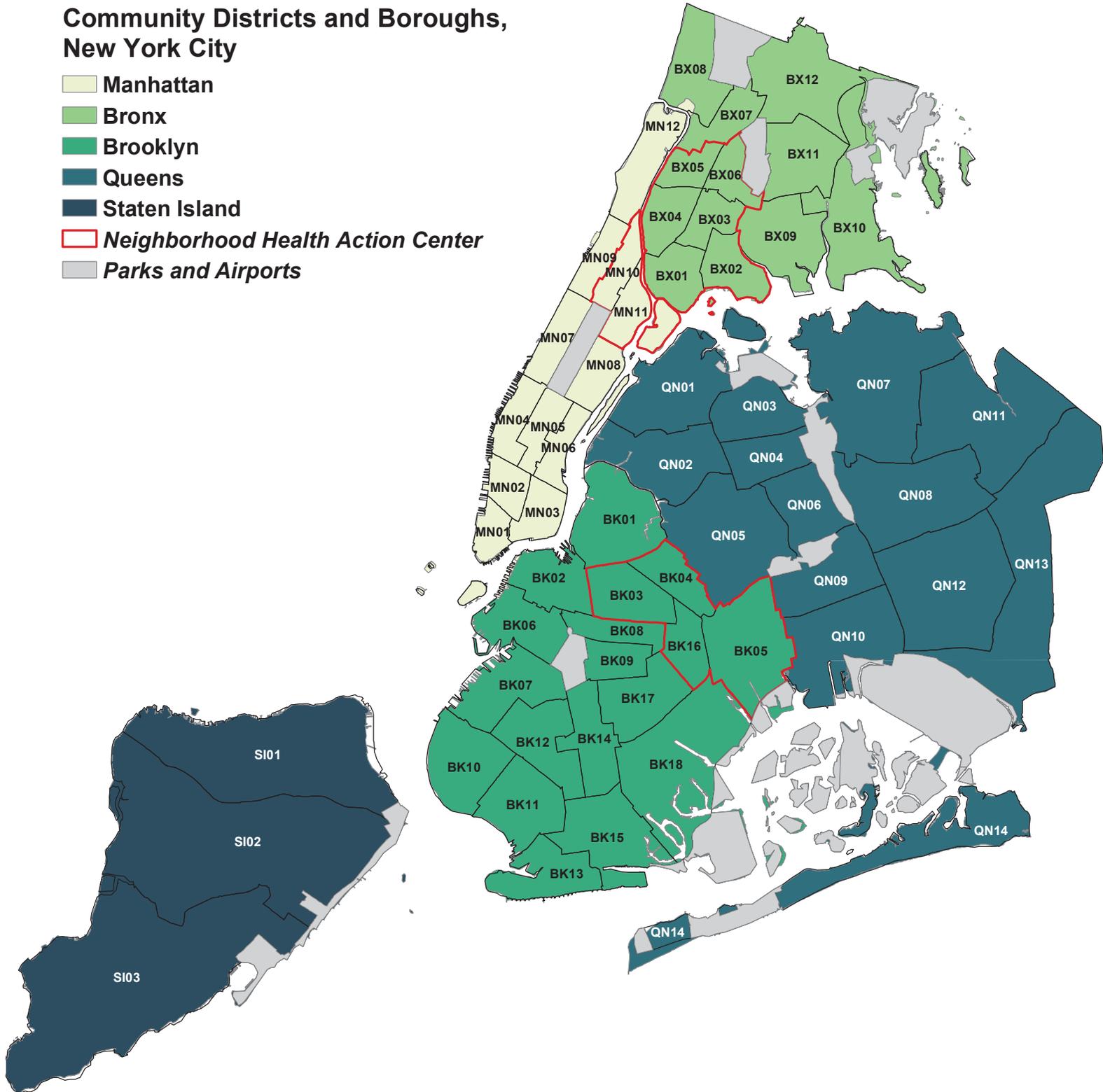
Low: < 10% of the population below poverty	Medium: 10-19% of the population below poverty	High: 20-29% of the population below poverty	Very High: ≥ 30% of the population below poverty
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The denominator of any rate by neighborhood poverty category contains 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

Community Districts and Boroughs,
New York City

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



VITAL EVENT RATES

DEATH RATES

<p>Death Rate, all causes per 1,000 population</p> $\frac{\text{Deaths to all causes}}{\text{Population}} \times 1,000$	<p>Death Rate, specified causes per 100,000 population</p> $\frac{\text{Deaths to specific causes (specified ICD10 codes)}}{\text{Population}} \times 100,000$
<p>Death Rate, age and sex specific per 1,000 population</p> $\frac{\text{Deaths to persons of specified age group and sex}}{\text{Population, specified age group and sex}} \times 1,000$	<p>Death Rate, age-adjusted per 100,000 population</p> <p>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.</p>
<p>Maternal Mortality Ratio – World Health Organization Definition (Appendix A Table M13)</p> $\frac{\text{Deaths due to complications of pregnancy, childbirth and the puerperium occurring within 42 days of delivery}}{\text{Live births}} \times 100,000$ <p>*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)</p>	
<p>Perinatal Mortality Ratio</p> $\frac{\text{Fetal deaths 28 weeks and over + infant deaths under 7 days}}{\text{Fetal deaths 28 weeks and over + live births}} \times 1,000$	

INFANT MORTALITY RATES

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

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

<p>Fertility Rate</p> $\frac{\text{Live births}}{\text{Female population aged 15 to 44 years}} \times 1,000$	<p>Pregnancy Rate</p> $\frac{\sum (\text{Births, Spontaneous, Induced Terminations})}{\text{Female population aged 15 to 44 years}} \times 1,000$
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<p>BIRTH RATES</p>	
<p>Total birth rate</p> $\frac{\text{Total births}}{\text{Total population regardless of age or sex}} \times 1,000$	<p>Age-specific birth rate</p> $\frac{\text{Births among specific age group}}{\text{Female population of specific age group}} \times 1,000$
<p>Total spontaneous termination rate</p> $\frac{\text{Total spontaneous terminations}}{\text{Female population ages 15 to 44 years}} \times 1,000$	<p>Age-specific spontaneous termination rate</p> $\frac{\text{Spontaneous terminations among specific aged females}}{\text{Female population of specified age group}} \times 1,000$

TECHNICAL NOTES, 2018

<p style="text-align: center;"><u>Total induced termination of pregnancy rate</u></p> $\frac{\text{Total induced terminations}}{\text{Female population age 15 to 44 years}} \times 1,000$	<p style="text-align: center;"><u>Age-specific induced termination of pregnancy rate</u></p> $\frac{\text{Induced terminations among specific aged females}}{\text{Female population of specified age group}} \times 1,000$
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<p>Fetal-infant Mortality Rate (FIMR)</p> $\frac{[\text{Fetal deaths (weight } \geq 500 \text{ grams and gestational age } \geq 24 \text{ weeks)} + \text{infant deaths (under 1 year old)}]}{[\text{Live births (birthweight } \geq 500 \text{ grams)}]} \times 1,000$
--

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, now replaced by eVital as of October 15, 2018) 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, now replaced by eVital as of October 15, 2018). Since the June 1993 revision of the death certificate, decedent race and ancestry information is reported by funeral directors.

DEATH RATES

See Vital Event Rates.

TYPE OF PLACE OF DEATH

“Hospital” includes residential units and other special facilities within the hospital. “Nursing home” includes only sites licensed as Extended Care Facilities by New York State. “Home” refers to the decedent’s residence, and includes private houses and apartments, group quarters for special populations, homes for adults, and other long-term residential sites.

CAUSE OF DEATH REPORTING

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

- immediate cause – the specific condition that directly preceded the death.
- intermediate cause(s) – the significant condition(s) that preceded and gave rise to the immediate cause of death.
- underlying cause – the disease or condition that set off the chain of events leading to death.

For further information on how cause of death should be documented, visit <https://www1.nyc.gov/site/doh/providers/reporting-and-services/evital.page>.

CAUSE OF DEATH- QUALITY IMPROVEMENT INITIATIVE

The Office of Vital Statistics (OVS) 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:

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

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:

$$\text{SAF} = [p_0 + p_1(\text{RR}_1) + p_2(\text{RR}_2) - 1] / [p_0 + p_1(\text{RR}_1) + p_2(\text{RR}_2)]$$

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 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:

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

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, 2018

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.

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 (Federal Bureau of Investigation). 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:

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

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 (now eVital). 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 of Health 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 in 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, now replaced by eVital as of October 15, 2018); 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.

TECHNICAL NOTES, 2018

HISTORICAL TECHNICAL NOTES

POPULATION

POPULATION ESTIMATES

2013-2017

Tables and figures with 2013-2017 data use intercensal population estimates determined by Census Bureau in 2013-2017 vintage files. Tables and figures with 2001-2012 data use intercensal population estimates determined by Census Bureau released as of September 2012.

2010-2017

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

2013-2017

Community District population estimates for 2013-2017 were based on Census intercensal estimates by county, age, race, and sex, 2013-2017 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 NCHS certified nosologists.

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 – present

Unintentional Drug-related Overdose Deaths (Mortality: Figure 19), a definition used in Take Care New York (TCNY) was reported in the Summaries starting in 2008. 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 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 the 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:

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

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

WORLD TRADE CENTER DEATHS

2008 – present

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

2007, 2008

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

In 2008, a 2001 death was reclassified as a 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.

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	4a. DATE OF CHILD'S BIRTH (Month) (Day) (Year - yyyy)	4b. TIME <input type="checkbox"/> AM <input type="checkbox"/> PM
	3b. If more than one, number of this child in order of delivery		
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	<input type="checkbox"/> Hospital <input type="checkbox"/> Freestanding Birthing Center <input type="checkbox"/> Clinic/Doctor's Office <input type="checkbox"/> Home Delivery: Planned to deliver at home? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> 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		7c. City or town	7d. Street and number Apt. No. ZIP Code
a. State b. County		7e. Inside city limits of 7c? Yes <input type="checkbox"/> No <input type="checkbox"/>	
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		<input type="checkbox"/> M.D. <input type="checkbox"/> RPA <input type="checkbox"/> D.O. <input type="checkbox"/> R.N. <input type="checkbox"/> Lic. Midwife <input type="checkbox"/> Other-Specify _____	
9b. I CERTIFY THAT THIS CHILD WAS BORN ALIVE AT THE PLACE, DATE AND TIME GIVEN		<input type="checkbox"/> M.D. <input type="checkbox"/> RPA <input type="checkbox"/> D.O. <input type="checkbox"/> R.N. <input type="checkbox"/> Hosp. Admin. <input type="checkbox"/> Lic. Midwife <input type="checkbox"/> 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 _____			

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, Ukrainian, Nigerian, Taiwanese, etc.)

Specify _____

(Mother/Parent) (Father/Parent)

12. PARENT'S LENGTH OF TIME IN US

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

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

13. PARENT'S EDUCATION

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

a. Mother/Parent **b. Father/Parent**

.....8th grade or less; none

.....9th-12th grade, no diploma

.....High school graduate or GED

.....Some college credit, but no degree

.....Associate degree (e.g., AA, AS)

.....Bachelor's degree (e.g., BA, AB, BS)

.....Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA)

.....Doctorate (e.g., PhD, EdD)

or Professional degree (e.g., MD, DDS, DVM, LLB, JD)

14. PARENT'S OCCUPATION

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

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

15. PRENATAL HISTORY

a. 1. Total Number of Previous Live Births _____ None

2. Number Born Alive and Now Living _____ None

3. Number Born Alive and Now Dead _____ None

b. Those born alive may have been Preterm, Low Birth Weight or both. Please indicate:

1. Number Preterm (< 37 wks.) _____ None

2. Number Low Birth Weight (< 2500 grams or 5 lbs. 8 oz.) _____ None

c. 1. Total Number of other Pregnancy Outcomes (Spontaneous or Induced Terminations): _____ None

2. Number of Spontaneous Terminations of Pregnancy less than 20 Weeks _____ None

3. Number of Spontaneous Terminations of Pregnancy 20 Weeks or More _____ None

4. Number of Induced Terminations of Pregnancy _____ None

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

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

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

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

16. PRENATAL CARE

a. Total Number of Prenatal Visits for this Pregnancy
 None

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

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

d. Primary Prenatal Care Provider Type (Check one)

MD/DO 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

17. FINANCIAL COVERAGE

a. Primary Payer (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

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

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

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	20. INFANT																																																																																																			
<p>a. If birth occurred in hospital, was mother/parent transferred in before giving birth? If yes, name of facility transferred from _____</p> <p><input type="checkbox"/> Yes _____ <input type="checkbox"/> No</p> <p>b. Mother/Parent Weight at Delivery _____ pounds</p> <p>c. Onset of Labor (Check all that apply)</p> <p><input type="checkbox"/> Prolonged rupture of membranes (12 hours or more) <input type="checkbox"/> Prolonged labor (20 hours or more) <input type="checkbox"/> Premature rupture of membranes (prior to labor) <input type="checkbox"/> None of the above <input type="checkbox"/> Precipitous labor (less than 3 hours)</p> <p>d. Characteristics of Labor & Delivery (Check all that apply)</p> <table style="width:100%; border:none;"> <tr> <td><input type="checkbox"/> Induction of Labor-AROM</td> <td><input type="checkbox"/> Chorioamnionitis</td> </tr> <tr> <td><input type="checkbox"/> Induction of Labor-Medicinal</td> <td><input type="checkbox"/> Febrile (>100.4F or 38C)</td> </tr> <tr> <td><input type="checkbox"/> Augmentation of Labor</td> <td><input type="checkbox"/> Meconium staining</td> </tr> <tr> <td><input type="checkbox"/> Placenta previa</td> <td><input type="checkbox"/> Fetal intolerance</td> </tr> <tr> <td><input type="checkbox"/> Other excessive bleeding</td> <td><input type="checkbox"/> External electronic fetal monitor</td> </tr> <tr> <td><input type="checkbox"/> Steroids</td> <td><input type="checkbox"/> Internal electronic fetal monitor</td> </tr> <tr> <td><input type="checkbox"/> Antibiotics</td> <td><input type="checkbox"/> None of the above</td> </tr> </table> <p>e. 1. Anesthesia (Check all that apply)</p> <table style="width:100%; border:none;"> <tr> <td><input type="checkbox"/> Epidural</td> <td><input type="checkbox"/> Paracervical</td> </tr> <tr> <td><input type="checkbox"/> General inhalation</td> <td><input type="checkbox"/> Pudendal</td> </tr> <tr> <td><input type="checkbox"/> General intravenous</td> <td><input type="checkbox"/> Local</td> </tr> <tr> <td><input type="checkbox"/> Spinal</td> <td><input type="checkbox"/> None of the above</td> </tr> </table> <p>2. Complications from any of the above? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<input type="checkbox"/> Induction of Labor-AROM	<input type="checkbox"/> Chorioamnionitis	<input type="checkbox"/> Induction of Labor-Medicinal	<input type="checkbox"/> Febrile (>100.4F or 38C)	<input type="checkbox"/> Augmentation of Labor	<input type="checkbox"/> Meconium staining	<input type="checkbox"/> Placenta previa	<input type="checkbox"/> Fetal intolerance	<input type="checkbox"/> Other excessive bleeding	<input type="checkbox"/> External electronic fetal monitor	<input type="checkbox"/> Steroids	<input type="checkbox"/> Internal electronic fetal monitor	<input type="checkbox"/> Antibiotics	<input type="checkbox"/> None of the above	<input type="checkbox"/> Epidural	<input type="checkbox"/> Paracervical	<input type="checkbox"/> General inhalation	<input type="checkbox"/> Pudendal	<input type="checkbox"/> General intravenous	<input type="checkbox"/> Local	<input type="checkbox"/> Spinal	<input type="checkbox"/> None of the above	<p>a. Birthweight _____ Pounds _____ Ounces or _____ Grams</p> <p>b. If birth weight < 1250 grams (2 lbs. 12 oz.), reason(s) for delivery at a less than level III hospital: (Only if applicable) <input type="checkbox"/> None <input type="checkbox"/> Unknown at this time (Select all that apply) <input type="checkbox"/> Rapid/Advanced Labor <input type="checkbox"/> Severe pre-eclampsia <input type="checkbox"/> Bleeding <input type="checkbox"/> Woman Refused Transfer <input type="checkbox"/> Fetus at Risk <input type="checkbox"/> Other-specify _____</p> <p>c. Apgar Score at 1. 1 minute 2. 5 minutes 3. 10 minutes _____</p> <p>d. Clinical Estimate of Gestation Completed Weeks: _____</p> <p>e. Infant Transferred Within 24 hours of Delivery After 24 hours Not Transferred <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>f. If transferred, name of facility transferred to: _____</p>																																																																													
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	<p>g. Abnormal Conditions of the Newborn (Check all that apply)</p> <p><input type="checkbox"/> Assisted ventilation required immediately following delivery <input type="checkbox"/> Assisted ventilation required for more than six hours <input type="checkbox"/> NICU admission <input type="checkbox"/> Newborn given surfactant replacement therapy <input type="checkbox"/> Antibiotics received by the newborn for suspected neonatal sepsis <input type="checkbox"/> Seizure or serious neurologic dysfunction <input type="checkbox"/> Significant birth injury (skeletal fracture(s), peripheral nerve injury, and/or soft tissue/solid organ hemorrhage which requires intervention) <input type="checkbox"/> None of the above</p> <p>h. Hepatitis B Inoculation 1. Immunization administered? <input type="checkbox"/> Yes Date: (mm/dd/yyyy) ____/____/____ <input type="checkbox"/> No 2. Immunoglobulin administered? <input type="checkbox"/> Yes Date: (mm/dd/yyyy) ____/____/____ <input type="checkbox"/> No</p> <p>i. Is infant living at time of report? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>j. How is infant being fed? (Check one) <input type="checkbox"/> Breast milk <input type="checkbox"/> Both <input type="checkbox"/> Formula <input type="checkbox"/> Neither</p>																																																																																																			
<p>Method of Delivery</p> <p>f. Fetal Presentation at Birth <input type="checkbox"/> Cephalic <input type="checkbox"/> Other <input type="checkbox"/> Breech</p> <p>g. Final route and method of delivery (Check one) <input type="checkbox"/> Vaginal/Spontaneous <input type="checkbox"/> Vaginal/Vacuum <input type="checkbox"/> Vaginal/Forceps <input type="checkbox"/> Cesarean</p> <p>1. If cesarean, was trial of labor attempted? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Indications for C-Section <input type="checkbox"/> Unknown (Select all that apply) <input type="checkbox"/> Maternal condition-not pregnancy related <input type="checkbox"/> Failure to progress <input type="checkbox"/> Maternal condition-pregnancy related <input type="checkbox"/> Malpresentation <input type="checkbox"/> Refused VBAC <input type="checkbox"/> Previous C-Section <input type="checkbox"/> Elective <input type="checkbox"/> Fetus at risk/NFS <input type="checkbox"/> Other</p> <p>3. Was delivery with forceps attempted but unsuccessful? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>4. Indications for Forceps <input type="checkbox"/> Unknown (Select all that apply) <input type="checkbox"/> Fetus at Risk <input type="checkbox"/> Failure to progress <input type="checkbox"/> Other</p> <p>5. Was delivery with vacuum extraction attempted but unsuccessful? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>6. Indications for Vacuum <input type="checkbox"/> Unknown (Select all that apply) <input type="checkbox"/> Fetus at Risk <input type="checkbox"/> Failure to progress <input type="checkbox"/> Other</p> <p>h. Other Procedures Performed at Delivery (Check all that apply) <input type="checkbox"/> Episiotomy & repair <input type="checkbox"/> Repair of lacerations <input type="checkbox"/> Sterilization <input type="checkbox"/> None of the above</p>	<p style="text-align: center;">Congenital Anomalies</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">k. Select all that apply</th> <th style="width: 10%;">Yes</th> <th style="width: 10%;">No</th> <th style="width: 10%;">i. Diagnosed Prenatally?</th> <th style="width: 10%;">Yes</th> <th style="width: 10%;">No</th> <th style="width: 10%;">m. If Yes, please indicate all methods used:</th> </tr> </thead> <tbody> <tr> <td>1. 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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 <input type="checkbox"/> Hospital Inpatient 2 <input type="checkbox"/> Emergency Dept./Outpatient 3 <input type="checkbox"/> Dead on Arrival	4 <input type="checkbox"/> Nursing Home/Long Term Care Facility 5 <input type="checkbox"/> Hospice Facility 6 <input type="checkbox"/> Decedent's Residence 7 <input type="checkbox"/> Other Specify _____	2d. Any Hospice care in last 30 days 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> 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 <input type="checkbox"/> AM <input type="checkbox"/> PM	4. Sex	5. Date last attended by a Physician mm dd yyyy		
6. Certifier: I certify that death occurred at the time, date and place indicated and that to the best of my knowledge traumatic injury or poisoning DID NOT play any part in causing death, and that death did not occur in any unusual manner and was due entirely to NATURAL CAUSES. See instructions on reverse of certificate.							
Name of Physician _____ (Type or Print)			Signature _____		D.O. M.D.		
Address _____			License No. _____		Date _____		
PERSONAL PARTICULARS (To be filled in by Funeral Director or, in case of City Burial, by Physician)	7a. Usual Residence State	7b. County	7c. City or Town	7d. Street and Number	Apt. No.	ZIP Code	
	8. Date of Birth (Month) (Day) (Year-yyyy)		9. Age at last birthday (years)	Under 1 Year Months 2	Under 1 Day Days 3	Hours 4	Minutes 5
	10. Social Security No.		11a. Usual Occupation (Type of work done during most of working life. Do not use "retired")		11b. Kind of business or industry		12. Aliases or AKAs
	13. Birthplace (City & State or Foreign Country)		14. Education (Check the box that best describes the highest degree or level of school completed at the time of death) 1 <input type="checkbox"/> 8th grade or less; none 2 <input type="checkbox"/> 9th – 12th grade; no diploma 3 <input type="checkbox"/> High school graduate or GED 4 <input type="checkbox"/> Some college credit, but no degree 5 <input type="checkbox"/> Associate degree (e.g., AA, AS) 6 <input type="checkbox"/> Bachelor's degree (e.g., BA, AB, BS) 7 <input type="checkbox"/> Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA) 8 <input type="checkbox"/> Doctorate (e.g., PhD, EdD) or Professional degree (e.g., MD, DDS, DVM, LLB, JD)				
	15. Ever in U.S. Armed Forces? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	16. Marital/Partnership Status at time of death 1 <input type="checkbox"/> Married 2 <input type="checkbox"/> Domestic Partnership 3 <input type="checkbox"/> Divorced 4 <input type="checkbox"/> Married, but separated 5 <input type="checkbox"/> Never Married 6 <input type="checkbox"/> Widowed 7 <input type="checkbox"/> Other, Specify _____ 8 <input type="checkbox"/> 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 <input type="checkbox"/> Burial 2 <input type="checkbox"/> Cremation 3 <input type="checkbox"/> Entombment 4 <input type="checkbox"/> City Cemetery 5 <input type="checkbox"/> 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)			

THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE
CONFIDENTIAL MEDICAL REPORT

VR 15 (Rev. 01/09)

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.

To be filled in by FUNERAL DIRECTOR or, in case of City Burial, by Physician		Certificate No. _____		
23. Ancestry (Check one box and specify) <input type="checkbox"/> Hispanic (Mexican, Puerto Rican, Cuban, Dominican, etc.) Specify _____ <input type="checkbox"/> 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 <input type="checkbox"/> White 02 <input type="checkbox"/> Black or African American 03 <input type="checkbox"/> American Indian or Alaska Native (Name of enrolled or principal tribe) _____ 04 <input type="checkbox"/> Asian Indian 05 <input type="checkbox"/> Chinese 06 <input type="checkbox"/> Filipino 07 <input type="checkbox"/> Japanese 08 <input type="checkbox"/> Korean 09 <input type="checkbox"/> Vietnamese 10 <input type="checkbox"/> Other Asian—Specify _____ 11 <input type="checkbox"/> Native Hawaiian 12 <input type="checkbox"/> Guamanian or Chamorro 13 <input type="checkbox"/> Samoan 14 <input type="checkbox"/> Other Pacific Islander—Specify _____ 15 <input type="checkbox"/> Other—Specify _____		
DECEDENT'S LEGAL NAME (Type or Print) _____				
25. CAUSE OF DEATH – List only one cause on each line. DO NOT ABBREVIATE.				
PART I	a. IMMEDIATE CAUSE		APPROXIMATE INTERVAL: ONSET TO DEATH	
	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 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	27a. If Female 1 <input type="checkbox"/> Not pregnant within 1 year of death 2 <input type="checkbox"/> Pregnant at time of death 3 <input type="checkbox"/> Not pregnant at death, but pregnant within 42 days of death 4 <input type="checkbox"/> Not pregnant at death, but pregnant 43 days to 1 year before death 5 <input type="checkbox"/> Unknown if pregnant within 1 year of death	27b. If pregnant within one year of death, outcome of pregnancy 1 <input type="checkbox"/> Live Birth 2 <input type="checkbox"/> Spontaneous Termination/ Ectopic Pregnancy 3 <input type="checkbox"/> Induced Termination 4 <input type="checkbox"/> None	27c. Date of Outcome mm dd yyyy	28. Was this case referred to OCME? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No
29. Did tobacco use contribute to death? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Probably 4 <input type="checkbox"/> 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. _____		

CERTIFICATE OF DEATH Certificate No. _____

- New
- Corr/Amend
- Replacement

**DOHMH
USE ONLY**

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

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

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

MEDICAL CERTIFICATE OF DEATH <small>(To be filled in by the OCME)</small>	PART I	2a. New York City 2b. Borough	2c. Type of Place 1 <input type="checkbox"/> Hospital Inpatient 2 <input type="checkbox"/> Emergency Dept./Outpatient 3 <input type="checkbox"/> Dead on Arrival	4 <input type="checkbox"/> Nursing Home/Long Term Care Facility 5 <input type="checkbox"/> Hospice Facility 6 <input type="checkbox"/> Decedent's Residence 7 <input type="checkbox"/> Other Specify _____	2d. Any Hospice care in last 30 days 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Unknown	2e. Name of hospital or other facility (if not facility, street address)
	PART II	6. CAUSE OF DEATH a. Immediate cause b. Due to or as a consequence of c. Due to or as a consequence of 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 <input type="checkbox"/> AM <input type="checkbox"/> PM	7c. At Work 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	7d. Place of Injury – At home, factory, street, etc. 7e. Location	
		7f. How Injury Occurred		7g. If Transportation Injury Specify <input type="checkbox"/> Driver/Operator <input type="checkbox"/> Pedestrian <input type="checkbox"/> Passenger <input type="checkbox"/> Other Specify _____		
		8. Manner of Death <input type="checkbox"/> Pending further study <input type="checkbox"/> Natural <input type="checkbox"/> Homicide <input type="checkbox"/> Accident <input type="checkbox"/> Suicide <input type="checkbox"/> Undetermined		9. Autopsy <input type="checkbox"/> Yes <input type="checkbox"/> No Autopsy Pursuant to Law <input type="checkbox"/> No Autopsy		10. On the basis of examination and/or investigation, in my opinion, death occurred due to the causes and manner as stated: Certifier Signature _____ D.O. M.D. Date _____ Certifier Name (Print) _____ (Medical Investigator) (Deputy Chief) (Chief) (Medical Examiner)
PERSONAL PARTICULARS <small>(To be filled in by Funeral Director or, in case of City Burial, by OCME)</small>	11a. Usual Residence State		11b. County	11c. City or Town	11d. Street and Number Apt. No. ZIP Code	11e. Inside City Limits? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No
	12. Date of Birth (Month) (Day) (Year-yyyy)		13. Age at last birthday (years)		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 <input type="checkbox"/> 8th grade or less; none 2 <input type="checkbox"/> 9th – 12th grade; no diploma 3 <input type="checkbox"/> High school graduate or GED 4 <input type="checkbox"/> Some college credit, but no degree 5 <input type="checkbox"/> Associate degree (e.g., AA, AS) 6 <input type="checkbox"/> Bachelor's degree (e.g., BA, AB, BS) 7 <input type="checkbox"/> Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA) 8 <input type="checkbox"/> Doctorate (e.g., PhD, EdD) or Professional degree (e.g., MD, DDS, DVM, LLB, JD)			
19. Ever in U.S. Armed Forces? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No		20. Marital/Partnership Status at time of death 1 <input type="checkbox"/> Married 2 <input type="checkbox"/> Domestic Partnership 3 <input type="checkbox"/> Divorced 4 <input type="checkbox"/> Married, but separated 5 <input type="checkbox"/> Never Married 6 <input type="checkbox"/> Widowed 7 <input type="checkbox"/> Other, Specify _____ 8 <input type="checkbox"/> 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 <input type="checkbox"/> Burial 2 <input type="checkbox"/> Cremation 3 <input type="checkbox"/> Entombment 4 <input type="checkbox"/> City Cemetery 5 <input type="checkbox"/> 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)		

THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE
MEDICAL EXAMINER'S SUPPLEMENTARY REPORT

VR 16 (Rev. 01/09)

Certificate No. _____

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

<p>27. Ancestry (Check one box and specify)</p> <p><input type="checkbox"/> Hispanic (Mexican, Puerto Rican, Cuban, Dominican, etc.)</p> <p>Specify _____</p> <p><input type="checkbox"/> NOT Hispanic (Italian, African American, Haitian, Pakistani, Ukrainian, Nigerian, Taiwanese, etc.)</p> <p>Specify _____</p>	<p>28. Race as defined by the U.S. Census (Check one or more to indicate what the decedent considered himself or herself to be)</p> <p>01 <input type="checkbox"/> White 02 <input type="checkbox"/> Black or African American</p> <p>03 <input type="checkbox"/> American Indian or Alaska Native (Name of enrolled or principal tribe) _____</p> <p>04 <input type="checkbox"/> Asian Indian 05 <input type="checkbox"/> Chinese</p> <p>06 <input type="checkbox"/> Filipino 07 <input type="checkbox"/> Japanese</p> <p>08 <input type="checkbox"/> Korean 09 <input type="checkbox"/> Vietnamese</p> <p>10 <input type="checkbox"/> Other Asian—Specify _____</p> <p>11 <input type="checkbox"/> Native Hawaiian 12 <input type="checkbox"/> Guamanian or Chamorro</p> <p>13 <input type="checkbox"/> Samoan</p> <p>14 <input type="checkbox"/> Other Pacific Islander—Specify _____</p> <p>15 <input type="checkbox"/> Other—Specify _____</p>
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DECEDENT'S LEGAL NAME (Type or Print) _____

<p>29a. If Female</p> <p>1 <input type="checkbox"/> Not pregnant within 1 year of death</p> <p>2 <input type="checkbox"/> Pregnant at time of death</p> <p>3 <input type="checkbox"/> Not pregnant at death, but pregnant within 42 days of death</p> <p>4 <input type="checkbox"/> Not pregnant at death, but pregnant 43 days to 1 year before death</p> <p>5 <input type="checkbox"/> Unknown if pregnant within 1 year of death</p>	<p>29b. If pregnant within one year of death, outcome of pregnancy</p> <p>1 <input type="checkbox"/> Live Birth</p> <p>2 <input type="checkbox"/> Spontaneous Termination / Ectopic Pregnancy</p> <p>3 <input type="checkbox"/> Induced Termination 4 <input type="checkbox"/> None</p>	<p>29c. Date of Outcome</p> <table border="1"> <tr> <td style="width: 33%; text-align: center;">mm</td> <td style="width: 33%; text-align: center;">dd</td> <td style="width: 33%; text-align: center;">yyyy</td> </tr> <tr> <td style="height: 20px;"> </td> <td> </td> <td> </td> </tr> </table>	mm	dd	yyyy			
mm	dd	yyyy						
<p>30. Did tobacco use contribute to death?</p> <p>1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Probably 4 <input type="checkbox"/> Unknown</p>	<p>31. For infant under one year: Name and address of hospital or other place of birth</p>							

**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)

DATE FILED

THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE
CERTIFICATE OF SPONTANEOUS TERMINATION OF PREGNANCY

VR-17
(REV. 01/10)

CERTIFICATE NO.

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

- 1. Typewrite or print with black fine point ink.
2. Certificates containing alterations or omissions are unacceptable.
3. Items "Date filed," "Certificate No." and this space, reserved for the Department of Health and Mental Hygiene use only.
I CERTIFY THAT I HAVE IN MY POSSESSION AN AFFIDAVIT OF AUTHORIZATION FOR CREMATION

FD Initials

Form containing sections: FETUS, FETUS Place of Delivery, MOTHER/PARENT, FATHER/PARENT, ATTENDANT/CERTIFIER, and FUNERAL DIRECTOR'S CERTIFICATE. Includes fields for name, date of delivery, birthplace, and certifier information.

THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE (Each question MUST be answered)
CONFIDENTIAL MEDICAL REPORT OF SPONTANEOUS TERMINATION OF PREGNANCY (1 of 2)

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

Mother/Parent Medical Record No. _____

CERTIFICATE NO. _____

22. Date Last Normal Menses Began: ____/____/____
mm dd yyyy

23. PARENT'S EDUCATION
(Check the box that best describes the highest degree or level of school completed at time of delivery)
a. Mother/Parent b. Father/Parent
8th grade or less; none.....
9th-12th grade, no diploma
High school graduate or GED
Some college credit, but no degree
Associate degree (e.g., AA, AS)
Bachelor's degree (e.g., BA, AB, BS)
Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA)
Doctorate (e.g., PhD, EdD)
or Professional degree (e.g., MD, DDS, DVM, LLB, JD)
Unknown

24. PARENT'S OCCUPATION
a. Was mother/parent employed during pregnancy? Yes No
1. Current/most recent occupation 2. Kind of business or industry
b. Mother/Parent
c. Father/Parent

25. PARENT'S ANCESTRY
(Check one box and specify what the parent considers her/himself to be)
a. Mother/Parent b. Father/Parent
Hispanic (Mexican, Puerto Rican, Cuban, Dominican, etc.)
Specify
(Mother/Parent) (Father/Parent)
NOT Hispanic (Italian, African American, Haitian, Pakistani, Ukrainian, 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 – Pre-pregnancy
 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
- Syphilis
- Herpes Simplex (HSV)
- Chlamydia
- Bacterial Vaginosis
- Hepatitis B
- Hepatitis C
- Listeria
- Group B Strep
- Tuberculosis
- Rubella
- Cytomegalovirus
- Parvovirus
- Toxoplasmosis
- Other
- None
- Unknown

32. DELIVERY

a. Method of Delivery

1. Was delivery with forceps attempted but unsuccessful?
 Attempted and successful Attempted and unsuccessful
 Forceps were not used Unknown
2. Was delivery with vacuum extraction attempted but unsuccessful?
 Attempted and successful Attempted and unsuccessful
 Vacuum extraction was not used Unknown
3. Fetal presentation at delivery
 Cephalic
 Breech
 Other
 Unknown
4. Final route and method of delivery
(Check **one**)
 Vaginal/Spontaneous
 Vaginal/Forceps
 Vaginal/Vacuum
 Vaginal delivery after a previous C-section?
 Yes No Unknown
 Primary Cesarean
 Repeat Cesarean
 If cesarean, was a trial of labor attempted?
 Yes No Unknown
5. Hysterotomy/Hysterectomy
 Yes No Unknown

b. Maternal Morbidity (Check **all** that apply)
(Complications associated with labor and delivery)

- Maternal transfusion
- Third or fourth degree perineal laceration
- Ruptured uterus
- Unplanned hysterectomy
- Admission to intensive care unit
- Unplanned operating room procedure following delivery
- Hemorrhage
- Postpartum transfer to a higher level of care
- Other
- None
- Unknown

c. Was mother transferred for maternal medical or fetal indication prior to delivery?

- Yes No Unknown

If yes, name of facility transferred from:

33. FETAL ATTRIBUTES

a. Weight of Fetus (grams preferred, specify unit)

- _____ _____
- lb/oz grams

b. Estimated Time of Fetal Death

- Death at time of first assessment, no labor ongoing
- Death at time of first assessment, labor ongoing
- Died during labor, after first assessment
- Unknown time of fetal death

c. Was an autopsy performed?

- Yes No Planned

d. Was a histological placental examination performed?

- Yes No Planned

e. Were autopsy or histological placental examination results used in determining the cause of fetal death?

- Yes No Unknown

f. Congenital Anomalies of the Fetus
(Check **all** that apply)

- Anencephaly
- Meningomyelocele/Spina bifida
- Cyanotic congenital heart disease
- Congenital diaphragmatic hernia
- Omphalocele
- Gastroschisis
- Limb reduction defect (excluding congenital amputation and dwarfing syndromes)
- Cleft lip with or without cleft palate
- Cleft palate alone
- Down syndrome
 - Karyotype confirmed
 - Karyotype pending
- Suspected chromosomal disorder
 - Karyotype confirmed
 - Karyotype pending
- Hypospadias
- Other
- None
- Unknown

THE CITY OF NEW YORK – DEPARTMENT OF HEALTH AND MENTAL HYGIENE
CERTIFICATE OF INDUCED TERMINATION OF PREGNANCY
 Use this form *ONLY* for induced terminations whether surgical or medical.
 Only for scientific purposes approved by the Commissioner; not subject to compelled disclosure.

CERTIFICATE NO.
(For Health Dept. Use Only)

FACILITY	1. DATE OF PROCEDURE FOR TERMINATION (Month) (Day) (Year-yyyy)		2. FACILITY TYPE	
	3A. FACILITY NAME		<input type="checkbox"/> Hospital <input type="checkbox"/> Shared Facility <input type="checkbox"/> Clinic (Article 28) <input type="checkbox"/> Doctor's Office <input type="checkbox"/> Clinic (non-Article 28) <input type="checkbox"/> Unknown <input type="checkbox"/> Other type _____	
	3B. FACILITY ADDRESS Street Number and Name		4. PRIMARY FINANCIAL COVERAGE THIS TERMINATION	
	City or Town _____ County _____ State _____ Country _____ ZIP Code _____		<input type="checkbox"/> Medicaid <input type="checkbox"/> Self Pay <input type="checkbox"/> Other Govt. Insurance <input type="checkbox"/> Unknown <input type="checkbox"/> Private Insurance	
PATIENT	5. PATIENT'S LEGAL NAME		6. PATIENT'S DATE OF BIRTH (Month) (Day) (Year-yyyy)	
	First Name _____ Last Name _____ (First two letters) (First two letters)		City or Town _____ State _____ Country _____	
	8. NEVER LIVED IN UNITED STATES <input type="checkbox"/>		9. PATIENT'S USUAL RESIDENCE (COMPLETE ONLY ONE)	
If born outside of the United States, how long lived in U.S.? _____ (years)		<input type="checkbox"/> New York City ZIP Code _____ <input type="checkbox"/> Outside NYS <input type="checkbox"/> Manhattan <input type="checkbox"/> Bronx <input type="checkbox"/> Brooklyn <input type="checkbox"/> Queens <input type="checkbox"/> Staten Island <input type="checkbox"/> Unknown (U.S. State)		
Or if less than 1 year, _____ (months)		<input type="checkbox"/> New York State (Outside NYC) <input type="checkbox"/> Outside U.S. City or Town _____ County _____ ZIP Code _____ (Foreign Country)		
PATIENT ATTRIBUTES	10. EDUCATION		11. ANCESTRY (CHECK ONE BOX AND SPECIFY)	
	<input type="checkbox"/> 8th grade or less; none <input type="checkbox"/> Associate degree <input type="checkbox"/> 9th-12th grade, no diploma <input type="checkbox"/> Bachelor's degree <input type="checkbox"/> High school graduate or GED completed <input type="checkbox"/> Master's degree <input type="checkbox"/> Some college credit, but no degree <input type="checkbox"/> Doctorate or Professional degree <input type="checkbox"/> Unknown		<input type="checkbox"/> Hispanic (Mexican, Puerto Rican, Cuban, Dominican, etc.) Specify _____ <input type="checkbox"/> NOT Hispanic (Italian, African American, Haitian, Pakistani, Ukrainian, Nigerian, Taiwanese, etc.) Specify _____ <input type="checkbox"/> Unknown	
	12. RACE Race as defined by the U.S. Census. (Check one or more to indicate what the patient considers herself to be.)		13. MARITAL/PARTNERSHIP STATUS	
<input type="checkbox"/> White <input type="checkbox"/> Chinese <input type="checkbox"/> Other Asian (specify) _____ <input type="checkbox"/> Other Pacific Islander (specify) _____ <input type="checkbox"/> Black or African American <input type="checkbox"/> Filipino _____ <input type="checkbox"/> American Indian or Alaska Native (specify tribe) _____ <input type="checkbox"/> Japanese <input type="checkbox"/> Native Hawaiian <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> Asian Indian <input type="checkbox"/> Korean <input type="checkbox"/> Guamanian or Chamorro _____ <input type="checkbox"/> Vietnamese <input type="checkbox"/> Samoan <input type="checkbox"/> Unknown		<input type="checkbox"/> Married <input type="checkbox"/> Domestic Partnership <input type="checkbox"/> Divorced <input type="checkbox"/> Married, but separated <input type="checkbox"/> Never Married <input type="checkbox"/> Widowed <input type="checkbox"/> Other, Specify _____ <input type="checkbox"/> Unknown		
MEDICAL	14. DATE LAST NORMAL MENSES BEGAN (Month) (Day) (Year-yyyy)		15. OBSTETRIC ESTIMATE OF GESTATION _____ completed weeks	
	16. PREVIOUS PREGNANCIES		17. TERMINATION PROCEDURE	
	a. Total Number of Previous Live Births _____ <input type="checkbox"/> None		d. Total Number of Other Pregnancy Outcomes _____ <input type="checkbox"/> None	
	b. Born Alive Now Living _____ <input type="checkbox"/> None		e. Number of Spontaneous Terminations _____ <input type="checkbox"/> None	
	c. Born Alive Now Dead _____ <input type="checkbox"/> None		f. Number of Induced Terminations _____ <input type="checkbox"/> None	
17A. PRIMARY PROCEDURE (CHECK ONLY ONE)		17B. ADDITIONAL PROCEDURES (CHECK ALL THAT APPLY)		
<input type="checkbox"/> Suction Curettage <input type="checkbox"/> Mifepristone and Misoprostol <input type="checkbox"/> Sharp Curettage (D&C) <input type="checkbox"/> Methotrexate and Misoprostol <input type="checkbox"/> Dilatation and Evacuation (D&E) <input type="checkbox"/> Other Medical (nonsurgical) Specify Medications _____ <input type="checkbox"/> Intra-Uterine Instillation <input type="checkbox"/> Hysterotomy/Hysterectomy <input type="checkbox"/> Misoprostol <input type="checkbox"/> Other, Specify _____		<input type="checkbox"/> None <input type="checkbox"/> Mifepristone and Misoprostol <input type="checkbox"/> Suction Curettage <input type="checkbox"/> Methotrexate and Misoprostol <input type="checkbox"/> Sharp Curettage (D&C) <input type="checkbox"/> Other Medical (nonsurgical) Specify Medications _____ <input type="checkbox"/> Dilatation and Evacuation (D&E) <input type="checkbox"/> Intra-Uterine Instillation <input type="checkbox"/> Hysterotomy/Hysterectomy <input type="checkbox"/> Misoprostol <input type="checkbox"/> Other, Specify _____		
18. CONTRACEPTIVE METHOD PRESCRIBED AND/OR DISPENSED AFTER THIS PROCEDURE (Check all that apply)				
<input type="checkbox"/> None Offered <input type="checkbox"/> Oral Contraceptive Pills <input type="checkbox"/> Injection <input type="checkbox"/> Contraceptive Patch <input type="checkbox"/> Diaphragm <input type="checkbox"/> Emergency Contraception <input type="checkbox"/> Offered but Declined <input type="checkbox"/> Condoms <input type="checkbox"/> Contraceptive Implant <input type="checkbox"/> Cervical Vaginal Ring <input type="checkbox"/> IUD <input type="checkbox"/> Other, Specify _____				
19. ATTENDANT NAME AT TERMINATION: _____ <input type="checkbox"/> MD <input type="checkbox"/> DO <input type="checkbox"/> NP (First, Middle, Last, Suffix)				
ATTENDANT/CERTIFIER	20. CERTIFIER: I HEREBY CERTIFY THAT THIS EVENT OCCURRED AT THE TIME AND ON THE DATE INDICATED AND THAT ALL FACTS STATED IN THIS CERTIFICATE ARE TRUE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.			
	Signature of Certifier _____ <input type="checkbox"/> MD <input type="checkbox"/> DO <input type="checkbox"/> NP			
	Name of Certifier _____			
	Address _____			
	License No. _____ / _____ / _____ Date			