# Annual Report of Vital Statistics: New York State 2013



### **Division of Information and Statistics**

Office of Quality and Patient Safety New York State Department of Health October 2015



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### **Chapter 1. Introduction**

The **Annual Report of Vital Statistics: New York State 2013** is prepared by the Division of Information and Statistics, Office of Quality and Patient Safety within the New York State Department of Health (NYSDOH). This report contains the most current information available on New York State pregnancies, deaths, and marriages, including trends over time and state population demographics.

For additional vital event data, trends and statistical reports, readers may visit the Vital Statistics page on the DOH website at the following address: http://www.health.ny.gov/statistics/vital\_statistics/.

Researchers interested in longitudinal data files of vital events can find them available for download on the Open NY Data portal for health data - Health Data NY https://health.data.ny.gov/.

Feedback on this report is welcome. Please contact us at:

#### **Division of Information and Statistics**

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Measure	Description	Numerator <sup>1</sup>	Denominator <sup>1</sup>
Birth Rate	Annual number of live births per 1,000 population	Number of live births	Estimated mid-year population
Mortality (Death) Rate	Annual number of deaths per 100,000 population	Number of deaths	Estimated mid-year population
Death-to-Birth Ratio	A ratio of deaths to births	Number of deaths	Number of births
Percent Change <sup>2</sup>	Change from the earliest trend time period (T1) to most current (T2)=(T2-T1)/T1*100		
Fertility Rate	Annual number of live births per 1,000 female population aged 15- 44	Number of live births aged 15-44 years	Number of females
Pregnancy Rate	Annual number of pregnancies per 1,000 female population aged 15-44	Number of pregnancies	Number of females aged 15-44
Spontaneous Fetal Mortality Rate	Annual number of spontaneous fetal deaths (all gestations) per 1,000 spontaneous fetal deaths plus live births occurring during the year	Number of spontaneous fetal deaths	Number of spontaneous fetal deaths + live births
Live Birth-to- Abortion Ratio	The ratio of the number of live births to the number of abortions	Number of live births	Number of abortions
Underlying Cause of Death	The disease or injury which initiated the chain of morbid events leading directly to death or the circumstances of the accident or violence which produced the fatal injury	Specified underlying cause of death using ICD-10 coding	
Multiple Causes of Death <sup>3</sup>	All causes listed in any position on the death certificate. This includes the underlying cause and all related causes of death	Any condition mentioned in any position in the Multiple Cause of Death file using ICD-10 coding	
External Cause of Death	Cases where the underlying cause of death is one of a group of causes external to the body (suicide, transport accidents, poisoning, falls, etc.)	ICD-10 External Causes coding	
Age-Adjusted Mortality Rate <sup>4</sup>	Age-specific death rates weighted by the proportion of each age group in the standard population and summed across age groups.	Number of deaths in specified age group	Estimated mid-year population of specified age group
Infant Death Rate	Deaths under 1 year of age per 1,000 live births	Number of deaths in specified age group	Live Births

#### **Measures Used in this Report**



Measure	Description	Numerator <sup>1</sup>	Denominator <sup>1</sup>
Neonatal Death Rate	Deaths under 28 days of age per 1,000 live births	Number of deaths in specified age group	Live Births
Post-Neonatal Death Rate	Death at age 28 days and older but less than 1 year per 1,000 live births	Number of deaths in specified age group	Live Births
Perinatal Death Rate	Number of neonatal deaths + Spontaneous fetal deaths of gestation 20 + weeks	(Number of neonatal deaths + Spontaneous fetal deaths of gestation 20+ weeks)*1000	Spontaneous fetal deaths of gestation 20+ weeks + Live births
Cause-Specific Mortality Rate	Annual number of deaths from a specified cause or group of causes per 100,000 population	Number of deaths from a specific cause	Estimated mid-year population

<sup>1</sup> The numerator reflects the number of vital events in a specified period of time, typically the calendar year. When the denominator is a population count, it refers to the count at a specific point, usually mid-calendar year.

<sup>2</sup>The percent change measure may lead to unstable high and low values when cell numbers or percentages are small. These unstable percent change rates are retained in this report.

<sup>3</sup> Multiple cause of death information is useful for describing the role of all diseases involved in deaths especially for chronic disease causes of death where there is usually more than one disease contributing to the death.

<sup>4</sup>Adjusted rates are used when there are differences in the age distribution for the populations compared. Rates are adjusted to the 2000 US Standard population using the direct method.



#### **Race/Ethnicity Reporting**

#### **Birth Certificate**

Race and ethnicity reported in the birth record is based solely on the self-reported information provided by the mother. The birth certificate allows for the selection of multiple races from a list of 15 categories that follow the Census 2000 coding scheme. Ethnicity information is used to distinguish women of Spanish origin, regardless of race. In this report, Hispanic refers to anyone of Hispanic origin regardless of race. When race groups are reported, they are non-Hispanic.

Rates in this report are based on mid-year Census population estimates and are limited to white non-Hispanic, black non-Hispanic, and Hispanic in order to ensure consistency between the numerators and available population denominators. Tables showing birth outcomes as counts or as a percentage of births include a more detailed breakdown of race/ethnicity.

#### **Fetal Deaths**

For both induced and spontaneous fetal deaths, race and ethnicity are self-reported. These fetal death certificates allow for the selection of only one race category.

#### **Death Certificate**

Race and ethnicity information on death certificates is completed by the funeral director, often in consultation with the decedent's family. The death certificate allows for the selection of multiple races from a list of 15 categories that follow the Census 2000 coding scheme. The reporting of Hispanic ethnicity is known to be undercounted. This information should be considered when analyzing mortality data by race\ethnicity. Please see the Technical Notes section for additional details.



### **Chapter 2. Overview**

- Each day in New York State, an average of 950 women become pregnant, 645 babies are born, and 404 residents die. Heart disease continues as the leading cause of death for males and females.
- Of the 404 average deaths each day, about 30 percent of them are related to heart disease and 24 percent to cancer on the average; and 15 New Yorkers experience an accidental death daily.
- In 2013, New York State had a population of 19.65 million residents. Forty-three percent of New Yorkers reside in the five boroughs of New York City and 57 percent reside in the Rest of State.
- A larger proportion of the population aged 20-44 resides in New York City, with a higher percentage of females than males.
- A disproportionately larger percentage of older adults aged 50 years and over reside in the Rest of State region (62 percent).
- The aging of the population is made evident by projections indicating that the percentage of the population aged 65 years and older will grow from 13.2% in 1980 to 18.0% in 2030.



Vital Event	2008	2009	2010	2011	2012	2013
	Pregna	ancies				
Total Pregnancies	1,057	1,038	1,021	992	972	950
Teenage Pregnancies	108	102	94	83	74	65
Live Births	684	676	666	657	655	645
Low Birthweight Births	56	55	55	53	52	51
Multiple Births (Mother)	13	13	13	13	12	13
Multiple Births (Baby)	26	27	26	26	25	26
Spontaneous Fetal Deaths	49	47	51	54	50	47
Induced Abortions	324	315	305	281	267	258
	Deaths – Unde	erlying Caus	se			
Total Deaths	404	397	397	403	404	404
Infant Deaths	4	4	3	3	3	3
Heart Disease Deaths	135	127	122	120	119	118
Diabetes Deaths	10	10	10	11	11	11
Stroke Deaths	16	16	17	17	17	16
Kidney Disease Deaths	6	7	7	6	6	6
Alzheimer's Deaths	6	7	7	7	7	7
Accidental Deaths	14	13	13	14	15	15
Cancer Deaths	96	96	96	96	98	96
Suicide Deaths	4	4	4	4	5	4
Homicide Deaths	2	2	2	2	2	2
AIDS Deaths	3	3	3	2	2	2
D	eaths – Any Mei	ntion of a C	ause <sup>1</sup>			
Opioid-Related Deaths	2	2	2	3	2	2
Firearm-Related Deaths	3	3	3	3	3	2
Alcohol-Related Deaths	10	11	11	11	12	12
	Marriages and	Dissolution	ns			
Marriages	348	336	340	360	369	377
Dissolutions	146	138	156	156	161	160

#### Table 1. Average Daily Statistics for Selected Vital Events: New York State 2008-2013

<sup>1</sup> Condition mentioned in any position in the Multiple Cause of Death file

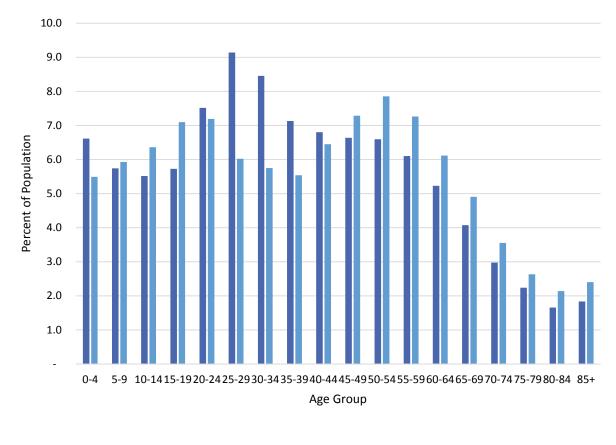


Region	Ne	New York State New York City Rest of State						2	
Age Group	Total	Female	Male	Total	Female	Male	Total	Female	Male
Total	19,651,127	10,114,934	9,536,193	8,405,837	4,395,464	4,010,373	11,245,290	5,719,470	5,525,820
0	239,298	116,865	122,433	119,474	58,362	61,112	119,824	58,503	61,321
1	237,552	116,370	121,182	116,128	56,864	59,264	121,424	59,506	61,918
2	240,147	117,146	123,001	115,428	56,033	59,395	124,719	61,113	63,606
3	231,058	113,045	118,013	105,078	51,241	53,837	125,980	61,804	64,176
4	225,572	110,200	115,372	99,821	48,726	51,095	125,751	61,474	64,277
5-9	1,149,437	561,489	587,948	482,699	236,311	246,388	666,738	325,178	341,560
10-14	1,178,995	576,143	602,852	463,561	226,860	236,701	715,434	349,283	366,151
15-17	737,917	360,940	376,977	283,363	139,442	143,921	454,554	221,498	233,056
18-19	541,855	266,890	274,965	198,046	99,000	99,046	343,809	167,890	175,919
20-24	1,440,691	713,418	727,273	631,907	322,735	309,172	808,784	390,683	418,101
25-29	1,446,167	724,576	721,591	768,622	397,593	371,029	677,545	326,983	350,562
30-34	1,357,550	686,140	671,410	710,767	364,980	345,787	646,783	321,160	325,623
35-39	1,222,693	620,055	602,638	599,648	307,295	292,353	623,045	312,760	310,285
40-44	1,297,274	661,106	636,168	571,888	293,555	278,333	725,386	367,551	357,835
45-49	1,377,319	705,728	671,591	557,970	288,975	268,995	819,349	416,753	402,596
50-54	1,437,632	741,101	696,531	554,523	291,443	263,080	883,109	449,658	433,451
55-59	1,329,776	690,845	638,931	512,957	274,833	238,124	816,819	416,012	400,807
60-64	1,127,713	595,331	532,382	439,771	240,711	199,060	687,942	354,620	333,322
65-69	894,064	482,088	411,976	342,523	192,192	150,331	551,541	289,896	261,645
70-74	650,058	361,577	288,481	250,234	144,971	105,263	399,824	216,606	183,218
75-79	484,399	278,499	205,900	188,125	111,328	76,797	296,274	167,171	129,103
80-84	379,670	229,418	150,252	139,034	86,543	52,491	240,636	142,875	97,761
85+	424,290	285,964	138,326	154,270	105,471	48,799	270,020	180,493	89,527

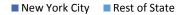
#### Table 2. Population Demographics by Age Group and Region: New York State 2013<sup>1</sup>

<sup>1</sup>Source: National Center for Health Statistics, "Bridged-Race Vintage 2013 Postcensal File 2013."









• A greater proportion of the 2013 New York State population aged 0-4 and 20-44 years resided in New York City compared to the Rest of State; a larger share of teenagers and older New Yorkers resided in the Rest of State.



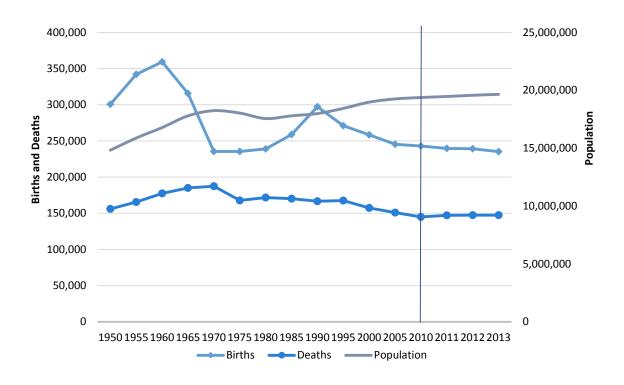


Chart 2. Population, Births, and Deaths: New York State, 1950-2013<sup>1</sup>

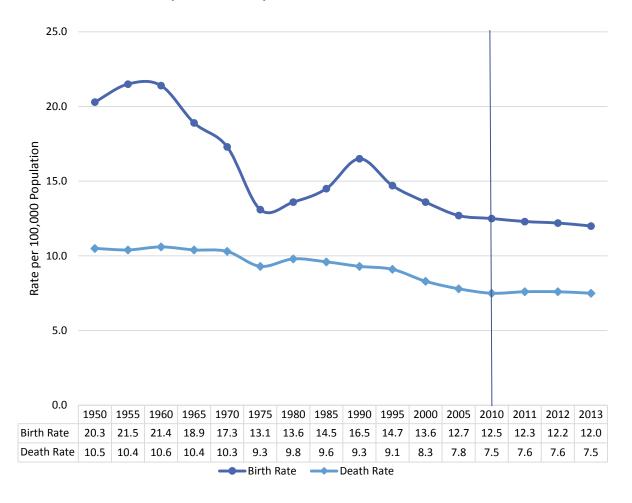
<sup>1</sup>The scale changes to single years of data in 2010.

The period 1950 to 1965 reflects the post-World War II baby boom when the state's annual births exceeded 350,000 and the birth rate exceeded 20 per 1,000 population. Births then declined until the mid-1980s followed by a brief "boomlet." Since 1990, births and the birth rate has consistently declined.

Since the 1970 high point, deaths have declined in New York State. While migration in and out of state has certainly been a factor, since 2010 the state's population has grown by the approximate difference between births and deaths.

- The number of births declined 21.8% from 300,752 in 1950 to 235,274 in 2013. The highest annual number of births was 359,222 in 1960.
- The number of deaths declined 5.6% from 156,143 in 1950 to 147,445 in 2013. The highest annual number of deaths during this time period was 187,350 in 1970.
- The state's population has increased steadily from 14.83 million in 1950 to 19.65 million in 2013.







<sup>1</sup>The scale changes to single years of data in 2010

- Birth rates declined 40.9% from 20.3 per 100,000 in 1950 to 12.0 per 100,000 in 2013. The highest annual birth rate was 21.5 per 100,000 in 1955.
- Death rates declined 28.6% from 10.5 per 100,000 in 1950 to 7.5 per 100,000 in 2013. The highest annual death rate during this time period was 10.6 per 100,000 in 1960.



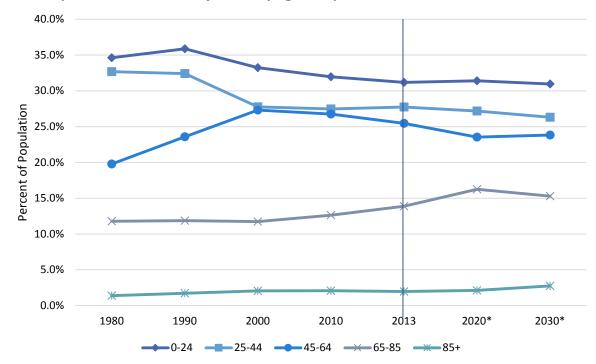


Chart 4. Population Trends and Projections by Age Group: New York State 1980-2030<sup>1,2</sup>

<sup>1</sup>The vertical line indicates the most recent of available data and a change in the scale of the x axis. <sup>2</sup> US Census Bureau http://www.census.gov/population/projections/data/national/2014.html

Population projections show that the population of older New Yorkers is increasing as a result of the aging baby boomer generation. This trend is particularly pronounced among residents aged 65 years and older which is projected to continue increasing through the year 2020.

• By 2030, it is projected that New York State residents aged 65-84 years will represent 15.3% of the state's population while those aged 85 years and older will increase to 2.7%.



Region/County	Births	Deaths	Difference	Death-to- Birth Ratio	Region/County	Births	Deaths	Difference	Death-to- Birth Ratio
New York State	235,274	147,445	87,829	0.63					
New York City	115,994	51,825	64,169	0.45					
Bronx	21,156	9,078	12,078	0.43					
Kings	41,060	15,570	25,490	0.38					
New York	18,423	9,768	8,655	0.53					
Queens	30,074	13,876	16,198	0.46					
Richmond	5,281	3,533	1,748	0.67					
Rest of State	119,280	95,620	23,660	0.80					
Albany	3,137	2,620	517	0.84	Oneida	2,642	2,440	202	0.92
Allegany	473	461	12	0.97	Onondaga	5,233	4,065	1,168	0.78
Broome	2,061	2,096	-35	1.02	Ontario	1,028	1,005	23	0.98
Cattaraugus	909	781	128	0.86	Orange	4,746	2,557	2,189	0.54
Cayuga	741	700	41	0.94	Orleans	414	440	-26	1.06
Chautauqua	1,340	1,308	32	0.98	Oswego	1,329	1,073	256	0.81
Chemung	938	828	110	0.88	Otsego	534	579	-45	1.08
Chenango	499	535	-36	1.07	Putnam	802	666	136	0.83
Clinton	730	661	69	0.91	Rensselaer	1,750	1,441	309	0.82
Columbia	539	654	-115	1.21	Rockland	4,650	2,004	2,646	0.43
Cortland	471	429	42	0.91	St. Lawrence	1,227	970	257	0.79
Delaware	376	534	-158	1.42	Saratoga	2,252	1,707	545	0.76
Dutchess	2,594	2,336	258	0.90	Schenectady	1,661	1,555	106	0.94
Erie	9,873	9,626	247	0.97	Schoharie	251	292	-41	1.16
Essex	307	402	-95	1.31	Schuyler	157	176	-19	1.12
Franklin	510	374	136	0.73	Seneca	394	314	80	0.80
Fulton	526	589	-63	1.12	Steuben	1,083	924	159	0.85
Genesee	569	612	-43	1.08	Suffolk	15,530	11,546	3,984	0.74
Greene	418	478	-60	1.14	Sullivan	837	696	141	0.83
Hamilton	30	67	-37	2.23	Tioga	521	349	172	0.67
Herkimer	673	666	7	0.99	Tompkins	853	665	188	0.78
Jefferson	2,206	872	1,334	0.40	Ulster	1,585	1,661	-76	1.05
Lewis	319	227	92	0.71	Warren	609	669	-60	1.10
Livingston	524	541	-17	1.03	Washington	612	562	50	0.92
Madison	645	577	68	0.89	Wayne	960	819	141	0.85
Monroe	8,355	6,265	2,090	0.75	Westchester	10,557	7,015	3,542	0.66
Montgomery	594	592	2	1.00	Wyoming	387	366	21	0.95
Nassau	13,821	10,586	3,235	0.77	Yates	303	246	57	0.81
Niagara	2,195	2,401	-206	1.09					

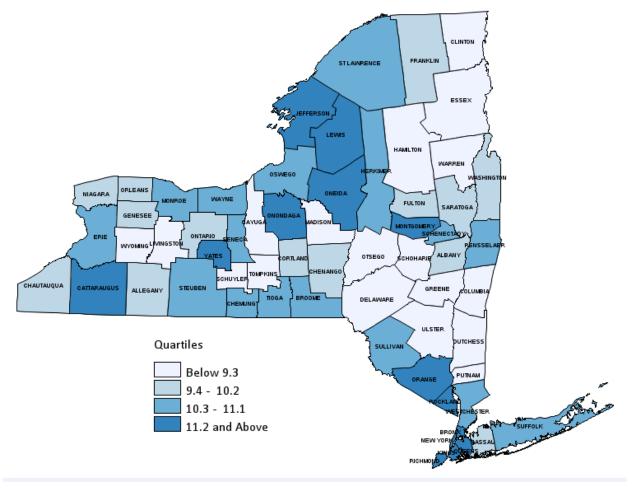
#### Table 3. Births, Deaths, and Death-to-Birth Ratio by Region and County: New York State 2013



Measures of the difference between births and deaths and the death-to-birth ratio can be useful indicators of the health and well-being of the population, aging, and migration trends. A larger difference and a ratio exceeding 1.0 indicate more deaths than births in the county. A lower ratio is usually indicative of a younger population. This information is further illustrated in Map 3.

- In 2013, New York State had a birth-death difference of 87,829; 64,169 for New York City and 23,660 for the Rest of State. The death-to-birth ratios were 0.63, 0.45, and 0.80, respectively.
- Birth-death differences in New York City ranged from a high of 25,490 in Kings County to a low of 1,748 in Richmond County. Differences in the Rest of State region ranged from a high of 3,984 in Suffolk County to a low of -206 in Niagara County.
- Death-to-birth ratios in New York City ranged from a low of 0.43 in Bronx County to a high of 0.67 in Richmond County. Ratios in the Rest of State region ranged from a low of 0.40 in Jefferson County to a high of 2.23 in Hamilton County.



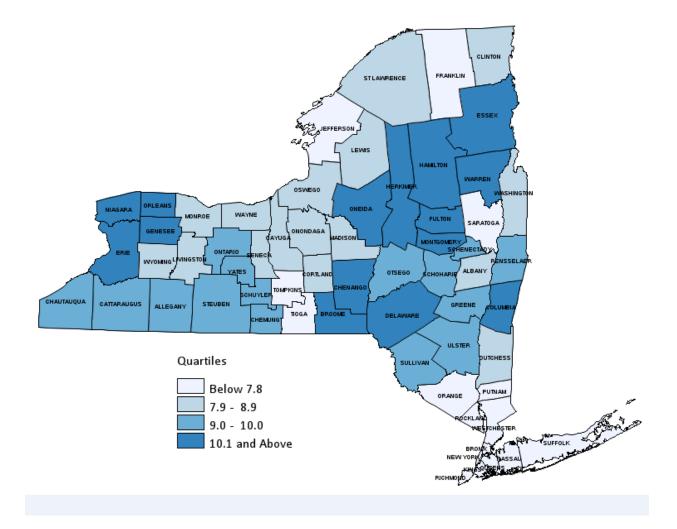




Because most births are to females in their 20s or 30s, these rates are heavily influenced by the percentage of the overall population comprised of this segment.

• The highest birth rates are largely concentrated in the New York City metropolitan area. The lower birth rates that dominate many Rest of State counties reflect the older populations in those areas.



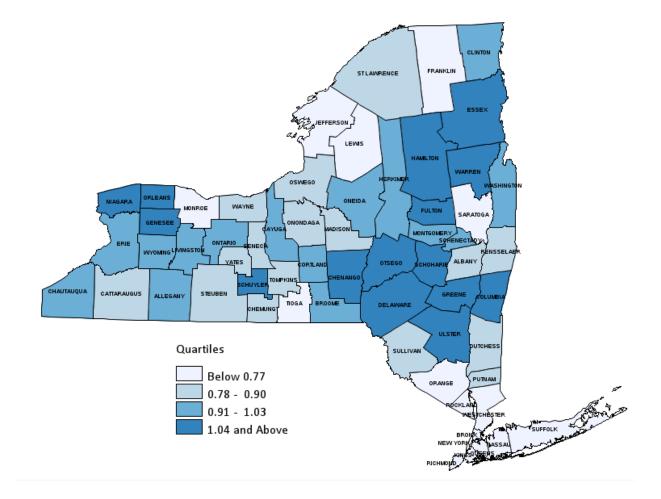




Because deaths are highly concentrated in an older population, the percentage of the overall population older than 65 within a region or area heavily influences these rates.

• The New York City metropolitan area has generally lower death rates than the Rest of State, reflecting the younger population that area of the state.







A death-to-birth ratio below one reflects more births than deaths; a ratio above one indicates more deaths than births.

• The New York City metropolitan area, with a generally younger population, had the lowest death-tobirth ratio. Rest of State counties with older populations had the highest ratios. In 2013, seventeen Rest of State counties had more resident deaths than births.



### **Chapter 3. Pregnancies**

- The number of lives births, and birth, pregnancy, and fertility rates in New York State have all declined since 2008.
- Total pregnancies and related outcomes have all declined from 2008 to 2013: teenage pregnancies and related outcomes have all declined to a greater extent than for all women combined.
- Over half of pregnancies resulting in a live birth during 2013 were insured by Medicaid, Family Health Plus or Child Health Plus.
- According to information provided on the birth certificate, approximately 7 in 10 of women in New York State received prenatal care in the first trimester, and less than 1 percent of women received no prenatal care.
- Nearly one quarter of mothers having a live birth in 2013 were overweight, and another one-fifth were obese.
- The number of women who self-reported smoking during pregnancy is declining.
- Preterm births have declined since 2008 in all age and racial/ethnic groups.
- In 2013, the large majority of newborns were fed either exclusively breast milk or breast milk with formula.
- The number of women who delivered vaginally after having a previous cesarean delivery (VBAC) has increased while the number of primary cesarean deliveries has decreased over time.
- The rates of spontaneous fetal deaths have not changed substantially since 2008, but rates have been consistently highest among black non-Hispanic women
- The number of induced abortions and abortion ratios have decreased since 2008 in nearly all age and race/ethnicity groups with black women receiving the largest number of abortions each year.



							Change (%)
Age Group	2008	2009	2010	2011	2012	2013	(%) 2008-2013
< 15	242	207	185	180	179	125	-48.3
15-17	5,074	4,687	4,330	3,811	3,500	2,972	-41.4
18-19	12,171	11,561	10,749	9,868	9,054	8,119	-33.3
20-24	50,924	49,540	47,844	45,929	45,275	43,326	-14.9
25-29	66,181	65,640	64,238	64,305	63,298	62,121	-6.1
30-34	65,527	66,605	67,131	67,655	69,056	69,256	5.7
35-39	38,991	37,716	37,741	37,372	37,989	38,608	-1.0
40-44	9,689	9,777	9,843	9,795	10,028	9,838	1.5
>45	819	837	843	812	839	869	6.1
Unknown	37	22	10	9	6	40	8.1
Race/Ethnicity							
White	120,420	119,167	117,214	116,137	114,958	114,678	-4.8
Black	40,283	39,865	38,210	37,730	36,905	36,130	-10.3
Hispanic	60,594	59,196	58,759	57,031	56,378	55,156	-9.0
Asian	21,399	21,238	21,545	22,966	24,908	23,510	9.9
American							
Indian	545	458	452	418	411	394	-27.7
Pacific							
Islander	1,641	1,724	1,605	1,649	1,672	1,598	-2.6
Multiple	3,488	3,300	3,792	2,485	2,644	2,441	-30.0
Other/							
Unknown	1,274	1,645	1,337	1,320	1,348	1,367	7.3
Total	249,655	246,592	242,914	239,736	239,224	235,274	-5.8

#### Table 4. Live Births by Age Group and Race/Ethnicity: New York State 2008-2013

• The number of lives births in New York State have declined since 2008 with decreases observed in most age-specific and racial/ethnic groups, particularly teens and younger women.

Pregnancy							Change (%)
Outcome	2008	2009	2010	2011	2012	2013	2008-2013
			Num	ber			
Pregnancies	385,885	378,814	372,588	362,200	354,868	346,644	-10.2
Live Births	249,655	246,592	242,914	239,736	239,224	235,274	-5.8
Spontaneous							
Fetal Deaths	17,849	17,214	18,462	19,786	18,142	17,044	-4.5
Induced							
Abortions	118,381	115,008	111,212	102,678	97,502	94,326	-20.3

#### Table 5. Pregnancy Outcomes for Women All Ages: New York State 2008-2013

• Total pregnancies and related outcomes have all declined from 2008 to 2013, with the greatest declines observed for induced abortions (-20.3%).



Pregnancy							Change (%)
Outcome	2008	2009	2010	2011	2012	2013	2008-2013
			Num	ber			
Pregnancies	39,312	37,058	34,277	30,315	26,922	23,549	-40.1
Live Births	17,487	16,455	15,264	13,859	12,733	11,216	-35.9
Spontaneous							
Fetal Deaths	1,103	947	1,128	1,071	896	724	-34.4
Induced							
Abortions	20,722	19,656	17,885	15,385	13,293	11,609	-45.0

#### Table 6. Teenage<sup>1</sup> Pregnancy Outcomes: New York State 2008-2013

<sup>1</sup> Teenage includes ages 10-19 years.

• Teenage pregnancies and related outcomes have all declined to a greater extent than for all women since 2008, with substantial decreases observed for live births, spontaneous fetal deaths, and induced abortions.

#### Table 7. Fertility Rates by Race/Ethnicity: New York State 2008-2013

	2008	2009	2010	2011	2012	2013	Change (%) 2008-2013
Race/Ethnicity	Rate p	er 1,000 F	emale Po	oulation A	ged 15-44	Years	
White	53.8	53.7	55.2	54.8	54.6	54.7	1.7
Black	60.0	60.8	58.7	58.0	57.1	56.0	-6.7
Hispanic	79.5	79.6	71.9	69.2	67.8	66.1	-16.9
Total	61.2	61.3	60.0	59.5	59.2	58.3	-4.7

- Fertility rates for 2013 ranged from 54.7 per 1,000 for white non-Hispanic women to 66.1 per 1,000 for Hispanics.
- Fertility rates decreased 4.7% in New York State since 2008 including a 16.9% decrease among Hispanic women.



							Change (%)				
	2008	2009	2010	2011	2012	2013	2008-2013				
Age Group	Rat	Rate per 1,000 Female Population Aged 15-44 Years									
<15	1.4	1.4	1.3	1.0	1.0	0.8	-42.9				
15-17	33.3	31.4	28.5	25.3	22.6	19.3	-42.0				
18-19	86.3	85.6	80.3	74.7	66.4	60.4	-30.0				
20-24	128.8	130.7	122.4	115.3	110.3	105.7	-17.9				
25-29	151.0	143.7	136.0	132.4	128.0	124.1	-17.8				
30-34	140.1	138.0	137.1	134.4	133.6	131.2	-6.4				
35-39	78.3	78.4	80.0	82.0	82.6	82.7	5.6				
40-44	20.9	21.4	22.0	21.9	22.4	22.5	7.7				
<u>&gt;</u> 45	1.8	1.8	1.9	1.8	1.9	2.0	11.1				
Race/Ethnicity											
White	67.6	66.9	68.1	67.8	67.6	67.5	0.2				
Black	133.2	134.4	130.6	123.0	116.5	112.6	-0.1				
Hispanic	125.9	127.0	114.5	106.1	102.5	99.7	-15.5				
Total	94.7	94.2	92.0	89.8	87.9	85.9	-9.3				

#### Table 8. Pregnancy Rates by Age Group and Race/Ethnicity: New York State 2008-2013

• There have been substantial decreases in pregnancy rates since 2008, particularly among teenagers and Hispanic women.

• Pregnancy rates have increased over the same time period for women aged 35 years and over.

#### Table 9. Birth Rates by Age Group and Race/Ethnicity: New York State 2008-2013

							Change (%)
	2008	2009	2010	2011	2012	2013	2008-2013
Age Group		Rat	te per 1,00	0 Populati	on		
<15	0.4	0.4	0.3	0.3	0.3	0.2	-46.4
15-17	12.9	12.1	11.2	10.1	9.5	8.2	-36.3
18-19	41.4	41.1	38.4	36.6	33.4	30.4	-26.6
20-24	73.0	74.1	68.5	64.8	63.5	60.7	-16.9
25-29	101.6	97.1	91.8	90.9	88.3	85.7	-15.6
30-34	104.8	103.9	103.4	101.9	102.4	100.9	-3.7
35-39	57.1	57.3	58.9	60.4	61.7	62.3	9.0
40-44	13.2	13.8	14.2	14.3	14.8	14.9	12.6
45-49	1.1	1.1	1.1	1.1	1.2	1.2	15.7
Race/Ethnicity							
White	10.3	10.2	10.4	10.3	10.2	10.2	-1.0
Black	14.1	13.9	13.5	13.2	12.9	12.5	-11.3
Hispanic	18.6	18.1	17.2	16.3	15.9	15.3	-17.7
Total	12.8	12.6	12.5	12.3	12.2	12.0	-4.8



- Birth rates have declined nearly 5% since 2008. As anticipated, the highest birth rates were observed among women aged 20-39 years. From 2008 to 2013, birth rates decreased among teenagers and increased among women aged 35-49 years.
- Birth rates for 2013 were highest (15.3 per 1,000) for Hispanics who also had the largest decrease in birth rates over the 2008-2013 time period declining by 17.7%.

							Change (%)
Maternal Characteristics	2008	2009	2010	2011	2012	2013	2008-2013
Education		Perce	ent of A	ll Live E	Births		
No High School Diploma	21.2	20.5	20.2	19.2	18.7	17.7	-16.2
High School Graduate	22.7	22.8	22.3	22.1	21.9	21.7	-4.3
Some College	24.7	24.5	24.3	24.7	24.7	24.7	0.2
Bachelor's Degree	16.5	16.9	17.0	17.5	18.0	18.5	11.9
Master's or Higher	14.2	14.6	15.6	16.0	16.2	16.7	18.2
Unknown	0.7	0.8	0.7	0.6	0.5	0.5	-25.8
Marriage Status							
Married	57.7	57.5	57.2	57.8	58.1	58.7	1.8
Unmarried	41.1	41.6	41.8	41.3	41.0	40.3	-1.9
Unknown	1.2	0.9	0.9	0.9	0.9	0.9	-21.0
Insurance Primary Payer							
Medicaid <sup>1</sup>	48.5	50.2	50.7	50.7	50.9	51.0	5.2
Private Insurance	46.4	45.2	44.6	44.8	44.5	44.7	-3.6
Self-Pay Self-Pay	1.8	1.7	1.7	1.6	1.6	1.6	-10.9
Other Commercial	2.3	2.1	1.9	1.9	2.0	1.9	-17.4
Not Stated	1.0	0.9	1.1	1.0	1.0	0.8	-21.2

#### Table 10. Live Birth Maternal Characteristics: New York State 2008-2013

<sup>1</sup> Medicaid includes Family Health Plus and Child Health Plus.

- The percentage of mothers with low education (No High School Diploma, High School Graduate) is declining while those with higher education is increasing (Bachelor's Degree, Master's or Higher). This is likely related to fewer younger women and increasingly older women becoming pregnant.
- Married women represented 58% of all births compared to approximately 40% among the unmarried in 2013
- Over half (51%) of mothers having a live birth in 2013 were insured by Medicaid, Family Health Plus or Child Health Plus followed by private insurance (44.7%).
- Primary insurance payer did not change remarkably for any insurance type since 2008, with the only increase seen in the proportion of women covered by public insurance programs.



							Change (%)
Prenatal Characteristics	2008	2009	2010	2011	2012	2013	2008-2013
Month Prenatal Care Began		Perce	ent of A	ll Live E	Births		
1st Trimester	66.3	67.5	69.7	69.7	71.8	72.7	9.6
2nd Trimester	20.2	19.9	20.0	20.5	20.0	18.9	-6.3
3rd trimester	4.7	4.5	4.8	4.6	4.8	5.1	9.2
None	1.0	0.7	0.7	0.7	0.6	0.6	-42.2
Not Stated	4.0	2.8	1.7	1.6	1.8	1.6	-60.1
Start Unknown	3.7	4.6	3.1	2.8	0.9	1.0	-72.8
Maternal Pre-Pregnancy BMI							
Underweight	4.3	4.3	4.1	4.2	4.4	4.2	-2.1
Normal	49.4	49.2	48.9	49.0	48.9	48.5	-1.8
Overweight	23.7	23.8	24.0	24.2	24.1	24.4	2.9
Obese	18.6	19.2	19.5	19.4	19.6	19.9	6.9
Unknown	4.0	3.4	3.5	3.2	3.1	3.1	-24.1
Smoking During Pregnancy <sup>1</sup>							· · · · · · · · · · · · · · · · · · ·
Yes	6.8	6.6	6.3	6.0	5.9	5.6	-17.6
<sup>1</sup> Smoking during pregnancy is likely under-	reported	on hirth	cortifi	ates			

#### Table 11. Live Birth Prenatal Characteristics: New York State 2008-2013

<sup>1</sup> Smoking during pregnancy is likely under-reported on birth certificates.

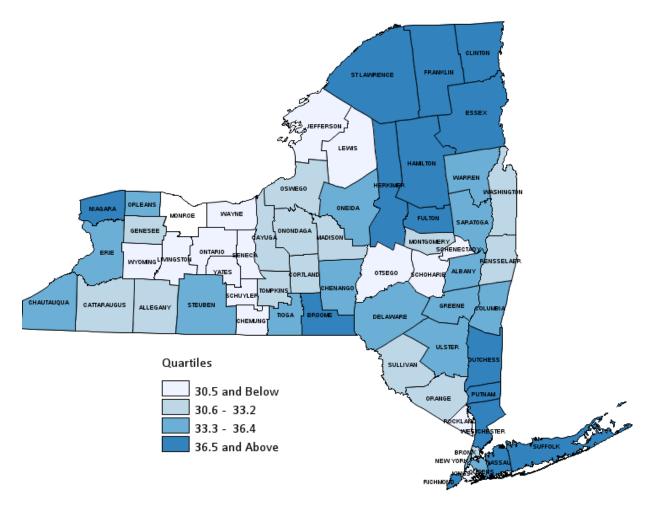
- Approximately 70% of women in New York State receive prenatal care in the first trimester, and this has increased since 2008.
- Less than 1% of women received no prenatal care, and this has been declining since 2008.
- Nearly a quarter (24.4%) of mothers having a live birth in 2013 were overweight, and another 19.9% were obese for a total of 44.3% overweight or obese. Weight status rates have not changed remarkably since 2008, although the proportion overweight or obese is increasing.
- The number of women who self-reported smoking during pregnancy is declining. In 2008, 6.8% of women reporting smoking during pregnancy fell to 5.6% in 2013 representing nearly an 18 percent decrease over that time period.



Birth Characteristics and Outcomes	2008	2009	2010	2011	2012	2013	Change (%) 2008-2013
Place of Delivery at Birth		Perc	ent of All L	ive Birt	hs		
Hospital	97.9	98.2	98.0	98.0	98.0	97.9	-0.1
Home	0.7	0.7	0.8	0.9	0.9	0.9	38.6
Other	1.4	1.1	1.1	1.1	1.1	1.2	-13.3
Attendant at Birth							
Physician	88.5	88.7	88.5	88.6	88.7	88.5	0.0
Certified Midwife	9.9	10.0	10.1	10.1	10.0	10.1	1.7
Other	0.4	0.5	0.6	0.6	0.6	0.7	53.5
Not Stated	1.1	0.8	0.8	0.7	0.7	0.7	-36.8
Method of Delivery							
Cesarean	34.3	34.7	34.5	34.1	34.1	34.1	-0.5
Vaginal	65.3	64.9	65.0	65.4	65.4	65.2	-0.2
Not Stated	0.4	0.5	0.5	0.4	0.5	0.7	58.9
Plurality							
Singleton	96.2	96.0	96.1	96.1	96.1	96.0	1.8
Twin	3.6	3.8	3.7	3.7	3.7	3.8	5.6
Triplets or More	0.2	0.2	0.2	0.2	0.1	0.1	-50.0
Birth Order							
1st	43.2	43.5	43.4	42.9	42.7	42.2	-2.2
2nd	31.3	31.0	31.0	31.6	31.6	31.9	2.0
3rd	15.0	14.8	14.6	14.7	14.7	14.8	-1.3
4th or Higher	10.5	10.6	10.9	10.7	10.9	11.0	5.2
Baby Gender							
Female	48.7	48.7	48.7	49.0	48.8	48.8	0.3
Male	51.3	51.3	51.3	51.0	51.2	51.2	-0.2
Gestational Age							
Preterm	12.2	12.3	11.6	11.0	10.8	10.8	-11.5
Early Term	25.4	25.2	24.9	24.3	23.5	23.8	-6.3
Full Term	47.0	47.4	48.1	48.6	49.2	49.2	4.7
Late Term	13.0	12.6	13.0	13.5	13.7	13.5	3.8
Unknown Gestation	2.4	2.5	2.4	2.6	2.7	2.8	16.7
Birthweight (gm)							
<1500	1.5	1.5	1.5	1.5	1.5	1.4	-9.9
1500-2499	6.6	6.7	6.7	6.6	6.5	6.6	-0.3
<u>&gt;</u> 2500	91.8	91.7	91.7	91.8	92.0	91.9	0.2
Not Stated	0.1	0.1	0.1	0.1	0.1	0.1	28.2
How Infant Was Fed							
Breast Milk Only	41.6	42.4	43.5	39.8	40.6	41.9	0.7
Breast Milk & Formula	34.0	36.5	37.0	42.3	42.5	42.5	24.9
Formula Only	19.1	18.3	17.0	16.4	15.4	14.2	-25.6
Not Stated	5.3	2.8	2.5	1.6	1.5	1.4	-73.1

#### Table 12. Live Birth Characteristics and Outcomes: New York State 2008-2013





#### Map 4. Percent of All Live Births that are Cesarean Delivery by County 2013

- Approximately two-thirds of live births were vaginal deliveries in 2013 and one-third (34.1%) cesarean with no notable change in these rates since 2008.
- As shown in Map 4, in 2013 the percent of births that are Cesarean Delivery are the highest on Long Island, the Lower Hudson Valley, and the North Country. Central New York counties have the lowest percentage of Cesarean Delivery, which may be attributed to the role Regional Perinatal Centers play in this part of the state.
- Approximately half of all births in 2008 (49.2%) were full term births followed by early term (23.8%), late term (13.5%), and preterm (10.8%).
- Preterm births have declined by 11.5% since 2008.
- The vast majority of births in 2013 (91.9%) weighed 2,500 grams or more while births 1,500-2,499 grams and less than 1.500 grams represented 6.6% and 1.4% of births, respectively, in 2013. There has been little change in birthweights since 2008.
- In 2013, the percent of newborns fed either breast milk exclusively or breast milk with formula was 84.4%. Those fed breast milk with formula increased by 24.9% since 2008, while exclusively formula fed declined by 25.6% from 2008 to 2013.





	2008	2009	2010	2011	2012	2013	Change (%) 2008-2013
Age Group							
<15	13.6	10.1	17.3	11.7	15.6	9.7	-29.0
15-17	10.5	11.0	10.8	10.5	10.1	10.4	-1.0
18-19	9.6	9.0	9.1	9.6	9.3	9.4	-2.7
20-24	8.2	8.1	8.1	7.9	7.7	8.0	-2.7
25-29	7.4	7.4	7.4	7.3	7.2	7.1	-4.3
30-34	7.6	7.7	7.8	7.6	7.4	7.6	-0.8
35-39	8.9	8.9	8.9	9.1	8.6	8.5	-4.6
40-44	11.2	11.6	10.9	10.4	11.1	11.1	-0.6
<u>&gt;</u> 45	19.7	21.9	20.0	24.1	19.7	19.6	-0.5
Race/Ethnicity							
White	6.8	6.9	6.8	6.9	6.7	6.5	-4.4
Black	13.0	13.0	12.9	12.6	12.3	12.5	-3.8
Hispanic	7.9	7.7	7.8	7.5	7.6	7.7	-2.5
Asian	7.7	7.4	8.2	8.2	7.6	8.1	5.2
American Indian	7.0	7.2	8.2	5.7	6.1	7.9	12.9
Pacific Islander	8.2	8.9	10.9	8.7	10.0	9.3	13.4
Multiple	9.9	8.6	9.9	8.9	8.8	10.0	1.0
Other/Unknown	11.0	10.5	10.8	9.7	10.0	10.0	-9.1
Total	8.1	8.2	8.2	8.1	8.0	8.0	-1.2

Table 13. Percent Low Birthweight <sup>1</sup> by Mother's Age Group and Race/Ethnicity: New York State 2008	•
2013	

<sup>1</sup> Number of resident low weight (<2,500 grams) live births/number of resident live births\*100

• Low birthweight births declined 29.0% since 2008 among mothers aged less than 15 years to 9.7% in 2013. The highest rates of low birthweight are among older women.

• Low birthweight births in 2013 ranged from a low of 10.0% of mothers from a multiple racial/ethnic background to a high of 12.5% for blacks.



							Change (%)
	2008	2009	2010	2011	2012	2013	2008-2013
Age Group							
<15	22.7	20.0	22.6	21.7	23.0	17.2	-24.3
15-17	16.1	16.8	15.5	14.2	14.5	14.4	-10.6
18-19	13.1	13.3	12.7	12.7	11.9	11.7	-10.5
20-24	11.5	11.5	11.0	10.8	10.2	10.5	-8.9
25-29	10.9	11.1	10.3	10.1	9.8	9.6	-11.4
30-34	11.7	11.7	11.3	10.4	10.4	10.5	-9.8
35-39	13.8	13.7	13.0	12.5	12.1	12.1	-12.0
40-44	16.2	17.0	15.8	13.4	15.1	15.4	-4.9
<u>&gt;</u> 45	23.8	28.0	22.1	26.1	23.1	22.7	-4.3
Race/Ethnicity							
White	10.7	10.9	10.3	9.8	9.6	9.7	-9.3
Black	17.1	17.5	16.2	15.8	15.5	15.2	-11.1
Hispanic	13.4	13.4	12.6	12.0	12.1	11.8	-11.9
Asian	10.3	10.6	10.5	9.6	8.8	9.8	-4.9
American Indian	16.7	11.7	13.4	13.1	9.0	12.5	-25.1
Pacific Islander	12.2	13.7	13.0	13.0	12.9	12.0	-1.6
Multiple	14.5	12.4	12.7	12.1	11.7	12.9	-11.0
Other/Unknown	14.3	13.2	13.2	11.9	11.7	13.4	-6.3
Total	12.2	12.3	11.6	11.0	10.8	10.8	-11.5

Table 14. Percent Preterm Live Births <sup>1</sup> by Mother's Age Group and Race/Ethnicity: New York State
2008-2013

<sup>1</sup> Number of resident preterm (<37 completed weeks gestation) live births/Number of resident live births\*100

- Preterm births declined 11.5% since 2008 with decreases seen in all age and racial/ethnic groups since 2008. The greatest decrease (24.3%) was among mothers aged less than 15 years.
- Preterm births in 2013 ranged from a low of 9.7% among whites to a high of 15.2% among blacks.



	2009	2010	2011	2012	2013	Change (%) 2009-2013
Method of Delivery			Number			
Vaginal Delivery	159,917	157,999	156,855	156,546	153,341	-4.1
VBAC <sup>2</sup>	3,153	3,548	3,963	4,114	4,503	42.8
Cesarean Delivery	85,559	83,818	81,858	81,550	80,310	-6.1
Primary Cesarean <sup>3</sup>	52,910	50,946	48,559	47,813	46,517	-12.1
Repeat Cesarean	32,649	32,872	33,299	33,737	33,793	3.5
Not Stated	1,116	1,097	1,023	1,128	1,623	45.4
Total Births <sup>4</sup>	246,592	242,914	239,736	239,224	235,274	-4.6
Method of Delivery			Percent			
Vaginal Delivery <sup>5</sup>	64.9	65.0	65.4	65.4	65.2	0.5
VBAC <sup>6</sup>	8.8	9.7	10.6	10.9	11.8	34.1
Cesarean Delivery <sup>7</sup>	34.9	34.7	34.3	34.3	34.4	-1.4
Primary Cesarean	21.6	21.1	20.3	20.1	19.9	-7.9
Repeat Cesarean	13.3	13.6	13.9	14.2	14.5	9.0
Not Stated	0.5	0.5	0.4	0.5	0.7	52.4

<sup>1</sup> Valid data for these measures became available in 2009

<sup>2</sup> Vaginal Birth After Cesarean is a subset of all Vaginal Deliveries

<sup>3</sup> Primary and Repeat Cesarean are subsets of all Cesarean Deliveries

<sup>4</sup> Total Births = Vaginal Births + Cesarean Deliveries + Not Stated

<sup>5</sup> Vaginal % = Vaginal/All Births of Known Method\*100

<sup>6</sup> VBAC % = VBAC / (VBAC + Repeat Cesarean)\*100

<sup>7</sup> Cesarean % = Cesarean/All Births of Known Method\*100

• From 2009 to 2013, the number of women who delivered vaginally after having a previous cesarean delivery increased 42.8% while the number of primary cesarean deliveries decreased by 12.1% over that time period.



Rank	2008	2009	2010	2011	2012	2013						
	Males											
1	Michael	Michael	Michael	Michael	Michael	Jacob						
2	Matthew	Jayden	Jayden	Jacob	Jacob	Michael						
3	Anthony	Matthew	Jacob	Jayden	Jayden	Ethan						
4	Daniel	Daniel	Ethan	Joseph	Ethan	Liam						
5	Joseph	Ethan	Joseph	Matthew	Joseph	Jayden						
6	Ryan	Ryan	Daniel	Ethan	Matthew	Joseph						
7	Jayden	Joseph	Anthony	Anthony	Mason	Mason						
8	Jacob	Anthony	Matthew	Mason	Ryan	Noah						
9	Christopher	Jacob	Ryan	Daniel	Liam	Matthew						
10	Alexander	Christopher	Alexander	Ryan	Daniel	Daniel						
			Female	S								
1	Isabella	Isabella	Isabella	Sophia	Sophia	Sophia						
2	Olivia	Sophia	Sophia	Isabella	Isabella	Isabella						
3	Sophia	Olivia	Olivia	Olivia	Emma	Emma						
4	Madison	Emma	Emma	Emma	Olivia	Olivia						
5	Ava	Emily	Ava	Ava	Ava	Mia						
6	Emma	Madison	Madison	Emily	Emily	Ava						
7	Emily	Ava	Emily	Madison	Mia	Emily						
8	Abigail	Mia	Mia	Mia	Madison	Madison						
9	Sarah	Abigail	Abigail	Abigail	Abigail	Abigail						
10	Samantha	Sarah	Chloe	Chloe	Chloe	Sofia						

#### Table 16. Top 10 Baby First Names<sup>1</sup> by Gender: New York State 2008-2013

• Jacob replaced Michael as the top name for a male newborn in 2013. Also in 2013, Noah made the top 10 list for the first time since 2008. Sophia remained in first place in the top 10 list for female newborns in 2013. Mia moved up to 5th in overall ranking, while Chloe fell off the list for the first time since 2010.

<sup>&</sup>lt;sup>1</sup> Similar first names with variations in spelling (e.g., Sarah, Sara) were not combined when ranking first names.

#### **Spontaneous Fetal Deaths and Induced Abortions**

- While the number of spontaneous fetal deaths declined in New York State since 2008, the rate remained relatively constant. The highest spontaneous fetal death rates are among older women.
- The rates of spontaneous fetal deaths have not changed substantially since 2008, but rates have been consistently highest among black non-Hispanic women.
- The number of spontaneous fetal deaths later in pregnancy decreased 16.4% from 2008 to 2013, with mothers aged 18-24 years having the largest decline over that time period.
- The rate of spontaneous fetal deaths later in pregnancy has decreased in all age groups, with the exception of younger teens where increases were observed since 2008.
- The number of spontaneous fetal deaths declined from 2008 to 2013 among white and black non-Hispanics and Hispanics. However, the fetal death rate declined among whites, blacks, and Hispanics.
- The number of induced abortions decreased 20.3% since 2008. Over half of induced abortions are for women between the ages of 20-29 years old. The largest decrease in induced abortions is seen in the teenage age groups under the age of 20 years.
- The abortion ratio has declined 15.3 percent since 2008 with decreases in nearly every age group.
- The number of induced abortions and abortion ratios decreased in all race/ethnicity groups since 2008.
- In the context of decreased ratios, black women received the largest number of abortions and had the highest abortion ratio each year.



	2008	2009	2010	2011	2012	2013	Change (%) 2008-2013
Age Group	2008	2009	Dea	-	2012	2015	2000-2015
< 15	21	21	32	25	23	12	-42.9
15-17	300	292	348	326	288	221	-26.3
18-19	782	634	748	720	585	491	-37.2
20-24	2,792	2,652	2,979	3,156	2,711	2,414	-13.5
25-29	3,860	3,601	4,003	4,127	3,867	3,537	-8.4
30-34	4,207	4,278	4,468	4,969	4,633	4,520	7.4
35-39	3,678	3,632	3,698	4,152	3,871	3,760	2.2
40-44	1,860	1,806	1,828	1,988	1,906	1,826	-1.8
>45	206	204	225	249	221	208	1.0
Unknown	143	94	133	74	37	55	-61.5
Total	17,849	17,214	18,462	19,786	18,142	17,044	-4.5
	Rat	e per 1,000 s	Spontaneous	<b>Fetal Deaths</b>	plus Live Birt	hs	
< 15	79.8	92.1	147.5	122.0	113.9	87.6	9.7
15-17	55.8	58.6	74.4	78.8	76.0	69.2	24.0
18-19	60.4	52.0	65.1	68.0	60.7	57.0	-5.5
20-24	52.0	50.8	58.6	64.3	56.5	52.8	1.5
25-29	55.1	52.0	58.7	60.3	57.6	53.9	-2.3
30-34	60.3	60.4	62.4	68.4	62.9	61.3	1.6
35-39	86.2	87.8	89.2	100.0	92.5	88.7	3.0
40-44	161.1	155.9	156.6	168.7	159.7	156.6	-2.8
>45	201.0	196.0	210.7	234.7	208.5	193.1	-3.9
Total	66.7	65.3	70.6	76.2	70.5	67.6	1.3

Table 17. Spontaneous Fetal Deaths and Rates All Gestational Ages by Ag	ge Group: New York State
2008-2013	

## Table 18. Spontaneous Fetal Deaths and Rates for All Gestational Ages by Race/Ethnicity: New YorkState 2008-2013

Age Group	2008	2009	2010	2011	2012	2013	Change (%) 2008-2013		
Race/Ethnicity	Deaths								
White	7,601	7,537	6,796	7,084	6,744	6,676	-12.2		
Black	4,026	4,002	4,489	4,303	3,961	3,620	-10.1		
Other	1,530	1,451	1,573	1,591	1,422	1,204	-10.6		
Hispanic	3,779	3,558	4,313	3,652	3,316	3,379	-21.3		
Total	17,849	17,214	18,462	19,786	18,142	17,044	-4.5		
	Ra	ate per 1,000	Spontaneous	Fetal Deaths	plus Live Birth	IS			
White	59.2	59.5	54.8	57.5	55.4	55.4	-1.4		
Black	90.8	91.2	105.1	102.4	96.9	92.3	0.7		
Hispanic	59.3	56.7	68.4	60.2	55.5	58.9	0.3		
Total	66.7	65.3	70.6	76.2	70.5	67.6	1.3		



							Change (%)
	2008	2009	2010	2011	2012	2013	2008-2013
Age Group			Dea	iths			
< 15	2	2	-	1	2	2	0.0
15-17	27	29	38	34	27	28	3.7
18-19	98	74	80	97	61	40	-59.2
20-24	362	349	338	337	295	269	-25.7
25-29	400	386	421	399	404	336	-16.0
30-34	407	438	399	433	368	380	-6.6
35-39	321	297	261	283	299	294	-8.4
40-44	110	117	92	115	89	103	-6.4
<u>&gt;</u> 45	18	12	9	14	11	14	-22.2
Unknown	15	7	7	1	2	5	-66.7
Total	1,760	1,711	1,645	1,714	1,558	1,471	-16.4
	Rate	e per 1,000 s	Spontaneous	Fetal Deaths	plus Live Birt	hs	
< 15	8.2	9.6	0.0	5.5	11.0	15.7	92.1
15-17	5.3	6.1	8.7	8.8	7.7	9.3	76.3
18-19	8.0	6.4	7.4	9.7	6.7	4.9	-38.6
20-24	7.1	7.0	7.0	7.3	6.5	6.2	-12.6
25-29	6.0	5.8	6.5	6.2	6.3	5.4	-10.5
30-34	6.2	6.5	5.9	6.4	5.3	5.5	-11.6
35-39	8.2	7.8	6.9	7.5	7.8	7.6	-7.4
40-44	11.2	11.8	9.3	11.6	8.8	10.4	-7.7
>45	21.5	14.1	10.6	16.9	12.9	15.9	-26.3
Total	7.0	6.9	6.7	7.1	6.5	6.2	-11.3

### Table 19. Spontaneous Fetal Deaths and Rates for Gestational Age 20 Weeks and Over by Age Group:New York State 2008-2013

# Table 20. Spontaneous Fetal Deaths and Rates for Gestational Age 20 Weeks and Over byRace/Ethnicity: New York State 2008-2013

	2008	2009	2010	2011	2012	2013	Change (%) 2008-2013		
Race/Ethnicity	Deaths								
White	629	654	581	587	549	552	-12.2		
Black	561	540	498	510	438	391	-30.3		
Other	161	158	176	224	253	231	43.5		
Hispanic	409	359	390	393	318	297	-27.4		
Total	1,760	1,711	1,645	1,714	1,558	1,471	-16.4		
	Ra	ate per 1,000	Spontaneous	Fetal Deaths	plus Live Birth	IS			
White	5.2	5.5	4.9	5.0	4.8	4.8	-8.3		
Black	13.7	13.4	12.9	13.3	11.7	10.7	-21.9		
Hispanic	6.8	6.0	6.6	6.8	5.6	5.4	-21.2		
Total	7.0	6.9	6.7	7.1	6.5	6.2	-11.3		



	2008	2009	2010	2011	2012	2013	Change (%) 2008-2013	
Age Group	Abortions							
< 15	599	600	558	404	365	317	-47.1	
15-17	7,713	7,173	6,355	5,409	4,543	3,780	-51.0	
18-19	12,410	11,883	10,972	9,572	8,385	7,512	-39.5	
20-24	36,095	35,231	34,713	32,601	30,648	29,700	-17.7	
25-29	28,369	27,882	26,960	25,288	24,557	24,260	-14.5	
30-34	17,889	17,591	17,440	16,592	16,380	16,261	-9.1	
35-39	10,751	10,202	9,778	9,158	9,001	8,900	-17.2	
40-44	3,740	3,604	3,597	3,294	3,247	3,212	-14.1	
<u>&gt;</u> 45	343	357	319	271	293	316	-7.9	
Unknown	472	485	520	89	83	68	-85.6	
Total	118,381	115,008	111,212	102,678	97,502	94,326	-20.3	
			Birth-to-Abo	rtion Ratio				
< 15	2,475.2	2,898.6	3,016.2	2,244.4	2,039.1	2,536.0	2.5	
15-17	1,520.1	1,530.4	1,467.7	1,419.3	1,298.0	1,273.2	-16.2	
18-19	1,019.6	1,027.9	1,020.7	970.0	926.1	925.9	-9.2	
20-24	708.8	711.2	725.5	709.8	676.9	686.7	-3.1	
25-29	428.7	424.8	419.7	393.3	388.0	391.1	-8.8	
30-34	273.0	264.1	259.8	245.2	237.2	235.1	-13.9	
35-39	275.7	270.5	259.1	245.0	236.9	230.9	-16.2	
40-44	386.0	368.6	365.4	336.3	323.8	327.0	-15.3	
<u>&gt;</u> 45	418.8	426.5	378.4	333.7	349.2	363.2	-13.3	
Unknown	2,475.2	2,898.6	3,016.2	2,244.4	2,039.1	2,536.0	2.5	
Total	474.2	466.4	457.8	428.3	407.6	401.5	-15.3	

### Table 21. Induced Abortions and Birth-to-Abortion Ratios by Woman's Age Group: New York State2008-2013

Table 22. Induced Abortions and Ratios by Woman's Race/Ethnicity: New York State 2008-2013

							Change (%)
	2008	2009	2010	2011	2012	2013	2008-2013
Race/Ethnicity			Abor	tions			
White	24,738	23,865	23,047	21,178	22,169	21,359	-13.7
Black	48,319	47,181	45,134	40,070	36,633	34,960	-27.6
Other	13,110	12,300	12,511	14,670	7,634	8,477	-35.3
Hispanic	32,214	31,662	30,520	26,760	25,526	24,663	-23.4
Total	118,381	115,008	111,212	102,678	97,502	94,326	-20.3
			Birth-to-Ab	ortion Ratio			
White	204.6	200.3	196.6	187.5	192.8	187.5	-8.4
Black	1199.1	1183.5	1181.2	1062.0	992.6	982.5	-18.1
Other	228.9	219.1	212.8	256.7	247.2	271.6	18.7
Hispanic	537.8	534.9	519.4	469.2	452.8	456.5	-15.1
Total	474.2	466.6	457.8	428.3	40.8	401.5	-15.3



# **Chapter 4. Deaths**

- Mortality rates have declined in New York State from 2004-2013 with decreases observed in all age, gender, and race/ethnicity groups.
- Infant, neonatal, post-neonatal, and perinatal deaths and rates have all been declining since 2004.
- Disorders related to preterm delivery and low birth weight are the most frequent cause of neonatal mortality, while congenital malformations and related conditions are the most common cause of death in the post-neonatal period.
- Diseases of the heart, malignant neoplasms, chronic lower respiratory disease, and cerebrovascular disease have been the top 4 underlying causes of death in New York State since 2004.
- Alzheimer's disease, hypertension, influenza, suicide, cirrhosis of liver, accidents, diabetes, and septicemia have all seen increases in mortality rates.
- Suicide rates are on the increase in New York State with the rates highest among males and whites.
- Cancers of the lung and bronchus are the leading cause of deaths due to malignant neoplasms, followed by cancers of the breast, colon, and pancreas.
- Accidental poisoning is the leading external cause of death, followed by suicide, accidental fall, and motor vehicle accidents.
- Firearm-related deaths have remained stable over time, with the highest rates among males and blacks.
- Alcohol-related deaths have increased somewhat since 2004 with the largest increase occurring among whites.
- Opioid-related deaths have increased substantially from 2004-2013 with increases observed in both genders and the greatest increase among whites.



# Mortality Trends 2004-2013

Age											Change 2004- 2013
Group	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	(%)
				Rate	per 100,00	0 Populatio	on				
<1	590.7	561.8	570.2	561.9	543.0	526.1	529.2	496.5	504.5	478.5	-19.0
1-9	16.3	16.6	15.8	16.3	16.4	14.7	13.4	14.7	13.9	14.7	-9.5
10-19	30.1	29.0	27.4	26.5	25.3	26.9	25.2	25.0	22.6	21.7	-27.9
10-13	30.1	29.0	27.4	20.5	23.3	20.9	23.2	23.0	22.0	21.7	-27.9
20-24	67.1	75.7	67.7	61.6	61.7	64.9	66.6	64.7	64.2	61.6	-8.1
25.24	75 7		76 5	75.0	76.0	74.0	74 5	76.6	745	74.0	1.0
25-34	75.7	73.7	76.5	75.3	76.3	71.9	71.5	76.6	74.5	74.3	-1.8
35-44	161.6	156.6	155.3	150.6	143.8	140.2	133.9	134.0	129.4	129.6	-19.7
45-54	380.3	375.7	363.2	354.6	336.9	339.1	333.9	329.7	326.6	324.6	-14.6
55-64	818.6	790.7	781.7	771.2	757.0	733.4	738.0	724.1	728.0	708.0	-13.5
65-74	1,985.4	1,945.1	1,809.6	1,767.8	1,732.0	1,679.0	1,663.0	1,645.0	1,591.0	1,570.0	-20.9
75-84	4,771.4	4,631.3	4,625.7	4,578.8	4,504.0	4,363.3	4,285.0	4,296.0	4,212.0	4,121.0	-13.6
	.,.,.,.	.,	.,020.7	.,370.0	.,	.,303.3	.,203.0	.,_50.0	.,_12.0	.,	15.0
<u>&gt;</u> 85	13,158.6	12,981.1	12,778.6	12,358.4	12,344.0	12,509.7	12,799.0	12,777	12,624	12,448	-5.4
Total	787.7	785.1	765.4	759.7	758.2	741.8	747.8	755.7	753.1	750.5	-4.7

# Table 23. Crude Mortality Rates by Age Group: New York State 2004-2013

• Age-specific deaths rates have declined within each age since 2004. The crude mortality rate has decreased 4.7% from 2004 to 2013.



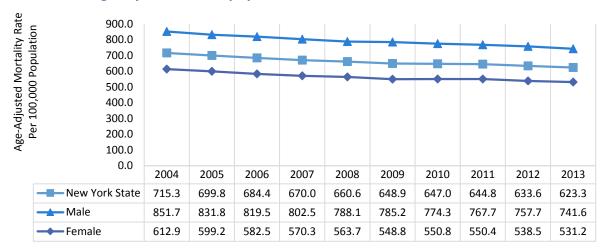
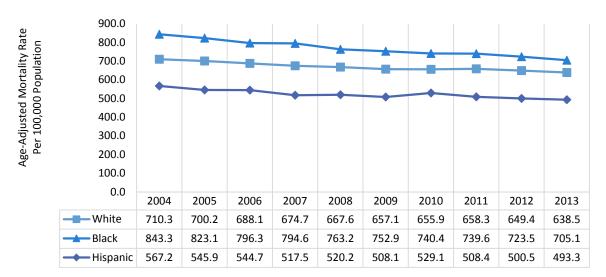


Chart 5. Trends in Age-Adjusted Mortality by Gender: New York State 2004-2013

• The age-adjusted mortality rate has decreased 12.9% from 2004 to 2013; 12.9% among males and 13.3 % among females.





• From 2004 to 2013, the age-adjusted mortality rate for blacks decreased 16.4%. Rates for Hispanics and whites decreased 13.0% and 10.1%, respectively, since 2004.



# **Infant Mortality**

Table 24. Infant, Neonatal, Post-Neonatal, and Perinatal Mortality and Rates: New York State 2004-2013

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Change (%) 2004- 2013
Infant Deaths	1 502	1 417	1 200	1 202	1 250	1 206	1 2 2 7	1,202	1 101	1 1 4 4	22.0
Infant Deaths	1,502	1,412	1,390	1,382	1,359	1,296	1,227	1,202	1,191	1,144	-23.8
Infant Death Rate <sup>1</sup>	6.00	5.8	5.6	5.5	5.4	5.3	5.1	5	5	4.9	-18.3
Neonatal Deaths	1,058	982	935	910	919	886	855	833	800	813	-23.2
	_,										
Neonatal Death Rate <sup>2</sup>	4.3	4	3.8	3.6	3.7	3.6	3.5	3.5	3.3	3.5	-18.6
Post-Neonatal Deaths	444	430	455	472	440	410	372	369	391	331	-25.5
Post-Neonatal Death	1.0	1.0	1.0	1.0	1.0	17	1 5	4 5	1.0	1.4	22.2
Rate <sup>3</sup>	1.8	1.8	1.8	1.9	1.8	1.7	1.5	1.5	1.6	1.4	-22.2
Perinatal Mortality <sup>4</sup>	2,842	2,676	2,656	2,583	2,679	2,597	2,500	2,547	2,358	2,284	-19.6
Perinatal Death Rate <sup>5</sup>	11.3	10.8	10.6	10.2	10.7	10.5	10.2	10.5	9.8	9.7	-14.2

<sup>1</sup> Deaths under 1 year of age per 1,000 live births

<sup>2</sup> Deaths under 28 days of age per 1,000 live births

<sup>3</sup> Deaths at age 28 days and older but less than 1 year per 1,000 live births

<sup>4</sup> Number of neonatal deaths + Spontaneous fetal deaths of gestation 20+ weeks

<sup>5</sup> (Number of neonatal deaths + Spontaneous fetal deaths of gestation 20+ weeks)\*1000/ (Spontaneous fetal deaths of gestation 20+ weeks + Live births)

• Measures of infant and perinatal mortality are important indicators of the population's health. Infant, neonatal, post-neonatal, and perinatal deaths and rates have all been declining since 2004.



	Neon	atal	Po Neoi	st- natal	Total	Infant
Cause of Death	N	%	N	%	N	%
Disorders related to short gestation and low birth weight, not elsewhere classified	233	28.7	11	3.3	244	21.3
Congenital malformations, deformations and chromosomal abnormalities	130	16.0	63	19.0	193	16.9
Cardiovascular disorders originating in the perinatal period	114	14.0	1	0.3	115	10.1
Newborn affected by maternal complications of pregnancy	51	6.3	0	0.0	51	4.5
Respiratory distress of newborn	36	4.4	0	0.0	36	3.1
Accidents (unintentional injuries)	6	0.7	26	7.9	32	2.8
Other respiratory conditions originating in the perinatal period	24	3.0	5	1.5	29	2.5
Newborn affected by complications of placenta, cord and membranes	25	3.1	1	0.3	26	2.3
Sudden infant death syndrome	3	0.4	23	6.9	26	2.3
Bacterial sepsis of newborn	24	3.0	1	0.3	25	2.2
Diarrhea and gastroenteritis of infectious origin	1	0.1	19	5.7	20	1.7
Diseases of the nervous system	6	0.7	14	4.2	20	1.7
Diseases of the circulatory system	3	0.4	13	3.9	16	1.4
Necrotizing enterocolitis of newborn	15	1.8	1	0.3	16	1.4
Neonatal hemorrhage	14	1.7	1	0.3	15	1.3
Intrauterine hypoxia and birth asphyxia	14	1.7	0	0.0	14	1.2
Influenza and pneumonia	0	0.0	11	3.3	11	1.0
Assault (homicide)	1	0.1	9	2.7	10	0.9
Endocrine, nutritional and metabolic diseases	4	0.5	6	1.8	10	0.9
Atelectasis	4	0.5	3	0.9	7	0.6
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	1	0.1	6	1.8	7	0.6
Diseases of the digestive system	4	0.5	3	0.9	7	0.6
Diseases of the genitourinary system	4	0.5	3	0.9	7	0.6
Neoplasms	6	0.7	1	0.3	7	0.6
Newborn affected by other complications of labor and delivery	5	0.6	0	0.0	5	0.4
Septicemia	1	0.1	3	0.9	4	0.3
Viral diseases	2	0.2	2	0.6	4	0.3
All Other Causes Combined	82	10.1	105	31.7	187	16.3
Total	813	100.0	331	100.0	1144	100.0

#### Table 25. Infant Cause of Death: New York State 2013

• Disorders related to preterm delivery and low birth weight are the most frequent cause of neonatal mortality, while congenital malformations and related conditions are the most common cause of death in the post-neonatal period.



# Cause of Death Trends 2004-2013

	2004	2005	2025	2007			2010	2011	2012	2010	Change (%) 2004-
Cause of Death	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2013
				Rate	ner 100 0	00 Popula	ation				
Diseases of the				nate	per 100,0	oo i opun					
Heart	272.4	270.6	260.3	256.1	252.5	240.1	229.9	225.9	221.1	219.5	-19.4
Malignant											
Neoplasms	186.6	183.5	181.6	182.7	180.4	178.5	181.1	180.0	181.9	178.5	-4.3
Chronic Lower											
Respiratory											
Disease	35.2	35.4	32.5	33.6	35.2	34.3	35.0	35.5	35.7	35.5	0.9
Cerebrovascular											
Disease	35.7	34.2	32.7	30.6	30.3	29.9	31.6	31.6	30.8	30.3	-15.1
Accidents	21.3	23.0	23.0	25.8	25.7	24.3	24.4	27.0	27.9	28.3	32.9
Pneumonia	29.3	28.9	25.4	23.4	23.4	22.3	23.6	24.7	22.1	23.7	-19.1
Diabetes											
Mellitus	20.4	21.1	19.9	19.2	18.4	19.0	18.6	20.1	20.3	20.5	0.5
Alzheimer's											
Disease	10.1	10.6	10.3	10.2	11.7	12.2	13.4	13.0	13.4	12.6	24.8
Septicemia	11.7	11.6	11.6	11.8	12.0	11.8	11.3	11.1	11.9	11.9	1.7
Hypertension											
with or without				<u> </u>	<u> </u>						
Renal Disease	8.2	8.7	8.4	8.5	9.5	9.7	10.5	10.3	10.1	11.4	39.0
Nephritis,											
Nephrotic											
Syndrome,	12.4	12.2	11.0	17.2	12.2	17 2	12 5	11 0	11 2	11.2	-8.9
Nephrosis Suicide	12.4 6.5	12.2 6.8	11.9 6.7	12.3 7.2	12.2 7.1	12.3 7.1	12.5 7.8	11.3 8.3	11.2 8.4	11.3 8.3	-8.9
Cirrhosis of Liver	6.7	6.3	6.2	6.7	7.1	6.6	7.8	7.6	7.6	7.8	16.4
Other Diseases	0.7	0.5	0.2	0.7	7.0	0.0	7.5	7.0	7.0	7.0	10.4
of the											
Circulatory											
System	0.4	07	7.0	7.0	6.0	C F	<b>C</b> 0	6.0	C F	6.2	26.2
Acquired	8.4	8.7	7.8	7.6	6.8	6.5	6.9	6.8	6.5	6.2	-26.2
Immune											
Deficiency											
Syndrome (AIDS)	9.0	8.6	7.5	6.9	6.4	5.6	5.1	4.6	3.8	3.7	-58.9
Certain	5.0	0.0	7.5	0.5	0.4	5.0	5.1	4.0	5.0	5.7	50.5
Conditions											
Originating in											
the Perinatal											
Period	4.5	4.2	4.2	4.0	3.8	3.8	3.6	3.6	3.4	3.4	-24.4
Homicide and											
Legal											
Intervention	4.5	4.6	4.8	4.3	4.4	4.2	4.5	4.1	3.6	3.3	-26.7
Arteriosclerosis	2.8	3.0	2.3	2.4	2.3	2.6	2.4	2.3	2.4	2.4	-14.3
Congenital											
Anomalies	2.9	2.8	2.6	2.7	2.7	2.4	2.4	2.4	2.3	2.3	-20.7
Gastritis,											
Enteritis, Colitis,											
Diverticulitis	2.0	2.3	2.3	2.4	2.4	1.5	1.4	1.4	1.4	1.3	-35.0
Influenza	0.2	0.6	0.2	0.1	0.4	0.3	0.1	0.3	0.3	0.9	350.0

#### Table 26. Crude Cause of Death Rates: New York State 2004-2013



Cause of Death	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Change (%) 2004- 2013
Complications of											
Pregnancy,											
Childbirth, and											
Puerperium	0.3	0.2	0.2	0.2	0.4	0.4	0.3	0.3	0.3	0.3	0.0
Sudden Infant											
Death Syndrome	0.2	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.0
Tuberculosis	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.1	0.1	-50.0

- Diseases of the heart, malignant neoplasms, chronic lower respiratory disease, and cerebrovascular disease have been the top 4 leading causes of death since 2004, but they are decreasing over time. The largest mortality rate decreases were seen for Sudden Infant Death Syndrome; AIDS; tuberculosis and other diseases of the circulatory system.
- Alzheimer's disease, hypertension, influenza, suicide, cirrhosis of liver, accidents, diabetes, and septicemia have all seen increases in mortality rates since 2004.

# Leading Causes of Death

Table 27. Age-Adjusted Mortality Rates for the Five Leading Causes of Death by Race/Ethnicity: NewYork State 2013

	White	Black	Hispanic
Rank	Cause of D	eath and Rate per 100,000 P	opulation
1	Diseases of the Heart	Diseases of the Heart	Diseases of the Heart
	179.2	210.4	136.9
2	Malignant Neoplasms	Malignant Neoplasms	Malignant Neoplasms
	157.3	165.0	111.8
3	Chronic Lower Respiratory Disease 33.6	Diabetes Mellitus 34.3	Cerebrovascular Disease 21.7
4	Accidents	Cerebrovascular Disease	Accidents
	29.9	27.5	21.4
5	Cerebrovascular Disease	Pneumonia	Pneumonia
	24.4	24.5	21.2

• Diseases of the heart and malignant neoplasms are the leading killers for whites, blacks, and Hispanics, followed by chronic lower respiratory disease for whites, diabetes for blacks, and cerebrovascular disease among Hispanics.

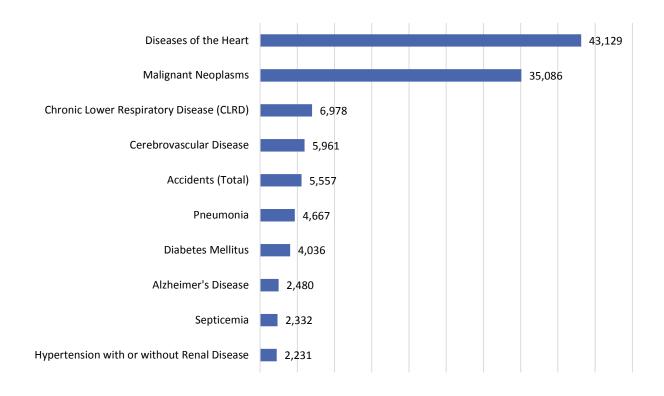


		Males			Females	
R	White	Black	Hispanic	White	Black	Hispanic
а						
n		Cause of D	eath and Rate	per 100,000 Po	pulation	
k						
1	<b>Diseases of the</b>	<b>Diseases of</b>	Diseases of	Diseases of	Diseases of	Diseases of
	Heart	the Heart	the Heart	the Heart	the Heart	the Heart
	223.2	251.4	173.2	144.7	181.5	110.9
2	Malignant	Malignant	Malignant	Malignant	Malignant	Malignant
	Neoplasms	Neoplasms	Neoplasms	Neoplasms	Neoplasms	Neoplasms
	183.1	207.7	140.4	139.1	141.3	94.1
3	Accidents 41.2	Diabetes Mellitus 39.2	Accidents 34.4	Chronic Lower Respiratory Disease 31.6	Diabetes Mellitus 25.4	Cerebrovas- cular Disease 20.8
4	Chronic Lower Respiratory Disease 36.8	Pneumonia 34.0	Pneumonia 28.0	Cerebrovas- cular Disease 24.3	Cerebrovas- cular Disease 28.0	Diabetes Mellitus 18.2
5	Cerebrovascular Disease 23.8	Cerebrovas- cular Disease 29.5	Diabetes Mellitus 23.5	Accidents 19.3	Chronic Lower Respiratory Disease 20.7	Pneumonia 16.7

Table 28. Age-Adjusted Mortality Rates for the Five Leading Causes of Death by Gender andRace/Ethnicity: New York State 2013

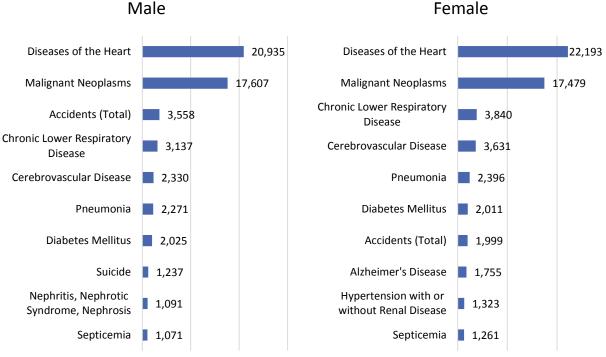
- Diseases of the heart and malignant neoplasms are the leading causes of death for male and female whites, blacks, and Hispanics.
- Diabetes is the third leading cause of death for black males and females, accidents for white and Hispanic males, and cerebrovascular disease for Hispanic females.





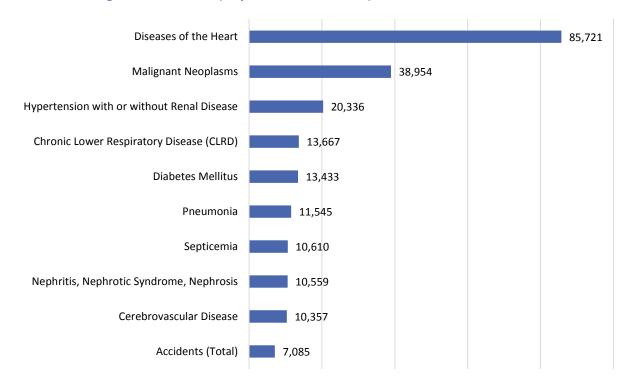
#### Chart 7. Leading Underlying Causes of Death: New York State 2013

#### Chart 8. Leading Underlying Causes of Death by Gender: New York State 2013



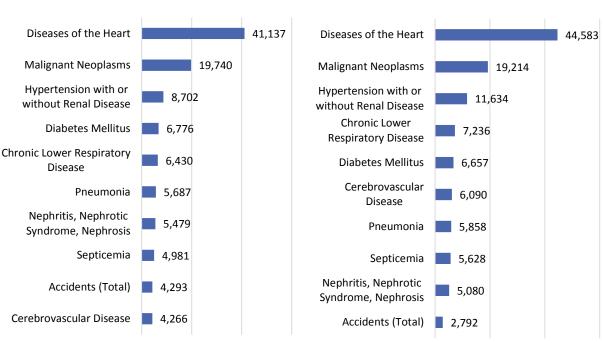
# Female

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#### Chart 9. Leading Causes of Death (Any Mention of a Cause)<sup>1</sup>: New York State 2013

#### Chart 10. Leading Causes of Death (Any Mention of a Cause)<sup>1</sup> by Gender: New York State 2013

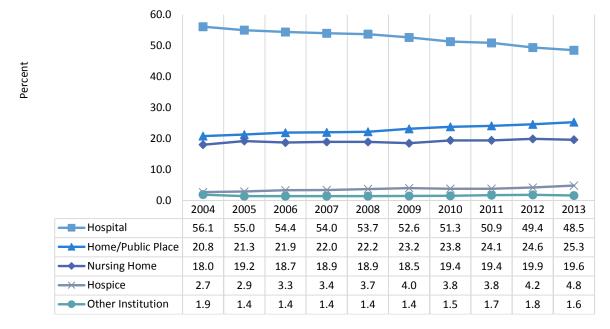


Male

## Female

<sup>1</sup>Condition mentioned in any position in the Multiple Cause of Death file.

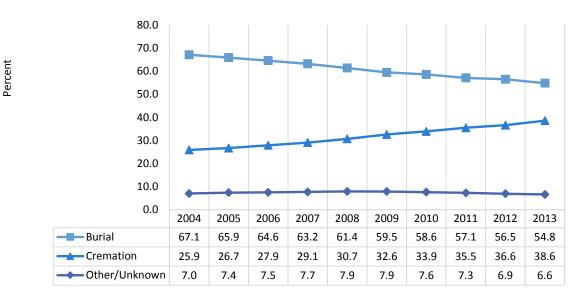




# **Place of Death and Disposition**



#### Chart 12. Disposition after Death: New York State 2004-2013



- Since 2004, 15.7% fewer New Yorkers have been dying in the hospital while more are dying at home and in hospice care increasing by 21.6% and 77.8%, respectively.
- Burials have decreased 18.3% while cremations have increased by 49.0% since 2004.



# **Deaths Due to Diseases of the Heart**

Table 29. Diseases of the Heart Mortality Rates per 100,000 and Ranking by Age Group and Gender:New York State 2013

		Т	otal		N	lales		Fe	males	
				R			R			R
A				a			a			a
Age Group	Cause of Death	Deaths	Rate	n k	Deaths	Rate	n k	Deaths	Rate	n k
droup	Other Ischemic Heart Diseases	23,476	96.1	1	11,682	122.9	1	11,794	76.2	1
	Other Diseases of the Heart	8,309	33.9	2	3,756	40.2	2	4,552	29.3	2
Total	Acute Myocardial Infarction	7,203	29.8	3	3,618	37.4	3	3,585	23.7	3
	Hypertension with Heart Disease Diseases of Pulmonary	3,262	13.7	4	1,568	15.8	4	1,694	11.7	4
	Circulation	714	3.1	5	262	2.7	5	452	3.3	5
	Other Ischemic Heart Diseases		2.1	1	52	0.9	2	186	3.2	1
	Other Diseases of the Heart	231	2.0	2	77	1.3	1	154	2.7	2
<45	Hypertension with Heart Disease	148	1.3	3	48	0.8	3	100	1.7	3
	Acute Myocardial	95	0.8	4	23	0.4	5	72	1.2	4
	Diseases of Pulmonary Circulation	56	0.5	5	34	0.6	4	22	0.4	5
	Other Ischemic Heart Diseases	861	30.6	1	220	15.2	1	641	46.9	1
	Acute Myocardial Infarction	348	12.4	2	85	5.9	4	263	19.2	2
45-54	Hypertension with Heart Disease	300	10.7	3	105	7.3	2	195	14.3	3
	Other Diseases of the Heart	247	8.8	4	87	6.0	3	160	11.7	4
	Diseases of Pulmonary Circulation	65	2.3	5	33	2.3	5	32	2.3	5
	Other Ischemic Heart Diseases	2,015	82.0	1	562	43.7	1	1,453	124.0	1
55-64	Acute Myocardial Infarction	773	31.5	2	203	15.8	2	570	48.7	2
JJ*07	Hypertension with Heart Disease	528	21.5	3	188	14.6	4	340	29.0	3
	Other Diseases of the Heart	528	21.5	4	194	15.1	3	334	28.5	4



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		Т	otal		N	1ales		Fe	males	
				R			R			R
				а			а			а
Age		_		n	_		n	_		n
Group	Cause of Death	Deaths	Rate	k	Deaths	Rate	k	Deaths	Rate	k
	Diseases of Pulmonary		<b>.</b> .				_			
	Circulation	76	3.1	5	35	2.7	5	41	3.5	5
	Other Ischemic Heart									
	Diseases	3,320	215.0	1	1,199	142.1	1	2,121	302.8	1
	Acute Myocardial			_			_			
	Infarction	1,178	76.3	2	444	52.6	2	734	104.8	2
65-74	Other Diseases of the			_			_			
	Heart	863	55.9	3	350	41.5	3	513	73.2	3
	Hypertension with					26.4		200		
	Heart Disease	509	33.0	4	220	26.1	4	289	41.3	4
	Diseases of Pulmonary	400		_	- 4		_			_
	Circulation	128	8.3	5	74	8.8	5	54	7.7	5
	Other Ischemic Heart		6 <b>75 0</b>					2 4 6 6		
	Diseases	5,834	675.2	1	2,668	525.3	1	3,166	888.9	1
	Other Diseases of the	4 000	<b>22</b> 2	-	000	100.1	_	0.0-		-
	Heart	1,932	223.6	2	996	196.1	2	935	262.5	2
75-84	Acute Myocardial	4 70 4	207.0	2	0.64	400 5	2	000	262.0	2
	Infarction	1,794	207.6	3	861	169.5	3	933	262.0	3
	Hypertension with	660	77.0		262	74 5		205	05.0	
	Heart Disease	668	77.3	4	363	71.5	4	305	85.6	4
	Diseases of Pulmonary	470	20.0	_	445	22.6	_	62	477	_
	Circulation	178	20.6	5	115	22.6	5	63	17.7	5
	Other Ischemic Heart	11 205	2 6 4 0 0	1	7 001	2 470 7	1	4 1 1 4	2 074 4	1
	Diseases	11,205	2,640.9	1	7,091	2,479.7	1	4,114	2,974.1	1
	Other Diseases of the	4 500	1 0 0 0	2	2 0 4 0	005.0	2	1 (50	1 100 0	2
	Heart	4,506	1,062.0	2	2,848	995.9	2	1,658	1,198.6	2
<u>&gt;</u> 85	Acute Myocardial	2.045	740.0	2	4.000	600 F	~	4.046	750.0	2
	Infarction	3,015	710.6	3	1,969	688.5	3	1,046	756.2	3
	Hypertension with	4 400	264.4					220		_
	Heart Disease	1,109	261.4	4	770	269.3	4	339	245.1	4
	Diseases of Pulmonary			_		<b>F</b> 6 6	_	-	26.4	_
	Circulation	211	49.7	5	161	56.3	5	50	36.1	5





# **Cancer Deaths**

	Total		Males		Female	S
Type of Cancer	Deaths	Rank	Deaths	Rank	Deaths	Rank
All Malignant Neoplasms	35,078		17,600		17,478	
Lip, Oral & Pharynx	505	18	354	14	151	19
Digestive Organs	9,334		5,212		4,122	
Esophagus	870	14	660	11	210	18
Stomach	851	15	511	12	340	14
Colon	2,564	3	1,266	3	1,298	3
Rectum	603	17	348	15	255	17
Liver and Bile Ducts	1,450	9	981	8	469	11
Pancreas	2,543	4	1,253	4	1,290	4
Other	453	19	193	17	260	16
Respiratory Organs	9,231		4,851		4,380	
Bronchus & Lung	8,899	1	4,603	1	4,296	1
Other	332	20	248	16	84	20
Bone, Connective Tissue	79	22	51	18	28	21
Breast	2,612	2	35	20	2,577	2
Genital Organs	3,781		1,642		2,123	
Cervix	286	21	-	-	286	15
Ovaries	984	12	-	-	977	7
Prostate	1,600	8	1,600	2	-	-
Other	905	13	42	19	863	8
Urinary Organs	1,712	7	1,153	7	559	10
Other Sites	3,109		1,613		1,496	
Brain	814	16	438	13	376	13
Other	2,295	5	1,175	6	1,120	5
Lymphatic Tissue	3,604		2,002		1,602	
Leukemia	1,415	10	822	9	593	9
Other	2,189	6	1,180	5	1,009	6
All Other Malignant Neoplasms	1,111	11	680	10	431	12

• Cancers of the lung and bronchus are the leading causes of deaths due to malignant neoplasms for both males and females, followed by cancers of the breast, colon, and pancreas.



			Total			Males		Females			
Age Group	Cause of Death	Ν	Rate	Rank	Ν	Rate	Rank	Ν	Rate	Rank	
	Breast	76	0.7	1				74	1.3	1	
	Brain	52	0.5	2	30	0.5	1	22	0.4	4	
	Colon	48	0.4	3	25	0.4	2	23	0.4	3	
<45	Bronchus & Lung	47	0.4	4	22	0.4	3	25	0.4	2	
	Lip	28	0.2	5	19	0.3	4				
	Pancreas	21	0.2	6	13	0.2	5				
	Cervix	19	0.2	7				19	0.3	5	
	Bronchus & Lung	404	14.4	1	212	15.5	1	192	13.3	2	
	Breast	230	8.2	2				227	15.7	1	
	Colon	115	4.1	3	70	5.1	3	45	3.1	4	
45-54	Pancreas	114	4.0	4	73	5.3	2	41	2.8	5	
	Ovary							71	4.9	3	
	Brain	64	2.3	6	37	2.7	5				
	Esophagus	44	1.6	7	40	2.9	4				
	Bronchus & Lung	1,160	47.2	1	638	54.5	1	522	40.6	1	
	Breast	305	12.4	2				302	23.5	2	
55-64	Pancreas	286	11.6	3	173	14.8	2	113	8.8	4	
	Colon	230	9.4	4	133	11.4	5	97	7.5	5	
	Liver & Bile Ducts	219	8.9	5	171	14.6	3				
	Esophagus	162	6.6	6	135	11.5	4				
	Ovary							126	9.8	3	
	Bronchus & Lung	1,877	121.6	1	996	142.2	1	881	104.4	1	
	Pancreas	430	27.8	2	223	31.8	2	207	24.5	3	
	Breast	343	22.2	3				340	40.3	2	
65-74	Colon	315	20.4	4	203	29.0	3	112	13.3	5	
	Liver & Bile Ducts	212	13.7	5	151	21.6	5				
	Prostate				179	25.6	4				
	Ovary							177	21.0	4	
	Bronchus & Lung	1,782	206.2	1	875	245.7	1	907	178.6	1	
	Pancreas	475	55.0	2	216	60.6	3	259	51.0	3	
	Colon	393	45.5	3	199	55.9	4	194	38.2	4	
75-84	Breast	337	39.0	4				327	64.4	2	
	Prostate				316	88.7	2				
	Bladder	230	26.6	6	174	48.9	5				
	Ovary							150	29.5	5	
	Bronchus & Lung	839	197.7	1	370	267.5	1	469	164.0	1	
	Colon	419	98.8	2	151	109.2	3	268	93.7	3	
	Prostate				366	264.6	2				
<u>&gt;</u> 85	Pancreas	321	75.7	4	121	87.5	5	200	69.9	4	
_	Breast	302	71.2	5				297	103.9	2	
	Bladder	217	51.1	6	139	100.5	4				
	Ovary							100	35.0	5	

Table 31. Top 5 Causes of Deaths By Gender Due to Malignant Neoplasms, Mortality Rates per 100,000Population and Ranking by Age Group and Gender: New York State 2013



# **External Causes of Death**

- Accidental poisonings, suicides, and accidental falls represent two-thirds of the top 8 external causes of deaths in New York State.
- Compared to males, suicide and motor vehicle accident deaths rank lower and accidental falls higher among females.
- Accidental poisonings are the leading external cause of death for whites, Hispanics, and adults aged 20-54 years.
- Suicide is the second leading external cause of death for whites and New Yorkers aged 10-54 years.
- Homicide and legal intervention deaths are the leading external cause of death for blacks and the second leading cause for children aged 0-9 years.

		Total			Males		Females		
External Cause of Death	N	Rate	Rank	N	Rate	Rank	N	Rate	Rank
Accidental Poisoning	1,969	9.6	1	1,377	13.9	1	592	5.6	1
Suicide	1,638	7.8	2	1,240	12.5	2	398	3.7	3
Accidental Fall	1,384	5.8	3	712	7.6	4	672	4.4	2
Motor Vehicle Accident	1,200	5.8	4	846	8.7	3	354	3.1	4
Homicide and Legal Intervention	671	3.4	5	516	5.3	5	155	1.5	5
Accidental Threat to Breathing	259	1.2	6	142	1.5	6	117	0.9	6
Accidental Fire	148	0.7	7	82	0.9	7	66	0.6	7
Accidental Drowning	105	0.5	8	78	0.8	8	27	0.2	8

# Table 32. External Cause of Death Age-Adjusted Mortality Rates per 100,000 Population and Rankingby Gender: New York State 2013



Rank	0-9	10-19	20-34	35-54	55-74	75+	Total
Nalik			Cause and Ra	ate per 100,00	0 Population		
1	Accidental Threat to Breathing (1.9)	Motor Vehicle Accident (3.9)	Accidental Poisoning (13.6)	Accidental Poisoning (17.1)	Suicide (11.6)	Accidental Fall (76.5)	Accidental Poisoning (10.0)
2	Homicide and Legal Intervention (1.5)	Suicide (2.9)	Suicide (8.5)	Suicide (11.3)	Accidental Poisoning (10.1)	Motor Vehicle Accident (14.4)	Suicide (8.3)
3	Motor Vehicle Accident (1.3)	Homicide and Legal Intervention (1.9)	Motor Vehicle Accident (7.7)	Motor Vehicle Accident (5.4)	Motor Vehicle Accident (6.9)	Suicide (10.4)	Accidental Fall (7.0)
4	Accidental Fire (0.6)	Accidental Poisoning (1.4)	Homicide and Legal Intervention (7.2)	Homicide and Legal Intervention (3.6)	Accidental Fall (6.2)	Accidental Threat to Breathing (8.4)	Motor Vehicle Accident (6.1)
5	Accidental Drowning (0.4)	Accidental Drowning (0.5)	Accidental Fall (0.6)	Accidental Fall (2.2)	Homicide and Legal Intervention (1.8)	Accidental Fire (3.2)	Homicide and Legal Intervention (3.4)
6	Accidental Fall (0.2)	Accidental Fire (0.4)	Accidental Fire (0.4)	Accidental Threat to Breathing (0.6)	Accidental Threat to Breathing (1.5)	Accidental Poisoning (3.1)	Accidental Threat to Breathing (1.3)
7	Suicide (0.1)	Accidental Fall (0.2)	Accidental Drowning (0.4)	Accidental Drowning (0.5)	Accidental Fire (1.0)	Homicide and Legal Intervention (1.6)	Accidental Fire (0.8)
8	Accidental Poisoning (0.0)	Accidental Threat to Breathing (0.1)	Accidental Threat to Breathing (0.3)	Accidental Fire (0.4)	Accidental Drowning (0.7)	Accidental Drowning (1.0)	Accidental Drowning (0.5)

Table 33. External Cause of Death Crude Mortality Rates and Ranking by Age Group: New York State2013



Table 34. External Cause of Death Age-Adjusted Mortality Rates and Ranking by Race/Ethnicity: New
York State 2013

Rank	White	Black	Hispanic
	Caus	e and Rate per 100,000 Popula	ation
1	Accidental Poisoning (11.9)	Homicide and Legal Intervention (12.0)	Accidental Poisoning (8.7)
2	Suicide (9.9)	Accidental Poisoning (7.8)	Motor Vehicle Accident (5.5)
3	Accidental Fall (6.5)	Motor Vehicle Accident (4.5)	Suicide (4.6)
4	Motor Vehicle Accident (6.5)	Suicide (3.9)	Accidental Fall (3.9)
5	Homicide and Legal Intervention (1.4)	Accidental Fall (3.2)	Homicide and Legal Intervention (2.8)
6	Accidental Threat to Breathing (1.3)	Accidental Fire (2.7)	Accidental Threat to Breathing (0.9)
7	Accidental Fire (0.7)	Accidental Threat to Breathing (0.9)	Accidental Fire (0.6)
8	Accidental Drowning (0.6)	Accidental Drowning (0.4)	Accidental Drowning (0.3)



# **Suicide Deaths**

#### Table 35. Suicide Deaths and Crude Mortality Rates by Age Group: New York State 2004-2013

											Change (%)
	2004	2025	2000	2007	2000	2000	2010	2011	2042	2042	2004-
Age	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2013
Group	Deaths										
10-19	79	66	60	58	54	69	69	94	90	72	-8.9
20-24	102	121	93	94	97	117	115	127	121	110	7.8
25-34	179	182	201	202	197	173	204	246	245	252	40.8
35-44	233	270	246	275	277	252	276	273	249	244	4.7
45-54	244	278	302	295	326	334	386	362	389	357	46.3
55-64	157	177	189	206	201	222	233	255	293	304	93.6
65-74	87	88	95	112	126	109	120	129	148	160	83.9
75-84	84	79	83	91	82	76	75	100	90	94	11.9
85+	29	37	26	35	31	45	35	36	32	40	37.9
Total	1,196	1,298	1,295	1,368	1,391	1,400	1,513	1,625	1,657	1,637	36.9
Age											
Group				•	-	000 Popu					
10-19	3.0	2.5	2.2	2.2	2.1	2.7	2.7	3.7	3.6	2.9	-2.5
20-24	7.8	9.3	6.8	6.7	6.9	8.7	8.2	8.9	8.4	7.6	-2.0
25-34	6.8	7.0	7.9	8.0	7.7	6.5	7.7	9.1	8.9	9.0	32.2
35-44	7.8	9.1	8.5	9.7	9.9	9.3	10.6	10.7	9.8	9.7	24.4
45-54	8.9	10.0	10.7	10.3	11.2	11.3	13.4	12.6	13.7	12.7	42.4
55-64	8.0	8.7	9.1	9.6	9.1	9.7	10.1	10.7	12.1	12.4	55.2
65-74	7.1	7.2	7.5	8.7	9.5	8.0	8.8	9.2	10.0	10.4	46.0
75-84	9.2	8.6	9.4	10.3	9.3	8.7	8.7	11.6	10.4	10.9	18.2
85+	8.2	10.0	7.0	9.1	7.8	11.6	9.0	8.9	7.7	9.4	15.0
Total	6.2	6.7	6.7	7.1	7.1	7.2	7.8	8.3	8.5	8.3	33.9



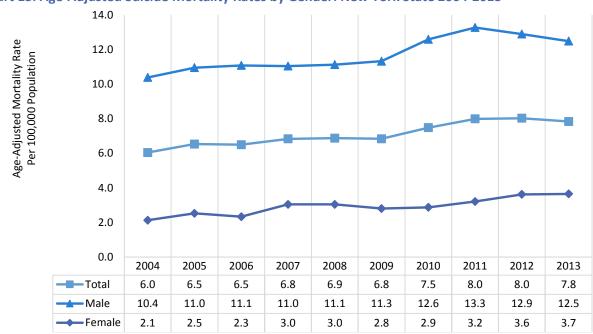
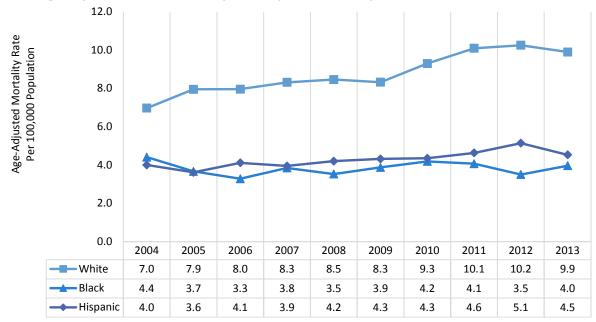


Chart 13. Age-Adjusted Suicide Mortality Rates by Gender: New York State 2004-2013







## **Firearm-Related Deaths**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Change (%) 2004- 2013
Age	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2013
Group					Dea	ths					
10-19	89	91	111	106	94	96	110	97	83	48	-46.1
20-24	174	172	183	147	142	154	138	149	164	116	-33.3
25-34	208	221	251	220	229	210	231	212	204	174	-16.3
35-44	161	173	141	178	163	132	145	130	127	111	-31.1
45-54	138	151	126	122	114	123	152	156	127	146	5.8
55-64	80	92	75	85	79	94	88	102	110	107	33.8
65-74	46	45	56	54	58	55	70	55	70	58	26.1
75-84	40	40	34	52	41	41	45	54	48	48	20.0
85+	5	14	10	20	20	32	15	17	18	18	260.0
Total	941	999	987	984	940	937	994	972	951	826	-12.2
Age Group				Rate p	er 100,0	00 Popu	ulation				
10-19	3.4	3.5	4.2	4.0	3.6	3.7	4.3	3.8	3.3	2.0	-42.3
20-24	13.3	13.2	13.4	10.5	10.1	11.4	9.8	10.4	11.4	8.1	-39.4
25-34	7.9	8.5	9.9	8.7	8.9	7.9	8.7	7.8	7.4	6.2	-21.4
35-44	5.4	5.8	4.9	6.3	5.8	4.9	5.6	5.1	5.0	4.4	-18.1
45-54	5.0	5.4	4.5	4.3	3.9	4.2	5.3	5.4	4.5	5.2	3.0
55-64	4.1	4.5	3.6	4.0	3.6	4.1	3.8	4.3	4.6	4.4	7.2
65-74	3.8	3.7	4.4	4.2	4.4	4.1	5.1	3.9	4.7	3.8	0.1
75-84	4.4	4.3	3.8	5.9	4.7	4.7	5.2	6.3	5.6	5.6	26.8
85+	1.4	3.8	2.7	5.2	5.0	8.3	3.8	4.2	4.3	4.2	200.3
Total	4.9	5.2	5.1	5.1	4.8	4.8	5.2	5.0	4.9	4.2	-13.8

Table 36. Firearm-Related Deaths1 and Crude Mortality Rates by Age Group: New York State 2004-2013

<sup>1</sup> Condition mentioned in any position in the Multiple Cause of Death file



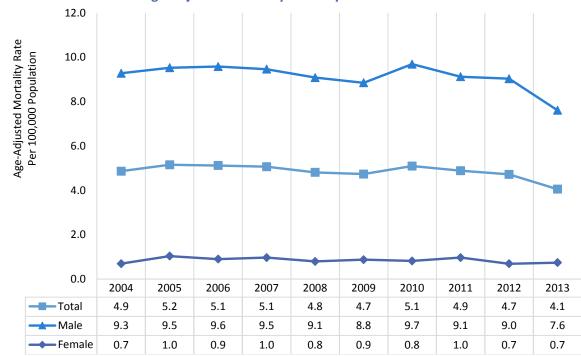
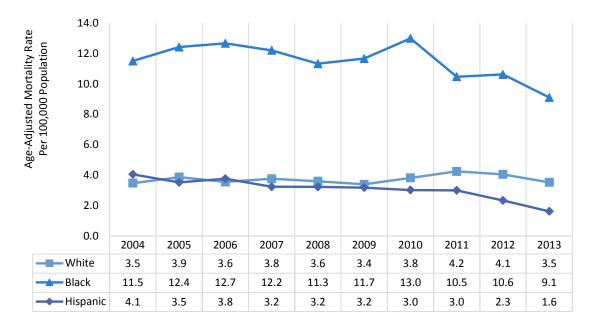


Chart 15. Firearm-Related Age-Adjusted Mortality Rates by Gender: New York State 2004-2013

Chart 16. Firearm-Related Age-Adjusted Mortality Rates by Race/Ethnicity: New York State 2004-2013





# **Alcohol-Related Deaths**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Change (%) 2004- 2013
Age	2004	2005	2000	2007	2000	2005	2010			2015	2010
Group					Dea	iths					
10-19	11	9	9	6	10	6	4	7	4	8	-27.3
20-24	26	32	19	30	38	18	24	35	27	21	-19.2
25-34	99	71	79	113	110	109	123	128	143	151	52.5
35-44	388	364	331	332	373	343	323	340	346	342	-11.9
45-54	965	1,001	940	941	977	996	964	977	1,072	1,037	7.5
55-64	862	917	970	1,000	1,117	1,114	1,193	1,302	1,412	1,416	64.3
65-74	698	639	606	619	623	686	677	726	773	860	23.2
75-84	465	428	448	413	422	434	412	439	398	451	-3.0
85+	118	125	140	140	136	141	153	143	131	169	43.2
Total	3,632	3,590	3,548	3,595	3,808	3,848	3,874	4,099	4,308	4,457	22.7
Age											
Group				Rate p	er 100,0	00 Popu	lation				
10-19	0.4	0.3	0.3	0.2	0.4	0.2	0.2	0.3	0.2	0.3	-22.2
20-24	2.0	2.5	1.4	2.2	2.7	1.3	1.7	2.4	1.9	1.5	-26.6
25-34	3.8	2.7	3.1	4.5	4.3	4.1	4.6	4.7	5.2	5.4	43.2
35-44	13.0	12.3	11.4	11.7	13.3	12.7	12.4	13.3	13.6	13.6	4.7
45-54	35.2	36.0	33.4	33.0	33.6	33.8	33.5	34.1	37.7	36.8	4.6
55-64	43.8	45.0	46.4	46.7	50.6	48.9	51.8	54.5	58.5	57.6	31.7
65-74	56.9	52.2	47.9	48.3	46.8	50.5	49.8	52.0	52.2	55.7	-2.2
75-84	50.9	46.5	50.5	46.9	48.1	49.6	47.5	50.9	46.2	52.2	2.5
85+	33.3	33.8	37.7	36.4	34.2	36.4	39.1	35.3	31.6	39.8	19.5
Total	18.9	18.6	18.4	18.6	19.5	19.7	20	21.1	22	22.7	20.1

 Table 37. Alcohol-Related Deaths<sup>1</sup> and Crude Mortality Rates by Age Group: New York State 2004-2013

<sup>1</sup> Condition mentioned in any position in the Multiple Cause of Death file



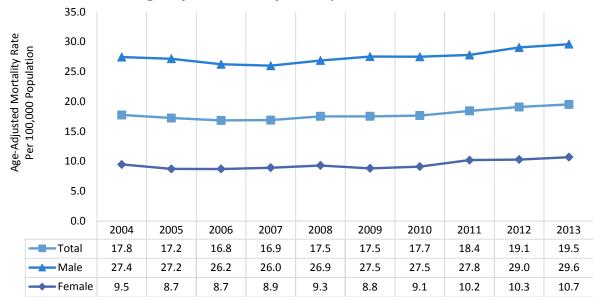
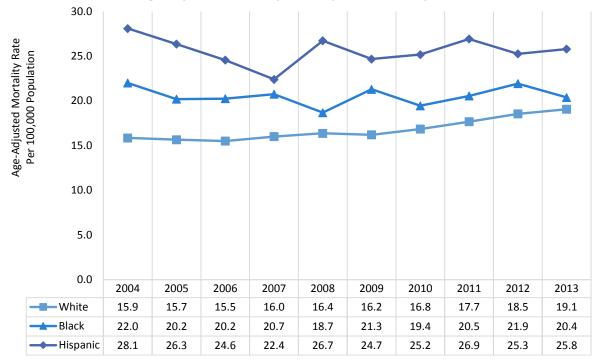


Chart 17. Alcohol-Related Age-Adjusted Mortality Rates by Gender: New York State 2004-2013







# **Opioid-Related Deaths**

Table 38. Opioid-Related<sup>1</sup> Deaths and Crude Mortality Rates by Age Group: New York State 2004-2013

											Change (%) 2004-
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2013
Age											
Group		· · · · · · · · · · · · · · · · · · ·			Dea	aths					
10-19	10	16	22	14	33	24	23	20	19	19	90.0
20-24	14	38	49	57	56	66	78	127	112	116	728.6
25-34	44	94	115	168	153	166	156	273	297	288	554.5
35-44	112	167	205	215	210	224	204	233	257	224	100.0
45-54	122	193	254	277	326	302	285	333	339	319	161.5
55-64	32	57	71	103	117	120	125	154	192	208	550.0
65-74	4	9	13	7	19	15	18	17	25	40	900.0
75-84	2	2	7	4	5	4	3	3	6	8	300.0
85+	1	1	2	5	2	1	1	2	3	2	100.0
Total	341	579	739	851	922	925	895	1,165	1,254	1,227	259.8
Age											
Group					er 100,0	000 Pop	ulation				
10-19	0.4	0.6	0.8	0.5	1.3	0.9	0.9	0.8	0.8	0.8	103.2
20-24	1.1	2.9	3.6	4.1	4.0	4.9	5.5	8.9	7.8	8.1	652.8
25-34	1.7	3.6	4.5	6.7	6.0	6.3	5.9	10.1	10.8	10.3	514.7
35-44	3.7	5.6	7.1	7.6	7.5	8.3	7.8	9.1	10.1	8.9	137.5
45-54	4.5	6.9	9.0	9.7	11.2	10.3	9.9	11.6	11.9	11.3	154.6
55-64	1.6	2.8	3.4	4.8	5.3	5.3	5.4	6.4	8.0	8.5	421.1
65-74	0.3	0.7	1.0	0.5	1.4	1.1	1.3	1.2	1.7	2.6	694.1
75-84	0.2	0.2	0.8	0.5	0.6	0.5	0.3	0.3	0.7	0.9	322.5
85+	0.3	0.3	0.5	1.3	0.5	0.3	0.3	0.5	0.7	0.5	66.8
Total	1.8	3.0	3.8	4.4	4.7	4.7	4.6	6.0	6.4	6.2	252.1

<sup>1</sup> Condition mentioned in any position in the Multiple Cause of Death file



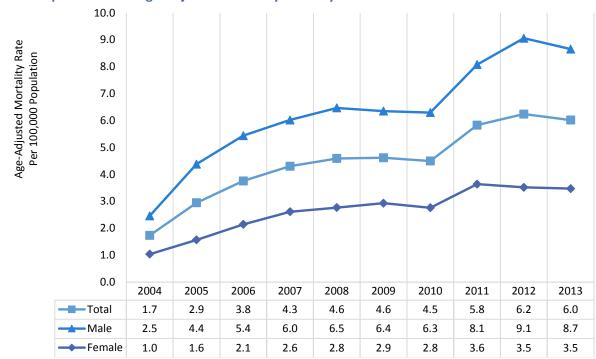
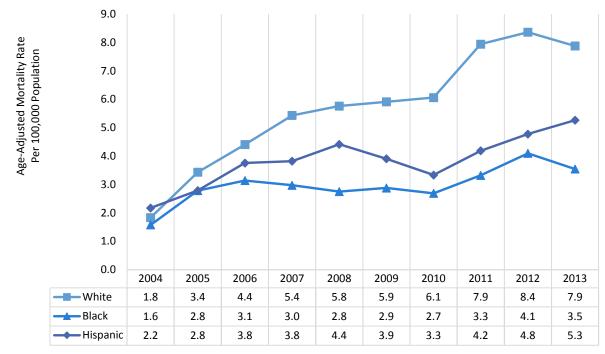


Chart 19. Opioid-Related Age-Adjusted Mortality Rates by Gender: New York State 2004-2013







# **Chapter 5. Marriages and Dissolutions**

- Since the passage of same sex marriage legislation in July 2011, the percent of same sex marriages increased to 6.7 percent of all Rest of State marriages in 2013 (NYC has not reported data on same sex marriages).
- The number of marriages has increased since 2008 with more ceremonies taking place later in the calendar year.
- The number of couples divorcing has increased by nearly 10 percent since 2008 with increases seen in nearly every group irrespective of marriage duration.



Same sex marriage legislation passed in New York State in July 2011, and data is only available for the Rest of State region. Initially, not all districts issuing licenses had access to the new forms that included the gender variable, resulting in a disproportionate number of marriages unspecified in 2011.

			Percent						
	Female-	Male-	Male-	Not		Female-	Female-	Male-	Not
Month	Female	Female	Male	Specified	Total	Female	Male	Male	Specified
2011									
July 24-31	179	265	125	1,627	2,196	8.2	12.1	5.7	74.1
August	333	3,404	229	3,981	7,947	4.2	42.8	2.9	50.2
September	270	5,024	197	2,226	7,717	3.5	65.1	2.6	28.8
October	255	4,907	162	1,531	6,855	3.7	71.6	2.4	22.3
November	169	2,978	117	961	4,225	4.0	70.5	2.8	22.7
December	118	2,423	82	835	3,458	3.4	70.1	2.4	24.2
Total 2011	1,324	9,001	912	11,161	2,398	4.1	58.6	2.8	34.4
2012									
January	59	1,645	41	417	2,162	2.7	76.1	1.9	19.3
February	97	2,073	40	466	2,676	3.6	77.5	1.5	17.4
March	90	2,464	57	458	3,069	2.9	80.3	1.9	14.9
April	103	2,773	63	438	3,377	3.1	82.1	1.9	13.0
May	152	4,208	87	652	5,099	3.0	82.5	1.7	12.8
June	213	6,419	138	984	7,754	2.7	82.8	1.8	12.
July	254	6,094	126	881	7,355	3.5	82.9	1.7	12.0
August	230	6,610	94	938	7,872	2.9	84.0	1.2	11.9
September	212	6,457	114	953	7,736	2.7	83.5	1.5	12.3
October	197	5,197	119	699	6,212	3.2	83.7	1.9	11.3
November	79	2,756	50	423	3,308	2.4	83.3	1.5	12.8
December	106	3,131	75	462	3,774	2.8	83.0	2.0	12.2
Total 2012	1,792	49,827	1,004	7,771	60,394	3.0	82.5	1.7	12.9
2013									
January	45	1,779	24	239	2,087	2.2	85.2	1.1	11.
February	60	2,102	29	239	2,430	2.5	86.5	1.2	9.8
March	103	2,591	47	251	2,992	3.4	86.6	1.6	8.4
April	93	2,902	55	301	3,351	2.8	86.6	1.6	9.0
May	100	4,335	72	459	4,966	2.0	87.3	1.4	9.2
June	183	6,163	101	634	7,081	2.6	87.0	1.4	9.0
July	311	5,792	233	673	7,009	4.4	82.6	3.3	9.0
August	356	7,005	266	766	8,393	4.2	83.5	3.2	9.1
September	293	6,334	220	632	7,479	3.9	84.7	2.9	8.5
October	333	5,380	251	543	6,507	5.1	82.7	3.9	8.3
November	253	3,343	192	325	4,113	6.2	81.3	4.7	7.9
December	224	2,962	187	272	3,645	6.1	81.3	5.1	7.5
Total 2013	2,354	50,688	1,677	5,334	60,053	3.9	84.4	2.8	8.9

#### Table 39. Marriage by Gender in the Rest of State Region: New York State 2013



							Change %
Month	2008	2009	2010	2011	2012	2013	2008-2013
			Num	ber			
January	6,614	6,175	6,439	6,344	6,841	7,100	7.3
February	7,601	7,242	6,824	7,157	8,129	7,294	-4.0
March	7,948	7,875	8,503	8,170	9,077	8,837	11.2
April	9,153	9,044	8,930	9,096	9,815	9,345	2.1
May	11,596	11,133	10,972	10,747	12,299	12,011	3.6
June	13,290	12,490	12,776	12,723	14,783	13,318	0.2
July	13,757	13,510	14,132	15,478	14,163	14,860	8.0
August	16,477	14,895	14,595	15,533	15,587	16,612	0.8
September	12,433	12,816	12,452	14,650	14,070	14,719	18.4
October	11,922	11,853	12,960	13,020	12,003	13,653	14.5
November	7,975	7,612	7,869	9,686	8,402	9,950	24.8
December	8,290	7,998	7,744	8,911	9,587	10,032	21.0
Total	127,056	122,643	124,196	131,515	134,756	137,731	8.4
			Perc	ent			
January	5.2	5.0	5.2	4.8	5.1	5.2	-0.1
February	6.0	5.9	5.5	5.4	6.0	5.3	-11.4
March	6.3	6.4	6.8	6.2	6.7	6.4	2.3
April	7.2	7.4	7.2	6.9	7.3	6.8	-5.6
May	9.1	9.1	8.8	8.2	9.1	8.7	-4.7
June	10.5	10.2	10.3	9.7	11.0	9.7	-7.3
July	10.8	11.0	11.4	11.8	10.5	10.8	-0.3
August	13.0	12.1	11.8	11.8	11.6	12.1	-6.7
September	9.8	10.4	10.0	11.1	10.4	10.7	9.3
October	9.4	9.7	10.4	9.9	8.9	9.9	5.5
November	6.3	6.2	6.3	7.4	6.2	7.2	14.7
December	6.5	6.5	6.2	6.8	7.1	7.3	11.9

# Table 40. Number and Percent of Marriages by Month of Ceremony: New York State 2009-2013



Duration	2008	2000	2010	2011	2012	2012	Change (%)
(Years)	2008	2009	2010	2011	2012	2013	2008-2013
< 1	595	510	542	614	567	555	-6.7
1	1,957	1,848	1,918	2,141	2,119	2,334	19.3
2	2,707	2,691	2,843	2,825	2,751	2,850	5.3
3	3,250	3,070	3 <i>,</i> 583	3,649	3,366	3,386	4.2
4	3,521	3,470	4,271	4,196	4,325	4,262	21.0
5	3,648	3,468	4,160	4,163	4,156	4,432	21.5
6	3,522	3,256	3,527	3,550	3,698	3,606	2.4
7	3,427	3,060	3,118	3,063	3,204	3,139	-8.4
8	2,368	2,933	2,944	2,788	2,824	2,824	19.3
9	2,055	2,060	2,831	2,522	2,477	2,429	18.2
10-14	9,477	8,677	9,533	9,773	10,128	9,833	3.8
15-19	6,249	5,633	6,360	6,577	6,941	6,860	9.8
20-24	4,596	4,183	4,633	4,822	5,233	4,816	4.8
25-29	2,730	2,656	2,859	3,066	3,334	3,341	22.4
30-34	1,502	1,363	1,438	1,567	1,783	1,863	24.0
35-39	892	755	855	826	881	898	0.7
<u>&gt;</u> 40	609	612	624	709	862	891	46.3
Not Stated	194	157	211	174	184	222	14.4
Total	53,299	50,402	56,250	57,025	58,833	58,541	9.8

Table 41. Dissolutions of	Marriage hy	<b>Duration: New</b>	York State 2005-2013
	IVIAI I I AGE DY		



# **Chapter 6. Additional Resources**

#### New York State Vital Statistics Tables Available on DOH Website, 1997-2013

#### Population

Table 1 - Estimated Population by Sex, Age and Region, New York State

Table 1a - Estimated Female Population by County and Age, New York State

Table 2 - Estimated Population, Land Area and Population Density by County, New York State

Table 3 - New York State Life Tables by Sex

#### **Live Births**

Table 4 - Live Birth Summary by Mother's Race/Ethnicity, New York State

Table 5 - Live Birth Summary by Mother's Age, New York State

Table 6a - Live Births by Race/Ethnicity, Birthweight and Mother's Age, New York State

Table 6b - Live Births by Race/Ethnicity, Month Prenatal Care Began and Mother's Age, New York State

Table 7 - Live Births by Mother's Age and Resident County, New York State

Table 8 - Live Birth and Fertility Rates by Mother's Age and Resident County, New York State

Table 9 - Live Births by Race/Ethnicity and Resident County, New York State

Table 10 - Out of Wedlock Live Births by Mother's Age and Resident County, New York State

Table 11 - Low Birthweight (<2500 grams) Live Births by Mother's Age and Resident County, New York State

Table 11a - Live Births by Birthweight and Resident County, New York State

Table 11b - Live Births by Gestation in Weeks and Resident County, New York State

Table 12 - Live Births by Month Prenatal Care Began and Resident County, New York State

Table 12a - Percent Early and Late or No Prenatal Care by Mother's Age and Resident County, New York State

Table 12b - Percent Early and Late or No Prenatal Care by Mother's Race and Resident County, New York State

Table 13 - Live Births by Primary Financial Coverage and Resident County, New York State

Table 14 - Live Births by Method of Delivery and Resident County, New York State

Table 15 - Most Popular Birth Names by Sex, New York State

#### **Spontaneous Fetal Deaths**

Table 16 - Spontaneous Fetal Deaths (All Gestations) by Woman's Age and Resident County, New York State

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State/Region	Vital Statistics Web Link	
National Vital	http://www.cdc.gov/nchs/nvss.htm	
Statistics System		
National Vital	http://www.cdc.gov/nchs/products/nvsr.htm	
Statistics		
Reports		
Alabama	http://adph.org/vitalrecords/	
Alaska	http://dhss.alaska.gov/dph/VitalStats/Pages/default.aspx	
Arizona	http://azdhs.gov/plan/	
Arkansas	http://www.healthy.arkansas.gov/programsservices/certificatesvitalrecords/page /default.aspx	
California	http://www.cdph.ca.gov/data/dataresources/requests/Pages/VitalStatisticsBirthleathFetalDeathMarriageData.aspx	
Colorado	https://www.colorado.gov/pacific/cdphe/center-health-and-environmental- information-and-statistics-topics	
Connecticut	http://www.ct.gov/dph/cwp/view.asp?a=3132&q=394598	
Delaware	http://www.dhss.delaware.gov/dhss/dph/pubreportsaz.html#V	
District of	http://doh.dc.gov/node/139482	
Columbia		
Florida	http://www.flpublichealth.com/VSBOOK/VSBOOK.aspx	
Georgia	http://dph.georgia.gov/VitalRecords	
Hawaii	http://health.hawaii.gov/vitalstatistics/	
Idaho	http://www.healthandwelfare.idaho.gov/Health/VitalRecordsandHealthStatistics/ HealthStatistics/VitalStatistics/tabid/914/Default.aspx	
Illinois	http://www.idph.state.il.us/health/statshome.htm	
Indiana	http://www.in.gov/isdh/18888.htm	
lowa	https://www.idph.state.ia.us/apl/health_statistics.asp	
Kansas	http://www.kdheks.gov/hci/annsumm.html	
Kentucky	http://chfs.ky.gov/dph/vital/vitalstats.htm	
Louisiana	http://dhh.louisiana.gov/index.cfm/page/647/n/238	
Maine	http://www.maine.gov/dhhs/mecdc/public-health-systems/data- research/data/index.html	
Maryland	http://dhmh.maryland.gov/vsa/sitepages/reports.aspx	
Massachusetts	http://www.mass.gov/eohhs/gov/departments/dph/programs/admin/dmoa/	
Michigan	http://www.michigan.gov/mdch/0,4612,7-132-2944_4669,00.html	

### **Other State Vital Statistics Web Links**



State/Region	Vital Statistics Web Link	
Minnesota	http://www.health.state.mn.us/divs/chs/	
Mississippi	http://msdh.ms.gov/msdhsite/_static/31,0,75.html	
Missouri	http://health.mo.gov/data/vitalstatistics/	
Montana	http://dphhs.mt.gov/statisticalinformation	
Nebraska	http://dhhs.ne.gov/publichealth/pages/ced_vs.aspx	
Nevada	http://www.vitalrecordsus.com/nevada-vital-records.html	
New Hampshire	http://sos.nh.gov/vital_records.aspx	
New Jersey	http://www.nj.gov/health/chs/	
New Mexico	http://nmhealth.org/about/erd/bvrhs/hsp/	
New York	https://www.health.ny.gov/statistics/vital_statistics/	
New York City	http://www.nyc.gov/html/doh/html/data/vs-summary.shtml	
North Carolina	http://www.schs.state.nc.us/data/vital.cfm	
North Dakota	http://ndhealth.gov/vital/stats.htm	
Ohio	http://www.odh.ohio.gov/healthstats/dataandstats.aspx	
Oklahoma	http://www.ok.gov/health/Data_and_Statistics/Center_For_Health_Statistics/Hea th Care Information/Vital Statistics/Vital Statistics Data and Reports/	
Oregon	https://public.health.oregon.gov/BirthDeathCertificates/VitalStatistics/annualrepo rts/Pages/index.aspx	
Pennsylvania	http://www.portal.state.pa.us/portal/server.pt?open=514&objID=596032&mode= 2	
Rhode Island	http://www.health.ri.gov/publications/bytopic.php?parm=Vital Records	
South Carolina	https://www.scdhec.gov/Health/SCPublicHealthStatisicsMaps/BiostatisticsPublicat ions/	
South Dakota	https://doh.sd.gov/statistics/	
Tennessee	http://tn.gov/health/article/cedep-reports	
Texas	http://www.dshs.state.tx.us/chs/vstat/annrpts.shtm	
Utah	http://health.utah.gov/data/	
Vermont	http://healthvermont.gov/research/	
Virginia	http://www.vdh.state.va.us/HealthStats/stats.htm	
Washington	http://www.doh.wa.gov/DataandStatisticalReports/VitalStatisticsandPopulationDa	
West Virginia		
-		
West Virginia Wisconsin Wyoming	ta http://www.wvdhhr.org/bph/hsc/statserv/VitalStats.asp https://www.dhs.wisconsin.gov/stats/vitalstats.htm http://health.wyo.gov/rfhd/vital_records/reports.html	



# **Technical Notes**

# How the Vital Event Data Are Collected

New York State consists of two vital event registration areas, New York City and New York State Exclusive of New York City (referred as Rest of State). New York City (NYC) includes the five boroughs of Bronx, Kings (Brooklyn), New York (Manhattan), Queens, and Richmond (Staten Island); the remaining 57 counties comprise the Rest of State (ROS).

The New York State Department of Health (NYSDOH), processes data from live births, deaths, spontaneous fetal deaths/induced abortions, and marriage and dissolution of marriage recorded outside of NYC. Through a cooperative agreement, the NYSDOH receives data on live births, deaths, spontaneous fetal deaths/induced abortions and marriage and dissolution of marriage recorded in NYC from the New York City Department of Health and on live births and deaths recorded outside of New York State to residents of New York State from other states and Canada. NYSDOH processes data from dissolution of marriage certificates recorded for the entire state.

# Pregnancies / Spontaneous Fetal Deaths / Induced Abortions

Fetal deaths include both spontaneous fetal deaths and induced abortions which are presented separately in this report.

Fetal death is defined by NYS Public health Law (PHL) §4160 to be the death prior to the complete expulsion or extraction from its mother of a product of conception; the death is indicated by the fact that after such separation, the fetus does not breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

New York State Public Health Law requires the registration of all fetal deaths regardless of the gestation of the fetus. Unlike birth and death registration, the registration of fetal mortality is not uniform across the United States. In order to provide data comparable to other states, this report presents data for both spontaneous fetal deaths of gestation 20 weeks or more and for spontaneous fetal deaths of all gestations. Due to suspected underreporting of spontaneous fetal deaths, particularly those under 20 weeks gestation, caution should be used when analyzing spontaneous fetal death data.

Categories used to report operative procedure for induced abortions include dilation and curettage (D&C), suction and curettage, dilation and evacuation (D&E), saline injection, prostaglandin injection, medical (non-surgical) and other that includes hysterectomy, hysterectomy and other procedures.



Beginning in 1998, New York City combines saline and prostaglandin injection and this combination is reported in the saline injection procedure.

#### Live Births

New York State Public Health Law §4130 defines a live birth as the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such separation, breathes or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached.

In 2003, the National Center of Health Statistics (NCHS) revised the U.S. Standard Certificate of Live Birth. The NCHS revisions were implemented outside of New York City beginning on January 1, 2004 in a web-based live birth registration system. NYC implemented the changes beginning on January 1, 2008.

One major change associated with the adoption of the revised birth certificate is the way the variable Race is reported. The selection of race for the statistical reporting of live births is based upon the self-reported race of the mother only. Prior to 2004, a mother was allowed to select only one race category (1990 Census scheme), even when she identified herself with more than one race due to her multiple race heritage. The revised birth certificate uses the Census 2000 scheme, allowing the mother and the father to report more than one race from among 15 race categories. Under this system, a response of white and no other races means that the respondent does not identify herself as part of any other race but black. The current coding scheme uses the labels white only and black only respectively to denote these racial identities. All other respondents are included in the race category, other. Although not presented in this report, it is possible to tabulate the race of mother or the race of a decedent in several race combination categories.

Ethnicity is separate from race and is based on the ethnicity of the mother. Ethnicity distinguishes individuals of Spanish origin regardless of race. In order to better identify disparities in birth outcomes, race data is separated into Hispanic and Non-Hispanic categories. Non-Hispanic women are categorized by their race, Hispanic women are categorized by their ethnicity.

Both clinical estimate of gestation and calculated gestation based on the date of birth and the date of last menses are used in determining weeks gestation. Using methodology developed by NCHS, if the calculated gestation is missing or inconsistent with birthweight the clinical estimate is used instead if it is consistent with birthweight.

Early prenatal care is defined as prenatal care during the first trimester of the pregnancy. Late prenatal care is defined as prenatal care during the third trimester of the pregnancy. Unknown prenatal care is broken down as follow: Start Unknown for cases where the mother received prenatal care but not enough information was available to determine when it began and Unknown when no information is available to determine whether or not any prenatal care was received. The month in which prenatal care began is determined by calculating the interval between the date of last normal menses as stated on the



birth certificate, or in cases where the clinical estimate of gestation is used, the calculated LMP and the date of the first prenatal visit. This calculation is consistent with the calculation of gestational age.

Attendant at birth is categorized as physician, midwife or other. Physician includes medical doctors and doctors of osteopathy. Midwife includes certified nurse midwives and midwives.

The number of out of wedlock live births is imputed. New York State Public Health Law § 4135 prohibits the specific statement on the birth certificate as to whether the child was born in- or out-of-wedlock. Out-of-wedlock live births are defined as those births for which a mother reports that a paternity acknowledgement has been filed or births for which no further information is supplied by the mother.

#### Deaths

New York State PHL does not require that death be pronounced by a physician. Unless there is a local law that requires otherwise, anyone may make the pronouncement of death. However, this decision is more likely to fall upon emergency medical technicians, policemen, firemen and other emergency personnel. The pronouncement may even be implied by the decision to call a funeral director or coroner/medical examiner instead of an ambulance. NYS PHL §4140 requires that a death certificate be filed within 72 hours after death, or the finding of the body, by a funeral director or undertaker licensed and currently registered by the NYSDOH.

Unless otherwise specified, the cause of death reported in this publication is the underlying cause classified according to the tenth revision of the International Classification of Diseases (ICD, 10th revision) adopted by New York State in 1999. Historically, several revisions of the ICD have been used, therefore, it is necessary to employ a comparability ratio when comparing cause of death statistics across revisions. Comparability ratios have been published by the National Center for Health Statistics (NCHS).

Infant and neonatal mortality rates published in this report are based on all live births regardless of birth weight or gestation. No attempt was made to account for the viability of the infant at birth. These rates for a specific year are based on the number of deaths prior to one year of age and the number of live births that occurred during that year.

When tabulating deaths by place of death, other institution is defined as state institution, Veterans Administration facility, hospice, federal institution, health related facility or home for the aged.

The race and ethnicity information reported on death certificates is typically provided by the decedent's family. Race data is not categorized by Non-Hispanic and Hispanic on mortality tables because of the under-reporting of Hispanic ethnicity on death certificates<sup>1</sup>.

## Marriage and Dissolution of Marriage

Marriages in New York State are required to be reported through town and county clerks. Marriages in New York City are tabulated by borough in which the license is issued. New York City marriage data is obtained from the City of New York, Office of the City Clerk and not from the New York City Health



Department. With the passage of the Marriage Equality Act, same sex marriage became legal in New York on July 24, 2011. The composition of couples married after that date is not available since sex is not required information on the license.

Dissolution of Marriage Certificates are filed by attorneys with the County Clerk of the county where the divorce is granted. The certificate is forwarded directly to the NYSDOH by the County Clerk. A local copy of the dissolution is not kept by the Clerk. This process applies for all counties of the state, including those in NYC.

#### **Populations**

**Population Estimates** - All population used in this report are derived from the NCHS released estimates of "Bridged Race Vintage," for the specific year which are consistent with the Bureau of the Census estimates).



# **Cause of Death ICD-10 Codes**

Cause of Death	ICD-10 Codes
Tuberculosis	A15-A19
Septicemia	A40-A41
Acquired Immune Deficiency Syndrome (AIDS)	B20-B24
Malignant Neoplasms	C00-C97
Buccal Cavity and Pharynx	C00-C14
Digestive Organs and Peritoneum	C15-C26
Respiratory System	C30-C39
Trachea, Bronchus and Lung	C33-C34
Skin	C43-C44
Breast	C50
Genital Organs	C51-C63
Urinary Organs	C64-C68
Other and Unspecified Sites	C40-C42,C45-C49,C69-C80,C97
Lymphatic and Hematopoietic Tissues	C81-C96
Diabetes Mellitus	E10-E14
Alzheimer's Disease	G30
Diseases of the Circulatory System	100-199
Diseases of the Heart	100-109,111,113,120-151
Acute Rheumatic Fever	100-102
Chronic Rheumatic Fever	105-102
	111.113
Hypertension with Heart Disease	21- 22
Acute Myocardial Infarction	
Other Ischemic Heart Diseases	120,124-125
Diseases of Pulmonary Circulation	126-128
Other Diseases of the Heart	130-151
Hypertension with or without Renal Disease	110,112
Cerebrovascular Disease	160-169
Arteriosclerosis	170
Other Diseases of the Circulatory System	171-178,180-199
Pneumonia	J12-J18
Influenza	J10-J11
Chronic Lower Respiratory Disease (CLRD)	J40-J47
Gastritis, Enteritis, Colitis, Diverticulitis	K29,K50-K52,K57
Cirrhosis of Liver	К70,К73-К74
Nephritis, Nephrotic Syndrome, Nephrosis	N00-N07,N17-N19,N25-N27
Complications of Pregnancy, Childbirth, and Puerperium	000-099
Maternal Causes	A34,000-095,098-099
Congenital Anomalies	Q00-Q99
Certain Conditions Originating in the Perinatal Period	P00-P96
Sudden Infant Death Syndrome	R95
Accidents (Total)	V01-X59,Y85-Y86
Motor Vehicle	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,V89.2
Drownings	W65-W74
Falls	W00-W19
Poisonings	X40-X49
Opioid	X40-X44, X60-X64, X85, Y10-Y14 and a secondary code of
	T401-T404
Suicide	
Suicide Homicide and Legal Intervention	X60-X84,Y87.0 X85-Y09,Y35,Y87.1,Y89.0



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