

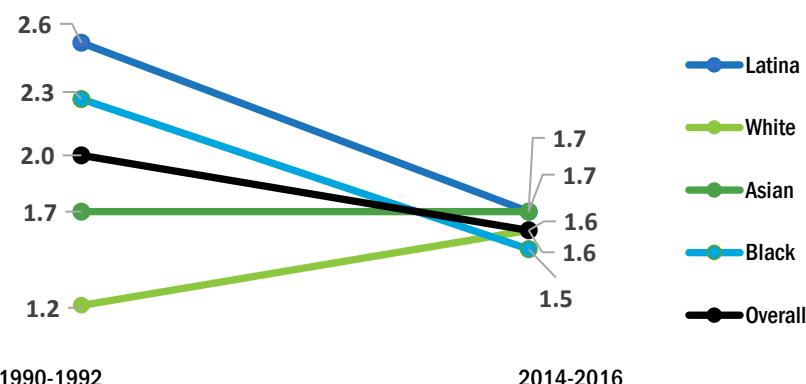
Changing Birth Composition in New York City, 1990-2016

From 1990 to 2016, the number of annual births to New York City (NYC) residents declined 16%, from 129,811 to 108,949. The decline in birth rates varied by age and race/ethnicity of the birthing parent. Exploring the changing demographic composition of females giving birth in NYC can aid in understanding health outcomes surrounding pregnancy, such as the infant mortality rate (IMR), preterm birth rate, and maternal mortality rate. For example, over the period 1990 to 2016, NYC experienced a dramatic decline in IMR, which differs by race/ethnicity.^{1,2} One of the factors attributable to the decline in IMR may be the changing demographic composition. While parental age, socio-economic status, nativity, and access to care are also factors that affect these health outcomes, this report focuses on the changing composition of females giving birth, by age, and by race/ethnicity.

From 1990 to 2016, population and birth trends differed among each racial/ethnic group

- Between 1990 and 2016, the overall total fertility rate (TFR) in NYC decreased from 2.0 to 1.6 births.
- Among Black and Latina females, there were steep declines in birth rates in the 15 to 29 year age group, while birth rates among those over age 30 remained stable. Expected lifetime births among both Black and Latina females 15 to 49 years old decreased by 35% (from 2.3 to 1.5 births among Black females and from 2.6 to 1.7 births among Latina females).
- Among White females, expected lifetime births increased by 33% (from 1.2 to 1.6 births).
- Among Asian females, expected lifetime births remained steady at 1.7 births at both the beginning and end of the time period.

Total fertility rate by race and ethnicity, New York City, 1990-2016



Note: The National Center for Health Statistics (NCHS) changed the definition of Asian from Ancestry to Race in 1993; to ensure consistency over time, the TFR for Asians for 1993-1995 is shown in the above graph for the 1990-1992 period.

Source: NYC DOHMH Bureau of Vital Statistics, 1990-2016

Definitions:

Race/ethnicity: For the purposes of this report, Latina includes people of Hispanic origin based on ancestry reported on the birth certificate, regardless of reported race; Latina excludes reported ancestry from non-Spanish speaking Central/ South American countries, and non-Spanish speaking Caribbean islands. Latinas are excluded from other race categories. Other race was not shown due to small sample sizes. Asian includes people who identified as Asian and/or Pacific Islander. A change was made in the classification of Asian births from ancestry to race in 1993.

The **total fertility rate (TFR)** is a measure of how many births a female would expect to have over her lifetime based on the current age-specific birth rates. The TFR is the sum of the age-specific birth rates multiplied by duration (e.g., from age 20 to 24 years). The TFRs presented in the report are for three-year periods to ensure greater stability.

The **age-specific birth rate** is calculated in seven five-year intervals from ages 15-19 to 45-49 years and takes the number of births in the age category divided by the number of females in the age category.

Data Sources: Bureau of Vital

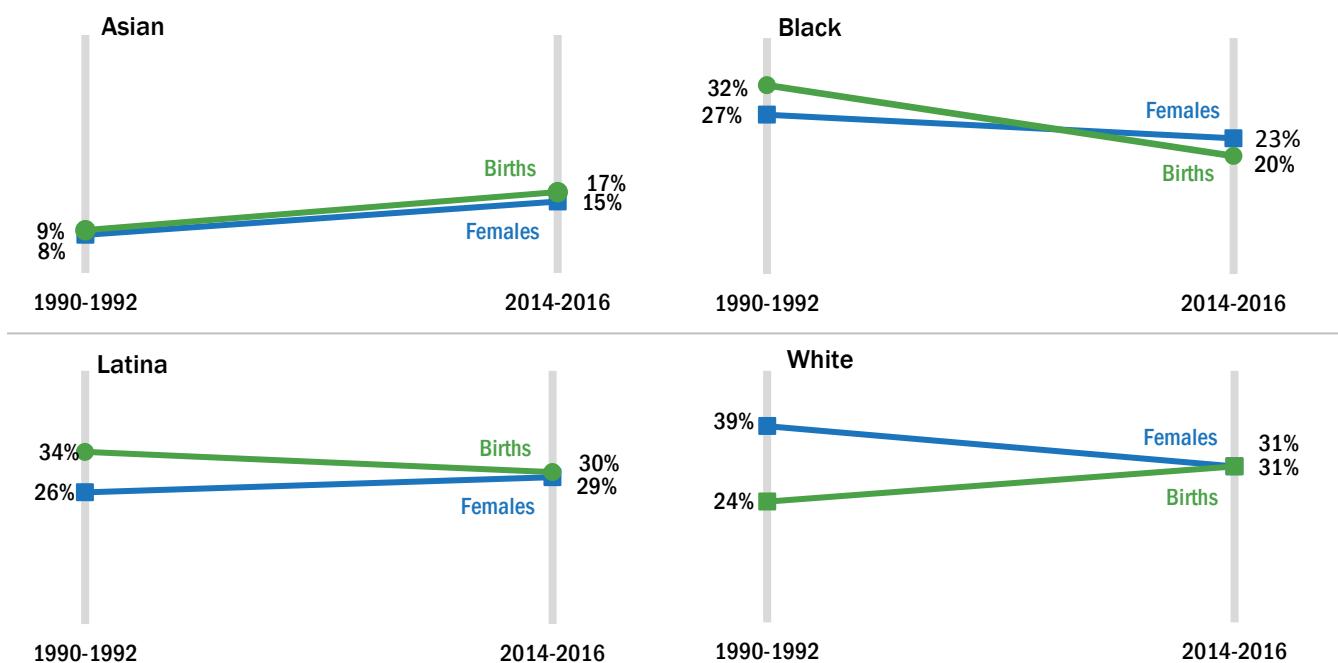
Statistics (BVS), 1990-2016: The NYC Health Department's BVS maintains data on all births in NYC from birth certificates. To construct rates, the population denominators come from the **1990 Census, 2000 Census, 2010 Census and the Population and Housing Units Estimates from the Census Bureau for 2011-2016** for the NYC female population ages 15-49 years in 1990-2016. Annual estimates from 1990-2010 are interpolated. The term "female" is used throughout this brief in accordance with Census Bureau classification of the population as "male" or "female" as reported by the individual or a member of the household completing Census Bureau data collection forms.

From 1990 to 2016, population and birth trends differed within and among racial/ethnic groups

In NYC, between 1990-1992 and 2014-2016:

- The proportion of Asian females aged 15-49 in the population **increased** by 7 percentage points and the proportion of births to Asian females **increased** by 8 percentage points;
- The proportion of Black females aged 15-49 in the population **decreased** by 4 percentage points and the proportion of births to Black females **decreased** by 12 percentage points;
- The proportion of Latina females aged 15-49 in the population **increased** by 3 percentage points, yet the proportion of births to Latina females **decreased** by 4 percentage points;
- The proportion of White females aged 15-49 in the population **decreased** by 8 percentage points, yet the proportion of births to White females **increased** by 7 percentage points.

Change in percentage of **females** ages 15 to 49 years and percentage of **births** by race/ethnicity, New York City, 1990-1992 and 2014-2016



Note: The National Center for Health Statistics (NCHS) changed the definition of Asian from Ancestry to Race in 1993; to ensure consistency over time, the TFR for Asians for 1993-1995 is shown in the above graph for the 1990-1992 period.

Source: NYC DOHMH Bureau of Vital Statistics, 1990-2016

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Acknowledgements: Liza King, Tanvi Jain, Emily White Johnasson

References:

1 *Summary of Vital Statistics, 1990* New York, NY: New York City Department of Health, Office of Vital Statistics and Epidemiology, 1993. <https://www1.nyc.gov/assets/doh/downloads/pdf/vs/1990sum.pdf>

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

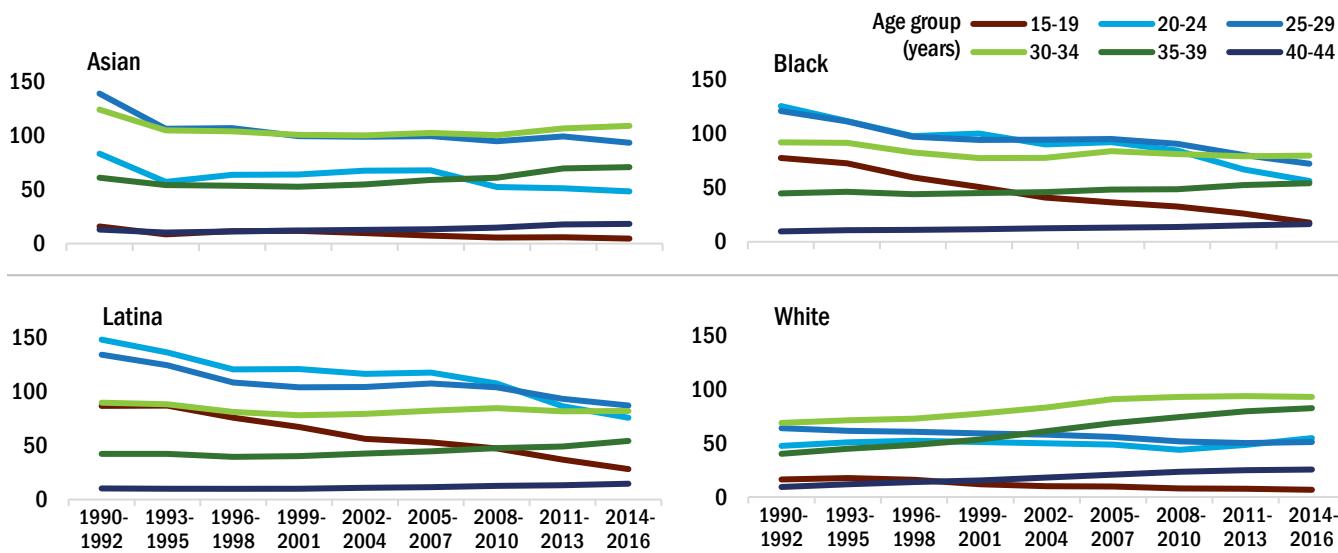
<https://www1.nyc.gov/assets/doh/downloads/pdf/vs/2016sum.pdf>

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Changes in age-specific birth rates from 1990 to 2016

- Between the 1990-1992 period and the 2014-2016 period, birth rates among females ages 15 to 19 decreased for all racial and ethnic groups, with the largest declines among Black and Latina females. Birth rates decreased by 77% among Black females (from 77.3 to 17.7 births per 1,000 females), and 68% among Latina females (from 86.6 to 28.1 births per 1,000 females) in this age group.
- For ages 20 to 29, birth rates decreased sharply among Black and Latina females between 1990-2016, but the rates among White and Asian females were relatively flat.
- For ages 30 to 34, birth rates among White females increased between 1990-2016 by 35% (from 68.8 to 93.0 births per 1,000 females).
- For ages 35 to 39, birth rates among among White, Black, and Latina females increased between 1990-2016. Among White females, there was a 106% increase from 40.1 to 82.5 births per 1,000 females ages 35 to 39; birth rates among Asian females ages 35-39 remained stable over the period 1990-2016.

Age-specific birth rates per 1,000 females by race/ethnicity and age group, New York City, 1990-2016



Notes: "Asian" was redefined from Ancestry to Race in 1993 resulting in a one-time adjustment of age-specific birth rates.

Age category 45-49 is not presented due to low rates.

Source: NYC DOHMH Bureau of Vital Statistics, 1990-2016

Implications

The changing birth composition over the period 1990 to 2016 reflects substantial population-level changes, including a decrease in the IMR from 9.1 to 2.6 deaths per 1,000 among Whites, and from 16.9 to 8.0 among Blacks (see appendix). These numbers show a large decline in overall rates and a widening disparity (as a percentage). Between the first period (1990-1992) and the last (2014-2016), the share of birth to Black females declined from 32% to 20%. During the same time period, the percentage of births to Asian females in NYC rose from 9% to 17%. These figures indicate a changing demographic composition of the population.

In addition, there was a steep decline in the birth rate among all females under age 30 between 1990 and 2016. Among Latinas ages 20 to 24 the number of births declined from 147.6 to 75.5 per 1,000 females between the first and last period; the figure for Black females ages 20 to 24 fell from 125.2 to 56.1 births per 1,000 females between the two periods. These changes imply a changing context of family formation that requires further examination. Future research aims to examine how both demographic composition and other factors affect the changes in IMR, preterm birth rate, and maternal mortality, particularly in the post-2016 period, as birth trends and overall population dynamics were significantly affected by the COVID-19 pandemic.

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Epi Data Tables

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Data Tables

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- Table 2.** Births in New York City, by birthing parent's age and race/ethnicity, 1990-2016
- Table 3.** Age-specific birth rates in New York City, by race/ethnicity, in 3-year periods, 1990-2016
- Table 4.** Infant mortality rate by race/ethnicity, 1990-2016

Data Sources

Birth data: Bureau of Vital Statistics (BVS), 1990-2016: The NYC Health Department's BVS maintains data on all births in NYC from birth certificates. To construct rates, the population denominators come from the 1990 Census, 2000 Census, 2010 Census and the Population and Housing Units Estimates from the Census Bureau for 2011-2016 for the NYC female population aged 15-49 years in 1990-2016. Annual estimates from 1990-2010 are interpolated. The term "female" is used throughout this brief in accordance with Census Bureau classification of the population as "male" or "female" as reported by the individual or a member of the household completing Census Bureau data collection forms.



Table 1. Females* ages 15-49 years in New York City, in 5-year age groups by race/ethnicity, 1990-2016**

Sources: 1990 Census, 2000 Census, 2010 Census and the Population and Housing Units Estimates from the Census Bureau for 2011-2016

Overall Females

	Age group (years)						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
1990	237,294	302,076	361,999	344,626	306,052	272,788	221,390
1991	239,043	302,317	361,188	345,383	309,131	276,514	226,737
1992	240,805	302,558	360,379	346,141	312,242	280,291	232,212
1993	242,580	302,799	359,571	346,901	315,384	284,119	237,821
1994	244,368	303,040	358,765	347,663	318,557	288,000	243,564
1995	246,170	303,282	357,961	348,426	321,762	291,934	249,446
1996	247,984	303,523	357,159	349,191	325,000	295,922	255,471
1997	249,812	303,765	356,359	349,958	328,270	299,964	261,640
1998	251,653	304,007	355,561	350,726	331,573	304,061	267,959
1999	253,508	304,250	354,764	351,496	334,909	308,214	274,430
2000	255,377	304,492	353,969	352,268	338,279	312,424	281,058
2001	251,522	313,517	352,245	354,768	336,725	316,879	284,793
2002	251,087	311,596	355,400	353,136	332,518	316,394	289,692
2003	252,900	309,248	360,490	348,331	327,579	316,624	292,964
2004	255,972	307,115	363,533	341,467	320,212	317,449	294,893
2005	261,022	304,463	366,428	332,037	317,963	312,598	296,824
2006	263,894	305,507	372,367	326,136	316,051	308,464	297,618
2007	266,027	309,553	375,065	328,743	313,530	303,303	296,110
2008	267,542	317,513	380,286	333,354	310,455	299,275	296,775
2009	267,521	325,682	385,018	339,666	307,379	294,426	298,705
2010	264,778	332,678	384,442	345,583	302,696	294,773	296,545
2011	251,093	329,694	389,766	351,213	300,165	295,106	293,828
2012	244,334	326,805	394,884	358,270	303,153	295,731	291,894
2013	238,248	320,599	399,244	364,249	306,165	293,007	288,285
2014	232,552	314,306	404,112	366,512	310,056	289,884	284,647
2015	228,820	303,284	408,199	367,136	313,716	285,525	284,387
2016	226,424	293,001	410,095	368,355	314,819	280,311	283,728

Latina Females

	Age group (years)						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
1990	72,122	84,325	92,487	86,102	74,978	63,872	51,164
1991	73,243	85,214	92,937	87,141	76,621	65,391	52,699
1992	74,382	86,112	93,390	88,192	78,300	66,947	54,279
1993	75,538	87,020	93,844	89,256	80,016	68,539	55,908
1994	76,712	87,937	94,301	90,333	81,769	70,170	57,584
1995	77,904	88,864	94,760	91,423	83,561	71,839	59,312
1996	79,115	89,801	95,221	92,526	85,392	73,548	61,091
1997	80,345	90,748	95,685	93,642	87,264	75,298	62,923
1998	81,594	91,704	96,151	94,772	89,176	77,089	64,811
1999	82,862	92,671	96,619	95,916	91,130	78,923	66,755
2000	84,150	93,648	97,089	97,073	93,127	80,800	68,757
2001	84,145	94,973	97,098	98,275	94,576	83,593	71,023
2002	84,329	95,198	98,142	98,075	94,272	85,049	73,190
2003	84,983	94,341	99,126	96,694	93,945	86,485	74,665
2004	86,375	93,333	99,638	95,048	91,768	88,042	76,257
2005	88,994	91,637	99,802	92,831	90,286	87,607	77,665
2006	90,592	91,110	99,946	91,136	89,623	87,575	78,283
2007	91,851	91,174	100,368	91,830	88,405	86,788	79,439
2008	93,246	93,259	100,927	92,776	87,617	86,806	80,710
2009	94,252	95,771	101,543	94,544	87,251	85,529	82,455
2010	94,167	99,311	101,341	95,960	87,107	85,937	83,083
2011	90,279	101,439	102,156	97,272	86,182	85,586	83,370
2012	87,976	103,570	102,975	99,123	87,426	85,477	83,867
2013	85,414	103,812	103,911	100,343	88,495	84,707	84,091
2014	83,080	103,130	105,670	100,068	89,491	84,269	83,373
2015	81,391	100,067	107,294	99,639	90,392	83,515	83,178
2016	80,201	96,592	108,456	99,236	90,301	82,199	82,912

Table 1. Females* ages 15-49 years in New York City, in 5-year age groups by race/ethnicity, 1990-2016**

Sources: 1990 Census, 2000 Census, 2010 Census and the Population and Housing Units Estimates from the Census Bureau for 2011-2016

White Females

	Age group (years)						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
1990	71,859	111,422	145,224	139,330	125,245	116,594	94,135
1991	71,064	109,616	143,116	137,080	123,154	115,300	95,051
1992	70,278	107,840	141,038	134,866	121,098	114,020	95,976
1993	69,500	106,093	138,991	132,688	119,076	112,754	96,910
1994	68,731	104,374	136,973	130,545	117,088	111,502	97,853
1995	67,970	102,682	134,985	128,437	115,133	110,265	98,805
1996	67,218	101,018	133,026	126,363	113,211	109,041	99,767
1997	66,474	99,381	131,095	124,322	111,321	107,830	100,737
1998	65,739	97,771	129,192	122,315	109,463	106,633	101,718
1999	65,011	96,187	127,316	120,339	107,635	105,450	102,708
2000	64,292	94,628	125,468	118,396	105,838	104,279	103,707
2001	61,937	98,672	125,350	120,682	102,761	102,687	101,836
2002	61,761	96,176	126,680	119,863	100,590	99,904	100,825
2003	61,924	95,174	129,715	117,922	99,149	96,741	99,584
2004	62,241	94,907	131,272	115,254	97,696	94,837	97,126
2005	62,555	95,027	132,605	111,762	98,360	91,669	95,071
2006	62,696	97,212	136,080	109,687	98,946	88,686	93,347
2007	62,483	100,667	137,732	111,430	98,322	86,651	90,451
2008	62,223	103,907	140,957	113,417	96,880	85,388	87,826
2009	61,522	106,379	143,739	115,525	94,963	84,102	86,018
2010	60,459	106,485	143,923	117,175	92,280	84,042	83,511
2011	56,809	98,816	146,079	119,572	92,319	85,429	81,158
2012	55,998	92,869	148,782	122,730	93,817	86,038	79,932
2013	55,260	87,232	150,367	125,521	95,089	85,239	78,891
2014	54,644	83,762	149,885	127,519	96,261	84,153	78,344
2015	54,379	80,267	147,582	129,086	97,215	82,614	79,002
2016	54,342	77,984	145,047	129,705	97,877	80,886	79,433

Asian Females

	Age group (years)						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
1990	17,140	21,207	27,841	27,837	22,694	19,798	13,740
1991	17,768	22,246	29,182	28,986	23,933	20,987	14,874
1992	18,418	23,335	30,588	30,182	25,240	22,248	16,101
1993	19,093	24,478	32,062	31,428	26,618	23,585	17,430
1994	19,792	25,677	33,607	32,725	28,071	25,002	18,868
1995	20,517	26,935	35,226	34,075	29,604	26,504	20,425
1996	21,268	28,254	36,923	35,482	31,220	28,097	22,110
1997	22,047	29,638	38,702	36,946	32,924	29,785	23,935
1998	22,854	31,090	40,566	38,471	34,722	31,574	25,910
1999	23,691	32,613	42,520	40,059	36,618	33,471	28,048
2000	24,559	34,210	44,569	41,712	38,617	35,482	30,362
2001	24,535	36,513	46,473	43,843	39,749	36,576	32,314
2002	24,817	37,155	47,977	46,052	40,185	37,139	34,001
2003	25,332	37,279	49,302	47,233	40,379	38,179	35,570
2004	25,974	37,428	50,399	48,015	40,767	39,227	36,681
2005	26,969	37,627	51,879	48,537	41,881	39,445	37,884
2006	27,807	38,524	53,608	49,311	42,938	40,061	38,575
2007	28,904	39,708	54,571	50,226	45,113	40,457	39,374
2008	29,958	41,188	55,789	51,287	46,454	40,908	40,609
2009	30,661	42,790	56,578	52,381	47,664	41,663	42,410
2010	31,266	44,054	56,122	53,401	48,077	43,137	43,109
2011	29,307	44,269	57,753	54,979	48,186	44,141	43,124
2012	28,927	44,616	58,659	56,734	48,949	46,080	43,464
2013	28,846	43,877	59,429	58,208	49,364	46,982	42,880
2014	28,809	42,876	61,272	58,863	50,776	47,434	43,237
2015	28,869	41,706	63,432	59,093	52,267	47,653	44,303
2016	28,873	40,899	64,796	60,092	53,066	47,842	45,339

Table 1. Females* ages 15-49 years in New York City, in 5-year age groups by race/ethnicity, 1990-2016**

Sources: 1990 Census, 2000 Census, 2010 Census and the Population and Housing Units Estimates from the Census Bureau for 2011-2016

Black Females

	Age group (years)						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
1990	75,535	84,309	95,455	90,462	82,307	71,848	61,835
1991	75,821	83,598	94,005	90,441	83,581	73,307	63,024
1992	76,108	82,893	92,577	90,421	84,875	74,796	64,235
1993	76,396	82,195	91,171	90,400	86,189	76,316	65,470
1994	76,685	81,502	89,786	90,380	87,523	77,866	66,729
1995	76,975	80,815	88,422	90,359	88,878	79,448	68,012
1996	77,267	80,133	87,079	90,338	90,254	81,061	69,320
1997	77,559	79,458	85,756	90,318	91,651	82,708	70,652
1998	77,853	78,788	84,453	90,297	93,069	84,388	72,011
1999	78,147	78,124	83,170	90,277	94,510	86,102	73,395
2000	78,443	77,465	81,907	90,256	95,973	87,851	74,806
2001	76,809	78,353	78,194	87,116	94,875	89,678	76,035
2002	76,037	77,817	77,368	84,267	92,705	89,832	77,952
2003	76,339	77,140	76,756	81,514	89,421	90,699	79,279
2004	76,909	76,165	76,428	78,168	85,326	90,718	80,890
2005	77,840	74,917	76,079	73,948	82,717	89,209	82,218
2006	78,032	73,331	76,412	70,962	79,813	87,488	83,253
2007	77,838	72,450	75,728	70,120	76,868	84,713	82,536
2008	77,104	73,252	75,777	70,271	74,530	81,509	83,234
2009	75,928	74,552	75,987	71,391	72,405	78,463	83,275
2010	73,674	76,459	75,754	72,833	70,166	76,901	82,282
2011	69,591	78,820	76,325	73,009	68,362	75,106	81,615
2012	66,214	79,486	76,745	73,150	67,709	73,298	79,980
2013	63,411	79,426	77,635	73,461	67,817	71,259	77,776
2014	60,647	78,144	79,314	73,151	68,015	69,175	75,084
2015	58,745	74,782	81,571	72,280	68,213	66,970	73,237
2016	57,506	71,085	83,183	72,153	67,810	64,623	71,358

* Other race was not shown due to small sample sizes.

Table 2. Births in New York City, by birthing parent's age and race/ethnicity*, 1990-2016

Sources: NYC DOHMH Bureau of Vital Statistics, 1990-2016

Number of births to birthing parents overall

	Age group (years)								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Not stated/ Unknown	All births
1990	13,944	31,249	38,667	29,777	13,215	2,599	110	250	129,811
1991	13,813	30,919	37,733	29,478	13,527	2,733	112	96	128,411
1992	13,622	29,633	36,446	29,446	13,904	2,936	144	68	126,199
1993	13,664	28,603	35,060	29,188	14,261	3,022	152	78	124,028
1994	13,981	28,365	34,323	29,325	14,424	3,234	175	63	123,890
1995	13,513	27,435	32,880	29,311	14,681	3,213	186	89	121,308
1996	12,848	26,106	31,877	28,562	14,599	3,275	197	32	117,496
1997	11,634	25,552	30,310	28,031	14,464	3,559	226	2	113,778
1998	11,633	25,949	30,487	27,471	14,995	3,736	233	7	114,511
1999	10,979	26,306	29,856	27,696	15,381	3,618	236	0	114,072
2000	10,623	26,431	30,076	28,111	15,857	4,008	294	0	115,400
2001	10,225	26,141	29,103	28,375	15,944	4,009	297	0	114,094
2002	9,070	25,620	29,433	28,253	16,036	4,126	328	0	112,866
2003	8,678	25,220	30,127	28,651	16,483	4,497	370	1	114,027
2004	8,564	24,769	30,299	28,704	16,694	4,365	351	0	113,746
2005	8,427	24,330	30,202	27,953	16,711	4,438	373	0	112,434
2006	8,520	25,050	30,637	28,547	17,269	4,499	378	0	114,900
2007	8,395	25,320	31,807	29,773	17,629	4,662	435	0	118,021
2008	8,254	24,612	31,155	29,860	17,915	4,682	448	0	116,926
2009	7,646	24,119	30,915	30,648	17,980	4,981	463	0	116,752
2010	7,131	23,032	30,009	30,958	18,192	5,092	494	0	114,908
2011	6,361	22,040	29,803	31,393	18,433	5,021	435	0	113,486
2012	5,647	21,267	29,473	32,017	19,195	5,370	494	0	113,463
2013	4,922	20,246	28,607	31,793	19,197	5,346	463	1	110,575
2014	4,440	19,473	29,043	32,806	20,136	5,184	475	0	111,557
2015	3,947	18,468	28,890	32,833	20,584	5,488	534	0	110,744
2016	3,292	17,229	28,828	32,696	20,976	5,404	524	0	108,949

Number of births to Latina birthing parents

	Age group (years)								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Not stated/ Unknown	All births
1990	6,266	12,725	12,694	7,760	3,152	629	34	77	43,337
1991	6,395	12,773	12,454	7,850	3,254	708	32	41	43,507
1992	6,374	12,246	12,142	7,750	3,265	682	25	18	42,502
1993	6,484	11,879	11,916	7,866	3,355	694	35	30	42,259
1994	6,631	11,991	11,710	7,894	3,500	711	34	27	42,498
1995	6,849	11,993	11,419	8,059	3,505	711	35	29	42,600
1996	6,390	11,044	10,750	7,715	3,465	738	39	10	40,151
1997	5,791	10,673	9,943	7,634	3,372	728	40	0	38,181
1998	5,987	10,999	10,301	7,320	3,483	764	30	0	38,884
1999	5,743	11,335	10,056	7,536	3,661	749	37	0	39,117
2000	5,613	11,275	10,139	7,529	3,791	803	44	0	39,194
2001	5,472	11,252	9,970	7,609	3,763	875	47	0	38,988
2002	4,792	11,124	10,113	7,711	3,982	908	54	0	38,684
2003	4,748	10,970	10,305	7,556	3,925	944	46	0	38,494
2004	4,761	10,677	10,408	7,665	3,972	981	46	0	38,510
2005	4,712	10,574	10,501	7,402	3,992	960	41	0	38,182
2006	4,776	10,838	10,677	7,531	4,021	1,015	50	0	38,908
2007	4,807	10,694	10,955	7,685	3,929	1,015	63	0	39,148
2008	4,709	10,483	10,639	7,764	4,071	1,046	75	0	38,787
2009	4,433	10,408	10,566	7,961	4,230	1,134	69	0	38,801
2010	4,113	9,988	10,289	8,207	4,127	1,105	72	0	37,901
2011	3,662	9,317	9,931	8,000	4,204	1,084	53	0	36,251
2012	3,217	8,814	9,545	8,006	4,319	1,191	69	0	35,161
2013	2,858	8,488	9,247	8,130	4,296	1,106	68	0	34,193
2014	2,609	8,049	9,299	8,161	4,828	1,110	76	0	34,132
2015	2,332	7,563	9,500	8,247	4,881	1,261	89	0	33,873
2016	1,940	7,033	9,107	8,000	4,907	1,279	69	0	32,335

Table 2. Births in New York City, by birthing parent's age and race/ethnicity*, 1990-2016

Sources: NYC DOHMH Bureau of Vital Statistics, 1990-2016

Number of births to White birthing parents

	Age group (years)							Not stated/ Unknown	All births
	15-19	20-24	25-29	30-34	35-39	40-44	45-49		
1990	1,220	5,327	9,644	9,743	4,936	1,016	24	50	31,960
1991	1,098	5,260	9,033	9,381	4,906	1,009	39	12	30,738
1992	1,137	5,021	8,745	9,168	4,979	1,187	70	8	30,315
1993	1,216	5,365	8,914	9,477	5,214	1,271	70	14	31,541
1994	1,334	5,449	8,515	9,270	5,302	1,322	97	8	31,297
1995	1,070	5,088	7,815	9,110	5,259	1,366	92	17	29,817
1996	1,195	5,178	8,170	9,160	5,323	1,379	111	6	30,522
1997	1,031	5,137	7,890	9,051	5,331	1,544	120	1	30,105
1998	938	5,232	7,768	8,875	5,499	1,607	140	1	30,060
1999	808	4,917	7,631	9,027	5,532	1,546	130	0	29,591
2000	756	4,940	7,499	9,200	5,653	1,660	161	0	29,869
2001	678	4,889	7,236	9,657	5,685	1,608	160	0	29,913
2002	646	4,781	7,274	9,512	5,752	1,658	182	0	29,805
2003	625	4,824	7,611	9,959	6,176	1,839	190	0	31,224
2004	607	4,703	7,506	9,879	6,269	1,776	201	0	30,941
2005	635	4,696	7,390	9,722	6,426	1,799	204	0	30,872
2006	599	4,726	7,531	10,061	6,833	1,794	211	0	31,755
2007	602	4,869	7,736	10,428	7,031	1,917	218	0	32,801
2008	541	4,654	7,330	10,521	7,054	1,880	225	0	32,205
2009	476	4,726	7,476	10,857	6,993	2,024	237	0	32,789
2010	483	4,510	7,287	10,809	7,068	2,058	236	0	32,451
2011	457	4,597	7,374	11,405	7,165	2,040	210	0	33,248
2012	435	4,485	7,419	11,385	7,586	2,180	246	0	33,736
2013	390	4,433	7,512	11,688	7,636	2,169	203	0	34,031
2014	407	4,501	7,717	11,927	7,740	2,117	226	0	34,635
2015	380	4,418	7,422	12,039	8,085	2,111	248	0	34,703
2016	315	4,311	7,405	11,971	8,220	2,093	237	0	34,552

Number of births to Asian birthing parents

	Age group (years)							Not stated/ Unknown	All births
	15-19	20-24	25-29	30-34	35-39	40-44	45-49		
1990	265	1,821	4,070	3,553	1,360	253	20	17	11,359
1991	297	1,850	4,048	3,600	1,451	282	16	9	11,553
1992	282	1,870	4,015	3,608	1,563	280	15	7	11,640
1993	149	1,417	3,454	3,223	1,448	225	8	10	9,934
1994	180	1,438	3,555	3,449	1,538	257	11	15	10,443
1995	174	1,534	3,686	3,599	1,576	281	16	14	10,880
1996	230	1,797	4,036	3,854	1,698	310	9	2	11,936
1997	266	1,924	4,215	3,844	1,779	343	13	1	12,385
1998	262	1,920	4,125	3,798	1,799	359	23	3	12,289
1999	288	2,114	4,321	3,880	1,885	372	19	0	12,879
2000	297	2,210	4,575	4,456	2,102	462	20	0	14,122
2001	279	2,259	4,361	4,270	2,048	429	32	0	13,678
2002	257	2,460	4,632	4,422	2,052	457	31	0	14,311
2003	250	2,621	4,908	4,836	2,228	536	48	1	15,428
2004	233	2,448	5,043	4,855	2,359	465	35	0	15,438
2005	197	2,405	4,919	4,670	2,340	514	54	0	15,099
2006	217	2,588	5,135	4,983	2,489	548	44	0	16,004
2007	196	2,836	5,806	5,491	2,818	525	66	0	17,738
2008	194	2,398	5,527	5,148	2,825	550	58	0	16,700
2009	150	2,229	5,229	5,294	2,759	585	52	0	16,298
2010	174	2,051	5,143	5,279	3,052	707	59	0	16,465
2011	177	2,211	5,731	5,699	3,237	719	57	0	17,831
2012	174	2,413	6,086	6,492	3,510	802	65	0	19,542
2013	167	2,162	5,592	5,867	3,409	913	77	0	18,187
2014	168	2,115	5,793	6,394	3,614	834	66	0	18,984
2015	114	2,029	5,645	6,337	3,608	895	76	0	18,704
2016	118	1,903	6,204	6,597	3,796	869	84	0	19,571

Table 2. Births in New York City, by birthing parent's age and race/ethnicity*, 1990-2016

Sources: NYC DOHMH Bureau of Vital Statistics, 1990-2016

Number of births to Black birthing parents

	Age group (years)								All births
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Not stated/ Unknown	
1990	6,041	10,842	11,621	8,324	3,563	667	30	76	41,164
1991	5,874	10,527	11,493	8,160	3,721	703	25	28	40,531
1992	5,673	10,040	10,897	8,407	3,892	745	32	28	39,714
1993	5,690	9,600	10,331	8,282	4,080	805	35	21	38,844
1994	5,708	9,131	10,099	8,405	3,923	908	32	13	38,219
1995	5,265	8,465	9,436	8,086	4,140	817	37	27	36,273
1996	4,934	7,839	8,647	7,592	3,980	826	36	12	33,866
1997	4,497	7,727	8,122	7,380	3,926	919	52	0	32,623
1998	4,386	7,659	8,132	7,319	4,152	977	40	2	32,667
1999	4,089	7,833	7,708	7,123	4,215	929	49	0	31,946
2000	3,922	7,882	7,737	6,806	4,253	1,062	67	0	31,729
2001	3,767	7,623	7,405	6,734	4,374	1,080	58	0	31,041
2002	3,353	7,155	7,265	6,494	4,184	1,077	59	0	29,587
2003	3,033	6,754	7,233	6,223	4,070	1,156	83	0	28,552
2004	2,940	6,855	7,236	6,174	4,026	1,126	67	0	28,424
2005	2,849	6,570	7,250	6,037	3,884	1,140	66	0	27,796
2006	2,897	6,822	7,192	5,864	3,871	1,118	72	0	27,836
2007	2,769	6,864	7,214	6,102	3,799	1,180	87	0	28,015
2008	2,675	6,598	7,010	5,735	3,503	1,086	81	0	26,688
2009	2,429	6,242	6,953	5,793	3,572	1,102	92	0	26,183
2010	2,240	6,072	6,626	5,844	3,449	1,071	110	0	25,412
2011	1,976	5,662	6,404	5,891	3,550	1,096	102	0	24,681
2012	1,743	5,303	6,095	5,704	3,526	1,119	108	0	23,598
2013	1,444	4,943	5,951	5,722	3,608	1,093	112	0	22,873
2014	1,199	4,576	5,927	5,889	3,647	1,061	100	0	22,399
2015	1,062	4,219	5,900	5,711	3,666	1,126	114	0	21,798
2016	870	3,780	5,747	5,710	3,695	1,083	125	0	21,010

* Other race was not shown due to small sample sizes.

Table 3. Age-specific birth rates* in New York City by race/ethnicity*, 3-year periods, 1990-2016**

Sources: NYC DOHMH Bureau of Vital Statistics, 1990-2016

All Females**																							
Age 15-19				Age 20-24				Age 25-29				Age 30-34				Age 35-39				Age 40-44			
Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval
1990 - 1992	57.7	57.1	58.3	101.2	100.6	101.9	104.1	103.5	104.8	85.6	85.0	86.2	43.8	43.4	44.3	10.0	9.8	10.2	0.5	0.5	0.6		
1993 - 1995	56.1	55.6	56.7	92.8	92.2	93.5	95.0	94.4	95.6	84.2	83.6	84.8	45.4	44.9	45.8	11.0	10.7	11.2	0.7	0.6	0.8		
1996 - 1998	48.2	47.7	48.7	85.2	84.6	85.8	86.7	86.1	87.2	80.1	79.5	80.6	44.7	44.3	45.2	11.7	11.5	12.0	0.8	0.8	0.9		
1999 - 2001	41.9	41.4	42.3	85.5	84.9	86.1	83.9	83.4	84.5	79.5	79.0	80.1	46.7	46.3	47.1	12.4	12.2	12.6	1.0	0.9	1.1		
2002 - 2004	34.6	34.2	35.0	81.5	80.9	82.1	83.2	82.7	83.8	82.1	81.5	82.6	50.2	49.8	50.6	13.7	13.4	13.9	1.2	1.1	1.3		
2005 - 2007	32.0	31.6	32.4	81.2	80.7	81.8	83.2	82.6	83.7	87.4	86.8	88.0	54.5	54.0	54.9	14.7	14.5	15.0	1.3	1.3	1.4		
2008 - 2010	28.8	28.4	29.2	73.5	73.0	74.1	80.1	79.6	80.6	89.8	89.2	90.4	58.8	58.3	59.3	16.6	16.3	16.9	1.6	1.5	1.7		
2011 - 2013	23.1	22.7	23.4	65.0	64.5	65.5	74.2	73.7	74.7	88.7	88.1	89.2	62.5	62.0	63.0	17.8	17.5	18.1	1.6	1.5	1.7		
2014 - 2016	17.0	16.7	17.3	60.6	60.1	61.1	71.0	70.5	71.4	89.2	88.7	89.8	65.7	65.2	66.3	18.8	18.5	19.1	1.8	1.7	1.9		
Latina Females																							
Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval
1990 - 1992	86.6	85.4	87.9	147.6	146.1	149.1	133.7	132.4	135.1	89.4	88.2	90.5	42.1	41.2	42.9	10.3	9.8	10.7	0.6	0.5	0.7		
1993 - 1995	86.7	85.5	87.9	135.9	134.5	137.3	123.9	122.6	125.2	87.9	86.8	89.0	42.2	41.4	43.0	10.0	9.6	10.5	0.6	0.5	0.7		
1996 - 1998	75.4	74.3	76.5	120.2	118.9	121.5	108.0	106.8	109.2	80.7	79.6	81.7	39.4	38.7	40.2	9.9	9.5	10.3	0.6	0.5	0.7		
1999 - 2001	67.0	66.0	68.0	120.4	119.1	121.7	103.7	102.6	104.9	77.8	76.8	78.9	40.2	39.5	41.0	10.0	9.6	10.4	0.6	0.5	0.7		
2002 - 2004	55.9	55.0	56.8	115.9	114.6	117.1	103.8	102.7	105.0	79.1	78.1	80.1	42.4	41.7	43.2	10.9	10.5	11.3	0.7	0.5	0.8		
2005 - 2007	52.7	51.8	53.5	117.2	115.9	118.5	107.1	105.9	108.2	82.0	80.9	83.1	44.5	43.7	45.3	11.4	11.0	11.8	0.7	0.6	0.8		
2008 - 2010	47.1	46.3	47.9	107.1	105.9	108.3	103.7	102.5	104.8	84.5	83.4	85.6	47.4	46.6	48.3	12.7	12.3	13.2	0.9	0.8	1.0		
2011 - 2013	36.9	36.2	37.7	86.2	85.2	87.2	92.9	91.9	94.0	81.3	80.3	82.4	48.9	48.1	49.8	13.2	12.8	13.7	0.8	0.6	0.9		
2014 - 2016	28.1	27.5	28.8	75.5	74.6	76.5	86.8	85.8	87.8	81.6	80.6	82.7	54.1	53.2	55.0	14.6	14.1	15.1	0.9	0.8	1.1		
White Females																							
Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval
1990 - 1992	16.2	15.7	16.7	47.5	46.7	48.2	63.9	63.1	64.6	68.8	68.0	69.6	40.1	39.5	40.8	9.3	9.0	9.6	0.5	0.4	0.5		
1993 - 1995	17.6	17.0	18.1	50.8	50.0	51.6	61.4	60.7	62.2	71.1	70.3	72.0	44.9	44.2	45.6	11.8	11.5	12.2	0.9	0.8	1.0		
1996 - 1998	15.9	15.3	16.4	52.1	51.3	53.0	60.6	59.8	61.4	72.6	71.8	73.5	48.4	47.6	49.1	14.0	13.6	14.4	1.2	1.1	1.4		
1999 - 2001	11.7	11.2	12.2	50.9	50.1	51.8	59.1	58.4	59.9	77.6	76.7	78.5	53.3	52.5	54.2	15.4	15.0	15.8	1.5	1.3	1.6		
2002 - 2004	10.1	9.6	10.6	50.0	49.2	50.8	57.8	57.0	58.5	83.1	82.2	84.1	61.2	60.3	62.1	18.1	17.6	18.6	1.9	1.8	2.1		
2005 - 2007	9.8	9.3	10.2	48.8	48.0	49.6	55.7	55.0	56.5	90.8	89.7	91.8	68.6	67.7	69.6	20.6	20.1	21.2	2.3	2.1	2.4		
2008 - 2010	8.1	7.7	8.6	43.8	43.1	44.6	51.5	50.9	52.2	93.0	92.0	94.0	74.3	73.3	75.3	23.5	22.9	24.1	2.7	2.5	2.9		
2011 - 2013	7.6	7.2	8.0	48.5	47.6	49.3	50.1	49.4	50.8	93.7	92.7	94.7	79.6	78.6	80.6	24.9	24.3	25.5	2.7	2.5	3.0		
2014 - 2016	6.7	6.3	7.1	54.7	53.7	55.6	50.9	50.3	51.6	93.0	92.1	94.0	82.5	81.5	83.6	25.5	24.9	26.2	3.0	2.8	3.2		

Table 3. Age-specific birth rates* in New York City by race/ethnicity*, 3-year periods, 1990-2016**

Sources: NYC DOHMH Bureau of Vital Statistics, 1990-2016

Asian Females

	Age 15-19			Age 20-24			Age 25-29			Age 30-34			Age 35-39			Age 40-44			Age 45-49		
	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval
1990 - 1992	15.8	14.8	16.9	83.0	80.8	85.10	138.5	136.0	141.0	123.7	121.3	126.0	60.9	59.1	62.7	12.9	12.0	13.8	1.1	0.8	1.5
1993 - 1995	8.5	7.7	9.2	56.9	55.2	58.6	106.0	104.0	108.0	104.6	102.5	106.6	54.1	52.6	55.7	10.2	9.4	10.9	0.6	0.4	0.8
1996 - 1998	11.5	10.6	12.3	63.4	61.7	65.0	106.5	104.6	108.4	103.7	101.8	105.6	53.4	51.9	54.8	11.3	10.6	12.0	0.6	0.4	0.8
1999 - 2001	11.9	11.1	12.7	63.7	62.2	65.2	99.3	97.6	100.9	100.4	98.6	102.1	52.5	51.2	53.8	12.0	11.3	12.6	0.8	0.6	1.0
2002 - 2004	9.7	9.0	10.4	67.3	65.8	68.8	98.7	97.1	100.4	99.9	98.2	101.5	54.7	53.4	56.0	12.7	12.1	13.4	1.1	0.9	1.3
2005 - 2007	7.3	6.7	7.9	67.6	66.1	69.1	99.1	97.5	100.6	102.3	100.6	103.9	58.9	57.5	60.2	13.2	12.6	13.9	1.4	1.2	1.6
2008 - 2010	5.6	5.2	6.1	52.2	50.9	53.4	94.4	92.9	95.8	100.1	98.5	101.7	60.7	59.5	62.0	14.7	14.0	15.3	1.3	1.1	1.5
2011 - 2013	5.9	5.4	6.5	51.1	49.9	52.3	99.0	97.5	100.5	106.3	104.7	107.8	69.3	68.0	70.7	17.7	17.0	18.4	1.5	1.3	1.8
2014 - 2016	4.6	4.2	5.1	48.2	47.0	49.4	93.1	91.7	94.5	108.6	107	110.1	70.6	69.3	71.9	18.2	17.5	18.9	1.7	1.5	1.9

Black Females

	Age 15-19			Age 20-24			Age 25-29			Age 30-34			Age 35-39			Age 40-44			Age 45-49		
	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval	Births per 1000 women	Lower 95% Confidence Interval	Upper 95% Confidence Interval
1990 - 1992	77.3	76.2	78.5	125.2	123.9	126.6	120.6	119.3	121.9	91.7	90.6	92.9	44.6	43.7	45.4	9.6	9.2	10.0	0.5	0.4	0.6
1993 - 1995	72.4	71.3	73.5	111.2	109.9	112.5	110.9	109.6	112.1	91.4	90.2	92.5	46.2	45.4	47.1	10.8	10.4	11.3	0.5	0.4	0.6
1996 - 1998	59.4	58.4	60.4	97.4	96.2	98.7	96.8	95.6	98.0	82.3	81.2	83.3	43.9	43.1	44.6	11.0	10.6	11.4	0.6	0.5	0.7
1999 - 2001	50.5	49.6	51.4	99.8	98.5	101.0	93.9	92.7	95.1	77.2	76.1	78.3	45.0	44.2	45.8	11.6	11.2	12.1	0.8	0.7	0.9
2002 - 2004	40.7	39.8	41.5	89.8	88.6	91.1	94.3	93.0	95.5	77.4	76.3	78.5	45.9	45.1	46.7	12.4	12.0	12.8	0.9	0.8	1.0
2005 - 2007	36.4	35.7	37.2	91.8	90.5	93.0	94.9	93.6	96.2	83.7	82.5	84.9	48.3	47.4	49.1	13.2	12.7	13.6	0.9	0.8	1.0
2008 - 2010	32.4	31.7	33.1	84.3	83.1	85.5	90.5	89.3	91.7	81.0	79.8	82.2	48.5	47.5	49.4	13.8	13.3	14.2	1.1	1.0	1.3
2011 - 2013	25.9	25.2	26.6	66.9	65.9	68.0	80.0	78.8	81.1	78.8	77.7	80.0	52.4	51.4	53.4	15.1	14.5	15.6	1.3	1.2	1.5
2014 - 2016	17.7	17.1	18.3	56.1	55.2	57.1	72.0	70.9	73.1	79.6	78.4	80.7	54.0	52.9	55.0	16.3	15.7	16.8	1.5	1.4	1.7

*The age-specific birth rate is calculated in seven 5-year intervals from ages 15-19 to 45-49 by taking the number of births in the age category divided by the number of women in the age-category.

** Other race was not shown due to small sample sizes.

Table 4. Infant mortality rate by race/ethnicity, 1990-2016

Sources: NYC DOHMH Bureau of Vital Statistics annual reports, 1990-2016

Infant Mortality Rate (deaths under 1 year) per 1000 live births

	Overall	White	Black	Asian/ Pacific Islander	Latina	Other*
1990	11.6	9.1	16.9			2.8
1991	11.4	8.5	17.1			3.8
1992	10.2	7.8	15.8			6.5
1993	10.2	7.9	15.6			6.4
1994	9.0	6.8	14.3			5.4
1995	8.8	7.3	13.1			5.0
1996	7.8	6.0	10.2			10.0
1997	7.1	5.5	8.3			2.9
1998	6.8	5.1	7.8			2.7
1999	6.9	5.2	8.1			2.8
2000	6.7	5.7	9.2			3.5
2001	6.1	4.2	10.0	3.1	5.6	
2002	6.0	4.1	10.1	2.5	5.8	
2003	6.5	3.8	11.3	3.5	6.2	
2004	6.1	3.5	11.6	4.1	5.3	
2005	6.0	4.8	9.7	3.7	5.1	
2006	5.9	3.8	10.5	3.6	5.5	
2007	5.4	3.9	9.8	3.1	4.8	
2008	5.5	3.3	10.2	3.2	5.2	
2009	5.3	3.4	9.5	2.8	5.2	
2010	4.9	2.8	8.6	3.4	4.8	
2011	4.7	3.1	8.1	2.9	4.9	
2012	4.7	2.7	8.5	3.3	5.2	
2013	4.6	3.0	8.3	3.1	4.4	
2014	4.2	2.6	7.5	2.6	4.9	
2015	4.3	2.7	8.0	2.6	4.6	
2016	4.1	2.6	8.0	2.9	3.7	

*Before 2001, race/ethnicity categories were grouped as White, Black and Other. Asian/Pacific Islander and Latino/a were not available in annual reports.