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March 22, 2016

Steven T. James
House Clerk
State House Room 145
Boston, MA 02133

William F. Welch
Senate Clerk
State House Room 335
Boston, MA 02133

Dear Mr. Clerk,

Pursuant to Section 2 of Chapter 111 of the Massachusetts General Laws, the attached report summarizes birth data and statistics for the 2015 calendar year.

Sincerely,

Monica Bharel, MD, MPH
Commissioner
Department of Public Health

Charles D. Baker
Governor

Karyn Polito
Lieutenant Governor



Marylou Sudders
Secretary

Monica Bharel, MD, MPH
Commissioner

Massachusetts Births 2015

March 2017



Massachusetts Births 2015



Massachusetts Department of Public Health
Registry of Vital Records and Statistics

December 2016

Massachusetts Births 2015

Charles D. Baker, Governor
Marylou Sudders, Secretary of Health and Human Services
Monica Bharel, MD, MPH, Commissioner of Public Health

Dean DiMartino, Acting Registrar
Registry of Vital Records and Statistics

Massachusetts Department of Public Health

December 2016

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An additional thank you to: Dean DiMartino, Acting Registrar, Karin Barrett and Maria Vu, Registry of Vital Records and Statistics; Tom Land, Director, and Kevin Foster, Office of Data Management and Outcomes Assessment.

Data in this report has been collected through the efforts of the Registry of Vital Records and Statistics staff, including: Tara Andrews, Michael Baker, June Deloney, Alex Forman, Marta Mercado, Margaret Riley and Carina Veliz.

To obtain additional copies of this report, contact:

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To obtain more information on births in Massachusetts and other Department of Public Health data please visit the Department's free, Internet-based public health information reports at: <http://www.mass.gov/eohhs/researcher/community-health/masschip/>

or call 888-MAS-CHIP (toll free in MA) or 617-624-5629.

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Note to Readers

Please review the information below before reading the report. As required by Chapter 111, Section 2 of the General Laws, this report satisfies the requirement of the annual report on statistics on births for calendar year 2015 (Annual Report Vital Statistics of Massachusetts-Births, Public Document #1 2015). Public Document #1 information on 2015 deaths, marriages, and divorces is covered in separate reports.

1. **Population Sources.** We have used two population files based upon the 2010 Census for denominators in rate calculations:
 - The 2015 Modified Age, Race/Ethnicity, and Sex file (MARS), which is a bridged population file produced by the National Center for Health Statistics (NCHS) and the Census Bureau Population Estimates Program was used to calculate state rates by race and Hispanic ethnicity, e.g., teen birth rates. This file has data by single years of age, sex, race and Hispanic ethnicity in the five mutually exclusive categories used by the Department: White Non-Hispanic, Black Non-Hispanic, Asian Non-Hispanic, American Indian/Alaska Native Non-Hispanic, and Hispanic.
 - The Massachusetts Department of Public Health Race Allocated Census 2010 Estimates file, which contains population estimates based upon the Census 2010 Summary File 1, was used to calculate city, town, and other substate rates. In this file, the Census 2010 race categories, "Two or more races" and "Some other race" are redistributed to the MDPH standard race categories: Non-Hispanic White, Non-Hispanic Black, Non-Hispanic Asian and Pacific Islander, and Non-Hispanic American Indian and Alaska Native. All persons in the Census 2010 Hispanic ethnicity category are counted as "Hispanic" race in the MDPH estimates. **Please note:** If the population in your community increased from 2010 to 2014, the rates listed may **overestimate** the actual rate. If the population in your community declined from 2010 to 2015, the rates given in the publication may **underestimate** the actual rate.
2. **Resident births.** All data in this publication are resident data unless otherwise stated. Resident data include all events that occur to residents of the Commonwealth, including resident births that occur in other U.S. States and territories.
3. **Race and Ethnicity.** In the text, the race categories, White, Black, American Indian, Asian, and Hispanic are mutually exclusive. For example, when we refer to White mothers, this means White non-Hispanic mothers. See "Technical Notes" for detailed information on the multiple-race reporting area and methods used to bridge responses for those who report more than one race to a single race. Please note that trend data on minority groups such as Native Americans, Hispanics, Blacks, and Asians may not be comparable as these groups will show increases in the number of births solely related to the methods used for re-classification of multiple races into single race categories. **Please use caution in interpreting these numbers.**
4. **Adjusted Adequacy of Prenatal Care Utilization Index.** In 2015, there were continued reporting issues for the number of prenatal visits in three hospitals: Newton Wellesley Hospital, Saint Vincent Hospital, and Winchester Hospital. Adjusted Prenatal Care Utilization Index (APCUI) presents adequate prenatal care without these three hospitals since their data are considered to be unreliable.
5. **Mothers.** Please note that Tables 18-19 and Figures 6-9 are based on mothers and not births.

Suggested Citation

Massachusetts Births 2015 Boston, MA: Registry of Vital Records and Statistics, Massachusetts Department of Public Health. December 2016.

Selected Takeaways

- In 2015, there were 71,484 births to Massachusetts resident mothers, a decline of 0.5% from 71,867 in 2014 and a decline of 22.7% since 1990. In 2015, the number of births to mothers under the age of 30 (2015 – 28,890; 2014 – 29,858) decreased by 3.2% whereas the number of births to mothers ages 30 and older increased by 1.4% from 2014 (2015 – 42,594, 2014 – 42,009).
- The proportion of births to White mothers declined by 1.5% (from 61.4% in 2014 to 60.5% in 2015) and the proportion of births to Hispanic mothers increased by 2.8% (from 17.6% in 2014 to 18.1% in 2015). The proportion of births to Asian mothers increased by 2.2% (from 8.9% in 2014 to 9.1% in 2015).
- In 2015, the percentage of mothers who breastfed or intended to breastfeed at the time of discharge reached a record high of 87.0%, a 1.5% increase from 2014. Breastfeeding rates were highest among Asian mothers (91.7%) and Black mothers (87.9%) and lower among Hispanic mothers (86.7%) and White mothers (86.2%).
- In 2015, the cesarean delivery rate was 31.4% comparable with the 2014 figure of 31.6% but lower than the percentage for the US1 (31.4% vs 32.0%). Asian and Hispanic mothers continue to have the lowest cesarean delivery rates (29.3% and 30.4%, respectively), while Black mothers continue to have the highest rate (35.2%).
- The 2015 teen birth rate in Massachusetts decreased again for the fifth year in a row. In 2011 the teen birth rate was at 15.4 births per 1,000 women ages 15 – 19, and in 2015 the rate was at 9.4 births per 1,000 women age 15 - 19. While this is a significant decrease in a five year time period, disparities remain, with Hispanic teen birth rate more than seven times that of White non-Hispanic teens.
- The percentage of mothers who had their prenatal care financed through public programs decreased from 2014. In 2014 the percentage was 42.9% but in 2015 it decreased to 38.3%.
- The percentage of Black non-Hispanic mothers who had adequate prenatal care decreased to 69.3%, the lowest it has ever been in 20 years.
- The percentage of low birthweight (LBW) infants (less than 2,500 grams or 5.5 pounds) in 2015 remained unchanged when compared to 2014 births (2014: 7.5%; 2015: 7.5%).
- Gestational diabetes was somewhat higher in 2015 (6.0%) than in 2014 (5.4%).
- There was a decrease of multiple births in 2015. The percentage of twin births in 2015 was 3.7% in comparison to 4.2% in 2014. Triplets or more stayed the same at 0.1% for both 2014 and 2015, making the percentages for total multiples 4.3% for 2014 and 3.8% for 2015. Women 35+ years continue to have higher multiple births compared to women <35 years.
- Smoking during pregnancy decreased in 2015. The percentage of mothers that reported smoking during their pregnancy in 2015 was 5.5% compared to 6.4% in 2014. Perinatal smoking was disproportionately higher among White non-Hispanic mothers.

¹ <https://www.cdc.gov/nchs/data/databriefs/db258.pdf>

Table 1. Trends in Birth Characteristics, Massachusetts: 1990, 2001-2015

Characteristic		1990	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Births ¹	n ²	92,461	81,014	80,624	80,167	78,460	76,824	77,670	77,934	76,969	74,966	72,835	73,169	72,457	71,618	71,867	71,484
	Rate ³	62.1	56.6	56.8	56.8	56.2	55.6	56.9	57.2	56.5	55.1	53.7	54.1	53.3	52.5	52.1	52.0
Race of Mother																	
White non-Hispanic	n	72,483	59,115	58,136	57,604	55,322	53,469	52,975	52,620	51,760	49,759	48,466	45,973	45,032	44,432	44,128	43,255
	% ⁴	78.4	73.0	72.1	71.9	70.5	69.6	68.2	67.5	67.2	66.4	66.5	62.8	62.1	62.0	61.4	60.5
Black non-Hispanic	n	7,158	5,862	5,948	5,902	6,053	6,077	6,452	6,462	6,652	6,945	6,794	6,999	6,892	7,016	7,071	6,949
	% ⁴	7.7	7.2	7.4	7.4	7.7	7.9	8.3	8.3	8.6	9.3	9.3	9.6	9.5	9.8	9.8	9.7
Asian	n	3,349	4,784	5,300	5,224	5,454	5,251	5,469	5,758	5,958	5,939	5,817	6,022	6,530	6,220	6,426	6,473
	% ⁴	3.6	5.9	6.6	6.5	7.0	6.8	7.0	7.4	7.7	7.9	8.0	8.2	9.0	8.7	8.9	9.1
Hispanic	n	8,406	9,410	9,543	9,764	9,798	10,061	10,696	10,861	10,895	10,986	10,588	12,777	13,088	12,315	12,670	12,927
	% ⁴	9.1	11.6	11.8	12.2	12.5	13.1	13.8	13.9	14.2	14.7	14.5	17.5	18.1	17.2	17.6	18.1
Teen Births (Ages 15-19)	n	7,258	4,979	4,642	4,639	4,559	4,539	4,722	4,944	4,583	4,477	3,907	3,480	3,219	2,732	2,402	2,140
	Rate ³	35.4	24.9	23.3	23.0	22.2	21.7	21.3	22.0	20.1	19.5	17.1	15.4	14.0	12.0	10.6	9.4
Births to Unmarried	n	22,837	21,620	21,604	22,262	22,376	23,170	24,977	26,010	26,146	26,029	25,220	25,349	24,900	24,014	23,853	23,913
	%	24.7	26.7	26.8	27.8	28.5	30.2	32.2	33.4	34.0	34.7	34.6	34.8	34.5	33.7	33.3	33.6
Cesarean Deliveries	n	20,615	20,639	22,553	23,392	24,295	24,732	25,901	26,240	26,240	25,067	24,244	23,062	22,900	22,508	22,691	22,431
	%	22.3	25.5	28.0	29.2	31.0	32.3	33.4	33.7	34.3	33.6	33.3	32.5	31.7	31.5	31.6	31.4
Gestational Diabetes ⁵	n		2,402	2,633	2,693	2,741	2,666	2,925	3,279	3,086	3,445	3,368	3,698	4,070	3,784	3,867	4,287
	%		3.0	3.3	3.4	3.5	3.5	3.8	4.2	4.0	4.7	4.7	5.1	5.6	5.3	5.4	6.0
Low Birthweight ⁶	n	5,388	5,795	6,060	6,115	6,125	6,073	6,150	6,147	5,955	5,804	5,650	5,458	5,491	5,495	5,394	5,321
	%	5.8	7.2	7.5	7.6	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.6	7.6	7.7	7.5	7.5
Preterm ⁷	n	5,899	6,412	6,795	6,963	7,222	6,925	6,954	6,980	6,750	6,516	6,234	5,992	6,107	6,300	6,161	6,001
	%	6.5	8.0	8.5	8.7	9.2	9.0	9.0	9.0	8.8	8.7	8.6	8.4	8.6	8.8	8.6	8.4
Late Preterm ⁸	n	3,977	4,428	4,726	4,800	5,016	4,808	4,918	4,945	4,753	4,602	4,361	4,206	4,422	4,518	4,394	4,305
	%	4.4	5.5	5.9	6.0	6.4	6.3	6.3	6.4	6.2	6.2	6.0	5.9	6.2	6.3	6.1	6.0
Prenatal Care																	
Public Pay Prenatal Care ⁹	%	25.1	27.2	27.9	28.3	29.9	31.9	33.5	34.9	34.5	35.3	35.8	38.8	39.8	38.9	42.9	38.3
APNCU Index ¹⁰	%		85.2	84.7	84.5	84.2	84.0	83.1	82.8	82.1	84.3	84.9	82.8	83.4	83.7	82.6	77.7
Adjusted APNCU Index ¹¹	%												85.3	85.4	84.5	83.1	81.8

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.

1. Births presented in all tables are resident live births unless otherwise specified. 2. Differences in numbers of births from previous publications are the result of updated files. 3. Birth rates represent the total number of births to women ages 15-44 years per 1,000 females ages 15-44; teen birth rates refer to number of births per 1,000 females ages 15-19. 4. Percentages are calculated based on births, including those to mothers of unknown race. 5. Gestational diabetes is defined as glucose intolerance found for the first time during pregnancy. It excludes cases with known pre-existing diabetes. 6. Low birthweight: less than 2,500 grams or 5.5 pounds. 7. Preterm: <37 weeks gestation. 8. Late preterm: 34-36 weeks of gestation. 9. Government programs including CommonHealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care; other: Worker's Compensation and other sources. 10. Beginning with Births 2001, the APNCU Index has replaced the Kessner Index as the standard measurement of adequacy of prenatal care. 11. Does not include data from Newton Wellesley, Saint Vincent and Winchester hospitals because of reporting problems.

Table 2. Birth Characteristics by Maternal Race/Hispanic Ethnicity and Birthplace, Massachusetts: 2015

Race and Hispanic Ethnicity (by mother's birthplace)	Births		Teen Births				Birthweight				Prenatal Care				Cesarean Deliveries		Breastfeeding ⁵	
	n	% ¹	<18 Years		<20 Years		Very Low ²		Low ³		Adequate ⁴		1 st Trimester		n	%	n	%
State Total	71,484	100.0	561	0.8	2,162	3.0	865	1.2	5,321	7.5	49,185	81.8	57,154	82.0	22,431	31.4	60,515	87.0
US inc. DC	48,863	68.4	386	0.8	1,507	3.1	525	1.1	3,497	7.2	39,446	84.1	40,483	84.9	15,169	31.1	40,015	84.6
US Territories ⁷	1,781	2.5	65	3.6	226	12.7	40	2.3	177	10.0	1,347	79.1	1,360	78.6	564	31.7	1,436	82.3
Non-US-born ⁸	20,821	29.1	111	0.5	430	2.1	297	1.4	1,641	7.9	15,281	76.7	15,306	75.5	6,693	32.2	19,056	93.0
White Non-Hispanic	43,255	60.5	149	0.3	721	1.7	391	0.9	2,795	6.5	35,386	85.1	36,327	85.8	13,599	31.5	36,100	86.2
US inc. DC	38,507	89.0	147	0.4	685	1.8	347	0.9	2,479	6.4	31,712	85.6	32,562	86.4	12,163	31.6	31,712	85.2
US Territories ⁷	8	0.0	0	0.0	0	0.0	0	0.0	0	0.0	- ⁶	- ⁶	- ⁶	- ⁶	- ⁶	8	100.0	
Non-US-born ⁸	4,737	11.0	- ⁶	- ⁶	36	0.8	44	0.9	315	6.7	3,668	81.1	3,758	81.2	1,435	30.3	4,380	94.1
Black non-Hispanic	6,949	9.7	76	1.1	291	4.2	158	2.3	734	10.6	4,632	69.3	4,640	68.6	2,446	35.2	6,009	87.9
US inc. DC	2,963	42.6	52	1.8	209	7.1	61	2.1	357	12.1	2,126	74.9	2,208	76.7	926	31.3	2,338	80.4
US Territories ⁷	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0
Non-US-born ⁸	3,982	57.3	24	0.6	82	2.1	97	2.4	376	9.5	2,504	65.2	2,430	62.5	1,519	38.2	3,668	93.4
Hispanic	12,927	18.1	316	2.4	1,058	8.2	217	1.7	1,071	8.3	9,650	77.6	9,684	76.8	3,927	30.4	11,040	86.7
US inc. DC	5,066	39.2	172	3.4	542	10.7	88	1.7	445	8.8	3,837	78.5	3,916	79.0	1,484	29.3	4,063	81.5
US Territories ⁷	1,746	13.5	64	3.7	223	12.8	40	2.3	176	10.1	1,326	79.0	1,339	78.6	554	31.7	1,404	82.1
Non-US-born ⁸	6,113	47.3	80	1.3	293	4.8	89	1.5	450	7.4	4,486	76.5	4,428	74.5	1,888	30.9	5,572	92.3
Asian	6,473	9.1	8	0.1	49	0.8	64	1.0	553	8.6	5,231	82.8	5,238	82.1	1,895	29.3	5,858	91.7
US inc. DC	1,258	19.4	7	0.6	38	3.0	14	1.1	120	9.6	1,045	84.7	1,040	83.9	293	23.3	1,079	87.2
US Territories ⁷	5	0.1	0	0.0	0	0.0	0	0.0	0	0.0	5	100.0	5	100.0	- ⁶	- ⁶	5	100.0
Non-US-born ⁸	5,209	80.5	- ⁶	- ⁶	11	0.2	49	0.9	432	8.3	4,181	82.3	4,193	81.7	1,599	30.7	4,774	92.8
American Indian ⁹	212	0.3	- ⁶	- ⁶	10	4.7	- ⁶	- ⁶	18	8.6	152	72.4	157	74.8	75	35.4	163	78.7
US inc. DC	206	97.2	- ⁶	- ⁶	10	4.9	- ⁶	- ⁶	17	8.4	147	72.1	151	74.0	73	35.4	158	78.6
US Territories ⁷	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Non-US-born ⁸	6	2.8	0	0.0	0	0.0	0	0.0	- ⁶	- ⁶	- ⁶	- ⁶	6	100.0	- ⁶	- ⁶	- ⁶	- ⁶
Other ¹⁰	419	0.6	- ⁶	- ⁶	8	1.9	10	2.4	43	10.3	262	72.6	291	74.6	155	37.2	347	91.3
US inc. DC	98	23.4	- ⁶	- ⁶	5	5.1	- ⁶	- ⁶	14	14.4	72	80.0	77	82.8	35	36.1	78	87.6
US Territories ⁷	- ⁶	- ⁶	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	- ⁶	- ⁶
Non-US-born ⁸	321	76.6	- ⁶	- ⁶	- ⁶	- ⁶	8	2.5	29	9.1	190	70.1	214	72.1	120	37.5	269	92.4
Unknown	1,249	1.7	8	0.6	27	2.2	23	2.0	107	9.1	767	82.7	817	80.0	334	28.7	998	88.0

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.

1. In the column "Births %," the percentages of the race/Hispanic groups (bolded) are based on the state total (including births of unknown race/ethnicity), and the birthplace percentage for the race/ethnicities are based on the total number in race/Hispanic ethnicity category. For all other categories, percentages are based on row totals. 2. Very low birthweight: less than 1,500 grams or 3.3 pounds. 3. Low birthweight: less than 2,500 grams or 5.5 pounds. 4. Based on Adequacy of Prenatal Care Utilization (APNCU) Index. Does not include data from Newton Wellesley, Saint Vincent and Winchester hospitals because of reporting problems. 5. Infant was being breastfed at time of discharge. 6. Calculations based on 1-4 events are excluded. 7. The category "US Territories" includes women born in Puerto Rico, the US Virgin Islands, and Guam. Approximately 95% of the births in this category were to women born in Puerto Rico. 8. The category "Non-US-born" includes women born outside of the 50 US states, District of Columbia, and the US territories. 9. Mothers who selected American Indian/Alaska Native as their race. 10. Mothers who indicated "Other" as their race.

Table 3. Birth Characteristics by Maternal Ancestry, Massachusetts: 2015

Maternal Ancestry	Births ¹		Teen Births				Low Birthweight ²		Prenatal Care				Late Preterm ⁴		Cesarean Section		Breast-feeding ⁵		Gestational Diabetes ⁶	
			<18 years		<20 Years				Adequate ³		1 st Trimester									
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
State Total	71,484	100.0	561	0.8	2,162	3.0	5,321	7.5	56,080	81.8	57,154	82.0	4,305	6.0	22,431	31.4	60,515	87.0	4,287	6.0
American	35,152	49.2	185	0.5	813	2.3	2,250	6.4	24,683	85.5	29,682	85.9	2,074	5.9	11,063	31.5	29,649	84.9	1,876	5.3
European	8,779	12.3	18	0.2	72	0.8	508	5.8	5,927	87.2	7,593	87.9	487	5.6	2,640	30.1	7,976	91.5	416	4.7
Puerto Rican	4,847	6.8	174	3.6	580	12.0	462	9.6	3,509	79.4	3,742	78.9	318	6.6	1,482	30.6	3,772	79.2	308	6.4
African American	3,092	4.3	59	1.9	210	6.8	369	12.0	2,079	75.3	2,295	76.6	239	7.7	980	31.7	2,451	80.8	147	4.8
Dominican	2,946	4.1	54	1.8	200	6.8	244	8.3	2,072	75.1	2,191	76.4	168	5.7	1,003	34.1	2,615	89.9	162	5.5
Portuguese	2,183	3.1	25	1.1	98	4.5	166	7.6	1,615	81.4	1,694	79.1	139	6.4	774	35.5	1,542	71.1	124	5.7
Asian Indian	2,070	2.9	0	0.0	5	0.2	206	10.0	1,240	83.4	1,706	84.1	137	6.6	752	36.4	1,964	96.9	243	11.7
Other	1,944	2.7	11	0.6	32	1.6	180	9.3	1,208	85.8	1,468	82.6	121	6.2	615	31.7	905	87.4	104	5.3
African	1,917	2.7	6	0.3	16	0.8	147	7.7	1,130	66.4	1,204	64.0	106	5.5	717	37.4	1,792	94.3	117	6.1
Chinese	1,900	2.7	0	0.0	7	0.4	100	5.3	1,401	85.3	1,607	85.3	91	4.8	476	25.1	1,739	92.7	172	9.1
Brazilian	1,590	2.2	10	0.6	29	1.8	114	7.2	1,101	82.2	1,240	81.3	92	5.8	664	41.8	1,482	94.0	90	5.7
Haitian	1,425	2.0	8	0.6	24	1.7	164	11.6	812	61.8	839	60.4	91	6.4	578	40.6	1,269	90.7	113	7.9
Cape Verdean	1,396	2.0	34	2.4	100	7.2	121	8.7	959	71.5	979	71.6	82	5.9	416	29.8	1,190	86.4	66	4.7
Salvadoran	1,220	1.7	35	2.9	97	8.0	93	7.6	865	75.5	893	74.9	70	5.7	270	22.1	1,105	91.5	83	6.8
Middle Eastern	1,132	1.6	- ⁷	- ⁷	16	1.4	77	6.8	731	73.4	816	73.6	59	5.2	322	28.4	1,042	93.2	84	7.4
Guatemalan	970	1.4	17	1.8	67	6.9	44	4.5	657	73.4	608	65.5	52	5.4	209	21.5	864	89.8	61	6.3
Russian	770	1.1	- ⁷	- ⁷	8	1.0	54	7.0	514	83.8	635	84.1	36	4.7	208	27.0	733	95.8	47	6.1
Vietnamese	640	0.9	- ⁷	- ⁷	7	1.1	72	11.3	435	80.3	502	79.6	55	8.6	194	30.3	533	84.3	83	13.0
Cambodian	618	0.9	6	1.0	26	4.2	53	8.6	474	80.7	448	73.4	30	4.9	131	21.2	427	70.5	62	10.0
West Indian Caribbean	575	0.8	- ⁷	- ⁷	25	4.3	68	11.8	378	73.1	419	74.6	31	5.4	189	32.9	532	93.3	36	6.3
Mexican	552	0.8	8	1.4	26	4.7	31	5.6	378	77.6	417	76.9	21	3.8	164	29.8	493	90.6	48	8.7
Other South American	526	0.7	- ⁷	- ⁷	17	3.2	31	5.9	380	79.7	396	76.4	26	4.9	142	27.0	496	95.4	20	3.8
Native American	441	0.6	10	2.3	24	5.4	33	7.5	289	74.7	327	75.0	28	6.3	144	32.7	340	77.4	18	4.1
Honduran	417	0.6	8	1.9	31	7.4	45	10.8	288	72.4	287	70.0	30	7.2	101	24.2	358	86.7	23	5.5
Korean	411	0.6	0	0.0	- ⁷	- ⁷	41	10.0	293	88.8	351	88.2	35	8.5	106	25.8	394	96.8	30	7.3
Colombian	398	0.6	6	1.5	12	3.0	23	5.8	276	80.7	315	81.6	27	6.8	126	31.7	374	95.7	8	2.0

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Since 2009, certain ancestry groups were combined: Lebanese, Iranian, Israeli, and Other Middle Eastern ancestries were combined into "Middle Eastern"; and Nigerian and Other African were combined into "African." 1. In the column "Births," percentages are based on column total (state total of births, including births for which maternal ethnicity is unknown and other). For all other categories, percentages are based on row totals. 2. Low birthweight: less than 2,500 grams or 5.5 pounds. 3. Based on Adequacy of Prenatal Care Utilization (APNCU) Index. Does not include data from Newton Wellesley, Saint Vincent and Winchester hospitals because of reporting problems. 4. Late preterm: 34-36 weeks gestation. 5. Infant was being breastfed at time of discharge. 6. Gestational diabetes is defined as glucose intolerance found during pregnancy for the first time. It excludes cases with pre-existing diabetes. 7. Calculations based on 1-4 events are excluded.

Figure 1. Trends in the Number of Births by Mother's Age Group, Massachusetts: 1981-2015

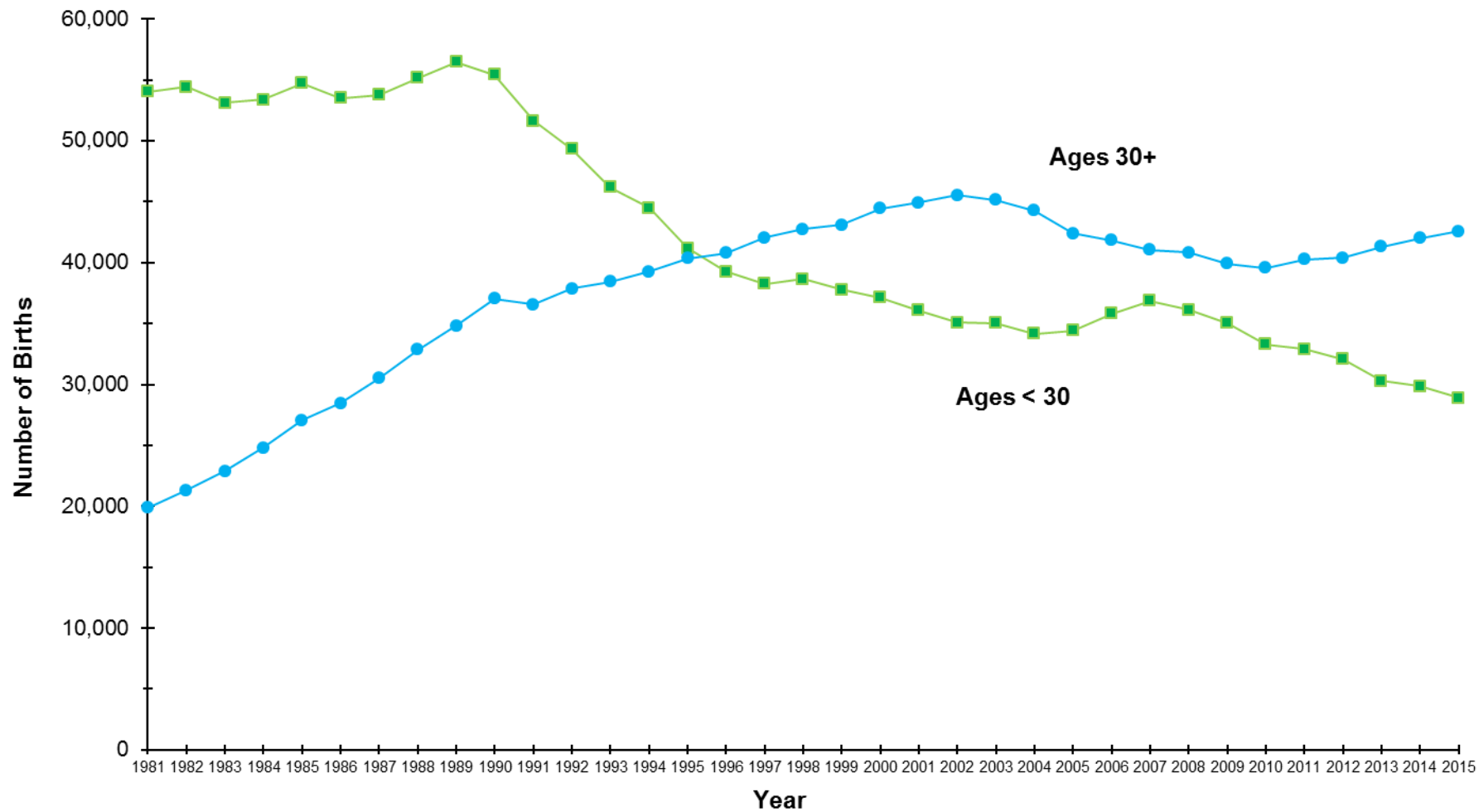


Table 4. Trends in Number and Percent Distribution of Births by Plurality and Maternal Age, Massachusetts: 2001-2015

Singletons				Multiples ¹						Total births ²	
Age Group				Twins		Triplets or more		Total Multiples			
	Year	n	%	n	%	n	%	n	%	n	%
<u>All Ages</u>											
	2001	77,409	95.6	3,371	4.2	234	0.3	3,605	4.4	81,014	100.0
	2002	76,673	95.1	3,708	4.6	243	0.3	3,951	4.9	80,624	100.0
	2003	76,367	95.3	3,551	4.4	249	0.3	3,800	4.7	80,167	100.0
	2004	74,677	95.2	3,538	4.5	245	0.3	3,783	4.8	78,460	100.0
	2005	73,258	95.4	3,375	4.4	190	0.2	3,565	4.6	76,824	100.0
	2006	74,146	95.5	3,375	4.3	149	0.2	3,524	4.5	77,670	100.0
	2007	74,498	95.6	3,310	4.2	126	0.2	3,436	4.4	77,934	100.0
	2008	73,475	95.5	3,365	4.4	129	0.2	3,494	4.5	76,969	100.0
	2009	71,423	95.3	3,386	4.5	157	0.2	3,543	4.7	74,966	100.0
	2010	69,508	95.4	3,220	4.4	107	0.1	3,327	4.6	72,835	100.0
	2011	69,933	95.6	3,135	4.3	100	0.1	3,235	4.4	73,169	100.0
	2012	69,272	95.6	3,093	4.3	90	0.1	3,183	4.4	72,457	100.0
	2013	68,363	95.5	3,164	4.4	91	0.1	3,255	4.5	71,618	100.0
	2014	68,800	95.7	2,984	4.2	83	0.1	3,067	4.3	71,867	100.0
	2015	68,756	96.2	2,671	3.7	57	0.1	2,728	3.8	71,484	100.0
<u>Ages <35</u>											
	2001	60,704	96.3	2,211	3.5	134	0.2	2,345	3.7	63,049	100.0
	2002	59,736	96.0	2,379	3.8	127	0.2	2,506	4.0	62,242	100.0
	2003	59,347	95.9	2,389	3.9	118	0.2	2,507	4.1	61,854	100.0
	2004	57,618	96.0	2,229	3.7	142	0.2	2,371	4.0	59,989	100.0
	2005	56,380	96.3	2,086	3.6	102	0.2	2,188	3.7	58,569	100.0
	2006	57,237	96.3	2,116	3.6	89	0.1	2,205	3.7	59,442	100.0
	2007	57,977	96.3	2,144	3.6	87	0.1	2,231	3.7	60,208	100.0
	2008	57,080	96.3	2,111	3.6	78	0.1	2,189	3.7	59,269	100.0
	2009	55,906	96.1	2,202	3.8	80	0.1	2,282	3.9	58,188	100.0
	2010	54,369	96.3	2,018	3.6	58	0.1	2,076	3.7	56,445	100.0
	2011	54,837	96.4	2,014	3.5	59	0.1	2,073	3.6	56,910	100.0
	2012	54,069	96.4	1,961	3.5	57	0.1	2,018	3.6	56,089	100.0
	2013	52,995	96.2	2,025	3.7	54	0.1	2,079	3.8	55,074	100.0
	2014	53,166	96.5	1,890	3.4	50	0.1	1,940	3.5	55,106	100.0
	2015	52,640	96.9	1,665	3.1	45	0.1	1,710	3.1	54,350	100.0
<u>Ages 35+</u>											
	2001	16,703	93.0	1,160	6.5	100	0.6	1,260	7.0	17,963	100.0
	2002	16,936	92.1	1,329	7.2	116	0.6	1,445	7.9	18,381	100.0
	2003	17,015	92.9	1,162	6.3	131	0.7	1,293	7.1	18,308	100.0
	2004	17,055	92.4	1,309	7.1	103	0.6	1,412	7.6	18,467	100.0
	2005	16,874	92.5	1,289	7.1	88	0.5	1,377	7.5	18,251	100.0
	2006	16,901	92.8	1,257	6.9	60	0.3	1,317	7.2	18,218	100.0
	2007	16,519	93.2	1,166	6.6	39	0.2	1,205	6.8	17,724	100.0
	2008	16,392	92.6	1,254	7.1	51	0.3	1,305	7.4	17,697	100.0
	2009	15,513	92.5	1,184	7.1	77	0.5	1,261	7.5	16,774	100.0
	2010	15,136	92.4	1,200	7.3	49	0.3	1,249	7.6	16,385	100.0
	2011	15,092	92.8	1,121	6.9	41	0.3	1,162	7.1	16,255	100.0
	2012	15,202	92.9	1,132	6.9	33	0.2	1,165	7.1	16,367	100.0
	2013	15,367	92.9	1,139	6.9	37	0.2	1,176	7.1	16,543	100.0
	2014	15,634	93.3	1,094	6.5	33	0.2	1,127	6.7	16,761	100.0
	2015	16,115	94.1	1,005	5.9	12	0.1	1,017	5.9	17,132	100.0

1. Numbers of multiples (n) represent individual infants rather than sets of infants. 2. Differences in the number of births from previous publications are the result of updated files.

Table 5a. Summary of Selected Teen Birth Characteristics, Massachusetts: 2015

	Ages 15-17		Ages 18-19		Combined Ages 15-19	
	N	% ^{1,2}	N	% ^{1,2}	N	% ^{1,2}
State Total	539	25.2%	1,601	74.8%	2,140	100.0%
White non-Hispanic	146	27.4%	572	36.2%	718	34.0%
Black non-Hispanic	71	13.3%	215	13.6%	286	13.5%
Asian	7	1.3%	41	2.6%	48	2.3%
Hispanic	302	56.8%	742	46.9%	1,044	49.4%
Other	6	1.1%	12	0.8%	18	0.9%
Birthplace						
US States / D.C.	370	68.6%	1,121	70.0%	1,491	69.7%
Puerto Rico / US Terr.	64	11.9%	161	10.1%	225	10.5%
Non-US-born	105	19.5%	319	19.9%	424	19.8%
Prenatal Care Funding						
Public	454	86.1%	1,241	79.5%	1,695	81.2%
Private, other	73	13.9%	320	20.5%	393	18.8%
Pregnancy-Related Factors						
Adequacy of Prenatal Care³						
Adequate Total ⁴	324	60.1%	1,060	66.2%	1,384	64.7%
Adequate Intensive	171	31.7%	510	31.9%	681	31.8%
Adequate Basic	153	28.4%	550	34.4%	703	32.9%
Intermediate	46	8.5%	139	8.7%	185	8.6%
Inadequate/None	141	26.2%	327	20.4%	468	21.9%
Unknown	28	5.2%	75	4.7%	103	4.8%
Parity⁵						
1	517	95.9%	1,355	84.7%	1,872	87.6%
2	22	4.1%	212	13.3%	234	10.9%
3+	0	0.0%	32	2.0%	32	1.5%
Smoking during Pregnancy						
Yes	25	4.9%	140	9.2%	165	8.1%
No	481	95.1%	1,382	90.8%	1,863	91.9%
Birth Outcomes						
Birthweight						
< 500 g	- ⁶	- ⁶	- ⁶	- ⁶	5	0.2%
500-1,499 g	6	1.1%	19	1.2%	25	1.2%
1,500-2,499 g	44	8.2%	121	7.6%	165	7.7%
LBW (<2,499 g)	51	9.5%	144	9.0%	195	9.1%
2,500-3,999 g	470	87.2%	1,367	85.7%	1,837	86.0%
4000+ g	18	3.3%	85	5.3%	103	4.8%
Gestational Age						
< 28 weeks	- ⁶	- ⁶	- ⁶	- ⁶	14	0.7%
Preterm (< 37 weeks)	48	8.9%	118	7.4%	166	7.8%
37-42 weeks	489	90.7%	1,470	91.9%	1,959	91.6%
Plurality						
Singleton	533	98.9%	1,579	98.6%	2,112	98.7%
Multiple birth	6	1.1%	22	1.4%	28	1.3%

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.

1. For state total row, percentages are based on total births to females ages 15-19. For the rest of the table, percentages are based on births for a given age group and characteristic. 2. Percentages are based on state total of the age group. 3. Based on Adequacy of Prenatal Care Utilization (APNCU) Index. Does not include data from Newton Wellesley, Saint Vincent, and Winchester hospitals because of reporting problems. 4. Adequate Total = Adequate Basic + Adequate Intensive. 5. Number of live births including the current birth. 6. Calculations based on 1-4 events are excluded.

Table 5b. Number and Teen Birth Rates by Race/Hispanic Ethnicity for Selected Communities, Massachusetts: 2015

Municipality ¹	Teen Births		White non-Hispanic		Black non-Hispanic		Hispanic	
	N	Rate (95%CI) ^{2,3}	N	Rate (95%CI) ^{2,3}	N	Rate (95%CI) ^{2,3}	N	Rate (95%CI) ^{2,3}
State Total	2,140	9.4 (9, 9.8)	718	4.5 (4.2, 4.8)	286	14.4 (12.7, 16.1)	1,044	32.7 (30.8, 34.7)
Holyoke	61	40.5 (29, 53.9)	- ⁴	- ⁴	- ⁴	- ⁴	54	51.1 (38, 66)
Southbridge	21	36.8 (25.9, 49.6)	- ⁴	- ⁴	- ⁴	- ⁴	14	63.9 (49.2, 80.5)
Chelsea	41	34.3 (23.8, 46.6)	- ⁴	- ⁴	- ⁴	- ⁴	31	35.1 (24.4, 47.6)
Lawrence	110	32.4 (26.3, 38.5)	- ⁴	- ⁴	- ⁴	- ⁴	106	37 (30, 44.1)
Lynn	104	32.3 (26.1, 38.5)	17	15 (8.4, 23.5)	7	15.6 (8.8, 24.2)	72	53.8 (40.4, 69.1)
New Bedford	97	31.9 (21.8, 43.9)	29	14.3 (7.9, 22.6)	7	28.8 (19.3, 40.2)	56	77.8 (61.5, 96)
Springfield	215	31.5 (27.2, 35.7)	11	5.7 (2.1, 11.3)	28	18.6 (11.1, 27.9)	173	53.9 (45.9, 62)
Fall River	81	29.1 (19.5, 40.6)	50	22.8 (14.4, 33)	5	32.3 (22.1, 44.3)	22	71.7 (56, 89.2)
Fitchburg	44	24.7 (16, 35.4)	11	9.4 (4.4, 16.3)	- ⁴	- ⁴	27	57.8 (43.9, 73.6)
West Springfield	20	23.8 (15.2, 34.2)	10	15.9 (9.1, 24.7)	.	-	10	73.5 (57.7, 91.3)
Brockton	77	23 (14.5, 33.3)	10	7.3 (3, 13.4)	42	28.6 (19.1, 40)	23	56.4 (42.6, 72)
Lowell	84	20.4 (12.5, 30.2)	24	12.6 (6.7, 20.5)	12	41.8 (30.1, 55.4)	28	28.4 (18.9, 39.7)
Haverhill	36	20.1 (12.3, 29.8)	- ⁴	- ⁴	.	-	20	51.7 (38.6, 66.7)
Everett	23	17.5 (10.2, 26.5)	- ⁴	- ⁴	- ⁴	- ⁴	19	58.1 (44.1, 74)
Worcester	130	16.8 (13.9, 19.7)	45	10.1 (4.8, 17.2)	14	18.3 (10.9, 27.5)	66	33.3 (22.9, 45.5)
Chicopee	30	15.9 (9.1, 24.7)	13	9.8 (4.7, 16.9)	- ⁴	- ⁴	14	32 (21.9, 44)
Marlborough	16	15.6 (8.8, 24.2)	- ⁴	- ⁴	.	-	13	71 (55.5, 88.5)
Leominster	17	13 (6.9, 20.9)	- ⁴	- ⁴	- ⁴	- ⁴	10	35.3 (24.7, 47.9)
Pittsfield	17	12.7 (6.7, 20.6)	11	9.9 (4.7, 17)	- ⁴	- ⁴	- ⁴	- ⁴
Taunton	21	12 (6.2, 19.7)	12	8.1 (3.5, 14.5)	- ⁴	- ⁴	- ⁴	- ⁴
Revere	17	11.9 (6.1, 19.5)	- ⁴	- ⁴	.	-	14	26.8 (17.6, 37.8)
Framingham	27	11.5 (5.8, 19)	- ⁴	- ⁴	- ⁴	- ⁴	17	39.8 (28.4, 53.1)
Methuen	18	11.1 (5.6, 18.5)	- ⁴	- ⁴	- ⁴	- ⁴	11	24.6 (15.9, 35.2)
Boston	247	9.5 (8.3, 10.7)	19	1.7 (0.1, 5)	87	13.3 (7.2, 21.4)	135	26 (21.6, 30.4)
Quincy	13	6.6 (2.5, 12.4)	- ⁴	- ⁴	5	40 (28.6, 53.3)	- ⁴	- ⁴

Note: The total number of Asian teen births in MA was 48 for a rate of 3.5/1,000 significantly lower than the state rate of 10.6. The only community with more than 10 Asian teen births was Lowell. Asian teen birth rate in this community was higher than the state.

1. Selected communities include the 25 Massachusetts cities and towns with the greatest number of teen births. 2. Rates are per 1,000 females ages 15-19 per city/town. 3. Birth rates for cities and towns were calculated using the Massachusetts Department of Public Health Race Allocated Census 2010 Estimates file (MRACE 2010), which is the most up-to-date information available on the number of persons by age, race, and sex at the sub-state level. **Please note:** If the population in your **community increased from 2010 to 2015, the rates listed may overestimate the actual rate. If the population in your community declined from 2010 to 2015, the rates given in the publication may underestimate the actual rate.** 4. Rates based on counts of 1-4 births are not presented.

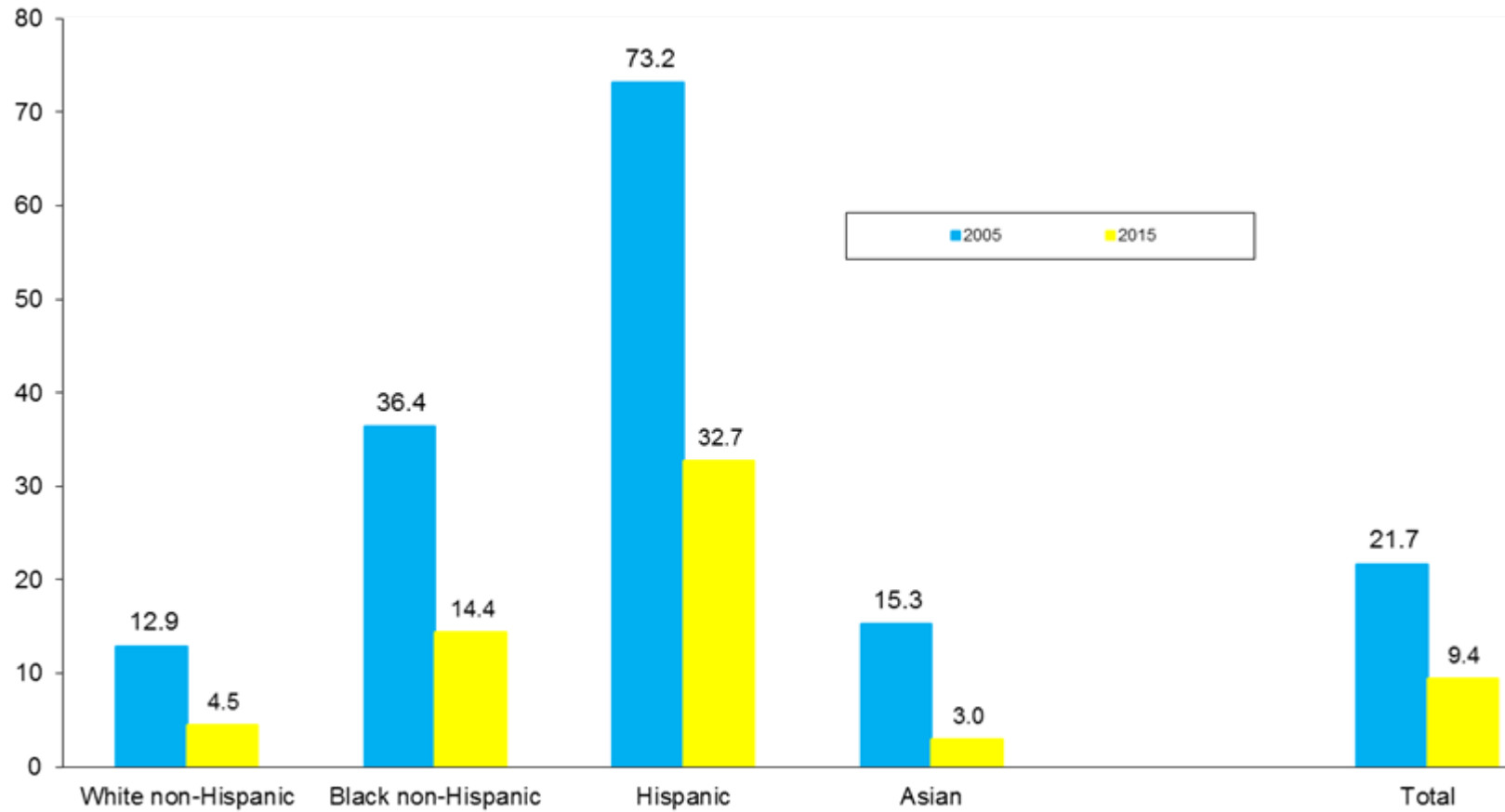
Table 6. Trends in Teen Birth Rates for Selected Communities, Ranked by 2015 Teen Birth Rate, Massachusetts: 2005, 2014-2015

2015 Rank	Municipality ¹	2005		2014		2015	
		Number of Teen Births	Teen Birth Rate ²	Number of Teen Births	Teen Birth Rate ^{2,3}	Number of Teen Births	Teen Birth Rate ^{2,3}
	State Total	3,140	11.1	2,732	12.0	2,140	9.4
1	Holyoke	146	96.8	60	39.8	61	40.5
2	Southbridge	36	64.5	19	33.3	21	36.8
3	Chelsea	75	75.0	59	49.3	41	34.3
4	Lawrence	217	71.7	121	35.6	110	32.4
5	Lynn	146	47.3	94	29.2	104	32.3
6	New Bedford	174	58.9	101	33.3	97	31.9
7	Springfield	435	71.6	239	35.0	215	31.5
8	Fall River	140	49.5	79	28.4	81	29.1
9	Fitchburg	62	39.6	41	23.1	44	24.7
10	West Springfield	20	25.0	8	9.5	20	23.8
11	Brockton	148	40.7	88	26.2	77	23.0
12	Lowell	204	51.4	89	21.6	84	20.4
13	Haverhill	59	30.9	41	22.9	36	20.1
14	Everett	35	33.0	17	12.9	23	17.5
15	Worcester	262	37.2	126	16.3	130	16.8
16	Chicopee	72	41.4	35	18.6	30	15.9
17	Marlborough	24	26.9	16	15.6	16	15.6
18	Leominster	22	17.5	18	13.8	17	13.0
19	Pittsfield	67	52.7	32	23.9	17	12.7
20	Taunton	53	32.5	17	9.7	21	12.0
21	Revere	48	45.6	30	20.9	17	11.9
22	Framingham	45	23.0	35	14.9	27	11.5
23	Methuen	36	27.1	15	9.2	18	11.1
24	Boston	566	28.6	276	10.6	247	9.5
25	Quincy	48	23.1	16	8.1	13	6.6

1. Selected communities include the 25 Massachusetts cities and towns with the greatest number of teen births in 2015. Ranking is by 2015 teen birth rate.

2. Rates are per 1,000 females ages 15-19 per city/town. 3. Birth rates for cities and towns were calculated using the Massachusetts Department of Public Health Race Allocated Census 2010 Estimates file (MRACE 2010), which is the most up-to-date information available on the number of persons by age, race, and sex at the sub-state level. **Please note:** If the population in your community increased from 2010 to 2015, the rates listed may **overestimate** the actual rate. If the population in your community declined from 2010 to 2015, the rates given in the publication may **underestimate** the actual rate.

Figure 2. Teen Birth Rates among Females Ages 15-19 Years by Mother's Race/Hispanic Ethnicity, Massachusetts: 2005 and 2015



Note: Teen birth rate is number of births to females ages 15-19 per 1,000 females ages 15-19. Birth rates are based upon the 2010 Census population and the [National Center for Health Statistics](#). Postcensal estimates of the resident population of the United States for July 1, 2010-July 1, 2015, by year, county, single-year of age (0, 1, 2, ..., 85 years and over), bridged race, Hispanic origin, and sex (Vintage 2015).

Table 7. Births by Birthweight, Race/Hispanic Ethnicity, Massachusetts: 2015

Birthweight (in grams)	Total		White non-Hispanic		Black non-Hispanic		Hispanic		Asian		Other		Unknown Race/Ethnicity	
	n	% ¹	n	% ¹	n	% ¹	n	% ¹	n	% ¹	n	% ¹	n	% ¹
State Total	71,484	100.0	43,255	100.0	6,949	100.0	12,927	100.0	6,473	100.0	631	100.0	1,249	100.0
<500	104	0.1	31	0.1	29	0.4	36	0.3	7	0.1	0	0.0	-. ²	-. ²
500-999	313	0.4	123	0.3	63	0.9	92	0.7	22	0.3	-. ²	-. ²	10	0.9
1,000-1,499	448	0.6	237	0.5	66	1.0	89	0.7	35	0.5	9	1.4	12	1.0
1,500-1,999	1,031	1.4	545	1.3	150	2.2	196	1.5	101	1.6	12	1.9	27	2.3
2,000-2,499	3,425	4.8	1,859	4.3	426	6.1	658	5.1	388	6.0	37	5.9	57	4.9
2,500-2,999	11,788	16.5	6,210	14.4	1,434	20.7	2,385	18.5	1,427	22.1	126	20.1	206	17.6
3,000-3,499	26,967	37.8	15,841	36.7	2,636	38.0	5,055	39.2	2,749	42.6	250	39.9	436	37.2
3,500-3,999	20,339	28.5	13,440	31.2	1,650	23.8	3,396	26.3	1,388	21.5	151	24.1	314	26.8
4,000-4,499	5,890	8.3	4,198	9.7	407	5.9	853	6.6	309	4.8	32	5.1	91	7.8
4,500-4,999	879	1.2	638	1.5	65	0.9	131	1.0	31	0.5	-. ²	-. ²	13	1.1
>=5,000	87	0.1	62	0.1	-. ²	-. ²	10	0.1	-. ²	-. ²	-. ²	-. ²	5	0.4
Unknown birthweight	213	0.3	71	0.2	21	0.3	26	0.2	13	0.2	5	0.8	77	6.2
VLBW³ (0-1,499 g)	865	1.2	391	0.9	158	2.3	217	1.7	64	1.0	12	1.9	23	2.0
LBW⁴ (0-2,499 g)	5,321	7.5	2,795	6.5	734	10.6	1,071	8.3	553	8.6	61	9.7	107	9.1
NOTE: Percentages for detailed birthweight rows ("<500" through "Unknown birthweight") are calculated based on births including those with unknown birthweight. Percentages for VLBW and LBW rows are calculated based on births with known birthweight only.														
1. Percentages are based on column totals. 2. Calculations based on values of 1-4 are excluded. 3. Very Low Birthweight (VLBW): less than 1,500 grams (3.3 lbs.). 4. Low Birthweight (LBW): less than 2,500 grams (5.5 lbs.).														

Table 8. Low Birthweight by Plurality and Maternal Age, Massachusetts: 2005-2015

Maternal Age Group (years)	Year	Singleton				Twin				Multiples				Total Multiples				Total Births			
		VLBW ¹		LBW ²		VLBW ¹		LBW ²		VLBW ¹		LBW ²		VLBW ¹		LBW ²		VLBW ¹		LBW ²	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
All Ages	2005	701	1.0	4,126	5.6	322	9.5	1,765	52.3	75	39.5	181	95.3	397	11.1	1,946	54.6	1,098	1.4	6,072	7.9
	2006	687	0.9	4,264	5.8	308	9.1	1,746	51.8	46	31.1	140	94.6	354	10.1	1,886	53.6	1,041	1.3	6,150	7.9
	2007	693	0.9	4,258	5.7	306	9.2	1,772	53.6	54	42.9	117	92.9	360	10.5	1,889	55.0	1,053	1.4	6,147	7.9
	2008	627	0.9	4,039	5.5	324	9.7	1,803	53.8	55	42.6	113	87.6	379	10.9	1,916	55.1	1,006	1.3	5,955	7.8
	2009	677	1.0	3,886	5.5	276	8.2	1,771	52.7	61	38.9	147	93.6	337	9.6	1,918	54.5	1,014	1.4	5,804	7.8
	2010	643	0.9	3,882	5.6	288	8.9	1,668	51.8	30	28.8	100	96.2	318	9.6	1,768	53.2	961	1.3	5,650	7.8
	2011	629	0.9	3,824	5.6	286	9.2	1,541	49.8	41	41.0	93	93.0	327	10.2	1,634	51.2	956	1.3	5,458	7.6
	2012	585	0.8	3,810	5.5	252	8.2	1,592	51.6	41	45.6	89	98.9	300	7.5	1,731	43.5	878	1.2	5,491	7.6
	2013	596	0.9	3,727	5.5	318	10.1	1,686	53.5	23	25.8	82	92.1	351	8.6	1,825	45.0	937	1.3	5,495	7.7
	2014	605	0.9	3,690	5.4	270	9.1	1,624	54.5	19	22.9	80	96.4	297	7.6	1,763	45.2	894	1.2	5,394	7.5
	2015	627	0.9	3,849	5.6	219	8.2	1,419	53.4	19	34.5	53	96.4	241	6.8	1,528	43.2	865	1.2	5,321	7.5
Ages < 35	2005	552	1.0	3,198	5.7	215	10.3	1,149	55.1	47	46.1	100	98.0	262	12.0	1,249	57.1	814	1.4	4,447	7.6
	2006	534	0.9	3,342	5.8	217	10.3	1,157	54.8	28	31.5	83	93.3	245	11.1	1,240	56.3	779	1.3	4,582	7.7
	2007	533	0.9	3,317	5.7	223	10.4	1,191	55.6	45	51.7	85	97.7	268	12.0	1,276	57.2	801	1.3	4,593	7.6
	2008	492	0.9	3,134	5.5	218	10.4	1,181	56.2	34	43.6	70	89.7	252	11.6	1,251	57.4	744	1.3	4,385	7.4
	2009	525	0.9	3,093	5.6	174	7.9	1,187	54.2	36	45.0	76	95.0	210	9.2	1,263	55.6	735	1.3	4,356	7.5
	2010	489	0.9	3,071	5.7	206	10.2	1,059	52.5	22	40.0	51	92.7	228	11.0	1,110	53.5	717	1.3	4,181	7.4
	2011	475	0.9	2,964	5.5	189	9.5	1,034	52.0	31	52.5	54	91.5	220	10.8	1,088	53.2	695	1.2	4,052	7.2
	2012	437	0.8	2,964	5.5	185	9.5	1,066	54.6	34	59.6	57	100	226	8.4	1,168	43.5	656	1.2	4,087	7.3
	2013	433	0.8	2,852	5.4	225	11.2	1,101	54.6	17	32.7	48	92.3	250	9.1	1,202	43.7	675	1.2	4,001	7.3
	2014	460	0.9	2,828	5.3	186	9.8	1,076	57.0	14	28.0	48	96.0	207	7.9	1,173	44.7	660	1.2	3,952	7.2
	2015	476	0.9	2,922	5.6	142	8.6	902	54.5	16	36.4	43	97.7	160	6.7	990	41.8	634	1.2	3,867	7.1
Ages 35+	2005	149	0.9	927	5.5	107	8.3	616	47.8	28	31.8	81	92.0	135	9.8	697	50.6	284	1.6	1,624	8.9
	2006	151	0.9	919	5.4	89	7.1	587	46.8	18	30.5	57	96.6	107	8.1	644	49.0	258	1.4	1,563	8.6
	2007	160	1.0	941	5.7	83	7.1	581	49.8	9	23.1	32	82.1	92	7.6	613	50.9	252	1.4	1,554	8.8
	2008	135	0.8	905	5.6	106	8.5	622	49.8	21	41.2	43	84.3	127	9.8	665	51.2	262	1.5	1,570	8.9
	2009	152	1.0	792	5.1	102	8.7	584	49.9	25	32.5	71	92.2	127	10.2	655	52.5	279	1.7	1,447	8.7
	2010	154	1.0	810	5.4	82	6.8	609	50.8	8	16.3	49	100	90	7.2	658	52.8	244	1.5	1,468	9.0
	2011	154	1.0	860	5.8	97	8.8	507	45.9	10	24.4	39	95.1	107	9.3	546	47.6	261	1.6	1,406	8.8
	2012	148	1.0	846	5.6	67	5.9	526	46.5	7	21.2	32	97.0	74	5.7	563	43.5	222	1.4	1,404	8.6
	2013	163	1.1	875	5.7	93	8.2	585	51.6	6	16.2	34	91.9	101	7.7	623	47.6	262	1.6	1,494	9.1
	2014	145	0.9	862	5.5	84	7.7	548	50.2	5	15.2	32	97.0	90	7.1	590	46.3	234	1.4	1,442	8.6
	2015	151	0.9	927	5.8	77	7.7	517	51.7	3	27.3	10	90.9	81	7.0	538	46.3	231	1.4	1,454	8.5

NOTE: Very Low Birthweight (VLBW) births are a subset of Low Birthweight (LBW) births. All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. 1. Very Low Birthweight (VLBW): less than 1,500 grams (3.3 lbs.). 2. Low Birthweight (LBW): less than 2,500 grams (5.5 lbs.).

Table 9. Births by Gestational Age, Race/Hispanic Ethnicity, Massachusetts: 2015

Gestational Age ¹ (weeks completed)	Total		White non-Hispanic		Black non-Hispanic		Hispanic		Asian		Other ³		Unknown
	n	% ²	n	% ²	n	% ²	n	% ²	n	% ²	n	% ²	n
State Total	71,484	100.0	43,255	100.0	6,949	100.0	12,927	100.0	6,473	100.0	631	100.0	1,249
<20	22	0.03	- ⁴	- ⁴	7	0.10	10	0.08	- ⁴	- ⁴	0	0.0	0
20-23	123	0.17	45	0.1	32	0.5	35	0.3	8	0.1	0	0.0	3
24-27	274	0.35	113	0.3	52	0.7	85	0.7	12	0.2	- ⁴	- ⁴	8
28-31	586	0.76	305	0.7	84	1.2	120	0.9	55	0.9	7	1.1	15
32-33	691	0.89	389	0.9	84	1.2	143	1.1	48	0.7	11	1.7	16
34-36	4,305	5.27	2,510	5.8	464	6.7	799	6.2	402	6.2	40	6.4	90
37-38	16,074	20.78	9,159	21.2	1,716	24.7	3,187	24.7	1,597	24.7	145	23.1	270
39	23,998	18.95	14,451	33.4	2,211	31.8	4,361	33.7	2,377	36.7	208	33.1	390
40	17,225	14.51	10,888	25.2	1,576	22.7	2,964	22.9	1,412	21.8	150	23.8	235
41	7,657	5.09	5,073	11.7	683	9.8	1,188	9.2	534	8.3	61	9.7	118
42	387	0.27	281	0.7	39	0.6	32	0.2	23	0.4	- ⁴	- ⁴	9
43	11	0.01	- ⁴	- ⁴	0	0.0	- ⁴	- ⁴	0	0.0	0	0.0	0
44+	- ⁴	- ⁴	- ⁴	- ⁴	0	0.0	0	0.0	0	0.0	0	0.0	0
Preterm⁵ (<37)	6,001	8.4	3,365	7.8	723	10.4	1,192	9.2	527	8.1	62	9.9	132
Very Early ⁶ (<28)	419	0.6	161	0.4	91	1.3	130	1.0	22	0.3	- ⁴	- ⁴	11
(28-33)	1,277	1.8	694	1.6	168	2.4	263	2.0	103	1.6	18	2.9	31
Late (34-36)	4,305	6.0	2,510	5.8	464	6.7	799	6.2	402	6.2	40	6.4	90
Term (≥37)	65,353	91.6	39,863	92.2	6,225	89.6	11,733	90.8	5,943	91.9	567	90.1	1,022
Early Term (37-38)	16,074	22.5	9,159	21.2	1,716	24.7	3,187	24.7	1,597	24.7	145	23.1	270
(39-41)	48,880	68.4	30,412	70.4	4,470	64.3	8,513	65.9	4,323	66.8	419	66.6	743
(≥42)	399	0.6	292	0.7	39	0.6	33	0.3	23	0.4	- ⁴	- ⁴	9
Unknown ⁷	130	0.2	27	0.1	- ⁴	- ⁴	- ⁴	- ⁴	- ⁴	- ⁴	- ⁴	- ⁴	95

NOTE: Percentages are calculated based on births with known gestational age only.

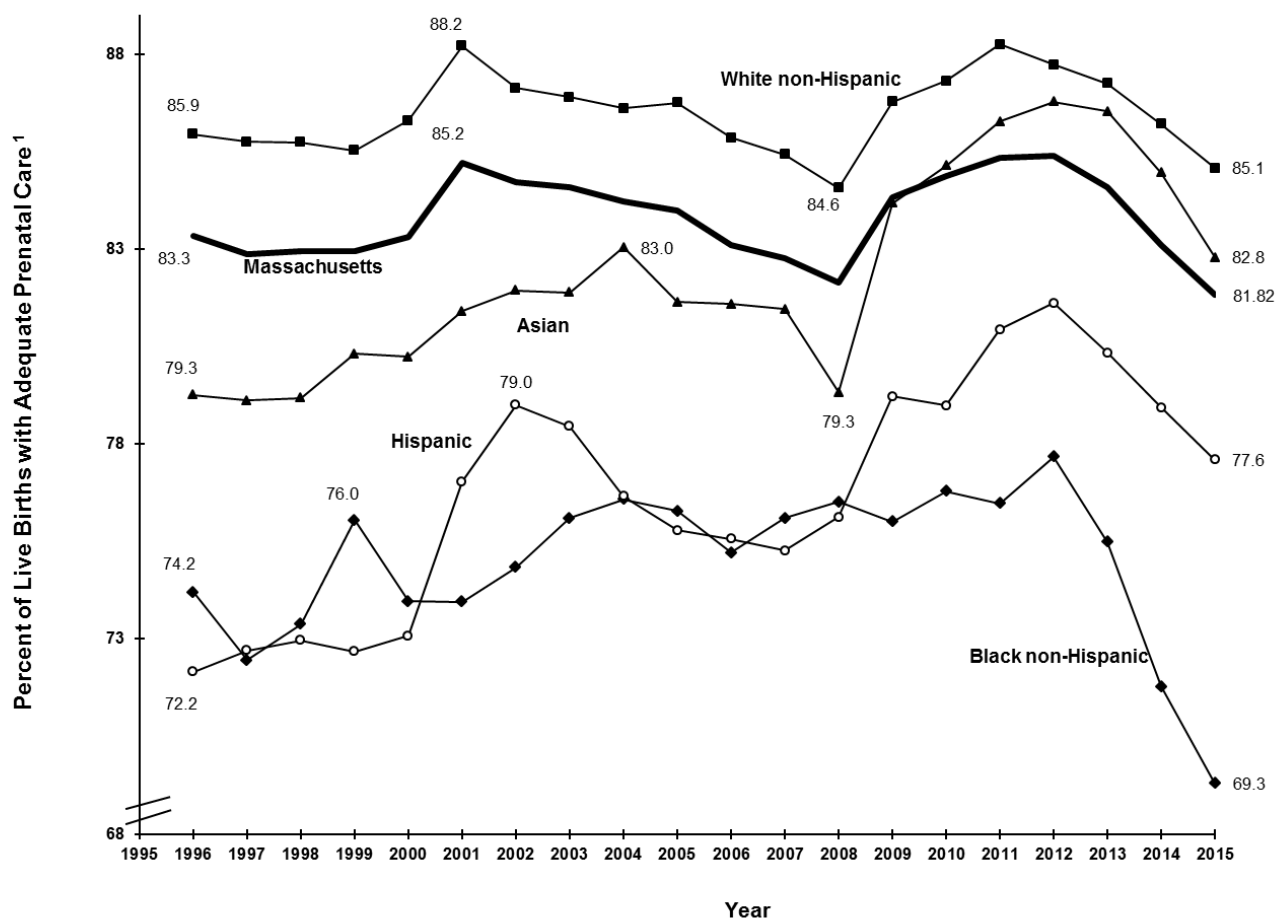
1. A clinical estimate of the number of weeks of pregnancy completed; as estimated by the attendant at birth or the postnatal physician. 2. Percentages are based on column total. 3. Other races include American Indian and others not specified. 4. Calculations based on values of 1-4 are excluded. 5. Also known as early gestational age, premature delivery, or preterm delivery. 6. Also known as extremely premature delivery, or extremely preterm delivery. 7. Estimate of gestational age not provided and excluded from percentage calculations.

Table 9b. Percent Preterm and Term Births by Gestational Age Category, Massachusetts: 2000-2015

	Preterm ¹			Term ²	
Year	Very Early Preterm (<28 wks)	Moderate Preterm (28-33 wks)	Late Preterm (34-36 wks)	Early Term (37-38 wks)	Full Term (37+ wks)
2000	0.6	2.0	5.7	18.7	91.7
2001	0.6	1.9	5.5	18.8	92.0
2002	0.6	1.9	5.9	20.0	91.5
2003	0.7	2.1	6.0	20.8	91.3
2004	0.6	2.2	6.4	22.3	90.8
2005	0.6	2.1	6.3	22.3	91.0
2006	0.6	2.0	6.3	22.7	91.0
2007	0.6	2.0	6.4	22.6	91.0
2008	0.6	2.0	6.2	22.6	91.2
2009	0.7	1.9	6.2	20.8	91.3
2010	0.6	2.0	6.0	21.1	91.4
2011	0.6	1.9	5.9	21.8	91.6
2012	0.6	1.7	6.2	21.5	91.4
2013	0.6	1.9	6.3	21.0	91.2
2014	0.6	1.9	6.1	21.7	91.4
2015	0.6	1.8	6.0	22.5	91.6

1. Also known as early gestational age, premature delivery, or preterm delivery. Preterm: <37 weeks gestation. 2. Full term and early term are not mutually exclusive.

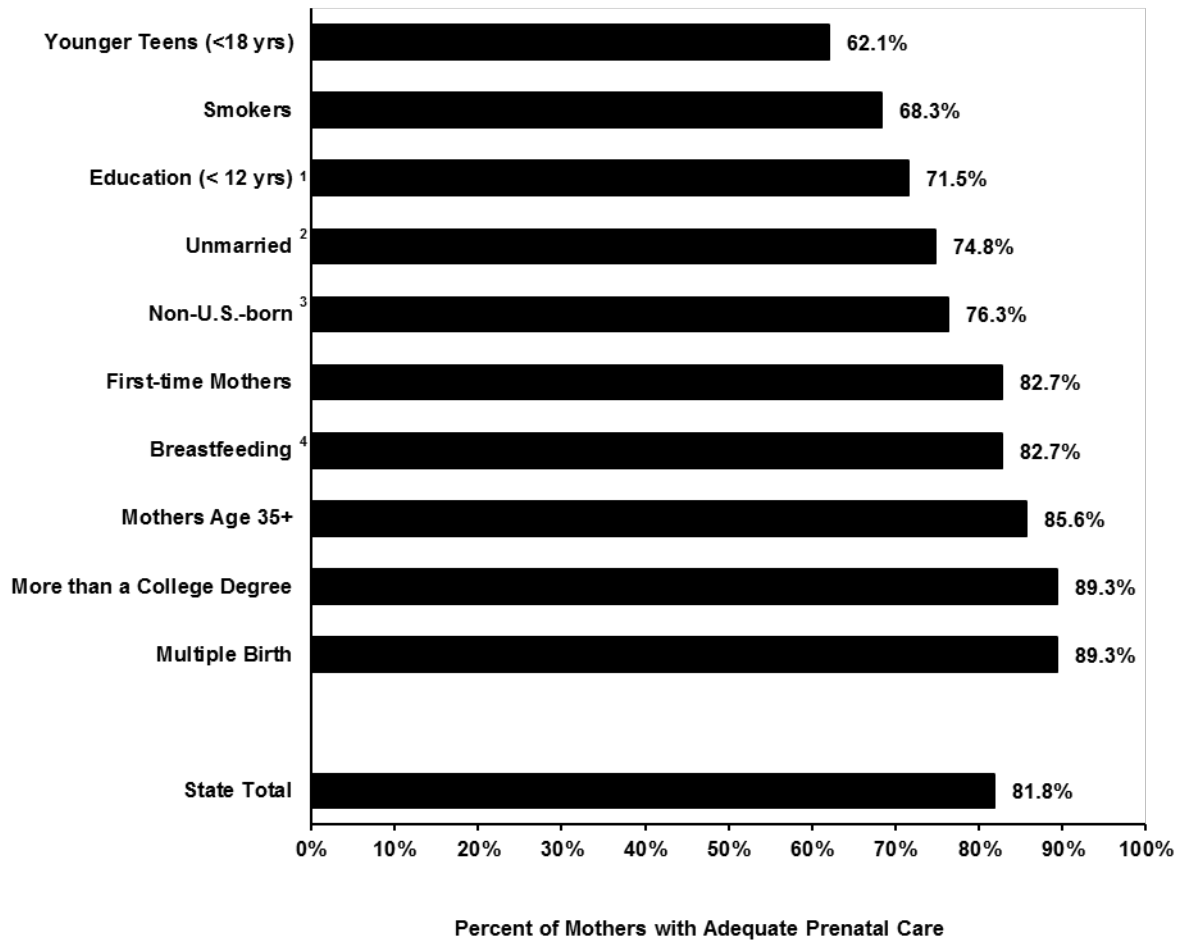
Figure 3. Trends in Adequacy of Prenatal Care by Race and Hispanic Ethnicity, Massachusetts: 1996-2015



PLEASE NOTE THAT FOR PURPOSES OF VISUAL REPRESENTATION THE VERTICAL SCALE OF GRAPH REPRESENTS A SMALL INTERVAL (from 70% to 90%).

1. All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.
2. Please note that the Adequacy of Prenatal Care Utilization (APNCU) Index is an assessment of the timing and number of prenatal care visits and not an evaluation of the quality of care delivered. Years 2011 and 2012 do not include data from Metro West, Newton Wellesley, Saint Vincent and Winchester hospitals because of reporting problems. Years 2013 - 2015 do not include data from Newton Wellesley, Saint Vincent and Winchester hospitals because of reporting problems.

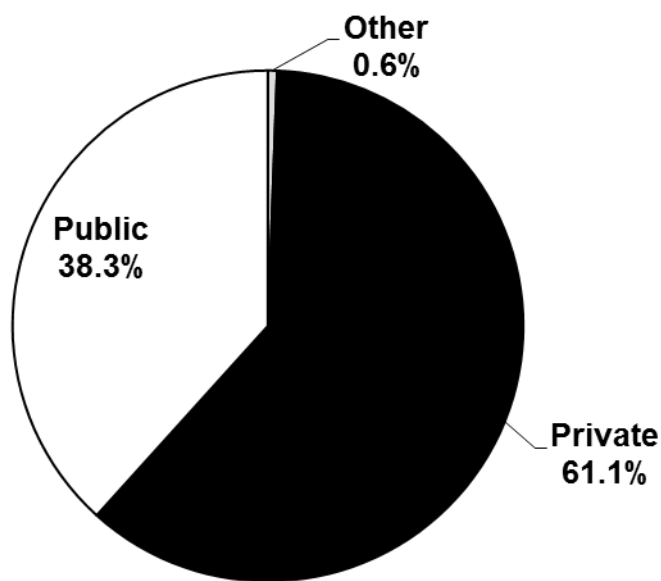
Figure 4. Adequacy of Prenatal Care by Selected Maternal Characteristics, Massachusetts: 2015



NOTE: All percentages are calculated based on the Adequacy of Prenatal Care Utilization (APNCU) Index. Does not include data from Newton Wellesley, Saint Vincent and Winchester hospitals because of reporting problems. Characteristics of interest are not mutually exclusive, except as noted.

1. Women 20 years of age and older. 2. Marital status at time of birth. 3. Non-US-born includes women born outside of the 50 U.S. states, District of Columbia, and U.S. territories (Puerto Rico, U.S. Virgin Islands, Guam). 4. Infant was being breastfed at time of discharge.

Figure 5. Distribution of Prenatal Care Payment Source, Massachusetts: 2015



NOTE: Sources of Prenatal Care Payment include private: Commercial indemnity plan, commercial managed care (HMO, PPO, IPP, IPA, and other), or other private insurance; public: Government programs including CommonHealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care; and other: self-pay.

Table 10. Resident Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2015

Municipality ¹	Rank (by pop. size)	Population	Crude Birth Rate ²	Mother's Race and Ethnicity				Birth weight		Gestational Diabetes %
				White non- Hispanic % ³	Black non- Hispanic % ³	Hispanic % ³	Asian or Other ⁴ % ³	Very Low (<1500 g) %	Low (2500-4000 g) %	
STATE TOTAL		6,794,422	9.6	58.5	10.4	19.6	9.6	1.4	7.8	6.0
Arlington	30	42,839	12.2	71.3	2.5	4.2	20.5	1.0	5.8	4.6
Attleboro	29	43,585	10.9	76.5	6.3	11.9	5.2	1.0	7.8	6.3
Barnstable	27	45,185	8.4	68.6	10.8	13.5	6.6	0.3	8.0	5.6
Boston	1	617,594	12.0	37.7	24.8	25.5	9.9	1.6	8.8	3.7
Brockton	7	93,802	16.7	23.4	56.6	14.6	4.3	2.0	9.8	6.3
Brookline	18	58,730	9.8	60.7	1.6	5.7	30.0	0.7	5.1	3.6
Cambridge	5	105,157	11.7	54.7	10.8	9.5	22.7	1.4	7.1	3.5
Chicopee	22	55,295	10.2	64.2	5.7	27.3	1.9	1.4	10.0	6.9
Fall River	10	88,844	13.0	67.6	8.7	18.6	5.0	1.0	8.3	9.2
Framingham	14	68,314	9.1	40.8	6.9	27.5	10.1	1.9	8.2	6.1
Haverhill	15	60,876	11.8	63.0	4.9	26.8	4.0	0.8	6.7	4.9
Lawrence	12	76,368	17.8	7.5	2.9	88.1	1.3	2.4	10.1	5.9
Lowell	4	106,517	14.2	35.9	11.5	22.7	29.5	1.0	8.4	8.6
Lynn	9	90,328	16.8	23.4	11.3	51.5	9.0	1.5	8.3	5.4
Malden	17	59,447	14.2	33.5	20.2	12.3	31.0	1.1	7.5	9.1
Medford	20	56,171	11.4	61.5	10.8	9.8	16.1	1.6	7.2	4.4
Methuen	26	47,252	10.6	50.3	4.6	38.7	5.4	1.6	6.0	4.8
New Bedford	6	95,071	13.7	51.9	10.8	31.8	2.4	1.0	8.4	6.4
Newton	11	85,142	5.8	65.5	2.2	4.4	25.0	0.8	7.9	4.6
Peabody	25	51,253	10.5	68.9	5.2	15.4	5.2	0.6	7.6	4.3
Pittsfield	28	44,728	10.3	75.3	10.4	10.2	4.1	1.3	7.4	3.9
Plymouth	19	56,455	9.0	89.2	1.8	5.7	2.8	0.8	6.7	6.3
Quincy	8	92,275	12.8	46.8	8.0	6.0	38.4	1.3	7.3	8.4
Revere	24	51,744	14.9	38.3	7.4	40.9	10.5	1.4	7.9	4.8
Somerville	13	75,748	11.2	57.7	6.7	19.7	13.4	1.4	10.4	4.7
Springfield	3	153,057	14.4	21.3	17.8	56.6	4.0	2.2	9.6	7.0
Taunton	21	55,869	10.8	67.5	13.9	12.4	4.5	2.2	10.1	7.0
Waltham	16	60,621	9.1	42.4	10.9	30.6	14.9	2.0	7.4	5.1
Weymouth	23	53,736	11.7	73.4	8.3	6.7	10.5	1.6	7.4	8.6
Worcester	2	181,041	9.5	41.0	19.4	30.9	8.1	2.6	11.4	9.3

Table 10 (cont'd). Resident Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2015

Municipality ¹	Adequate Prenatal Care ⁶	Public Payment ⁷ for Prenatal Care	Unmarried	Teen Mothers 15-19 years ⁸	
	%	%	%	n	Rate
STATE TOTAL	81.8	41.5	35.8	2,032	9.4
Arlington	92.7	9.4	5.7	⁵	⁵
Attleboro	79.1	21.7	34.5	9	6.7
Barnstable	69.0	58.1	38.6	11	8.6
Boston	78.8	44.0	39.4	246	9.5
Brockton	72.4	73.5	58.4	77	23.0
Brookline	92.1	9.2	4.7	⁵	⁵
Cambridge	85.9	15.4	12.7	⁵	⁵
Chicopee	85.2	50.8	50.8	30	15.9
Fall River	74.9	74.7	63.3	81	29.1
Framingham	80.5	56.5	36.0	24	10.2
Haverhill	82.4	47.3	45.3	36	20.1
Lawrence	73.0	84.1	65.8	109	32.1
Lowell	77.5	61.8	57.3	84	20.4
Lynn	73.2	67.4	51.2	104	32.3
Malden	79.3	43.0	23.1	10	6.5
Medford	86.9	25.4	19.8	5	3.0
Methuen	80.9	46.8	43.5	16	9.9
New Bedford	76.4	72.5	65.1	97	31.9
Newton	88.6	12.1	9.5	⁵	⁵
Peabody	83.8	38.0	32.4	6	4.3
Pittsfield	62.5	39.2	57.8	17	12.7
Plymouth	86.6	34.5	30.6	12	7.3
Quincy	85.7	36.5	26.1	13	6.6
Revere	80.1	49.7	34.3	17	11.9
Somerville	87.0	28.2	23.0	12	7.0
Springfield	81.8	75.2	70.1	215	31.5
Taunton	74.5	51.6	48.2	21	12.0
Waltham	83.0	38.1	25.5	⁵	⁵
Weymouth	87.1	28.5	21.8	8	5.5
Worcester	73.8	58.0	53.7	100	12.9

1. The 30 largest municipalities are the cities/ towns in Massachusetts with the largest populations. 2. Crude birth rates represent the number of births per 1,000 residents (male and female). 3. For the category of Mother's Race and Ethnicity, percentages are calculated based on the state total of resident births, including births for which mother's race/Hispanic ethnicity is unknown. 4. Mothers who designated themselves as Asian, American Indian, or Other. 5. Counts and calculations based on 1-4 events are excluded. 6. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. The State Total does not include data from, Newton Wellesley, Saint Vincent and Winchester hospitals because of reporting problems. 7. Public payment sources include CommonHealth, Healthy Start, Medicaid/MassHealth, and Medicare (may be HMO or managed care), or free care. 8. Births per 1,000 female residents ages 15-19; rates for cities and towns were calculated using MDPH population estimates for 2010.

Table 11. Birth Characteristics by Facility/Location, Massachusetts: 2015

Facility ⁽¹⁾	Location	(2) Occurrence Births (n)	(3) Low Birth weight (%)	(4) Public Pay for PNC (%)	(5) Adequate Prenatal Care (%)	(6) Early Term (%)	(7) Late preterm (%)
State Total		71,988	7.4	38.0	81.8	22.5	6.0
Anna Jaques Hospital	Newburyport	711	4.4	30.5	89.1	21.4	6.0
Baystate Franklin Medical Center	Greenfield	485	3.3	50.4	84.3	17.7	2.9
Baystate Medical Center	Springfield	4,030	10.1	57.6	85.1	22.5	7.4
Berkshire Medical Center	Pittsfield	803	5.6	37.5	63.9	13.4	4.5
Beth Israel Deaconess Hospital - Plymouth	Plymouth	707	5.0	38.7	86.4	19.5	4.4
Beth Israel Deaconess Medical Center	Boston	5,270	11.1	19.0	93.0	24.9	7.9
Beverly Hospital	Beverly	2,227	5.1	34.1	82.8	19.8	4.4
Boston Medical Center	Boston	2,481	10.0	87.8	47.3	24.2	5.8
Brigham and Women's Hospital	Boston	6,428	9.4	28.6	87.2	25.8	7.6
Brockton Hospital	Brockton	1,070	7.5	68.8	81.4	22.8	5.1
Cambridge Birth Center	Cambridge	115	1.7	19.1	90.4	13.0	-- ⁸
Cambridge Hospital	Cambridge	1,036	3.9	61.5	81.8	23.2	3.4
Cape Cod Hospital	Barnstable	786	5.2	58.2	66.9	20.2	5.6
Charlton Memorial Hospital	Fall River	1,569	6.3	63.7	78.9	19.8	5.1
Cooley Dickinson Hospital	Northampton	611	2.3	43.0	87.8	16.9	2.9
Emerson Hospital	Concord	1,158	4.5	12.7	86.6	24.5	4.5
Fairview Hospital	Great Barrington	132	3.0	37.1	83.3	19.7	-- ⁸
Falmouth Hospital	Falmouth	419	4.8	51.7	64.2	22.0	3.1
Good Samaritan Medical Center	Brockton	1,053	4.1	71.3	61.7	23.4	4.4
Harrington Memorial Hospital	Southbridge	261	3.8	70.4	93.9	17.2	3.4
HealthAlliance Hospital	Leominster	844	3.4	61.0	86.8	21.2	3.7
Heywood Hospital	Gardner	462	3.9	47.0	82.1	19.9	3.7
Holy Family Hospital and Medical Center	Methuen	1,064	3.9	49.8	81.5	17.7	4.4
Holyoke Medical Center	Holyoke	443	3.4	52.6	62.3	23.3	3.4
Lawrence General Hospital	Lawrence	1,422	6.2	72.5	73.8	24.4	5.2
Lowell General Hospital	Lowell	2,398	6.7	48.4	79.9	24.5	5.4
Martha's Vineyard Hospital	Oak Bluffs	124	--	64.5	91.7	24.2	-- ⁸
Massachusetts General Hospital	Boston	3,785	8.9	14.8	85.5	21.0	7.4
Melrose-Wakefield Hospital	Melrose	956	2.9	34.9	86.3	20.9	4.6
Mercy Medical Center	Springfield	1,262	4.7	50.1	86.0	22.1	5.1
Metro West Medical Center	Framingham	893	5.7	58.4	72.5	26.4	6.4
Milford Regional Medical Center	Milford	978	4.8	39.4	90.1	27.1	4.1
Morton Hospital	Taunton	293	5.1	55.6	66.8	20.5	1.7
Mt. Auburn Hospital	Cambridge	2,708	3.2	16.6	88.2	19.6	3.5
Nantucket Cottage Hospital	Nantucket	146	4.8	60.3	89.7	20.5	-- ⁸
Newton-Wellesley Hospital ⁹	Newton	4,438	5.1	4.6	83.1	22.8	5.6
North Shore Birth Center	Beverly	100	-- ⁸	23.0	94.0	11.0	-- ⁸
North Shore Medical Center - Salem Hospital	Salem	1,323	7.0	61.8	76.3	23.9	6.3
Norwood Hospital	Norwood	451	5.5	25.8	77.6	23.5	3.8
Saint Vincent Hospital ⁹	Worcester	2,076	4.1	36.1	79.3	22.5	5.8
South Shore Hospital	Weymouth	3,406	5.8	24.2	90.7	21.2	5.0
St. Elizabeth's Medical Center	Boston	1,017	16.8	39.5	79.0	22.2	10.6
St. Luke's Hospital	New Bedford	1,483	7.0	65.4	77.0	26.8	6.9

Table 11. Birth Characteristics by Facility/Location, Massachusetts: 2015

Facility ⁽¹⁾	Location	(2) Occurrence Births (n)	(3) Low Birth weight (%)	(4) Public Pay for PNC (%)	(5) Adequate Prenatal Care (%)	(6) Early Term (%)	(7) Late preterm (%)
Sturdy Memorial Hospital	Attleboro	665	3.9	14.2	75.3	11.9	4.4
Tobey Hospital	Wareham	424	3.5	48.2	81.3	13.2	4.5
Tufts Medical Center	Boston	1,246	23.8	49.6	80.1	23.4	11.9
UMass Memorial Medical Center	Worcester	3,752	12.2	41.1	77.0	24.0	8.9
Winchester Hospital ⁹	Winchester	2,033	4.9	14.7	82.4	20.1	5.9
Other Hospitals		6	-- ⁸	-- ⁸	-- ⁸	-- ⁸	-- ⁸
Home, Enroute & Dr. Office/Clinic		438	5.1	26.3	66.4	16.8	4.7

NOTE: All percentages are calculated based on only those occurrence births with known values for the characteristic(s) of interest.

1. A licensed maternity facility is a medical unit licensed by the Commonwealth for the care of women during pregnancy and childbirth.
2. Occurrence births are births that occurred at the facility, regardless of where the mother was a resident. 3. Less than 2,500 grams (5.5 lbs.)
4. Public payment for prenatal care (PNC) includes Medicaid/MassHealth, CommonHealth, Medicare, Healthy Start, other government programs, and free care. 5. Based on the APNCU Index. 6. Birth at 37 or 38 weeks of gestation. 7. Birth at 34 to 36 weeks of gestation. 8. Calculations based on 1-4 events are excluded. 9. Percent should be interpreted with caution as this is a facility that was identified as having reporting problems for prenatal care.

Table 12. Resident Teen Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2015

Municipality ¹	Total Population Rank	Female Population, ages 15-19	Number of Teen Births (Ages 15-19)	Teen Birth Rate ²	Mother's Race and Hispanic Ethnicity (% of teen births)			
					White non-Hispanic	Black non-Hispanic	Hispanic	Asian or Other ³
State Total		227,033	2,104	9.4	34.0	13.5	49.4	3.1
Arlington	30	867	_ ⁴	_ ⁴	_ ⁴	_ ⁴	_ ⁴	_ ⁴
Attleboro	29	1,344	9	6.7	44.4	11.1	44.4	0.0
Barnstable	27	1,278	11	8.6	45.5	27.3	27.3	0.0
Boston	1	25,988	244	9.4	7.8	35.7	55.3	1.2
Brockton	7	3,354	77	23.0	13.0	54.5	29.9	2.6
Brookline	18	1,469	_ ⁴	_ ⁴	_ ⁴	_ ⁴	_ ⁴	_ ⁴
Cambridge	5	3,550	_ ⁴	_ ⁴	_ ⁴	_ ⁴	_ ⁴	_ ⁴
Chicopee	22	1,881	29	15.4	44.8	6.9	48.3	0.0
Fall River	10	2,781	81	29.1	61.7	6.2	27.2	4.9
Framingham	14	2,351	24	10.2	16.7	8.3	70.8	4.2
Haverhill	15	1,791	36	20.1	41.7	0.0	55.6	2.8
Lawrence	12	3,395	110	32.4	1.8	1.8	96.4	0.0
Lowell	4	4,118	84	20.4	28.6	14.3	33.3	23.8
Lynn	9	3,223	100	31.0	17.0	7.0	72.0	4.0
Malden	17	1,548	11	7.1	18.2	54.5	18.2	9.1
Medford	20	1,683	6	3.6	50.0	0.0	33.3	16.7
Methuen	26	1,624	18	11.1	27.8	11.1	61.1	0.0
New Bedford	6	3,037	92	30.3	31.5	7.6	60.9	0.0
Newton	11	4,195	_ ⁴	_ ⁴	_ ⁴	_ ⁴	_ ⁴	_ ⁴
Peabody	25	1,405	5	3.6	20.0	20.0	60.0	0.0
Pittsfield	28	1,339	17	12.7	64.7	17.6	5.9	11.8
Plymouth	19	1,641	11	6.7	72.7	18.2	9.1	0.0
Quincy	8	1,984	13	6.6	23.1	38.5	30.8	7.7
Revere	24	1,434	17	11.9	17.6	0.0	82.4	0.0
Somerville	13	1,711	12	7.0	8.3	33.3	58.3	0.0
Springfield	3	6,836	215	31.5	5.1	13.0	80.5	1.4
Taunton	21	1,744	20	11.5	60.0	20.0	20.0	0.0
Waltham	16	2,356	_ ⁴	_ ⁴	_ ⁴	_ ⁴	_ ⁴	_ ⁴
Weymouth	23	1,444	8	5.5	100.0	0.0	0.0	0.0
Worcester	2	7,726	130	16.8	34.6	10.8	50.8	3.8

Table 12 (cont'd). Resident Teen Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2015

Municipality ¹	Public Payment for Prenatal Care ⁵ (%)	Unmarried (%)	Low Birthweight ⁶ (%)	Preterm ⁷ (%)	Adequacy of Prenatal Care ⁸			
					Adequate Intensive	Adequate Basic	Intermediate	Inadequate ⁹
State Total	81.2	93.7	9.1	8.4	33.4	34.5	9.1	23.0
Arlington	100.0	50.0	50.0	50.0	50.0	50.0	0.0	0.0
Attleboro	55.6	100.0	22.2	11.1	55.6	11.1	0.0	33.3
Barnstable	81.8	100.0	18.2	18.2	9.1	36.4	18.2	36.4
Boston	87.4	96.3	9.8	11.3	26.2	35.0	14.3	24.5
Brockton	90.9	92.2	3.9	2.6	39.0	31.2	6.5	23.4
Brookline	100.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0
Cambridge	75.0	75.0	0.0	0.0	50.0	50.0	0.0	0.0
Chicopee	80.0	80.0	6.7	6.7	33.3	36.7	6.7	23.3
Fall River	86.4	93.8	8.6	7.4	38.7	25.3	12.0	24.0
Framingham	90.9	96.3	7.4	7.4	50.0	30.0	10.0	10.0
Haverhill	75.0	94.4	14.3	16.7	44.4	22.2	13.9	19.4
Lawrence	94.5	98.2	8.2	7.3	12.8	38.5	22.9	25.7
Lowell	81.0	94.0	10.7	8.3	38.3	30.9	8.6	22.2
Lynn	93.1	87.5	5.8	4.8	19.4	39.8	7.5	33.3
Malden	54.5	90.9	0.0	0.0	45.5	45.5	0.0	9.1
Medford	80.0	60.0	0.0	0.0	40.0	0.0	20.0	40.0
Methuen	55.6	94.4	5.6	11.1	22.2	50.0	0.0	27.8
New Bedford	86.0	92.6	15.6	9.3	41.3	35.9	3.3	19.6
Newton	100.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Peabody	83.3	100.0	0.0	0.0	0.0	60.0	20.0	20.0
Pittsfield	64.7	100.0	11.8	5.9	17.6	70.6	0.0	11.8
Plymouth	83.3	91.7	8.3	0.0	33.3	33.3	8.3	25.0
Quincy	92.3	100.0	7.7	7.7	46.2	38.5	7.7	7.7
Revere	66.7	76.5	5.9	11.8	66.7	0.0	0.0	33.3
Somerville	72.7	100.0	16.7	8.3	16.7	50.0	0.0	33.3
Springfield	90.1	95.3	11.6	11.2	42.8	34.1	5.3	17.8
Taunton	70.0	95.0	9.5	4.8	40.0	25.0	10.0	25.0
Waltham	100.0	75.0	25.0	25.0	75.0	0.0	0.0	25.0
Weymouth	100.0	100.0	0.0	0.0	50.0	37.5	0.0	12.5
Worcester	77.3	90.0	13.1	12.3	29.5	35.7	14.0	20.9

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.

1. The 30 largest municipalities are the cities and towns in Massachusetts with the largest populations according to the 2010 Census. 2. Birth rates represent the number of births per 1,000 females ages 15-19. Birth rates for cities and towns were calculated using MDPH population estimates for 2010. 3. Mothers who designated themselves as Asian, American Indian, or Other. 4. Counts and calculations based on values of 1-4 are excluded. 5. Government programs including CommonHealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care; other: Worker's Compensation and other sources. 6. Less than 2,500 grams or 5.5 pounds. 7. Less than 37 weeks of gestational age. 8. Based on Adequacy of Prenatal Care Utilization (APNCU) Index. State total does not include data from Newton Wellesley, Saint Vincent and Winchester hospitals because of reporting problems. 9. Inadequate includes those mothers with no prenatal care.

Table 13. Adequacy of Prenatal Care Utilization: Summary and Component Indices, Massachusetts: 2015

	Adequate Total ¹		Adequate Intensive		Adequate Basic		Intermediate		Inadequate		Unknown
	n	%	n	%	n	%	n	%	n	%	n
<u>Summary Index</u>											
Adequacy of Prenatal Care Utilization	49,185	81.8	24,599	40.9	24,586	40.9	3,997	6.6	6,940	11.5	2,932
<u>Component Indices</u>											
Adequacy of Initiation	53,669	89.3	19,465	32.4	34,204	56.9	3,452	5.7	3,001	5.0	2,932
Adequacy of Received Services (Visits)	54,623	90.9	28,862	48.0	25,761	42.8	4,516	7.5	983	1.6	2,932

NOTE: All percentages are calculated based on the Adequacy of Prenatal Care Utilization (APNCU) Index. **Does not include data from Newton Wellesley, Saint Vincent and Winchester hospitals because of reporting problems.**

1. Adequate Total is the sum of Adequate Intensive and Adequate Basic categories.

Table 14. Birth Characteristics by Race/Hispanic Ethnicity and Source of Prenatal Care Payment, Massachusetts: 2015

Race/Ethnicity and Payment Source	Births ¹		Teen Births				Birthweight			
	n	%	<18 Years		<20 Years		Very Low ²		Low ³	
	n	%	n	%	n	%	n	%	n	%
STATE TOTAL⁴	71,484	100.0	561	0.8	2,162	3.0	865	1.2	5,321	7.5
Public	26,929	38.1	476	1.8	1,717	6.4	359	1.3	2,231	8.3
Medicaid ⁵	23,776	33.6	440	1.9	1,606	6.8	329	1.4	2,004	8.4
Other Public ⁶	3,153	4.5	36	1.1	111	3.5	30	1.0	227	7.2
Private ⁷	42,980	60.8	72	0.2	384	0.9	446	1.0	2,880	6.7
White non-Hispanic	43,255	100.0	149	0.3	721	1.7	391	0.9	2,795	6.5
Public	10,778	25.2	111	1.0	479	4.4	95	0.9	810	7.5
Medicaid ⁵	9,152	21.4	103	1.1	442	4.8	85	0.9	708	7.7
Other Public ⁶	1,626	3.8	8	0.5	37	2.3	10	0.6	102	6.3
Private ⁷	31,661	74.0	37	0.1	220	0.7	268	0.8	1,872	5.9
Black non-Hispanic	6,949	100.0	76	1.1	291	4.2	158	2.3	734	10.6
Public	4,431	64.1	64	1.4	250	5.6	87	2.0	443	10.0
Medicaid ⁵	3,990	57.7	57	1.4	229	5.7	79	2.0	399	10.0
Other Public ⁶	441	6.4	7	1.6	21	4.8	8	1.8	44	10.0
Private ⁷	2,303	33.3	6	0.3	31	1.3	64	2.8	264	11.5
Hispanic	12,927	100.0	316	2.4	1,058	8.2	217	1.7	1,071	8.3
Public	9,307	72.4	284	3.1	918	9.9	151	1.6	784	8.4
Medicaid ⁵	8,489	66.1	263	3.1	867	10.2	141	1.7	724	8.5
Other Public ⁶	818	6.4	21	2.6	51	6.2	10	1.2	60	7.3
Private ⁷	3,414	26.6	25	0.7	114	3.3	50	1.5	249	7.3
Asian	6,473	100.0	8	0.1	49	0.8	64	1.0	553	8.5
Public	1,699	26.4	8	0.5	38	2.2	14	0.8	134	7.9
Medicaid ⁵	1,527	23.7	8	0.5	37	2.4	13	0.9	124	8.1
Other Public ⁶	172	2.7	0	0.0	1	-. ⁸	-. ⁸	-. ⁸	-. ⁸	-. ⁸
Private ⁷	4,658	72.3	0	0.0	10	0.2	49	1.1	407	8.7
Other⁹	631	100.0	6	1.0	18	2.9	12	1.9	61	9.7
Public	314	51.6	-. ⁸	-. ⁸	13	4.1	-. ⁸	-. ⁸	33	10.5
Medicaid ⁵	277	45.6	-. ⁸	-. ⁸	13	4.7	-. ⁸	-. ⁸	29	10.5
Other Public ⁶	37	6.1	0	0.0	-. ⁸	-. ⁸	-. ⁸	-. ⁸	-. ⁸	-. ⁸
Private ⁷	284	46.7	-. ⁸	-. ⁸	-. ⁸	-. ⁸	-. ⁸	-. ⁸	21	7.4

Table 14 (cont'd). Birth Characteristics by Race/Hispanic Ethnicity and Source of Prenatal Care Payment, Massachusetts: 2015

Race/Ethnicity and Payment Source	Prenatal Care									
	Adequate ¹⁰		Began 1st Trimester		Cesarean Delivery		Breastfeeding ¹¹		Smoking ¹²	
	n	%	n	%	n	%	n	%	n	%
STATE TOTAL⁴	56,080	81.8	57,154	82.0	22,431	31.4	60,515	87.0	4,043	5.9
Public	19,256	74.3	19,287	73.0	8,353	31.0	21,483	80.7	2,935	11.3
Medicaid ⁵	17,057	74.6	16,973	72.8	7,356	30.9	18,874	80.4	2,635	11.5
Other Public ⁶	2,199	71.9	2,314	74.6	997	31.6	2,609	83.7	300	9.9
Private ⁷	36,438	87.6	37,479	88.6	13,639	31.7	38,214	91.2	1,012	2.4
White non-Hispanic	35,386	85.1	36,327	85.8	13,599	31.5	36,100	86.2	3,173	7.5
Public	8,006	76.9	8,040	75.7	3,351	31.1	7,905	74.4	2,222	21.3
Medicaid ⁵	6,815	77.2	6,797	75.5	2,843	31.1	6,626	73.4	1,985	22.4
Other Public ⁶	1,191	75.1	1,243	77.3	508	31.3	1,279	79.7	237	15.1
Private ⁷	27,110	88.5	28,021	89.9	10,030	31.7	27,860	90.5	871	2.8
Black non-Hispanic	4,632	69.3	4,640	68.6	2,446	35.2	6,009	87.9	263	3.9
Public	2,764	64.8	2,768	64.0	1,516	34.2	3,754	85.6	224	5.2
Medicaid ⁵	2,501	65.1	2,484	63.8	1,367	34.3	3,377	85.5	203	5.2
Other Public ⁶	263	62.0	284	65.9	149	33.8	377	86.7	21	4.8
Private ⁷	1,835	82.1	1,833	81.0	847	36.8	2,085	92.3	35	1.6
Hispanic	9,650	77.6	9,684	76.8	3,927	30.4	11,040	86.7	485	3.9
Public	6,794	75.6	6,819	74.7	2,788	30.0	7,837	85.1	395	4.4
Medicaid ⁵	6,230	76.1	6,225	74.8	2,532	29.8	7,118	84.8	358	4.4
Other Public ⁶	564	70.9	594	74.0	256	31.3	719	88.3	37	4.7
Private ⁷	2,827	85.2	2,836	84.6	1,081	31.7	3,064	91.1	81	2.5
Asian	5,231	82.8	5,238	82.1	1,895	29.3	5,858	91.7	71	1.1
Public	1,265	76.4	1,186	71.1	461	27.1	1,404	83.0	57	3.4
Medicaid ⁵	1,142	76.8	1,060	70.7	411	26.9	1,251	82.2	56	3.7
Other Public ⁶	123	72.8	126	74.1	50	29.1	153	90.5	- ⁸	- ⁸
Private ⁷	3,936	86.1	4,021	87.1	1,393	29.9	4,371	95.0	13	0.3
Other⁹	414	72.5	448	74.7	230	36.6	510	86.9	46	7.5
Public	198	67.8	214	69.7	116	36.9	249	81.6	35	11.6
Medicaid ⁵	177	68.9	189	69.7	102	36.8	218	81.3	31	11.7
Other Public ⁶	21	60.0	25	69.4	14	37.8	31	83.8	- ⁸	- ⁸
Private ⁷	208	78.8	226	81.3	102	35.9	244	92.4	11	4.0

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.

1. In the "Births" column, percentages are based on race/ethnicity category totals (in column). For all other characteristics, percentages are based on the total number of births for the race/ethnicity by payment source for the row. 2. Very low birthweight: less than 1,500 grams or 3.3 pounds. 3. Low Birthweight: less than 2,500 grams or 5.5 pounds. 4. Total births do not equal Public + Private because Workers' Compensation, self-paid, and other are in the state total but not shown in the table. 5. Medicaid/MassHealth. 6. Other Public: CommonHealth, Healthy Start, Medicare, other government programs, and free care. 7. Private: commercial indemnity plans or commercial managed care organizations (HMO, PPO, IPP, or IPA). It does not include Self-Paid/Other. 8. Calculations based on values of 1-4 are excluded. 9. Other: Mothers who designated their race as American Indian or "Other." 10. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. Does not include data from Newton Wellesley, Saint Vincent and Winchester hospitals because of reporting problems. 11. Infant was being breastfed at time of discharge. 12. Mother reported smoking during pregnancy. Note: Teen births include births to female ages less than 20, not just those ages 15-19

**Table 15. Birth Characteristics: Occurrence and Resident Births,
Massachusetts Municipalities: 2015**

Community	Occurrence Births ¹	Resident Births ²			
		Number of births	Low Birthweight (Less than 2,500 grams (5.5 lbs.))	Preterm (<37 weeks gestation)	Teen Births (15-19 years)
STATE TOTAL	71988	71484	5321	6001	2140
Abington	0	190	12	14	--
Acton	0	150	9	12	0
Acushnet	1	88	5	13	--
Adams	0	86	8	11	--
Agawam	1	258	21	28	--
Alford	0	3	0	0	0
Amesbury	2	151	12	20	--
Amherst	4	155	11	11	--
Andover	2	254	21	20	--
Arlington	5	585	33	47	--
Ashburnham	0	39	--	--	5
Ashby	0	25	--	--	--
Ashfield	1	9	--	--	0
Ashland	2	223	6	9	--
Athol	0	113	10	11	6
Attleboro	666	496	37	40	9
Auburn	1	135	8	16	0
Avon	0	50	--	--	--
Ayer	0	89	8	6	--
Barnstable	792	380	30	33	11
Barre	0	48	--	--	--
Becket	0	8	--	--	--
Bedford	3	131	7	11	--
Belchertown	0	126	6	5	--
Bellingham	2	176	13	16	--
Belmont	2	262	17	22	0
Berkley	1	56	--	--	--
Berlin	0	24	--	--	0
Bernardston	0	15	0	0	0
Beverly	2328	413	26	36	5
Billerica	1	439	34	32	5
Blackstone	3	95	7	8	5
Blandford	0	8	0	0	0
Bolton	0	45	5	5	0
Boston	20275	7757	667	736	247
Bourne	0	116	--	6	--
Boxborough	0	42	--	3	0
Boxford	1	48	--	5	0
Boylston	0	33	--	--	0
Braintree	1	408	33	33	--
Brewster	0	49	--	--	--
Bridgewater	0	232	13	20	--
Brimfield	0	26	0	0	--
Brockton	2130	1591	153	156	77
Brookfield	0	32	--	--	--
Brookline	1	609	30	39	--
Buckland	0	10	--	--	0
Burlington	1	306	26	28	--

**Table 15. Birth Characteristics: Occurrence and Resident Births,
Massachusetts Municipalities: 2015**

Community	Occurrence Births ¹	Resident Births ²			
		Number of births	Low Birthweight (Less than 2,500 grams (5.5 lbs.))	Preterm (<37 weeks gestation)	Teen Births (15-19 years)
Cambridge	3871	1247	87	100	--
Canton	0	253	19	26	0
Carlisle	0	30	--	--	0
Carver	0	113	12	11	--
Charlemont	0	11	0	0	--
Charlton	1	121	6	--	--
Chatham	0	25	0	--	0
Chelmsford	0	345	20	20	--
Chelsea	2	660	50	49	41
Cheshire	0	30	--	--	--
Chester	2	7	0	0	0
Chesterfield	0	8	0	0	0
Chicopee	3	566	56	58	30
Chilmark	0	10	0	0	0
Clarksburg	0	14	--	--	0
Clinton	1	176	17	25	6
Cohasset	0	77	5	5	0
Colrain	1	11	0	--	0
Concord	1163	107	--	--	0
Conway	2	10	--	--	0
Cummington	1	5	0	--	0
Dalton	0	41	--	0	--
Danvers	1	276	15	21	--
Dartmouth	0	204	11	13	--
Dedham	2	304	29	29	--
Deerfield	1	45	--	--	--
Dennis	0	78	7	--	5
Dighton	1	60	--	--	0
Douglas	0	71	--	--	5
Dover	0	28	--	--	0
Dracut	0	348	23	25	9
Dudley	0	87	7	8	6
Dunstable	0	20	--	--	0
Duxbury	1	112	5	--	0
East Bridgewater	0	127	6	8	--
East Brookfield	1	23	--	--	0
East Longmeadow	0	117	9	16	--
Eastham	0	25	--	--	0
Easthampton	2	124	7	9	--
Easton	3	169	7	10	0
Edgartown	0	37	--	--	0
Egremont	0	9	--	--	0
Erving	0	6	--	--	--
Essex	0	27	--	--	0
Everett	0	624	50	61	23
Fairhaven	1	118	9	14	--
Fall River	1575	1153	96	96	81
Falmouth	420	200	19	19	--
Fitchburg	5	486	44	45	44
Florida	0	10	--	--	0
Foxborough	0	160	14	18	--

**Table 15. Birth Characteristics: Occurrence and Resident Births,
Massachusetts Municipalities: 2015**

Community	Occurrence Births ¹	Resident Births ²			
		Number of births	Low Birthweight (Less than 2,500 grams (5.5 lbs.))	Preterm (<37 weeks gestation)	Teen Births (15-19 years)
Framingham	897	888	64	74	27
Franklin	1	239	12	16	--
Freetown	0	75	--	--	--
Gardner	466	229	15	17	11
Aquinnah (Formally Gay Head)	0	5	0	0	0
Georgetown	1	73	5	7	0
Gill	0	12	0	--	--
Gloucester	2	228	18	20	6
Goshen	0	3	0	0	0
Gosnold	0	0	0	0	0
Grafton	0	217	19	19	--
Granby	2	49	--	--	0
Granville	1	9	--	--	0
Great Barrington	135	39	--	--	--
Greenfield	490	160	8	9	--
Groton	0	74	5	9	0
Groveland	0	43	6	--	0
Hadley	0	24	--	--	--
Halifax	0	67	--	6	--
Hamilton	1	82	5	--	0
Hampden	0	24	--	--	0
Hancock	0	6	0	0	0
Hanover	0	130	12	11	--
Hanson	0	98	5	9	--
Hardwick	1	25	--	--	0
Harvard	0	30	--	--	0
Harwich	0	85	5	7	--
Hatfield	2	22	0	0	--
Haverhill	6	774	50	60	36
Hawley	0	2	0	0	0
Heath	0	3	--	--	0
Hingham	1	227	13	17	--
Hinsdale	0	14	--	--	--
Holbrook	1	113	8	9	--
Holden	2	181	9	11	--
Holland	0	32	--	--	0
Holliston	1	142	9	7	--
Holyoke	449	525	33	43	61
Hopedale	0	42	--	--	--
Hopkinton	3	132	9	8	0
Hubbardston	0	33	--	--	0
Hudson	1	213	9	20	--
Hull	0	53	--	--	--
Huntington	0	20	--	--	0
Ipswich	1	98	6	7	2
Kingston	2	137	10	13	0
Lakeville	0	94	8	6	--
Lancaster	3	52	5	7	--
Lanesborough	1	16	--	--	0
Lawrence	1425	1406	139	137	110
Lee	0	29	--	--	--

**Table 15. Birth Characteristics: Occurrence and Resident Births,
Massachusetts Municipalities: 2015**

Community	Occurrence Births ¹	Resident Births ²			
		Number of births	Low Birthweight (Less than 2,500 grams (5.5 lbs.))	Preterm (<37 weeks gestation)	Teen Births (15-19 years)
Leicester	0	97	8	8	--
Lenox	0	22	--	--	0
Leominster	846	473	28	32	17
Leverett	3	12	0	0	0
Lexington	1	167	17	19	0
Leyden	0	5	0	0	0
Lincoln	1	84	--	5	0
Littleton	1	83	5	5	0
Longmeadow	0	106	7	10	--
Lowell	2409	1568	128	126	84
Ludlow	1	133	9	12	--
Lunenburg	0	94	8	8	--
Lynn	3	1530	125	132	104
Lynnfield	2	131	8	10	0
Malden	2	884	69	66	11
Manchester	0	15	0	0	0
Mansfield	0	234	16	16	--
Marblehead	1	138	9	10	0
Marion	0	19	0	0	--
Marlborough	0	455	22	34	16
Marshfield	1	200	10	11	0
Mashpee	0	99	5	--	--
Mattapoisett	0	38	--	5	0
Maynard	2	121	--	5	0
Medfield	1	115	--	8	0
Medford	0	732	51	64	6
Medway	2	101	9	11	--
Melrose	957	377	15	25	--
Mendon	2	38	--	--	0
Merrimac	1	56	--	--	0
Methuen	1065	568	32	42	18
Middleborough	3	218	15	19	10
Middlefield	0	2	0	--	0
Middleton	1	58	6	7	0
Milford	981	365	24	36	12
Millbury	1	117	8	12	--
Millis	0	76	5	8	--
Millville	1	35	5	6	0
Milton	1	262	14	20	0
Monroe	0	2	--	--	0
Monson	1	67	7	--	--
Montague	2	96	5	6	--
Monterey	1	5	0	0	0
Montgomery	0	5	0	0	0
Mount Washington	0	1	0	0	0
Nahant	0	19	--	--	0
Nantucket	147	153	12	8	--
Natick	4	415	29	40	--
Needham	4	256	16	18	--
New Ashford	0	0	0	0	0
New Bedford	1486	1307	110	113	97

**Table 15. Birth Characteristics: Occurrence and Resident Births,
Massachusetts Municipalities: 2015**

Community	Occurrence Births ¹	Resident Births ²			
		Number of births	Low Birthweight (Less than 2,500 grams (5.5 lbs.))	Preterm (<37 weeks gestation)	Teen Births (15-19 years)
New Braintree	0	7	--	--	0
New Marlborough	0	8	--	0	0
New Salem	1	3	0	0	--
Newbury	2	44	--	--	0
Newburyport	711	132	17	19	--
Newton	4444	771	47	45	--
Norfolk	1	114	5	7	0
North Adams	2	117	10	10	9
North Andover	0	313	32	38	--
North Attleborough	1	279	10	23	7
North Brookfield	1	44	5	--	--
North Reading	1	162	12	16	0
Northampton	620	186	8	12	--
Northborough	1	137	9	16	0
Northbridge	3	208	25	21	10
Northfield	1	19	0	--	0
Norton	0	154	20	19	--
Norwell	0	107	--	--	--
Norwood	454	412	30	31	--
Oak Bluffs	124	51	--	5	--
Oakham	0	12	0	--	0
Orange	0	78	7	--	6
Orleans	1	31	--	--	--
Otis	0	8	0	0	0
Oxford	1	113	10	13	--
Palmer	2	126	--	7	6
Paxton	0	28	0	--	--
Peabody	2	563	41	43	6
Pelham	0	7	0	0	0
Pembroke	0	161	5	10	0
Pepperell	0	106	7	6	--
Peru	0	6	--	--	--
Petersham	0	9	--	--	0
Phillipston	1	15	0	0	0
Pittsfield	807	461	34	29	17
Plainfield	0	3	0	0	0
Plainville	0	92	8	9	--
Plymouth	712	507	34	43	12
Plympton	0	29	--	--	0
Princeton	0	25	--	--	--
Provincetown	0	15	--	--	0
Quincy	7	1207	87	87	13
Randolph	1	360	48	51	6
Raynham	0	123	--	5	--
Reading	0	267	13	15	0
Rehoboth	1	72	5	--	--
Revere	2	781	62	70	17
Richmond	0	4	--	--	0
Rochester	0	39	0	--	0
Rockland	2	191	14	13	--
Rockport	0	40	5	--	0

**Table 15. Birth Characteristics: Occurrence and Resident Births,
Massachusetts Municipalities: 2015**

Community	Occurrence Births ¹	Resident Births ²			
		Number of births	Low Birthweight (Less than 2,500 grams (5.5 lbs.))	Preterm (<37 weeks gestation)	Teen Births (15-19 years)
Rowe	0	0	0	0	0
Rowley	0	49	--	--	--
Royalston	0	11	--	0	0
Russell	2	18	0	--	--
Rutland	0	80	--	6	--
Salem	1327	459	25	30	10
Salisbury	0	62	--	--	--
Sandisfield	1	4	0	0	0
Sandwich	1	136	10	11	--
Saugus	0	253	20	21	--
Savoy	0	2	0	0	0
Scituate	1	166	--	7	0
Seekonk	0	130	8	10	--
Sharon	0	140	6	8	0
Sheffield	0	34	--	--	--
Shelburne	1	14	--	0	--
Sherborn	0	25	0	--	0
Shirley	0	48	--	5	--
Shrewsbury	2	328	18	25	--
Shutesbury	1	12	--	--	0
Somerset	0	117	--	5	--
Somerville	6	876	91	90	12
South Hadley	0	138	5	8	--
Southampton	0	45	--	--	--
Southborough	1	93	10	12	0
Southbridge	262	229	19	28	21
Southwick	0	74	5	7	--
Spencer	1	119	12	11	5
Springfield	5310	2199	211	231	215
Sterling	1	58	5	5	0
Stockbridge	0	4	0	0	0
Stoneham	0	239	15	18	--
Stoughton	2	297	13	20	--
Stow	1	65	--	--	--
Sturbridge	0	96	9	11	5
Sudbury	1	131	11	10	0
Sunderland	0	24	--	--	--
Sutton	1	59	--	--	0
Swampscott	0	148	16	20	--
Swansea	0	126	12	-	--
Taunton	293	612	61	67	21
Templeton	0	62	--	--	--
Tewksbury	2	294	25	28	7
Tisbury	0	29	--	--	0
Tolland	0	3	0	--	0
Topsfield	0	41	5	8	0
Townsend	0	71	--	2	0
Truro	0	10	0	0	--
Tyngsborough	0	114	5	6	5
Tyringham	0	2	0	0	0
Upton	0	51	--	5	--

**Table 15. Birth Characteristics: Occurrence and Resident Births,
Massachusetts Municipalities: 2015**

Community	Occurrence Births ¹	Resident Births ²			
		Number of births	Low Birthweight (Less than 2,500 grams (5.5 lbs.))	Preterm (<37 weeks gestation)	Teen Births (15-19 years)
Uxbridge	1	134	5	8	--
Wakefield	1	312	20	25	--
Wales	0	14	0	--	--
Walpole	0	297	27	26	--
Waltham	4	805	61	59	--
Ware	0	85	5	5	--
Wareham	424	180	15	17	13
Warren	0	49	--	--	0
Warwick	0	3	0	0	0
Washington	0	3	0	0	0
Watertown	3	471	24	18	--
Wayland	0	127	7	10	--
Webster	0	187	11	17	12
Wellesley	1	208	21	20	0
Wellfleet	0	14	0	0	0
Wendell	1	12	0	0	0
Wenham	0	23	0	0	0
West Boylston	0	50	--	--	0
West Bridgewater	1	78	--	--	--
West Brookfield	0	28	--	--	0
West Newbury	0	29	7	5	0
West Springfield	1	355	22	32	20
West Stockbridge	1	9	--	--	0
West Tisbury	4	21	0	0	0
Westborough	1	238	22	24	--
Westfield	2	363	26	34	11
Westford	1	147	11	11	--
Westhampton	0	12	0	--	0
Westminster	3	62	--	5	0
Weston	0	53	--	--	0
Westport	1	103	8	6	--
Westwood	0	117	6	--	0
Weymouth	3408	639	46	45	8
Whately	0	7	0	0	0
Whitman	1	148	--	8	--
Wilbraham	2	98	5	8	--
Williamsburg	0	13	0	0	--
Williamstown	0	31	0	--	0
Wilmington	0	232	14	20	5
Winchendon	1	99	--	--	--
Winchester	2037	190	7	8	0
Windsor	1	5	0	0	0
Winthrop	2	163	7	9	--
Woburn	0	483	34	43	--
Worcester	5846	2403	232	255	130
Worthington	1	7	0	0	0
Wrentham	1	95	6	8	--
Yarmouth	0	211	11	11	--

1. Births occurring in a geographical place (state, city/town) regardless of the residency of the mother. 2. Births to mothers who report their usual place of residence as a particular geographical place (state, or city/town). See "Note to Readers" for more details.
 -- Due to small numbers (n=1-4), exact count not provided.

Table 16. Birth Characteristics: Occurrence and Resident Births, by County, Massachusetts: 2015

County	Occurrence Births ¹	Number	Resident Births ²		
			Low Birthweight ³	Preterm ⁴	Teen Births (15-19 years)
STATE TOTAL	71,988	71,484	5,321	6,001	2,140
BARNSTABLE	1214	1474	103	108	31
BERKSHIRE	948	1031	75	73	41
BRISTOL	4030	5676	429	466	243
DUKES	128	153	8	8	- ⁵
ESSEX	6885	8544	664	742	315
FRANKLIN	505	581	32	36	20
HAMPDEN	5777	5133	419	498	359
HAMPSHIRE	632	1034	49	62	19
MIDDLESEX	15828	17297	1185	1340	250
NANTUCKET	147	153	12	8	- ⁵
NORFOLK	3891	7205	520	577	59
PLYMOUTH	3279	5252	364	419	147
SUFFOLK	20281	9361	786	864	308
WORCESTER	8442	8590	675	800	344

1. Births occurring in a geographical place (state, city/town) regardless of the residency of the mother. 2. Births to mothers who report their usual place of residence as a particular geographical place (state, or city/town). See "Note to Readers" for more details. 3. Less than 2,500 grams (5.5 lbs.). 4. Less than 37 weeks gestation 5. Due to small numbers (n=1-4), exact count not provided.

Table 17. Birth Characteristics: Occurrence and Resident Births, Massachusetts Community Health Network Areas (CHNAs), Massachusetts: 2015

Community Health Network Area	Occurrence Births ¹	Number	LBW ³	Resident Births ²	
				Preterm ⁴	Teen Births (15-19 years)
STATE TOTAL	71,988	71,484	5,321	6,001	2,140
1. Community Health Network of Berkshire County	948	1,031	75	73	41
2. Upper Valley Health Web (Franklin County)	506	729	46	51	26
3. Partnership for Health in Hampshire County (Northampton)	632	1,014	48	60	19
4. The Community Health Connection (Springfield)	5,320	3,467	294	348	252
5. Community Health Network of Southern Worcester County	267	1,200	87	108	64
6. Community Partners for Health (Milford)	997	1,614	111	139	40
7. Community Health Network of Greater Metro West (Framingham)	918	4,354	280	359	61
8. Community Wellness Coalition (Worcester)	5,852	3,589	304	349	141
9. Fitchburg/Gardner Community Health Network	1,327	2,572	181	214	105
10. Greater Lowell Community Health Network	2,413	3,275	248	252	115
11. Greater Lawrence Community Health Network	2,493	2,599	230	244	132
12. Greater Haverhill Community Health Network	724	1,461	108	130	46
13. Community Health Network North (Beverly/Gloucester)	2,332	967	66	79	13
14. North Shore Community Health Network	1,336	3,517	260	289	124
15. Greater Woburn/Concord/Littleton Community Health Network	3,207	2,005	133	162	10
16. North Suburban Health Alliance (Medford/Malden/Melrose)	961	3,597	245	290	43
17. Greater Cambridge/Somerville Community Health Network	3,887	3,441	252	277	19
18. West Suburban Health Network (Newton/Waltham)	4,455	2,542	184	179	10
19. Alliance for Community Health (Boston/Chelsea/Revere/Winthrop)	20,282	9,970	816	903	309
20. Blue Hills Community Health Alliance (Greater Quincy)	3,874	4,311	310	335	38
21. Four (For) Communities (Holyoke, Chicopee, Ludlow, Westfield)	457	1,614	125	149	103
22. Greater Brockton Community Health Network	2,138	2,995	221	250	102
23. South Shore Community Partners in Prevention (Plymouth)	718	1,745	113	132	22
24. Greater Attleboro-Taunton Health & Education Response	965	2,528	189	214	62
25. Partners for a Healthier Community (Fall River)	1,576	1,499	119	111	87
26. Greater New Bedford Health & Human Services Coalition	1,912	2,068	153	180	121
27. Cape and Islands Community Health Network	1,489	1,780	123	124	35

1. Births occurring in a geographical place (state, city/town) regardless of the residency of the mother. 2. Births to mothers who report their usual place of residence as a particular geographical place (state, city/town). See "Note to Readers" or more details. 3. Less than 2,500 grams (5.5 lbs.). 4. Less than 37 weeks gestation

Figure 6. Percent of Infants whose Mother Smoked During Pregnancy, Massachusetts: 1990 - 2015

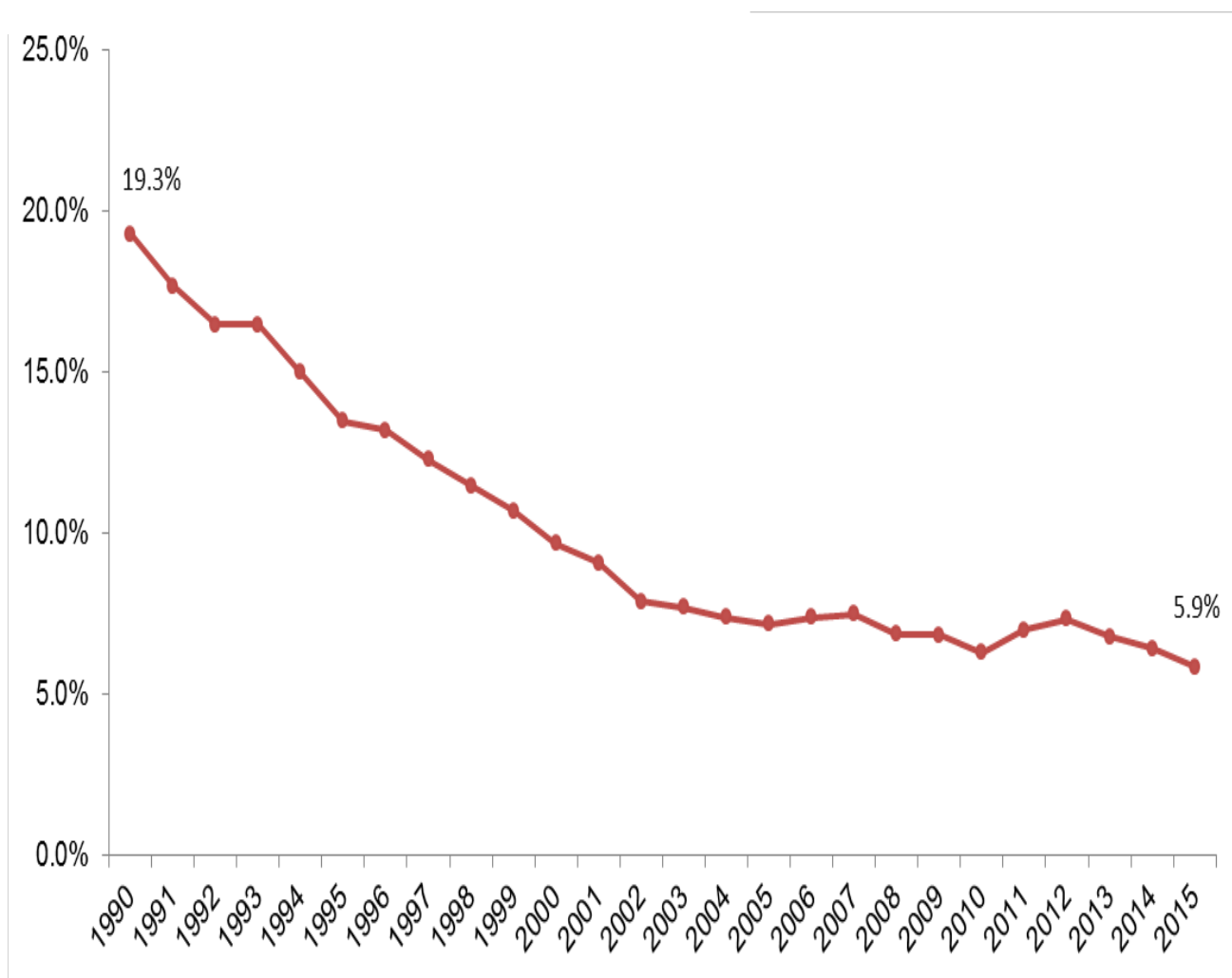


Table 18. Cesarean Deliveries and Vaginal Births after Cesarean (VBACs) by Licensed Maternity Facility, All Mothers, Massachusetts: 2015

Facility ¹	Occurrence Births ²	Total Cesareans		Primary Cesareans ²		Repeat Cesareans ²		VBACs ²	
		N	% ³	N	%	N	%	N	%
State Total	70,594	21,710	30.8	12,081	20.3	9,629	87.1	1,424	12.9
Anna Jaques Hospital	701	224	32.0	127	21.5	97	87.4	14	12.6
Baystate Franklin Medical Center	478	100	20.9	43	10.4	57	86.4	9	13.6
Baystate Medical Center	3,952	1,420	35.9	802	24.8	618	85.8	102	14.2
Berkshire Medical Center	790	211	26.7	116	17.4	95	77.9	27	22.1
Beth Israel Deaconess Hospital - Plymouth	700	192	27.4	101	17.2	91	80.5	22	19.5
Beth Israel Deaconess Medical Center	5,108	1,476	28.9	892	20.3	584	83.0	120	17.0
Beverly Hospital	2,194	578	26.3	307	16.3	271	86.0	44	14.0
Boston Medical Center	2,444	765	31.3	491	23.2	274	82.5	58	17.5
Brigham and Women's Hospital	6,211	1,957	31.6	1,253	23.4	704	83.6	138	16.4
Brockton Hospital	1,056	310	29.4	143	16.7	167	83.1	34	16.9
Cambridge Hospital	1,026	263	25.6	152	17.3	111	74.5	38	25.5
Cape Cod Hospital	772	227	29.4	111	17.2	116	91.3	11	8.7
Charlton Memorial Hospital	1,551	524	33.8	256	20.0	268	99.6	- ⁴	- ⁴
Cooley Dickinson Hospital	607	189	31.1	106	20.8	83	85.6	14	14.4
Emerson Hospital	1,140	367	32.2	203	21.4	164	85.0	29	15.0
Fairview Hospital	132	33	25.0	20	16.8	13	100.0	0	0.0
Falmouth Hospital	414	156	37.7	85	24.8	71	100.0	0	0.0
Good Samaritan Medical Center	1,043	406	38.9	196	23.8	210	95.5	10	4.5
Harrington Memorial Hospital	257	86	33.5	40	19.0	46	100.0	0	0.0
HealthAlliance Hospital	841	235	27.9	141	19.1	94	91.3	9	8.7
Heywood Hospital	454	102	22.5	62	15.3	40	81.6	9	18.4
Holy Family Hospital and Medical Center	1,052	467	44.4	251	30.1	216	98.6	- ⁴	- ⁴
Holyoke Medical Center	439	92	21.0	49	12.7	43	79.6	11	20.4
Lawrence General Hospital	1,407	440	31.3	156	14.0	284	97.9	6	2.1
Lowell General Hospital	2,355	744	31.6	383	19.5	361	91.6	33	8.4
Martha's Vineyard Hospital	122	42	34.4	21	20.8	21	100.0	0	0.0
Massachusetts General Hospital	3,682	1,064	28.9	635	20.1	429	81.7	96	18.3
Melrose-Wakefield Hospital	944	317	33.6	182	22.6	135	97.8	- ⁴	- ⁴
Mercy Medical Center	1,248	364	29.2	189	18.0	175	87.9	24	12.1
Metro West Medical Center	878	311	35.4	163	22.9	148	88.6	19	11.4
Milford Regional Medical Center	964	311	32.3	148	18.7	163	94.8	9	5.2
Morton Hospital	292	120	41.1	72	29.5	48	100.0	0	0.0
Mt. Auburn Hospital	2,675	621	23.2	438	18.2	183	68.5	84	31.5

Table 18. Cesarean Deliveries and Vaginal Births after Cesarean (VBACs) by Licensed Maternity Facility, All Mothers, Massachusetts: 2015

Nantucket Cottage Hospital	146	42	28.8	25	19.4	17	100.0	0	0.0
Newton-Wellesley Hospital	4,350	1,341	30.8	732	19.9	609	89.8	69	10.2
North Shore Medical Center - Salem Hospital	1,310	385	29.4	188	17.1	197	94.7	11	5.3
Norwood Hospital	447	156	34.9	81	22.3	75	89.3	9	10.7
Saint Vincent Hospital	2,056	611	29.7	357	20.5	254	80.1	63	19.9
South Shore Hospital	3,339	1,195	35.8	613	22.9	582	88.0	79	12.0
St. Elizabeth's Medical Center	981	373	38.0	230	28.5	143	81.7	32	18.3
St. Luke's Hospital	1,465	469	32.0	204	17.0	265	99.6	- ⁴	- ⁴
Sturdy Memorial Hospital	662	176	26.6	97	16.8	79	91.9	7	8.1
Tobey Hospital	414	78	18.8	44	11.6	34	100.0	0	0.0
Tufts Medical Center	1,188	476	40.1	282	29.4	194	85.1	34	14.9
UMass Memorial Medical Center	3,655	1,052	28.8	549	18.0	503	83.0	103	17.0
Winchester Hospital	1,999	641	32.1	344	20.6	297	90.3	32	9.7

NOTE: This table is based on mothers and not births. All percentages are calculated based on only those **mothers** with known values for the characteristic(s) of interest

1. A licensed maternity facility is a medical unit licensed by the Commonwealth for the care of women during pregnancy and childbirth.
2. The percentages provided in this table are based on occurrence births, and may differ from data that are based on resident births presented elsewhere in this book.
3. The percentage of Cesarean births reported is not adjusted for risk factors such as mother's age, birthweight, or complications of labor and delivery, which would influence the number of procedures in a particular facility. Caution should be used when comparing unadjusted percentages.
4. Calculations based on values of 1-4 are excluded.

Figure 7. Maternal Body Mass Index (BMI) Prior to Pregnancy, Massachusetts: 2015

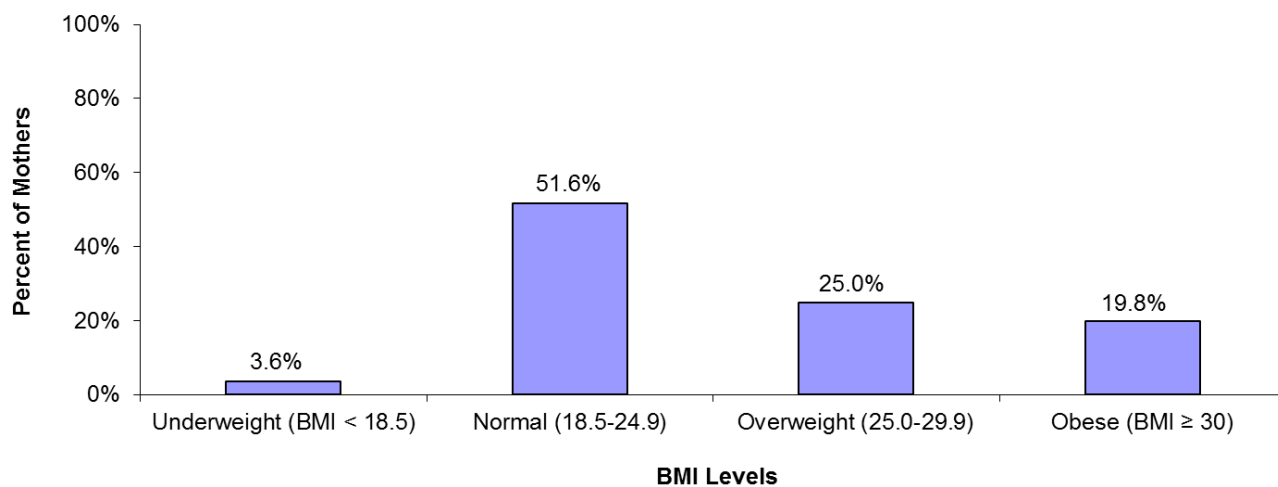
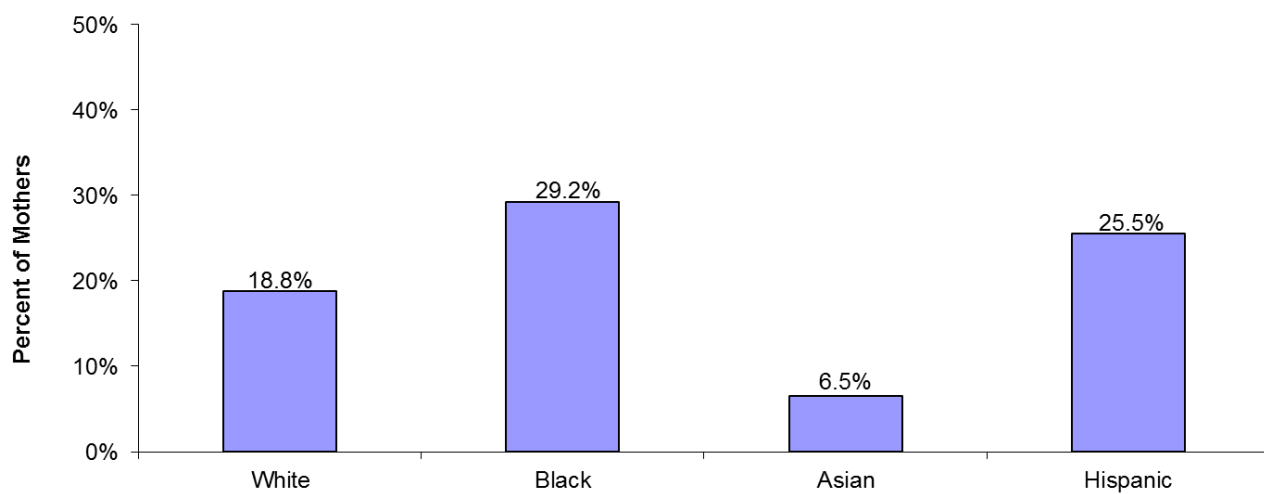


Figure 8. Obesity Prior to Pregnancy by Race and Hispanic Ethnicity, Massachusetts: 2015



Note: These figures are based on mothers and not births

Figure 9. Mothers Who Reported Having Their Teeth Cleaned During Pregnancy by Race/Hispanic Ethnicity, Massachusetts: 2015

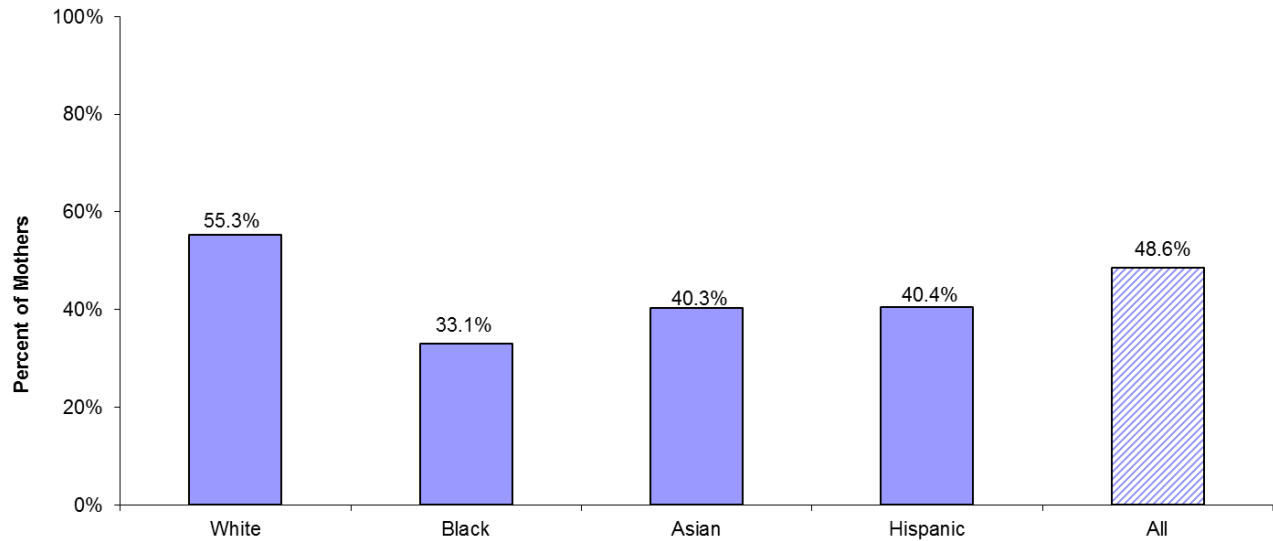
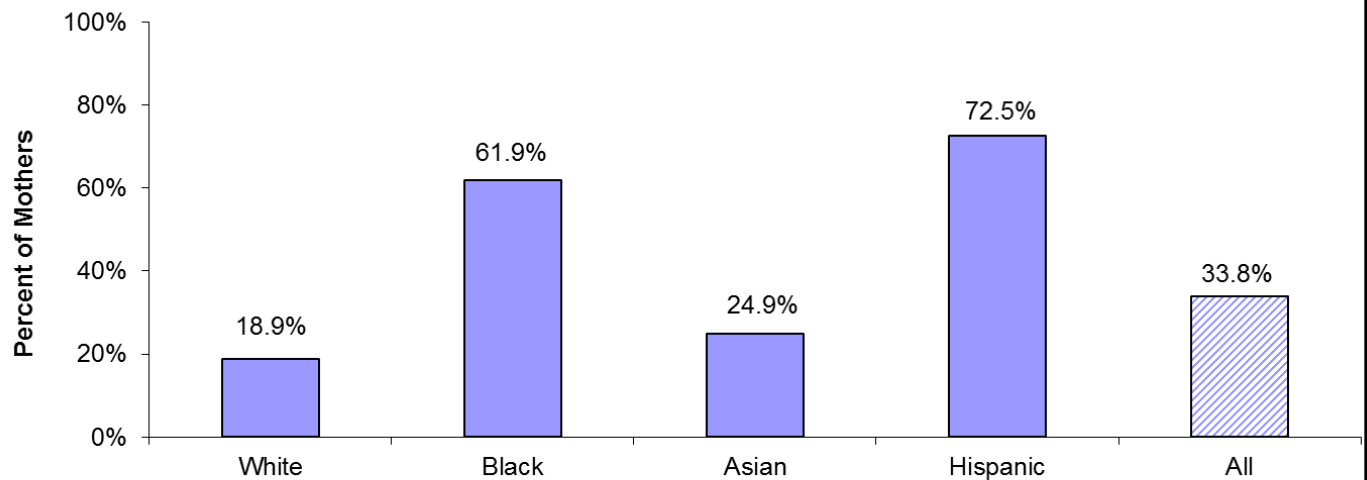
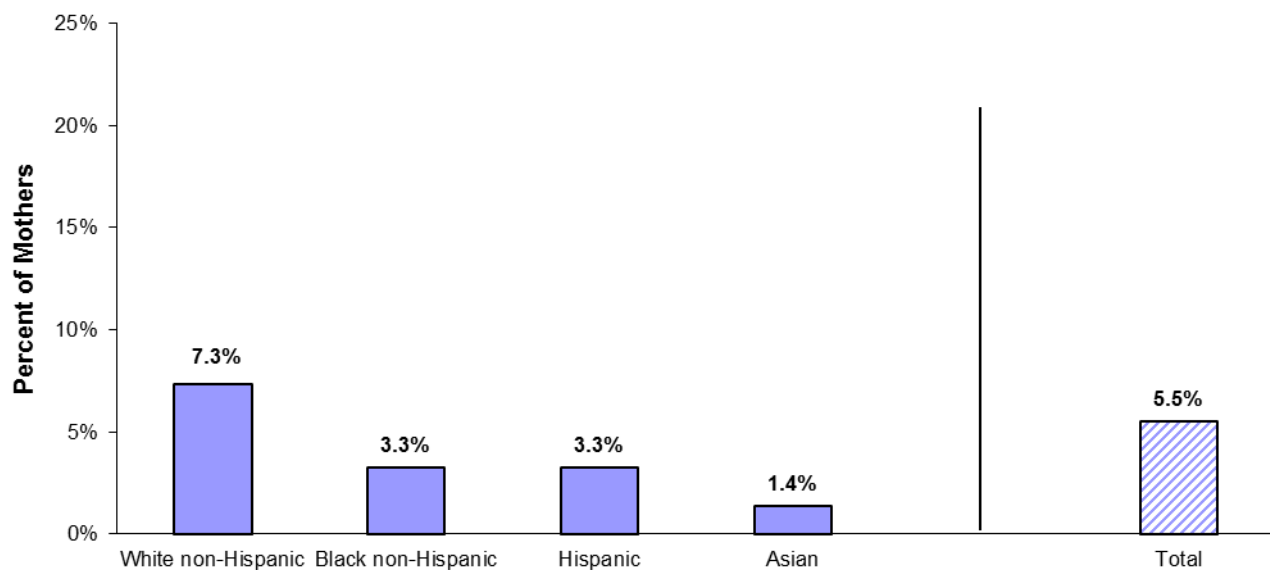


Figure 10. Mothers Who Reported Having Received WIC Food During Pregnancy by Race/Hispanic Ethnicity, Massachusetts: 2015



Note: These figures are based on mothers and not births

Figure 11. Mothers Who Reported Smoking During Pregnancy by Race/Hispanic Ethnicity, Massachusetts: 2015



Note: This figure is based on mothers and not births.

Table 19. Mothers¹ Who Used Infertility Treatments, Massachusetts: 2015

	Assisted Reproductive Technology (ART) with or without Artificial Insemination and/or Fertility Drugs ²		Artificial Insemination with or without Fertility Drugs ³		Fertility Enhancing Drugs Only ⁴	
	N	% ⁵	N	% ⁵	N	% ⁵
State total	2294	73.3%	415	13.3%	419	13.4%
Maternal Demographics						
Race/Hispanic Ethnicity	N	% ⁶	N	% ⁶	N	% ⁶
White non-Hispanic	1790	78.8%	333	81.4%	300	64.4%
Black non-Hispanic	86	3.8%	16	3.9%	22	4.7%
Asian	278	12.2%	36	8.8%	54	11.6%
Hispanic	102	4.5%	23	5.6%	86	18.5%
Other	15	0.7%	¹⁰	¹⁰	¹⁰	¹⁰
Birthplace						
US States / D.C./US Terr.	1754	76.5%	354	85.3%	309	73.7%
Non-US-born	540	23.5%	61	14.7%	110	26.3%
Prenatal care funding						
Public	98	4.3%	36	8.7%	46	11.0%
Private, other	2185	95.7%	378	91.3%	371	89.0%
Age						
20-29	101	6.8%	35	10.4%	75	21.7%
30-34	483	32.6%	137	40.9%	150	43.4%
35-39	582	39.3%	134	40.0%	93	26.9%
40+	316	21.3%	29	8.7%	28	8.1%
Pregnancy-Related Factors						
Adequacy of Prenatal Care⁷						
Adequate Total ⁸	2019	90.3%	374	93.5%	348	89.5%
Adequate Intensive	1125	50.3%	229	57.3%	207	53.2%
Adequate Basic	894	40.0%	145	36.3%	141	36.2%
Intermediate	123	5.5%	12	3.0%	20	5.1%
Inadequate/None	94	4.2%	14	3.5%	21	5.4%
Parity⁹						
1	1149	57.7%	304	73.3%	262	62.5%
2	668	33.5%	91	21.9%	128	30.5%
3+	175	8.8%	20	4.8%	29	6.9%
Birth Outcomes						
Gestational age						
< 28 weeks (extremely preterm)	23	1.00%	6	1.45%	6	1.43%
< 37 weeks (preterm) ¹¹	396	17.26%	56	13.49%	58	13.84%
37+	1898	82.74%	359	86.51%	361	86.16%
Plurality						
Singleton	1938	84.48%	377	90.84%	365	87.11%
Multiple birth	356	15.52%	38	9.16%	54	12.89%

NOTE: Beginning in 2014, questions about fertility assistance were asked on both the hospital and mother's worksheets. This table shows combined data from both sources. While asking mothers has increased reporting, it is known that these treatments are still underreported. As such, these numbers should be interpreted with caution. All percentages are calculated based only on mothers with known values for the characteristic(s) of interest, unless otherwise stated. Often women use more than one method of treatment, and the categories presented are mutually exclusive.

1. The unit of analysis for this table is unique mothers, not births. 2. This category includes all women who used ART (typically IVF) and those who used any additional treatments. 3. This category includes women who used artificial insemination (including intrauterine insemination) and those who used fertility drugs in addition. 4. This category includes women who only used fertility drugs. 5. For state total row, percentages are based on total births where infertility treatment was present. 6. Percent is based on state total of the treatment methods. 7. Based on Adequacy of Prenatal Care Utilization (APNCU) Index. Does not include data from Newton Wellesley, Saint Vincent and Winchester hospitals because of reporting problems. 8. Adequate Total = Adequate Basic + Adequate Intensive. 9. Number of live births including the current birth. 10. Numbers and calculations based on 1-4 events are excluded. 11. Categories are not mutually exclusive so percent will add to more than 100%.

Technical Notes

Data Cautions

Limitations of small numbers:

Cells in some tables in this publication, and particularly those tables specific to individual cities and towns, contain small numbers. Rates and proportions based on fewer than five observations are suppressed, and trends based upon small numbers should be interpreted cautiously.

Differences with previously published data

Numbers and rates in this publication may differ from those in previous reports because of updated birth data, or release of the most up-to-date population estimates for a given year (see Population Denominators for details on population files).

Self-reported data

Many statistics reported in this publication, such as maternal smoking, education, and race/ethnicity are *self-reported*, and are subject to the usual limitations of this type of information.

Changes in the Collection of Race/Ethnicity Information

The 2003 revision of the Standard Certificate of Live Birth allows the reporting of more than one race (multiple races) for each parent in accordance with the revised standards issued by the Office of Management and Budget (OMB) in 1997.

The revised standards incorporated two major changes designed to reflect the changing racial and ethnic profile of the United States. First, the revision increased from five to twelve the minimum set of categories to be used for identification of race. The twelve categories for race specified in the 1997 standards are: American Indian or Alaska Native, Asian, Black, Guamanian or Chamorro, Hispanic/Latino/Black, Hispanic/Latino/White, Hispanic/Latino/Other, Native Hawaiian, Samoan, White, Other Pacific Islander and Other. The revised standards called for reporting of Asians separately from Native Hawaiians, Samoan or Other Pacific Islanders.

The revised standards require federal data collection programs to allow respondents to select *one or more race categories*. In order to provide uniformity and comparability of the data during the transition period, before multiple-race data are available for all reporting areas, it is necessary to “bridge” the responses of those who reported more than one race to a single-race. The method used to bridge responses for those who report more than one race to a single race is based on a procedure whereby multiple races are assigned to the smallest minority group first (i.e. Asian and White becomes Asian or Black and Native American becomes Native American). All multiple races that include Hispanic will be assigned as Hispanic and this group also includes all respondents who reported Hispanic ethnicities as well.

The revised standards also require federal data collection programs to allow respondents to select *one or more ancestry categories*. The method used to bridge responses for those who report more than one ancestry is based on a procedure whereby multiple ancestries are assigned to each of the ancestries listed.

The following table is from the Parent Worksheet for the birth certificate, which is the self-reported information we use to report on mother's race and ancestry.

2003 revision

Mother/Parent Race

Please indicate your race(s). *You may choose more than one.*

<input type="checkbox"/> American Indian/Alaska Native (specify tribal nation): _____ <input type="checkbox"/> Asian <input type="checkbox"/> Black <input type="checkbox"/> Guamanian or Chamorro <input type="checkbox"/> Hispanic/Latina/Black <input type="checkbox"/> Hispanic/Latina/White	<input type="checkbox"/> Hispanic/Latina/Other (specify): _____ <input type="checkbox"/> Native Hawaiian <input type="checkbox"/> Samoan <input type="checkbox"/> White <input type="checkbox"/> Other Pacific Islander (specify): _____ <input type="checkbox"/> Other race not listed (specify): _____
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Mother/Parent Ethnicity

Please indicate your ethnic background(s). *You may choose more than one.*

<input type="checkbox"/> African (specify): _____ <input type="checkbox"/> African-American <input type="checkbox"/> American <input type="checkbox"/> Asian Indian <input type="checkbox"/> Brazilian <input type="checkbox"/> Cambodian <input type="checkbox"/> Cape Verdean <input type="checkbox"/> Caribbean Islander (specify): _____ <input type="checkbox"/> Chinese <input type="checkbox"/> Colombian <input type="checkbox"/> Cuban <input type="checkbox"/> Dominican <input type="checkbox"/> European (specify): _____ <input type="checkbox"/> Filipino <input type="checkbox"/> Guatemalan <input type="checkbox"/> Haitian <input type="checkbox"/> Honduran	<input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Laotian <input type="checkbox"/> Mexican, Mexican American, Chicano <input type="checkbox"/> Middle Eastern (specify): _____ <input type="checkbox"/> Native American (specify tribal nation(s)): _____ <input type="checkbox"/> Portuguese <input type="checkbox"/> Puerto Rican <input type="checkbox"/> Russian <input type="checkbox"/> Salvadoran <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other Asian (specify): _____ <input type="checkbox"/> Other Central American (specify): _____ <input type="checkbox"/> Other Pacific Islander (specify): _____ <input type="checkbox"/> Other Portuguese (specify): _____ <input type="checkbox"/> Other South American (specify): _____ <input type="checkbox"/> Other ethnicity (ies) not listed (specify): _____
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1989 revision

MOTHER'S RACE Please mark the *one* category that *best describes* the mother's race:

- ☐ White ☐ Black ☐ Asian/Pacific Islander ☐ American Indian ☐ Other (specify)

MOTHER'S ANCESTRY Please mark the *one* category that *best describes* the mother's ancestry of ethnic heritage:

HISPANIC/LATINA

- 1 ☐ Puerto Rican 7 ☐ Other Central American (specify)
2 ☐ Dominican
3 ☐ Mexican 8 ☐ Other South American (specify)
4 ☐ Cuban
5 ☐ Colombian 9 ☐ Other Hispanic/Latina (specify):
6 ☐ Salvadoran

ASIAN/PACIFIC ISLANDER

- 10 ☐ Chinese 17 ☐ Laotian
11 ☐ Vietnamese 18 ☐ Pakistani
12 ☐ Cambodian 19 ☐ Thai
13 ☐ Asian Indian 20 ☐ Hawaiian
14 ☐ Korean 21 ☐ Other Asian/Pacific Islander(specify)
15 ☐ Filipino
16 ☐ Japanese

PORTUGUESE SPEAKING

- 22 ☐ Cape Verdean 24 ☐ Other Portuguese (specify):
23 ☐ Brazilian

WEST INDIAN/CARIBBEAN ISLANDER

- 25 ☐ Haitian 28 ☐ Other West Indian/Caribbean
Islander (specify):
26 ☐ Jamaican
27 ☐ Barbadian

AFRICAN/AFRICAN AMERICAN

- 29 ☐ African-American/ Afro-American
30 ☐ Nigerian
31 ☐ Other African (specify):

MIDDLE EASTERN

- 32 ☐ Lebanese
33 ☐ Iranian
34 ☐ Israeli
35 ☐ Other Middle Eastern (specify):

AMERICAN ANCESTRY

- 36 ☐ Native American/ American Indian
(specify tribe/affiliation):
37 ☐ American

EUROPEAN and OTHER ancestries

- 38 ☐ European (specify):
39 ☐ Other (specify):

Table A1. 2015 Massachusetts Population Estimates by Age Group, Gender, Race/Hispanic Ethnicity (mutually exclusive)

Age Group	Total ¹	White Non-Hispanic	Black Non-Hispanic	Native American Non-Hispanic	Asian Non-Hispanic	Hispanic ²
Female						
0 to 4	179,090	111,529	17,543	439	13,958	35,621
5 to 9	183,093	118,334	17,449	453	13,940	32,917
10 to 14	194,065	131,237	17,371	500	13,993	30,964
15 to 19	227,033	157,086	19,946	558	16,730	32,713
20 to 24	247,165	167,687	22,323	621	21,374	35,160
25 to 29	243,192	165,462	20,168	572	24,278	32,712
30 to 34	230,406	156,633	18,752	494	23,568	30,959
35 to 39	210,482	142,566	17,550	437	20,830	29,099
40 to 44	215,680	153,260	16,769	430	19,381	25,840
45 to 49	240,532	183,176	17,346	557	16,110	23,343
50+	1,327,566	1,123,953	72,428	2,641	55,615	72,929
All Females	3,498,304	2,610,923	257,645	7,702	239,777	382,257
Male						
0 to 4	187,472	116,913	18,758	450	14,216	37,135
5 to 9	190,954	124,022	18,473	481	14,145	33,833
10 to 14	201,865	137,250	18,224	512	13,830	32,049
15 to 19	229,398	159,207	20,115	551	15,396	34,129
20 to 24	247,977	166,981	22,695	701	19,726	37,874
25 to 29	243,326	164,919	20,783	645	21,483	35,496
30 to 34	226,924	155,117	17,889	502	21,132	32,284
35 to 39	202,791	139,135	16,440	369	17,845	29,002
40 to 44	205,140	147,241	15,423	452	18,062	23,962
45 to 49	228,099	175,496	15,675	522	15,046	21,360
50+	1,132,172	962,744	58,759	2,474	48,382	59,813
All Males	3,296,118	2,449,025	2,043,234	7,659	219,263	376,937
0 to 4	366,562	228,442	36,301	889	28,174	72,756
5 to 9	374,047	242,356	35,922	934	28,085	66,750
10 to 14	395,930	268,487	35,595	1,012	27,823	63,013
15 to 19	456,431	316,293	40,061	1,109	32,126	66,842
20 to 24	495,142	334,668	45,018	1,322	41,100	73,034
25 to 29	486,518	330,381	40,951	1,217	45,761	68,208
30 to 34	457,330	311,750	36,641	996	44,700	63,243
35 to 39	413,273	281,701	33,990	806	38,675	58,101
40 to 44	420,820	300,501	32,192	882	37,443	49,802
45 to 49	468,631	358,672	33,021	1,079	31,156	44,703
50+	2,459,738	2,086,697	131,187	5,115	103,997	132,742
State Total	6,794,422	5,059,948	500,879	15,361	459,040	759,194

1. National Center for Health Statistics. Postcensal estimates of the resident population of the United States for July 1, 2010-July 1, 2015, by year, county, single-year of age (0, 1, 2, ..., 85 years and over), bridged race, Hispanic origin, and sex (Vintage 2015). Prepared under a collaborative arrangement with the U.S. Census Bureau. Available from: <http://www.cdc.gov/nchs/nvss/bridged.race.htm> as of September 2016, following release by the U.S. Census Bureau of the unbridged Vintage 2015 postcensal estimates by 5-year age.

2. Persons of Hispanic ethnicity are NOT included in the race categories.

These estimates are used to calculate **statewide population based rates** published in this report.