The Commonwealth of Massachusetts

Executive Office of Health and Human Services

Department of Public Health

250 Washington Street, Boston, MA 02108-4619



CHARLES D. BAKER

Governor

KARYN E. POLITO

Lieutenant Governor

MARYLOU SUDDERS

Secretary

MARGRET R. COOKE Commissioner

**Tel: 617-740-2600**

**www.mass.gov/dph**

February 22, 2022

Steven T. James

House Clerk

State House Room 145

Boston, MA 02133

Michael D. Hurley

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 2018 calendar year.

Sincerely,

Margret R. Cooke

Commissioner

Department of Public Health

A picture containing logo

Description automatically generated

**Massachusetts Births 2018**

**February 2022**

***Massachusetts Births 2018***



**Massachusetts Department of Public Health**

Registry of Vital Records and Statistics

February 2022

**Massachusetts Births 2018**

Charles D. Baker, Governor

Marylou Sudders, Secretary of Health and Human Services

[Margret R Cooke](http://www.mass.gov/eohhs/gov/departments/dph/biowel2.html), Commissioner of Public Health

Abigail R. Averbach, MSc, Assistant Commissioner

Karin Barrett, Registrar

Registry of Vital Records and Statistics

Massachusetts Department of Public Health

February 2022

**Acknowledgments**

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Data in this report have 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, and Margaret Riley.

**To obtain additional copies of this report, contact:**

Massachusetts Department of Public Health

Registry of Vital Records and Statistics

150 Mt. Vernon Street, 1st Floor

Dorchester, MA 02125

(617) 740-2670

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/dph/phit> or email DPH.PHIT@state.ma.us

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**Note to Readers**

As required by Chapter 111, Section 2 of the General Laws, this report satisfies the requirement of the annual report of statistics on births for calendar year 2018 (Annual Report Vital Statistics of Massachusetts-Births, Public Document #1 2017). The publication of this report was delayed due to both staffing vacancies and the reallocation of available staff in order to provide timely data for COVID-19 mortality reporting.  Public Document #1 information on 2018 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:

* Population estimates from 2000-2009 were created using straight line interpolation of data from the U.S. Census.
* Population estimates from 2011-present were created by the UMASS Donahue Institute (UMDI). The same categorizations were applied to the 2010 census data to make a consistent dataset from 2010-present. Data are updated annually with summary census files that incorporate lagging birth data. These more accurate and up-to-date rates may differ somewhat from previously released rates. UMDI estimates were created by a team of expert demographers using novel modifications of an existing and well-accepted methodology. UMDI created estimates by sex, age, race, and ethnicity at the census tract and community levels. These estimates are controlled to the annual county level Census estimates1 on a yearly basis, so they become more accurate over time. To read the full methodology, please refer to the report created by UMDI: Strate, S., Renski, H., Peake, T., Murphy, J.J., Zaldonis, P. (2016). Small area population estimates for 2011 through 2020. [White Paper]. Population Estimates Program, Economic and Public Policy Research, University of Massachusetts Donahue Institute.

1. **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.
2. **Race and Ethnicity.** In the text, the race categories, White, Black, American Indian/Alaska Native, 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.**

1. **Breastfeeding.** Beginning in 2016, statistics on breastfeeding indicate whether the infant was being breastfed during the hospital stay. In earlier birth reports, statistics on breastfeeding reported on breastfeeding at the time of discharge. **Please use caution when comparing breastfeeding data before and after 2016.**
2. **Tables/Figures Based on Mothers.** Please note that Tables 18-19 and Figures 7-11 are based on mothers and not births.

**Suggested Citation**

*Massachusetts Births 2018* Boston, MA: Registry of Vital Records and Statistics, Massachusetts Department of Public Health. February 2022.

**Selected Takeaways**

* In 2018, there were 69,098 births to Massachusetts resident mothers, a decline of 2.3% from 70,704 in 2017 and a decline of 25.3% since 1990 (Table 1). The number of births to mothers age 30 and older increased (for the 8th year in a row) by 10.7% (2010: 39,548; 2018: 43,793). Since 2008, the number of births to mothers under 30 decreased by 30.0% percent (2008: 36,117; 2018: 25,305) (Figure 1).
* Between 2017 and 2018, the number of births to White Non-Hispanic and Black Non-Hispanic mothers decreased by 2.5% and 1.5%, respectively, while the number of births to Asian Non-Hispanic and Hispanic mothers increased by 1.2% and 1.7%, respectively (Table 1).
* In 2018, the Massachusetts teen birth rate decreased for the tenth year in a row. The teen birth rate was 20.1 births per 1,000 women age 15-19 in 2008, while in 2018 the rate was 7.1 births per 1,000 women age 15-19 (Table 1). Between 2017 and 2018, the percentage of births to mothers less than 20 years old decreased for all races/ethnicities. However, disparities persisted between 2017 and 2018, and the percentage of teen births to Hispanic women remained over five times higher than the percentage of teen births to White Non-Hispanic women and the percentage of teen births to American Indian Non-Hispanic was over three times higher than that of White Non-Hispanic (Table 2, Figure 2).
* In 2018, 31.5% of births were cesarean deliveries (Table 1). Among White Non-Hispanic, Black Non-Hispanic, Hispanic, and Asian Non-Hispanic births, Black Non-Hispanics had the highest percentage of cesarean deliveries (36.5%), while Asian Non-Hispanics had the lowest percentage (29.2%) (Table 2).
* In 2018, the percentage of births to mothers affected by gestational diabetes increased to 7.0% from 6.5% in 2017 (Table 1).
* For the first time in 5 years, the percentage of low birthweight infants (less than 2,500 grams or 5.5 pounds) increased (2014: 7.5%; 2015: 7.5%; 2016: 7.5%; 2017: 7.5%; 2018:7.6%) (Table 1).
* From 2017 to 2018, the percentage of preterm births (births occurring at less than 37 weeks of gestation) remained the same at 8.9% (Table 1). The percentage of White Non-Hispanic preterm births from 2017 to 2018 increased from 8.0% to 8.3%. In contrast, this percentage decreased for Asian Non-Hispanics from 8.3% to 7.8%, for Hispanics from 10.0% to 9.8%, and for Black Non-Hispanic from 11.2% to 11.0% (Table 10).
* From 2017 to 2018, the percentage of births to mothers who received adequate prenatal care continued to increase from 80.5% to 86.1% (Table 1, Figure 3). In 2018, the percentage of births with adequate prenatal care was higher among those with private insurance (87.3%) than public insurance (74.0%) (Table 16p2).
* The percentage of births to mothers whose prenatal care was covered through public insurance decreased slightly from 2017 (39.2%) to 38.5% in 2018 (Table 1).
* The percentage of multiple births decreased slightly from 3.6% in 2017 to 3.5% in 2018. The percentage of multiple births to mothers under 35 years old decreased slightly from 3.2% in 2017 to 3.1% in 2018, and the corresponding percentage for multiple births to mothers 35 and older decreased from 5.1% to 4.8% (Table 4).
* Smoking during pregnancy continued to decline in 2018. The percentage of infants whose mothers reported smoking during pregnancy decreased from 4.9% in 2017 to 4.4% in 2018 (Figure 6).
* In Massachusetts 3,570 women used fertility treatment in 2018. The percentage of mothers who used assisted reproductive technology (ART) among all mothers who used infertility treatment increased from 70.7% in 2017 to 73.6% in 2018. The percentage of mothers who used ART fertility treatment was much higher among White Non-Hispanic mothers at 78.9% than among Black Non-Hispanic, Asian Non-Hispanic, and Hispanic mothers at 3.3%, 11.7%, and 5.7%, respectively (Table 21).

Table 1. Trends in Birth Characteristics, Massachusetts: 1990, 2004-2018

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** |  | **1990** | **2004** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** |
| **Births1** | **n2** | 92,461 | 78,460 | 76,824 | 77,670 | 77,934 | 76,969 | 74,966 | 72,835 | 73,169 | 72,457 | 71,618 | 71,867 | 71,484 | 71,319 | 70,704 | 69,098 |
|  | **Rate3** | 62.1 | 56.2 | 55.6 | 56.9 | 57.2 | 56.5 | 55.1 | 53.7 | 54.1 | 53.3 | 52.5 | 52.1 | 52 | 52 | 51.2 | 49.0 |
| **Race of Mother** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **White Non-Hispanic** | **n** | 72,483 | 55,322 | 53,469 | 52,975 | 52,620 | 51,760 | 49,759 | 48,466 | 45,973 | 45,032 | 44,432 | 44,128 | 43,255 | 42,448 | 40,989 | 39,956 |
|  | **%4** | 78.4 | 70.5 | 69.6 | 68.2 | 67.5 | 67.2 | 66.4 | 66.5 | 62.8 | 62.1 | 62.0 | 61.4 | 60.5 | 59.5 | 58 | 57.8 |
| **Black Non-Hispanic** | **n** | 7,158 | 6,053 | 6,077 | 6,452 | 6,462 | 6,652 | 6,945 | 6,794 | 6,999 | 6,892 | 7,016 | 7,071 | 6,949 | 7,095 | 7,251 | 7,142 |
|  | **%4** | 7.7 | 7.7 | 7.9 | 8.3 | 8.3 | 8.6 | 9.3 | 9.3 | 9.6 | 9.5 | 9.8 | 9.8 | 9.7 | 9.9 | 10.3 | 10.3 |
| **Asian Non-Hispanic** | **n** | 3,349 | 5,454 | 5,251 | 5,469 | 5,758 | 5,958 | 5,939 | 5,817 | 6,022 | 6,530 | 6,220 | 6,426 | 6,473 | 6,647 | 6,338 | 6,411 |
|  | **%4** | 3.6 | 7.0 | 6.8 | 7.0 | 7.4 | 7.7 | 7.9 | 8.0 | 8.2 | 9.0 | 8.7 | 8.9 | 9.1 | 9.3 | 9 | 9.3 |
| **Hispanic** | **n** | 8,406 | 9,798 | 10,061 | 10,696 | 10,861 | 10,895 | 10,986 | 10,588 | 12,777 | 13,088 | 12,315 | 12,670 | 12,927 | 13,100 | 13,516 | 13,748 |
|  | **%4** | 9.1 | 12.5 | 13.1 | 13.8 | 13.9 | 14.2 | 14.7 | 14.5 | 17.5 | 18.1 | 17.2 | 17.6 | 18.1 | 18.4 | 19.1 | 19.9 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Teen Births** | **n** | 7,258 | 4,559 | 4,539 | 4,722 | 4,944 | 4,583 | 4,477 | 3,907 | 3,480 | 3,219 | 2,732 | 2,402 | 2,140 | 1,931 | 1,827 | 1,639 |
| **(Ages 15-19)** | **Rate3** | 35.4 | 22.2 | 21.7 | 21.3 | 22.0 | 20.1 | 19.5 | 17.1 | 15.4 | 14.0 | 12.0 | 10.6 | 9.4 | 8.5 | 8.1 | 7.1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Births to Unmarried** | **n** | 22,837 | 22,376 | 23,170 | 24,977 | 26,010 | 26,146 | 26,029 | 25,220 | 25,349 | 24,900 | 24,014 | 23,853 | 23,913 | 23,566 | 23,309 | 22,467 |
|  | **%** | 24.7 | 28.5 | 30.2 | 32.2 | 33.4 | 34.0 | 34.7 | 34.6 | 34.8 | 34.5 | 33.7 | 33.3 | 33.6 | 33.2 | 33.1 | 32.6 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Cesarean Deliveries** | **n** | 20,615 | 24,295 | 24,732 | 25,901 | 26,240 | 26,240 | 25,067 | 24,244 | 23,062 | 22,900 | 22,508 | 22,691 | 22,431 | 22,302 | 22,290 | 21,710 |
|  | **%** | 22.3 | 31.0 | 32.3 | 33.4 | 33.7 | 34.3 | 33.6 | 33.3 | 32.5 | 31.7 | 31.5 | 31.6 | 31.4 | 31.3 | 31.6 | 31.5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Gestational Diabetes5** | **n** |  | 2,741 | 2,666 | 2,925 | 3,279 | 3,086 | 3,445 | 3,368 | 3,698 | 4,070 | 3,784 | 3,867 | 4,287 | 4,005 | 4,575 | 4,812 |
|  | **%** |  | 3.5 | 3.5 | 3.8 | 4.2 | 4.0 | 4.7 | 4.7 | 5.1 | 5.6 | 5.3 | 5.4 | 6 | 5.6 | 6.5 | 7.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Low Birthweight6** | **n** | 5,388 | 6,125 | 6,073 | 6,150 | 6,147 | 5,955 | 5,804 | 5,650 | 5,458 | 5,491 | 5,495 | 5,394 | 5,321 | 5,341 | 5,261 | 5,243 |
|  | **%** | 5.8 | 7.8 | 7.9 | 7.9 | 7.9 | 7.8 | 7.8 | 7.8 | 7.6 | 7.6 | 7.7 | 7.5 | 7.5 | 7.5 | 7.5 | 7.6 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Preterm7** | **n** | 5,899 | 7,222 | 6,925 | 6,954 | 6,980 | 6,750 | 6,516 | 6,234 | 5,992 | 6,107 | 6,300 | 6,161 | 6,001 | 6,167 | 6,272 | 6,167 |
|  | **%** | 6.5 | 9.2 | 9.0 | 9.0 | 9.0 | 8.8 | 8.7 | 8.6 | 8.4 | 8.6 | 8.8 | 8.6 | 8.4 | 8.7 | 8.9 | 8.9 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Late Preterm8** | **n** | 3,977 | 5,016 | 4,808 | 4,918 | 4,945 | 4,753 | 4,602 | 4,361 | 4,206 | 4,422 | 4,518 | 4,394 | 4,305 | 4,492 | 4,680 | 4,489 |
|  | **%** | 4.4 | 6.4 | 6.3 | 6.3 | 6.4 | 6.2 | 6.2 | 6.0 | 5.9 | 6.2 | 6.3 | 6.1 | 6 | 6.3 | 6.6 | 6.5 |
| **Prenatal Care** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Public Pay Prenatal Care**9** | **%** | 25.1 | 29.9 | 31.9 | 33.5 | 34.9 | 34.5 | 35.3 | 35.8 | 38.8 | 39.7 | 38.9 | 42.9 | 38.3 | 38.6 | 39.2 | 38.5 |
| APNCU Index**10** | **%** |  | 84.2 | 84.0 | 83.1 | 82.8 | 82.1 | 84.3 | 84.9 | 82.8 | 83.4 | 83.7 | 82.6 | 81.8 | 82.1 | 80.6 | 81.6 |
| AdjustedAPNCU Index**10** | **%** |  |  |  |  |  |  |  |  | 85.3 | 85.4 | 84.5 | 83.1 | 81.8 | 82.3 | 80.5 | 81.6 |

**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. Population data for computing 2008 birth rates at the state level were provided by the US Census Bureau. See the “Population Denominators” section of the “Technical Notes” for further information. 4. Percentages are calculated based on births, including those to mothers of unknown race. 5. Gestational diabetes is defined as glucose intolerance found during pregnancy for the first time. It excludes cases with 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 gestation. 9. Government programs including Commonwealth, 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 (see Technical Notes for more information).

Table 2. Birth Characteristics by Maternal Race/Hispanic Ethnicity and Birthplace, Massachusetts: 2018

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | |
| **Race and Hispanic Ethnicity** **(by mother’s birthplace)** | **Births** | | **Teen Births** | | | | **Birthweight** | | | | **Prenatal Care** | | | | **Cesarean Deliveries** | | **Breastfeeding5** | |
| **<18 Years** | | **<20 Years** | | **Very Low2** | | **Low3** | | **Adequate4** | | **1st Trimester** | |
| **n** | **%1** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** |
| **State Total** | **69,098** | **100.0** | **388** | **0.6** | **1,661** | **2.4** | **829** | **1.2** | **5,243** | **7.6** | **55,160** | **81.6** | **54,297** | **79.7** | **21,710** | **31.5** | **59,173** | **85.9** |
| US inc. DC | 45,835 | 66.3 | 256 | 0.6 | 1,086 | 2.4 | 519 | 1.1 | 3,395 | 7.4 | 37,688 | 84.2 | 37,534 | 83.1 | 14,037 | 30.7 | 38,163 | 83.6 |
| US Territories7 | 1,757 | 2.5 | 37 | 2.1 | 157 | 8.9 | 35 | 2.0 | 162 | 9.2 | 1,330 | 76.8 | 1,269 | 72.6 | 580 | 33.0 | 1,427 | 81.6 |
| Non-US-born8 | 21,473 | 31.1 | 94 | 0.4 | 417 | 1.9 | 269 | 1.3 | 1,673 | 7.8 | 16,133 | 76.5 | 15,481 | 73.1 | 7,083 | 33.0 | 19,577 | 91.4 |
| **White Non-Hispanic** | **39,956** | **57.8** | **73** | **0.2** | **463** | **1.2** | **362** | **0.9** | **2,599** | **6.5** | **33,432** | **85.4** | **33,303** | **84.4** | **12,408** | **31.1** | **34,008** | **85.3** |
| US inc. DC | 35,331 | 88.4 | 68 | 0.2 | 439 | 1.2 | 317 | 0.9 | 2,301 | 6.5 | 29,797 | 86.2 | 29,749 | 85.2 | 10,958 | 31.0 | 29,692 | 84.2  72.7 |
| US Territories7 | 11 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 9 | 81.8 | 8 | 72.7 | --6 | --6 | 8 |
| Non-US-born8 | 4,604 | 11.5 | 5 | 0.1 | 24 | 0.5 | 44 | 1.0 | 296 | 6.4 | 3,619 | 80.0 | 3,539 | 77.7 | 1,446 | 31.4 | 4,307 | 93.8 |
| **Black Non-Hispanic** | **7,142** | **10.3** | **47** | **0.7** | **192** | **2.7** | **169** | **2.4** | **767** | **10.8** | **4,861** | **69.9** | **4,673** | **66.6** | **2,607** | **36.5** | **6,263** | **88.2** |
| US inc. DC | 2,967 | 41.5 | 33 | 1.1 | 132 | 4.4 | 77 | 2.6 | 368 | 12.4 | 2,149 | 74.4 | 2,099 | 71.8 | 1,006 | 33.9 | 2,425 | 82.2 |
| US Territories7 | --6 | --6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | --6 | --6 | --6 | --6 |
| Non-US-born8 | 4,170 | 58.4 | 14 | 0.3 | 60 | 1.4 | 91 | 2.2 | 397 | 9.5 | 2,712 | 66.8 | 2,573 | 62.9 | 1,599 | 38.4 | 3,836 | 92.4 |
| **Hispanic** | **13,748** | **19.9** | **253** | **1.8** | **941** | **6.8** | **214** | **1.6** | **1,181** | **8.6** | **10,277** | **76.2** | **9,862** | **72.6** | **4,269** | **31.1** | **11,633** | **84.9** |
| US inc. DC | 5,279 | 38.4 | 144 | 2.7 | 472 | 8.9 | 99 | 1.9 | 521 | 9.9 | 3,970 | 77.1 | 3,946 | 75.7 | 1,485 | 28.1 | 4,203 | 79.9 |
| US Territories7 | 1,733 | 12.6 | 36 | 2.1 | 156 | 9.0 | 35 | 2.0 | 162 | 9.3 | 1,310 | 76.7 | 1,251 | 72.5 | 570 | 32.9 | 1,408 | 81.6 |
| Non-US-born8 | 6,734 | 49.0 | 73 | 1.1 | 313 | 4.6 | 80 | 1.2 | 497 | 7.4 | 4,997 | 75.3 | 4,665 | 70.1 | 2,213 | 32.9 | 6,021 | 89.7 |
| **Asian Non-Hispanic** | **6,411** | **9.3** | **9** | **0.1** | **29** | **0.5** | **45** | **0.7** | **504** | **7.9** | **5,252** | **83.1** | **5,191** | **81.6** | **1,868** | **29.2** | **5,830** | **91.0** |
| US inc. DC | 1,259 | 19.6 | 8 | 0.6 | 22 | 1.7 | 10 | 0.8 | 109 | 8.7 | 1,025 | 82.9 | 1,041 | 83.5 | 316 | 25.1 | 1,095 | 87.2 |
| US Territories7 | --6 | --6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | --6 | --6 | --6 | --6 | --6 | --6 | --6 | --6 |
| Non-US-born8 | 5,148 | 80.3 | --6 | --6 | 7 | 0.1 | 35 | 0.7 | 395 | 7.7 | 4,224 | 83.1 | 4,147 | 81.2 | 1,549 | 30.1 | 4,731 | 92.0 |
| **American Indian Non-Hispanic9** | **224** | **0.3** | --6 | --6 | **9** | **4.0** | --6 | --6 | **16** | **7.2** | **186** | **85.7** | **168** | **76.4** | **63** | **28.1** | **193** | **86.2** |
| US inc. DC | 217 | 96.9 | --6 | --6 | 9 | 4.1 | --6 | --6 | 16 | 7.4 | 181 | 86.2 | 164 | 77.0 | 62 | 28.6 | 186 | 85.7 |
| US Territories7 | 0 | 0.0 | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| Non-US-born8 | 7 | 3.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 71.4 | --6 | --6 | --6 | --6 | 7 | 100.0 |
| **Other Non-Hispanic10** | **497** | **0.7** | --6 | --6 | **13** | **2.6** | **8** | **1.6** | **51** | **10.3** | **341** | **71.6** | **338** | **70.0** | **178** | **35.8** | **413** | **83.4** |
| US inc. DC | 92 | 18.5 | 0 | 0.0 | 5 | 5.4 | --6 | --6 | 6 | 6.5 | 66 | 76.7 | 65 | 73.9 | 28 | 30.4 | 57 | 62.0 |
| US Territories7 | 0 | 0.0 | 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-born8 | 405 | 81.5 | --6 | --6 | 8 | 2.0 | 7 | 1.7 | 45 | 11.1 | 275 | 70.5 | 273 | 69.1 | 150 | 37.0 | 356 | 88.3 |
| **Unknown** | **1,120** | **1.6** | --6 | --6 | **14** | **1.3** | **30** | **2.8** | **125** | **11.8** | **811** | **82.5** | **762** | **77.1** | **317** | **30.2** | **833** | **80.2** |
| **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. 5. Infant was being breastfed during the hospital stay. 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: 2018 | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | |
| **Maternal**  **Ancestry** | **Births1** | | **Teen Births** | | | | **Low Birthweight2** | | **Prenatal Care** | | | | **Late Preterm4** | | **Cesarean Section** | | **Breast-feeding5** | | **Gestational Diabetes6** | |
|  | | **<18 years** | | **<20 Years** | | **Adequate3** | | **1st Trimester** | |
|  | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **State Total** | **69,098** | **100.0** | **388** | **0.6** | **1,661** | **2.4** | **5,243** | **7.6** | **55,160** | **81.6** | **54,297** | **79.7** | **4,489** | **6.5** | **21,710** | **31.5** | **59,173** | **85.9** | **4,812** | **7.0** |
| American | 31,798 | 46.0 | 100 | 0.3 | 551 | 1.7 | 2,125 | 6.7 | 26,701 | 85.5 | 26,511 | 84.3 | 2,046 | 6.4 | 9,786 | 30.8 | 27,218 | 85.8 | 1,990 | 6.3 |
| European | 8,930 | 12.9 | 8 | 0.1 | 51 | 0.6 | 501 | 5.6 | 7,583 | 86.5 | 7,619 | 86.3 | 523 | 5.9 | 2,665 | 29.8 | 8,246 | 92.4 | 540 | 6.0 |
| Puerto Rican | 4,837 | 7.0 | 134 | 2.8 | 467 | 9.7 | 491 | 10.2 | 3,606 | 76.2 | 3,527 | 73.5 | 368 | 7.6 | 1,478 | 30.6 | 3,737 | 77.6 | 357 | 7.4 |
| African American | 3,201 | 4.6 | 38 | 1.2 | 139 | 4.3 | 396 | 12.4 | 2,321 | 74.2 | 2,250 | 71.1 | 254 | 7.9 | 1,068 | 33.4 | 2,611 | 82.1 | 164 | 5.1 |
| Dominican | 3,089 | 4.5 | 42 | 1.4 | 167 | 5.4 | 271 | 8.8 | 2,348 | 77.7 | 2,204 | 72.5 | 181 | 5.9 | 1,155 | 37.4 | 2,665 | 86.8 | 193 | 6.3 |
| Asian Indian | 2,097 | 3.0 | 0 | 0.0 | --7 | --7 | 217 | 10.3 | 1,725 | 83.1 | 1,730 | 83.0 | 152 | 7.2 | 740 | 35.3 | 1,970 | 94.0 | 307 | 14.6 |
| Brazilian | 2,007 | 2.9 | 18 | 0.9 | 45 | 2.2 | 132 | 6.6 | 1,489 | 75.1 | 1,444 | 72.6 | 103 | 5.1 | 827 | 41.2 | 1,869 | 93.3 | 132 | 6.6 |
| African | 1,986 | 2.9 | --7 | --7 | 9 | 0.5 | 167 | 8.4 | 1,356 | 69.6 | 1,296 | 66.1 | 115 | 5.8 | 771 | 38.8 | 1,845 | 93.5 | 157 | 7.9 |
| Portuguese | 1,986 | 2.9 | 12 | 0.6 | 64 | 3.2 | 150 | 7.6 | 1,642 | 83.9 | 1,584 | 80.5 | 116 | 5.8 | 713 | 35.9 | 1,462 | 73.7 | 142 | 7.2 |
| Chinese | 1,916 | 2.8 | --7 | --7 | --7 | --7 | 116 | 6.1 | 1,614 | 85.1 | 1,637 | 86.0 | 115 | 6.0 | 445 | 23.2 | 1,757 | 91.7 | 216 | 11.3 |
| Haitian | 1,569 | 2.3 | --7 | --7 | 17 | 1.1 | 184 | 11.7 | 1,022 | 67.1 | 972 | 63.4 | 115 | 7.3 | 618 | 39.4 | 1,401 | 89.8 | 106 | 6.8 |
| Cape Verdean | 1,448 | 2.1 | 20 | 1.4 | 87 | 6.0 | 136 | 9.4 | 992 | 70.7 | 972 | 68.6 | 81 | 5.6 | 487 | 33.6 | 1,263 | 87.3 | 92 | 6.4 |
| Salvadoran | 1,313 | 1.9 | 20 | 1.5 | 85 | 6.5 | 126 | 9.6 | 999 | 76.6 | 926 | 70.9 | 90 | 6.9 | 329 | 25.1 | 1,176 | 89.8 | 74 | 5.6 |
| Middle Eastern | 1,166 | 1.7 | 0 | 0.0 | 6 | 0.5 | 86 | 7.4 | 857 | 74.8 | 854 | 73.9 | 79 | 6.8 | 396 | 34.0 | 1,086 | 93.3 | 93 | 8.0 |
| Guatemalan | 1,142 | 1.7 | 29 | 2.5 | 101 | 8.8 | 70 | 6.1 | 813 | 72.8 | 729 | 65.2 | 75 | 6.6 | 258 | 22.6 | 967 | 84.8 | 86 | 7.5 |
| Other | 1,833 | 2.7 | 5 | 0.3 | 20 | 1.1 | 174 | 9.5 | 1,423 | 83.6 | 1,423 | 80.2 | 145 | 7.9 | 626 | 34.2 | 942 | 51.4 | 137 | 7.5 |
| Russian | 707 | 1.0 | 0 | 0.0 | 6 | 0.8 | 40 | 5.7 | 578 | 83.3 | 563 | 80.1 | 38 | 5.4 | 181 | 25.6 | 671 | 94.9 | 45 | 6.4 |
| Vietnamese | 685 | 1.0 | 0 | 0.0 | --7 | --7 | 42 | 6.1 | 550 | 81.8 | 536 | 79.2 | 35 | 5.1 | 195 | 28.5 | 609 | 89.0 | 71 | 10.4 |
| Cambodian | 575 | 0.8 | 8 | 1.4 | 17 | 3.0 | 60 | 10.5 | 447 | 80.0 | 422 | 74.2 | 47 | 8.2 | 133 | 23.1 | 396 | 69.0 | 61 | 10.6 |
| West Indian Caribbean | 549 | 0.8 | --7 | --7 | 21 | 3.8 | 59 | 10.8 | 396 | 73.7 | 367 | 67.8 | 45 | 8.2 | 191 | 34.8 | 513 | 93.4 | 39 | 7.1 |
| Other South American | 545 | 0.8 | --7 | --7 | 18 | 3.3 | 25 | 4.6 | 407 | 75.8 | 394 | 73.0 | 33 | 6.1 | 146 | 26.8 | 525 | 96.5 | 24 | 4.4 |
| Mexican | 513 | 0.7 | 10 | 1.9 | 25 | 4.9 | 26 | 5.1 | 388 | 77.0 | 383 | 75.2 | 24 | 4.7 | 130 | 25.3 | 465 | 90.6 | 33 | 6.4 |
| Honduran | 453 | 0.7 | 8 | 1.8 | 31 | 6.8 | 46 | 10.2 | 318 | 70.5 | 312 | 69.2 | 44 | 9.7 | 104 | 23.0 | 393 | 87.1 | 20 | 4.4 |
| Colombian | 449 | 0.6 | 0 | 0.0 | 7 | 1.6 | 33 | 7.3 | 363 | 82.3 | 341 | 77.0 | 36 | 8.0 | 142 | 31.6 | 416 | 92.7 | 23 | 5.1 |
| Native American | 380 | 0.5 | --7 | --7 | 15 | 3.9 | 32 | 8.4 | 295 | 78.9 | 266 | 70.6 | 24 | 6.3 | 114 | 30.1 | 312 | 82.5 | 27 | 7.1 |
| Korean | 375 | 0.5 | 0 | 0.0 | 0 | 0.0 | 20 | 5.3 | 302 | 81.8 | 306 | 82.7 | 18 | 4.8 | 106 | 28.4 | 355 | 94.9 | 40 | 10.7 |
| **NOTE:** All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Women may select more than one ancestry groups, therefore totals of all ancestries is greater than the number of births. 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. 4. Late preterm: 34-36 weeks gestation. 5. Infant was being breastfed during the hospital stay. 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: 1981-2018

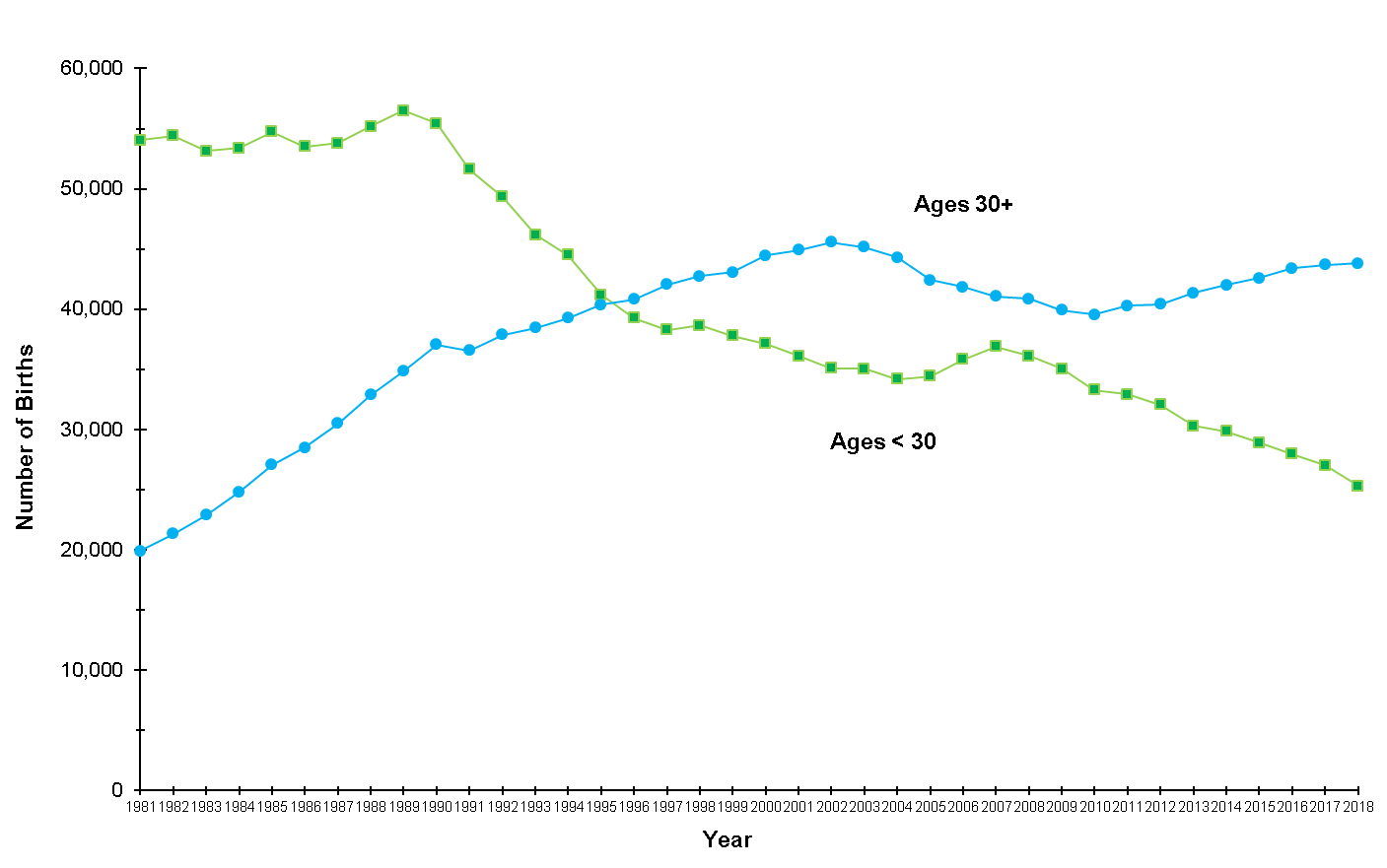


Table 4. Trends in Number and Percent Distribution of Births by Plurality and Maternal Age, Massachusetts: 2004-2018

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Singletons** | | **Multiples1** | | | | | | | **Total births2** | |
| **Age Group** |  |  |  | **Twins** | | | **Triplets or more** | | **Total Multiples** | |
| **Year** | **n** | **%** | **n** | | **%** | **n** | **%** | **n** | **%** | **n** | **%** |
| **All Ages** | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **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 |
|  | **2016** | 68,660 | 96.3 |  | 2,569 | 3.6 | 90 | 0.1 | 2,659 | 3.7 | 71,319 | 100.0 |
|  | **2017** | 68,134 | 96.4 |  | 2,523 | 3.6 | 47 | 0.1 | 2,570 | 3.6 | 70,704 | 100.0 |
|  | **2018** | 66,658 | 96.5 |  | 2,368 | 3.4 | 72 | 0.1 | 2,440 | 3.5 | 69,098 | 100.0 |
| **Ages <35** | |  |  |  | |  |  |  |  |  |  |  |
|  |  |  |  |  | |  |  |  |  |  |  |  |
|  | **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 |
|  | **2016** | 52,043 | 96.9 | 1,601 | | 3.0 | 47 | 0.1 | 1,648 | 3.1 | 53,691 | 100.0 |
|  | **2017** | 51,258 | 96.8 | 1,653 | | 3.1 | 18 | 0.0 | 1,671 | 3.2 | 52,929 | 100.0 |
|  | **2018** | 49,340 | 96.9 | 1,523 | | 3.0 | 36 | 0.1 | 1,559 | 3.1 | 50,899 | 100.0 |
| **Ages 35+** | |  |  |  | |  |  |  |  |  |  |  |
|  |  |  |  |  | |  |  |  |  |  |  |  |
|  | **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 |
|  | **2016** | 16,617 | 94.3 | 968 | | 5.5 | 43 | 0.2 | 1,011 | 5.7 | 17,628 | 100.0 |
|  | **2017** | 16,875 | 94.9 | 870 | | 4.9 | 29 | 0.2 | 899 | 5.1 | 17,774 | 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. | | **2018** | 17,315 | 95.2 | 843 | | 4.6 | 36 | 0.2 | 879 | 4.8 | 18,194 | 100.0 |

# Table 5. Summary of Selected Teen Birth Characteristics, Massachusetts: 2018

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Ages 15-17** | | | **Ages 18-19** | | | | **Combined Ages 15-19** | | |
|  | **N** | **%1,2** | | **N** | | | **%1,2** | **N** | **%1,2** | |
| **State Total** | 366 | 22.3% | | 1273 | | | 77.7% | 1639 | 100.0% | |
| White Non-Hispanic | 69 | | 19.0% | | 390 | | 30.9% | 459 | | 28.2% |
| Black Non-Hispanic | 46 | | 12.7% | | 145 | | 11.5% | 191 | | 11.7% |
| Asian Non-Hispanic | 8 | | 2.2% | | 20 | | 1.6% | 28 | | 1.7% |
| Hispanic | 238 | | 65.6% | | 688 | | 54.5% | 926 | | 56.9% |
| American Indian or Other | --6 | | --6 | | 20 | | 1.6% | 22 | | 1.4% |
| **Birthplace** |  | |  | |  | |  | | |  |
| US States / D.C. | 240 | | 65.6% | | 830 | | 65.2% | 1070 | | 65.3% |
| Puerto Rico / US Terr. | 35 | | 9.6% | | 120 | | 9.4% | 155 | | 9.5% |
| Non-US-born | 91 | | 24.9% | | 323 | | 25.4% | 414 | | 25.3% |
| **Prenatal Care Funding** |  | |  | |  | |  | | |  |
| Public | 307 | | 85.3% | | 1032 | | 82.0% | 1339 | | 82.7% |
| Private, other | 53 | | 14.7% | | 227 | | 18.0% | 280 | | 17.3% |
| **Pregnancy-Related Factors** | | | | | | | | | | |
| **Adequacy of Prenatal Care3** |  | |  | | |  |  |  | |  |
| Adequate Total**4** | 208 | | 56.8% | | | 844 | 66.3% | 1052 | | 64.2% |
| Adequate Intensive | 102 | | 27.9% | | | 400 | 31.4% | 502 | | 30.6% |
| Adequate Basic | 106 | | 29.0% | | | 444 | 34.9% | 550 | | 33.6% |
| Intermediate | 35 | | 9.6% | | | 114 | 9.0% | 149 | | 9.1% |
| Inadequate/None | 114 | | 31.1% | | | 284 | 22.3% | 398 | | 24.3% |
| Unknown | 9 | | 2.5% | | | 31 | 2.4% | 40 | | 2.4% |
| **Parity5** |  | |  | | |  |  | | |  |
| 1 | 348 | | 95.1% | | | 1094 | 86.0% | 1442 | | 88.0% |
| 2 | 17 | | 4.6% | | | 161 | 12.7% | 178 | | 10.9% |
| 3+ | --6 | | --6 | | | 17 | 1.3% | 18 | | 1.1% |
| **Smoking during Pregnancy** |  | |  | | |  |  | | |  |
| Yes | 13 | | 3.7% | | | 71 | 5.8% | 84 | | 5.3% |
| No | 341 | | 96.3% | | | 1158 | 94.2% | 1499 | | 94.7% |
| **Birth Outcomes** | | | | | | | | | | |
| **Birthweight** |  | |  | | |  |  |  | |  |
| < 500 g | 0 | | 0.0% | | | --6 | --6 | --6 | | --6 |
| 500-1,499 g | --6 | | --6 | | | 16 | 1.3% | 20 | | 1.2% |
| 1,500-2,499 g | 28 | | 7.7% | | | 108 | 8.5% | 136 | | 8.3% |
| **LBW (<2,499 g)** | 32 | | 8.7% | | | 125 | 9.8% | 157 | | 9.6% |
| 2,500-3,999 g | 319 | | 87.2% | | | 1080 | 84.8% | 1399 | | 85.4% |
| 4000+ g | 15 | | 4.1% | | | 68 | 5.3% | 83 | | 5.1% |
| **Gestational Age** |  | |  | | |  |  | | |  |
| < 28 weeks | 0 | | 0.0% | | | 10 | 0.8% | 10 | | 0.6% |
| **Preterm (< 37 weeks)** | 36 | | 9.8% | | | 110 | 8.6% | 146 | | 8.9% |
| 37-42 weeks | 330 | | 90.2% | | | 1162 | 91.4% | 1492 | | 91.1% |
| **Plurality** |  | |  | | |  |  | | |  |
| Singleton | 363 | | 99.2% | | | 1257 | 98.7% | 1620 | | 98.8% |
| Multiple birth | --6 | | --6 | | | 16 | 1.3% | 19 | | 1.2% |
| **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. 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 6. Number and Teen Birth Rates by Race/Hispanic Ethnicity for Selected Communities, Massachusetts: 2018

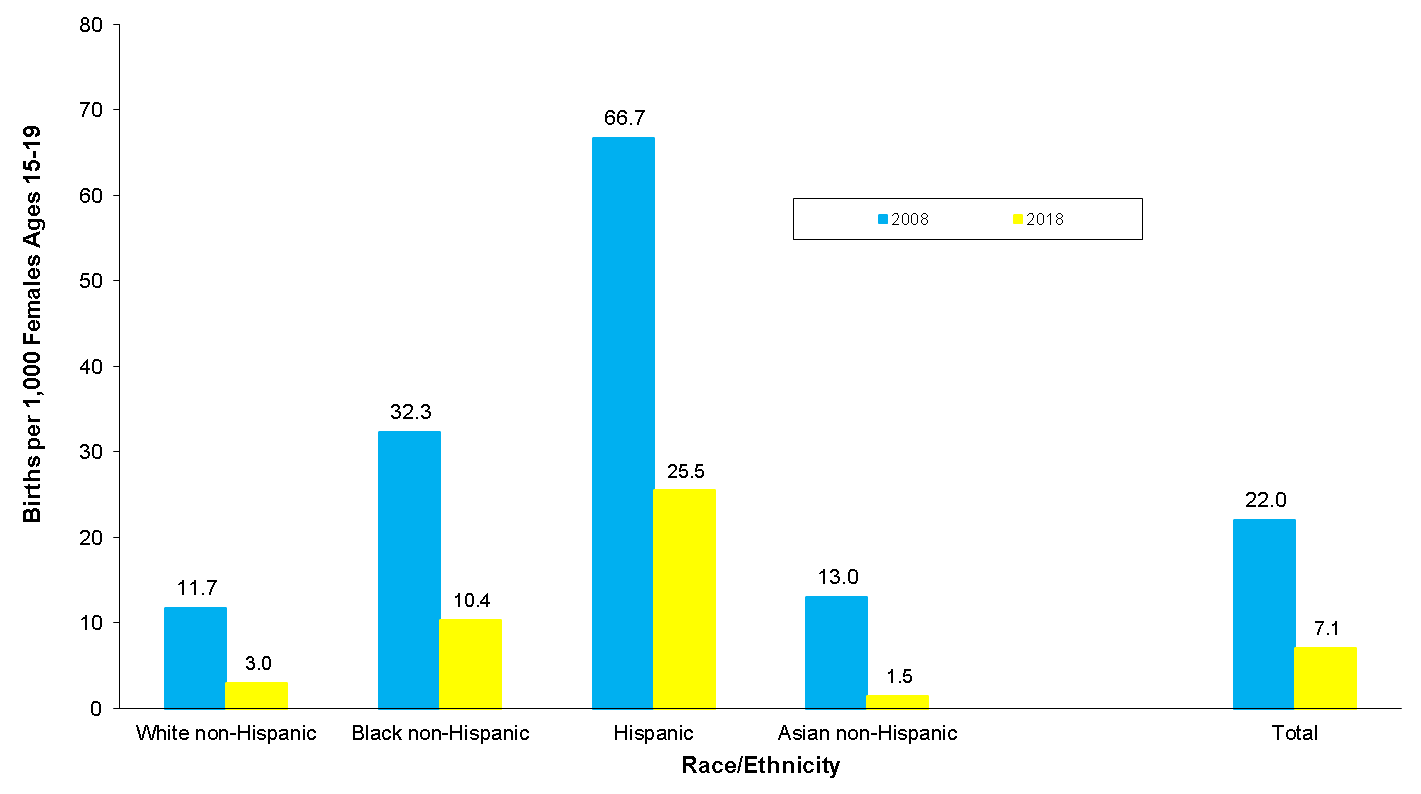
|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Municipality1** | **Teen Births** | | **White Non-Hispanic** | | **Black Non-Hispanic** | | **Hispanic** | |
|  | **N** | **Rate (95%CI)2,3** | **N** | **Rate (95%CI) 2,3** | **N** | **Rate (95%CI) 2,3** | **N** | **Rate (95%CI) 2,3** |
| **State Total** | **1,639** | **7.1 (6.7, 7.4)** | **459** | **3 (2.8, 3.3)** | **191** | **10.4 (8.9, 11.9)** | **926** | **25.7 (24, 27.3)** |
|  |  |  |  |  |  |  |  |  |
| Chelsea | 44 | 40.1 (28.6, 53.4) | --4 | --4 | --4 | --4 | 36 | 40.3 (28.8, 53.6) |
| Holyoke | 45 | 32.9 (22.7, 45.1) | --4 | --4 | --4 | --4 | 39 | 39.1 (27.8, 52.2) |
| Lawrence | 106 | 32.4 (26.2, 38.5) | --4 | --4 | --4 | --4 | 100 | 34 (27.3, 40.7) |
| New Bedford | 88 | 29.1 (19.5, 40.6) | 18 | 12.4 (6.5, 20.2) | 10 | 29.1 (19.5, 40.6) | 56 | 53.8 (40.4, 69) |
| Springfield | 174 | 28 (23.8, 32.1) | 7 | 6.4 (2.4, 12.2) | 18 | 15.5 (8.8, 24.1) | 147 | 41.1 (34.4, 47.7) |
| Fall River | 63 | 25.3 (16.4, 36) | 20 | 12.9 (6.8, 20.8) | 6 | 34 (23.6, 46.4) | 36 | 67 (52, 84) |
| Pittsfield | 29 | 23.7 (15.2, 34.2) | 19 | 25.6 (16.6, 36.4) | 7 | 45.8 (33.5, 59.9) | --4 | --4 |
| Lynn | 62 | 19.5 (11.8, 29.1) | --4 | --4 | --4 | --4 | 52 | 30.7 (20.8, 42.5) |
| Brockton | 57 | 18.2 (10.8, 27.4) | 8 | 12.1 (6.3, 19.9) | 34 | 19 (11.5, 28.5) | 11 | 25.5 (16.6, 36.3) |
| Lowell | 63 | 16.1 (9.2, 24.8) | 9 | 6.3 (2.4, 12) | --4 | --4 | 41 | 38.7 (27.5, 51.8) |
| Fitchburg | 25 | 15.9 (9, 24.6) | 6 | 6.9 (2.7, 12.9) | --4 | --4 | 19 | 36.4 (25.5, 49.1) |
| Haverhill | 26 | 14.8 (8.2, 23.2) | 13 | 12.2 (6.4, 20) | --4 | --4 | 12 | 23.1 (14.7, 33.4) |
| Marlboro | 15 | 14 (7.7, 22.2) | --4 | --4 | --4 | --4 | 12 | 46.3 (34, 60.6) |
| Chicopee | 22 | 13.2 (7.1, 21.2) | 6 | 6.3 (2.4, 12.1) | --4 | --4 | 13 | 24 (15.4, 34.5) |
| Worcester | 94 | 12.6 (6.6, 20.5) | 24 | 7.5 (3.1, 13.7) | 10 | 8.6 (3.8, 15.2) | 58 | 24.7 (15.9, 35.4) |
| Barnstable | 13 | 12.3 (6.4, 20.1) | 5 | 6.3 (2.4, 12.1) | --4 | --4 | 5 | 49.6 (36.7, 64.3) |
| Leominster | 13 | 11.2 (5.7, 18.7) | 5 | 7.2 (3, 13.4) | --4 | --4 | 8 | 24.8 (16, 35.4) |
| Taunton | 17 | 10.4 (5.1, 17.6) | 9 | 8 (3.4, 14.4) | --4 | --4 | 5 | 21.9 (13.7, 32) |
| Attleboro | 13 | 10.4 (5.1, 17.6) | 11 | 12.7 (6.7, 20.6) | --4 | --4 | --4 | --4 |
| Methuen | 17 | 9.6 (4.5, 16.6) | --4 | --4 | --4 | --4 | 14 | 18.8 (11.3, 28.3) |
| Everett | 14 | 9.5 (4.4, 16.4) | --4 | --4 | --4 | --4 | 8 | 14.8 (8.2, 23.2) |
| Waltham | 18 | 7.5 (3.1, 13.7) | --4 | --4 | --4 | --4 | 13 | 27 (17.8, 38.1) |
| Westfield | 13 | 7.3 (3, 13.4) | 8 | 5.4 (1.9, 10.8) | --4 | --4 | 5 | 21.6 (13.5, 31.6) |
| Framingham | 17 | 6.8 (2.7, 12.7) | --4 | --4 | --4 | --4 | 15 | 31.2 (21.2, 43) |
| Boston | 162 | 6.5 (5.5, 7.5) | 8 | 0.8 (0, 3.2) | 60 | 10.9 (5.5, 18.3) | 92 | 17.1 (10, 26.1) |

|  |
| --- |
| NOTE: The total number of Asian Non-Hispanic teen births in MA in 2018 was 28 for a rate of 1.6/1,000 significantly lower than the state rate of 7.1. Lowell had the largest number of Asian Non-Hispanic teen births at 12 births. The Asian Non-Hispanic teen birth rate in this community was slightly 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. If the population in your community increased from 2010 to 2018, the rates listed may overestimate the actual rate. If the population in your community declined from 2010 to 2018, the rates given in the publication may underestimate the actual rate. 4. Counts and rates based on counts of 1-4 births are excluded. |

Table 7. Trends in Teen Birth Rates for Selected Communities, Ranked by 2018 Teen Birth Rate, Massachusetts: 2008, 2017-2018

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | **2008** | | **2017** | | **2018** | | | **2018 Rank** | **Municipality1** | **# Births 15-19** | **Birth Rate2** | **# Births 15-19** | **Birth Rate 2,3** | **# Births 15-19** | **Birth Rate 2,3** | |  | **State Total** | **4,583** | **20.1** | **1,827** | **8.1** | **1,639** | **7.1** | |  |  |  |  |  |  |  |  | | 1 | Chelsea | 97 | 97.0 | 44 | 36.8 | 44 | 40.1 | | 2 | Holyoke | 174 | 115.3 | 40 | 26.5 | 45 | 32.9 | | 3 | Lawrence | 245 | 80.9 | 117 | 34.5 | 106 | 32.4 | | 4 | New Bedford | 186 | 62.9 | 92 | 30.3 | 88 | 29.1 | | 5 | Springfield | 373 | 61.4 | 195 | 28.5 | 174 | 28.0 | | 6 | Fall River | 159 | 56.2 | 67 | 24.1 | 63 | 25.3 | | 7 | Pittsfield | 60 | 47.2 | 21 | 15.7 | 29 | 23.7 | | 8 | Lynn | 164 | 53.2 | 91 | 28.2 | 62 | 19.5 | | 9 | Brockton | 155 | 42.6 | 60 | 17.9 | 57 | 18.2 | | 10 | Lowell | 193 | 48.7 | 65 | 15.8 | 63 | 16.1 | | 11 | Fitchburg | 60 | 38.4 | 35 | 19.7 | 25 | 15.9 | | 12 | Haverhill | 61 | 32.0 | 28 | 15.6 | 26 | 14.8 | | 13 | Marlborough | 27 | 27.3 | 13 | 12.6 | 15 | 14.0 | | 14 | Leominster | 29 | 23.1 | 12 | 10.2 | 13 | 11.2 | | 15 | Chicopee | 59 | 33.9 | 31 | 16.5 | 22 | 13.2 | | 16 | Taunton | 40 | 24.5 | 18 | 10.3 | 17 | 10.4 | | 17 | Worcester | 256 | 36.4 | 110 | 14.2 | 94 | 12.6 | | 18 | Attleboro | 30 | 26.4 | 7 | 5.2 | 13 | 10.4 | | 19 | Barnstable | 31 | 24.2 | 14 | 11.0 | 13 | 12.3 | | 20 | Methuen | 30 | 22.6 | 14 | 8.6 | 17 | 9.6 | | 21 | Everett | 43 | 40.6 | 18 | 13.7 | 14 | 9.5 | | 22 | Waltham | 35 | 15.0 | 14 | 5.9 | 18 | 7.5 | | 23 | Westfield | 38 | 22.0 | 8 | 4.4 | 13 | 7.3 | | 24 | Framingham | 53 | 27.1 | 19 | 8.1 | 17 | 6.8 | | 25 | Boston | 565 | 28.6 | 202 | 7.8 | 162 | 6.5 |   1. Selected communities include the 25 Massachusetts cities and towns with the greatest number of teen births in 2018. Ranking is by 2018 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. 4. Counts and rates based on counts of 1-4 births are excluded. **If the population in your community increased from 2010 to 2018, the rates listed may overestimate the actual rate. If the population in your community declined from 2010 to 2018, the rates given in the publication may underestimate the actual rate.** 4. Birth rates for select cities and towns were calculated using the Massachusetts Department of Public Health Race Allocated Census 2004 Estimates file (MRACE 2004), which is the most up-to-date information available prior to 2010 on the number of persons by age, race, and sex at the sub-state level. |

Figure 2. Teen Birth Rates among Females Ages 15-19 Years by Mother’s Race/Hispanic Ethnicity, Massachusetts: 2008 and 2018



**NOTE:** Teen birth rate is number of births to females ages 15-19 per 1,000 females ages 15-19.  2008 birth rates are based upon the 2008 population estimates from the National Center for Health Statistics.  2018 birth rates are based upon UMass Donahue Institute population estimates for 2018.

Table 8. Births by Birthweight, Race/Hispanic Ethnicity, Massachusetts: 2018

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Birthweight** | **Total** | | **White Non-**  **Hispanic** | | **Black Non-**  **Hispanic** | | **Hispanic** | | **Asian Non-**  **Hispanic** | | **Other Non-**  **Hispanic** | | **Unknown Race/Ethnicity** | |
| **(in grams)** | **n** | **%1** | **n** | **%1** | **n** | **%1** | **n** | **%1** | **n** | **%1** | **n** | **%1** | **n** | **%1** |
| **State Total** | **69,098** | **100.0** | **40,989** | **100.0** | **7,142** | **100.0** | **13,748** | **100.0** | **6,411** | **100.0** | **721** | **100.0** | **1,120** | **100.0** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <500 | 92 | 0.1 | 31 | 0.1 | 22 | 0.3 | 26 | 0.2 | --2 | --2 | --2 | --2 | 9 | 0.8 |
| 500-999 | 252 | 0.4 | 94 | 0.2 | 65 | 0.9 | 64 | 0.5 | 15 | 0.2 | --2 | --2 | 11 | 1.0 |
| 1,000-1,499 | 485 | 0.7 | 237 | 0.6 | 82 | 1.2 | 124 | 0.9 | 28 | 0.4 | --2 | --2 | 10 | 0.9 |
| 1,500-1,999 | 1,037 | 1.5 | 524 | 1.3 | 151 | 2.1 | 230 | 1.7 | 92 | 1.4 | 13 | 1.8 | 27 | 2.5 |
| 2,000-2,499 | 3,377 | 4.9 | 1,713 | 4.3 | 447 | 6.3 | 737 | 5.4 | 367 | 5.7 | 45 | 6.3 | 68 | 6.4 |
| 2,500-2,999 | 11,950 | 17.3 | 5,999 | 15.1 | 1,424 | 20.0 | 2,708 | 19.7 | 1,512 | 23.6 | 126 | 17.5 | 181 | 17.0 |
| 3,000-3,499 | 26,425 | 38.3 | 14,791 | 37.1 | 2,731 | 38.3 | 5,482 | 39.9 | 2,730 | 42.6 | 268 | 37.2 | 423 | 39.8 |
| 3,500-3,999 | 19,291 | 28.0 | 12,262 | 30.8 | 1,732 | 24.3 | 3,448 | 25.1 | 1,391 | 21.7 | 200 | 27.8 | 258 | 24.3 |
| 4,000-4,499 | 5,222 | 7.6 | 3,654 | 9.2 | 415 | 5.8 | 796 | 5.8 | 241 | 3.8 | 54 | 7.5 | 62 | 5.8 |
| 4,500-4,999 | 754 | 1.1 | 550 | 1.4 | 51 | 0.7 | 107 | 0.8 | 28 | 0.4 | --2 | --2 | 14 | 1.3 |
| >=5,000 | 56 | 0.1 | 38 | 0.1 | 6 | 0.1 | 11 | 0.1 | 0 | 0.0 | --2 | --2 | 0 | 0.0 |
| Unknown birthweight | 157 | 0.2 | 63 | 0.2 | 16 | 0.2 | 15 | 0.1 | 5 | 0.1 | --2 | --2 | 57 | 5.1 |
| **VLBW3 (0-1,499 g)** | 829 | 1.2 | 362 | 0.9 | 169 | 2.4 | 214 | 1.6 | 45 | 0.7 | 9 | 1.3 | 30 | 2.8 |
| **LBW4  (0-2,499 g)** | 5,243 | 7.6 | 2,599 | 6.4 | 767 | 10.8 | 1,181 | 8.6 | 504 | 7.9 | 67 | 9.3 | 125 | 11.8 |
| **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 9. Low Birthweight by Plurality and Maternal Age, Massachusetts: 2008-2018 | | | | | | | | | | | | | | | | | | | | | | |
| **Maternal Age Group**  **(years)** | **Year** | **Singleton** | | | | **Multiples** | | | | | | | | | | | | **Total Births** | | | | |
| **Twin** | | | | **Triplets or more** | | | | **Total Multiples** | | | |
| **VLBW1** | | **LBW2** | | **VLBW1** | | **LBW2** | | **VLBW1** | | **LBW2** | | **VLBW1** | | **LBW2** | | **VLBW1** | | **LBW2** | | |
| **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| **All Ages** | 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 | |
|  | 2016 | 596 | 0.9 | 3,904 | 5.7 | 208 | 8.1 | 1,351 | 52.7 | 38 | 42.2 | 86 | 95.6 | 258 | 6.8 | 1,514 | 39.7 | 842 | 1.2 | 5,341 | 7.5 | |
|  | 2017 | 575 | 0.8 | 3,878 | 5.7 | 183 | 7.3 | 1,342 | 53.4 | 16 | 34 | 41 | 87.2 | 206 | 5.9 | 1,443 | 41.2 | 774 | 1.1 | 5,261 | 7.5 | |
|  | 2018 | 583 | 0.9 | 3860 | 5.8 | 210 | 8.9 | 1318 | 56 | 36 | 53 | 65 | 96 | 258 | 7.5 | 1468 | 43 | 829 | 1.2 | 5243 | 7.6 | |
| **Ages < 35** | 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 | |
|  | 2016 | 443 | 0.9 | 2,952 | 5.7 | 145 | 9.1 | 865 | 54.1 | 22 | 46.8 | 47 | 100.0 | 178 | 6.9 | 977 | 37.8 | 610 | 1.1 | 3,864 | 7.2 | |
|  | 2017 | 446 | 0.9 | 2,920 | 5.7 | 122 | 7.4 | 924 | 56.1 | 3 | 16.7 | 14 | 77.8 | 132 | 5.4 | 992 | 40.9 | 571 | 1.1 | 3,858 | 7.3 | |
|  | 2018 | 396 | 0.8 | 2,798 | 5.7 | 157 | 10.3 | 859 | 56.6 | 20 | 57.1 | 35 | 100 | 188 | 8 | 967 | 40.9 | 573 | 1.1 | 3,692 | 7.3 | |
| **Ages 35+** | 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 | |
|  | 2016 | 153 | 0.9 | 952 | 5.7 | 63 | 6.5 | 486 | 50.3 | 16 | 37.2 | 39 | 90.7 | 80 | 6.5 | 537 | 43.8 | 232 | 1.3 | 1,477 | 8.4 | |
|  | 2017 | 129 | 0.8 | 958 | 5.7 | 61 | 7 | 418 | 48.3 | 13 | 44.8 | 27 | 93.1 | 74 | 6.9 | 451 | 41.8 | 203 | 1.1 | 1,403 | 7.9 | |
|  | 2018 | 187 | 1.1 | 1,061 | 6.1 | 53 | 6.3 | 457 | 54.5 | 16 | 48.5 | 30 | 90.9 | 70 | 6.4 | 499 | 45.7 | 256 | 1.4 | 1,548 | 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 10.** **Births by Gestational Age, Race/Hispanic Ethnicity, Massachusetts: 2018**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gestational Age**1  **(weeks completed)** | | **Total** | | **White Non-Hispanic** | | **Black Non-Hispanic** | | **Hispanic** | | **Asian Non-Hispanic** | | **Other Non-Hispanic**3 | | **Unknown** |
| **n** | **%2** | **n** | **%2** | **n** | **%2** | **n** | **%2** | **n** | **%2** | **n** | **%2** | **n** |
| **State Total** | **69,098** | | **100.0** | **39,956** | **100.0** | **7,142** | **100.0** | **13,748** | **100.0** | **6,411** | **100.0** | **721** | **100.0** | **1,120** |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| <20 | 13 | | 0.02 | --4 | --4 | --4 | --4 | 6 | 0.04 | 0 | 0.0 | 0 | 0.0 | --4 |
| 20-23 | 96 | | 0.14 | 37 | 0.1 | 26 | 0.4 | 21 | 0.2 | --4 | --4 | --4 | --4 | 6 |
| 24-27 | 257 | | 0.34 | 94 | 0.2 | 72 | 1.0 | 64 | 0.5 | 16 | 0.2 | --4 | --4 | 8 |
| 28-31 | 552 | | 0.73 | 287 | 0.7 | 84 | 1.2 | 124 | 0.9 | 35 | 0.5 | 7 | 1.0 | 15 |
| 32-33 | 760 | | 1.00 | 388 | 1.0 | 109 | 1.5 | 193 | 1.4 | 37 | 0.6 | 11 | 1.5 | 22 |
| 34-36 | 4,489 | | 5.64 | 2,522 | 6.3 | 497 | 7.0 | 939 | 6.8 | 410 | 6.4 | 47 | 6.5 | 74 |
| 37-38 | 16,162 | | 21.50 | 8,730 | 21.9 | 1,811 | 25.4 | 3,492 | 25.4 | 1,713 | 26.7 | 167 | 23.2 | 249 |
| 39 | 23,679 | | 19.44 | 13,626 | 34.1 | 2,292 | 32.1 | 4,811 | 35.0 | 2,318 | 36.2 | 282 | 39.1 | 350 |
| 40 | 15,994 | | 13.99 | 9,710 | 24.3 | 1,544 | 21.6 | 2,974 | 21.6 | 1,391 | 21.7 | 143 | 19.8 | 232 |
| 41 | 6,763 | | 4.67 | 4,372 | 10.9 | 678 | 9.5 | 1,100 | 8.0 | 477 | 7.4 | 56 | 7.8 | 80 |
| 42 | 219 | | 0.16 | 152 | 0.4 | 26 | 0.4 | 22 | 0.2 | 9 | 0.1 | --4 | --4 | 7 |
| 43 | 5 | | 0.00 | --4 | --4 | --4 | --4 | --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)** | **6,167** | | 8.9 | **3,331** | **8.3** | **789** | **11.0** | **1,347** | **9.8** | **502** | **7.8** | **70** | **9.7** | **128** |
| Very Early6 (<28) | 366 | | 0.5 | 134 | 0.3 | 99 | 1.4 | 91 | 0.7 | 20 | 0.3 | 5 | 0.7 | 17 |
| (28-33) | 1,312 | | 1.9 | 675 | 1.7 | 193 | 2.7 | 317 | 2.3 | 72 | 1.1 | 18 | 2.5 | 37 |
| Late (34-36) | 4,489 | | 6.5 | 2,522 | 6.3 | 497 | 7.0 | 939 | 6.8 | 410 | 6.4 | 47 | 6.5 | 74 |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| **Term ( >=37 )** | **62,825** | | **91.1** | **36,596** | **91.7** | **6,352** | **89.0** | **12,400** | **90.2** | **5,908** | **92.2** | **651** | **90.3** | **918** |
| Early Term (37-38) | 16,162 | | 23.4 | 8,730 | 21.9 | 1,811 | 25.4 | 3,492 | 25.4 | 1,713 | 26.7 | 167 | 23.2 | 249 |
| (39-41) | 46,436 | | 67.2 | 27,708 | 69.4 | 4,514 | 63.2 | 8,885 | 64.6 | 4,186 | 65.3 | 481 | 66.7 | 662 |
| (>=42) | 227 | | 0.3 | 158 | 0.4 | 27 | 0.4 | 23 | 0.2 | 9 | 0.1 | --4 | --4 | 7 |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| Unknown7 | 106 | |  | 29 |  | --4 | --4 | --4 | --4 | --4 | --4 | 0 | 0.0 | 74 |
| **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 11. Percent Preterm and Term Births by Gestational Age Category, Massachusetts: 2002-2018**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Preterm1** | | | **Term2** | |
| **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)** |
| 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 |
| 2016 | 0.6 | 1.8 | 6.3 | 22.8 | 91.3 |
| 2017 | 0.5 | 1.8 | 6.6 | 23.2 | 91.1 |
| 2018 | 0.5 | 1.9 | 6.5 | 23.4 | 91.0 |

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 Care2,3 by Race/Hispanic Ethnicity, Massachusetts: 1998-2018

**NOTE:** FOR PURPOSES OF VISUAL REPRESENTATION THE VERTICAL SCALE OF GRAPH REPRESENTS A SMALL INTERVAL (from 50% to 100%).

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

2. 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. Data from Metro West hospital are not included in years 2011 and 2012 because of reporting problems. Data from Newton Wellesley, Saint Vincent, and Winchester hospitals are not included in years 2011-2017 because of reporting problems.

3. Please use caution in interpreting this figure. The birth facility is responsible for collecting prenatal care data reported on the birth certificate. If prenatal care was obtained at a different location, the birth facility may be unable to obtain complete prenatal care data. Missing prenatal care data will impact the APNCU Index.

Figure 4. Adequacy of Prenatal Care by Selected Maternal Characteristics, Massachusetts: 2018

**NOTE:** All percentages are calculated based on the Adequacy of Prenatal Care Utilization (APNCU) Index. 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 during the hospital stay.

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Characteristics of interest are not mutually exclusive, except as noted.

1. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. 2. Women 20 years of age and older. 3. Marital status at time of birth. 4. 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). 5. Mother was or was intending to breastfeed at the time the birth certificate was completed.

Figure 5. Distribution of Prenatal Care Payment Source, Massachusetts: 2018

**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.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | **Mother's Race and Ethnicity4** | | |  |  |  |
| **Municipality1** | **Rank3** | **Population** | **Crude2** | **White** | **Black** | **Hispanic** | **Asian5** | **Very Low Birthweight** | **Low Birthweight** |
|  |  |  | **Birth rate** | **Non-Hispanic** | **Non-Hispanic** |  | **or Other** | **(<1500 gms.)** | **(<2500 gms.)** |
|  |  |  |  |  | **%** | **%** | **%** | **%** | **%** |
| **STATE TOTAL** |  | **6,947,185** | **9.9** | **57.8** | **10.3** | **19.9** | **10.3** | **1.2** | **7.6** |
|  |  |  |  |  |  |  |  |  |  |
| Arlington | 29 | 45,680 | 11.2 | 62.4 | 3.3 | 3.7 | 28.2 | 1.2 | 8.8 |
| Attleboro | 28 | 46,245 | 10.5 | 75.8 | 7.6 | 9.7 | 6.8 | 0.6 | 6.6 |
| Boston | 1 | 691,548 | 10.8 | 40.7 | 22.8 | 24.7 | 9.6 | 1.4 | 8.6 |
| Brockton | 9 | 98,454 | 14.7 | 17.0 | 63.3 | 14.6 | 4.4 | 1.9 | 9.8 |
| Brookline | 18 | 64,077 | 8.9 | 59.5 | 3.2 | 7.7 | 27.7 | 0.5 | 6.3 |
| Cambridge | 5 | 112,028 | 10.0 | 50.8 | 11.6 | 8.9 | 26.0 | 0.7 | 6.5 |
| Chicopee | 23 | 56,825 | 9.3 | 55.6 | 7.8 | 32.3 | 3.6 | 1.1 | 7.6 |
| Everett | 27 | 48,215 | 12.5 | 24.6 | 17.6 | 45.7 | 10.8 | 2.2 | 8.5 |
| Fall River | 11 | 89,458 | 12.2 | 61.0 | 9.8 | 22.7 | 6.2 | 2.7 | 8.8 |
| Framingham | 14 | 74,148 | 12.2 | 47.2 | 7.8 | 30.0 | 13.0 | 1.0 | 8.9 |
| Haverhill | 17 | 65,703 | 11.6 | 56.1 | 4.2 | 34.9 | 3.6 | 1.5 | 8.3 |
| Lawrence | 12 | 87,151 | 16.6 | 6.8 | 2.2 | 89.1 | 1.7 | 1.5 | 8.5 |
| Lowell | 4 | 115,969 | 13.0 | 28.8 | 12.4 | 28.3 | 30.0 | 0.8 | 9.0 |
| Lynn | 7 | 100,315 | 14.4 | 22.2 | 10.6 | 54.9 | 7.5 | 1.6 | 9.3 |
| Malden | 15 | 67,268 | 13.0 | 31.1 | 18.3 | 16.2 | 31.5 | 0.8 | 6.8 |
| Medford | 21 | 60,570 | 11.2 | 63.5 | 9.3 | 9.1 | 16.1 | 0.7 | 5.0 |
| Methuen | 26 | 53,379 | 10.1 | 45.9 | 5.2 | 42.6 | 5.9 | 2.2 | 7.4 |
| New Bedford | 8 | 99,570 | 12.8 | 44.7 | 14.0 | 34.2 | 6.4 | 1.4 | 10.1 |
| Newton | 10 | 91,408 | 7.3 | 65.5 | 3.8 | 5.3 | 23.7 | 1.2 | 7.1 |
| Peabody | 25 | 55,688 | 9.9 | 64.5 | 5.3 | 18.4 | 4.0 | 1.1 | 10.4 |
| Plymouth | 19 | 62,040 | 7.5 | 87.7 | 3.7 | 6.0 | 2.4 | 0.6 | 6.1 |
| Quincy | 6 | 100,562 | 10.8 | 46.1 | 8.0 | 6.1 | 37.7 | 0.8 | 5.8 |
| Revere | 20 | 60,597 | 12.7 | 33.9 | 8.0 | 45.8 | 9.7 | 1.3 | 8.5 |
| Salem | 30 | 44,879 | 9.4 | 55.8 | 7.1 | 28.1 | 4.0 | 0.9 | 9.5 |
| Somerville | 13 | 76,133 | 10.6 | 62.2 | 6.3 | 16.8 | 13.5 | 0.9 | 6.6 |
| Springfield | 3 | 157,276 | 13.5 | 17.5 | 19.4 | 58.7 | 4.0 | 2.1 | 8.6 |
| Taunton | 22 | 57,381 | 10.6 | 64.3 | 18.7 | 13.6 | 2.6 | 1.3 | 9.5 |
| Waltham | 16 | 66,267 | 11.6 | 47.9 | 8.2 | 25.0 | 17.8 | 2.1 | 9.5 |
| Weymouth | 24 | 55,949 | 11.4 | 69.9 | 7.8 | 5.8 | 15.2 | 0.6 | 6.6 |
| Worcester | 2 | 191,093 | 12.1 | 40.0 | 21.1 | 29.9 | 8.4 | 1.4 | 8.7 |

Table 12. Resident Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2018

|  |
| --- |
| **Table 12 (cont’d). Resident Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2018** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Births** |  |  |  |  |
| **Municipality1** | **Gestational Diabetes** | **Adequate Prenatal Care7** | **Public Payment for Prenatal Care8** | **Unmarried** | **Teen Mothers 15 to 19 years9** | |
|  | **%** | **%** | **%** | **%** | **N** | **Rate** |
| **STATE TOTAL** | **7.0** | **81.6** | **38.5** | **32.6** | **1,639** | **8.1** |
|  |  |  |  |  |  |  |
| Arlington | 5.1 | 87.7 | 7.7 | 4.5 | --6 | --6 |
| Attleboro | 8.0 | 79.4 | 18.8 | 33.1 | 13 | 10.4 |
| Boston | 4.9 | 81.1 | 42.6 | 35.7 | 162 | 6.5 |
| Brockton | 7.7 | 70.8 | 72.9 | 54.2 | 57 | 18.2 |
| Brookline | 5.6 | 89.4 | 10.2 | 7.4 | --6 | --6 |
| Cambridge | 5.7 | 84.0 | 17.4 | 12.8 | 5 | 1.4 |
| Chicopee | 11.7 | 78.3 | 64.3 | 58.8 | 22 | 13.2 |
| Everett | 5.5 | 80.1 | 69.8 | 39.6 | 14 | 9.5 |
| Fall River | 8.4 | 80.1 | 71.1 | 63.1 | 63 | 25.3 |
| Framingham | 9.4 | 70.8 | 47.6 | 26.5 | 17 | 6.8 |
| Haverhill | 5.4 | 79.1 | 49.3 | 50.3 | 26 | 14.8 |
| Lawrence | 7.1 | 74.0 | 82.0 | 62.5 | 106 | 32.4 |
| Lowell | 8.8 | 76.0 | 64.0 | 53.4 | 63 | 16.1 |
| Lynn | 5.6 | 76.9 | 65.2 | 45.6 | 62 | 19.5 |
| Malden | 6.2 | 80.5 | 41.4 | 23.5 | 11 | 6.7 |
| Medford | 5.4 | 83.7 | 21.1 | 16.9 | 5 | 3.0 |
| Methuen | 7.1 | 78.0 | 49.5 | 39.4 | 17 | 9.6 |
| New Bedford | 9.5 | 77.1 | 73.0 | 65.8 | 88 | 29.1 |
| Newton | 4.5 | 86.9 | 10.3 | 8.7 | --6 | --6 |
| Peabody | 3.6 | 84.0 | 28.2 | 32.2 | 9 | 6.8 |
| Plymouth | 5.4 | 89.6 | 22.7 | 28.7 | 5 | 2.9 |
| Quincy | 7.4 | 85.7 | 30.0 | 22.4 | --6 | --6 |
| Revere | 3.0 | 79.1 | 63.1 | 35.5 | 12 | 7.1 |
| Salem | 3.5 | 81.3 | 38.7 | 35.5 | 9 | 5.7 |
| Somerville | 5.3 | 86.0 | 24.0 | 21.5 | 5 | 3.3 |
| Springfield | 9.0 | 76.9 | 80.5 | 71.2 | 174 | 28.0 |
| Taunton | 8.0 | 73.8 | 48.8 | 49.4 | 17 | 10.4 |
| Waltham | 4.8 | 82.9 | 33.8 | 25.5 | 18 | 7.5 |
| Weymouth | 9.4 | 88.2 | 21.0 | 25.4 | --6 | --6 |
| Worcester | 7.5 | 74.9 | 60.1 | 48.2 | 94 | 12.6 |

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. Rank is by population size. 4. For the category of Mother’s Race/Ethnicity, percentages are calculated based on the state total of resident births, including births for which mother’s race/Hispanic ethnicity is unknown. 5. Mothers who designated themselves as Non-Hispanic Asian, American Indian, or Other. 6. Counts and calculations based on 1-4 events are excluded. 7. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. 8. Public payment sources include CommonHealth, Healthy Start, Medicaid/MassHealth, and Medicare (may be HMO or managed care), or free care. 9. Births per 1,000 female residents ages 15-19; rates for cities and towns were calculated using UMass Donahue Institute (UMDI) estimates for 2018.

| Table 13. Birth Characteristics by Facility/Location, Massachusetts: 2018 | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Hospital**(1) | **Location** | (2)  **Occurrence Births (n)** | (3)  **Low Birthweight (%)** | (4)  **Public Pay for PNC (%)** | (5)  **Adequate Prenatal Care(%)** | (6)  **Early Term**  **(%)** | (7)  **Late Preterm**  **(%)** |
| **State Total** |  | **69,804** | **7.5** | **38.2** | **81.6** | **23.4** | **6.5** |
| Anna Jaques Hospital | Newburyport | 704 | 4.0 | 20.2 | 86.5 | 25.4 | 5.0 |
| Baystate Franklin Medical Center | Greenfield | 404 | 3.0 | 41.3 | 84.4 | 22.3 | 3.2 |
| Baystate Medical Center | Springfield | 3,964 | 11.2 | 58.8 | 79.9 | 25.8 | 8.3 |
| Berkshire Medical Center | Pittsfield | 728 | 6.5 | 46.9 | 80.9 | 19.8 | 4.7 |
| Beth Israel Deaconess Hospital - Plymouth | Plymouth | 827 | 3.5 | 26.3 | 86.4 | 19.5 | 4.5 |
| Beth Israel Deaconess Medical Center | Boston | 5,350 | 10.8 | 22.5 | 92.9 | 26.1 | 7.9 |
| Beverly Hospital | Beverly | 2,129 | 5.7 | 26.9 | 83.1 | 21.1 | 6.1 |
| Boston Medical Center | Boston | 2,820 | 9.8 | 83.6 | 59.0 | 24.7 | 7.3 |
| Brigham And Women's Hospital | Boston | 6,286 | 10.1 | 26.6 | 87.1 | 27.2 | 8.7 |
| Brockton Hospital | Brockton | 894 | 5.6 | 63.7 | 86.2 | 25.4 | 5.1 |
| Cambridge Birth Center | Cambridge | 80 | 0.0 | 31.3 | 81.3 | 20.0 | 0.0 |
| Cambridge Hospital | Cambridge | 1,068 | 4.5 | 68.9 | 79.8 | 23.6 | 3.6 |
| Cape Cod Hospital | Barnstable | 793 | --8 | 57.1 | 71.3 | 21.4 | --8 |
| Charlton Memorial Hospital | Fall River | 1,409 | 6.5 | 60.3 | 85.0 | 17.4 | 5.9 |
| Cooley Dickinson Hospital | Northampton | 513 | 2.5 | 43.1 | 92.8 | 15.6 | 2.3 |
| Emerson Hospital | Concord | 1,251 | 4.4 | 10.0 | 85.6 | 20.4 | 4.6 |
| Fairview Hospital | Great Barrington | 138 | 2.9 | 43.8 | 88.3 | 18.1 | 3.6 |
| Falmouth Hospital | Falmouth | 310 | 3.2 | 43.4 | 75.5 | 23.2 | 3.5 |
| Good Samaritan Medical Center | Brockton | 1,215 | --8 | 72.4 | 58.6 | 22.3 | 4.8 |
| HealthAlliance Hospital | Leominster | 634 | 4.3 | 59.4 | 85.2 | 20.5 | 3.2 |
| Heywood Hospital | Gardner | 424 | 3.3 | 69.8 | 81.3 | 21.9 | 1.4 |
| Holyoke Medical Center | Holyoke | 414 | 4.6 | 54.4 | 69.8 | 27.5 | 3.1 |
| Lawrence General Hospital | Lawrence | 1,420 | 6.1 | 74.2 | 76.9 | 21.2 | 5.7 |
| Lowell General Hospital | Lowell | 2,186 | 6.9 | 53.2 | 79.3 | 26.1 | 6.9 |
| Martha’s Vineyard Hospital | Oak Bluffs | 136 | 0.7 | 60.3 | 93.8 | 11.0 | 1.5 |
| Massachusetts General Hospital | Boston | 3,780 | 9.4 | 24.2 | 83.3 | 22.0 | 7.9 |
| Melrose-Wakefield Hospital | Melrose | 834 | --8 | 28.6 | 88.5 | 24.0 | --8 |
| Mercy Medical Center | Springfield | 1,185 | 3.1 | 68.1 | 84.0 | 20.3 | 2.8 |
| Metro West Medical Center-Framingham Union Hospital | Framingham | 1,086 | 6.7 | 58.0 | 63.2 | 26.9 | 8.1 |
| Milford Regional Medical Center | Milford | 842 | 3.6 | 36.9 | 94.4 | 22.6 | 4.5 |
| Mt. Auburn Hospital | Cambridge | 2,645 | 3.7 | 17.3 | 85.9 | 18.1 | 4.7 |
| Nantucket Cottage Hospital | Nantucket | 137 | 2.9 | 51.5 | 88.8 | 16.8 | 2.9 |
| Newton-Wellesley Hospital | Newton | 3,730 | 4.8 | 3.0 | 83.7 | 22.8 | 5.4 |
| North Shore Birth Center | Beverly | 51 | --8 | 33.3 | 90.2 | 29.4 | --8 |
| North Shore Medical Center - Salem Hospital | Salem | 1,165 | 5.9 | 57.1 | 82.1 | 25.1 | 4.5 |
| Norwood Hospital | Norwood | 463 | --8 | 26.7 | 78.1 | 23.8 | --8 |
| Saint Vincent Hospital | Worcester | 1,881 | 4.4 | 34.7 | 86.7 | 23.6 | 5.9 |
| South Shore Hospital | Weymouth | 3,055 | 6.6 | 16.4 | 89.1 | 22.2 | 6.7 |
| St. Elizabeth's Medical Center | Boston | 915 | 15.1 | 41.3 | 77.1 | 23.7 | 10.1 |
| St. Luke’s Hospital | New Bedford | 1,507 | 8.2 | 66.1 | 79.1 | 24.8 | 6.8 |
| Steward Holy Family Hospital | Methuen | 1,100 | 4.3 | 50.6 | 76.4 | 17.5 | 3.6 |
| Sturdy Memorial Hospital | Attleboro | 626 | 4.8 | 12.2 | 77.0 | 18.5 | 2.7 |
| Tobey Hospital | Wareham | 372 | 2.7 | 53.2 | 88.2 | 17.2 | 2.4 |
| Tufts Medical Center  **Table 13 (cont’d). Birth Characteristics by Facility/Location, Massachusetts: 2018** | Boston | 1,267 | 21.8 | 43.3 | 82.6 | 25.8 | 11.6 |
| UMass Memorial Medical Center | Worcester | 4,296 | 10.5 | 42.0 | 74.0 | 26.0 | 8.1 |
| Winchester Hospital | Winchester | 2,321 | 5.9 | 10.6 | 76.3 | 23.1 | 6.0 |
| Other Hospitals |  | 9 | 12.5 | 75.0 | 25.0 | 33.3 | 0.0 |
| Home, Enroute & Dr. Off. |  | 440 | 7.0 | 25.6 | 62.2 | 20.2 | 5.2 |
|  |  |  |  |  |  |  |  |

**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.

## 

Table 14. Resident Teen Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2018

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Municipality1** | | **Total Population Rank** | **Female Population, ages 15-19** | **Number of Teen Births (Ages 15-19)** | **Teen Birth Rate2** | **Mother's Race/Hispanic Ethnicity (% of teen births)** | | | |
| **White Non-Hispanic** | **Black Non-Hispanic** | **Hispanic** | **Asian or Other Non-Hispanic3** |
| **State Total** | |  | **231,245** | **1,639** | **7.1** | **28.2** | **11.7** | **56.9** | **3.1** |
| Arlington | 29 | 1,203 | --4 | --4 | --4 | 0.0 | 0.0 | 0.0 |
| Attleboro | 28 | 1,248 | 13 | 10.4 | 84.6 | --4 | 0.0 | 0.0 |
| Boston | 1 | 25,003 | 162 | 6.5 | 5.0 | 37.3 | 57.1 | --4 |
| Brockton | 9 | 3,138 | 57 | 18.2 | 14.0 | 59.6 | 19.3 | --4 |
| Brookline | 18 | 1,770 | --4 | --4 | --4 | 0.0 | 0.0 | 0.0 |
| Cambridge | 5 | 3,496 | 5 | 1.4 | 0.0 | --4 | --4 | 0.0 |
| Chicopee | 23 | 1,664 | 22 | 13.2 | 27.3 | --4 | 59.1 | --4 |
| Everett | 27 | 1,476 | 14 | 9.5 | --4 | --4 | 57.1 | --4 |
| Fall River | 11 | 2,493 | 63 | 25.3 | 31.7 | 9.5 | 57.1 | --4 |
| Framingham  30 | 14 | 2,512 | 17 | 6.8 | 0.0 | --4 | 88.2 | --4 |
| Haverhill | 17 | 1,760 | 26 | 14.8 | 50.0 | 0.0 | 46.2 | --4 |
| Lawrence | 12 | 3,275 | 106 | 32.4 | --4 | --4 | 95.2 | 0.0 |
| Lowell | 4 | 3,922 | 63 | 16.1 | 14.3 | 0.0 | 65.1 | 20.6 |
| Lynn | 7 | 3,181 | 62 | 19.5 | --4 | --4 | 86.7 | 0.0 |
| Malden | 15 | 1,641 | 11 | 6.7 | 45.5 | --4 | 45.5 | 0.0 |
| Medford | 21 | 1,649 | 5 | 3.0 | --4 | --4 | --4 | 0.0 |
| Methuen | 26 | 1,763 | 17 | 9.6 | --4 | 0.0 | 82.4 | 0.0 |
| New Bedford | 8 | 3,022 | 88 | 29.1 | 20.5 | 11.4 | 63.6 | --4 |
| Newton | 10 | 4,887 | --4 | --4 | --4 | 0.0 | 0.0 | 0.0 |
| Peabody | 25 | 1,317 | 9 | 6.8 | --4 | 0.0 | --4 | 0.0 |
| Plymouth | 19 | 1,736 | 5 | 2.9 | --4 | --4 | 0.0 | 0.0 |
| Quincy | 6 | 1,989 | --4 | --4 | --4 | 0.0 | --4 | --4 |
| Revere | 20 | 1,697 | 12 | 7.1 | --4 | 0.0 | 75.0 | 0.0 |
| Salem | 30 | 1,573 | 9 | 5.7 | 0.0 | --4 | 88.9 | 0.0 |
| Somerville | 13 | 1,528 | 5 | 3.3 | --4 | 0.0 | --4 | 0.0 |
| Springfield | 3 | 6,223 | 174 | 28.0 | 4.0 | 10.4 | 85.0 | --4 |
| Taunton | 22 | 1,639 | 17 | 10.4 | 52.9 | --4 | 29.4 | 0.0 |
| Waltham | 16 | 2,401 | 18 | 7.5 | --4 | 0.0 | 72.2 | --4 |
| Weymouth | 24 | 1,459 | --4 | --4 | --4 | 0.0 | 0.0 | 0.0 |
| Worcester | 2 | 7,452 | 94 | 12.6 | 25.5 | 10.6 | 61.7 | --4 |

**Table 14 (cont’d). Resident Teen Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2018**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Municipality1** | **Public Payment for Prenatal Care5 (%)** | **Unmarried (%)** | **Low Birthweight6 (%)** | **Preterm7**  **(%)** | **Adequacy of Prenatal Care8 (% of teen births)** | | | |
| **Adequate Intensive** | **Adequate Basic** | **Intermediate** | **Inadequate9** |
| **State Total** | **82.7** | **93.1** | **9.6** | **8.9** | **31.4** | **34.4** | **9.3** | **24.9** |
| Arlington | --4 | --4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --4 |
| Attleboro | --4 | 92.3 | 0.0 | 0.0 | 46.2 | --4 | --4 | --4 |
| Boston | 87.4 | 92.6 | 9.3 | 8.7 | 21.3 | 31.9 | 14.4 | 32.5 |
| Brockton | 86.0 | 96.5 | 17.5 | 10.5 | 27.8 | 31.5 | --4 | 37.0 |
| Brookline | --4 | --4 | 0.0 | 0.0 | --4 | 0.0 | 0.0 | 0.0 |
| Cambridge | 100.0 | 100.0 | 0.0 | 0.0 | --4 | --4 | 0.0 | --4 |
| Chicopee | 95.5 | 95.5 | --4 | --4 | 22.7 | 50.0 | --4 | 22.7 |
| Everett | 71.4 | 85.7 | --4 | --4 | 35.7 | 42.9 | 0.0 | --4 |
| Fall River | 88.9 | 98.4 | 15.9 | 11.1 | 51.6 | 25.8 | --4 | 17.7 |
| Framingham | 87.5 | 82.4 | --4 | --4 | --4 | 35.3 | --4 | 29.4 |
| Haverhill | 80.8 | 96.2 | --4 | --4 | --4 | 36.0 | 28.0 | 20.0 |
| Lawrence | 89.6 | 96.2 | 9.4 | 7.5 | 17.3 | 37.5 | 15.4 | 29.8 |
| Lowell | 87.3 | 93.7 | 11.1 | 14.3 | 29.0 | 21.0 | 14.5 | 35.5 |
| Lynn | 86.7 | 88.7 | 9.7 | 9.7 | 28.8 | 39.0 | --4 | 27.1 |
| Malden | 63.6 | 81.8 | --4 | 0.0 | --4 | 45.5 | 0.0 | --4 |
| Medford | 100.0 | 100.0 | 0.0 | 0.0 | --4 | --4 | 0.0 | --4 |
| Methuen | 82.4 | 100.0 | 0.0 | --4 | --4 | 35.3 | --4 | 29.4 |
| New Bedford | 80.5 | 90.7 | 5.7 | --4 | 43.0 | 32.6 | --4 | 20.9 |
| Newton | --4 | --4 | 0.0 | 0.0 | --4 | --4 | 0.0 | 0.0 |
| Peabody | 87.5 | 100.0 | --4 | --4 | --4 | --4 | 0.0 | --4 |
| Plymouth | --4 | --4 | 0.0 | 0.0 | --4 | --4 | 0.0 | 0.0 |
| Quincy | --4 | --4 | 0.0 | 0.0 | --4 | 0.0 | --4 | --4 |
| Revere | 100.0 | 91.7 | 0.0 | 0.0 | --4 | 50.0 | --4 | --4 |
| Salem | 100.0 | 100.0 | --4 | --4 | --4 | --4 | 0.0 | --4 |
| Somerville | --4 | --4 | 0.0 | 0.0 | --4 | 0.0 | --4 | --4 |
| Springfield | 96.5 | 94.2 | 8.6 | 10.3 | 28.4 | 44.4 | 9.5 | 17.8 |
| Taunton | 58.8 | 94.1 | --4 | 0.0 | --4 | 33.3 | 0.0 | 40.0 |
| Waltham | 72.2 | 88.9 | 0.0 | 0.0 | --4 | 50.0 | --4 | --4 |
| Weymouth | --4 | --4 | --4 | --4 | --4 | --4 | 0.0 | 0.0 |
| Worcester | 87.0 | 94.7 | 11.7 | 8.5 | 31.9 | 28.7 | 12.8 | 26.6 |
| **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 UMASS Donahue Institute (UMDI) population estimates for 2018. 3. Mothers who designated themselves as Non-Hispanic 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. 9. Inadequate includes those mothers with no prenatal care. | | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 15. Adequacy of Prenatal Care Utilization: Summary and Component Indices, Massachusetts: 2018 | | | | | | | | | | | |
|  | **Adequate Total1** | | **Adequate Intensive** | | **Adequate Basic** | | **Intermediate** | | **Inadequate** | | **Unknown** |
|  | n | % | n | % | n | % | n | % | n | % | n |
| **Summary Index** |  |  |  |  |  |  |  |  |  |  |  |  |
| Adequacy of Prenatal Care Utilization | 54,290 | 81.6 | 26,630 | 40.0 | 27,660 | 41.6 | 4,276 | 6.4 | 7,937 | 11.9 | 1,333 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Component Indices** |  |  |  |  |  |  |  |  |  |  |  |
| Adequacy of Initiation | 59,085 | 88.8 | 20,505 | 30.8 | 38,580 | 58.0 | 4,031 | 6.1 | 3,387 | 5.1 | 1,333 |
|  |  |  |  |  |  |  |  |  |  |  |  |  | |
| Adequacy of Received Services (Visits) | 60,687 | 91.3 | 31,693 | 47.7 | 28,994 | 43.6 | 4,840 | 7.3 | 976 | 1.5 | 1,333 |
| **NOTE:** All percentages are calculated based on the Adequacy of Prenatal Care Utilization (APNCU) Index**.**  1. Adequate Total is the sum of Adequate Intensive and Adequate Basic categories. | | | | | | | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 16. Birth Characteristics by Race/Hispanic Ethnicity and Source of Prenatal Care Payment, Massachusetts: 2018 | | | | | | | | | | | | | | | | |
|  | | | | **Births1** | |  | **Teen Births2** | | | | | | |  | **Birthweight** | | | | |
| **Race/Ethnicity and Payment Source** | | | |  |  |  | **<18 Years** | | | | **<20 Years** | | |  | **Very Low3** | | **Low4** | |
|  | | | | **n** | **%** |  | **n** | **%** |  | **n** | | | **%** |  | **n** | **%** | **n** | **%** |
| **STATE TOTAL5** | | **69,098** | | **100.0** |  | **388** | **0.6** |  | **1,661** | | **2.4** | |  | **829** | **1.2** | **5,243** | **7.6** |
| **Public** | | 26,313 | | 38.3 |  | 321 | 1.2 |  | 1,353 | | 5.1 | |  | 384 | 1.5 | 2,340 | 8.9 |
| Medicaid6 | | 23,378 | | 34.0 |  | 298 | 1.3 |  | 1,252 | | 5.4 | |  | 339 | 1.5 | 2,085 | 8.9 |
| Other Public7 | | 2,935 | | 4.3 |  | 23 | 0.8 |  | 101 | | 3.4 | |  | 45 | 1.5 | 255 | 8.7 |
| **Private8** | | 41,538 | | 60.5 |  | 52 | 0.1 |  | 269 | | 0.6 | |  | 401 | 1.0 | 2,747 | 6.6 |
|  | |  | |  |  |  |  |  |  | |  | |  |  |  |  |  |
| **White Non-Hispanic** | | **39,956** | | **100.0** |  | **73** | **0.2** |  | **463** | | **1.2** | |  | **362** | **0.9** | **2,599** | **6.5** |
| **Public** | | 9,275 | | 23.4 |  | 48 | 0.5 |  | 300 | | 3.2 | |  | 96 | 1.0 | 732 | 7.9 |
| Medicaid6 | | 7,824 | | 19.7 |  | 44 | 0.6 |  | 276 | | 3.5 | |  | 77 | 1.0 | 613 | 7.8 |
| Other Public7 | | 1,451 | | 3.7 |  | --9 | --9 |  | 24 | | 1.7 | |  | 19 | 1.3 | 119 | 8.2 |
| **Private8** | | 30,077 | | 75.7 |  | 23 | 0.1 |  | 156 | | 0.5 | |  | 250 | 0.8 | 1,806 | 6.0 |
|  | |  | |  |  |  |  |  |  | |  | |  |  |  |  |  |
| **Black Non-Hispanic** | | **7,142** | | **100.0** |  | **47** | **0.7** |  | **192** | | **2.7** | |  | **169** | **2.4** | **767** | **10.7** |
| **Public** | | 4,546 | | 63.9 |  | 38 | 0.8 |  | 156 | | 3.4 | |  | 110 | 2.4 | 483 | 10.6 |
| Medicaid6 | | 4,087 | | 57.5 |  | 36 | 0.9 |  | 144 | | 3.5 | |  | 98 | 2.4 | 439 | 10.7 |
| Other Public7 | | 459 | | 6.5 |  | --9 | --9 |  | 12 | | 2.6 | |  | 12 | 2.6 | 44 | 9.6 |
| **Private8** | | 2,374 | | 33.4 |  | 6 | 0.3 |  | 31 | | 1.3 | |  | 49 | 2.1 | 244 | 10.3 |
|  | |  | |  |  |  |  |  |  | |  | |  |  |  |  |  |
| **Hispanic** | | **13,748** | | **100.0** |  | **253** | **1.8** |  | **941** | | **6.8** | |  | **214** | **1.6** | **1,181** | **8.6** |
| **Public** | | 10,093 | | 73.6 |  | 222 | 2.2 |  | 842 | | 8.3 | |  | 153 | 1.5 | 889 | 8.8 |
| Medicaid6 | | 9,325 | | 68.0 |  | 205 | 2.2 |  | 781 | | 8.4 | |  | 140 | 1.5 | 816 | 8.8 |
| Other Public7 | | 768 | | 5.6 |  | 17 | 2.2 |  | 61 | | 7.9 | |  | 13 | 1.7 | 73 | 9.5 |
| **Private8** | | 3,458 | | 25.2 |  | 21 | 0.6 |  | 73 | | 2.1 | |  | 52 | 1.5 | 263 | 7.6 |
|  | |  | |  |  |  |  |  |  | |  | |  |  |  |  |  |
| **Asian Non-Hispanic** | | **6,411** | | **100.0** |  | **9** | **0.1** |  | **29** | | **0.5** | |  | **45** | **0.7** | **504** | **7.9** |
| **Public** | | 1,592 | | 24.9 |  | 7 | 0.4 |  | 21 | | 1.3 | |  | 11 | 0.7 | 132 | 8.3 |
| Medicaid6 | | 1,435 | | 22.4 |  | 7 | 0.5 |  | 20 | | 1.4 | |  | 11 | 0.8 | 125 | 8.7 |
| Other Public7 | | 157 | | 2.5 |  | 0 | 0.0 |  | --9 | | --9 | |  | 0 | 0.0 | 7 | 4.5 |
| **Private8** | | 4,735 | | 73.9 |  | --9 | --9 |  | 8 | | 0.2 | |  | 33 | 0.7 | 361 | 7.6 |
|  | |  | |  |  |  |  |  |  | |  | |  |  |  |  |  |
| **Other Non-Hispanic9** | | **721** | | **100.0** |  | --9 | --9 |  | **22** | | **3.1** | |  | **9** | **1.2** | **67** | **9.3** |
| **Public** | | 425 | | 60.0 |  | --9 | --9 |  | 21 | | 4.9 | |  | --9 | --9 | 41 | 9.6 |
| Medicaid6 | | 364 | | 51.4 |  | --9 | --9 |  | 18 | | 4.9 | |  | --9 | --9 | 34 | 9.3 |
| Other Public7 | | 61 | | 8.6 |  | 0 | 0.0 |  | --9 | | --9 | |  | 0 | 0.0 | 7 | 11.5 |
| **Private8** | | 273 | | 38.6 |  | 0 | 0.0 |  | --9 | | --9 | |  | --9 | --9 | 23 | 8.4 |
|  | |  | |  |  |  |  |  |  | |  | |  |  |  |  |  |

**Table 16 (cont’d).** **Birth Characteristics by Race/Hispanic Ethnicity and Source of Prenatal Care Payment, Massachusetts: 2018**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Prenatal Care** | | | |  |  |  |  |  |  |
| **Race/Ethnicity and Payment Source** | **Adequate11** | | **Began 1st Trimester** | | **Cesarean Delivery** | | **Breastfeeding12** | | **Smoking13** | |
|  | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** |
| **STATE TOTAL5** | **55,160** | **81.6** | **54,297** | **79.7** | **21,710** | **31.5** | **59,173** | **85.9** | **2,937** | **4.4** |
| **Public** | 19,063 | 74.0 | 18,170 | 70.0 | 8,335 | 31.7 | 21,310 | 81.2 | 2,135 | 8.4 |
| Medicaid6 | 16,888 | 73.8 | 16,056 | 69.6 | 7,365 | 31.5 | 18,970 | 81.4 | 1,899 | 8.4 |
| Other Public7 | 2,175 | 75.6 | 2,114 | 72.8 | 970 | 33.0 | 2,340 | 79.9 | 236 | 8.2 |
| **Private8** | 35,634 | 87.3 | 35,653 | 86.7 | 13,056 | 31.4 | 37,197 | 89.7 | 699 | 1.7 |
|  |  |  |  |  |  |  |  |  |  |  |
| **White Non-Hispanic** | **33,432** | **85.4** | **33,303** | **84.4** | **12,408** | **31.1** | **34,008** | **85.3** | **2,206** | **5.6** |
| **Public** | 7,029 | 77.6 | 6,728 | 73.6 | 2,907 | 31.3 | 6,997 | 75.6 | 1,554 | 17.2 |
| Medicaid6 | 5,900 | 77.3 | 5,618 | 72.9 | 2,465 | 31.5 | 5,878 | 75.3 | 1,367 | 17.9 |
| Other Public7 | 1,129 | 79.3 | 1,110 | 77.3 | 442 | 30.5 | 1,119 | 77.4 | 187 | 13.1 |
| **Private8** | 26,110 | 88.4 | 26,279 | 88.2 | 9,355 | 31.1 | 26,726 | 89.0 | 578 | 2.0 |
|  |  |  |  |  |  |  |  |  |  |  |
| **Black Non-Hispanic** | **4,861** | **69.9** | **4,673** | **66.6** | **2,607** | **36.5** | **6,263** | **88.2** | **217** | **3.1** |
| **Public** | 2,913 | 65.7 | 2,768 | 61.9 | 1,635 | 36.0 | 3,920 | 86.7 | 169 | 3.8 |
| Medicaid6 | 2,633 | 66.1 | 2,473 | 61.5 | 1,458 | 35.7 | 3,539 | 87.1 | 153 | 3.8 |
| Other Public7 | 280 | 62.1 | 295 | 65.1 | 177 | 38.6 | 381 | 83.6 | 16 | 3.5 |
| **Private8** | 1,903 | 81.5 | 1,859 | 78.9 | 901 | 38.0 | 2,179 | 92.2 | 36 | 1.6 |
|  |  |  |  |  |  |  |  |  |  |  |
| **Hispanic** | **10,277** | **76.2** | **9,862** | **72.6** | **4,269** | **31.1** | **11,633** | **84.9** | **409** | **3.1** |
| **Public** | 7,351 | 74.0 | 7,001 | 70.0 | 3,093 | 30.7 | 8,410 | 83.6 | 342 | 3.5 |
| Medicaid6 | 6,783 | 73.9 | 6,477 | 70.1 | 2,813 | 30.2 | 7,795 | 83.9 | 314 | 3.5 |
| Other Public7 | 568 | 75.4 | 524 | 68.9 | 280 | 36.5 | 615 | 80.1 | 28 | 3.7 |
| **Private8** | 2,860 | 84.4 | 2,788 | 81.6 | 1,118 | 32.3 | 3,096 | 89.8 | 56 | 1.7 |
|  |  |  |  |  |  |  |  |  |  |  |
| **Asian Non-Hispanic** | **5,252** | **83.1** | **5,191** | **81.6** | **1,868** | **29.2** | **5,830** | **91.0** | **51** | **0.8** |
| **Public** | 1,218 | 77.9 | 1,155 | 73.2 | 437 | 27.4 | 1,327 | 83.4 | 30 | 1.9 |
| Medicaid6 | 1,100 | 78.1 | 1,041 | 73.3 | 394 | 27.5 | 1,185 | 82.6 | 29 | 2.1 |
| Other Public7 | 118 | 76.1 | 114 | 72.6 | 43 | 27.4 | 142 | 90.4 | --9 | --9 |
| **Private8** | 4,005 | 85.6 | 4,006 | 85.1 | 1,411 | 29.8 | 4,438 | 93.8 | 18 | 0.4 |
|  |  |  |  |  |  |  |  |  |  |  |
| **Other Non-Hispanic10** | **527** | **76.0** | **506** | **72.0** | **241** | **33.4** | **606** | **84.3** | **47** | **6.8** |
| **Public** | 294 | 70.7 | 277 | 65.8 | 137 | 32.2 | 367 | 86.6 | 35 | 8.7 |
| Medicaid6 | 247 | 69.0 | 237 | 65.7 | 116 | 31.9 | 320 | 88.2 | 31 | 9.0 |
| Other Public7 | 47 | 81.0 | 40 | 66.7 | 21 | 34.4 | 47 | 77.0 | --9 | --9 |
| |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Private8** | 412 | 83.7 | 413 | 83.8 | 184 | 37.0 | 447 | 89.8 | 16 | 3.2 | | 227 | 85.3 | 224 | 83.0 | 94 | 34.4 | 228 | 83.8 | 10 | 3.7 |
|  | | | | | | | | | | |

**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. Teen births include births to female ages less than 20, not just those ages 15-19. 3. Very low birthweight: less than 1,500 grams or 3.3 pounds. 4. Low Birthweight: less than 2,500 grams or 5.5 pounds. 5. 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. 6. Medicaid/MassHealth. 7. Other Public: CommonHealth, Healthy Start, Medicare, other government programs, and free care. 8. Private: commercial indemnity plans or commercial managed care organizations (HMO, PPO, IPP, or IPA). It does not include Self-Paid/Other. 9. Calculations based on values of 1-4 are excluded. 10. Other: Mothers who designated their race as American Indian or “Other.” 11. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. 12. Infant was being breastfed during the hospital stay. 13. Mother reported smoking during pregnancy.

| Table 17. Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2018 | | | | | |
| --- | --- | --- | --- | --- | --- |
| **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** | **69,804** | **69,098** | **5,243** | **6,167** | **1,639** |
|  |  |  |  |  |  |
| Abington | 0 | 194 | 14 | 19 | -- |
| Acton | 1 | 190 | 8 | 7 | 0 |
| Acushnet | 0 | 74 | 6 | 7 | -- |
| Adams | 1 | 72 | 8 | 5 | -- |
| Agawam | 0 | 249 | 18 | 24 | -- |
| Alford | 0 | 0 | 0 | 0 | 0 |
| Amesbury | 1 | 155 | 10 | 10 | -- |
| Amherst | 1 | 120 | 11 | 13 | -- |
| Andover | 2 | 264 | 13 | 17 | 0 |
| Aquinnah (Formerly Gay Head) | 0 | 3 | 0 | 0 | -- |
| Arlington | 3 | 510 | 45 | 43 | -- |
| Ashburnham | 0 | 46 | -- | 0 | -- |
| Ashby | 0 | 30 | -- | -- | 0 |
| Ashfield | 0 | 10 | 0 | -- | 0 |
| Ashland | 2 | 204 | 14 | 11 | -- |
| Athol | 2 | 124 | 10 | 12 | 5 |
| Attleboro | 627 | 487 | 32 | 40 | 13 |
| Auburn | 1 | 153 | 5 | 11 | 0 |
| Avon | 0 | 41 | -- | -- | 0 |
| Ayer | 2 | 88 | 7 | 12 | -- |
| Barnstable | 797 | 409 | 31 | 44 | 13 |
| Barre | 0 | 55 | -- | -- | -- |
| Becket | 0 | 11 | -- | -- | 0 |
| Bedford | 0 | 111 | 12 | 11 | 0 |
| Belchertown | 1 | 122 | 10 | 15 | 0 |
| Bellingham | 1 | 175 | 12 | 17 | 5 |
| Belmont | 0 | 258 | 13 | 16 | 0 |
| Berkley | 0 | 53 | 6 | 5 | -- |
| Berlin | 0 | 19 | -- | -- | 0 |
| Bernardston | 0 | 11 | -- | -- | 0 |
| Beverly | 2,180 | 383 | 20 | 38 | 5 |
| Billerica | 1 | 435 | 45 | 46 | -- |
| Blackstone | 1 | 66 | -- | -- | 0 |
| Blandford | 0 | 12 | 0 | -- | 0 |
| Bolton | 0 | 46 | -- | -- | 0 |
| Boston | 20,471 | 7,483 | 639 | 753 | 162 |
| Bourne | 2 | 131 | 8 | 12 | 0 |
| Boxborough | 0 | 41 | -- | -- | 0 |
| Boxford | 1 | 78 | -- | -- | 0 |
| Boylston | 1 | 43 | -- | -- | 0 |
| Braintree | 4 | 380 | 26 | 28 | -- |
| Brewster | 0 | 49 | 0 | -- | -- |
| Bridgewater | 0 | 231 | 15 | 18 | -- |
| Brimfield | 0 | 24 | -- | -- | 0 |
| Brockton | 2,117 | 1,443 | 141 | 140 | 57 |
| Brookfield | 0 | 24 | -- | -- | -- |
| Brookline | 4 | 571 | 36 | 30 | -- |
| Buckland  **Table 17 (cont’d). Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2018** | 1 | 15 | 0 | 0 | 0 |
| Burlington | 0 | 275 | 28 | 29 | -- |
| Cambridge | 3,806 | 1,121 | 73 | 81 | 5 |
| Canton | 1 | 262 | 21 | 22 | -- |
| Carlisle | 0 | 40 | -- | -- | 0 |
| Carver | 0 | 103 | 8 | 12 | -- |
| Charlemont | 1 | 7 | 0 | -- | -- |
| Charlton | 3 | 125 | 6 | 11 | 0 |
| Chatham | 1 | 27 | -- | -- | -- |
| Chelmsford | 1 | 343 | 32 | 46 | -- |
| Chelsea | 1 | 630 | 48 | 63 | 44 |
| Cheshire | 1 | 30 | -- | -- | -- |
| Chester | 1 | 7 | 0 | 0 | 0 |
| Chesterfield | 0 | 14 | -- | -- | -- |
| Chicopee | 2 | 529 | 40 | 54 | 22 |
| Chilmark | 0 | 5 | 0 | 0 | 0 |
| Clarksburg | 0 | 12 | -- | -- | 0 |
| Clinton | 3 | 167 | 12 | 16 | -- |
| Cohasset | 0 | 88 | -- | -- | 0 |
| Colrain | 1 | 10 | -- | -- | 0 |
| Concord | 1,253 | 89 | -- | 6 | 0 |
| Conway | 2 | 11 | -- | -- | 0 |
| Cummington | 1 | 8 | -- | 0 | 0 |
| Dalton | 1 | 37 | -- | -- | -- |
| Danvers | 1 | 242 | 15 | 25 | -- |
| Dartmouth | 0 | 193 | 17 | 17 | -- |
| Dedham | 0 | 293 | 16 | 22 | -- |
| Deerfield | 0 | 23 | -- | -- | 0 |
| Dennis | 1 | 93 | 7 | 10 | 0 |
| Dighton | 1 | 71 | -- | -- | -- |
| Douglas | 0 | 73 | -- | -- | -- |
| Dover | 1 | 24 | -- | -- | 0 |
| Dracut | 0 | 316 | 18 | 25 | -- |
| Dudley | 3 | 101 | -- | 8 | 5 |
| Dunstable | 0 | 25 | -- | -- | 0 |
| Duxbury | 1 | 121 | -- | 6 | -- |
| East Bridgewater | 1 | 149 | 12 | 15 | -- |
| East Brookfield | 0 | 14 | 0 | -- | 0 |
| East Longmeadow | 3 | 136 | -- | 6 | 0 |
| Eastham | 0 | 23 | -- | -- | 0 |
| Easthampton | 2 | 108 | 8 | 8 | -- |
| Easton | 1 | 181 | 7 | 11 | -- |
| Edgartown | 0 | 56 | -- | -- | 0 |
| Egremont | 0 | 3 | 0 | 0 | 0 |
| Erving | 0 | 12 | -- | 0 | -- |
| Essex | 0 | 20 | 0 | 0 | 0 |
| Everett | 4 | 602 | 51 | 55 | 14 |
| Fairhaven | 1 | 112 | 9 | 10 | -- |
| Fall River | 1,413 | 1,091 | 96 | 112 | 63 |
| Falmouth | 312 | 187 | 9 | 18 | 5 |
| Fitchburg  **Table 17 (cont’d). Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2018** | 1 | 454 | 41 | 40 | 25 |
| Florida | 0 | 3 | -- | 0 | 0 |
| Foxborough | 2 | 176 | 12 | 16 | -- |
| Framingham | 1,090 | 906 | 81 | 86 | 17 |
| Franklin | 2 | 252 | 28 | 27 | -- |
| Freetown | 1 | 84 | 6 | 10 | -- |
| Gardner | 426 | 237 | 9 | 10 | 9 |
| Georgetown | 1 | 71 | 5 | 5 | -- |
| Gill | 0 | 11 | 0 | 0 | 0 |
| Gloucester | 3 | 248 | 25 | 22 | 6 |
| Goshen | 0 | 4 | 0 | 0 | 0 |
| Gosnold | 0 | 0 | 0 | 0 | 0 |
| Grafton | 5 | 201 | 12 | 18 | 0 |
| Granby | 0 | 32 | 0 | 0 | 0 |
| Granville | 0 | 6 | -- | 0 | 0 |
| Great Barrington | 140 | 48 | 5 | 6 | 0 |
| Greenfield | 408 | 130 | 6 | 5 | -- |
| Groton | 0 | 85 | 7 | 7 | 0 |
| Groveland | 0 | 49 | -- | -- | 0 |
| Hadley | 0 | 31 | -- | -- | 0 |
| Halifax | 0 | 67 | 6 | 10 | 0 |
| Hamilton | 2 | 81 | -- | -- | 0 |
| Hampden | 0 | 29 | 0 | -- | 0 |
| Hancock | 0 | 7 | 0 | 0 | 0 |
| Hanover | 2 | 133 | 5 | 10 | 0 |
| Hanson | 0 | 95 | 8 | 14 | 0 |
| Hardwick | 1 | 19 | -- | -- | -- |
| Harvard | 0 | 30 | -- | -- | 0 |
| Harwich | 1 | 79 | 6 | 9 | -- |
| Hatfield | 1 | 24 | -- | -- | 0 |
| Haverhill | 2 | 759 | 63 | 76 | 26 |
| Hawley | 0 | 0 | 0 | 0 | 0 |
| Heath | 0 | 6 | 0 | 0 | 0 |
| Hingham | 0 | 199 | 7 | 16 | -- |
| Hinsdale | 0 | 15 | 0 | -- | 0 |
| Holbrook | 0 | 117 | 12 | 16 | -- |
| Holden | 6 | 165 | 11 | 11 | -- |
| Holland | 0 | 18 | -- | -- | -- |
| Holliston | 0 | 124 | 6 | 6 | 0 |
| Holyoke | 417 | 516 | 52 | 54 | 45 |
| Hopedale | 1 | 47 | -- | -- | 0 |
| Hopkinton | 0 | 146 | 15 | 21 | 0 |
| Hubbardston | 1 | 26 | -- | -- | -- |
| Hudson | 3 | 193 | 16 | 16 | 5 |
| Hull | 1 | 42 | -- | 6 | 0 |
| Huntington | 1 | 18 | -- | -- | -- |
| Ipswich | 0 | 82 | 5 | 6 | -- |
| Kingston | 1 | 129 | 7 | 5 | -- |
| Lakeville | 1 | 74 | -- | 7 | -- |
| Lancaster | 1 | 58 | -- | 0 | -- |
| Lanesborough  **Table 17 (cont’d). Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2018** | 1 | 24 | -- | -- | 0 |
| Lawrence | 1,424 | 1,443 | 123 | 134 | 106 |
| Lee | 0 | 40 | -- | -- | -- |
| Leicester | 1 | 87 | 10 | 8 | -- |
| Lenox | 1 | 17 | -- | -- | 0 |
| Leominster | 636 | 463 | 37 | 38 | 13 |
| Leverett | 0 | 4 | -- | -- | 0 |
| Lexington | 1 | 152 | 8 | 12 | -- |
| Leyden | 0 | 3 | 0 | 0 | 0 |
| Lincoln | 2 | 86 | -- | 6 | -- |
| Littleton | 1 | 90 | 7 | 5 | 0 |
| Longmeadow | 0 | 103 | -- | -- | -- |
| Lowell | 2,190 | 1,502 | 135 | 135 | 63 |
| Ludlow | 1 | 147 | 14 | 16 | -- |
| Lunenburg | 0 | 109 | 7 | 11 | -- |
| Lynn | 2 | 1,442 | 134 | 146 | 62 |
| Lynnfield | 1 | 115 | 7 | 9 | 0 |
| Malden | 4 | 874 | 59 | 57 | 11 |
| Manchester | 0 | 27 | -- | -- | 0 |
| Mansfield | 1 | 215 | 13 | 15 | -- |
| Marblehead | 2 | 135 | 7 | 12 | -- |
| Marion | 1 | 23 | -- | -- | 0 |
| Marlborough | 1 | 481 | 23 | 37 | 15 |
| Marshfield | 1 | 214 | 6 | 10 | 0 |
| Mashpee | 0 | 116 | 9 | 7 | -- |
| Mattapoisett | 1 | 35 | -- | 6 | 0 |
| Maynard | 1 | 125 | 7 | 8 | 0 |
| Medfield | 1 | 118 | 6 | 6 | 0 |
| Medford | 6 | 679 | 34 | 34 | 5 |
| Medway | 0 | 106 | -- | 6 | 0 |
| Melrose | 836 | 382 | 22 | 34 | 5 |
| Mendon | 3 | 56 | 6 | 5 | 0 |
| Merrimac | 0 | 53 | 0 | -- | -- |
| Methuen | 1,102 | 538 | 40 | 51 | 17 |
| Middleborough | 1 | 199 | 18 | 19 | 5 |
| Middlefield | 0 | 0 | 0 | 0 | 0 |
| Middleton | 0 | 69 | -- | 6 | 0 |
| Milford | 845 | 341 | 27 | 35 | 9 |
| Millbury | 1 | 121 | 10 | 12 | -- |
| Millis | 1 | 86 | 5 | 7 | 0 |
| Millville | 1 | 25 | 0 | 0 | -- |
| Milton | 0 | 255 | 13 | 21 | -- |
| Monroe | 0 | 1 | 0 | 0 | 0 |
| Monson | 1 | 52 | -- | -- | -- |
| Montague | 1 | 61 | -- | -- | -- |
| Monterey | 0 | 3 | 0 | 0 | 0 |
| Montgomery | 0 | 5 | 0 | 0 | -- |
| Mount Washington | 0 | 1 | 0 | -- | 0 |
| Nahant | 0 | 18 | 0 | -- | 0 |
| Nantucket | 138 | 157 | 6 | 11 | 6 |
| Natick  **Table 17 (cont’d). Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2018** | 4 | 394 | 35 | 46 | -- |
| Needham | 2 | 255 | 16 | 25 | 0 |
| New Ashford | 0 | 1 | 0 | 0 | 0 |
| New Bedford | 1,511 | 1,272 | 129 | 128 | 88 |
| New Braintree | 0 | 10 | -- | 0 | 0 |
| New Marlborough | 2 | 9 | 0 | 0 | 0 |
| New Salem | 0 | 3 | 0 | 0 | 0 |
| Newbury | 1 | 52 | -- | -- | 0 |
| Newburyport | 705 | 128 | -- | 12 | -- |
| Newton | 3,734 | 663 | 47 | 60 | -- |
| Norfolk | 0 | 113 | 7 | 7 | 0 |
| North Adams | 1 | 98 | 12 | 9 | 5 |
| North Andover | 0 | 274 | 23 | 27 | -- |
| North Attleborough | 0 | 232 | 17 | 16 | -- |
| North Brookfield | 0 | 42 | -- | 8 | 0 |
| North Reading | 1 | 152 | 10 | 11 | -- |
| Northampton | 519 | 166 | 12 | 11 | 6 |
| Northborough | 1 | 131 | 5 | 9 | -- |
| Northbridge | 1 | 141 | 16 | 20 | -- |
| Northfield | 1 | 17 | -- | -- | -- |
| Norton | 0 | 140 | 6 | 12 | -- |
| Norwell | 0 | 111 | 8 | 10 | 0 |
| Norwood | 466 | 385 | 26 | 32 | -- |
| Oak Bluffs | 136 | 38 | 0 | -- | 0 |
| Oakham | 0 | 14 | 0 | -- | 0 |
| Orange | 2 | 74 | -- | -- | -- |
| Orleans | 0 | 28 | -- | -- | -- |
| Otis | 1 | 10 | 0 | -- | 0 |
| Oxford | 3 | 103 | 8 | 10 | -- |
| Palmer | 0 | 116 | 7 | 5 | 8 |
| Paxton | 0 | 41 | 5 | 5 | 0 |
| Peabody | 1 | 550 | 57 | 50 | 9 |
| Pelham | 0 | 3 | -- | -- | 0 |
| Pembroke | 2 | 149 | 11 | 11 | 0 |
| Pepperell | 0 | 98 | -- | 7 | -- |
| Peru | 0 | 7 | 0 | 0 | -- |
| Petersham | 0 | 4 | 0 | 0 | 0 |
| Phillipston | 0 | 14 | 0 | -- | 0 |
| Pittsfield | 732 | 449 | 37 | 44 | 29 |
| Plainfield | 0 | 3 | 0 | 0 | 0 |
| Plainville | 1 | 96 | 6 | 7 | 0 |
| Plymouth | 830 | 464 | 28 | 45 | 5 |
| Plympton | 0 | 20 | 0 | -- | 0 |
| Princeton | 1 | 24 | -- | -- | 0 |
| Provincetown | 1 | 15 | -- | -- | 0 |
| Quincy | 1 | 1,090 | 63 | 92 | -- |
| Randolph | 1 | 362 | 34 | 39 | -- |
| Raynham | 1 | 132 | 8 | 16 | 0 |
| Reading | 0 | 275 | 14 | 23 | 0 |
| Rehoboth | 0 | 89 | 5 | 7 | 0 |
| Revere  **Table 17 (cont’d). Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2018** | 1 | 771 | 65 | 86 | 12 |
| Richmond | 1 | 10 | -- | -- | 0 |
| Rochester | 0 | 47 | 7 | 7 | 0 |
| Rockland | 2 | 191 | 13 | 14 | -- |
| Rockport | 0 | 32 | 8 | 7 | 0 |
| Rowe | 0 | 4 | -- | -- | 0 |
| Rowley | 0 | 49 | -- | -- | -- |
| Royalston | 0 | 9 | -- | -- | -- |
| Russell | 2 | 18 | -- | -- | -- |
| Rutland | 1 | 92 | 6 | 8 | -- |
| Salem | 1,168 | 423 | 40 | 37 | 9 |
| Salisbury | 0 | 56 | -- | 5 | -- |
| Sandisfield | 0 | 9 | 0 | 0 | 0 |
| Sandwich | 2 | 128 | -- | 6 | -- |
| Saugus | 0 | 277 | 23 | 31 | -- |
| Savoy | 0 | 2 | 0 | 0 | 0 |
| Scituate | 1 | 149 | 8 | 12 | 0 |
| Seekonk | 0 | 110 | 9 | 13 | -- |
| Sharon | 1 | 136 | -- | 6 | 0 |
| Sheffield | 1 | 25 | -- | -- | 0 |
| Shelburne | 0 | 6 | 0 | 0 | 0 |
| Sherborn | 0 | 20 | -- | -- | 0 |
| Shirley | 1 | 43 | -- | -- | 0 |
| Shrewsbury | 0 | 328 | 34 | 35 | -- |
| Shutesbury | 0 | 11 | -- | 0 | 0 |
| Somerset | 0 | 123 | 16 | 15 | -- |
| Somerville | 3 | 810 | 53 | 69 | 5 |
| South Hadley | 0 | 120 | 14 | 14 | -- |
| Southampton | 0 | 41 | -- | -- | 0 |
| Southborough | 0 | 86 | 5 | -- | 0 |
| Southbridge | 2 | 235 | 28 | 25 | 12 |
| Southwick | 1 | 68 | 7 | 6 | -- |
| Spencer | 2 | 115 | 8 | 11 | -- |
| Springfield | 5,166 | 2,119 | 182 | 211 | 174 |
| Sterling | 0 | 54 | -- | -- | 0 |
| Stockbridge | 1 | 7 | 0 | 0 | 0 |
| Stoneham | 0 | 255 | 18 | 22 | -- |
| Stoughton | 2 | 337 | 20 | 25 | 5 |
| Stow | 0 | 61 | -- | -- | 0 |
| Sturbridge | 1 | 78 | -- | 6 | -- |
| Sudbury | 0 | 135 | 7 | 7 | -- |
| Sunderland | 0 | 27 | -- | -- | 0 |
| Sutton | 2 | 83 | 5 | 6 | -- |
| Swampscott | 0 | 144 | -- | 6 | 0 |
| Swansea | 1 | 136 | 6 | 12 | -- |
| Taunton | 8 | 611 | 58 | 56 | 17 |
| Templeton | 0 | 68 | -- | -- | -- |
| Tewksbury | 0 | 300 | 28 | 28 | -- |
| Tisbury | 0 | 41 | -- | -- | 0 |
| Tolland | 0 | 2 | 0 | 0 | 0 |
| Topsfield  **Table 17 (cont’d). Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2018** | 0 | 47 | -- | -- | -- |
| Townsend | 0 | 92 | 8 | 8 | -- |
| Truro | 0 | 8 | 0 | -- | 0 |
| Tyngsborough | 0 | 105 | 7 | 9 | -- |
| Tyringham | 0 | 1 | 0 | 0 | 0 |
| Upton | 2 | 65 | -- | -- | 0 |
| Uxbridge | 2 | 120 | 7 | 11 | -- |
| Wakefield | 0 | 310 | 21 | 29 | -- |
| Wales | 0 | 18 | 0 | -- | 0 |
| Walpole | 1 | 258 | 12 | 21 | 0 |
| Waltham | 2 | 768 | 73 | 89 | 18 |
| Ware | 2 | 105 | 10 | 16 | -- |
| Wareham | 372 | 213 | 26 | 18 | -- |
| Warren | 1 | 41 | -- | -- | -- |
| Warwick | 0 | 4 | 0 | 0 | 0 |
| Washington | 0 | 6 | 0 | 0 | 0 |
| Watertown | 1 | 401 | 29 | 27 | -- |
| Wayland | 0 | 121 | 6 | 10 | 0 |
| Webster | 1 | 164 | 16 | 18 | 7 |
| Wellesley | 1 | 198 | 15 | 16 | 0 |
| Wellfleet | 1 | 16 | -- | -- | 0 |
| Wendell | 3 | 5 | -- | -- | 0 |
| Wenham | 0 | 34 | 0 | 0 | 0 |
| West Boylston | 1 | 61 | -- | -- | -- |
| West Bridgewater | 1 | 84 | 5 | 6 | 0 |
| West Brookfield | 2 | 28 | -- | 0 | -- |
| West Newbury | 0 | 38 | 0 | 0 | 0 |
| West Springfield | 0 | 312 | 24 | 26 | 6 |
| West Stockbridge | 0 | 6 | -- | -- | 0 |
| West Tisbury | 0 | 27 | -- | -- | 0 |
| Westborough | 0 | 198 | 13 | 16 | -- |
| Westfield | 1 | 336 | 22 | 30 | 13 |
| Westford | 1 | 155 | 13 | 19 | 0 |
| Westhampton | 1 | 7 | 0 | 0 | 0 |
| Westminster | 5 | 72 | 5 | 7 | 0 |
| Weston | 0 | 65 | -- | 5 | 0 |
| Westport | 0 | 82 | 6 | 8 | -- |
| Westwood | 2 | 115 | 7 | 16 | 0 |
| Weymouth | 3,058 | 637 | 42 | 56 | -- |
| Whately | 0 | 10 | 0 | 0 | 0 |
| Whitman | 0 | 150 | 14 | 22 | -- |
| Wilbraham | 1 | 106 | 7 | 9 | 0 |
| Williamsburg | 0 | 17 | -- | -- | 0 |
| Williamstown | 2 | 31 | -- | -- | 0 |
| Wilmington | 3 | 219 | 21 | 28 | -- |
| Winchendon | 1 | 98 | 8 | 5 | 6 |
| Winchester | 2,322 | 187 | 10 | 16 | 0 |
| Windsor | 0 | 5 | 0 | 0 | 0 |
| Winthrop | 0 | 186 | 21 | 16 | -- |
| Woburn | 4 | 454 | 32 | 38 | -- |
| Worcester  **Table 17 (cont’d). Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2018** | 6,195 | 2,321 | 202 | 223 | 94 |
| Worthington | 0 | 7 | 0 | 0 | 0 |
| Wrentham | 2 | 109 | 7 | 7 | 0 |
| Yarmouth | 0 | 189 | 10 | 13 | 5 |
| 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 18. Birth Characteristics: Occurrence and Resident Births by County, Massachusetts: 2018

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **County** | **Occurrence Births1** |  | **Resident Births2** | | |
| **Number of Births** | **Low Birthweight3** | **Preterm4** | **Teen Births**  **(15-19 Years)** |
| **STATE TOTAL** | **69,804** | **69,098** | **5,243** | **6,167** | **1,639** |
| BARNSTABLE | 1,118 | 1,498 | 93 | 130 | 34 |
| BERKSHIRE | 886 | 999 | 84 | 88 | 44 |
| BRISTOL | 3,566 | 5,488 | 454 | 512 | 209 |
| DUKES | 136 | 170 | 7 | 7 | -- |
| ESSEX | 6,599 | 8,376 | 651 | 756 | 261 |
| FRANKLIN | 420 | 476 | 25 | 27 | 10 |
| HAMPDEN | 5,596 | 4,928 | 392 | 456 | 280 |
| HAMPSHIRE | 529 | 950 | 80 | 95 | 17 |
| MIDDLESEX | 15,284 | 16,586 | 1,224 | 1,414 | 199 |
| NANTUCKET | 138 | 157 | 6 | 11 | 6 |
| NORFOLK | 3,555 | 7,035 | 456 | 576 | 36 |
| PLYMOUTH | 3,336 | 5,029 | 380 | 462 | 92 |
| SUFFOLK | 20,473 | 9,070 | 773 | 918 | 219 |
| WORCESTER | 8,167 | 8,335 | 618 | 715 | 231 |
| UNKNOWN | 1 | 1 | 0 | 0 | 0 |

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.

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|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 19. Birth Characteristics: Occurrence and Resident Births, Massachusetts Community Health Network Areas (CHNAs), Massachusetts: 2018 | | | | | |
|  |  |  |  | **Resident Births2** | |
| **Community Health Network Area** | **Occurrence**  **Births1** | **Number of Births** | **LBW3** | **Preterm4** | **Teen Births**  **(15-19 Years)** |
| **STATE TOTAL** | **69,804** | **69,098** | **5,243** | **6,167** | **1,639** |
| 1. Community Health Network of Berkshire County | --5 | 0 | 0 | 0 | 0 |
| 2. Upper Valley Health Web (Franklin County) | 886 | 999 | 84 | 88 | 44 |
| 3. Partnership for Health in Hampshire County (Northampton) | 422 | 627 | 36 | 41 | 16 |
| 4. The Community Health Connection (Springfield) | 528 | 932 | 79 | 94 | 16 |
| 5. Community Health Network of Southern Worcester County | 5,174 | 3,333 | 260 | 297 | 198 |
| 6. Community Partners for Health (Milford) | 18 | 1,130 | 84 | 105 | 36 |
| 7. Community Health Network of Greater Metro West (Framingham) | 861 | 1,550 | 113 | 140 | 27 |
| 8. Community Wellness Coalition (Worcester) | 1,110 | 4,281 | 292 | 350 | 44 |
| 9. Fitchburg/Gardner Community Health Network | 6,211 | 3,521 | 292 | 329 | 102 |
| 10. Greater Lowell Community Health Network | 1,080 | 2,597 | 172 | 192 | 75 |
| 11. Greater Lawrence Community Health Network | 2,193 | 3,181 | 279 | 309 | 73 |
| 12. Greater Haverhill Community Health Network | 2,528 | 2,588 | 203 | 235 | 126 |
| 13. Community Health Network North (Beverly/Gloucester) | 711 | 1,488 | 97 | 120 | 38 |
| 14. North Shore Community Health Network | 2,185 | 954 | 64 | 84 | 13 |
| 15. Greater Woburn/Concord/Littleton Community Health Network | 1,175 | 3,346 | 287 | 317 | 84 |
| 16. North Suburban Health Alliance (Medford/Malden/Melrose) | 3,587 | 1,934 | 136 | 161 | 7 |
| 17. Greater Cambridge/Somerville Community Health Network | 851 | 3,529 | 229 | 265 | 39 |
| 18. West Suburban Health Network (Newton/Waltham) | 3,813 | 3,100 | 213 | 236 | 12 |
| 19. Alliance for Community Health (Boston/Chelsea/Revere/Winthrop) | 3,742 | 2,381 | 179 | 235 | 22 |
| 20. Blue Hills Community Health Alliance (Greater Quincy) | 20,477 | 9,641 | 809 | 948 | 220 |
| 21. Four (For) Communities (Holyoke, Chicopee, Ludlow, Westfield) | 3,534 | 4,096 | 258 | 344 | 19 |
| 22. Greater Brockton Community Health Network | 423 | 1,553 | 129 | 155 | 82 |
| 23. South Shore Community Partners in Prevention (Plymouth) | 2,122 | 2,927 | 242 | 275 | 72 |
| 24. Greater Attleboro-Taunton Health & Education Response | 839 | 1,686 | 95 | 138 | 14 |
| 25. Partners for a Healthier Community (Fall River) | 640 | 2,413 | 177 | 208 | 48 |
| 26. Greater New Bedford Health & Human Services Coalition | 1,414 | 1,432 | 124 | 147 | 70 |
| 27. Cape and Islands Community Health Network | 1,887 | 2,053 | 204 | 206 | 101 |

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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” 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.

## 

## Figure 6. Percent of Infants whose Mother Smoked During Pregnancy, Massachusetts: 1990 - 2018

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| Table 20. Cesarean Deliveries and Vaginal Births after Cesarean (VBACs) by Licensed Maternity Facility1, All Mothers, Massachusetts: 2018 | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Facility2** | **Occurrence**  **Deliveries3** | **Total**  **Cesareans** | | **Primary**  **Cesareans3** | | **Repeat**  **Cesareans3** | | **VBACs3** | |
|  |  | **N** | **%4** | **N** | **%** | **N** | **%** | **N** | **%** | |
| **State Total** | **68,553** | **21,156** | **30.9** | **11,857** | **20.6** | **9,299** | **85.4** | **1,592** | **14.6** |
| Anna Jaques Hospital | 702 | 223 | 31.8 | 126 | 21.7 | 97 | 79.5 | 25 | 20.5 |
| Baystate Franklin Medical Center | 398 | 106 | 26.6 | 62 | 17.9 | 44 | 84.6 | 8 | 15.4 |
| Baystate Medical Center | 3,856 | 1,252 | 32.5 | 648 | 20.8 | 604 | 81.8 | 134 | 18.2 |
| Berkshire Medical Center | 722 | 186 | 25.8 | 99 | 16.2 | 87 | 77.7 | 25 | 22.3 |
| Beth Israel Deaconess Hospital - Plymouth | 819 | 283 | 34.6 | 154 | 23.0 | 129 | 87.2 | 19 | 12.8 |
| Beth Israel Deaconess Medical Center | 5,216 | 1,619 | 31.0 | 1,017 | 22.7 | 602 | 81.9 | 133 | 18.1 |
| Beverly Hospital | 2,103 | 564 | 26.8 | 312 | 17.1 | 252 | 91.0 | 25 | 9.0 |
| Boston Medical Center | 2,768 | 987 | 35.7 | 606 | 26.3 | 381 | 82.1 | 83 | 17.9 |
| Brigham And Women's Hospital | 6,087 | 2,056 | 33.8 | 1,290 | 24.7 | 766 | 88.4 | 101 | 11.6 |
| Brockton Hospital | 884 | 225 | 25.5 | 107 | 14.4 | 118 | 84.9 | 21 | 15.1 |
| Cambridge Hospital | 1,062 | 299 | 28.2 | 162 | 18.2 | 137 | 79.2 | 36 | 20.8 |
| Cape Cod Hospital | 786 | 250 | 31.8 | 123 | 19.3 | 127 | 84.7 | 23 | 15.3 |
| Charlton Memorial Hospital | 1,390 | 405 | 29.1 | 197 | 16.7 | 208 | 99.0 | --5 | --5 |
| Cooley Dickinson Hospital | 506 | 147 | 29.1 | 79 | 18.6 | 68 | 82.9 | 14 | 17.1 |
| Emerson Hospital | 1,230 | 418 | 34.0 | 239 | 23.4 | 179 | 86.5 | 28 | 13.5 |
| Fairview Hospital | 136 | 44 | 32.4 | 25 | 21.4 | 19 | 100.0 | 0 | 0.0 |
| Falmouth Hospital | 310 | 123 | 39.7 | 63 | 25.2 | 60 | 100.0 | 0 | 0.0 |
| Good Samaritan Medical Center | 1,201 | 390 | 32.5 | 185 | 19.2 | 205 | 86.1 | 33 | 13.9 |
| HealthAlliance Hospital | 629 | 174 | 27.7 | 82 | 15.3 | 92 | 98.9 | --5 | --5 |
| Heywood Hospital | 420 | 78 | 18.6 | 33 | 9.0 | 45 | 81.8 | 10 | 18.2 |
| Holyoke Medical Center | 412 | 109 | 26.5 | 69 | 19.1 | 40 | 80.0 | 10 | 20.0 |
| Lawrence General Hospital | 1,413 | 509 | 36.0 | 203 | 18.4 | 306 | 98.1 | 6 | 1.9 |
| Lowell General Hospital | 2,155 | 753 | 34.9 | 398 | 22.5 | 355 | 91.5 | 33 | 8.5 |
| Martha’s Vineyard Hospital | 136 | 60 | 44.1 | 34 | 30.9 | 26 | 100.0 | 0 | 0.0 |
| Massachusetts General Hospital | 3,684 | 1,019 | 27.7 | 640 | 20.1 | 379 | 76.0 | 120 | 24.0 |
| Melrose-Wakefield Hospital | 822 | 251 | 30.5 | 122 | 17.6 | 129 | 100.0 | 0 | 0.0 |
| Mercy Medical Center | 1,179 | 319 | 27.1 | 163 | 16.2 | 156 | 89.1 | 19 | 10.9 |
| Metro West Medical Center-Framingham Union Hospital | 1,075 | 373 | 34.7 | 165 | 19.4 | 208 | 92.0 | 18 | 8.0 |
| Milford Regional Medical Center | 838 | 274 | 32.7 | 162 | 22.7 | 112 | 89.6 | 13 | 10.4 |
| Mt. Auburn Hospital | 2,613 | 649 | 24.8 | 419 | 18.4 | 230 | 69.5 | 101 | 30.5 |
| Nantucket Cottage Hospital | 137 | 37 | 27.0 | 22 | 18.0 | 15 | 100.0 | 0 | 0.0 |
| Newton-Wellesley Hospital | 3,670 | 1,031 | 28.1 | 596 | 18.9 | 435 | 84.6 | 79 | 15.4 |
| North Shore Medical Center - Salem Hospital | 1,155 | 333 | 28.8  46 | 153 | 16.0 | 180 | 91.4 | 17 | 8.6 |
| Norwood Hospital | 462 | 138 | 29.9 | 71 | 18.2 | 67 | 93.1 | 5 | 6.9 |
| Saint Vincent Hospital | 1,852 | 572 | 30.9 | 332 | 21.4 | 240 | 78.9 | 64 | 21.1 |
| South Shore Hospital | 3,001 | 1,006 | 33.5 | 554 | 22.3 | 452 | 87.8 | 63 | 12.2 |
| St. Elizabeth's Medical Center | 888 | 314 | 35.4 | 187 | 25.6 | 127 | 80.9 | 30 | 19.1 |
| St. Luke’s Hospital | 1,488 | 491 | 33.0 | 240 | 19.7 | 251 | 93.3 | 18 | 6.7 |
| Steward Holy Family Hospital | 1,088 | 411 | 37.8 | 188 | 21.8 | 223 | 98.7 | --5 | --5 |
| Sturdy Memorial Hospital | 623 | 201 | 32.3 | 116 | 22.1 | 85 | 86.7 | 13 | 13.3 |
| Tobey Hospital | 367 | 65 | 17.7 | 32 | 9.6 | 33 | 100.0 | 0 | 0.0 |
| Tufts Medical Center | 1,218 | 420 | 34.5 | 262 | 26.2 | 158 | 72.8 | 59 | 27.2 |
| UMass Memorial Medical Center-Memorial Campus | 4,186 | 1,268 | 30.3 | 677 | 19.7 | 591 | 79.3 | 154 | 20.7 |
| Winchester Hospital | 2,288 | 724 | 31.6 | 443 | 22.4 | 281 | 90.4 | 30 | 9.6 |
| **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. Birth centers are not included in this table. 2. A licensed maternity facility is a medical unit licensed by the Commonwealth for the care of women during pregnancy and childbirth. 3. The counts and percentages provided in this table are based on occurrence deliveries by unique mothers, meaning that if a woman has more than one delivery in a calendar year, the data capture one event even if the delivery is of multiple infants (i.e., twins, triplets)  and may differ from data that are based on resident births presented elsewhere in this report.  4. 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. 5. Calculations based on values of 1-4 are excluded. | | | | | | | | | |

## Figure 7. Maternal Body Mass Index (BMI) Prior to Pregnancy, All Mothers,

## Massachusetts: 2018

## 

## Figure 8. Obesity Prior to Pregnancy by Race/Hispanic Ethnicity, All Mothers,

## Massachusetts: 2018

**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, All Mothers, Massachusetts: 2018

Figure 10. Mothers Who Reported Having Received WIC Food During Pregnancy by Race/Hispanic Ethnicity, All Mothers, Massachusetts: 2018

NOTE: These figures are based on mothers and not births.

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

All Mothers, Massachusetts: 2018

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

**Table 21. Mothers Who Used Infertility Treatments, Massachusetts: 2018**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Assisted Reproductive Technology (ART) with or without Artificial Insemination and/or Fertility Drugs1** | | | **Artificial Insemination with or without Fertility Drugs2** | | | | **Fertility Enhancing Drugs Only3** | |
|  | **N** | **%4** | | **N** | | **%4** | | **N** | **%4** |
| **State total** | 2,627 | 73.6% | | 468 | | 13.1% | | 475 | 13.3% |
| **Maternal Demographics** | | | | | | | | | |
| **Race/Hispanic Ethnicity** | **N** | **%5** | | **N** | | **%5** | | **N** | **%5** |
| White Non-Hispanic | 2,044 | 78.9% | | 364 | | 78.8% | | 356 | 76.6% |
| Black Non-Hispanic | 86 | 3.3% | | 14 | | 3.0% | | 28 | 6.0% |
| Asian Non-Hispanic | 303 | 11.7% | | 47 | | 10.2% | | 44 | 9.5% |
| Hispanic | 148 | 5.7% | | 32 | | 6.9% | | 32 | 6.9% |
| American Indian and Other | 10 | 0.4% | | 5 | | 1.1% | | 5 | 1.1% |
| **Birthplace** |  |  | |  | |  | | |  |
| US States / D.C. / US Terr. | 2,025 | 77.1% | | 378 | | 80.8% | | 354 | 74.5% |
| Non-US-born | 602 | 22.9% | | 90 | | 19.2% | | 121 | 25.5% |
| **Prenatal care funding** |  |  | |  | |  | | |  |
| Public | 129 | 4.9% | | 39 | | 8.4% | | 62 | 13.2% |
| Private, other | 2,491 | 95.1% | | 428 | | 91.6% | | 408 | 86.8% |
| **Age** |  |  | |  | |  | | |  |
| 20-29 | 151 | 5.8% | | 61 | | 13.0% | | 106 | 22.4% |
| 30-34 | 906 | 34.5% | | 190 | | 40.6% | | 216 | 45.6% |
| 35-39 | 1,030 | 39.2% | | 179 | | 38.2% | | 125 | 26.4% |
| 40+ | 539 | 20.5% | | 38 | | 8.1% | | 27 | 5.7% |
| **Pregnancy-Related Factors** | | | | | | | | | |
| **Adequacy of Prenatal Care6** |  |  | |  | |  | |  |  |
| Adequate Total**7** | 949 | 87.3% | | 162 | | 91.5% | | 150 | 83.3% |
| Adequate Intensive | 554 | 51.0% | | 90 | | 50.8% | | 85 | 47.2% |
| Adequate Basic | 395 | 36.3% | | 72 | | 40.7% | | 65 | 36.1% |
| Intermediate | 33 | 3.0% | | --9 | | --9 | | 9 | 5.0% |
| Inadequate/None | 105 | 9.7% | | 12 | | 6.8% | | 21 | 11.7% |
| **Parity8** |  |  | |  | |  | | |  |
| 1 | 1,543 | | 58.8% | | 311 | | 66.5% | 297 | 62.7% |
| 2 | 872 | | 33.2% | | 135 | | 28.8% | 149 | 31.4% |
| 3+ | 211 | | 8.0% | | 22 | | 4.7% | 28 | 5.9% |
| **Birth Outcomes** | | | | | | | | | |
| **Gestational age** |  |  | |  | |  | | |  |
| <28 weeks (extremely preterm)10 | 24 | 0.9% | | --9 | | --9 | | 6 | 1.3% |
| <37 weeks (preterm)10 | 373 | 14.2% | | 63 | | 13.5% | | 77 | 16.2% |
| 37+ | 2,254 | 85.8% | | 405 | | 86.5% | | 398 | 83.8% |
| **Plurality** |  |  | |  | |  | | |  |
| Singleton | 2,374 | 90.4% | | 435 | | 92.9% | | 435 | 91.6% |
| Multiple birth | 253 | 9.6% | | 33 | | 7.1% | | 40 | 8.4% |

**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.

**NOTE:** This table is based on unique mothers and not births.

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

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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.*

|  |  |
| --- | --- |
| American Indian/Alaska Native (specify tribal nation): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Asian  Black  Guamanian or Chamorro  Hispanic/Latina/Black  Hispanic/Latina/White | Hispanic/Latina/Other (specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Native Hawaiian  Samoan  White  Other Pacific Islander (specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Other race not listed (specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Mother/Parent Ethnicity**

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

|  |  |
| --- | --- |
| African (specify):\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_  African-American  American  Asian Indian  Brazilian  Cambodian    Cape Verdean  Caribbean Islander (specify): \_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_  Chinese  Colombian  Cuban  Dominican  European (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_  Filipino  Guatemalan  Haitian  Honduran | Japanese  Korean  Laotian  Mexican, Mexican American, Chicano  Middle Eastern (specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Native American (specify tribal nation(s)):\_\_\_\_\_\_\_\_\_\_\_\_  Portuguese  Puerto Rican  Russian  Salvadoran  Vietnamese    Other Asian (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Other Central American (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Other Pacific Islander (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Other Portuguese (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Other South American (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Other ethnicity (ies) not listed (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**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** | **AFRICAN/AFRICAN AMERICAN** |
| 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 | 29African-American/ Afro-American  30Nigerian  31Other African specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **MIDDLE EASTERN** |
| 32Lebanese  33Iranian  34Israeli  35Other Middle Eastern (specify):\_\_\_\_\_\_\_\_ |
| **ASIAN/PACIFIC ISLANDER** |
| 10 Chinese 17Laotian  11 Vietnamese 18Pakistani  12 Cambodian 19Thai  13 Asian Indian 20Hawaiian  14 Korean 21Other Asian/Pacific Islander(specify)  15 Filipino \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  16 Japanese |
| **AMERICAN ANCESTRY** |
| 36 Native American/ American Indian  (specify tribe/affiliation):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  37American |
| **PORTUGUESE SPEAKING** | **EUROPEAN and OTHER ancestries** |
| 22 Cape Verdean 24Other Portuguese (specify):  23 Brazilian \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 38European (specify):  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  39 Other (specify):  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **WEST INDIAN/CARIBBEAN ISLANDER** |
| 25 Haitian 28OtherWest Indian/Caribbean Islander (specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_  26 Jamaican  27 Barbadian |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Age Group** | **Total**1 | **White Non-Hispanic** | **Black Non-Hispanic** | **Native American**  **Non-Hispanic** | **Asian Non-Hispanic** | **Hispanic**2 |
| **Female** | | | | | | |
| **<1** | 35,213 | 20,418 | 3,243 | 59 | 2,384 | 7,527 |
| **1 to 4** | 141,228 | 83,823 | 13,264 | 249 | 10,201 | 29,234 |
| **5 to 9** | 181,316 | 104,393 | 16,492 | 364 | 12,673 | 35,035 |
| **10 to 14** | 197,483 | 122,926 | 16,720 | 316 | 13,497 | 34,789 |
| **15 to 19** | 231,245 | 151,500 | 18,359 | 369 | 17,902 | 36,070 |
| **20 to 24** | 257,768 | 167,967 | 21,824 | 449 | 23,130 | 38,237 |
| **25 to 29** | 253,592 | 165,936 | 22,535 | 614 | 25,814 | 39,027 |
| **30 to 34** | 235,427 | 158,230 | 19,227 | 384 | 25,408 | 32,315 |
| **35 to 39** | 220,073 | 143,830 | 17,684 | 314 | 22,646 | 31,713 |
| **40 to 44** | 206,644 | 137,126 | 16,485 | 277 | 19,333 | 28,637 |
| **45 to 49** | 230,236 | 165,303 | 16,410 | 340 | 17,601 | 25,714 |
| **50+** | 1,384,909 | 1,146,607 | 76,385 | 2,119 | 60,717 | 85,641 |
| **All Females** | **3,575,135** | **2,568,059** | **258,630** | **5,854** | **251,307** | **423,939** |
| **Male** | | | | | | |
| **<1** | 37,032 | 21,310 | 3,326 | 69 | 2,645 | 7,875 |
| **1 to 4** | 147,529 | 88,090 | 13,470 | 272 | 10,825 | 30,136 |
| **5 to 9** | 189,522 | 108,848 | 17,141 | 340 | 13,590 | 36,369 |
| **10 to 14** | 205,434 | 129,249 | 17,036 | 331 | 13,543 | 36,009 |
| **15 to 19** | 232,756 | 153,650 | 18,433 | 354 | 16,092 | 37,560 |
| **20 to 24** | 255,838 | 166,025 | 21,393 | 477 | 20,664 | 41,178 |
| **25 to 29** | 260,218 | 169,231 | 23,748 | 696 | 24,836 | 42,431 |
| **30 to 34** | 233,025 | 157,141 | 19,075 | 421 | 21,981 | 34,332 |
| **35 to 39** | 215,477 | 141,612 | 17,247 | 328 | 20,260 | 32,591 |
| **40 to 44** | 197,514 | 133,125 | 15,526 | 264 | 17,173 | 27,136 |
| **45 to 49** | 216,184 | 157,270 | 15,234 | 324 | 15,946 | 22,899 |
| **50+** | 1,181,523 | 983,365 | 61,982 | 1,985 | 52,210 | 69,743 |
| **All Males** | **3,372,050** | **2,408,917** | **243,612** | **5,861** | **229,764** | **418,258** |
|  | | | | | | |
| **<1** | 72,245 | 41,728 | 6,570 | 128 | 5,029 | 15,402 |
| **1 to 4** | 288,757 | 171,914 | 26,734 | 521 | 21,027 | 59,370 |
| **5 to 9** | 370,838 | 213,240 | 33,634 | 704 | 26,263 | 71,403 |
| **10 to 14** | 402,916 | 252,175 | 33,756 | 647 | 27,040 | 70,798 |
| **15 to 19** | 464,001 | 305,150 | 36,792 | 724 | 33,994 | 73,630 |
| **20 to 24** | 513,606 | 333,992 | 43,217 | 926 | 43,794 | 79,415 |
| **25 to 29** | 513,810 | 335,167 | 46,283 | 1,310 | 50,650 | 81,458 |
| **30 to 34** | 468,452 | 315,371 | 38,302 | 804 | 47,389 | 66,647 |
| **35 to 39** | 435,550 | 285,442 | 34,931 | 642 | 42,906 | 64,304 |
| **40 to 44** | 404,159 | 270,252 | 32,012 | 540 | 36,505 | 55,773 |
| **45 to 49** | 446,420 | 322,573 | 31,644 | 664 | 33,547 | 48,613 |
| **50+** | 2,566,432 | 2,129,972 | 138,367 | 4,104 | 112,927 | 155,384 |
| **State Total** | **6,947,185** | **4,976,976** | **502,242** | **11,715** | **481,071** | **842,196** |

Table A1. 2018 Massachusetts Population Estimates by Age Group, Gender, Race/Hispanic Ethnicity (mutually exclusive)

1. Population estimates were calculated using UMass Donahue Institute (UMDI) estimates for 2018.

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.