



The Commonwealth of Massachusetts  
Executive Office of Health and Human Services  
Department of Public Health  
Registry of Vital Records and Statistics  
150 Mt. Vernon Street, 1<sup>st</sup> Floor  
Dorchester, MA 02125

**MAURA T. HEALEY**  
Governor

**KIMBERLEY DRISCOLL**  
Lieutenant Governor

August 17<sup>th</sup>, 2023

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, please find enclosed a report from the Department of Public Health entitled Massachusetts Births 2021.

Sincerely,

A handwritten signature in black ink, appearing to be "R. Goldstein".

Robert Goldstein, MD, PhD  
Commissioner  
Massachusetts Department of Public Health

**KATHLEEN E. WALSH**  
Secretary

**ROBERT GOLDSTEIN, MD, PhD**  
Commissioner

Tel: 617-740-2600  
[www.mass.gov/dph/rvrs](http://www.mass.gov/dph/rvrs)



**MAURA T. HEALEY**  
GOVERNOR

**KIMBERLEY DRISCOLL**  
LIEUTENANT GOVERNOR



**KATHLEEN E. WALSH**  
SECRETARY

**ROBERT GOLDSTEIN, MD, PhD**  
COMMISSIONER

# Massachusetts Births 2021

July 2023

## **Article I. Legislative Mandate**

The following report is hereby issued pursuant to Section 2 of Chapter 111 of the Massachusetts General Laws as follows:

### **Chapter 111: Section 2. Annual report (specific text bolded below)**

*The commissioner shall administer the laws relative to health and sanitation and the regulations of the department, and shall prepare rules and regulations for the consideration of the council. The secretary of elder affairs and the commissioner shall jointly develop and submit to the council rules and regulations governing the licensure and operation of convalescent or nursing homes, rest homes, infirmaries maintained in a town and charitable homes for the aged. He may direct any executive officer or employee of the department to assist in the study, suppression or prevention of disease in any part of the commonwealth. He shall submit annually to the council a report containing recommendations in regard to health legislation.*

***The commissioner shall prepare from the birth, marriage and death records received by him under the provisions of chapter forty-six, and from the divorce returns received by him under the provisions of section forty-six of chapter two hundred and eight, such statistical tables as he deems useful, and shall make annual report thereof to the general court.** The commissioner may transmit such information to the appropriate agency of the federal government to participate in the development of a cooperative system for producing uniform statistical information at the federal, state and local level. The commissioner may make further use of such records as he deems useful for administrative and research purposes connected with health programs and population studies. He shall, as soon as is reasonably practicable, cause the birth, marriage and death records to be bound with indexes thereto and shall retain their custody. He shall prepare an alphabetical index of such divorce returns showing the names of the parties, year and number of the judgment and the county in which the divorce occurred.*

*Prior to undertaking any activity or implementing any policy which would affect expenditures for medical assistance under chapter one hundred and eighteen E, including but not limited to the certification and licensure of providers of services under said chapter, the commissioner shall assure that such activity is reviewed by the commissioner of medical assistance.*

*The commissioner shall consult with the commissioner of mental health prior to taking an action substantially affecting the design and implementation of behavioral health services for children under guidelines established by the secretary of health and human services under section 16S of chapter 6A.*

*The commissioner, subject to the approval of the governor, may make such rules and regulations governing the conduct of written and oral examinations by the several boards of registration and examination under the department as shall be necessary to standardize procedures and protect the commonwealth and applicants for registration against fraud. Nothing in this section shall prevent a board from adopting, under authority of other provisions of law, specific rules and regulations that are not in conflict with the rules and regulations authorized by this section.*



---

---

# Massachusetts Births 2021

---

---

Maura T. Healey, Governor  
Kathleen E. Walsh, Secretary of Health and Human Services  
Robert Goldstein, MD, Ph.D., Commissioner of Public Health  
Sai Cherala, MD, MPH, Acting Assistant Commissioner

Karin Barrett, Registrar  
Registry of Vital Records and Statistics

Massachusetts Department of Public Health

July 2023

## **Acknowledgments**

This report was prepared by Darien Mather, Registry of Vital Records and Statistics.

Special thanks go to: Karin Barrett, Registrar, Registry of Vital Records and Statistics; Dean DiMartino, Deputy Registrar, Registry of Vital Records and Statistics; Sharon Pagnano, Director of Statistics, Registry of Vital Records and Statistics; Maria Vu, Registry of Vital Records and Statistics.

Data in this report have been collected through the efforts of the Registry of Vital Records and Statistics staff, including: Tara Andrews, Alex Forman, Adahma Lucas-Conley, 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, 1<sup>st</sup> 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

## TABLE OF CONTENTS

Article I. Legislative Mandate .....	4
Note to Readers .....	7
Executive Summary.....	8
Selected Takeaways.....	9
Table 1. Trends in Birth Characteristics, Massachusetts: 1970, 1980, 1990, 2000, 2010-2021.	10
Table 2. Birth Characteristics by Race/Hispanic Ethnicity and Birthplace of Birthing Person, Massachusetts: 2021 .....	11
Table 3. Birth Characteristics by Ancestry of Birthing Person, Massachusetts: 2021 .....	12
Figure 1. Trends in the Number of Births by Birthing Person's Age Group, Massachusetts: 1970-2021 .....	13
Table 4. Trends in Number and Percent Distribution of Births by Plurality Age of Birthing Person, Massachusetts: 2011-2021 .....	14
Table 5. Summary of Selected Teen Birth Characteristics, Massachusetts: 2021 .....	15
Table 6. Number and Teen Birth Rates by Race/Hispanic Ethnicity for Selected Communities, Massachusetts: 2021 .....	16
Table 7. Trends in Teen Birth Rates for Selected Communities, Ranked by 2021 Teen Birth Rate, Massachusetts: 2011, 2020, and 2021 .....	17
Figure 2. Teen Birth Rates among Females Ages 15-19 Years by Race/Hispanic Ethnicity of Birthing Person, Massachusetts: 2011 and 2021 .....	18
Table 8. Births by Birthweight, Race/Hispanic Ethnicity, Massachusetts: 2021 .....	19
Table 9. Low Birthweight by Plurality and Age of Birthing Person, Massachusetts: 2011-2021.	20
Table 10. Births by Gestational Age, Race/Hispanic Ethnicity, Massachusetts: 2021 .....	21
Table 11. Percent Preterm and Term Births by Gestational Age Category, Massachusetts: 1980, 1990, 2000, 2010-2021.....	22
Figure 3. Trends in Adequacy of Prenatal Care <sup>2,3</sup> by Race/Hispanic Ethnicity, Massachusetts: 2000-2021 .....	23
Figure 4. Adequacy of Prenatal Care by Selected Characteristics of Birthing People, Massachusetts: 2021 .....	24
Figure 5. Distribution of Prenatal Care Payment Source, Massachusetts: 2021.....	25
Table 12. Resident Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2021 .....	26
Table 13. Birth Characteristics by Facility/Location, Massachusetts: 2021.....	28



Table 14. Resident Teen Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2021	29
Table 15. Adequacy of Prenatal Care Utilization: Summary and Component Indices, Massachusetts: 2021 .....	31
Table 16. Birth Characteristics by Race/Hispanic Ethnicity and Source of Prenatal Care Payment, Massachusetts: 2021 .....	32
Table 17. Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2021 .....	34
Table 18. Birth Characteristics: Occurrence and Resident Births by County, Massachusetts: 2021	41
Table 19. Birth Characteristics: Occurrence and Resident Births, Massachusetts Community Health Network Areas (CHNAs), Massachusetts: 2021 .....	42
Figure 6. Reported Smoking During Pregnancy, Percent of All Infants, Massachusetts: 1990 - 2021 .....	43
Table 20. Cesarean Deliveries and Vaginal Births after Cesarean (VBACs) by Licensed Maternity Facility, All Birthing People, Massachusetts: 2021 .....	44
Figure 7. Body Mass Index (BMI) Prior to Pregnancy, All Birthing People, Massachusetts: 2021	45
Figure 8. Obesity Prior to Pregnancy by Race/Hispanic Ethnicity, All Birthing People, Massachusetts: 2021 .....	45
Figure 9. Birthing People Who Reported Having Their Teeth Cleaned During Pregnancy by Race/Hispanic Ethnicity, All Birthing People, Massachusetts: 2021 .....	46
Figure 10. Birthing People Who Reported Having Received WIC Food During Pregnancy by Race/Hispanic Ethnicity, All Birthing People, Massachusetts: 2021 .....	46
Figure 11. Birthing People Who Reported Smoking During Pregnancy by Race/Hispanic Ethnicity, All Birthing People, Massachusetts: 2021 .....	47
Table 21. Birthing People Who Used Infertility Treatments, Massachusetts: 2021 .....	48
Technical Notes .....	49
Data Cautions .....	49
Changes in the Collection of Race/Ethnicity Information .....	49
Table A1. 2020 Massachusetts Population Estimates by Age Group, Gender, Race/Hispanic Ethnicity (mutually exclusive) .....	51

## **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 2021 (Annual Report Vital Statistics of Massachusetts-Births, Public Document #1 2021). Public Document #1 information on 2021 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 estimates<sup>1</sup> 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.
2. **Resident births.** All data in this publication are resident data unless otherwise stated. Resident data include all events that occur to residents of the Commonwealth, including resident births that occur in other U.S. States and territories.
3. **Race and Ethnicity.** In the text, the race categories, White, Black, American Indian/Alaska Native, Asian/Pacific Islander, and Hispanic are mutually exclusive. 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. These methods may have a disproportionate impact on some race groups, making it difficult to compare data over time. **Please use caution in interpreting these numbers.**
4. **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.**
5. **Tables/Figures Based on Birthing People.** Please note that Tables 20-21 and Figures 7-11 are based on birthing people and not births.

### **Suggested Citation**

*Massachusetts Births 2021* Boston, MA: Registry of Vital Records and Statistics, Massachusetts Department of Public Health. July 2023.

## **Executive Summary**

This report summarizes trends in births to Massachusetts residents for 2021. It is important to note that births in 2021 were primarily conceived in 2020, during the beginning of the COVID-19 pandemic; all birthing people represented in this report experienced the pandemic during their pregnancy. This report describes trends in prenatal care and birth outcomes in Massachusetts in 2021 and does not aim to analyze or explain the impact of the pandemic on these trends. Future studies will be needed to understand the impact of the pandemic on short- and long-term parental and child health.

While there was a slight reversal of the decades-long decline in the overall birth rate, it is unclear whether this was an anomaly or a true reversal of a long-term trend. It will be important to investigate the potential impact of social and workplace policies on the increase in birth rate and on birth outcomes, such as Massachusetts' Paid Family and Medical Leave, the rise in remote work and flexible work options for working parents, and access to healthcare during the COVID-19 pandemic. This is particularly important, as not all races or ethnic groups saw an increase in the birth rate in 2021, and some saw worsening perinatal conditions and outcomes, potentially as a result of decreased access to opportunities that support working parents, and other factors.

Despite the increase in births and birth rate, 2021 saw a drop in teen births and birth rate, continuing a long-term positive trend. The teen birth rate is nearly 1/5 of what it was in 1980, reflecting tremendous progress in teen pregnancy prevention efforts, as teen pregnancy increases the likelihood of dropping out of high school among birthing people.<sup>1</sup> It can also lead to health issues for the children of teen parents into adulthood and increase their likelihood of incarceration as a teen, of being a teen parent themselves, limited educational opportunities, and of unemployment in adulthood, all of which can contribute to a cycle of generational poverty.<sup>2</sup>

Meanwhile, gestational diabetes is on the rise, tripling since 2000. Preterm birth is also on the rise, with nearly one out of every 11 births being preterm, and is even higher for Black non-Hispanic births, with one out of nine born prematurely. Nearly one out of every 13 births are low birthweight – a statistic that has not improved over the last two decades. All these conditions carry health risks for the birthing person, the child, or both.

Public health efforts are ongoing to disentangle the risk factors of these conditions among Massachusetts residents, so that we can make progress in reducing health risks and improving health equity across the Commonwealth.

<sup>1</sup> Perper K, Peterson K, Manlove J. Diploma Attainment Among Teen Mothers. Child Trends, Fact Sheet Publication #2010-01: Washington, DC: Child Trends; 2010.

<sup>2</sup> Hoffman SD. Kids Having Kids: Economic Costs and Social Consequences of Teen Pregnancy. Washington, DC: The Urban Institute Press; 2008.

## **Selected Takeaways**

- In 2021, there were 69,127 births to Massachusetts residents, an increase of 4.0% from 66,442 in 2020 and a decline of 25.2% since 1990 (Table 1). The number of births to people age 30 and older increased by 6.4% (2020: 43,865; 2021: 46,683). The number of births to people under 30 was similar to 2020 (2020: 22,577; 2021: 22,444). Since 2008, the number of births to people under 30 decreased by 37.9% percent (2008: 36,117; 2021: 22,444; Figure 1).
- Between 2020 and 2021, the number of births to all races/ethnicities increased: American Indian/Alaska Native Non-Hispanic by 67.2%, Asian/Pacific Islander Non-Hispanic by 0.2%, Black Non-Hispanic by 1.5%, Hispanic by 3.6%, and White Non-Hispanic by 6.0% (Table 1).
- In 2021, the Massachusetts teen birth rate decreased slightly (2020: 5.9; 2021: 5.8), continuing a long-term trend. The teen birth rate was 20.1 births per 1,000 females age 15-19 in 2008, while in 2021 the rate was 5.8 births per 1,000 females age 15-19 (Table 1). Between 2011 and 2021, the percentage of teen births decreased for all racial and ethnic groups except for American Indian / Alaska Native Non-Hispanic residents. Additionally, despite this decrease, the Hispanic teen birth rate remained over five times higher and the Black Non-Hispanic teen birth rate more than twice as high as the White Non-Hispanic teen birth rate (Table 5, Figure 2).
- In 2021, 31.8% of births were cesarean deliveries (Table 1). Across all racial/ethnic groups, Black Non-Hispanic birthing people had the highest percentage of cesarean deliveries (35.2%), while Asian/ Pacific Islander Non-Hispanic birthing people had the lowest percentage (29.9%; Table 2).
- From 2020 to 2021, the percentage of births to people affected by gestational diabetes continued a long-term trend, increasing from 7.9% to 8.5% and has doubled since 2007 (4.2%; Table 1).
- From 2020 to 2021, the percentage of births to people who received adequate prenatal care increased from 76.6% to 78.5% (Table 1, Figure 3). In 2021, the percentage of births with adequate prenatal care was higher among those with private insurance (82.8%) than public insurance (73.8%; Table 16). The percentage of births to people whose prenatal care was covered through public insurance decreased from 39.0% in 2020 to 36.7% in 2021 (Table 1).
- The percentage of multiple births in 2021 increased slightly from 3.2% in 2020 to 3.4% (Table 4).
- While the overall percentage of birthing people who reported smoking during pregnancy was 2.9% in 2021 (down from 3.7% in 2020), the percentage of American Indian/Alaska Native Non-Hispanic birthing people who smoked was more than three times higher than any other races/ethnicities and increased from 12.4% in 2020 to 14.6% in 2021 (Figure 11).
- In Massachusetts, the number of birthing people who used fertility treatment in 2021 increased to 3,991 from 3,836 in 2020. The percentage of birthing people who used assisted reproductive technology (ART) among those who used infertility treatment decreased to 72.9% from 74.9% in 2020. The percentage of birthing people who used ART fertility treatment was much higher among White Non-Hispanic birthing people (at 76.9%) than among American Indian/Alaska Native Non-Hispanic, Asian/ Pacific Islander Non-Hispanic, Black Non-Hispanic, and Hispanic birthing people, at 0.2%, 12.1%, 3.6%, and 6.8%, respectively (Table 21).

**Table 1. Trends in Birth Characteristics, Massachusetts: 1970, 1980, 1990, 2000, 2010-2021**

Characteristic		1970	1980	1990	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Births<sup>1</sup></b>	<b>n<sup>2</sup></b>	93,579	72,591	92,461	81,582	72,835	73,169	72,457	71,618	71,867	71,484	71,319	70,704	69,098	69,117	66,442	69,127
	<b>Rate<sup>3</sup></b>	--12	53.4	62.1	57.1	53.7	54.1	53.3	52.5	52.1	52	52	51.2	48.8	48.9	47.1	48.6
<b>Race of Birthing Person</b>																	
American Indian/ Alaska Native Non-Hispanic	n	120	100	140	284	244	265	253	241	237	213	284	247	224	233	198	331
	% <sup>4</sup>	0.1	0.1	0.2	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.5
Asian/ Pacific Islander Non-Hispanic	n	317	964	3,349	4,667	5,817	6,022	6,530	6,220	6,426	6,473	6,647	6,338	6,411	6,457	6,061	6,075
	% <sup>4</sup>	0.4	1.3	3.6	5.7	8.0	8.2	9.0	8.7	8.9	9.1	9.3	9	9.3	9.3	9.1	8.8
Black Non-Hispanic	n	4,240	4,626	7,158	5,755	6,794	6,999	6,892	7,016	7,071	6,949	7,095	7,251	7,142	7,181	6,904	7,011
	% <sup>4</sup>	4.7	6.4	7.7	7.1	9.3	9.6	9.5	9.8	9.8	9.7	9.9	10.3	10.3	10.4	10.4	10.1
Hispanic	n	225	1,984	8,406	9,247	10,588	12,777	13,088	12,315	12,670	12,927	13,100	13,516	13,748	14,067	13,957	14,456
	% <sup>4</sup>	0.3	2.8	9.1	11.3	14.5	17.5	18.1	17.2	17.6	18.1	18.4	19.1	19.9	20.4	21.0	20.9
White Non-Hispanic	n	85,161	66,220	72,483	60,051	48,466	45,973	45,032	44,432	44,128	43,255	42,448	40,989	39,956	39,461	37,651	39,900
	% <sup>4</sup>	94.4	91.2	78.4	73.6	66.5	62.8	62.1	62.0	61.4	60.5	59.5	58	57.8	57.1	56.7	57.7
<b>Teen Births (Ages 15-19)</b>	<b>n</b>	10,176	7,694	7,258	5,305	3,907	3,480	3,219	2,732	2,402	2,140	1,931	1,827	1,639	1,538	1,353	1,308
	<b>Rate<sup>3</sup></b>	--12	28.1	35.4	25.9	17.1	15.4	14.0	12.0	10.6	9.4	8.5	8.1	7.1	7.1	5.9	5.8
<b>Births to Unmarried</b>	<b>n</b>	6,178	11,356	22,837	21,621	25,220	25,349	24,900	24,014	23,853	23,913	23,566	23,309	22,467	22,386	21,757	22,392
	<b>%</b>	7.2	15.6	24.7	26.5	34.6	34.8	34.5	33.7	33.3	33.6	33.2	33.1	32.6	32.5	33.0	32.7
<b>Cesarean Deliveries</b>	<b>n</b>	--12	--12	20,615	19,086	24,244	23,062	22,900	22,508	22,691	22,431	22,302	22,290	21,710	21,656	21,466	21,964
	<b>%</b>	--12	--12	22.3	23.4	33.3	32.5	31.7	31.5	31.6	31.4	31.3	31.6	31.5	31.4	32.4	31.8
<b>Gestational Diabetes<sup>5</sup></b>	<b>n</b>	--12	--12	--12	2,245	3,368	3,698	4,070	3,784	3,867	4,287	4,005	4,575	4,812	4,885	5,219	5,889
	<b>%</b>	--12	--12	--12	2.8	4.7	5.1	5.6	5.3	5.4	6	5.6	6.5	7.0	7.1	7.9	8.5
<b>Low Birthweight<sup>6</sup></b>	<b>n</b>	6,941	4,413	5,388	5,711	5,650	5,458	5,491	5,495	5,394	5,321	5,341	5,261	5,243	5,273	4,897	5,176
	<b>%</b>	7.4	6.1	5.8	7.1	7.8	7.6	7.6	7.7	7.5	7.5	7.5	7.5	7.6	7.7	7.4	7.5
<b>Preterm<sup>7</sup></b>	<b>n</b>	--12	4,998	5,899	6,582	6,234	5,992	6,107	6,300	6,161	6,001	6,167	6,272	6,167	6,200	5,814	6,198
	<b>%</b>	--12	6.9	6.5	8.3	8.6	8.4	8.6	8.8	8.6	8.4	8.7	8.9	8.9	9.0	8.8	9.0
<b>Late Preterm<sup>8</sup></b>	<b>n</b>	--12	3,343	3,977	4,509	4,361	4,206	4,422	4,518	4,394	4,305	4,492	4,680	4,489	4,570	4,304	4,619
	<b>%</b>	--12	4.6	4.4	5.7	6.0	5.9	6.2	6.3	6.1	6	6.3	6.6	6.5	6.6	6.5	6.7
<b>Prenatal Care</b>																	
Public Pay Prenatal Care <sup>9</sup>	%	--12	--12	25.1	26.5	35.8	38.8	39.7	38.9	42.9	38.3	38.6	39.2	38.5	38.1	39.0	36.7
APNCU Index <sup>10</sup>	%	--10	--10	--10	83.3	84.9	82.8	83.4	83.7	82.6	81.8	82.1	80.6	76.1	81.6	76.6	78.5
Adjusted APNCU Index <sup>10</sup>	%	--10	--10	--10	--10	--11	85.3	85.4	84.5	83.1	81.8	82.3	80.5	76.1	82.7	--11	--11

**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 females 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 birthing people 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). 11. As of 2020, all hospitals were reporting prenatal care and the adjusted index became equivalent to the unadjusted index. 12. Data not available.

**Table 2. Birth Characteristics by Race/Hispanic Ethnicity and Birthplace of Birthing Person, Massachusetts: 2021**

Race and Hispanic Ethnicity (by birthing person's birthplace)	Births		Teen Births				Birthweight				Prenatal Care				Cesarean Deliveries		Breastfeeding <sup>5</sup>	
	n	% <sup>1</sup>	Ages 15-17		Ages 15-19		Very Low <sup>2</sup>		Low <sup>3</sup>		Adequate <sup>4</sup>		1 <sup>st</sup> Trimester		n	%	n	%
<b>State Total</b>	<b>69,127</b>	<b>100.0</b>	<b>314</b>	<b>0.5</b>	<b>1,308</b>	<b>1.9</b>	<b>767</b>	<b>1.1</b>	<b>5,176</b>	<b>7.5</b>	<b>53,745</b>	<b>78.5</b>	<b>55,614</b>	<b>81.1</b>	<b>21,964</b>	<b>31.8</b>	<b>59,025</b>	<b>87.4</b>
US inc. DC	47,251	68.4	180	0.4	813	1.7	476	1.0	3,468	7.4	38,167	81.6	39,616	84.5	14,781	31.4	39,354	85.7
US Territories <sup>7</sup>	1,541	2.2	24	1.6	77	5.0	39	2.5	161	10.5	1,192	78.5	1,137	74.7	497	32.3	1,248	82.5
Non-US-born <sup>8</sup>	20,316	29.4	110	0.5	417	2.1	247	1.2	1,541	7.6	14,382	71.5	14,853	73.7	6,681	32.9	18,420	91.7
<b>American Indian/ Alaska Native Non-Hispanic<sup>9</sup></b>	<b>331</b>	<b>0.5</b>	<b>5</b>	<b>1.5</b>	<b>11</b>	<b>3.3</b>	<b>0</b>	<b>0.0</b>	<b>22</b>	<b>6.6</b>	<b>259</b>	<b>78.5</b>	<b>243</b>	<b>73.4</b>	<b>114</b>	<b>34.4</b>	<b>266</b>	<b>82.4</b>
US inc. DC	318	96.1	5	1.6	11	3.5	0	0.0	21	6.6	249	78.5	231	72.6	-6	-6	254	81.7
US Territories <sup>7</sup>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Non-US-born <sup>8</sup>	13	3.9	0	0.0	0	0.0	0	0.0	-6	-6	10	76.9	12	92.3	-6	-6	12	100.0
<b>Asian/ Pacific Islander Non-Hispanic</b>	<b>6,075</b>	<b>8.8</b>	<b>11</b>	<b>0.2</b>	<b>27</b>	<b>0.4</b>	<b>48</b>	<b>0.8</b>	<b>482</b>	<b>7.9</b>	<b>4,673</b>	<b>77.5</b>	<b>5,037</b>	<b>83.4</b>	<b>1,815</b>	<b>29.9</b>	<b>5,506</b>	<b>91.6</b>
US inc. DC	1,588	26.1	-6	-6	-6	-6	16	1.0	128	8.1	1,231	78.4	1,326	84.2	458	28.9	1,399	89.5
US Territories <sup>7</sup>	5	0.1	0	0.0	0	0.0	0	0.0	0	0.0	-6	-6	5	100.0	-6	-6	5	100.0
Non-US-born <sup>8</sup>	4,482	73.8	-6	-6	-6	-6	32	0.7	354	7.9	3,438	77.2	3,706	83.1	1,356	30.3	4,102	92.3
<b>Black Non-Hispanic</b>	<b>7,011</b>	<b>10.1</b>	<b>50</b>	<b>0.7</b>	<b>183</b>	<b>2.6</b>	<b>162</b>	<b>2.3</b>	<b>779</b>	<b>11.1</b>	<b>4,958</b>	<b>71.3</b>	<b>4,909</b>	<b>70.6</b>	<b>2,469</b>	<b>35.2</b>	<b>6,169</b>	<b>89.2</b>
US inc. DC	3,111	44.4	33	1.1	132	4.2	85	2.7	405	13.0	2,262	73.5	2,312	75.0	1,056	34.0	2,589	84.7
US Territories <sup>7</sup>	9	0.1	0	0.0	0	0.0	-6	-6	-6	-6	5	55.6	5	55.6	-6	-6	7	77.8
Non-US-born <sup>8</sup>	3,890	55.5	17	0.4	51	1.3	75	1.9	372	9.6	2,691	69.7	2,592	67.1	1,411	36.3	3,573	92.9
<b>Hispanic</b>	<b>14,456</b>	<b>20.9</b>	<b>198</b>	<b>1.4</b>	<b>769</b>	<b>5.3</b>	<b>194</b>	<b>1.3</b>	<b>1,182</b>	<b>8.2</b>	<b>10,486</b>	<b>73.2</b>	<b>10,507</b>	<b>73.2</b>	<b>4,547</b>	<b>31.5</b>	<b>12,311</b>	<b>86.0</b>
US inc. DC	5,758	39.8	91	1.6	368	6.4	71	1.2	498	8.7	4,410	77.2	4,469	78.1	1,701	29.6	4,688	82.3
US Territories <sup>7</sup>	1,504	10.4	24	1.6	77	5.1	36	2.4	156	10.4	1,169	78.8	1,111	74.7	487	32.4	1,222	82.5
Non-US-born <sup>8</sup>	7,194	49.8	83	1.2	324	4.5	87	1.2	528	7.3	4,907	68.9	4,927	69.1	2,359	32.8	6,401	89.6
<b>White Non-Hispanic</b>	<b>39,900</b>	<b>57.7</b>	<b>44</b>	<b>0.1</b>	<b>297</b>	<b>0.7</b>	<b>331</b>	<b>0.8</b>	<b>2,600</b>	<b>6.5</b>	<b>32,545</b>	<b>82.1</b>	<b>34,030</b>	<b>85.8</b>	<b>12,619</b>	<b>31.6</b>	<b>33,768</b>	<b>87.0</b>
US inc. DC	35,760	89.6	38	0.1	271	0.8	292	0.8	2,365	6.6	29,591	83.3	30,815	86.6	11,283	31.6	29,944	86.2
US Territories <sup>7</sup>	8	0.0	0	0.0	0	0.0	0	0.0	-6	-6	6	75.0	7	87.5	-6	-6	6	85.7
Non-US-born <sup>8</sup>	4,127	10.3	6	0.1	25	0.6	39	0.9	234	5.7	2,947	72.1	3,207	78.3	1,333	32.3	3,818	93.9
<b>Other Non-Hispanic<sup>10</sup></b>	<b>415</b>	<b>0.6</b>	<b>-6</b>	<b>-6</b>	<b>8</b>	<b>1.9</b>	<b>8</b>	<b>1.9</b>	<b>39</b>	<b>9.4</b>	<b>288</b>	<b>70.2</b>	<b>292</b>	<b>71.0</b>	<b>141</b>	<b>34.0</b>	<b>349</b>	<b>92.8</b>
US inc. DC	-6	-6	0	0.0	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6
US Territories <sup>7</sup>	-6	-6	0	0.0	0	0.0	0	0.0	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6
Non-US-born <sup>8</sup>	304	73.3	-6	-6	-6	-6	-6	-6	26	8.6	203	67.7	204	68.0	110	36.2	266	95.0

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

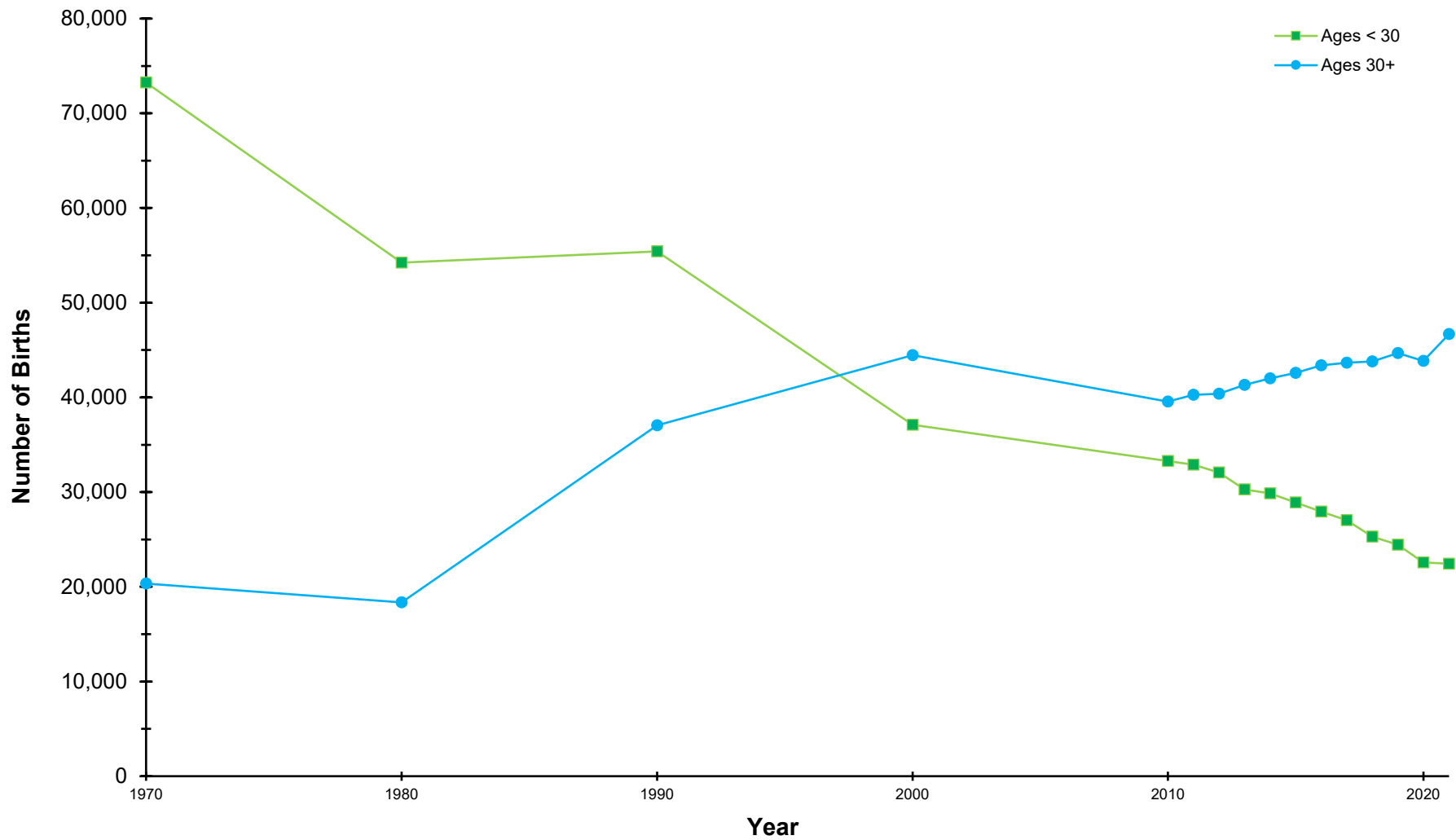
1. In the column "Births %," the percentages of the race/Hispanic groups (bolded) are based on the state total (including births of unknown race/ethnicity), and the birthplace percentage for the race/ethnicities are based on the total number in race/Hispanic ethnicity category. For all other categories, percentages are based on row totals.
2. Very low birthweight: less than 1,500 grams or 3.3 pounds.
3. Low birthweight: less than 2,500 grams or 5.5 pounds.
4. Based on Adequacy of Prenatal Care Utilization (APNCU) Index.
5. Infant was being breastfed during the hospital stay.
6. Calculations based on 1-4 events are excluded.
7. The category "US Territories" includes females born in Puerto Rico, the US Virgin Islands, and Guam. Approximately 95% of the births in this category were to females born in Puerto Rico.
8. The category "Non-US-born" includes females born outside of the 50 US states, District of Columbia, and the US territories.
9. Birthing people who selected American Indian/Alaska Native as their race.
10. Birthing people who indicated "Other" as their race.

**Table 3. Birth Characteristics by Ancestry of Birthing Person, Massachusetts: 2021**

Ancestry	Births <sup>1</sup>		Teen Births				Low Birthweight <sup>2</sup>		Prenatal Care				Late Preterm <sup>4</sup>		Cesarean Section		Breast-feeding <sup>5</sup>		Gestational Diabetes <sup>6</sup>	
	N	%	Ages 15-17		Ages 15-19		N	%	Adequate <sup>3</sup>		1 <sup>st</sup> Trimester		N	%	N	%	N	%	N	%
State Total	69,127	100.0	314	0.5	1,308	1.9	5,176	7.5	53,745	78.5	55,614	81.1	4,619	6.7	21,964	31.8	59,025	87.4	5,889	8.5
American	32,358	46.8	83	0.3	377	1.2	2,076	6.4	26,714	83.0	27,727	86.1	2,138	6.6	10,225	31.6	27,720	85.8	2,446	7.6
European	9,693	14.0	7	0.1	49	0.5	621	6.4	7,751	80.5	8,355	86.7	575	5.9	2,906	30.0	8,818	91.1	678	7.0
Puerto Rican	4,648	6.7	74	1.6	303	6.5	439	9.5	3,622	78.8	3,505	76.0	379	8.2	1,417	30.5	3,654	79.6	467	10.0
African American	3,374	4.9	35	1.0	147	4.4	426	12.6	2,466	73.8	2,520	75.4	269	8.0	1,151	34.1	2,863	85.2	235	7.0
Dominican	3,213	4.6	30	0.9	143	4.5	266	8.3	2,390	75.0	2,446	76.7	212	6.6	1,188	37.0	2,794	87.2	305	9.5
Brazilian	2,466	3.6	21	0.9	70	2.8	163	6.6	1,714	70.0	1,722	70.3	183	7.4	1,077	43.7	2,296	93.1	207	8.4
Portuguese	1,970	2.8	8	0.4	42	2.1	150	7.6	1,631	83.2	1,598	81.4	145	7.4	690	35.0	1,475	74.9	170	8.6
Asian Indian	1,841	2.7	0	0.0	--7	--7	177	9.6	1,486	81.1	1,558	84.9	108	5.9	692	37.6	1,722	95.1	314	17.1
African	1,798	2.6	6	0.3	14	0.8	148	8.2	1,244	69.7	1,221	68.4	117	6.5	651	36.2	1,671	93.2	176	9.8
Chinese	1,603	2.3	0	0.0	--7	--7	114	7.1	1,200	75.3	1,401	87.8	88	5.5	346	21.6	1,477	92.7	193	12.0
Haitian	1,481	2.1	7	0.5	23	1.6	153	10.3	966	65.7	974	66.2	96	6.5	544	36.7	1,319	89.5	146	9.9
Cape Verdean	1,328	1.9	12	0.9	51	3.8	131	9.9	992	75.1	960	72.7	87	6.6	431	32.5	1,163	87.6	128	9.6
Other	1,319	1.9	6	0.5	14	1.1	90	6.8	1,022	78.2	1,067	81.5	72	5.5	394	29.9	1,177	89.4	104	7.9
Guatemalan	1,268	1.8	36	2.8	123	9.7	89	7.0	802	63.7	789	62.6	73	5.8	316	24.9	1,027	81.2	107	8.4
Salvadoran	1,185	1.7	17	1.4	62	5.2	104	8.8	767	65.4	786	67.0	92	7.8	264	22.3	1,067	90.3	103	8.7
Middle Eastern	1,157	1.7	0	0.0	6	0.5	94	8.1	828	72.3	901	78.7	66	5.7	343	29.7	1,069	92.6	86	7.4
Missing	958	1.4	5	0.5	11	1.1	88	9.2	658	70.1	736	78.2	78	8.2	305	31.9	787	83.9	74	7.7
Other South American	671	1.0	8	1.2	28	4.2	42	6.3	436	65.9	451	67.8	38	5.7	170	25.3	624	93.1	40	6.0
Russian	637	0.9	--7	--7	5	0.8	28	4.4	490	77.5	521	82.2	33	5.2	149	23.4	602	94.5	59	9.3
Mexican	612	0.9	--7	--7	14	2.3	30	4.9	462	76.2	466	76.8	36	5.9	179	29.2	546	90.4	60	9.8
Vietnamese	572	0.8	0	0.0	0	0.0	34	5.9	444	78.9	457	81.0	36	6.3	156	27.3	514	90.7	100	17.5
West Island Caribbean	553	0.8	0	0.0	8	1.4	75	13.6	393	71.6	384	69.9	55	9.9	203	36.8	514	93.3	43	7.8
Cambodian	490	0.7	6	1.2	20	4.1	50	10.2	385	80.0	357	74.1	45	9.2	117	23.9	335	68.5	74	15.1
Honduran	476	0.7	9	1.9	34	7.1	32	6.7	323	68.9	327	69.7	35	7.4	130	27.3	433	91.2	35	7.4
Colombian	467	0.7	--7	--7	--7	--7	26	5.6	326	69.8	355	76.0	31	6.6	124	26.6	433	92.7	34	7.3
Korean	341	0.5	0	0.0	0	0.0	12	3.5	243	71.9	287	84.9	10	2.9	96	28.2	323	95.3	38	11.1
Native American	320	0.5	--7	--7	10	3.1	21	6.6	246	77.4	232	72.5	20	6.3	111	34.7	258	83.0	21	6.6

**NOTE:** All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Birthing people may select more than one ancestry group 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 "Births" column, percentages are based on column total (state total of births, including births for which ethnicity of birthing person 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 Birthing Person's Age Group, Massachusetts: 1970-2021**





**Table 4. Trends in Number and Percent Distribution of Births by Plurality Age of Birthing Person, Massachusetts: 2011-2021**

Singletons				Multiples <sup>1</sup>						Total births <sup>2</sup>	
Age Group	Year	n	%	Twins		Triplets or more		Total Multiples			
				n	%	n	%	n	%	n	%
<b>All Ages</b>											
	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	65,469	96.5	2,304	3.4	63	0.1	2,367	3.5	67,836	100.0
	2019	66,699	96.5	2,349	3.4	68	0.1	2,417	3.5	69,117	100.0
	2020	64,321	96.8	2,071	3.1	50	0.1	2,121	3.2	66,442	100.0
	2021	66,805	96.6	2,269	3.3	53	0.1	2,322	3.4	69,127	100.0
<b>Ages &lt;35</b>											
	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	48,492	97.0	1,491	3.0	27	0.1	1,518	3.0	50,010	100.0
	2019	48,856	97.0	1,446	2.9	47	0.1	1,493	3.0	50,350	100.0
	2020	46,510	97.2	1,314	2.7	35	0.1	1,349	2.8	47,859	100.0
	2021	47,753	97.0	1,423	2.9	38	0.1	1,461	3.0	49,214	100.0
<b>Ages 35+</b>											
	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
	2018	16,976	95.2	813	4.6	36	0.2	849	4.8	17,825	100.0
	2019	17,842	95.1	903	4.8	21	0.1	924	4.9	18,766	100.0
	2020	17,809	95.8	757	4.1	15	0.1	772	4.2	18,581	100.0
	2021	19,051	95.7	846	4.2	15	0.1	861	4.3	19,912	100.0

**Table 5. Summary of Selected Teen Birth Characteristics, Massachusetts: 2021**

	Ages 15-17		Ages 18-19		Combined Ages 15-19	
	N	% <sup>1,2</sup>	N	% <sup>1,2</sup>	N	% <sup>1,2</sup>
<b>State Total</b>	<b>314</b>	<b>24.0%</b>	<b>994</b>	<b>76.0%</b>	<b>1308</b>	<b>100.0%</b>
American Indian/ Alaska Native Non-Hispanic	5	1.6%	6	0.6%	11	0.8%
Asian/ Pacific Islander Non-Hispanic	11	3.6%	16	1.6%	27	2.1%
Black Non-Hispanic	50	16.2%	133	13.5%	183	14.1%
Hispanic	<b>198</b>	<b>64.1%</b>	<b>571</b>	<b>57.9%</b>	<b>769</b>	<b>59.4%</b>
White Non-Hispanic	44	14.2%	253	25.7%	297	22.9%
<b>Birthplace</b>						
U.S. States/D.C.	180	57.3%	633	63.7%	813	62.2%
Puerto Rico/U.S. Terr.	24	7.6%	53	5.3%	77	5.9%
Non-U.S.-Born	110	35.0%	308	31.0%	418	32.0%
<b>Prenatal Care Funding</b>						
Public	264	86.8%	813	84.8%	1077	85.3%
Private, other	40	13.2%	146	15.2%	186	14.7%
<b>Pregnancy-Related Factors</b>						
<b>Adequacy of Prenatal Care<sup>3</sup></b>						
Adequate Total <sup>4</sup>	176	56.1%	621	62.5%	797	60.9%
Adequate Intensive	79	25.2%	258	26.0%	337	25.8%
Adequate Basic	97	30.9%	363	36.5%	460	35.2%
Intermediate	40	12.7%	133	13.4%	173	13.2%
Inadequate/None	96	30.6%	219	22.0%	315	24.1%
Unknown	--6	--6	21	2.1%	23	1.8%
<b>Parity<sup>5</sup></b>						
1	300	95.5%	877	88.2%	1177	90.0%
2	14	4.5%	111	11.2%	125	9.6%
3+	0	0.0%	6	0.6%	6	0.5%
<b>Smoking during Pregnancy</b>						
Yes	5	1.7%	26	2.7%	31	2.5%
No	297	98.3%	935	97.3%	1232	97.5%
<b>Birth Outcomes</b>						
<b>Birthweight</b>						
< 500 g	0	0.0%	--6	--6	--6	--6
500-1,499 g	8	2.5%	--6	--6	--6	--6
1,500-2,499 g	24	7.6%	86	8.7%	110	8.4%
<b>LBW (&lt;2,499 g)</b>	<b>32</b>	<b>10.2%</b>	<b>107</b>	<b>10.8%</b>	<b>139</b>	<b>10.7%</b>
2,500-3,999 g	272	86.6%	842	85.0%	1114	85.4%
4000+ g	10	3.2%	42	4.2%	52	4.0%
<b>Gestational Age</b>						
< 28 weeks	5	1.6%	10	1.0%	15	1.1%
<b>Preterm (&lt; 37 weeks)</b>	<b>36</b>	<b>11.5%</b>	<b>101</b>	<b>10.2%</b>	<b>137</b>	<b>10.5%</b>
37-42 weeks	278	88.5%	892	89.8%	1170	89.5%
<b>Plurality</b>						
Singleton	--6	--6	--6	--6	--6	--6
Multiple birth	--6	--6	--6	--6	--6	--6

**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: 2021**

Municipality <sup>1</sup>	Teen Births		Black Non-Hispanic		Hispanic		White Non-Hispanic	
	N	Rate (95%CI) <sup>2,3</sup>	N	Rate (95%CI) <sup>2,3</sup>	N	Rate (95%CI) <sup>2,3</sup>	N	Rate (95%CI) <sup>2,3</sup>
<b>State Total</b>	<b>1,308</b>	<b>5.8 (5.4, 6.1)</b>	<b>183</b>	<b>11.0 (9.4, 12.5)</b>	<b>769</b>	<b>21.1 (19.6, 22.6)</b>	<b>297</b>	<b>2.1 (1.9, 2.4)</b>
Lynn	83	26.7 (17.6, 37.7)	--4	--4	72	44.4 (32.3, 58.4)	--4	--4
Chelsea	31	26.5 (17.4, 37.5)	--4	--4	--4	--4	--4	--4
Milford	20	25.2 (16.4, 36.0)	0	0.0	--4	--4	--4	--4
Holyoke	29	24.6 (15.9, 35.2)	--4	--4	--4	--4	--4	--4
Lawrence	73	23.0 (14.6, 33.4)	0	N/A	66	23.3 (14.8, 33.7)	--4	--4
Springfield	131	21.8 (18.1, 25.5)	23	21.7 (13.5, 31.7)	94	27.1 (17.9, 38.2)	--4	--4
New Bedford	54	18.1 (10.7, 27.3)	--4	--4	32	31.8 (21.7, 43.8)	12	9.3 (4.3, 16.2)
Fall River	46	17.7 (10.5, 26.9)	8	46 (33.7, 60.3)	23	42.6 (30.8, 56.3)	14	9.4 (4.4, 16.3)
Brockton	57	17.3 (10.2, 26.4)	32	23.3 (14.8, 33.7)	18	43.3 (31.3, 57.1)	7	10.4 (5.1, 17.7)
Lowell	60	16.0 (9.2, 24.8)	--4	--4	33	32.2 (22.1, 44.2)	--4	--4
Pittsfield	19	15.8 (9.0, 24.5)	--4	--4	--4	--4	--4	--4
West Springfield	11	14.6 (8.1, 22.9)	--4	--4	--4	--4	5	9.9 (4.8, 17)
Fitchburg	22	14.6 (8.1, 22.9)	--4	--4	17	33.9 (23.5, 46.2)	--4	--4
Haverhill	19	10.9 (5.4, 18.3)	0	N/A	--4	--4	--4	--4
Chicopee	16	10.2 (4.9, 17.3)	0	N/A	7	13 (7, 21)	9	11.4 (5.8, 18.9)
Worcester	74	9.6 (4.5, 16.6)	10	9 (4.1, 15.8)	54	22.4 (14.1, 32.6)	10	3.1 (0.6, 7.3)
Malden	14	9.3 (4.3, 16.2)	--4	--4	7	33.2 (22.9, 45.4)	--4	--4
Attleboro	11	9.3 (4.3, 16.1)	--4	--4	--4	--4	5	6.3 (2.4, 12.1)
Everett	13	9.1 (4.2, 15.9)	--4	--4	8	15.6 (8.8, 24.2)	--4	--4
Revere	14	8.0 (3.4, 14.4)	--4	--4	8	9.7 (4.6, 16.6)	--4	--4
Methuen	11	6.7 (2.6, 12.7)	0	N/A	--4	--4	--4	--4
Taunton	11	6.7 (2.6, 12.7)	--4	--4	--4	--4	5	4.9 (1.6, 10.1)
Framingham	16	6.6 (2.6, 12.5)	0	N/A	--4	--4	--4	--4
Waltham	12	5.2 (1.7, 10.5)	0	N/A	--4	--4	--4	--4
Boston	116	4.7 (3.9, 5.6)	35	7.7 (3.3, 14)	71	15.4 (8.7, 24)	--4	--4

**NOTE:** The total number of Asian/ Pacific Islander Non-Hispanic teen births in MA in 2021 was 27 for a rate of 1.4/1,000 significantly lower than the state rate of 5.8. Lowell had the largest number of Asian/ Pacific Islander Non-Hispanic teen births at 14 births (rate: 16.1). The Asian/ Pacific Islander Non-Hispanic teen birth rate in this community was higher than the state. The total number of American Indian/ Alaska Native Non-Hispanic teen births was 11 for a rate of 38.3/1,000, which was higher than the state.

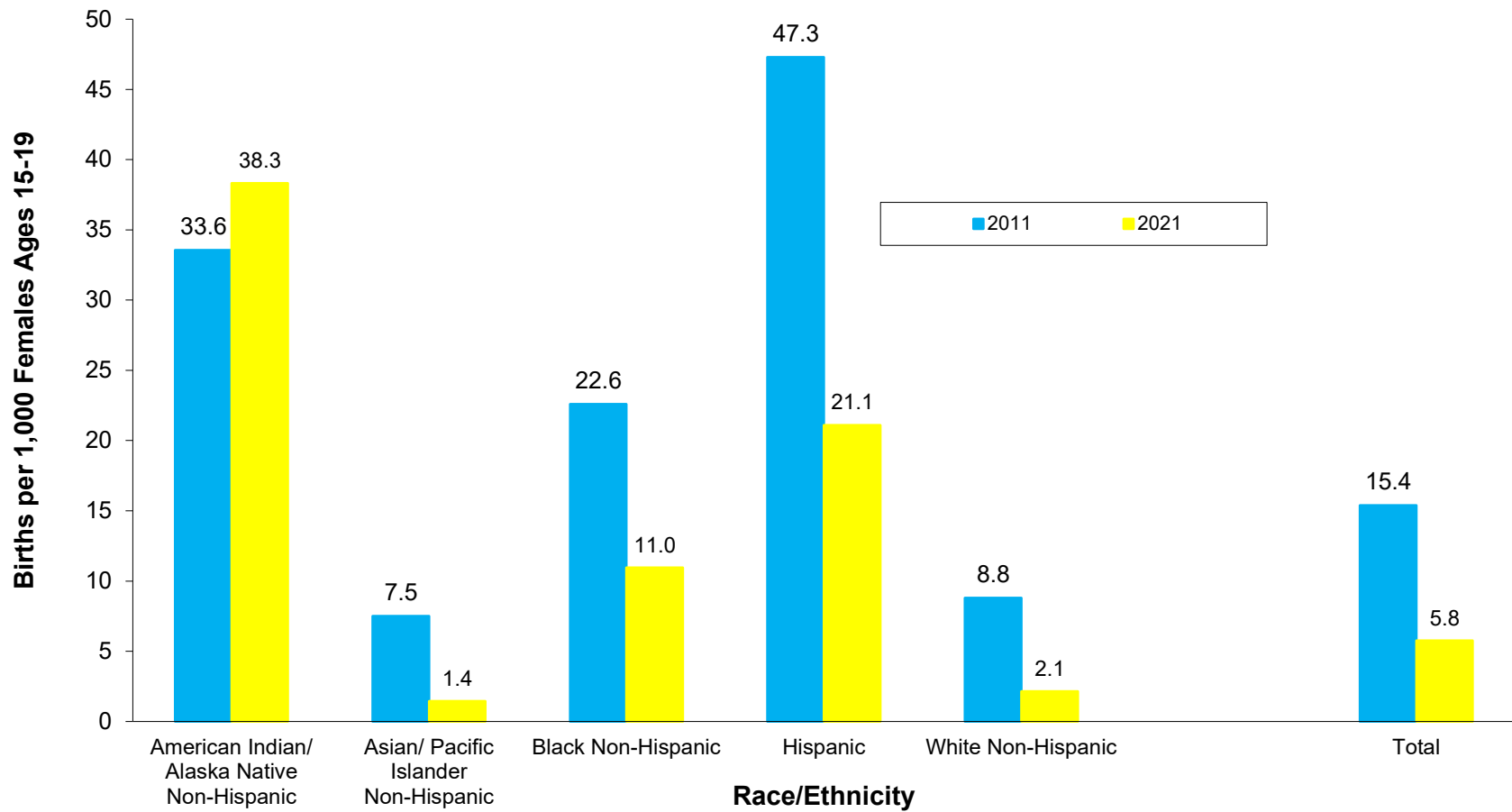
1. Selected communities include the 25 Massachusetts cities and towns with the greatest number of teen births. 2. Rates are per 1,000 females ages 15-19 per city/town. 3. Birth rates for cities and towns were calculated using the Massachusetts Department of Public Health Race Allocated Census 2010 Estimates file (MRACE 2010), which is the most up-to-date information available on the number of persons by age, race, and sex at the sub-state level. **If the population in your community increased from 2010 to 2019, the rates listed may overestimate the actual rate. If the population in your community declined from 2010 to 2019, 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 2021 Teen Birth Rate,  
Massachusetts: 2011, 2020, and 2021**

2021 Rank	Municipality <sup>1</sup>	2011		2020		2021	
		# Births 15-19	Birth Rate <sup>2</sup>	# Births 15-19	Birth Rate <sup>2,3</sup>	# Births 15-19	Birth Rate <sup>2,3</sup>
	<b>State Total</b>	<b>3,480</b>	<b>15.4</b>	<b>1,353</b>	<b>5.9</b>	<b>1,308</b>	<b>5.8</b>
1	Lynn	119	36.9	58	18.3	83	26.7
2	Chelsea	69	57.6	33	29.9	31	26.5
3	Milford	18	22.6	10	12.8	20	25.2
4	Holyoke	103	68.3	34	25.9	29	24.6
5	Lawrence	163	48.0	68	20.9	73	23
6	Springfield	367	53.7	137	22.6	131	21.8
7	New Bedford	137	45.1	75	24.8	54	18.1
8	Fall River	115	41.4	79	32.2	46	17.7
9	Brockton	121	36.1	60	18.6	57	17.3
10	Lowell	151	36.7	60	15.7	60	16
11	Pittsfield	45	33.6	12	9.8	19	15.8
12	West Springfield	21	24.9	7	9.0	11	14.6
13	Fitchburg	56	31.5	15	9.7	22	14.6
14	Haverhill	56	31.3	27	15.4	19	10.9
15	Chicopee	47	25.0	16	9.9	16	10.2
16	Worcester	193	25.0	78	10.6	74	9.6
17	Malden	29	18.7	6	3.7	14	9.3
18	Attleboro	24	18.0	8	6.5	11	9.3
19	Everett	31	23.5	15	10.1	13	9.1
20	Revere	35	24.4	13	7.4	14	8
21	Methuen	27	16.6	6	3.4	11	6.7
22	Taunton	36	20.6	9	5.5	11	6.7
23	Framingham	31	13.2	21	8.4	16	6.6
24	Waltham	20	8.2	10	4.2	12	5.2
25	Boston	401	15.4	154	6.1	116	4.7

1. Selected communities include the 25 Massachusetts cities and towns with the greatest number of teen births in 2021. Ranking is by 2021 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. **If the population in your community increased from 2010 to 2019, the rates listed may overestimate the actual rate. If the population in your community declined from 2010 to 2019, the rates given in the publication may underestimate the actual rate.**

**Figure 2. Teen Birth Rates among Females Ages 15-19 Years by Race/Hispanic Ethnicity of Birthing Person, Massachusetts: 2011 and 2021**



**NOTE:** Teen birth rate is number of births to females ages 15-19 per 1,000 females ages 15-19.

**Table 8. Births by Birthweight, Race/Hispanic Ethnicity, Massachusetts: 2021**

Birthweight (in grams)	Total		American Indian/ Alaska Native Non- Hispanic		Asian/ Pacific Islander Non-Hispanic		Black Non- Hispanic		Hispanic		White Non- Hispanic	
	n	% <sup>1</sup>	n	% <sup>1</sup>	n	% <sup>1</sup>	n	% <sup>1</sup>	n	% <sup>1</sup>	n	% <sup>1</sup>
<b>State Total</b>	<b>69,127</b>	<b>100.0</b>	<b>331</b>	<b>79.8</b>	<b>6,075</b>	<b>100.0</b>	<b>7,011</b>	<b>100.0</b>	<b>14,456</b>	<b>100.0</b>	<b>39,900</b>	<b>100.0</b>
<500	64	0.1	0	0.0	--2	--2	19	0.3	17	0.1	17	0.0
500-999	267	0.4	0	0.0	--2	--2	66	0.9	63	0.4	114	0.3
1,000-1,499	436	0.6	0	0.0	32	0.5	77	1.1	114	0.8	200	0.5
1,500-1,999	1,068	1.5	5	1.5	73	1.2	164	2.3	248	1.7	553	1.4
2,000-2,499	3,341	4.8	17	5.1	361	5.9	453	6.5	740	5.1	1,716	4.3
2,500-2,999	12,440	18.0	61	18.4	1,524	25.1	1,524	21.7	2,807	19.4	6,285	15.8
3,000-3,499	26,548	38.5	129	39.0	2,512	41.4	2,662	38.0	5,886	40.7	14,917	37.4
3,500-3,999	19,006	27.6	92	27.8	1,267	20.9	1,610	23.0	3,605	25.0	12,113	30.4
4,000-4,499	5,056	7.3	21	6.3	247	4.1	374	5.3	849	5.9	3,472	8.7
4,500-4,999	656	1.0	--2	--2	37	0.6	55	0.8	100	0.7	450	1.1
>=5,000	67	0.1	--2	--2	--2	--2	--2	--2	19	0.1	39	0.1
<b>VLBW<sup>3</sup> (0-1,499 g)</b>	<b>767</b>	<b>1.1</b>	<b>0</b>	<b>0.0</b>	<b>48</b>	<b>0.8</b>	<b>162</b>	<b>2.3</b>	<b>194</b>	<b>1.3</b>	<b>331</b>	<b>0.8</b>
<b>LBW<sup>4</sup> (0-2,499 g)</b>	<b>5,176</b>	<b>7.5</b>	<b>22</b>	<b>6.6</b>	<b>482</b>	<b>7.9</b>	<b>779</b>	<b>11.1</b>	<b>1,182</b>	<b>8.2</b>	<b>2,600</b>	<b>6.5</b>

**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 Age of Birthing Person, Massachusetts: 2011-2021**

Age Group (years)	Year	Singleton				Twin				Multiples Triplets or more				Total Multiples				Total Births			
		VLBW <sup>1</sup>		LBW <sup>2</sup>		VLBW <sup>1</sup>		LBW <sup>2</sup>		VLBW <sup>1</sup>		LBW <sup>2</sup>		VLBW <sup>1</sup>		LBW <sup>2</sup>		VLBW <sup>1</sup>		LBW <sup>2</sup>	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
All Ages	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	34.0	41	87.2	206	5.9	1,443	41.2	774	1.1	5,261	7.5
	2018	583	0.9	3,860	5.8	210	8.9	1,318	55.9	36	52.9	65	95.6	258	7.5	1,468	42.5	829	1.2	5,243	7.6
	2019	587	0.9	3,952	5.9	184	7.9	1,256	53.8	14	21.2	65	98.5	208	6.0	1,395	40.4	785	1.1	5,273	7.7
	2020	505	0.8	3,800	5.9	130	6.3	1,055	51.3	18	38.3	42	89.4	162	5.1	1,176	37.1	653	1.0	4,897	7.4
	2021	546	0.8	3950	5.9	197	8.7	1174	51.8	24	45.3	52	98.1	221	9.5	1226	52.8	767	1.1	5176	7.5
Ages < 35	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	100.0	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	-3	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	100.0	188	8.0	967	40.9	573	1.1	3,692	7.3
	2019	435	0.9	2,878	5.9	134	9.3	830	57.7	10	21.3	46	97.9	152	6.6	935	40.6	579	1.2	3,754	7.5
	2020	369	0.8	2,750	5.9	82	6.3	691	53.1	12	37.5	30	93.8	104	4.8	782	36.2	463	1.0	3,471	7.3
	2021	406	0.9	2836	6.0	109	7.7	755	53.1	19	50.0	37	97.4	128	8.8	792	54.3	534	1.1	3628	7.4
Ages 35+	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	-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	7.0	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
	2019	152	0.9	1,074	6.0	50	5.6	426	47.5	-3	-3	19	100.0	56	4.9	460	40.0	206	1.1	1,519	8.1
	2020	136	0.8	1,050	5.9	48	6.4	364	48.3	6	40.0	12	80.0	58	5.7	394	39.0	190	1.0	1,426	7.7
	2021	140	0.7	1114	5.9	88	10.4	419	49.5	5	33.3	15	100.0	93	10.8	434	50.4	233	1.2	1548	7.8

**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.). 3. Calculations based on values of 1-4 are excluded.

**Table 10. Births by Gestational Age, Race/Hispanic Ethnicity, Massachusetts: 2021**

Gestational Age <sup>1</sup> (weeks completed)	Total		American Indian/ Alaska Native Non-Hispanic		Asian/ Pacific Islander Non- Hispanic		Black Non- Hispanic		Hispanic		White Non- Hispanic	
	n	% <sup>2</sup>	n	% <sup>2</sup>	n	% <sup>2</sup>	n	% <sup>2</sup>	n	% <sup>2</sup>	n	% <sup>2</sup>
<b>State Total</b>	<b>69,127</b>	<b>100.0</b>	<b>331</b>	<b>5.4</b>	<b>6,075</b>	<b>100.0</b>	<b>7,011</b>	<b>100.0</b>	<b>14,456</b>	<b>100.0</b>	<b>39,900</b>	<b>100.0</b>
<20	11	0.02	0	0.0	--3	--3	5	0.07	--3	--3	--3	--3
20-23	75	0.11	0	0.0	--3	--3	16	0.2	--3	--3	--3	--3
24-27	245	0.36	0	0.0	13	0.2	66	0.9	48	0.3	108	0.3
28-31	504	0.73	0	0.0	37	0.6	82	1.2	134	0.9	236	0.6
32-33	740	1.07	--3	0.1	46	0.8	96	1.4	163	1.1	427	1.1
34-36	4,598	6.28	21	0.3	363	6.0	533	7.6	1,037	7.2	2,568	6.4
37-38	17,906	26.10	95	1.6	1,694	27.9	1,995	28.5	4,097	28.4	9,818	24.6
39	24,759	48.84	102	1.7	2,328	38.4	2,326	33.2	5,180	35.8	14,481	36.3
40	14,476	33.02	83	1.4	1,219	20.1	1,378	19.7	2,857	19.8	8,781	22.0
41	5,080	6.90	24	0.4	352	5.8	495	7.1	880	6.1	3,266	8.2
42	197	0.29	--3	--3	11	0.2	11	0.2	24	0.2	--3	--3
43	--3	--3	0	0.0	0	0.0	0	0.0	0	0.0	--3	--3
44+	--3	--3	0	0.0	0	0.0	0	0.0	0	0.0	--3	--3
<b><u>Preterm<sup>4</sup> (&lt;37)</u></b>												
Very Early <sup>5</sup> (<28)	331	0.5	0	0.0	18	0.3	87	1.2	79	0.5	128	0.3
(28-33)	1,248	1.8	--3	--3	83	1.4	178	2.5	297	2.1	663	1.7
Late (34-36)	4,619	6.7	21	6.3	363	6.0	533	7.6	1,037	7.2	2,568	6.4
<b><u>Term (≥37)</u></b>												
Early Term (37-38)	17,906	26.1	95	28.7	1,694	27.9	1,995	28.5	4,097	28.4	9,818	24.6
(39-41)	44,315	65.0	209	63.1	3,899	64.3	4,199	60.0	8,917	61.7	26,528	66.6
(≥42)	201	0.3	--3	--3	11	0.2	11	0.2	24	0.2	--3	--3

**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. Calculations based on values of 1-4 are excluded. 4. Also known as early gestational age, premature delivery, or preterm delivery. 5. Also known as extremely premature delivery or extremely preterm delivery.



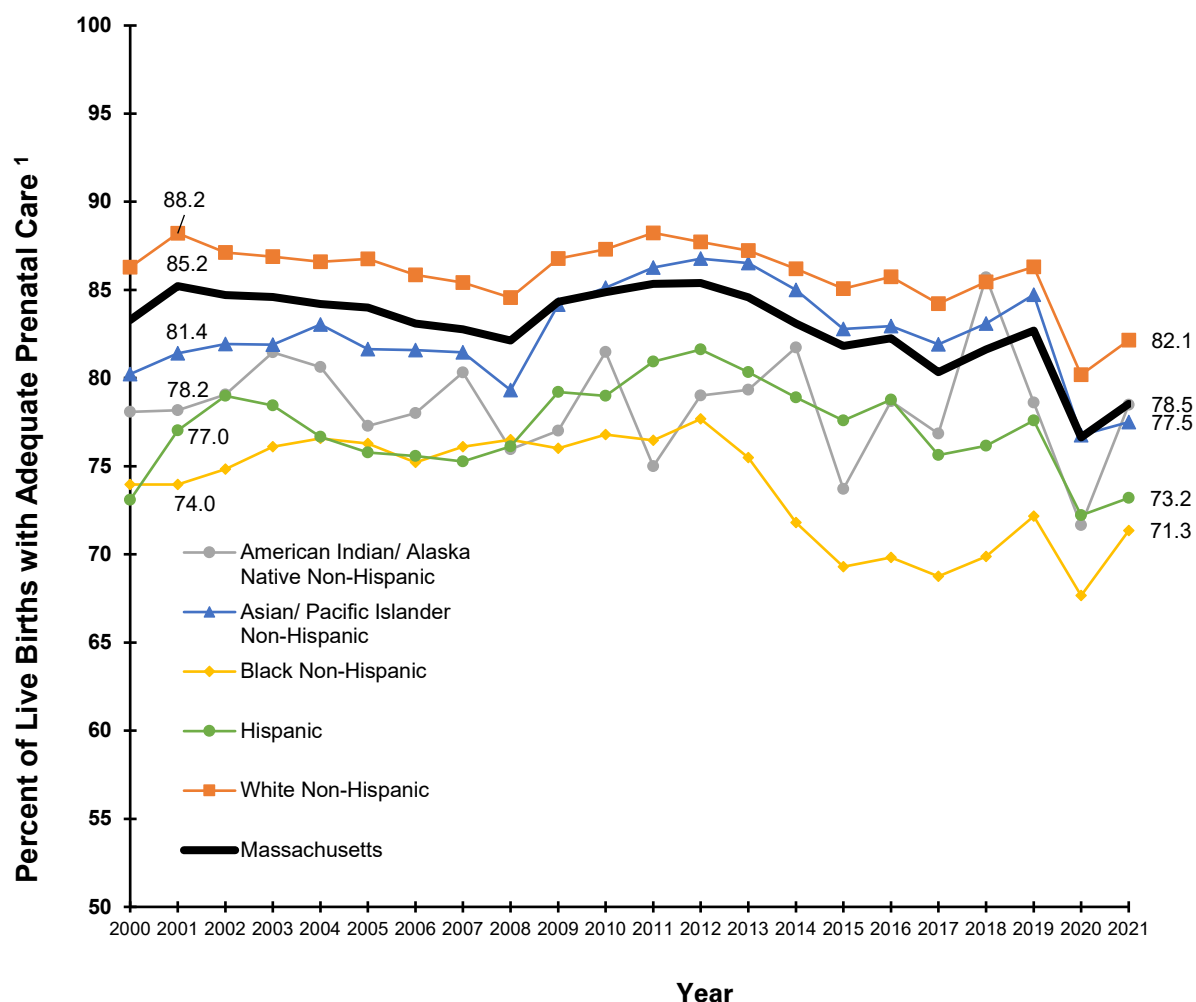
**Table 11. Percent Preterm and Term Births by Gestational Age Category, Massachusetts: 1980, 1990, 2000, 2010-2021**

	Preterm <sup>1</sup>			Term <sup>2</sup>	
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)
1980	0.6	1.7	4.6	12.0	93.1
1990	0.5	1.6	4.1	12.7	93.8
2000	0.7	2.8	7.3	22.4	89.7
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	0.5	1.8	6.1	21.7	91.4
2015	0.6	1.9	6.0	22.5	91.6
2016	0.6	1.8	6.3	22.8	91.3
2017	0.6	1.8	6.6	23.2	91.1
2018	0.5	1.9	6.5	23.4	91.1
2019	0.5	1.8	6.6	24.6	91.1
2020	0.5	1.8	6.5	24.8	91.2
2021	0.5	1.8	6.7	26.1	91.7

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.

NOTE: Gestational age data was not collected prior to 1975.

**Figure 3. Trends in Adequacy of Prenatal Care<sup>2,3</sup> by Race/Hispanic Ethnicity, Massachusetts: 2000-2021**



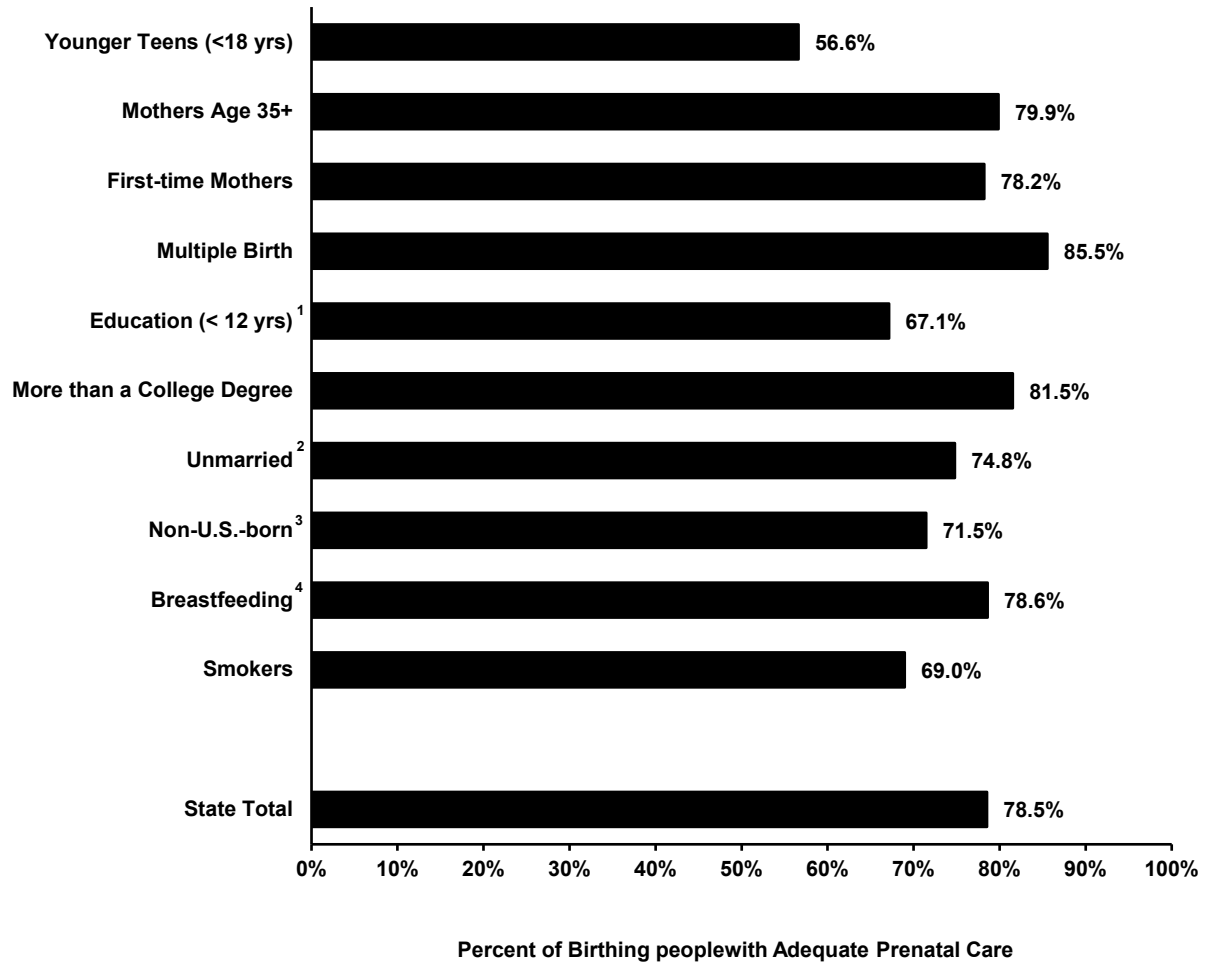
**NOTE:** FOR PURPOSES OF VISUAL REPRESENTATION THE VERTICAL SCALE OF GRAPH REPRESENTS A SMALL INTERVAL (from 50% to 100%). APNCU was not available prior to 2000.

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.

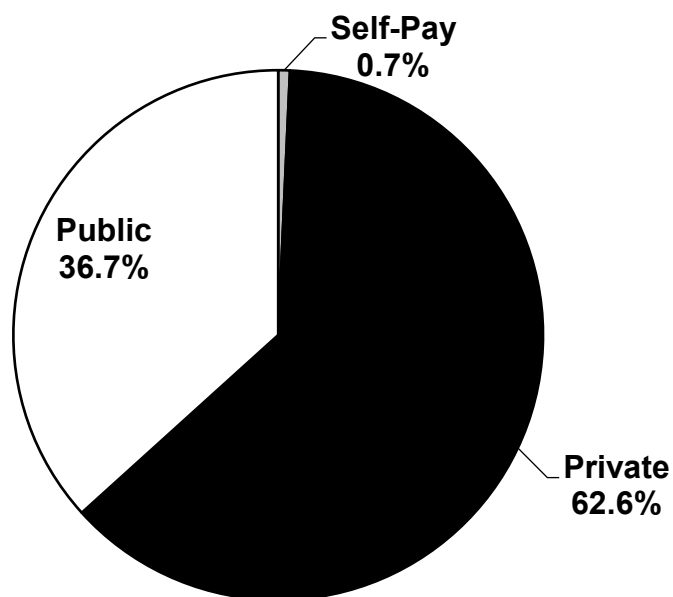
**Figure 4. Adequacy of Prenatal Care by Selected Characteristics of Birthing People, Massachusetts: 2021**



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

**Figure 5. Distribution of Prenatal Care Payment Source, Massachusetts: 2021**



---

**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 self-pay.

**Table 12. Resident Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2021**

Municipality <sup>1</sup>	Rank <sup>3</sup>	Population	Crude Birth rate <sup>2</sup>	Race and Ethnicity <sup>4</sup> of Birthing Person				
				American Indian/ Alaska Native Non-Hispanic	Asian/ Pacific Islander Non-Hispanic	Black Non-Hispanic	Hispanic	White Non-Hispanic
					%	%	%	%
<b>STATE TOTAL</b>		<b>7,029,914</b>	<b>48.6</b>	<b>0.5</b>	<b>8.8</b>	<b>10.1</b>	<b>20.9</b>	<b>57.7</b>
Arlington	30	46308	48.0	0.0	18.5	3.7	5.1	71.5
Attleboro	29	46461	53.5	--5	7.3	13.5	11.6	64.1
Barnstable	28	48916	54.3	1.2	3.2	13.0	17.5	64.3
Boston	1	675647	35.9	0.3	8.9	21.4	25.1	42.0
Brockton	6	105643	62.0	0.7	2.0	59.2	19.3	16.0
Brookline	18	63191	27.8	--5	20.8	4.1	9.4	64.4
Cambridge	4	118403	25.6	--5	25.8	11.4	9.1	52.0
Chicopee	24	55560	49.5	--5	2.3	5.0	39.9	51.2
Everett	27	49075	53.6	--5	9.1	16.6	47.7	24.0
Fall River	10	94000	58.3	1.3	3.6	13.8	25.3	54.3
Framingham	14	72362	59.4	--5	11.3	9.1	28.2	47.1
Haverhill	15	67787	55.2	0.7	3.1	4.5	39.2	51.1
Lawrence	11	89143	65.5	--5	1.3	2.6	88.9	6.5
Lowell	5	115554	55.1	0.7	25.2	11.0	33.4	28.9
Lynn	8	101253	66.4	--5	5.9	9.2	60.0	18.6
Malden	16	66263	49.8	--5	21.7	19.5	23.0	33.0
Medford	21	59659	42.0	--5	18.7	7.6	11.2	58.7
Methuen	26	53059	48.7	--5	3.5	6.1	45.3	43.8
New Bedford	9	101079	58.8	1.8	1.7	12.4	37.0	44.7
Newton	12	88923	33.1	--5	24.8	5.0	7.1	62.1
Peabody	25	54481	58.9	--5	3.1	6.3	19.8	65.0
Plymouth	20	61217	56.6	1.6	2.3	3.1	7.1	84.8
Quincy	7	101636	45.8	--5	31.9	11.2	9.5	45.2
Revere	19	62186	55.4	--5	8.2	7.8	47.1	32.9
Somerville	13	81045	27.2	--5	17.2	6.7	14.6	59.1
Springfield	3	155929	57.6	0.4	2.5	19.7	60.4	16.1
Taunton	22	59408	53.9	--5	2.8	21.8	14.4	58.5
Waltham	17	65218	42.1	--5	15.6	9.9	28.4	45.1
Weymouth	23	57437	63.7	0.7	13.4	8.5	10.4	65.9
Worcester	2	206518	46.0	0.5	7.2	20.3	34.0	37.7

**Table 12 (cont'd). Resident Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2021**

Births								
Municipality <sup>1</sup>	Very Low Birthweight (<1500 gms.)	Low Birthweight (<2500 gms.)	Gestational Diabetes	Adequate Prenatal Care <sup>6</sup>	Public Payment for Prenatal Care <sup>7</sup>	Unmarried	Teen Births 15 to 19 years	
	%	%	%	%	%	%	N	Rate <sup>8</sup>
<b>STATE TOTAL</b>	<b>1.1</b>	<b>7.5</b>	<b>8.5</b>	<b>78.5</b>	<b>36.7</b>	<b>32.7</b>	<b>1,308</b>	<b>5.8</b>
Arlington	--5	6.3	7.2	80.8	6.4	7.7	--5	--5
Attleboro	1.2	9.0	9.8	73.9	20.7	28.7	11	9.3
Barnstable	--5	5.2	7.7	74.9	54.5	33.3	5	4.5
Boston	1.3	8.4	5.3	69.6	36.8	35.7	116	4.7
Brockton	2.2	12.2	12.2	73.1	69.7	60.7	57	17.3
Brookline	1.6	6.9	4.1	74.4	8.0	6.4	0	0.0
Cambridge	0.9	5.2	6.5	66.3	13.9	13.5	--5	--5
Chicopee	1.1	8.5	11.5	79.7	64.7	59.2	16	10.2
Everett	1.2	7.4	7.9	59.4	71.3	39.4	13	9.1
Fall River	2.0	11.3	11.3	80.2	74.6	63.3	46	17.7
Framingham	1.6	7.4	9.2	74.0	43.0	27.2	16	6.6
Haverhill	--5	6.8	9.7	82.4	47.2	48.3	19	10.9
Lawrence	1.7	8.5	12.7	78.0	81.8	65.9	73	23.0
Lowell	1.8	9.0	11.5	79.0	64.8	54.7	60	16.0
Lynn	1.4	8.2	8.6	64.4	70.5	51.2	83	26.7
Malden	1.3	7.4	8.9	68.5	46.2	28.6	14	9.3
Medford	--5	6.5	8.0	73.7	21.3	18.4	--5	--5
Methuen	1.2	5.8	11.5	82.2	49.7	42.2	11	6.7
New Bedford	0.8	8.4	9.6	81.1	76.3	62.0	54	18.1
Newton	1.2	7.8	6.0	78.7	9.8	11.1	5	1.0
Peabody	2.0	7.6	12.1	78.7	37.4	29.4	9	7.2
Plymouth	--5	5.1	5.8	89.8	19.6	26.0	--5	--5
Quincy	0.9	6.3	9.9	75.3	29.0	28.4	8	4.3
Revere	1.1	5.6	8.3	63.4	61.8	39.1	14	8.0
Somerville	--5	7.3	6.6	69.4	19.1	16.5	9	5.9
Springfield	1.8	11.3	11.9	75.6	78.1	71.9	131	21.8
Taunton	1.7	8.7	9.4	78.8	50.5	45.8	11	6.7
Waltham	1.2	7.4	6.2	80.2	34.8	26.3	12	5.2
Weymouth	--5	5.3	8.7	83.5	19.3	26.7	5	3.7
Worcester	1.2	8.4	9.2	79.9	59.5	49.7	74	9.6

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 Race/Ethnicity, percentages are calculated based on the state total of resident births, including births for which race/Hispanic ethnicity of birthing person is unknown. 5. Counts and calculations based on 1-4 events are excluded. 6. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. 7. Public payment sources include CommonHealth, Healthy Start, Medicaid/MassHealth, and Medicare (may be HMO or managed care), or free care. 8. Births per 1,000 female residents ages 15-19; rates for cities and towns were calculated using UMass Donahue Institute (UMDI) estimates for 2020.

**Table 13. Birth Characteristics by Facility/Location, Massachusetts: 2021**

Facility <sup>1</sup>	Location	Occurrence Births <sup>2</sup> (n)	Low Birthweight <sup>3</sup> (%)	Public Pay for PNC <sup>4</sup> (%)	Adequate Prenatal Care <sup>5</sup> (%)	Early Term <sup>6</sup> (%)	Late Preterm <sup>7</sup> (%)
<b>State Total</b>		<b>70,083</b>	<b>7.5</b>	<b>35.8</b>	<b>78.5</b>	<b>26.1</b>	<b>6.8</b>
Anna Jaques Hospital	Newburyport	654	3.7	14.7	94.1	28.4	5.7
Baystate Franklin Medical Center	Greenfield	437	3.7	40.1	79.6	23.6	4.3
Baystate Medical Center	Springfield	4,412	13.2	54.5	79.0	29.8	10.9
Berkshire Medical Center	Pittsfield	637	4.2	50.8	86.8	24.8	5.0
Beth Israel Deaconess Hospital - Plymouth	Plymouth	921	2.9	28.3	86.6	24.1	4.6
Beth Israel Deaconess Medical Center	Boston	5,333	11.5	20.8	68.5	28.0	8.9
Beverly Hospital	Beverly	2,140	5.1	38.8	86.1	22.7	6.0
Boston Medical Center	Boston	2,577	9.8	71.4	67.4	29.8	7.8
Brigham And Women's Hospital	Boston	6,911	9.8	23.0	82.2	28.2	7.8
Brockton Hospital	Brockton	1,334	6.5	74.5	80.4	24.2	4.1
Cambridge Hospital	Cambridge	1,060	3.3	70.1	54.2	28.6	3.8
Cape Cod Hospital	Barnstable	1,048	4.1	47.3	74.1	23.4	6.6
Charlton Memorial Hospital	Fall River	1,428	7.8	58.0	86.6	23.5	7.5
Cooley Dickinson Hospital	Northampton	633	2.7	31.1	75.7	18.9	3.5
Emerson Hospital	Concord	1,377	4.2	16.1	88.6	26.4	6.2
Fairview Hospital	Great Barrington	163	– <sup>8</sup>	34.4	93.3	23.9	– <sup>8</sup>
Good Samaritan Medical Center	Brockton	579	5.7	51.8	70.5	25.3	5.7
Healthalliance - Clinton Hospital, Leominster	Leominster	543	3.9	58.0	86.2	26.7	3.9
Heywood Hospital	Gardner	340	2.9	41.7	89.4	15.6	4.4
Lawrence General Hospital	Lawrence	1,293	5.4	74.7	82.4	25.9	5.8
Lowell General Hospital	Lowell	1,667	7.3	50.3	83.3	25.6	7.0
Martha's Vineyard Hospital	Oak Bluffs	151	– <sup>8</sup>	45.7	64.0	19.2	– <sup>8</sup>
Massachusetts General Hospital	Boston	3,694	8.9	22.9	44.5	24.8	7.5
Melrose-Wakefield Hospital	Melrose	831	3.9	30.1	89.4	26.8	3.6
Mercy Medical Center	Springfield	973	2.3	66.7	79.8	28.8	2.4
Metrowest Med Center - Framingham Union Hospital	Framingham	1,020	6.1	55.9	67.1	28.1	7.3
Milford Regional Medical Center	Milford	932	4.1	37.7	86.0	27.5	5.6
Mt. Auburn Hospital	Cambridge	2,461	4.3	15.5	77.3	18.7	3.9
Nantucket Cottage Hospital	Nantucket	137	– <sup>8</sup>	39.0	58.4	25.5	– <sup>8</sup>
Newton-Wellesley Hospital	Newton	3,968	4.1	4.4	86.4	25.4	5.3
North Shore Birth Center	Beverly	59	0.0	30.5	93.2	16.9	0.0
North Shore Medical Center - Salem Hospital	Salem	1,221	6.5	52.7	66.3	27.1	4.6
Saint Vincent Hospital	Worcester	1,861	4.7	33.9	89.2	26.2	5.4
Seven Sisters Midwifery & Community Birth Center	Northampton	98	0.0	33.7	82.7	12.2	0.0
South Shore Hospital	Weymouth	3,277	5.6	13.6	92.0	27.4	6.0
St. Elizabeth's Medical Center	Boston	1,190	8.7	38.0	75.1	26.0	7.5
St. Lukes Hospital	New Bedford	1,807	6.3	63.5	82.7	26.4	6.1
Steward Holy Family Hospital	Methuen	1,290	3.6	58.2	80.9	27.9	4.2
Sturdy Memorial Hospital	Attleboro	631	11.6	9.7	66.1	17.6	4.8
Tufts Medical Center	Boston	1,301	19.7	42.0	83.7	30.6	10.4
UMass Memorial Medical Center - Memorial Campus	Worcester	4,437	9.7	42.4	81.6	25.9	9.0
Winchester Hospital	Winchester	2,647	5.9	10.6	90.7	24.5	6.3
Other Hospitals		10	– <sup>8</sup>	– <sup>8</sup>	– <sup>8</sup>	– <sup>8</sup>	– <sup>8</sup>
Home, Enroute & Dr. Off.		600	6.4	21.3	62.6	18.9	3.4

**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 birthing people during pregnancy and childbirth. 2. Occurrence births are births that occurred at the facility, regardless of residence of birthing person. 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: 2021**

Municipality <sup>1</sup>	Total Population Rank	Female Population, ages 15-19	Number of Teen Births (Ages 15-19)	Teen Birth Rate <sup>2</sup>	Race/Hispanic Ethnicity of Birthing Person (% of teen births)				
					American Indian/ Alaska Native Non- Hispanic	Asian/ Pacific Islander Non- Hispanic	Black Non- Hispanic	Hispanic	White Non- Hispanic
<b>State Total</b>		<b>227,269</b>	<b>1,308</b>	<b>5.8</b>	<b>0.8</b>	<b>2.1</b>	<b>14.1</b>	<b>59.4</b>	<b>22.9</b>
Arlington	30	1,237	--3	--3	0.0	0.0	0.0	--3	--3
Attleboro	29	1,188	11	9.3	--3	0.0	--3	--3	45.5
Barnstable	28	1,115	5	4.5	0.0	0.0	0.0	--3	--3
Boston	1	24,426	116	4.7	--3	0.0	30.2	61.2	--3
Brockton	6	3,288	57	17.3	0.0	0.0	56.1	31.6	12.3
Brookline	18	1,735	0	0.0	--3	--3	--3	--3	--3
Cambridge	4	3,602	--3	--3	0.0	0.0	--3	--3	0.0
Chicopee	24	1,569	16	10.2	0.0	0.0	0.0	43.8	56.3
Everett	27	1,427	13	9.1	0.0	0.0	--3	61.5	--3
Fall River	10	2,592	46	17.7	0.0	0.0	--3	50.0	30.4
Framingham	14	2,427	16	6.6	0.0	0.0	0.0	--3	--3
Haverhill	15	1,737	19	10.9	0.0	0.0	0.0	--3	--3
Lawrence	11	3,168	73	23.0	0.0	--3	0.0	90.4	--3
Lowell	5	3,745	60	16.0	0.0	23.3	--3	55.0	--3
Lynn	8	3,108	83	26.7	0.0	--3	--3	91.1	--3
Malden	16	1,500	14	9.3	0.0	0.0	--3	50.0	--3
Medford	21	1,480	--3	--3	0.0	--3	0.0	0.0	0.0
Methuen	26	1,639	11	6.7	0.0	--3	0.0	--3	--3
New Bedford	9	2,987	54	18.1	--3	--3	--3	59.3	22.2
Newton	12	4,770	5	1.0	0.0	0.0	--3	--3	0.0
Peabody	25	1,247	9	7.2	0.0	0.0	0.0	--3	--3
Plymouth	20	1,582	--3	--3	0.0	0.0	--3	--3	--3
Quincy	7	1,870	8	4.3	0.0	--3	--3	--3	0.0
Revere	19	1,756	14	8.0	0.0	0.0	--3	61.5	--3
Somerville	13	1,518	9	5.9	0.0	0.0	--3	--3	--3
Springfield	3	6,015	131	21.8	--3	--3	17.6	71.8	--3
Taunton	22	1,641	11	6.7	0.0	0.0	--3	--3	45.5
Waltham	17	2,325	12	5.2	0.0	0.0	0.0	--3	--3
Weymouth	23	1,361	5	3.7	0.0	0.0	--3	--3	--3
Worcester	2	7,696	74	9.6	0.0	0.0	13.5	73.0	13.5



**Table 14 (cont'd). Resident Teen Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2021**

Municipality <sup>1</sup>	Public Payment for Prenatal Care <sup>4</sup> (%)	Unmarried (%)	Low Birthweight <sup>5</sup> (%)	Preterm <sup>6</sup> (%)	Adequacy of Prenatal Care <sup>7</sup> (% of teen births)			
					Adequate Intensive	Adequate Basic	Intermediate	Inadequate <sup>8</sup>
<b>State Total</b>	<b>85.3</b>	<b>94.6</b>	<b>10.7</b>	<b>10.5</b>	<b>26.2</b>	<b>35.8</b>	<b>13.5</b>	<b>24.5</b>
Arlington	0.0	--3	--3	--3	--3	0.0	0.0	--3
Attleboro	--3	100.0	--3	--3	0.0	--3	--3	54.5
Barnstable	100.0	100.0	0.0	0.0	--3	--3	0.0	--3
Boston	85.0	--3	7.8	6.9	28.6	35.7	17.9	17.9
Brockton	81.8	--3	21.1	--3	27.3	34.5	12.7	25.5
Brookline	--3	--3	--3	--3	--3	--3	--3	--3
Cambridge	--3	--3	0.0	--3	--3	0.0	--3	--3
Chicopee	--3	100.0	--3	--3	--3	53.3	--3	--3
Everett	--3	--3	0.0	0.0	--3	--3	61.5	--3
Fall River	90.2	92.9	13.0	13.0	41.3	32.6	--3	--3
Framingham	100.0	--3	--3	--3	--3	46.7	--3	--3
Haverhill	--3	--3	0.0	0.0	31.6	42.1	--3	--3
Lawrence	--3	--3	8.2	9.6	16.4	43.8	19.2	20.5
Lowell	88.1	--3	8.3	13.3	28.6	33.9	--3	30.4
Lynn	92.4	--3	--3	9.6	10.8	28.9	18.1	42.2
Malden	--3	--3	--3	--3	--3	42.9	--3	--3
Medford	0.0	--3	0.0	0.0	0.0	--3	0.0	0.0
Methuen	--3	100.0	--3	--3	--3	--3	--3	--3
New Bedford	100.0	--3	--3	11.1	31.5	27.8	18.5	22.2
Newton	--3	100.0	0.0	0.0	0.0	--3	--3	--3
Peabody	--3	100.0	--3	--3	--3	--3	--3	--3
Plymouth	--3	--3	--3	--3	--3	--3	0.0	--3
Quincy	--3	--3	--3	--3	--3	--3	--3	--3
Revere	--3	--3	--3	--3	46.2	--3	--3	--3
Somerville	--3	--3	--3	--3	--3	--3	--3	--3
Springfield	94.5	--3	10.8	9.2	24.0	50.4	9.6	16.0
Taunton	--3	100.0	--3	0.0	--3	--3	0.0	54.5
Waltham	100.0	--3	--3	--3	--3	--3	0.0	58.3
Weymouth	--3	100.0	--3	0.0	--3	--3	0.0	--3
Worcester	--3	--3	16.2	17.6	25.7	40.5	14.9	18.9

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

1. The 30 largest municipalities are the cities and towns in Massachusetts with the largest populations according to the 2010 Census. 2. Birth rates represent the number of births per 1,000 females ages 15-19. Birth rates for cities and towns were calculated using UMASS Donahue Institute (UMDI) population estimates for 2019. 3. Counts and calculations based on values of 1-4 are excluded. 4. 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. 5. Less than 2,500 grams or 5.5 pounds. 6. Less than 37 weeks of gestational age. 7. Based on Adequacy of Prenatal Care Utilization (APNCU) Index. 8. Inadequate includes those birthing people with no prenatal care.

**Table 15. Adequacy of Prenatal Care Utilization: Summary and Component Indices, Massachusetts: 2021**

	Adequate Total <sup>1</sup>		Adequate Intensive		Adequate Basic		Intermediate		Inadequate		Unknown
	n	%	n	%	n	%	n	%	n	%	n
<b><u>Summary Index</u></b>											
Adequacy of Prenatal Care Utilization	52,691	78.4	22,423	33.4	30,268	45.1	7,655	11.4	6,823	10.2	618
<b><u>Component Indices</u></b>											
Adequacy of Initiation	60,898	90.7	21,469	32.0	39,429	58.7	3,526	5.2	2,745	4.1	618
Adequacy of Received Services (Visits)	57,967	86.3	26,448	39.4	31,519	46.9	8,225	12.2	977	1.5	618

**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: 2021**

Race/Ethnicity and Payment Source	Births <sup>1</sup>		Teen Births <sup>2</sup>				Birthweight			
			<18 Years		<20 Years		Very Low <sup>3</sup>		Low <sup>4</sup>	
	n	%	n	%	n	%	n	%	n	%
<b>STATE TOTAL<sup>5</sup></b>	<b>69,127</b>	<b>100.0</b>	<b>328</b>	<b>0.5</b>	<b>1,322</b>	<b>1.9</b>	<b>767</b>	<b>1.1</b>	<b>5,176</b>	<b>7.5</b>
<b>Public</b>	24,686	36.5	277	1.1	1,090	4.4	316	1.3	2,104	8.5
Medicaid <sup>6</sup>	20,834	30.8	246	1.2	944	4.5	281	1.3	1,838	8.8
Other Public <sup>7</sup>	3,852	5.7	31	0.8	146	3.8	35	0.9	266	6.9
<b>Private<sup>8</sup></b>	42,104	62.3	39	0.1	180	0.4	384	0.9	2,794	6.6
<b>American Indian/ Alaska Native Non-Hispanic</b>	<b>331</b>	<b>100.0</b>	<b>5</b>	<b>1.5</b>	<b>11</b>	<b>3.3</b>	<b>0</b>	<b>0.0</b>	<b>22</b>	<b>6.6</b>
<b>Public</b>	165	51.1	5	3.0	--9	--9	0	0.0	10	6.1
Medicaid <sup>6</sup>	129	39.9	5	3.9	--9	--9	0	0.0	--9	--9
Other Public <sup>7</sup>	36	11.1	0	0.0	0	0.0	0	0.0	--9	--9
<b>Private<sup>8</sup></b>	155	48.0	0	0.0	--9	--9	0	0.0	12	7.7
<b>Asian/ Pacific Islander Non-Hispanic</b>	<b>6,075</b>	<b>100.0</b>	<b>11</b>	<b>0.2</b>	<b>27</b>	<b>0.4</b>	<b>48</b>	<b>0.8</b>	<b>482</b>	<b>7.9</b>
<b>Public</b>	1,196	19.9	--9	--9	--9	--9	8	0.7	98	8.2
Medicaid <sup>6</sup>	1,038	17.3	--9	--9	--9	--9	8	0.8	--9	--9
Other Public <sup>7</sup>	158	2.6	--9	--9	--9	--9	0	0.0	--9	--9
<b>Private<sup>8</sup></b>	4,767	79.3	--9	--9	--9	--9	38	0.8	373	7.8
<b>Black Non-Hispanic</b>	<b>7,011</b>	<b>100.0</b>	<b>51</b>	<b>0.7</b>	<b>184</b>	<b>2.6</b>	<b>162</b>	<b>2.3</b>	<b>779</b>	<b>11.1</b>
<b>Public</b>	4,254	61.3	--9	--9	150	3.5	84	2.0	467	11.0
Medicaid <sup>6</sup>	3,732	53.8	--9	--9	--9	--9	74	2.0	402	10.8
Other Public <sup>7</sup>	522	7.5	--9	--9	--9	--9	10	1.9	65	12.5
<b>Private<sup>8</sup></b>	2,565	37.0	--9	--9	27	1.1	60	2.3	270	10.5
<b>Hispanic</b>	<b>14,456</b>	<b>100.0</b>	<b>210</b>	<b>1.5</b>	<b>781</b>	<b>5.4</b>	<b>194</b>	<b>1.3</b>	<b>1,182</b>	<b>8.2</b>
<b>Public</b>	10,463	72.9	186	1.8	693	6.6	126	1.2	855	8.2
Medicaid <sup>6</sup>	8,963	62.5	167	1.9	607	6.8	112	1.2	761	8.5
Other Public <sup>7</sup>	1,500	10.5	19	1.3	86	5.7	14	0.9	94	6.3
<b>Private<sup>8</sup></b>	3,743	26.1	16	0.4	61	1.6	59	1.6	285	7.6
<b>White Non-Hispanic</b>	<b>39,900</b>	<b>100.0</b>	<b>44</b>	<b>0.1</b>	<b>297</b>	<b>0.7</b>	<b>331</b>	<b>0.8</b>	<b>2,600</b>	<b>6.5</b>
<b>Public</b>	8,063	18.0	34	0.4	206	2.6	88	1.1	630	7.8
Medicaid <sup>6</sup>	6,495	16.7	--9	--9	174	2.7	78	1.2	537	8.3
Other Public <sup>7</sup>	1,568	4.0	--9	--9	32	2.0	10	0.6	93	5.9
<b>Private<sup>8</sup></b>	30,291	78.0	10	0.0	78	0.3	212	0.7	1,803	6.0

**Table 16 (cont'd). Birth Characteristics by Race/Hispanic Ethnicity and Source of Prenatal Care Payment, Massachusetts: 2021**

Race/Ethnicity and Payment Source	Prenatal Care									
	Adequate <sup>10</sup>		Began 1st Trimester		Cesarean Delivery		Breastfeeding <sup>11</sup>		Smoking <sup>12</sup>	
	n	%	n	%	n	%	n	%	n	%
<b>STATE TOTAL<sup>5</sup></b>	<b>53,745</b>	<b>78.5</b>	<b>55,614</b>	<b>81.1</b>	<b>21,964</b>	<b>31.8</b>	<b>59,025</b>	<b>87.4</b>	<b>1,907</b>	<b>2.9</b>
<b>Public</b>	17,944	73.8	17,469	71.7	7,891	32.2	20,270	82.9	1,412	6.0
Medicaid <sup>6</sup>	14,937	<b>72.8</b>	14,710	71.6	6,628	32.0	17,161	83.1	1,211	6.1
Other Public <sup>7</sup>	2,876	<b>75.8</b>	2,759	72.7	1,263	33.1	3,109	81.6	201	5.4
<b>Private<sup>8</sup></b>	34,554	<b>82.8</b>	36,780	88.0	13,426	32.0	38,074	90.9	418	1.0
<b>American Indian/ Alaska Native Non-Hispanic</b>	<b>259</b>	<b>78.5</b>	<b>243</b>	<b>73.4</b>	<b>114</b>	<b>34.4</b>	<b>266</b>	<b>82.4</b>	<b>46</b>	<b>14.4</b>
<b>Public</b>	128	77.6	113	68.5	55	33.3	128	77.6	40	25.0
Medicaid <sup>6</sup>	100	77.5	87	67.4	40	31.0	101	78.3	--9	--9
Other Public <sup>7</sup>	28	77.8	26	72.2	15	41.7	27	75.0	--9	--9
<b>Private<sup>8</sup></b>	125	80.6	124	80.0	56	36.1	137	88.4	--9	--9
<b>Asian/ Pacific Islander Non-Hispanic</b>	<b>4,673</b>	<b>77.5</b>	<b>5,037</b>	<b>83.4</b>	<b>1,815</b>	<b>29.9</b>	<b>5,506</b>	<b>91.6</b>	<b>31</b>	<b>0.5</b>
<b>Public</b>	885	74.7	858	72.2	327	27.3	975	81.7	15	1.3
Medicaid <sup>6</sup>	759	73.8	735	71.3	281	27.1	830	80.2	--9	--9
Other Public <sup>7</sup>	126	80.8	123	78.3	46	29.1	145	91.8	--9	--9
<b>Private<sup>8</sup></b>	3,726	78.6	4,112	86.6	1,449	30.4	4,481	94.1	15	0.3
<b>Black Non-Hispanic</b>	<b>4,958</b>	<b>71.3</b>	<b>4,909</b>	<b>70.6</b>	<b>2,469</b>	<b>35.2</b>	<b>6,169</b>	<b>89.2</b>	<b>139</b>	<b>2.0</b>
<b>Public</b>	2,910	68.8	2,813	66.5	1,443	33.9	3,696	87.1	109	2.6
Medicaid <sup>6</sup>	2,550	68.7	2,453	66.1	1,240	33.2	3,238	87.0	86	2.3
Other Public <sup>7</sup>	360	69.5	360	69.5	203	38.9	458	87.7	23	4.5
<b>Private<sup>8</sup></b>	1,980	77.8	2,030	79.7	968	37.8	2,374	92.8	23	0.9
<b>Hispanic</b>	<b>10,486</b>	<b>73.2</b>	<b>10,507</b>	<b>73.2</b>	<b>4,547</b>	<b>31.5</b>	<b>12,311</b>	<b>86.0</b>	<b>278</b>	<b>2.0</b>
<b>Public</b>	7,399	71.3	7,311	70.4	3,224	30.8	8,780	84.1	240	2.4
Medicaid <sup>6</sup>	6,289	70.8	6,292	70.8	2,747	30.6	7,590	84.9	208	2.4
Other Public <sup>7</sup>	1,110	74.3	1,019	68.2	477	31.8	1,190	79.5	32	2.2
<b>Private<sup>8</sup></b>	2,986	80.3	3,093	83.0	1,247	33.3	3,420	91.5	32	0.9
<b>White Non-Hispanic</b>	<b>32,545</b>	<b>82.1</b>	<b>34,030</b>	<b>85.8</b>	<b>12,619</b>	<b>31.6</b>	<b>33,768</b>	<b>87.0</b>	<b>1,398</b>	<b>3.6</b>
<b>Public</b>	6,158	77.1	6,027	75.3	2,666	33.1	6,235	77.5	1,000	12.7
Medicaid <sup>6</sup>	4,956	77.0	4,840	75.0	2,161	33.3	5,007	77.3	864	13.6
Other Public <sup>7</sup>	1,202	77.2	1,187	76.2	505	32.2	1,228	78.5	136	8.8
<b>Private<sup>8</sup></b>	25,286	83.8	26,919	89.2	9,502	31.4	27,141	89.7	338	1.1

**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. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. 11. Infant was being breastfed during the hospital stay. 12. Birthing person reported smoking during pregnancy.

**Table 17. Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2021**

Community	Occurrence Births <sup>1</sup>	Resident Births <sup>2</sup>			
		Number of Births	Low Birthweight (Less than 2,500 grams, 5.5 lbs.)	Preterm (<37 weeks gestation)	Teen Births (15-19 years)
<b>STATE TOTAL</b>	<b>70,083</b>	<b>69,127</b>	<b>5,176</b>	<b>6,198</b>	<b>1,308</b>
Abington	1	241	11	21	--3
Acton	0	179	13	15	0
Acushnet	1	81	--3	--3	--3
Adams	0	96	6	10	--3
Agawam	2	238	21	27	--3
Alford	0	2	0	0	0
Amesbury	2	212	14	18	--3
Amherst	0	111	6	10	--3
Andover	1	302	20	25	--3
Aquinnah	0	4	0	0	0
Arlington	4	428	27	42	--3
Ashburnham	2	66	5	--3	0
Ashby	0	33	--3	0	0
Ashfield	0	10	--3	--3	0
Ashland	2	232	17	19	--3
Athol	1	111	8	9	6
Attleboro	635	490	44	44	11
Auburn	1	165	11	16	--3
Avon	0	58	--3	--3	0
Ayer	1	87	--3	5	0
Barnstable	1052	401	21	30	5
Barre	0	55	8	9	0
Becket	0	13	0	0	--3
Bedford	1	101	13	15	--3
Belchertown	2	116	10	9	0
Bellingham	1	189	11	17	--3
Belmont	3	210	6	10	0
Berkley	2	69	6	6	--3
Berlin	0	40	--3	--3	0
Bernardston	1	13	--3	0	0
Beverly	2201	447	27	39	--3
Billerica	3	454	24	31	--3
Blackstone	0	81	6	7	--3
Blandford	2	13	--3	--3	0
Bolton	1	70	--3	--3	--3
Boston	21064	6788	569	619	116
Bourne	1	133	8	13	--3
Boxborough	0	42	--3	--3	--3
Boxford	2	73	5	5	0
Boylston	1	44	--3	6	0
Braintree	4	374	31	38	--3
Brewster	1	65	--3	--3	0
Bridgewater	3	282	22	25	--3
Brimfield	0	27	--	--3	0
Brockton	1929	1366	167	134	57
Brookfield	0	24	--3	--3	0
Brookline	4	491	34	45	0
Buckland	0	7	--3	0	0
Burlington	0	291	20	31	0

**Table 17. Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2021**

Community	Occurrence Births <sup>1</sup>	Resident Births <sup>2</sup>			
		Number of Births	Low Birthweight (Less than 2,500 grams, 5.5 lbs.)	Preterm (<37 weeks gestation)	Teen Births (15-19 years)
Cambridge	3528	966	50	51	--3
Canton	2	270	21	26	--3
Carlisle	0	26	0	--3	0
Carver	1	91	8	10	--3
Charlemont	0	6	0	0	0
Charlton	0	123	--3	14	--3
Chatham	1	25	--3	--3	0
Chelmsford	2	381	35	43	--3
Chelsea	0	541	51	55	31
Cheshire	0	21	0	--3	0
Chester	1	9	--3	--3	0
Chesterfield	0	9	0	--3	0
Chicopee	3	557	47	53	16
Chilmark	0	9	--3	--3	0
Clarksburg	0	15	--3	--3	0
Clinton	3	180	13	21	--3
Cohasset	0	99	5	6	0
Colrain	2	20	0	--3	0
Concord	1377	147	10	17	--3
Conway	0	8	0	0	0
Cummington	0	6	--3	--3	0
Dalton	0	59	--3	--3	0
Danvers	3	268	34	39	0
Dartmouth	0	221	14	15	--3
Dedham	3	289	21	27	--3
Deerfield	1	30	--3	0	--3
Dennis	2	90	8	12	--3
Dighton	0	86	5	6	--3
Douglas	3	80	5	--3	0
Dover	1	36	0	0	0
Dracut	0	308	28	31	--3
Dudley	0	96	0	--3	0
Dunstable	1	34	0	--3	0
Duxbury	3	146	--3	7	--3
East Bridgewater	2	135	8	13	--3
East Brookfield	0	18	0	--3	--3
East Longmeadow	2	134	13	17	--3
Eastham	0	27	--3	--3	0
Easthampton	3	121	7	12	--3
Easton	1	203	14	21	--3
Edgartown	0	49	--3	--3	--3
Egremont	0	5	0	--3	0
Erving	0	7	0	--3	0
Essex	2	35	0	0	0
Everett	1	583	43	48	13
Fairhaven	2	125	21	23	--3
Fall River	1428	1106	125	120	46
Falmouth	4	178	16	23	--3
Fitchburg	4	507	42	50	22
Florida	0	3	--3	--3	0
Foxborough	0	200	17	16	0

**Table 17. Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2021**

Community	Occurrence Births <sup>1</sup>	Resident Births <sup>2</sup>			
		Number of Births	Low Birthweight (Less than 2,500 grams, 5.5 lbs.)	Preterm (<37 weeks gestation)	Teen Births (15-19 years)
Framingham	1025	924	68	94	16
Franklin	1	352	15	24	--3
Freetown	1	78	7	--3	0
Gardner	343	209	17	24	6
Georgetown	1	76	9	10	0
Gill	0	8	0	0	0
Gloucester	4	246	22	23	--3
Goshen	0	6	0	--3	0
Gosnold	0	0	0	0	0
Grafton	2	206	17	19	0
Granby	1	61	8	6	--3
Granville	0	16	--3	--3	0
Great Barrington	165	35	--3	5	--3
Greenfield	441	132	6	15	--3
Groton	0	95	8	8	--3
Groveland	0	43	--3	--3	0
Hadley	1	30	0	0	0
Halifax	1	70	9	15	0
Hamilton	1	87	--3	--3	0
Hampden	1	41	6	7	--3
Hancock	0	4	0	0	0
Hanover	0	147	14	16	--3
Hanson	0	86	10	9	--3
Hardwick	1	21	--3	0	0
Harvard	2	36	--3	--3	0
Harwich	0	78	--3	6	--3
Hatfield	0	18	0	0	0
Haverhill	3	732	50	64	19
Hawley	1	3	0	0	0
Heath	0	6	0	0	0
Hingham	1	254	7	16	--3
Hinsdale	0	13	0	--3	0
Holbrook	1	114	9	10	--3
Holden	2	211	16	17	--3
Holland	0	16	--3	--3	0
Holliston	0	142	9	7	0
Holyoke	7	447	50	60	29
Hopedale	0	36	--3	--3	0
Hopkinton	0	185	9	16	0
Hubbardston	2	36	0	--3	0
Hudson	3	211	8	14	--3
Hull	1	51	--3	--3	--3
Huntington	0	21	--3	--3	--3
Ipswich	1	93	--3	7	0
Kingston	0	136	7	7	--3
Lakeville	1	96	7	8	--3
Lancaster	2	79	5	9	--3
Lanesborough	0	19	0	0	0
Lawrence	1297	1289	109	127	73
Lee	0	30	--3	--3	0
Leicester	0	91	11	17	--3

**Table 17. Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2021**

Community	Occurrence Births <sup>1</sup>	Resident Births <sup>2</sup>			
		Number of Births	Low Birthweight (Less than 2,500 grams, 5.5 lbs.)	Preterm (<37 weeks gestation)	Teen Births (15-19 years)
Lenox	0	22	--3	--3	0
Leominster	545	452	31	50	7
Leverett	0	13	0	0	0
Lexington	0	162	10	14	0
Leyden	0	3	0	0	0
Lincoln	4	59	--3	--3	--3
Littleton	1	103	7	6	0
Longmeadow	0	116	6	11	--3
Lowell	1669	1418	127	144	60
Ludlow	1	149	15	23	0
Lunenburg	4	123	8	6	0
Lynn	4	1429	117	127	83
Lynnfield	0	122	--3	6	0
Malden	3	775	57	64	14
Manchester	1	33	0	0	0
Mansfield	0	234	8	12	--3
Marblehead	1	172	8	12	0
Marion	0	41	--3	--3	0
Marlborough	1	477	28	43	9
Marshfield	3	231	11	19	0
Mashpee	0	107	5	7	--3
Mattapoisett	1	46	--3	--3	0
Maynard	4	114	5	5	--3
Medfield	0	138	9	12	0
Medford	8	589	38	39	--3
Medway	0	123	12	17	0
Melrose	834	333	25	24	--3
Mendon	1	59	--3	7	0
Merrimac	0	64	6	9	0
Methuen	1293	521	30	36	11
Middleborough	1	232	17	24	--3
Middlefield	0	3	0	0	0
Middleton	0	76	6	7	0
Milford	935	384	20	30	20
Millbury	1	127	10	11	--3
Millis	1	88	12	12	0
Millville	2	32	--3	--3	0
Milton	5	268	9	21	0
Monroe	0	3	0	--3	0
Monson	2	68	--3	5	0
Montague	3	79	9	8	--3
Monterey	0	2	0	0	0
Montgomery	1	12	--3	--3	0
Mount Washington	1	3	0	0	0
Nahant	0	27	--3	--3	0
Nantucket	138	154	9	11	--3
Natick	1	356	26	31	0
Needham	2	265	20	15	0
New Ashford	0	3	--3	--3	0
New Bedford	1817	1234	104	105	54
New Braintree	1	8	--3	0	0



**Table 17. Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2021**

Community	Occurrence Births <sup>1</sup>	Resident Births <sup>2</sup>			
		Number of Births	Low Birthweight (Less than 2,500 grams, 5.5 lbs.)	Preterm (<37 weeks gestation)	Teen Births (15-19 years)
New Marlborough	3	8	--3	0	0
New Salem	0	4	0	0	0
Newbury	3	39	--3	--3	--3
Newburyport	657	126	5	8	0
Newton	3977	605	47	54	5
Norfolk	0	115	6	13	0
North Adams	1	103	13	11	6
North Andover	1	265	15	24	--3
North Attleborough	3	265	31	23	0
North Brookfield	3	38	--3	--3	--3
North Reading	1	147	10	11	0
Northampton	735	145	9	12	--3
Northborough	2	137	6	9	0
Northbridge	2	167	14	23	--3
Northfield	2	30	0	0	--3
Norton	1	165	11	18	--3
Norwell	0	136	13	15	--3
Norwood	2	389	30	27	--3
Oak Bluffs	151	43	5	6	--3
Oakham	0	19	--3	--3	--3
Orange	1	52	5	5	--3
Orleans	0	21	0	--3	--3
Otis	0	8	--3	--3	0
Oxford	4	135	--3	11	--3
Palmer	1	119	9	11	--3
Paxton	2	38	--3	--3	0
Peabody	2	555	42	50	9
Pelham	1	5	0	0	0
Pembroke	0	180	11	24	--3
Pepperell	1	110	8	13	--3
Peru	0	3	--3	--3	0
Petersham	0	6	0	--3	0
Phillipston	0	18	--3	--3	0
Pittsfield	642	419	48	56	19
Plainfield	0	6	--3	--3	0
Plainville	0	100	--3	--3	--3
Plymouth	933	574	29	42	--3
Plympton	0	39	--3	--3	--3
Princeton	0	35	0	0	0
Provincetown	0	15	--3	--3	--3
Quincy	4	1010	64	89	8
Randolph	5	368	31	27	6
Raynham	2	132	6	8	--3
Reading	2	278	15	19	0
Rehoboth	2	102	5	--3	0
Revere	4	696	39	53	14
Richmond	0	3	--3	0	0
Rochester	0	48	7	9	0
Rockland	2	203	11	13	--3
Rockport	1	24	--3	--3	0
Rowe	0	3	--3	--3	0

**Table 17. Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2021**

Community	Occurrence Births <sup>1</sup>	Resident Births <sup>2</sup>			
		Number of Births	Low Birthweight (Less than 2,500 grams, 5.5 lbs.)	Preterm (<37 weeks gestation)	Teen Births (15-19 years)
Rowley	1	43	--3	--3	--3
Royalston	0	5	0	0	0
Russell	0	14	0	--3	0
Rutland	3	81	10	11	0
Salem	1226	474	44	53	--3
Salisbury	0	56	5	9	--3
Sandisfield	0	5	0	0	0
Sandwich	3	146	--3	6	--3
Saugus	1	268	20	19	--3
Savoy	0	7	0	0	0
Scituate	2	193	6	13	0
Seekonk	0	127	16	15	--3
Sharon	0	175	9	15	0
Sheffield	0	22	0	--3	0
Shelburne	0	11	0	0	--3
Sherborn	0	48	--3	--3	0
Shirley	3	61	--3	--3	--3
Shrewsbury	1	345	26	30	--3
Shutesbury	1	21	--3	--3	0
Somerset	2	139	7	10	0
Somerville	4	670	49	52	9
South Hadley	2	137	--3	11	--3
Southampton	0	48	--3	--3	--3
Southborough	1	106	--3	6	0
Southbridge	5	212	23	23	10
Southwick	0	70	--3	--3	0
Spencer	1	116	14	18	5
Springfield	5407	2043	231	255	131
Sterling	1	58	--3	--3	0
Stockbridge	0	6	--3	--3	0
Stoneham	1	269	24	26	--3
Stoughton	4	318	23	25	7
Stow	0	55	--3	--3	0
Sturbridge	2	78	7	6	0
Sudbury	4	168	6	6	0
Sunderland	2	30	0	--3	0
Sutton	6	88	6	13	0
Swampscott	0	169	12	15	0
Swansea	3	166	14	24	--3
Taunton	5	633	55	70	11
Templeton	2	82	--3	7	--3
Tewksbury	1	279	14	14	--3
Tisbury	0	55	--3	0	--3
Tolland	0	1	0	0	0
Topsfield	0	49	0	0	0
Townsend	1	67	--3	--3	0
Truro	0	12	--3	--3	0
Tyngsborough	0	97	9	8	--3
Tyringham	0	1	0	0	0
Upton	3	71	--3	--3	0
Uxbridge	2	137	8	14	0

**Table 17. Birth Characteristics: Occurrence and Resident Births, Massachusetts Municipalities: 2021**

Community	Occurrence Births <sup>1</sup>	Resident Births <sup>2</sup>			
		Number of Births	Low Birthweight (Less than 2,500 grams, 5.5 lbs.)	Preterm (<37 weeks gestation)	Teen Births (15-19 years)
Wakefield	0	316	20	25	--3
Wales	0	9	--3	--3	0
Walpole	0	305	13	14	0
Waltham	4	679	50	53	12
Ware	1	86	9	5	--3
Wareham	3	211	19	23	5
Warren	0	51	--3	--3	--3
Warwick	1	6	0	0	0
Washington	0	1	0	0	0
Watertown	4	427	24	32	0
Wayland	1	129	5	14	0
Webster	2	194	19	24	8
Wellesley	2	200	10	9	--3
Wellfleet	1	14	0	--3	0
Wendell	0	5	0	--3	0
Wenham	0	29	--3	--3	0
West Boylston	0	64	6	6	--3
West Bridgewater	1	82	5	--3	--3
West Brookfield	0	32	0	--3	--3
West Newbury	2	46	--3	6	0
West Springfield	2	304	30	39	11
West Stockbridge	1	8	0	0	0
West Tisbury	0	32	--3	--3	0
Westborough	2	210	10	9	--3
Westfield	6	338	30	36	5
Westford	0	168	7	13	0
Westhampton	1	10	--3	--3	0
Westminster	4	93	8	9	0
Weston	1	78	6	7	0
Westport	0	114	5	7	0
Westwood	0	137	11	12	--3
Weymouth	3282	703	37	64	5
Whately	0	9	0	0	0
Whitman	3	160	11	11	--3
Wilbraham	2	108	11	16	0
Williamsburg	1	13	--3	--3	0
Williamstown	0	27	0	0	0
Wilmington	2	252	18	23	0
Winchendon	0	97	7	5	--3
Winchester	2649	187	13	23	0
Windsor	2	6	0	--3	0
Winthrop	1	173	12	14	--3
Woburn	1	499	26	40	5
Worcester	6325	2237	188	222	74
Worthington	0	11	--3	--3	0
Wrentham	0	125	10	9	0
Yarmouth	4	178	10	15	--3

1. Births occurring in a geographical place (state, city/town) regardless of the residency of the birthing person. 2. Births to birthing people who report their usual place of residence as a particular geographical place (state, or city/town). See "Note to Readers" for more details. 3. Due to small numbers (n=1-4), exact count not provided.

**Table 18. Birth Characteristics: Occurrence and Resident Births by County, Massachusetts: 2021**

County	Occurrence Births <sup>1</sup>	Number of Births	Resident Births <sup>2</sup>		
			Low Birthweight <sup>3</sup>	Preterm <sup>4</sup>	Teen Births (15-19 Years)
<b>STATE TOTAL</b>	<b>70,083</b>	<b>69,127</b>	<b>5,176</b>	<b>6,198</b>	<b>1,308</b>
BARNSTABLE	1,069	1,490	84	126	20
BERKSHIRE	815	972	85	103	31
BRISTOL	3,905	5,770	500	534	138
DUKES	151	192	13	13	5
ESSEX	6,711	8,490	625	755	213
FRANKLIN	456	519	27	37	11
HAMPDEN	5,440	4,849	487	578	203
HAMPSHIRE	748	963	64	78	14
MIDDLESEX	15,133	16,034	1,079	1,319	180
NANTUCKET	138	154	9	11	--5
NORFOLK	3,324	7,299	478	598	45
PLYMOUTH	2,892	5,477	423	491	92
SUFFOLK	21,069	8,198	671	741	162
WORCESTER	8,232	8,720	631	814	192
UNKNOWN	0	0	0	0	0

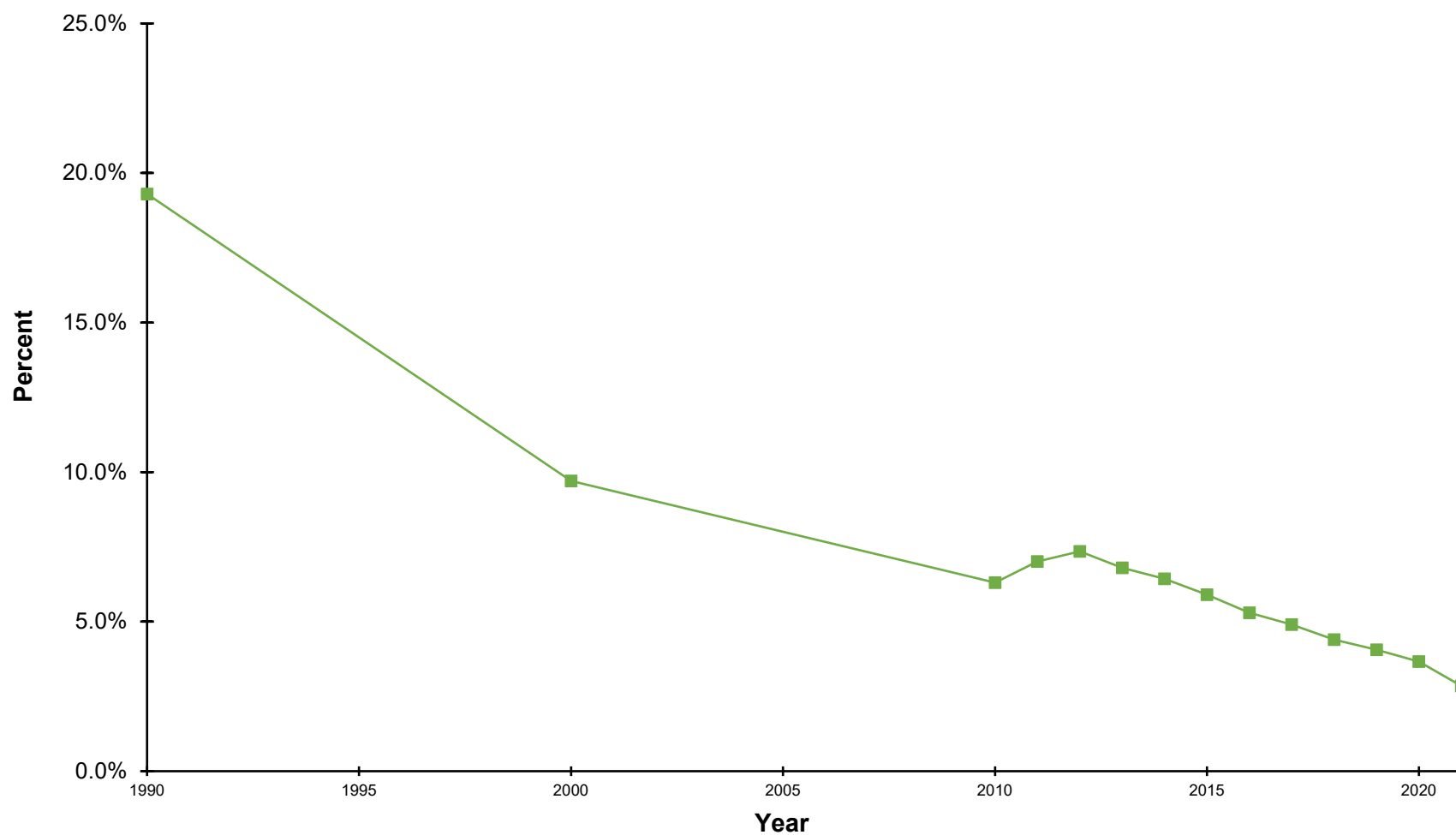
1. Births occurring in a geographical place (state, city/town) regardless of the residency of the birthing person. 2. Births to birthing people who report their usual place of residence as a particular geographical place (state, or city/town). See "Note to Readers" for more details. 3. Less than 2,500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

**Table 19. Birth Characteristics: Occurrence and Resident Births, Massachusetts Community Health Network Areas (CHNAs), Massachusetts: 2021**

Community Health Network Area	Occurrence Births <sup>1</sup>	Resident Births <sup>2</sup>			
		Number of Births	LBW <sup>3</sup>	Preterm <sup>4</sup>	Teen Births (15-19 Years)
<b>STATE TOTAL</b>	<b>70,083</b>	<b>69,127</b>	<b>5,176</b>	<b>6,198</b>	<b>1,308</b>
1. Community Health Network of Berkshire County	815	972	85	103	31
2. Upper Valley Health Web (Franklin County)	457	659	39	51	17
3. Partnership for Health in Hampshire County (Northampton)	748	942	61	76	13
4. The Community Health Connection (Springfield)	5,422	3,297	340	399	153
5. Community Health Network of Southern Worcester County	17	1,169	80	114	32
6. Community Partners for Health (Milford)	956	1,799	103	163	29
7. Community Health Network of Greater Metro West (Framingham)	1,047	4,565	279	359	36
8. Community Wellness Coalition (Worcester)	6,335	3,528	290	348	83
9. Fitchburg/Gardner Community Health Network	926	2,800	190	247	50
10. Greater Lowell Community Health Network	1,676	3,139	244	285	70
11. Greater Lawrence Community Health Network	2,592	2,453	180	219	87
12. Greater Haverhill Community Health Network	671	1,510	104	138	24
13. Community Health Network North (Beverly/Gloucester)	2,211	1,043	59	75	6
14. North Shore Community Health Network	1,237	3,484	282	323	96
15. Greater Woburn/Concord/Littleton Community Health Network	4,035	2,048	134	190	11
16. North Suburban Health Alliance (Medford/Malden/Melrose)	850	3,290	232	256	32
17. Greater Cambridge/Somerville Community Health Network	3,543	2,701	156	187	14
18. West Suburban Health Network (Newton/Waltham)	3,994	2,780	199	222	22
19. Alliance for Community Health (Boston/Chelsea/Revere/Winthrop)	21,069	8,198	671	741	162
20. Blue Hills Community Health Alliance (Greater Quincy)	3,308	4,290	267	361	27
21. Four (For) Communities (Holyoke, Chicopee, Ludlow, Westfield)	18	1,521	146	175	51
22. Greater Brockton Community Health Network	1,945	2,959	274	268	74
23. South Shore Community Partners in Prevention (Plymouth)	943	1,903	113	164	15
24. Greater Attleboro-Taunton Health & Education Response	652	2,631	211	237	33
25. Partners for a Healthier Community (Fall River)	1,433	1,525	151	161	47
26. Greater New Bedford Health & Human Services Coalition	1,825	2,085	180	186	66
27. Cape and Islands Community Health Network	1,358	1,836	106	150	27

1. Births occurring in a geographical place (state, city/town) regardless of the residency of the birthing person. 2. Births to birthing people 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. Reported Smoking During Pregnancy, Percent of All Infants, Massachusetts: 1990 - 2021**



NOTE: Smoking not available prior to 1987.

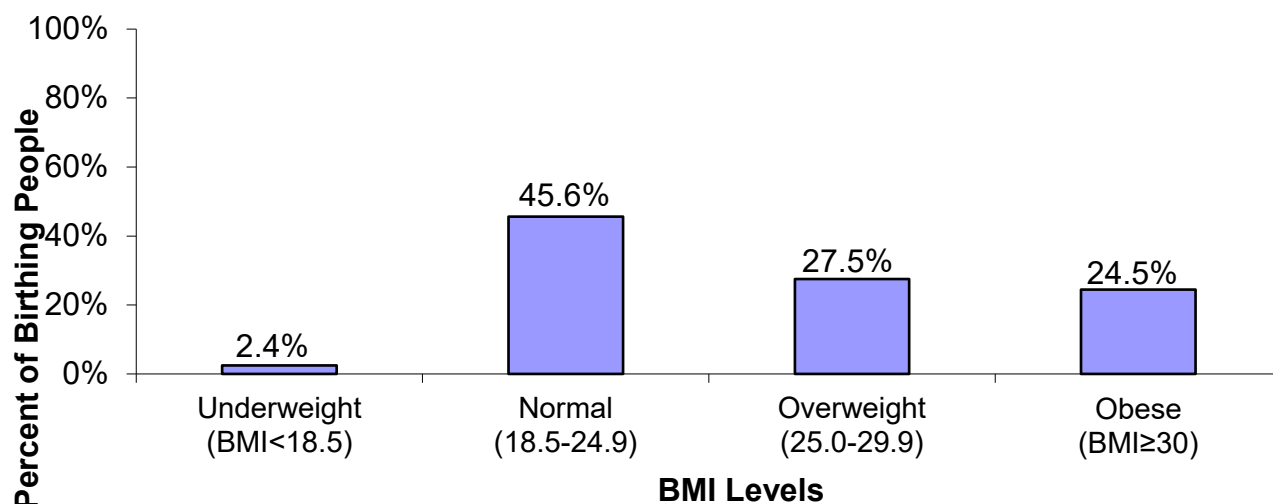
**Table 20. Cesarean Deliveries and Vaginal Births after Cesarean (VBACs) by Licensed Maternity Facility, All Birthing People, Massachusetts: 2021**

Facility <sup>1</sup>	Occurrence Deliveries <sup>2</sup>		Total Cesareans <sup>2</sup>		Primary Cesareans <sup>2</sup>		Repeat Cesareans <sup>2</sup>		VBACs <sup>2</sup>	
			N	% <sup>3</sup>	N	%	N	%	N	%
<b>State Total</b>	<b>66,659</b>	<b>20,717</b>	<b>31.2</b>		<b>11,763</b>	<b>21.0</b>	<b>8,954</b>	<b>84.4</b>	<b>1,656</b>	<b>15.6</b>
Anna Jaques Hospital	526	177	33.7		98	22.4	79	89.8	9	10.2
Baystate Franklin Medical Center	403	122	30.3		68	20.5	54	76.1	17	23.9
Baystate Medical Center	4,068	1,310	32.2		731	21.8	579	81.0	136	19.0
Berkshire Medical Center	617	171	27.7		105	19.3	66	90.4	7	9.6
Beth Israel Deaconess Hospital - Plymouth	904	270	29.9		155	20.0	115	88.5	15	11.5
Beth Israel Deaconess Medical Center	5,096	1,573	30.9		1,065	23.4	508	93.6	35	6.4
Beverly Hospital	2,074	634	30.6		367	20.7	267	87.5	38	12.5
Boston Medical Center	2,519	672	26.7		436	20.5	236	60.7	153	39.3
Brigham And Women's Hospital	6,407	2,048	32.0		1,174	21.9	874	85.2	152	14.8
Brockton Hospital	1,319	359	27.2		180	16.1	179	87.7	25	12.3
Cambridge Hospital	1,044	342	32.8		178	21.0	164	83.2	33	16.8
Cape Cod Hospital	1,029	341	33.1		174	20.6	167	89.8	19	10.2
Charlton Memorial Hospital	1,315	403	30.6		205	18.4	198	99.5	-4	-4
Cooley Dickinson Hospital	619	172	27.8		116	21.4	56	71.8	22	28.2
Emerson Hospital	1,319	407	30.9		208	19.3	199	82.9	41	17.1
Fairview Hospital	140	44	31.4		30	23.8	14	100.0	0	0.0
Good Samaritan Medical Center	565	231	40.9		129	28.5	102	90.3	11	9.7
HealthAlliance - Clinton Hospital, Leominster	536	158	29.5		90	19.3	68	97.1	-4	-4
Heywood Hospital	324	81	25.0		38	13.8	43	89.6	5	10.4
Lawrence General Hospital	1,204	418	34.7		171	18.2	247	93.6	17	6.4
Lowell General Hospital	1,509	443	29.4		225	18.1	218	82.9	45	17.1
Martha's Vineyard Hospital	146	64	43.8		37	31.4	27	96.4	-4	-4
Massachusetts General Hospital	3,482	1,091	31.3		678	23.0	413	77.3	121	22.7
Melrose-Wakefield Hospital	798	217	27.2		138	19.2	79	97.5	-4	-4
Mercy Medical Center	942	237	25.2		122	15.4	115	77.2	34	22.8
Metrowest Med Ctr - Framingham Union Hospital	996	403	40.5		186	24.4	217	93.1	16	6.9
Milford Regional Medical Center	881	276	31.3		147	20.2	129	83.2	26	16.8
Mt. Auburn Hospital	2,407	559	23.2		354	16.9	205	66.8	102	33.2
Nantucket Cottage Hospital	133	38	28.6		20	17.4	18	100.0	0	0.0
Newton-Wellesley Hospital	3,882	1,213	31.2		736	22.2	477	83.1	97	16.9
North Shore Medical Center - Salem Hospital	1,196	385	32.2		228	22.5	157	85.8	26	14.2
Saint Vincent Hospital	1,809	551	30.5		283	19.0	268	84.0	51	16.0
Seven Sisters Midwifery & Community Birth Ctr	92	0	0.0		0	0.0	0	0	0	0
South Shore Hospital	3,221	1,154	35.8		642	24.3	512	88.4	67	11.6
St. Elizabeth's Medical Center	1,136	362	31.9		230	23.5	132	84.1	25	15.9
St. Lukes Hospital	1,769	544	30.8		286	19.2	258	93.5	18	6.5
Steward Holy Family Hospital	1,063	429	40.4		194	23.6	235	97.5	6	2.5
Sturdy Memorial Hospital	554	176	31.8		89	19.6	87	87.9	12	12.1
Tufts Medical Center	1,226	483	39.4		264	27.7	219	80.5	53	19.5
UMass Memorial Medical Ctr - Memorial Campus	4,235	1,364	32.2		748	21.6	616	79.9	155	20.1
Winchester Hospital	2,497	794	31.8		437	20.9	357	88.4	47	11.6
UMass Memorial Medical Center - Memorial Campus	3,950	1,237	31.3		695	21.3	542	79.6	139	20.4
Winchester Hospital	2,338	753	32.2		443	22.2	310	91.2	30	8.8

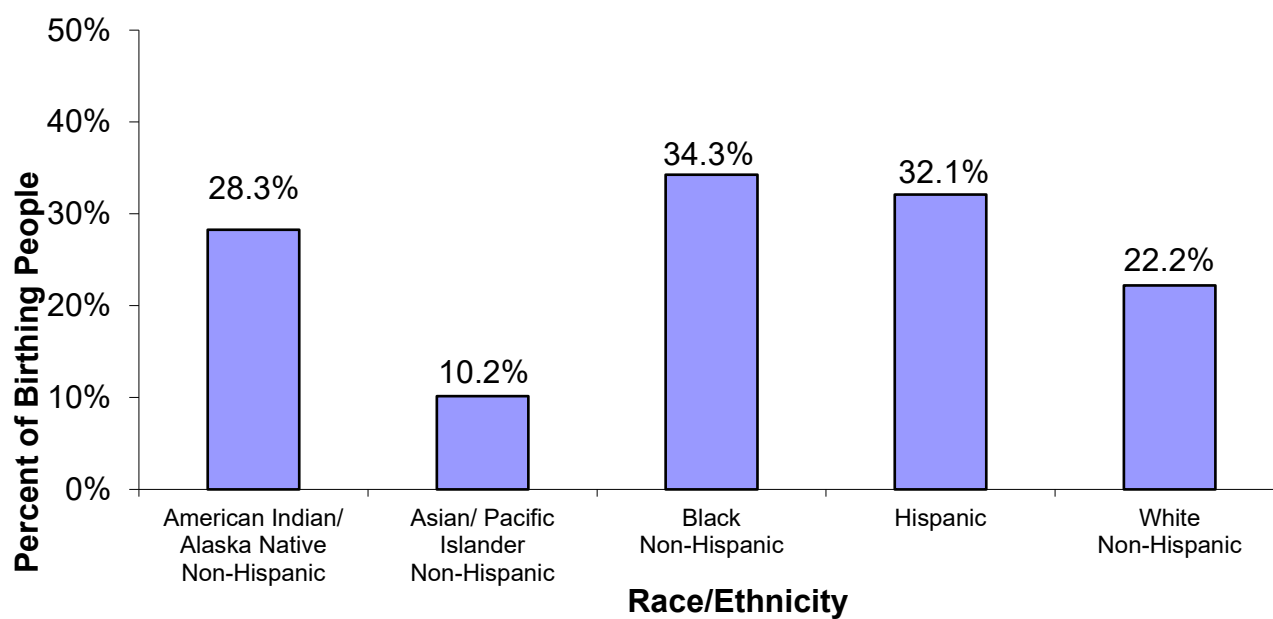
**NOTE:** This table is based on birthing people and not births. All percentages are calculated based on only those birthing people with known values for the characteristic(s) of interest

1. A licensed maternity facility is a medical unit licensed by the Commonwealth for the care of birthing people during pregnancy and childbirth. 2. The counts and percentages provided in this table are based on occurrence deliveries by unique birthing people, meaning that if a person 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. 3. The percentage of Cesarean births reported is not adjusted for risk factors such as age of birthing person, birthweight, or complications of labor and delivery, which would influence the number of procedures in a particular facility. Caution should be used when comparing unadjusted percentages. 4. Calculations based on values of 1-4 are excluded.

**Figure 7. Body Mass Index (BMI) Prior to Pregnancy, All Birthing People, Massachusetts: 2021**



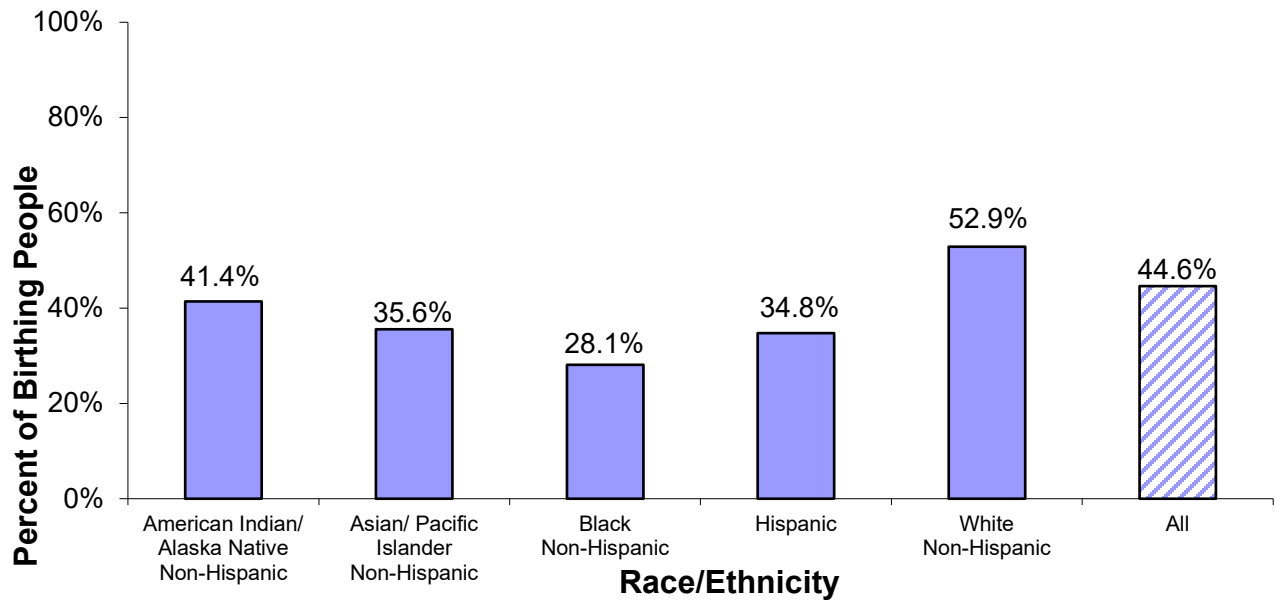
**Figure 8. Obesity Prior to Pregnancy by Race/Hispanic Ethnicity, All Birthing People, Massachusetts: 2021**



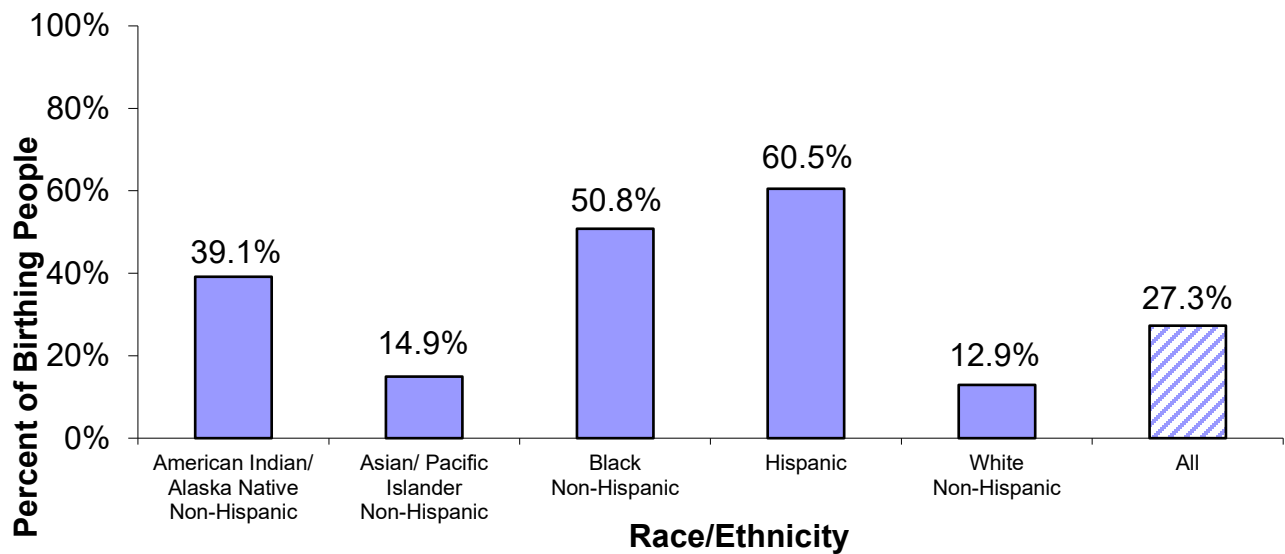
**NOTE:** These figures are based on birthing people and not births.



**Figure 9. Birthing People Who Reported Having Their Teeth Cleaned During Pregnancy by Race/Hispanic Ethnicity, All Birthing People, Massachusetts: 2021**

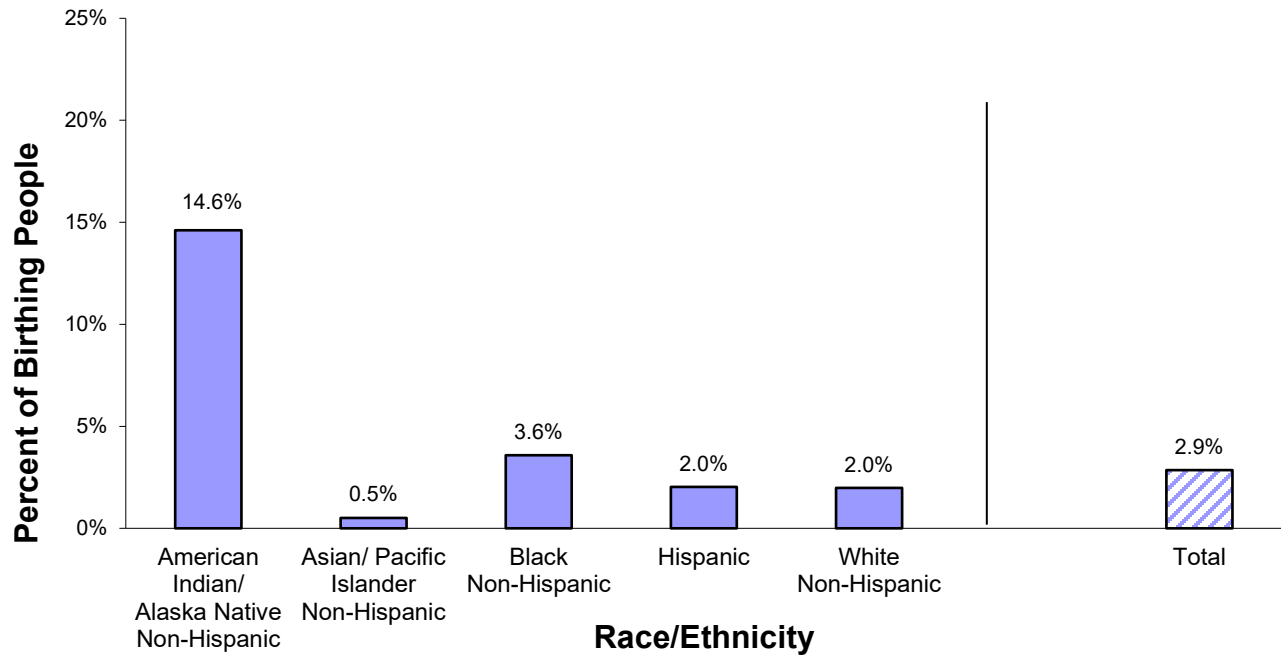


**Figure 10. Birthing People Who Reported Having Received WIC Food During Pregnancy by Race/Hispanic Ethnicity, All Birthing People, Massachusetts: 2021**



**NOTE:** These figures are based on birthing people and not births.

**Figure 11. Birthing People Who Reported Smoking During Pregnancy by Race/Hispanic Ethnicity, All Birthing People, Massachusetts: 2021**



**NOTE:** This figure is based on birthing people and not births.

**Table 21. Birthing People Who Used Infertility Treatments, Massachusetts: 2021**

	Assisted Reproductive Technology (ART) with or without Artificial Insemination and/or Fertility Drugs <sup>1</sup>		Artificial Insemination with or without Fertility Drugs <sup>2</sup>		Fertility Enhancing Drugs Only <sup>3</sup>	
	N	% <sup>4</sup>	N	% <sup>4</sup>	N	% <sup>4</sup>
<b>State Total</b>	2,909	72.9%	572	14.3%	510	12.8%
<b>Demographics</b>						
<b>Race/Hispanic Ethnicity</b>	N	% <sup>5</sup>	N	% <sup>5</sup>	N	% <sup>5</sup>
American Indian/ Alaska Native Non-Hispanic	7	0.2%	--9	--9	--9	--9
Asian/ Pacific Islander Non-Hispanic	351	12.1%	53	9.3%	56	11.0%
Black Non-Hispanic	104	3.6%	20	3.5%	33	6.5%
Hispanic	197	6.8%	45	7.9%	43	8.5%
White Non-Hispanic	2,223	76.9%	445	77.9%	372	73.2%
<b>Birthplace</b>						
US States / D.C. / US Terr.	2,304	79.2%	486	85.0%	387	75.9%
Non-US-born	605	20.8%	86	15.0%	123	24.1%
<b>Prenatal care funding</b>						
Public	119	4.2%	38	6.7%	58	11.8%
Private, other	2,721	95.8%	533	93.3%	433	88.2%
<b>Age</b>						
20-29	139	4.8%	67	11.7%	94	18.4%
30-34	875	30.1%	251	43.9%	232	45.5%
35-39	1,250	43.0%	212	37.1%	153	30.0%
40+	645	22.2%	42	7.3%	31	6.1%
<b>Pregnancy-Related Factors</b>						
<b>Adequacy of Prenatal Care<sup>6</sup></b>						
Adequate Total <sup>7</sup>	2,436	84.4%	480	84.5%	437	86.2%
Adequate Intensive	1,205	41.7%	240	42.3%	208	41.0%
Adequate Basic	1,231	42.6%	240	42.3%	229	45.2%
Intermediate	298	10.3%	62	10.9%	47	9.3%
Inadequate/None	153	5.3%	26	4.6%	23	4.5%
<b>Parity<sup>8</sup></b>						
1	1,701	58.5%	407	71.2%	0	0.0%
2	947	32.6%	140	24.5%	311	65.9%
3+	260	8.9%	25	4.4%	161	34.1%
<b>Birth Outcomes</b>						
<b>Gestational age</b>						
<28 weeks (extremely preterm) <sup>10</sup>	21	3.8%	--9	--9	--9	--9
<37 weeks (preterm) <sup>10</sup>	370	67.5%	73	2.2%	49	4.7%
37+	2,539	463.3%	499	14.8%	461	44.2%
<b>Plurality</b>						
Singleton	2,735	94.0%	525	91.8%	471	92.4%
Multiple birth	174	6.0%	47	8.2%	39	7.6%

**NOTE:** Beginning in 2014, questions about fertility assistance were asked on both the hospital and parental worksheets. This table shows combined data from both sources. While asking birthing people 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 birthing people with known values for the characteristic(s) of interest, unless otherwise stated. Often birthing people use more than one method of treatment, and the categories presented are mutually exclusive.

**NOTE:** This table is based on unique birthing people and not births. 1. This category includes all birthing people who used ART (typically IVF) and those who used any additional treatments. 2. This category includes birthing people who used artificial insemination (including intrauterine insemination) and those who used fertility drugs in addition. 3. This category includes birthing people 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. Calculations based on values of 1-4 are excluded. 10. Categories are not mutually exclusive so percent will add to more than 100%.

## Technical Notes

### Data Cautions

#### Limitations of small numbers:

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

#### Differences with previously published data:

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

#### Self-reported data:

Many statistics reported in this publication, such as 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 population 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 race and ancestry of the birthing person.

## **2003 Revision**

### **Mother/Parent Race**

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

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

### **Mother/Parent Ethnicity**

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

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

**Table A1. 2020 Massachusetts Population Estimates by Age Group, Gender, Race/Hispanic Ethnicity (mutually exclusive)**

Age Group	Total <sup>1</sup>	American Indian/ Alaska Native Non-Hispanic	Asian/ Pacific Islander Non-Hispanic	Black Non-Hispanic	Hispanic <sup>2</sup>	White Non-Hispanic
<b>Female</b>						
<1	33,809	17,960	2,718	42.72406845	2,281	7,681
1 to 4	140,340	76,048	11,762	173.7230874	9,866	30,288
5 to 9	180,803	99,391	15,376	289.7352643	13,460	36,755
10 to 14	188,198	108,691	15,473	313.0378619	14,052	34,528
15 to 19	227,269	138,146	16,706	287.0185972	18,748	36,438
20 to 24	249,103	149,413	18,520	342.0307201	22,825	39,738
25 to 29	253,926	154,518	19,635	397.1741846	24,687	39,195
30 to 34	251,028	158,079	18,779	320.206979	26,285	35,449
35 to 39	229,785	144,674	17,242	285.1632364	24,414	32,867
40 to 44	211,113	134,053	16,248	282.2379518	21,392	30,288
45 to 49	226,782	155,579	15,787	283.2383062	20,016	26,803
50+	1,426,744	1,157,994	76,269	1,941	70,422	89,744
<b>All Females</b>	<b>3,618,898</b>	<b>2,494,546</b>	<b>244,515</b>	<b>4,957</b>	<b>268,447</b>	<b>439,772</b>
<b>Male</b>						
<1	35,672	18,860	3,227	52	2,558	7,825
1 to 4	147,055	80,547	13,050	217	10,530	31,132
5 to 9	188,424	103,444	17,303	255	14,136	37,722
10 to 14	195,825	114,245	17,182	326	14,094	36,213
15 to 19	228,179	138,769	18,566	288	16,803	38,552
20 to 24	246,282	146,830	21,022	362	20,473	42,806
25 to 29	261,140	155,894	24,456	415	23,678	45,223
30 to 34	249,279	157,388	20,110	368	23,161	38,141
35 to 39	225,176	142,512	17,846	315	21,476	34,501
40 to 44	202,212	131,777	15,791	254	18,569	28,517
45 to 49	212,882	148,564	15,192	285	18,080	23,467
50+	1,218,890	994,091	63,406	1,835	59,965	73,950
<b>All Males</b>	<b>3,411,016</b>	<b>2,332,921</b>	<b>247,152</b>	<b>4,969</b>	<b>243,527</b>	<b>438,050</b>
<1	69,481	36,820	2,805	94	4,840	15,506
1 to 4	287,395	156,595	11,992	390	20,396	61,420
5 to 9	369,226	202,835	16,024	544	27,597	74,477
10 to 14	384,022	222,936	15,843	639	28,146	70,740
15 to 19	455,448	276,914	16,860	575	35,551	74,990
20 to 24	495,385	296,243	17,976	704	43,298	82,544
25 to 29	515,066	310,412	20,895	812	48,366	84,418
30 to 34	500,307	315,466	18,977	688	49,446	73,590
35 to 39	454,960	287,186	17,231	600	45,891	67,368
40 to 44	413,325	265,830	15,668	536	39,961	58,804
45 to 49	439,665	304,143	15,210	568	38,096	50,270
50+	2,645,634	2,152,086	62,928	3,776	130,387	163,695
<b>State Total</b>	<b>7,029,914</b>	<b>4,827,467</b>	<b>232,410</b>	<b>9,927</b>	<b>511,973</b>	<b>877,822</b>

1. Population estimates were calculated using UMass Donahue Institute (UMDI) estimates for 2020.

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.