

2004 Annual Report

Vital Statistics of Massachusetts

Massachusetts Department of Public Health
Public Document No. 1

**ANNUAL REPORT
VITAL STATISTICS OF MASSACHUSETTS
PUBLIC DOCUMENT #1
2004**

**THE COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC HEALTH**

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The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
Registry of Vital Records and Statistics
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To the Honorable Senate and
House of Representatives:

We have the honor to submit, as required by Chapter 111, Section 2 of the General Laws, the one hundred sixty-third annual report on statistics of births, deaths, marriages, and divorces in Massachusetts for calendar year 2004.

Since 1964, the ANNUAL REPORT OF VITAL STATISTICS has been published by the Department of Public Health and is intended to assist in the development of policy and programmatic initiatives within the Department, as well as to provide State officials and agencies, and the general public, with valuable statistical information.

Sincerely,

Stanley E. Nyberg
Stanley E. Nyberg, Ph.D.
Registrar

ACKNOWLEDGEMENTS

This publication of the 2004 ANNUAL REPORT OF VITAL STATISTICS is the result of the combined efforts of all data providers, including the 351 city and town clerks, hospital personnel, physicians, funeral directors, probate courts, clinics, and Department of Public Health personnel. We gratefully acknowledge the assistance provided by all data providers, without whose efforts there would be no vital statistics.

Department of Public Health staff most significantly involved in the production of the 2004 ANNUAL REPORT OF VITAL STATISTICS include:

Jane Purtill, Director, Statistics Unit: supervision of data collection, coding and editing.

Sharon Pagnano and Maria Vu: coordination of the hospital query program for birth certificate data, specialized data programming, and assistance in developing specialized table production; Maureen McKean (Statistics Unit), Robert Coffin (Nosologist), and Ann-Marie Neault (Nosologist): technical assistance; and Division of Data Processing: data file management and vital events series printouts.

Isabel Caceres, Bruce Cohen, Malena Hood, and James West, Bureau of Health Information, Statistics, Research, and Evaluation: provided technical assistance and data, including the previously published:

Massachusetts Births 2004: Figures B-4, B-5, B-6, B-7, B-8, B-9, B-10, B-11, B-12, B-13, B-14 and D-3; as well as, Tables B-1, B-2A, B-2B, B-3A, B-3B, B-4, B-5, B-6, B-7, B-8A, B-8B, B-9, B-10, B-11, B-12, B-13, B-14, B-15, B-16, B-17, B-18, B-19, B-20, B-21, B-22, B-23A, B-23B, B-23C, and D-2.

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The joint efforts of all the staff of the Registry of Vital Records and Statistics are necessary to produce the data contained in this publication. Special acknowledgement is made to the following Registry supervisors:

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Pauline McNulty, Registration Unit Director, who is responsible for coordination with cities and towns, funeral directors, courts and the overall registration and amendment process;

June Deloney, Registration Unit Supervisor, who is responsible for coordinating timely and accurate document processing.

The 2004 ANNUAL REPORT OF VITAL STATISTICS has been compiled and produced under the general supervision and direction of:

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Massachusetts Department of Public Health publications and materials can be accessed at the following website:

<http://www.mass.gov/dph>

INTRODUCTION

The ANNUAL REPORT OF VITAL STATISTICS (Public Document No. 1) has been published continuously since 1842. This is the 41st edition produced by the Department of Public Health. This report, required under the provisions of Chapter 111, section 2, of the Massachusetts General Laws, tabulates data on Massachusetts births, fetal deaths, deaths, marriages, divorces, and population for calendar year 2004. The report provides its users with an overview of the health status of the Massachusetts population.

Vital statistics data may be tabulated either in terms of resident data or occurrence data. Resident data include all events which occur to residents of the Commonwealth, wherever the events occur. Occurrence data include all those events which occur within the state, including those which occur to out-of-state residents. There is an interstate exchange of copies of birth and death records among the fifty states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, and all Canadian provinces. These records are exchanged for statistical purposes only, for events which occur in states or provinces other than where the individual resides. This exchange allows each of the states and provinces to track the births and deaths of its residents. The majority of the data presented in this report for births and deaths is based on resident data. Marriage, divorce, and fetal death data however, only reflect events that occurred within the Commonwealth.

REGISTRATION

The first government-operated system of vital events registration anywhere in the world began in the Commonwealth of Massachusetts in 1639 under colonial administration. Prior to that time, in countries with a vital registration system such as England, the responsibility for the registration of vital events had been placed on church officials. The Massachusetts system mandated the registration of vital events by the clerks of the communities. In 1842, the Massachusetts legislature established the first statewide coordination for the registration of these events by requiring that copies of the events registered in the local cities and towns be sent to the Secretary of State. The first year of collection was designated for 1841. The collection of data and the production of the ANNUAL REPORT OF VITAL STATISTICS has continued since then. With the exception of the administrative location of the State Registry, the actual mechanics of the system have changed remarkably little over the years.

With limited exceptions, most vital records in Massachusetts are open records. For open birth and death records, there is a triple registration process in Massachusetts. The event is first recorded in the city or town where the event occurred. Originally, the clerk would send a copy of the event to the State Registry. Since 2000, the clerk of that community has been required to forward the original record to the State Registry and a certified copy to the community where the person resided at the time of the event. Certified copies of the records may be issued from local or state registries. If the record is a restricted birth record, such as those of out-of-wedlock births, the registration occurs only in the community where the event occurred and in the state office, unless the mother gives permission for the resident community to receive a copy.

In addition to receiving a legal copy of each birth record from the city or town in which the birth occurred, the State Registry also receives information about the birth record directly from the hospital or birthing center where the birth occurred. These data include confidential medical information in addition to the legal information. This medical information is processed to produce the statistical information on births contained in this report.

Since 1986, the State Registry has utilized a program of direct electronic transmission of birth records from hospitals. The system used in Massachusetts is called the Electronic Birth Certificate (EBC). Most birth records are now received through this method. EBC has contributed to reducing processing time at both the hospital and the State Registry, while the system's built-in edits increase the quality of the data.

The process for creating death certificates is the most complex of all vital records. Complete and accurate death records are dependent upon the following individuals: 1.) Certifier, who not only initiates the death registration process but also determines the cause of death as well as the place, time, and date of death; 2.) Funeral Director, who plays the role of facilitator in the death registration process and adds the personal data concerning the decedent, which are supplied by an informant; 3.) Burial Agent, who both issues the permit that allows the chosen disposition to take place and serves as the initial acceptor of the death certificate for official registration; and 4.) City or Town Clerk, who records the death certificate, issues certified copies and forwards the original death record to the Registry of Vital Records and Statistics and other communities as required by law.

Beginning in 1999, the International Classification of Diseases-Tenth Revision (ICD-10) replaced the ninth revision as a means of classifying cause of death. The ICD-10, developed by the World Health Organization, is an international classification system employed by the United States in order to promote international comparability in collecting, classifying, and tabulating mortality statistics.

The Registry of Vital Records and Statistics directly receives the fetal death reports for fetuses of either twenty or more weeks gestation or weighing at least 350 grams from hospitals or physicians. There are no local filings of fetal death reports.

Marriage licenses may be issued from any of the 351 cities or towns regardless of where the marriage is to take place. The community issuing the license is required to submit an attested copy of the marriage record to the State Registry. For the 2004 marriage records, the event is recorded only in the community where the notice of intention to marry was filed and at the State Registry.

Abstracts of divorces granted are also sent directly to the State Registry from the Registers of Probate from each county probate court.

STATISTICAL PROCESSING AND TABULATING

The records received in the State Registry are carefully examined for legal errors and inconsistencies. As part of the computerization process, errors and inconsistencies are queried and corrected. A computerized hospital query program is part of the EBC program. The Registry also has a data quality assurance program that includes on-site

instruction for clerks and hospital personnel who have reporting difficulties, and training for all groups involved in the data collection process.

Annually, when registration is considered as complete as possible, statistics are aggregated for presentation in this report, in special studies, and for program monitoring and surveillance.

Anyone using statistical information for comparisons over time should be aware of inconsistencies and changing conventions for classification and coding. This is particularly important when using cause of death information. Codes used for classifying cause of death in this report are based on the Tenth Revision of the International Classification of Diseases, World Health Organization. Classification of variables such as race, nativity, and marital status may also differ over time.

It is hoped that this report will be useful to a wide range of health data users in the Commonwealth, as well as to educational planners, demographers, and historians. Questions concerning these data and requests for more detailed findings should be directed to:

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VITAL EVENTS

SECTION A

VITAL EVENTS

HIGHLIGHTS

BIRTHS

- In 2004, there were 78,460 births to Massachusetts residents.
- Births decreased by 2.1% from 2003 to 2004.
- The 2004 Massachusetts birth rate per 1,000 residents was 12.2, a decrease of 2.4% from the birth rate of 12.5 per 1,000 residents in 2003.
- Massachusetts' 2004 birth rate of 12.2 per 1,000 residents was lower than the 2004 US birth rate of 14.0 per 1,000 residents.
- The most births occurred in July (9.0%--7,089 births); the fewest births occurred in February (7.7%--6,079 births).

DEATHS

- In 2004, 54,419 Massachusetts residents died.
- The number of resident deaths decreased by 3% from 2003 to 2004.
- The Massachusetts crude death rate decreased from 872.2 deaths per 100,000 residents in 2003 to 845.2 in 2004. The 2004 US crude death rate of 816.5 deaths per 100,000 residents was lower than the 2003 US crude death rate of 841.9. The 2004 age-adjusted death rate in Massachusetts (739.3 per 1,000 residents) was lower than the US age-adjusted death rate (800.8).
- The most deaths in 2004 occurred in January (10.7%--5,799); the fewest deaths occurred in June (7.5%--4,074).

FETAL DEATHS

- There were 415 reportable fetal deaths to Massachusetts residents in 2004.
- The number of reportable fetal deaths decreased by 49 from 2003 to 2004, resulting in a fetal death rate of 5.3 per 1,000 live births.

INFANT DEATHS

- In 2004, 376 infant deaths (less than 1 year of age) occurred to Massachusetts residents.
- The 2004 Massachusetts infant mortality rate of 4.8 deaths per 1,000 live births was equivalent to the 2003 infant mortality rate of 4.8 deaths per 1,000 live births.
- The Black non-Hispanic infant mortality rate decreased from 12.7 deaths per 1,000 live births to 11.5 deaths per 1,000 live births between 2003 and 2004.
- The Massachusetts 2004 infant mortality rate of 4.8 per 1,000 live births was 29.4% below the US infant mortality rate of 6.8.

MARRIAGES

- In 2004, there were 41,571 marriages in Massachusetts, which includes the 2,176 male to male and 3,945 female to female marriages.
- The total number of marriages in Massachusetts increased by 14.7% from 2003 to 2004, while the number of male/female marriages continued its steady decline since 1985, decreasing by 2.1%.
- The 2004 Massachusetts rate of 6.5 marriages (5.5 for male/female marriages) per 1,000 population was below the US marriage rate of 7.8 per 1,000 population.
- The most marriages occurred in June (13.9%--5,783); the fewest marriages occurred in January (2.9%--1,193).

DIVORCES

- In 2004, 14,137 divorces were granted in Massachusetts.
- Divorces in Massachusetts decreased by 10.2% from 2003 to 2004.
- The 2004 Massachusetts divorce rate of 2.2 divorces per 1,000 population was below the US rate of 3.7.
- The largest number of divorces that was finalized occurred in January (1,433--10.1%), and the fewest occurred in May (971--6.9%).

NATURAL INCREASE

- The rate of natural increase in the Massachusetts resident population remained equivalent from 2003 to 2004, at 3.7 per 1,000 population.

- The 2004 US natural increase rate of 5.4 remains above that of Massachusetts.

The Vital Events section provides basic information on all vital events. In addition to the information highlighted above, this section contains summary birth and death data by city, town and county. More detailed information is contained in the sections on the individual events. Counts and rates in this report may differ slightly from previously published reports due to updating files and population estimates.

DEFINITIONS IMPORTANT FOR THIS SECTION INCLUDE:

LIVE BIRTH

A live birth is any infant who breathes or shows any other evidence of life (such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles) after separation from the mother's uterus, regardless of the duration of gestation.

FETAL DEATH

A fetal death is a death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy; the death is indicated by the fact that after such separation, the fetus does not breathe or show any other evidence of life, such as the beating of the heart, pulsation of the umbilical cord, or definite movement of the voluntary muscles.

Massachusetts law requires that fetal deaths of 20 or more weeks gestation or weighing at least 350 grams be reported; therefore, the fetal deaths referred to in this report are of that gestational age or weight.

INFANT DEATH

Death of a child whose age is less than one year.

MISER

The Massachusetts Institute for Social and Economic Research. This research institute, which was located at the University of Massachusetts in Amherst, produced the official population estimates and projections for the Commonwealth through 1999.

NATURAL INCREASE

The difference between the number of resident live births and the number of resident deaths.

NEONATAL DEATH

Death of a child whose age is less than 28 days.

OCCURRENCE

Occurrence data reflect where the event took place without regard to residence. In Massachusetts, place of event will be one of the 351 cities or towns.

RESIDENCE

The usual place of residence as reported by the mother (for births) or the informant (for deaths). An infant's residence is considered that of the mother. While occurrence data include only events that occurred within Massachusetts, resident data for births and deaths include those which may or may not have occurred in Massachusetts.

CRUDE RATES OF VITAL EVENTS:

BIRTH RATE	$\frac{\text{No. of Resident Live Births}}{\text{Total Resident Population}} \times 1,000$
FETAL MORTALITY RATE	$\frac{\text{Number of Resident Fetal Deaths}}{\text{Resident Live Births} + \text{Resident Fetal Deaths}} \times 1,000$
INFANT MORTALITY RATE	$\frac{\text{No. of Resident Deaths} < 1 \text{ Year}}{\text{Resident Live Births}} \times 1,000$
NEONATAL MORTALITY RATE	$\frac{\text{No. of Resident Deaths} < 28 \text{ Days}}{\text{Resident Live Births}} \times 1,000$
DEATH RATE	$\frac{\text{No. of Resident Deaths}}{\text{Total Resident Population}} \times 100,000$
MARRIAGE RATE	$\frac{\text{No. of Occurrence Marriages}}{\text{Total Resident Population}} \times 1,000$
DIVORCE RATE	$\frac{\text{No. of Occurrence Divorces}}{\text{Total Resident Population}} \times 1,000$

Table A-1
SELECTED FACTS IN VITAL STATISTICS,
MASSACHUSETTS: 2004

BIRTH

Age Range of Fathers: 13 - 78	Age Range of Mothers: 13 - 61
Sets of Twins: 1,747	Sets of Triplets: 75
Most Births Occurred on: June 2 (290 births)	Fewest Births Occurred on: December 26 (124 births)
Highest # of Births at: Brigham and Women's Hospital (8,864)	Lowest # of Births at: North Shore Birth Center (80)

Twenty Most Popular Names for Boys

Boys' Names	Number	Boys' Names	Number
Michael	740	Joshua	472
Ryan	711	Christopher	470
Matthew	710	Alexander	466
Nicholas	598	Tyler	465
William	548	Jack	455
Andrew	541	Anthony	449
John	525	Benjamin	449
Joseph	516	James	430
Daniel	500	Ethan	404
Jacob	487	Samuel	398

Twenty Most Popular Names for Girls

Girls' Names	Number	Girls' Names	Number
Emily	569	Sophia	351
Emma	546	Samantha	331
Olivia	532	Hannah	324
Abigail	426	Elizabeth	293
Isabella	426	Ella	258
Julia	387	Ashley	254
Ava	386	Lily	237
Grace	386	Lauren	236
Madison	372	Anna	231
Sarah	372	Caroline	225

DEATH

Male Decedents 100 Years and Older: 62	Female Decedents 100 Years and Older: 453
Most Deaths Occurred on: January 13 (215 Deaths)	Fewest Deaths Occurred on: June 19 (95 Deaths)
Month Most Suicides Occurred: June (41 Deaths)	Month Most Homicides Occurred: July & August (20 Deaths each)
Month Most Motor Vehicle Deaths Occurred: August (47 Deaths)	

MARRIAGE

Ages of Men with Female Spouses: 16-96 years (average: 34.7) Ages of Men (first marriage) w. Female Spouses: 16-96 years (average: 30.5) Ages of Men with Male Spouses: 18-89 years (average 44.7) Most Popular Month for Marriages: June (5,783)	Ages of Women with Male Spouses: 15-88 years (average: 32.3) Ages of Women (first marriage) w. Male Spouses: 15-80 (average: 27.8) Ages of Women with Female Spouses: 18-86 years (average 43.8) Least Popular Month for Marriages: January (1,193)
Most Marriages Occurred on: September 18 (928)	Fewest Marriages Occurred on: April 19 (5)
Greatest Age Difference When Male Older than Female: 48 years Greatest Age Difference Between Two Men: 37 years	Greatest Age Difference When Female Older than Male: 37 years Greatest Age Difference Between Two Women: 28 years

DIVORCE

Length of Marriages Involved in Divorces: < 1 Year to 59 Years of Marriage	Most Common Length of Marriage Prior to Divorce: 7 years
Month Most Divorces Granted: January (1,433)	Month Fewest Divorces Granted: May (971)

Figure A-1

2004 Massachusetts Daily Vital Events

Each day in 2004, Massachusetts residents had approximately:

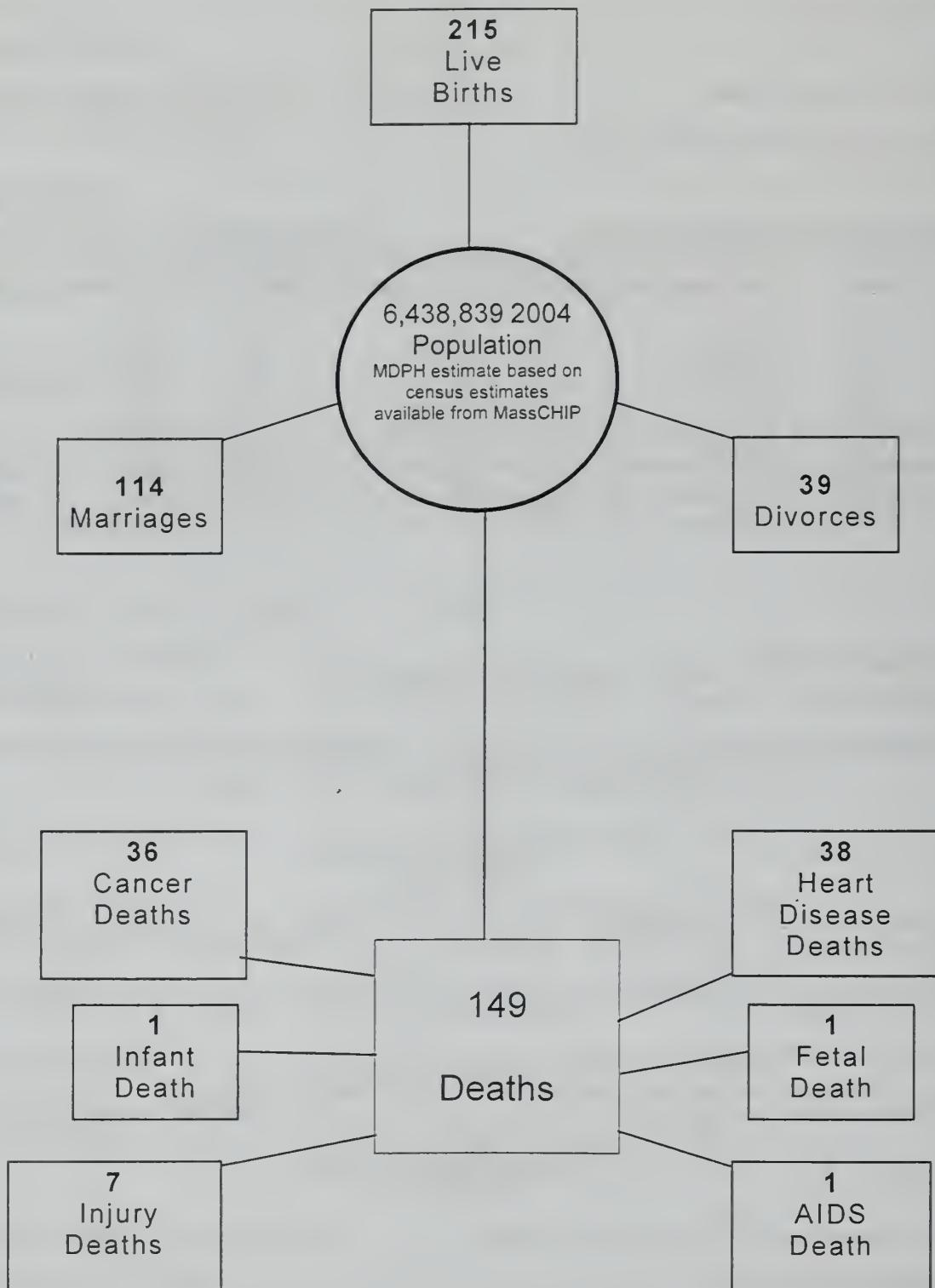


Table A-2. Number and Crude Rates of Vital Events, Massachusetts and United States: 2003-2004

Vital Event	Massachusetts			United States							
	2004 Number	Rate*	Number	2003 % of Rate	Change	Number	Rate*	Number	Rate*	% of Rate	Change
Births	78,460	12.2	80,167	12.5	-2.4	4,112,052	14.0	4,093,000	14.1	-0.7	
Fetal Deaths	416	5.3	464	5.8	-8.6	25,665	6.2	25,635	6.2	0	
Total Deaths	54,419	845.2	56,194	872.2	-3.1	2,397,615	816.5	2,423,000	833.2	-2.0	
Infant Deaths	376	4.8	383	4.8	0	27,936	6.8	28,242	6.9	-1.4	
Neonatal Deaths	291	3.7	285	3.6	2.8	18,593	4.5	19,237	4.7	-4.2	
Marriages ¹	41,571	6.5	36,250	5.6	16.1	2,297,000	7.8	2,187,000	7.7	1.3	
Divorces	14,137	2.2	15,945	2.5	-12.0	Not Available	3.7	1,106,240 ²	3.8	-2.6	

* NOTES: Neonatal and infant deaths are included in total deaths; neonatal deaths are included in infant deaths; fetal deaths are excluded from total deaths.

Figures for marriages and divorces reflect occurrence, not residence.

The rates for live births, marriages and divorces are per 1,000 population; rates for total deaths are per 100,000 population.

Rates for infants and neonatal deaths are per 1,000 live births.

Rates for fetal deaths are per 1,000 live births and fetal deaths.

National numbers and rates provided by the National Center for Health Statistics.

¹ Marriage number and rate includes 2,176 male to male and 3,945 female to female marriages. ² U.S. Divorce rate not inclusive of California, Hawaii, Indiana, and Louisiana

Figure A-2A. Birth and Death Rates in Massachusetts, Selected Years: 1910-2004

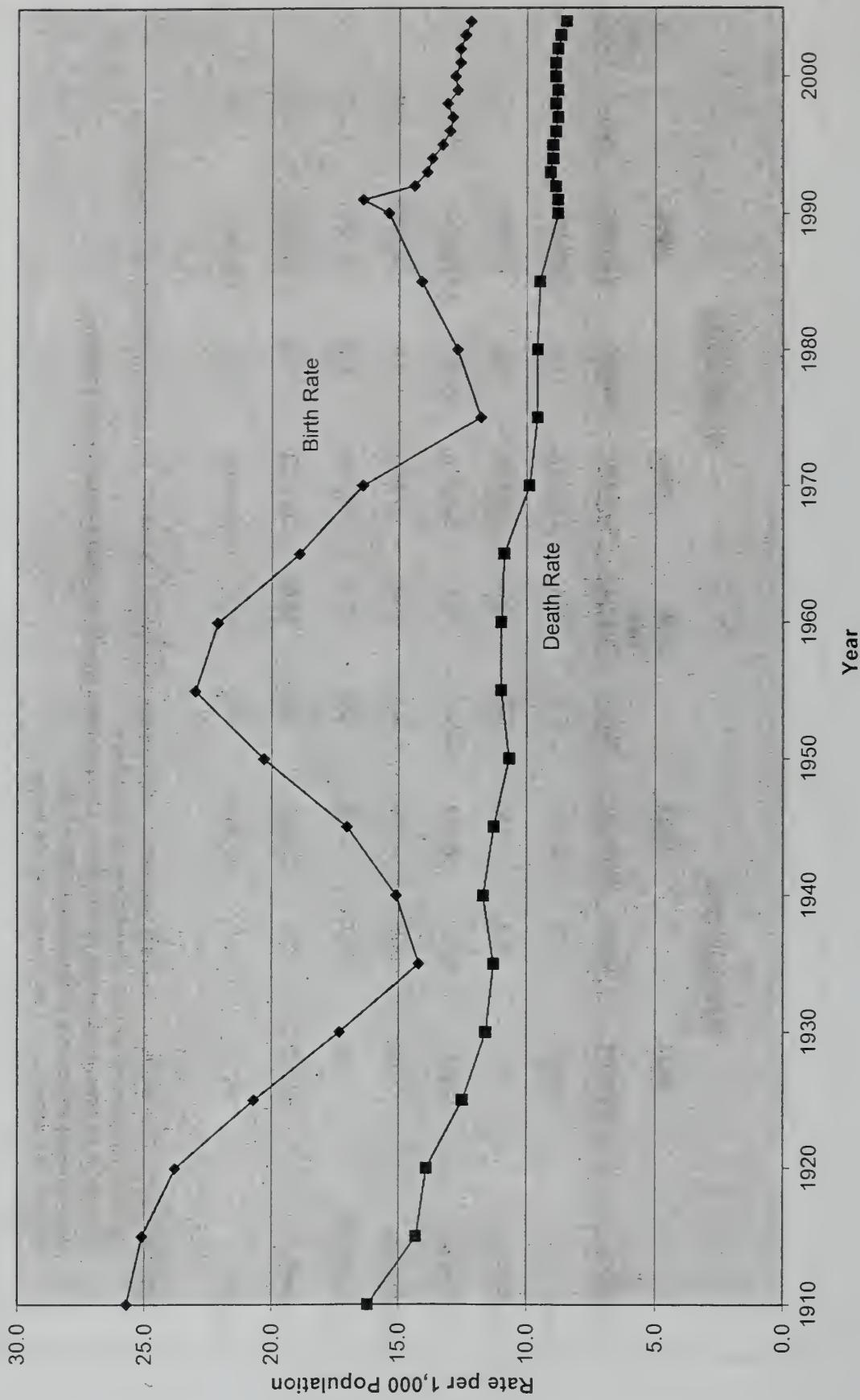


Figure A-2B. Rates of Natural Increase in Massachusetts and the United States, Selected Years, 1910-2004

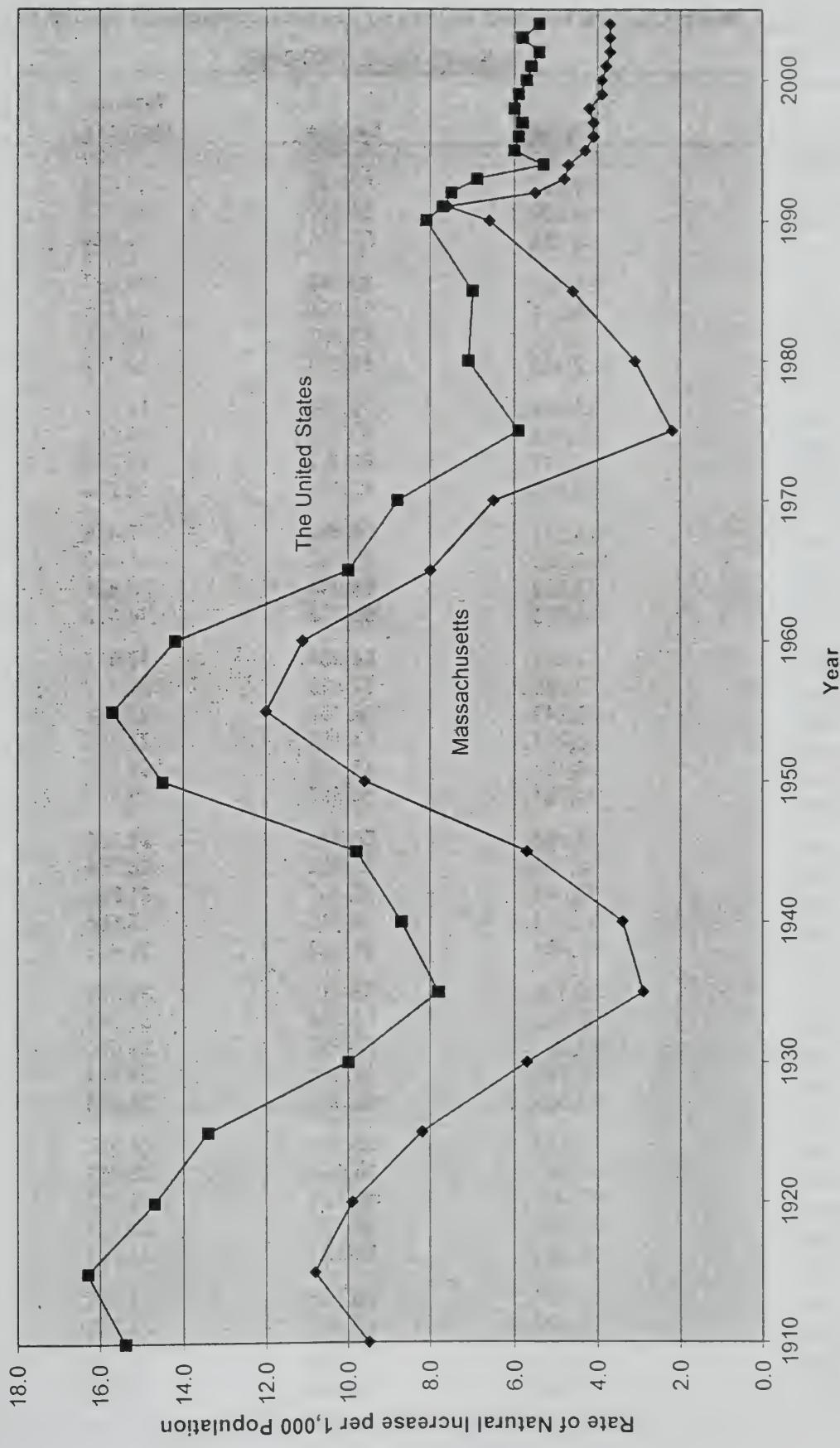


Table A-3. Massachusetts Resident Births and Deaths with Resultant Natural Increase

Selected Years: 1900-2004

Year	Births	Deaths	Natural Increase	Rate/1,000 Residents
1900	73,386	51,156	22,230	7.9
1905	75,022	50,486	24,536	8.2
1910	86,539	54,407	32,132	9.5
1915	93,155	53,131	40,024	10.8
1920	91,859	53,632	38,227	9.9
1925	86,014	51,890	34,124	8.2
1930	73,690	49,503	24,187	5.7
1935	62,416	49,634	12,782	2.9
1940	65,369	50,698	14,671	3.4
1945	76,455	50,763	25,692	5.7
1950	95,619	50,359	45,260	9.6
1955	109,610	53,386	56,224	11.6
1960	114,018	56,560	57,458	11.2
1965	100,262	58,853	41,409	7.8
1970	93,582	56,944	36,638	6.4
1975	68,070	53,708	14,362	2.5
1980	72,591	54,934	17,657	3.1
1981	73,930	52,813	21,117	3.7
1982	75,749	52,867	22,882	4.0
1983	76,031	54,150	21,881	3.8
1984	78,197	55,189	23,008	4.0
1985	81,781	55,597	26,184	4.5
1986	82,168	55,860	26,308	4.5
1987	84,345	55,562	28,783	4.9
1988	88,047	56,407	31,640	5.4
1989	91,314	53,748	37,566	6.4
1990	92,461	53,008	39,453	6.6
1991	88,176	53,010	35,166	5.8
1992	87,202	53,804	33,398	5.5
1993	84,627	55,557	29,070	4.8
1994	83,758	54,914	28,844	4.7
1995	81,562	55,296	26,266	4.3
1996	80,164	55,187	24,977	4.0
1997	80,321	54,634	25,687	4.1
1998	81,406	55,204	26,202	4.2
1999	80,866	55,763	25,103	4.0
2000	81,582	56,591	24,991	3.9
2001	81,104	56,733	24,371	3.8
2002	80,624	56,881	23,743	3.7
2003	80,167	56,194	23,973	3.7
2004	78,460	54,419	24,041	3.7

Table A-4A. Vital Events by Month, Massachusetts Residents: 2004

		Births	Fetal Deaths ¹	Deaths	Infant Deaths ²	Neonatal Deaths ²	Marriages	Divorces
Totals		78,460	416	54,419	376	291	41,571	14,137
January	#	6,324	43	5,809	35	21	1,193	1,433
	Rank	9	2	1	1	11	12	1
February	#	6,079	31	4,615	35	24	1,622	1,061
	Rank	12	8	4	1	7	10	11
March	#	6,651	28	4,758	31	27	1,472	1,339
	Rank	5	11	3	6	1	11	2
April	#	6,442	33	4,536	30	25	2,158	1,176
	Rank	8	6	6	7	5	7	7
May	#	6,676	49	4,229	34	26	5,413	971
	Rank	4	1	9	3	4	2	12
June	#	6,807	38	4,090	30	22	5,783	1,075
	Rank	3	4	12	7	10	1	10
July	#	7,089	26	4,272	29	27	5,027	1,225
	Rank	1	12	8	10	1	4	3
August	#	6,908	31	4,185	29	25	4,956	1,185
	Rank	2	8	10	10	5	5	5
September	#	6,555	41	4,136	33	23	4,827	1,180
	Rank	6	3	11	5	8	6	6
October	#	6,511	31	4,545	34	27	5,056	1,162
	Rank	7	8	5	3	1	3	8
November	#	6,245	32	4,438	26	21	2,149	1,133
	Rank	10	7	7	12	11	8	9
December	#	6,173	33	4,806	30	23	1,915	1,197
	Rank	11	5	2	7	8	9	4

¹Fetal deaths are not included in Births or Deaths. ²Infant deaths and neonatal deaths are included in total resident deaths; neonatal deaths are included in infant deaths.

TABLE A-4B
VITAL EVENTS BY COMMUNITY
2004

COMMUNITY	POPULATION (1)	LIVE BIRTHS		DEATHS		INFANT DEATHS (2)	MARRIAGES (3)	DIVORCES (4)	RESIDENT LICENSES: OCCURRENCE NATURAL INCREASE
		OCCURRENCE:	RESIDENT	OCURRENCE:	RESIDENT				
STATE TOTAL	6,438,839	79,438	:	78,460	:	55,127	:	54,419	376
ABINGTON	16,199	0		182	91	154	0	0	73
ACTON	20,605	0		234	69	98	0	0	96
ACUSHNET	10,555	2		72	35	107	0	0	61
ADAMS	8,501	0		90	31	132	3	3	63
AGAWAM	28,550	0		270	407	327	3	2	194
ALFORD	393	0		2	1	4	0	0	1
AMESBURY	16,380	0		192	105	155	0	0	103
AMHERST	34,863	6		191	90	120	0	0	71
ANDOVER	32,639	0		310	154	220	0	0	201
AQUINNAH	362	0		3	0	0	0	0	172
ARLINGTON	41,533	1		569	127	394	5	5	199
ASHBURNHAM	5,886	1		66	7	29	0	0	27
ASHBY	2,919	2		27	8	21	0	0	19
ASHFIELD	1,819	0		15	4	9	0	0	7
ASHLAND	15,404	0		238	24	85	0	0	27
ATHOL	11,653	1		132	158	131	2	2	191
ATTLEBORO	43,409	1,066		616	522	379	4	4	26
AUBURN	16,355	1		169	109	179	1	1	201
AVON	4,382	0		64	14	40	0	0	177
AYER	7,199	1		108	130	66	1	1	103
BARNSTABLE	48,444	934		448	972	521	1	1	71
BARRE	5,347	0		68	10	40	0	0	30
BECKET	1,772	0		19	3	12	0	0	9
BEDFORD	12,514	2		140	174	143	0	0	14
BELCHERTOWN	13,766	1		173	20	73	1	1	52
BELLINGHAM	15,706	1		202	27	86	1	1	91
BELMONT	23,336	0		286	80	159	1	0	168
BERKLEY	6,320	2		86	7	23	1	1	178
BERLIN	2,668	0		26	6	20	0	0	71
BERNARDSTON	2,214	0		18	0	19	0	0	52
BEVERLY	40,044	2,207		416	573	394	0	0	45
BILLERICA	39,774	0		455	136	250	1	1	249
									111
									155
									205

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(3) MARRIAGE INTENTIONS MAY BE FILED IN ANY MASSACHUSETTS COMMUNITY, REGARDLESS OF WHERE THE PARTIES RESIDE OR WHERE THE MARRIAGE CEREMONY OCCURS.

(4) MARRIAGE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.

TABLE A-4B
VITAL EVENTS BY COMMUNITY
2004

COMMUNITY	POPULATION (1)	LIVE BIRTHS		DEATHS		INFANT DEATHS		MARRIAGES		RESIDENT LICENSES: OCCURRENCE NATURAL INCREASE	
		OCCURRENCE:	RESIDENT	OCCURRENCE:	RESIDENT	TOTAL	: NEONATAL	ISSUED :	(3)	(4)	
STATE TOTAL	6,438,839	79,438	:	78,460	:	55,127	:	54,419	376	:	291
BLACKSTONE	9,040	0	114	27	75	0	0	0	51	33	39
BLANDFORD	1,262	0	7	0	7	0	0	0	1	2	0
BOLTON	4,379	0	64	6	14	0	0	0	19	37	50
BOSTON	567,203	22,627	7,721	7,452	4,063	46	36	3,550	4,208	3,658	3,658
BOURNE	19,458	1	226	129	226	1	1	91	122	0	0
BOXBOROUGH	5,014	0	57	4	16	0	0	0	11	29	41
BOXFORD	8,190	1	80	14	39	0	0	0	13	12	41
BOYLSTON	4,172	1	52	6	24	1	1	1	23	67	28
BRAINTREE	33,812	0	375	328	362	0	0	0	214	152	13
BREWSTER	10,336	1	58	200	157	0	0	0	108	223	-99
BRIDGEWATER	25,732	0	241	56	155	0	0	0	98	93	86
BRIMFIELD	3,588	0	39	17	30	0	0	0	10	18	9
BROCKTON	99,711	2,252	1,592	1,305	848	17	12	631	531	744	744
BROOKFIELD	3,098	0	27	10	39	0	0	0	13	12	-12
BROOKLINE	56,723	2	697	234	369	1	1	1	641	430	328
BUCKLAND	1,986	0	17	6	14	0	0	0	17	14	3
BURLINGTON	23,181	2	305	618	153	2	2	131	115	152	152
CAMBRIDGE	101,910	3,034	1,095	925	526	4	3	1,644	1,267	569	569
CANTON	21,408	0	269	143	217	1	1	110	95	52	52
CARLISLE	4,818	0	49	7	15	0	0	0	23	30	34
CARVER	11,468	0	104	28	103	0	0	0	67	44	11
CHARLEMONT	1,394	0	11	5	10	0	0	0	7	21	1
CHARLTON	12,258	2	132	56	91	0	0	0	31	36	41
CHATHAM	6,841	0	31	113	139	0	0	0	92	242	-108
CHELMFORD	33,708	0	395	119	282	2	1	159	159	113	113
CHELSEA	34,462	4	678	207	299	7	5	298	227	379	379
CHESTERFIELD	3,352	0	25	11	25	0	0	0	7	15	0
CHESTERFIELD	1,324	0	16	4	10	0	0	0	5	5	6
CHICOPEE	54,726	2	12	1	9	0	0	0	4	8	3
CHILMARK	927	0	9	1	4	0	0	0	17	53	5
CLARKSBURG	1,666	0	12	3	15	0	0	0	5	5	-3

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TABLE A-4B
VITAL EVENTS BY COMMUNITY
2004

COMMUNITY	POPULATION (1)	LIVE BIRTHS		DEATHS		INFANT DEATHS		MARRIAGES		RESIDENT LICENSES: OCCURRENCE (NATURAL INCREASE) (4)			
		OCCURRENCE:	RESIDENT	OCCURRENCE:	RESIDENT	TOTAL	: NEONATAL	ISSUED	MARRIAGES				
STATE TOTAL	6,438,839	79,438	:	78,460	55,127	:	54,419	376	:	291	41,571	41,571	24,041
CLINTON	13,880	1		186	73		144	2		1	87	64	42
COHASSET	7,263	0		102	38		62	0		0	51	170	40
COLRAIN	1,859	0		12	3		10	0		0	10	12	2
CONCORD	16,916	1,314		156	375		136	0		0	93	124	20
CONWAY	1,886	1		23	0		9	2		2	2	12	14
CUMMINGTON	990	0		13	1		5	0		0	3	10	8
DALTON	6,729	0		55	43		86	0		0	19	29	-31
DANVERS	25,372	1		233	275		291	0		0	147	242	-58
DARTMOUTH	31,282	1		275	113		258	1		1	123	179	17
DEPHAM	23,197	0		302	119		233	0		0	322	159	69
DEERFIELD	4,795	0		44	9		30	1		1	39	68	14
DENNIS	16,091	0		113	132		230	0		0	134	156	-117
DIGHTON	6,603	0		60	20		48	0		0	38	45	12
DOUGLAS	7,733	0		116	12		47	2		2	30	22	69
DOVER	5,644	0		50	13		29	1		0	14	14	21
DRACUT	28,587	1		384	64		226	0		0	136	120	158
DUDLEY	10,740	1		113	17		68	1		0	43	28	45
DUNSTABLE	3,088	0		35	4		13	0		0	10	9	22
DUXBURY	14,665	1		131	93		114	0		0	44	76	17
EAST BRIDGEWATER	13,652	0		160	56		99	3		2	70	72	61
EAST BROOKFIELD	2,119	0		19	5		24	0		0	8	12	-5
EAST LONGMEADOW	14,766	0		161	228		152	0		0	95	67	9
EASTHAM	5,603	0		27	20		70	0		0	36	70	-43
EASTHAMPTON	16,041	0		154	39		146	0		0	147	111	8
EASTON	22,999	0		249	69		136	0		0	106	127	113
EDGARTOWN	3,916	0		34	12		37	0		0	117	197	-3
EGREMONT	1,347	0		11	2		15	0		0	3	7	-4
ERVING	1,529	0		19	5		13	0		0	7	1	6
ESSEX	3,345	0		30	13		35	0		0	19	27	-5
EVERETT	37,348	1		512	396		352	1		1	330	249	160
FAIRHAVEN	16,307	1		146	143		206	1		1	135	112	-60
FALL RIVER	92,645	1		1,631	1,189		1,310	1,036		6	646	554	153

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TABLE A-4B
VITAL EVENTS BY COMMUNITY
2004

COMMUNITY	POPULATION (1)	LIVE BIRTHS		DEATHS		INFANT DEATHS		MARRIAGES		RESIDENT LICENSES: OCCURRENCE NATURAL INCREASE	
		OCCURRENCE:	RESIDENT	OCCURRENCE:	RESIDENT	TOTAL	: NEONATAL	ISSUED:	(2)	(3)	(4)
STATE TOTAL	6,438,839	79,438	:	78,460	:	55,127	:	54,419	376	:	291
FALMOUTH	33,688	655	298	464	381	4	2	296	550	-83	
FITCHBURG	40,269	2	550	271	366	5	4	229	171	184	
FLORIDA	660	0	5	4	6	0	0	0	1	-1	
FOXBOROUGH	16,317	1	166	27	101	1	1	99	127	65	
FRAMINGHAM	65,986	2,026	943	618	549	8	6	603	503	394	
FRANKLIN	30,085	2	414	84	161	2	1	138	80	253	
FREETOWN	8,941	0	94	16	55	0	0	45	170	39	
GARDNER	20,977	541	235	314	223	0	0	136	121	12	
GEORGETOWN	7,930	0	102	18	48	0	0	0	17	37	
GILL	1,391	0	13	3	16	0	0	4	9	-3	
GLoucester	30,716	0	312	344	292	1	1	213	336	20	
GOSHEN	955	1	11	1	4	0	0	0	1	5	
GOSNOLD	87	0	0	0	1	0	0	0	2	6	
GRAFTON	16,209	1	243	33	95	1	0	75	55	148	
GRANBY	6,314	0	47	13	33	0	0	32	25	14	
GRANVILLE	1,622	0	10	3	11	0	0	8	10	-1	
GREAT BARRINGTON	7,428	175	68	154	104	3	3	100	71	-36	
GREENFIELD	17,960	451	171	319	227	1	1	177	121	-56	
GROTON	10,320	1	109	16	40	0	0	48	39	69	
GROVELAND	6,446	0	64	8	35	0	0	16	17	29	
HADLEY	4,846	1	46	62	61	0	0	15	46	-15	
HALIFAX	7,766	0	75	21	69	1	0	30	58	6	
HAMILTON	8,393	0	86	9	46	3	3	36	54	40	
HAMPDEN	5,307	1	34	43	44	0	0	12	18	-10	
HANCOCK	1,003	0	10	0	1	0	0	0	0	9	
HANOVER	13,818	0	157	26	91	0	0	69	47	66	
HANSON	9,874	1	140	21	74	0	0	52	68	66	
HARDWICK	2,662	0	37	9	29	0	0	34	24	8	
HARVARD	6,109	0	45	6	39	0	0	16	61	6	
HARWICH	12,767	0	100	106	178	1	1	104	194	-78	
HATFIELD	3,301	1	27	5	29	0	0	20	24	-2	
HAVERHILL	60,155	2	872	574	567	3	2	301	263	305	

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TABLE A-4B
VITAL EVENTS BY COMMUNITY
2004

COMMUNITY	POPULATION (1)	LIVE BIRTHS OCCURRENCE: RESIDENT (2)	DEATHS OCCURRENCE: RESIDENT (3)	INFANT DEATHS TOTAL: NEONATAL (2)	MARRIAGES LICENSES: OCCURRENCE (3)	RESIDENT INCREASE (4)
STATE TOTAL	6,438,839	79,438	78,460	55,127	54,419	376
HAWLEY	346	0	2	0	6	0
HEATH	807	0	5	2	6	0
HINGHAM	21,141	1	254	158	180	0
HINSDALE	1,823	0	24	7	13	0
HOLBROOK	10,809	1	141	31	106	0
HOLDEN	16,554	0	194	76	133	2
HOLLAND	2,479	0	25	7	13	0
HOLLISTON	13,884	0	153	25	73	1
HOLYOKE	40,920	591	608	674	488	6
HOPEDALE	6,206	1	92	32	46	0
HOPKINTON	13,961	0	180	21	60	1
HUBBARDSTON	4,259	0	35	8	21	0
HUDSON	18,632	0	236	41	129	3
HULL	11,301	0	105	25	101	1
HUNTINGTON	2,190	4	19	7	20	0
IPSWICH	13,330	0	141	39	110	0
KINGSTON	12,311	0	151	89	136	0
LAKEVILLE	10,501	0	120	55	63	0
LANCASTER	6,957	1	59	56	55	0
LANESBOROUGH	2,960	0	22	0	19	0
LAWRENCE	80,122	1,741	1,417	506	473	13
LEE	5,884	1	49	55	76	0
LEICESTER	10,880	0	128	94	107	1
LENOK	5,151	0	39	76	82	1
LEOMINSTER	42,093	1,117	511	461	400	2
LEVERETT	1,760	0	13	4	9	0
LEXINGTON	30,517	0	222	191	247	0
LEYDEN	807	0	0	2	2	0
LINCOLN	7,989	0	102	4	36	0
LITTLETON	8,544	0	111	77	61	1
LONGMEADOW	15,608	0	136	96	160	0
LOWELL	105,738	2,574	1,649	1,250	863	8

(1) MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH ESTIMATES FOR 2004 BASED ON CENSUS BUREAU ESTIMATES, AVAILABLE FROM MASSCHIP.

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TABLE A-4B
VITAL EVENTS BY COMMUNITY
2004

COMMUNITY	POPULATION (1)	LIVE BIRTHS OCCURRENCE : RESIDENT	DEATHS OCCURRENCE : RESIDENT	INFANT DEATHS TOTAL : NEONATAL (2)	MARRIAGES LICENSES : OCCURRENCE (3)	MARRIAGES ISSUED : (4)	RESIDENT NATURAL INCREASE
STATE TOTAL	6,438,839	79,438	78,460	55,127	54,419	376	291
LUDLOW	21,825	1	184	73	173	5	178
LUNENBURG	9,954	1	102	20	66	0	41
LYNN	92,002	6	1,428	558	819	9	523
LYNNFIELD	11,609	0	99	22	88	2	1
MALEDEN	56,262	2	856	142	464	2	2
MANCHESTER	5,356	0	51	18	40	1	0
MANSFIELD	22,926	0	316	19	93	0	33
MARBLEHEAD	20,319	0	223	114	168	0	0
MARLTON	5,300	0	55	58	60	0	0
MARLBOROUGH	37,374	3	566	331	299	1	1
MARSHFIELD	24,773	0	332	47	178	1	0
MASHPEE	14,153	1	160	70	105	0	96
MATTAPoisSETT	6,456	0	47	19	54	0	0
MAYNARD	10,299	1	156	13	73	0	0
MEDFIELD	12,371	1	124	24	77	0	0
MEDFORD	54,223	2	617	535	553	5	4
MEDWAY	12,845	0	163	51	74	1	1
MELROSE	26,500	1,460	330	495	242	1	139
MENDON	5,743	1	67	3	28	1	1
MERRIMAC	6,299	0	57	10	42	0	0
METHUEN	44,658	1,343	622	517	411	3	1
MIDDLEBOROUGH	21,052	0	267	109	176	1	1
MIDDLEFIELD	545	0	4	0	2	0	0
MIDDLETON	8,929	0	71	21	55	0	0
MILFORD	27,383	860	357	411	222	0	0
MILLBURY	13,346	0	148	118	153	0	0
MILLIS	7,976	0	100	14	47	1	1
MILLYVILLE	2,927	0	56	2	12	0	0
MILTON	26,032	0	331	276	243	3	3
MONROE	98	0	0	1	1	0	0
MONSON	8,662	0	86	27	79	1	0
MONTAGUE	8,446	2	86	46	97	0	0

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TABLE A-4B
VITAL EVENTS BY COMMUNITY
2004

COMMUNITY	POPULATION (1)	LIVE BIRTHS :	DEATHS :	INFANT DEATHS :	MARRIAGES :	RESIDENT LICENSES: OCCURRENCE NATURAL OCCURRENCE: RESIDENT OCCURRENCE: RESIDENT TOTAL : NEONATAL ISSUED : (2) : (3) : (4)
STATE TOTAL	6,438,839	79,438 :	78,460	55,127 :	54,419	376 : 291 41,571 : 41,571 24,041 : :
MONTEREY	954	0	9	3	6	0 : 0 0 : 0 6 3 : 3
MONTGOMERY	733	0	9	9	4	0 : 0 0 : 0 1 5 : 5
MOUNT WASHINGTON	133	0	2	0	1	0 : 0 0 : 0 1 1 : 1
NAHANT	3,612	0	25	19	37	0 : 0 0 : 0 4 -12 : -12
NANTUCKET	10,046	105	149	61	64	0 : 0 0 : 0 81 217 : 217
NATICK	32,029	1	436	362	241	2 : 2 2 : 2 92 202 : 195
NEEDHAM	28,578	0	348	368	240	1 : 1 1 : 1 100 108 : 108
NEW ASHFORD	245	0	1	0	0	0 : 0 0 : 0 1 1 : 1
NEW BEDFORD	94,942	1,563	1,378	1,391	1,117	4 : 3 3 : 3 560 508 : 261
NEW BRAINTREE	1,064	0	4	0	3	0 : 0 0 : 0 7 4 : 4
NEW MARLBOROUGH	1,511	0	16	2	3	0 : 0 0 : 0 0 30 : 30
NEW SALEM	985	0	7	1	8	0 : 0 0 : 0 5 11 : 11
NEWBURY	6,864	0	77	18	44	2 : 2 2 : 2 30 30 : 33
NEWBURYPORT	17,497	744	197	368	210	0 : 0 0 : 0 191 -13 : -13
NEWTON	83,793	3,070	844	614	602	4 : 4 4 : 4 521 242 : 242
NORFOLK	10,496	0	98	11	42	0 : 0 0 : 0 31 21 : 21
NORTH ADAMS	14,173	292	151	218	193	0 : 0 0 : 0 82 69 : 69
NORTH ANDOVER	27,184	1	329	180	204	0 : 0 0 : 0 171 125 : 125
NORTH ATTLEBORO	28,080	0	374	95	199	0 : 0 0 : 0 142 70 : 75
NORTH BROOKFIELD	4,808	0	46	3	30	0 : 0 0 : 0 32 28 : 28
NORTH READING	13,946	0	175	52	75	0 : 0 0 : 0 48 53 : 53
NORTHAMPTON	28,924	910	242	554	285	0 : 0 0 : 0 540 469 : 469
NORTHBOROUGH	14,311	0	164	69	94	0 : 0 0 : 0 66 50 : 50
NORTHBRIDGE	13,846	2	221	113	132	0 : 0 0 : 0 93 49 : 49
NORTHEFIELD	3,169	2	36	6	21	0 : 0 0 : 0 15 24 : 24
NORTON	19,074	2	243	68	119	0 : 0 0 : 0 81 85 : 85
NORWELL	10,362	0	107	109	92	1 : 1 1 : 1 48 48 : 48
NORWOOD	28,514	605	371	643	324	1 : 1 1 : 1 180 143 : 143
OAK BLUFFS	3,810	131	44	69	45	0 : 0 0 : 0 50 82 : 82
OAKHAM	1,871	0	12	0	10	0 : 0 0 : 0 3 9 : 9
ORANGE	7,558	0	84	19	76	1 : 1 1 : 1 42 34 : 34
ORLEANS	6,455	0	38	43	103	0 : 0 0 : 0 115 156 : 156
						-65 : -65 : -65

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TABLE A-4B
VITAL EVENTS BY COMMUNITY
2004

COMMUNITY	POPULATION (1)	LIVE BIRTHS		DEATHS		INFANT DEATHS		MARRIAGES		RESIDENT LICENSES: OCCURRENCE TOTAL : NEONATAL ISSUED : (2) : (3) : (4)	
		OCCURRENCE : RESIDENT	OCCURRENCE : NOT RESIDENT	TOTAL : RESIDENT	TOTAL : NOT RESIDENT	TOTAL : NEONATAL	LICENSES : OCCURRENCE TOTAL : (2)	NATURAL INCREASE			
STATE TOTAL	6,438,839	79,438	: 78,460	55,127	: 54,419	376	: 291	41,571	: 41,571	24,041	
OTIS	1,380	0	13	5	10	0	0	8	8	3	
OXFORD	13,710	1	148	34	104	2	2	72	63	44	
PALMER	12,868	0	135	126	123	0	0	82	62	12	
PAXTON	4,534	0	45	8	32	0	0	7	19	13	
PEABODY	50,076	2	513	496	582	0	0	226	205	-69	
PELHAM	1,418	0	4	2	5	0	0	6	8	-1	
PEMBROKE	17,674	0	222	33	94	2	1	82	53	128	
PEPPERELL	11,400	1	115	26	69	1	1	33	23	46	
PERU	822	0	8	0	2	0	0	1	1	6	
PETERSHAM	1,261	0	8	1	14	0	0	7	13	-6	
PHILLIPSTON	1,725	0	15	0	7	0	0	3	3	8	
PITTSFIELD	44,313	814	538	742	543	3	1	387	291	-5	
PLAINFIELD	603	0	5	1	3	0	0	1	3	2	
PLAINVILLE	7,899	0	97	18	50	0	0	43	23	47	
PLIMOTH	54,406	615	688	621	471	2	2	348	398	217	
PLYMPTON	2,748	0	30	5	14	0	0	7	10	16	
PRINCETON	3,492	1	36	2	11	0	0	25	103	25	
PROVINCETOWN	3,458	1	18	31	44	0	0	875	1,071	-26	
QUINCY	90,018	4	1,168	751	871	5	4	835	699	297	
RANDOLPH	32,308	0	414	116	292	4	3	222	206	122	
RAYNHAM	13,244	0	168	68	104	0	0	58	67	64	
READING	23,326	0	273	222	197	0	0	105	60	76	
REHOBOTH	11,096	0	108	14	61	0	0	40	58	47	
REVERE	45,850	0	689	218	491	3	3	276	291	198	
RICHMOND	1,627	0	8	7	14	0	0	11	9	-6	
ROCHESTER	5,183	0	47	6	21	0	0	17	14	26	
ROCKLAND	17,837	1	228	83	180	1	1	106	77	48	
ROCKPORT	7,786	0	59	0	60	0	0	0	96	-1	
ROWE	349	0	4	1	4	0	0	3	4	0	
ROWLEY	5,700	0	74	33	44	0	0	23	24	30	
ROYALSTON	1,350	0	15	3	7	0	0	3	4	8	
RUSSELL	1,709	1	17	0	7	0	0	5	10	10	

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TABLE A-4B
VITAL EVENTS BY COMMUNITY
2004

COMMUNITY	POPULATION (1)	LIVE BIRTHS		DEATHS		INFANT DEATHS		MARRIAGES		RESIDENT INCREASE (4)			
		OCCURRENCE:	RESIDENT	OCCURRENCE:	RESIDENT	TOTAL	: NEONATAL (2)	LICENSES : OCCURRENCE (3)	ISSUED :				
STATE TOTAL	6,438,839	79,438	:	78,460	:	55,127	:	54,419	376	291	41,571	41,571	24,041
RUTLAND	7,205	1		102	13	38		0	0	24	18	64	
SALEM	41,697	1,807	526	758	375	2	2	339	287	151	151		
SALISBURY	8,127	0	78	19	57	1	0	43	54	21	21		
SANDISFIELD	823	0	8	3	10	0	0	0	2	-2	-2		
SANDWICH	20,748	0	177	134	151	0	0	129	195	26	26		
SAUGUS	26,670	0	281	119	266	3	2	101	118	15	15		
SAVOY	719	0	3	2	2	0	0	0	2	4	1		
SCITUATE	18,167	0	193	127	167	0	0	0	89	150	26		
SEEKONK	13,698	0	104	33	92	1	1	119	80	12	12		
SHARON	17,368	0	190	57	96	1	1	65	105	94	94		
SHEFFIELD	3,353	1	29	14	37	1	0	30	17	-8	-8		
SHELburne	2,061	0	13	27	23	0	0	13	26	-10	-10		
SHERBORN	4,222	2	39	8	25	0	0	0	12	45	14		
SHIRLEY	7,343	0	60	15	45	0	0	28	37	15	15		
SHREWSBURY	33,093	0	469	84	204	0	0	174	112	265	265		
SHUTESBURY	1,843	2	19	3	5	0	0	9	13	14	14		
SOMERSET	18,653	1	145	99	217	0	0	74	63	-72	-72		
SOMERVILLE	75,949	4	849	204	485	5	4	588	404	364	364		
SOUTH HADLEY	17,153	0	158	112	167	1	1	100	117	-9	-9		
SOUTHAMPTON	5,750	1	41	9	38	0	0	19	15	3	3		
SOUTHBOROUGH	9,492	0	125	10	45	0	0	47	54	80	80		
SOUTHBRIDGE	17,497	463	261	191	182	4	4	120	81	79	79		
SOUTHWICK	9,392	0	92	24	84	1	1	66	62	8	8		
SPENCER	11,997	1	125	24	92	1	1	76	146	33	33		
SPRINGFIELD	5,596	2,390	2,028	1,321	15	9	9	927	845	1,069	1,069		
STERLING	7,725	1	83	58	47	0	0	39	87	36	36		
STOCKBRIDGE	2,250	0	13	8	24	0	0	28	46	-11	-11		
STONEHAM	21,759	0	213	109	241	1	1	135	78	-28	-28		
STOUGHTON	26,932	1	345	304	250	5	5	180	128	95	95		
STOW	6,096	0	100	8	26	1	1	13	31	74	74		
STURBRIDGE	8,654	1	100	25	69	2	1	129	186	31	31		
SUDSBURY	17,109	2	200	97	107	1	1	60	288	93	93		

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TABLE A-4B
• VITAL EVENTS BY COMMUNITY
2004

COMMUNITY	POPULATION (1)	LIVE BIRTHS		DEATHS		INFANT DEATHS		MARRIAGES		RESIDENT LICENSES: OCCURRENCE ISSUED : (3) :	
		OCCURRENCE : RESIDENT	OCCURRENCE : NONRESIDENT	TOTAL (2)	: NEONATAL	TOTAL (2)	: (3)	(4)	NATURAL INCREASE		
STATE TOTAL	6,438,839	79,438	: 78,460	55,127	: 54,419	376	: 291	41,571	: 41,571	24,041	
SUNDERLAND	3,846	1		31	13	18	0	0	23	10	13
SUTTON	8,855	0		111	21	50	0	0	33	51	61
SWAMPSOFT	14,396	2		157	100	146	0	0	65	64	11
SWANSEA	16,282	0		133	55	133	2	1	63	88	0
TAUNTON	56,622	524		775	483	448	2	1	394	305	327
TEMPLETON	7,302	0		69	65	72	0	0	23	33	-3
TEWKSBURY	29,047	0		318	133	226	0	0	123	94	92
TIBSBURY	3,833	1		35	13	30	0	0	46	49	5
TOLLAND	442	0		3	0	1	0	0	1	1	2
TOPSFIELD	6,210	0		56	78	52	0	0	21	50	4
TOWNSEND	9,303	1		97	19	46	1	0	34	19	51
TRURO	2,172	1		12	10	20	0	0	35	95	-8
TYNGSBOROUGH	11,336	0		140	18	49	1	0	73	37	91
TYRINGHAM	355	0		3	2	4	0	0	1	7	-1
UPTON	6,237	1		97	24	42	0	0	30	12	55
UXBRIDGE	12,202	0		153	37	74	1	0	74	127	79
WAKEFIELD	24,515	2		298	184	226	1	1	157	150	72
WALES	1,794	0		18	3	11	0	0	3	3	7
WALPOLE	23,139	0		276	84	174	1	1	106	98	102
WALTHAM	59,259	5		676	232	470	1	1	445	352	206
WARE	9,986	130		110	74	93	0	0	54	30	17
WAREHAM	21,173	517		244	293	251	0	0	128	102	-7
WARREN	4,971	2		59	11	35	0	0	31	17	24
WAWICK	759	0		3	3	10	0	0	4	2	-7
WASHINGTON	542	0		2	1	2	0	0	1	20	0
WATERTOWN	32,513	0		335	120	280	0	0	319	202	55
WAYLAND	13,055	1		124	92	104	0	0	38	48	20
WEBSTER	16,856	0		216	238	200	1	1	133	143	16
WELLESLEY	26,922	111		274	115	192	0	0	96	103	82
WELLFLEET	2,832	0		24	12	44	0	0	44	76	-20
WENDELL	1,028	0		7	0	5	0	0	0	2	2
WENHAM	4,654	1		41	8	29	0	0	10	8	12

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TABLE A-4B
VITAL EVENTS BY COMMUNITY
2004

COMMUNITY	POPULATION		LIVE BIRTHS		DEATHS		INFANT DEATHS		MARRIAGES		RESIDENT	
	(1)	OCCURRENCE : RESIDENT	(2)	OCCURRENCE : RESIDENT	(3)	: NEONATAL	(2)	TOTAL	(3)	ISSUED :	(4)	NATURAL INCREASE
STATE TOTAL	6,438,839	79,438	78,460	55,127	54,419	376	291	41,571	41,571	24,041		
WEST BOYLSTON	7,623	0	71	39	68	0	0	49	49	64	31	
WEST BRIDGEWATER	6,831	0	73	94	82	1	1	36	48	-9		
WEST BROOKFIELD	3,894	0	38	87	47	0	0	13	54	-9		
WEST NEWBURY	4,284	0	34	6	18	0	0	8	9	16		
WEST SPRINGFIELD	27,985	1	351	160	269	3	2	166	177	82		
WEST STOCKBRIDGE	1,448	0	12	0	10	0	0	0	0	10	2	
WEST TILSBURY	2,650	0	23	8	12	0	0	28	42	11		
WESTBOROUGH	18,741	1	235	158	175	1	1	78	76	60		
WESTFIELD	40,455	4	425	386	373	0	0	248	295	52		
WESTFORD	21,368	1	249	90	107	0	0	66	79	142		
WESTHAMPTON	1,558	1	13	4	8	0	0	3	6	5		
WESTMINSTER	7,284	0	49	13	52	0	0	43	89	-3		
WESTON	11,586	1	84	114	98	0	0	62	83	-14		
WESTPORT	14,705	0	109	34	114	1	0	79	154	-5		
WESTWOOD	14,004	1	156	51	137	0	0	41	41	19		
WEYMOUTH	54,065	4,105	699	923	517	4	4	288	196	182		
WHATELY	1,585	0	17	6	13	0	0	9	18	4		
WHITMAN	14,319	0	205	21	77	0	0	104	67	128		
WILBRAHAM	13,894	0	112	156	136	0	0	67	68	-24		
WILLIAMSBURG	2,436	0	23	7	23	0	0	19	22	0		
WILLIAMSTOWN	8,304	1	42	144	92	0	0	55	61	-50		
WILMINGTON	21,504	1	298	149	159	1	1	99	79	139		
WINCHENDON	10,010	0	103	25	69	0	0	36	36	34		
WINCHESTER	21,106	2,219	275	447	167	1	1	89	106	108		
WINDSOR	854	0	8	1	1	0	0	7	5	7		
WINTHROP	17,406	0	176	96	197	1	1	93	76	-21		
WOBURN	37,320	0	481	164	333	0	0	225	193	148		
WORCESTER	178,947	6,357	2,579	3,045	1,718	17	12	1,462	1,299	861		
WORTHINGTON	1,296	0	14	4	12	0	0	7	7	2		
WRENTHAM	11,052	1	118	87	109	0	0	28	113	9		
YARMOUTH	24,929	1	202	221	407	2	2	181	253	-205		
UNKNOWN	0	0	0	0	0	0	0	0	0	0		

(1) MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH ESTIMATES FOR 2004 BASED ON CENSUS BUREAU ESTOMATES, AVAILABLE FROM MASSSHIP.

(2) INFANT AND NEONATAL DEATHS ARE INCLUDED IN TOTAL RESIDENT DEATHS.

(3) MARRIAGE INTENTIONS MAY BE FILED IN ANY MASSACHUSETTS COMMUNITY, REGARDLESS OF WHERE THE PARTIES RESIDE OR WHERE THE MARRIAGE CEREMONY OCCURS.

(4) MARRIAGE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.

TABLE A-4C
VITAL EVENTS BY COUNTY
2004

COUNTY	POPULATION		LIVE BIRTHS		DEATHS		INFANT DEATHS		MARRIAGES		DIVORCES		RESIDENT	
	(1)	:	OCCURRENCE:	RESIDENT	OCCURRENCE:	RESIDENT	TOTAL	: NEONATAL	(3)	(3)	(3)	(3)	NATURAL	INCREASE
STATE TOTAL	6,438,839	79,438	:	78,460	55,127	:	54,419	376	:	291	41,571	14,137	24,041	
BARNSTABLE	227,974	1,595	1,932	2,657	2,776	9	7	4,048	558	-844				
BERKSHIRE	132,474	1,284	1,297	1,542	1,544	11	7	999	155	-247				
BRISTOL	548,381	4,793	6,640	4,594	4,945	23	18	3,025	1,356	1,695				
DUKES	15,585	132	148	103	129	0	0	456	0	19				
ESSEX	747,290	7,858	9,253	6,094	6,452	43	31	4,299	1,732	2,801				
FRANKLIN	72,280	459	670	488	661	5	5	508	275	9				
HAMPDEN	465,730	6,195	5,740	4,694	4,412	42	27	2,691	887	1,328				
HAMPSHIRE	154,194	1,058	1,307	1,006	1,136	2	2	1,148	320	171				
MIDDLESEX	1,467,263	15,738	17,954	10,498	11,002	69	58	8,342	2,463	6,952				
NANTUCKET	10,046	105	149	61	64	0	0	323	32	85				
NORFOLK	655,865	4,837	8,054	4,951	5,501	34	30	3,602	1,375	2,553				
PLYMOUTH	494,423	3,388	6,150	3,649	4,104	31	22	2,652	1,388	2,046				
SUFFOLK	664,921	22,531	9,264	7,973	5,050	57	45	4,802	1,629	4,214				
WORCESTER	782,413	9,365	9,902	6,817	6,643	50	39	4,676	1,966	3,259				
UNKNOWN	0	0	0	0	0	0	0	0	1	0				

(1) MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH ESTIMATES FOR 2004 BASED ON CENSUS BUREAU ESTIMATES, AVAILABLE FROM MASSCHIP.

(2) INFANT AND NEONATAL DEATHS ARE INCLUDED IN TOTAL RESIDENT DEATHS.

(3) MARRIAGE AND DIVORCE FIGURES REFLECT OCCURRENCE, NOT RESIDENCE.

BIRTHS

SECTION B

BIRTHS

There were 78,460 live births to Massachusetts residents in 2004, a 2.1% decrease from the 80,167 resident live births in 2003. Live births to Massachusetts residents include all births to Massachusetts residents, regardless of the state in which the births occurred. Most data presented in this section are resident data. Table B-20 presents births by licensed maternity facility of occurrence, which includes births to women who live in other states. Counts and rates in this report may differ slightly from previously published reports due to updating files and population estimates.

OCCURRENCE BIRTHS

In 2004, 79,438 births occurred in Massachusetts. All but 312 births occurred at the 52 licensed maternity facilities in this state. The number of babies delivered at these maternity facilities ranged from 80 at the North Shore Birth Center in Beverly to 8,864 at Brigham and Women's Hospital in Boston. The four hospitals with the greatest numbers of births were Brigham and Women's Hospital (8,864), Beth Israel Deaconess Medical Center (5,219), UMass Memorial Medical Center (4,480), and Baystate Medical Center (4,200). Births from these hospitals represented 28.7% of all births occurring in Massachusetts. The distribution of Massachusetts births by hospital size is presented below.

2004 DISTRIBUTION OF MASSACHUSETTS
* OCCURRENCE BIRTHS BY FACILITY

NUMBER OF BIRTHS AT HOSPITAL	NUMBER OF HOSPITALS IN CATEGORY	TOTAL NUMBER OF BIRTHS IN CATEGORY	% OF TOTAL BIRTHS
< 500	10	2,036	2.6
500-999	14	9,932	12.5
1000-1499	10	12,770	16.1
1500-1999	7	12,315	15.5
≥ 2000	11	42,073	53.0
All other ¹		312	0.4
TOTAL	52	79,438	100.0²

¹ Includes hospitals without maternity units, home births, births en route to hospital and births occurring in a doctor's office/clinic.

² Percents do not sum to 100.0 due to rounding.

BIRTHS BY RACE/ETHNICITY

There are two points to keep in mind when analyzing 2004 data by race/ethnicity. First, since June 1986, information on both race and ethnicity rather than just race has been collected. This provides improved data, particularly for Hispanic births. Presented for comparison below are resident birth data for calendar years 2003 and 2004, utilizing maternal race and Hispanic ethnicity information:

RACE AND HISPANIC ETHNICITY OF MOTHER
2003 - 2004

MATERNAL RACE/ETHNICITY	2004		2003		CHANGE (2003-2004)
	TOTAL BIRTHS	% OF BIRTHS	TOTAL BIRTHS	% OF BIRTHS	
White non-Hispanic	55,321	70.5	57,604	71.9	-2,283
Black non-Hispanic	6,053	7.7	5,902	7.4	181
Hispanic	9,801	12.5	9,764	12.2	37
Asian	5,453	7.0	5,224	6.5	229
Other ¹	1,729	2.2	1,548	1.9	181
Unknown ²	103	0.1	125	0.2	-22
TOTAL³	78,460	100	80,167	100	-1,707

¹ Other races include American Indian, Hawaiian, and Other.

² Unknown race: mothers did not indicate a race/ethnicity.

The other point which must be considered is the method used to present data by race/ethnicity. Massachusetts follows the recommendation from the National Center for Health Statistics (NCHS) for classifying race/ethnicity on the birth certificate according to the self-reported race/ethnicity of the mother. Beginning with 1989 births, birth data are presented by race/ethnicity of the mother only.

TEEN BIRTHS

The number of births to mothers ages 15-19 decreased slightly from 4,639 in 2003 to 4,559 in 2004. The teen birth rate declined from 22.6 to 22.2 births per 1,000 women ages 15-19 during these years. The percentage of total births to women under age 20 continues to decrease markedly, from a peak of 12.7% in 1975 to 5.8% in 2004.

BIRTHS BY MARITAL STATUS

The percentage of births to unmarried women increased from 27.8% of all resident births in 2003 to 28.5% of all resident births in 2004. Over 90% of the mothers under the age of 20 were unmarried while 24.5% of the mothers who were 20 years of age or older were unmarried. The generally upward trend in percent of unwed mothers continues from prior years, and developments in state law that in 2004 made marriage available to some for whom it was previously prohibited do not have a statistically significant impact. In 2004 there were 56 women who gave birth to 61 infants (singletons and twins) who listed a spouse of the same gender.

BIRTHS BY AGE OF MOTHER

The largest percentage increases in births between the years 2003 and 2004 (14.5%) were to mothers in the 45 and over age group, as shown below. This percentage is based on relatively few births and should be interpreted with caution.

AGE OF MOTHER	NUMBER OF BIRTHS 2004	NUMBER OF BIRTHS 2003	DIFFERENCE IN THE NUMBER OF BIRTHS 2003-2004	PERCENTAGE CHANGE 2003-2004
< 20	4,601	4,695	-94	-2.0
20-24	11,670	11,894	-224	-1.9
25-29	17,914	18,436	-522	-2.8
30-34	25,804	26,829	-1025	-3.8
35-39	14,977	14,889	88	0.6
40-44	3,308	3,260	88	1.5
≥ 45	182	159	23	14.5

In 2004 there were 4 mothers with missing age information.

BIRTHS BY CAESAREAN SECTION

The number of Caesarean section deliveries to Massachusetts residents increased from 23,392 in 2003 to 24,295 in 2004, an increase of about 3.9%. Caesarean section was the method of delivery for 31.0% of the 2004 resident births, compared to the 29.3% of Caesarean section deliveries in 2003. (Calculations are based on births with known method of delivery.)

HOSPITAL PROFILES

The following is a synopsis of hospital data, some of which is presented in Table B-21.

- In 2004, 79,438 births occurred in Massachusetts, a decrease of 15.9% since 1990. Caesarean section was the method of delivery for 31.1% of 2004 births. (Calculations are based on births with known method of delivery.)
- In 2004, eight hospitals had Caesarean section delivery rates of 36.0% or more Caritas Holy Family Hospital and Medical Center (40.3%), Tufts - New England Medical Center Hospital (40.3%), Caritas St. Elizabeth's Medical Center of Boston (39.9%), Beth Israel Deaconess Medical Center (38.1%), Newton - Wellesley Hospital (37.6%), Metrowest Medical Center in Framingham (36.7%), Melrose-Wakefield Hospital (36.2%), and Morton Hospital (36.0%).
- Statewide, the lowest rates of Caesarean section deliveries were at the following hospitals: Nantucket Cottage Hospital (17.5%), Tobey Hospital (20.4%), Holyoke Hospital (21.4%), Heywood Memorial Hospital (21.5%), Berkshire Medical Center (22.3%), Mercy Medical Center (22.7%), Mount Auburn Hospital (23.0%), Franklin Medical Center (23.8%), Cooley Dickinson Hospital (25.2%), Boston Medical Center (25.7%), Anna Jaques Hospital (25.8%), Saint Vincent Hospital (25.8%), and Leominster Hospital (26.1%).
- In 2004, at least 10% of the births in six hospitals were low birthweight. These hospitals were: Tufts - New England Medical Center Hospital (26.1%), Baystate Medical Center (13.2%), Caritas St. Elizabeth's Medical Center (13.2%), Beth Israel Deaconess Medical Center (12.3%), Brigham and Women's Hospital (11.3%), and UMass Memorial Medical Center - West Campus (10.8).
- In nine hospitals, 50% or more of the deliveries were paid with public funds: Boston Medical Center (83.0%), Cambridge Hospital (72.1%), Holyoke Hospital (64.9%), Lawrence General Hospital (61.3%), Brockton Hospital (60.6%), Mercy Medical Center (58.3%), St. Luke's Hospital (57.0%), Mary Lane Hospital (53.8%), and North Adams Regional Hospital (51.7%). In four facilities, less than 10% of deliveries were paid with public funds: Saint Vincent Hospital (8.5%), Winchester Hospital (5.2%), Emerson Hospital (3.4%), and Newton-Wellesley Hospital (2.5).
- In 2004, 26 of the 52 hospitals exceeded the state-wide average (84.2%) for adequacy of prenatal care for their patients. The three maternity facilities with the lowest reported rate of women who had received adequate prenatal care were: Boston Medical Center (53.9%), Tobey Hospital (62.8%), and UMass Memorial Medical Center - West Campus (63.8%).

LOW BIRTHWEIGHT INFANTS

The percentage of low birthweight infants (less than 2,500 grams or 5.5 pounds) increased slightly from 7.6% in 2003 to 7.8% in 2004. The number of low birthweight deliveries increased from 6,115 births in 2003 to 6,125 births in 2004.

DEFINITIONS IMPORTANT FOR THIS SECTION INCLUDE:

ADEQUACY OF PRENATAL CARE UTILIZATION

Beginning in 2001, adequacy of prenatal care is being measured using a new method. The Adequacy of Prenatal Care Utilization (APNCU) Index, developed by Dr. Milton Kotelchuck, replaced the Kessner Index. The APNCU Index is the standard used in Healthy People 2010 and by the majority of states. It improves upon the Kessner Index in various ways, the most important being the ability to distinguish between inadequate prenatal care due to the timing of initiation and inadequate care due to insufficient prenatal care visits. The APNCU Index also improves upon the Kessner Index by correcting some of its principal faults. First, the APNCU Index more accurately assesses adequacy of visits for term pregnancies; the Kessner Index characterizes 9 or more visits as adequate, due to an early computer database limitation, which only allowed for a single-digit number to record prenatal care visits. Other limitations of the Kessner Index include its bias towards measurement of adequacy of initiation of care, and its various computational algorithms based upon inadequate initial documentation.

Below are the definitions for the APNCU Index categories and its two component indices (initiation and received services), and the definition of the Kessner Index categories. Also following is a short summary of the major differences in classification of adequacy of prenatal care using the Kessner Index and the APNCU Index.

Adequacy of Prenatal Care Utilization (APNCU) Index: Definition of Categories

Category	Month Prenatal Care Began	% of Expected ¹ Prenatal Care
Adequate Intensive	1, 2, 3, or 4	110% or more
Adequate Basic	1, 2, 3, or 4	80 – 109%
Intermediate	1, 2, 3, or 4	50 – 79%
Inadequate	Month 5 or later	Less than 50%
Unknown	Prenatal care information not recorded	

1. The number of "expected" visits is determined based on standards set by the American College of Obstetricians and Gynecologists (ACOG).

Component Indices of the APNCU Index: Definitions of Categories

Adequacy of Initiation Index

Category	Month Prenatal Care Began
Adequate Intensive	1 or 2
Adequate Basic	3 or 4
Intermediate	5 or 6
Inadequate	Month 7 or later, or no PNC
Unknown	Prenatal care initiation information not recorded

Adequacy of Received Services (Visits) Index

Category	% of Expected ¹ Prenatal Care Visits
Adequate Intensive	110% or more
Adequate Basic	80 – 109%
Intermediate	50 – 79%
Inadequate	Less than 50%
Unknown	Information on prenatal care visits not recorded

1. The number of "expected" visits is determined based on standards set by the American College of Obstetricians and Gynecologists (ACOG).

Kessner Index of Adequacy of Prenatal Care: Definition of Categories

Category	Trimester Care Began	Number of Visits
Adequate	1	9 or more
Intermediate	1	5-8
	2	5 or more
Inadequate	1	1-4
	2	1-4
	3	1 or more
No Prenatal	--	0
Unknown	Unknown	Unknown

Summary of Major Differences in Categorization of Adequacy of Prenatal Care between the Kessner Index and the APNCU Index

The two different methods used in the Kessner Index and APNCU Index to calculate adequacy of prenatal care can result in differences in how each one classifies adequacy of prenatal care. These differences only occur under certain conditions, not in all cases (see "Explanation" column).

The Kessner Index classifies prenatal care as...	... but the APNCU Index classifies prenatal care as ...	Explanation
Intermediate	Adequate Basic	This is primarily due to the fact that the APNCU Index allows for prenatal care in the 4 th month of pregnancy to be considered adequate if the mother received 80-109% of expected visits, whereas the Kessner Index only allows for care begun in the first trimester (months 1-3) to be considered adequate.
Intermediate	Inadequate	This is primarily due to the fact that the APNCU categorizes any prenatal care beginning after month 4 as "inadequate" whereas the Kessner Index allows for care beginning in months 5 or 6 with 5 or more visits to be "intermediate."
Adequate	Intermediate	This is primarily due to the consideration of "expected" visits (based on when the mother initiated care and the length of gestation) using the APNCU Index, which bases expected visits on the ACOG recommendations, which can be as high as 14 visits if a gestational period is 40 weeks, whereas the Kessner Index considers 9 visits sufficient in all cases.
Adequate	Adequate Intensive	The APNCU Index added an "Adequate Intensive" category, which is not used in the Kessner Index. This allows analysis of situations in which more than normal care is received (e.g. women with high risk conditions, pregnancy complications).

ANCESTRY

A self-reported item on the birth certificate, with listings and an open text field. The items listed are:

Puerto Rican	Cambodian	Cape Verdean	Other African
Dominican	Asian Indian	Brazilian	Lebanese
Mexican	Korean	Other Portuguese	Iranian
Cuban	Filipino	Haitian	Israeli
Columbian	Japanese	Jamaican	Other Mid. Eastern
Salvadorian	Laotian	Barbadian	Native American
Other Central Amer.	Pakistani	African American	European
Other South Amer.	Thai	Nigerian	Other
Other Hispanic	Hawaiian	Other West Indian / Caribbean	
Chinese	Other Asian/Pac. Isl.		

BIRTH CERTIFICATE -

A vital record signed by an informant that includes the infant's name, sex, birth date, place of residence, and place of occurrence.

BIRTHWEIGHT

The weight of an infant recorded at the time of delivery. It may be recorded in either pounds/ounces or grams. If recorded in pounds/ounces, it is converted to grams for use in this report.

1 pound = 453.6 grams
1,000 grams = 2 pounds, 3 ounces

BIRTHWEIGHT CATEGORIES

Normal birthweight (NBW)	An infant's weight of 2,500 grams (5.5 pounds) or more recorded at birth.
Low birthweight (LBW)	An infant's weight of less than 2,500 grams (5.5 pounds) recorded at birth.
Very low birthweight (VLBW)	An infant's weight of less than 1,500 grams (3.3 pounds) recorded at birth.

CAESAREAN SECTION or C-SECTION

Primary: A mother's first Caesarean section delivery.

Repeat: A Caesarean delivery that has been preceded by at least one Caesarean delivery.

COMMUNITY HEALTH NETWORK AREAS (CHNA)

The Department of Public Health, in collaboration with health service providers, coalition members, and other interested citizens, has designated 27 geographic areas for community health planning. The Department of Public Health has fostered in each of these

areas the development of Community Health Networks: a consortia of health care providers, human service agencies, schools, churches, youth, parents, elders, advocacy groups, and individual consumers to address the health needs of the community. These community coalitions will participate in monitoring outcomes and the progress of strategies and responses to those health needs. The data published in this edition reflect the new definitions of CHNAs instituted in January 1997.

A Community Health Network Area (CHNA) is defined as an aggregation of cities and towns. It is hoped that the networks will mobilize around key health issues impacting the community, promote prevention efforts, enhance access to health care, provide opportunities for more collaboration among agencies, and create a client-centered, outcome-oriented health service delivery system. Community Health Networks will also promote efficiency in service delivery by working to reduce duplication and overlap, and by identifying gaps in service.

ETHNICITY

See Race.

FOREIGN-BORN WOMEN

Women not born in the United States, its possessions or protectorates. Women born in Puerto Rico, the US Virgin Islands, and Guam are not foreign-born.

HEALTHY START

A Massachusetts-funded program providing services and financing for prenatal care to low-income pregnant women who lack health insurance, but do not qualify for Medicaid.

INFANT

A child whose age is less than one year (365 days).

Interpregnancy Interval (IPI)

Interpregnancy interval is the time, in months, between the date of last menstrual period of current pregnancy and the date of previous live birth. IPI is calculated for each mother currently giving birth to their second or later child.

$$\begin{aligned} \text{\% Short IPI} &= \frac{\text{Number of mothers giving birth to their 2nd or later child with IPI} \\ &\quad \text{<12 months}}{\text{Number of mothers giving birth to their 2nd or later child in the} \\ &\quad \text{same year}} \times 100 \\ \\ \text{\% IPI} \\ 12 \text{ to } 35 \text{ months} &= \frac{\text{Number of mothers giving birth to their 2nd or later child with IPI} \\ &\quad \text{between 12 and 35 months}}{\text{Number of mothers giving birth to their 2nd or later child in the} \\ &\quad \text{same year}} \times 100 \end{aligned}$$

$$\% \text{ IPI} = \frac{\text{Number of mothers giving birth to their 2nd or later child with IPI} \\ >=36 \text{ months}}{\text{Number of mothers giving birth to their 2nd or later child in the} \\ \text{same year}} \times 100$$

LIVE BIRTH

A live birth is any infant who breathes or shows any other evidence of life (such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles) after separation from the mother's uterus, regardless of the duration of gestation.

LOW BIRTHWEIGHT (LBW)

See Birthweight Categories.

NEONATAL

Referring to a child under 28 days of age.

NORMAL BIRTHWEIGHT (NBW)

See Birthweight Categories.

OCCURRENCE BIRTH

A birth occurring in the Commonwealth of Massachusetts, regardless of the residency of the mother. In Massachusetts, the place will be one of the 351 cities or towns. See Resident Birth.

PARITY

Total number of live births, including the present birth, ever born to the mother.

PLURALITY

The number of births to a woman produced in the same gestational period. A singleton is the birth of one infant, twins represent the births of two infants, etc.

POSTNEONATAL

Referring to a child whose age is at least 28 days, but less than one year.

PRETERM

Referring to a child born before the 37th week of gestation.

PRIMARY CAESAREAN SECTION or C-SECTION

See Caesarean Section.

RACE

Race of mother: For data presented in this publication, mother's race is as reported by the infant's mother. The tables that use race or ethnicity in this document all refer to the mother's race or ethnicity.

Ethnicity: Beginning in 1986, an identifier for Hispanic and other ethnicities was added to the birth certificate. Prior to this change, most Hispanics were included with Whites and it was not possible to accurately calculate Hispanic-specific rates of natality.

REPEAT CAESAREAN SECTION or C-SECTION

See Caesarean Section.

RESIDENT BIRTH

The birth of an infant whose mother reports that her usual place of residence is in Massachusetts. In Massachusetts, a resident is a person with a permanent address in one of the 351 cities or towns. Vital statistics data may be presented in terms either of residence or occurrence. Unless otherwise noted, all data in this publication are resident data. Resident data include all events that occur to residents of the Commonwealth, wherever they occur. Occurrence data include all events that occur within the state, whether to residents or non-residents. There is an exchange agreement among the 50 states, Canada, Puerto Rico, Guam, the Virgin Islands, and the District of Columbia that provides for exchange of copies of birth and death records. These records are used for statistical purposes only, and allow each state or province to track the births and deaths of its residents.

VAGINAL BIRTH AFTER CAESAREAN (VBAC)

A vaginal delivery of an infant to a mother who has had at least one prior Caesarean section delivery.

VERY LOW BIRTHWEIGHT (VLBW)

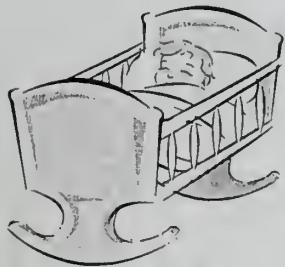
See Birthweight Categories.

RATES IMPORTANT FOR THIS SECTION INCLUDE:

AGE-SPECIFIC BIRTH RATE	$\frac{\text{No. of Resident Live Births for a Specific Age Group of Mothers}}{\text{Total Female Population of That Specific Age Group}} \times 1,000$
CRUDE BIRTH RATE	$\frac{\text{No. of Resident Live Births}}{\text{Total Resident Population}} \times 1,000$
GENERAL FERTILITY RATE	$\frac{\text{No. of Resident Live Births}}{\text{Total Female Population of Childbearing Age (15-44)}} \times 1,000$
CAESAREAN SECTION or C-SECTION RATE	$\frac{\text{No. of Resident Births Delivered by C-Section}}{\text{Number of Resident Births Total}} \times 100$

Figure B-1. Daily Birth Statistics, Massachusetts: 2004

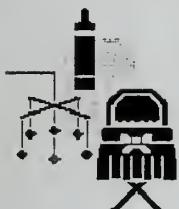
Every day in 2004, residents of Massachusetts experienced an average of:



215 Births



67 Births by Cesarean Section



51 Births to women aged 35 or older



36 Births with less than adequate prenatal care



**17 Births weighing less than 2500 grams
or 5 lbs. 8 oz. (low birthweight)**



12 Births to women aged 15 through 19

Table B-1. Trends in Birth Characteristics, Massachusetts: 1980, 1990, 1992-2004

Characteristic	1980	1990	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
Births ¹	72,591 53.4	92,461 62.1	87,202 59.1	84,627 57.6	83,758 57.0	81,562 55.5	80,164 54.6	80,321 54.7	81,406 55.6	80,866 55.9	81,582 56.9	81,014 57.2	80,624 56.8	80,167 56.5	78,460 55.0	
Race of Mother																
White ⁴	n % ⁵	66,220 91.2	80,775 87.4	76,052 87.2	73,704 87.1	72,980 87.2	71,083 86.7	69,485 86.5	69,503 86.5	70,452 85.7	69,305 85.0	69,371 84.8	68,728 84.2	67,874 84.2	67,586 84.3	65,362 83.3
Black	n % ⁵	4,626 6.4	7,729 8.3	7,203 8.2	6,916 8.0	6,713 7.7	6,299 7.4	5,946 7.4	6,182 7.7	6,337 7.8	6,524 8.1	6,445 7.9	6,555 8.1	6,649 8.2	6,561 8.2	6,698 8.5
Asian/Other ⁶	n % ⁵	1,069 1.5	3,688 4.0	3,582 4.1	3,664 4.3	3,790 4.5	3,817 4.7	3,950 4.9	4,217 5.3	4,248 5.2	4,615 5.7	5,205 6.4	5,279 6.5	5,793 7.2	5,688 7.2	5,906 7.5
Unknown	n % ⁵	676 0.9	269 0.3	365 0.4	343 0.4	275 0.3	363 0.4	783 1.0	419 0.5	369 0.5	422 0.5	561 0.5	452 0.7	308 0.6	332 0.4	494 0.6
Teen Births (Ages 15-19)	n Rate ³	7,694 28.1	7,258 35.4	6,555 34.5	6,469 34.0	6,412 33.2	5,990 30.3	5,758 28.5	5,801 28.5	5,823 28.1	5,515 26.7	5,305 25.8	4,979 24.3	4,642 22.6	4,639 22.6	4,559 22.2
Births to Unmarried Mothers ⁷	n %	11,356 15.6	22,837 24.7	22,612 25.9	22,345 26.4	22,302 26.6	20,857 25.6	20,253 25.3	20,640 25.7	21,191 26.0	21,448 26.5	21,621 26.5	21,620 26.5	21,604 26.7	22,262 26.8	22,376 27.8
Low Birthweight	n %	4,413 6.1	5,388 5.8	5,137 5.9	5,202 6.2	5,335 6.4	5,174 6.4	5,105 6.4	5,617 7.0	5,655 7.0	5,708 7.1	5,711 7.1	5,795 7.2	6,060 7.5	6,115 7.5	6,125 7.6
Preterm	n %	6,732 7.4	5,899 6.5	6,313 7.3	6,201 7.4	6,492 7.8	6,438 7.9	5,705 7.2	5,831 7.3	6,117 7.6	6,136 7.6	6,582 8.3	6,412 8.3	6,795 8.0	6,963 8.5	7,222 8.7
Adequate Prenatal Care																
Kessner Index ⁸	%	82.0	80.1	82.9	83.8	84.3	84.2	79.9	80.0	79.8	79.4	79.1	80.4	79.9	79.5	
APNCU Index ⁹	%	-	-	-	-	-	-	83.3	82.9	82.9	83.3	83.3	85.2	84.7	84.5	

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

1. Births presented in all tables are resident live births unless otherwise specified. 2. Differences in numbers of births from previous publications are the result of updated files. 3. Birth rates represent the total number of births to women ages 15-44 years per 1,000 females ages 15-44; teen birth rates refer to number of births per 1,000 women age 15-19. 2000-2004 birth rates are calculated using DPH 2000 population estimates, based on U.S. Census 2000 population counts. 1999 rates are calculated using the 1999 DPH MASSACHUSETTS population estimates (see Technical Notes in Appendix). PLEASE NOTE: DIFFERENCES BETWEEN THESE RATES AND PREVIOUSLY PUBLISHED DATA REFLECT UPDATES IN POPULATION ESTIMATES. 4. On tables and graphs that include data prior to June 1986, the race classifications do not include an ethnicity component; most Hispanics are included in the race category of white. 5. Percentages are calculated based on births, including those to mothers of unknown race. 6. Other races include American Indian and others not specified.

7. Includes those women who were unmarried 300 days before giving birth. 8. Adequacy of prenatal care in Massachusetts has historically been measured with the Kessner Index, based on the timing of care and number of visits. This measure is calculated based on only those births with known adequacy of prenatal care. Changes in the calculation of the Kessner Index in 1996, as well as computational adjustments made for 1996-2000 data, make data prior to 1996 non-comparable to data from 1996 onward. 9. Beginning with Births 2001, the APNCU Index has replaced the Kessner Index as the standard measurement of adequacy of prenatal care (see Section Definitions for more information).

Table B-2A. Birth Characteristics by Maternal Race and Hispanic Ethnicity and Birthplace, Massachusetts: 2004

Race and Hispanic Ethnicity (by mother's birthplace)	Births	Teen Births			Birthweight			Prenatal Care			Cesarean Section			Breastfeeding ⁵					
		n	% ¹	n	%	n	%	n	%	n	%	n	%	n	%				
State Total	78,460	100.0		4,601	5.9	1,148	1.5	6,125	7.8	65,362	84.2	64,958	83.5	24,295	31.0	60,718	78.9		
U.S. States / D.C.	56,599	72.1	1,154	2.0	3,463	6.1	806	1.4	4,474	7.9	48,097	85.8	48,259	85.9	17,809	31.5	41,770	75.5	
Puerto Rico/U.S. Terr. ⁷	1,949	2.5	153	7.5	382	18.8	59	3.0	237	11.9	1,566	79.7	1,495	75.8	536	27.0	1,418	71.9	
Non-U.S.-Born ⁸	19,792	25.2	188	0.9	754	3.8	277	1.4	1,403	7.1	15,674	80.1	15,180	77.3	5,941	30.1	17,530	89.2	
White non-Hispanic	55,321	70.5		2,137	3.9	687	1.2	4,024	7.3	47,511	86.6	47,816	87.0	17,692	32.0	42,031	77.8		
U.S. States / D.C.	49,193	88.9	529	1.1	1,975	4.0	621	1.3	3,647	7.4	42,399	86.9	42,797	87.6	15,789	32.1	36,560	76.2	
Puerto Rico/U.S. Terr. ⁷	44	0.1	3	— ⁶	4	— ⁶	0	0.0	2	— ⁶	37	84.1	37	84.1	13	29.5	37	90.2	
Non-U.S.-Born ⁸	6,060	11.0	33	0.5	157	2.6	64	1.1	372	6.1	5,057	84.1	4,964	82.4	1,885	31.1	5,434	90.6	
Black non-Hispanic	6,053	7.7		214	3.5	595	9.8	213	3.5	733	12.1	4,522	76.6	4,288	72.0	1,987	33.0	4,806	80.0
U.S. States / D.C.	3,018	49.9	193	6.4	504	16.7	119	3.9	431	14.3	2,297	78.2	2,178	73.5	929	30.9	2,077	69.5	
Puerto Rico/U.S. Terr. ⁷	26	0.4	1	— ⁶	2	— ⁶	2	— ⁶	5	19.2	16	61.5	19	73.1	12	46.2	20	80.0	
Non-U.S.-Born ⁸	3,005	49.6	20	0.7	88	2.9	90	3.0	294	9.8	2,207	75.1	2,089	70.6	1,044	34.9	2,709	90.4	
Hispanic	9,801	12.5		585	6.0	1,524	15.5	153	1.6	834	8.5	7,432	76.7	7,196	73.9	2,627	26.9	7,918	81.0
U.S. States / D.C.	3,097	31.6	325	10.5	764	24.7	46	1.5	274	8.9	2,352	76.8	2,276	74.0	794	25.7	2,148	69.5	
Puerto Rico/U.S. Terr. ⁷	1,865	19.0	147	7.9	367	19.7	50	2.7	220	11.8	1,465	79.5	1,392	75.3	494	26.6	1,324	71.3	
Non-U.S.-Born ⁸	4,839	49.4	113	2.3	393	8.1	57	1.2	340	7.0	3,615	75.5	3,528	73.4	1,339	27.7	4,446	92.0	
Asian	5,453	7.0		67	1.2	156	2.9	57	1.0	378	6.9	4,508	83.0	4,292	78.9	1,502	27.6	4,535	83.4
U.S. States / D.C.	563	10.3	54	9.6	93	16.5	9	1.6	57	10.1	462	82.4	433	77.2	129	23.0	454	81.1	
Puerto Rico/U.S. Terr. ⁷	3	— ⁶	0	0.0	1	— ⁶	0	0.0	0	0.0	3	— ⁶	2	— ⁶	0	0.0	3	— ⁶	
Non-U.S.-Born ⁸	4,879	89.5	13	0.3	62	1.3	48	1.0	319	6.5	4,038	83.1	3,853	79.2	1,372	28.1	4,078	83.7	
Other⁹	1,729	2.2		63	3.6	184	10.6	34	2.0	148	8.6	1,346	79.9	1,322	78.0	469	27.3	1,393	84.0
U.S. States / D.C.	728	42.1	53	7.3	127	17.4	11	1.5	65	9.0	587	82.6	575	80.5	168	23.2	531	75.6	
Puerto Rico/U.S. Terr. ⁷	11	0.6	1	— ⁶	4	— ⁶	4	— ⁶	4	— ⁶	9	100.0	8	88.9	4	— ⁶	5	83.3	
Non-U.S.-Born ⁸	988	57.1	9	0.9	53	5.4	18	1.8	77	7.8	750	77.8	739	76.1	296	30.1	857	90.1	
Unknown¹⁰	103	0.1		1	—⁶	5	4.9	4	—⁶	8	13.3	43	86.0	44	86.3	18	30.5	35	72.9

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

1. This 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 percents 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. Beginning with *Births 2001*, the Adequacy of Prenatal Care Utilization Index has replaced the Kessner Index as the measure of adequate prenatal care. 5. Mother was breastfeeding or was intending to breastfeed at the time the birth certificate was completed. 6. Calculations based on fewer than five events are excluded. 7. The category "Puerto Rico/U.S. Territories" includes women born in Puerto Rico, the U.S. Virgin Islands, and Guam. Approximately 95% of the births in this category were to women born in Puerto Rico. 8. The category "Non-U.S.-Born" includes women born outside of the 50 U.S. states, District of Columbia, and Puerto Rico/U.S. territories. 9. Other: Mothers who designated themselves as American Indian or Other race. 10. Unknown: Mothers who did not indicate a race/ethnicity

Table B-2B. Birth Characteristics by Maternal Ancestry, Massachusetts: 2004

Maternal Ancestry	Births ¹	Teen Births				Birthweight				Prenatal Care				Cesarean Section		Breastfeeding ⁵		
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	
State Total	78,460	100.0	1,496	1.9	4,601	5.9	1,148	1.5	6,125	7.8	65,362	84.2	64,958	83.5	24,295	31.0	60,718	78.9
American	35,239	44.9	467	1.3	1,670	4.7	460	1.3	2,735	7.8	30,362	86.5	30,787	87.7	11,086	31.5	26,477	75.3
European	14,068	17.9	59	0.4	236	1.7	135	1.0	857	6.1	12,265	87.6	12,154	86.7	4,537	32.3	11,758	84.2
Puerto Rican	4,286	5.5	423	9.9	1,013	23.6	88	2.1	455	10.6	3,281	77.5	3,142	73.9	1,122	26.2	2,913	68.2
African American	2,632	3.4	158	6.0	439	16.7	94	3.6	367	14.0	1,995	77.8	1,921	74.3	803	30.7	1,865	71.0
Brazilian	1,801	2.3	23	1.3	99	5.5	15	0.8	106	5.9	1,470	81.8	1,439	80.1	717	39.8	1,706	94.7
Dominican	1,745	2.2	64	3.7	205	11.7	25	1.4	137	7.9	1,342	77.4	1,368	78.8	560	32.1	1,571	90.1
Chinese	1,520	1.9	1	0.1	8	0.5	9	0.6	79	5.2	1,345	88.7	1,245	82.1	410	27.0	1,309	86.2
Other Portuguese ⁶	1,350	1.7	26	1.9	97	7.2	13	1.0	95	7.1	1,144	86.3	1,114	84.0	424	31.6	695	51.9
Asian Indian	1,224	1.6	1	0.1	7	0.6	22	1.8	115	9.4	1,025	84.1	1,033	84.7	421	34.4	1,187	97.2
Haitian	1,145	1.5	8	0.7	30	2.6	45	3.9	126	11.0	803	72.5	775	69.0	408	35.8	1,011	88.4
Other Central American ⁶	1,055	1.3	25	2.4	99	9.4	16	1.5	71	6.7	748	71.6	698	66.6	265	25.2	935	88.7
Other African ⁶	1,015	1.3	6	0.6	21	2.1	24	2.4	78	7.7	735	73.4	679	67.6	378	37.3	937	92.4
Salvadoran	981	1.3	33	3.4	97	9.9	10	1.0	71	7.2	704	72.8	685	70.4	215	21.9	917	93.6
Cape Verdean	863	1.1	36	4.2	107	12.4	19	2.2	94	11.0	615	73.1	586	69.3	214	25.0	672	78.7
Vietnamese	778	1.0	6	0.8	16	2.1	3	0.4	42	5.4	634	82.2	598	77.3	220	28.3	536	69.1
Cambodian	611	0.8	46	7.5	94	15.4	7	1.1	60	9.8	382	62.8	347	57.0	91	14.9	302	49.4
Other South American ⁶	565	0.7	13	2.3	28	5.0	4	0.7	33	5.9	448	80.1	432	77.1	153	27.3	509	90.7
Mexican	514	0.7	9	1.8	34	6.6	3	0.6	27	5.3	369	73.1	354	69.5	119	23.2	472	92.0
Other & Missing ⁷	7,068	9.0	92	1.3	301	4.3	156	2.2	577	8.2	5,695	84.5	5,601	82.2	2,152	30.7	4,946	85.2

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

- In the first category, "Births", percentages are based on column total (state total of births, including births for which maternal ethnicity is unknown and other). For all other categories, percentages are based on row totals.
- Very low birthweight: less than 1,500 grams or 3.3 pounds.
- Low birthweight: less than 2,500 grams or 5.5 pounds.
- The Adequacy of Prenatal Care Utilization Index has replaced the Kessner Index as the measure of adequate prenatal care.
- Mother was breastfeeding or was intending to breastfeed at the time the birth certificate was completed.
- "Other" refers to groups not specified on the parents' worksheet. See the Section Definitions entry "ethnicity" for the complete list of ethnicities.
- This group includes other ethnicities specified that had fewer than 400 births, missing ethnicity, and "Other Ethnicity".

**Figure B-2. Resident Live Births by Mother's Race and Hispanic Ethnicity,
Massachusetts: 2004**

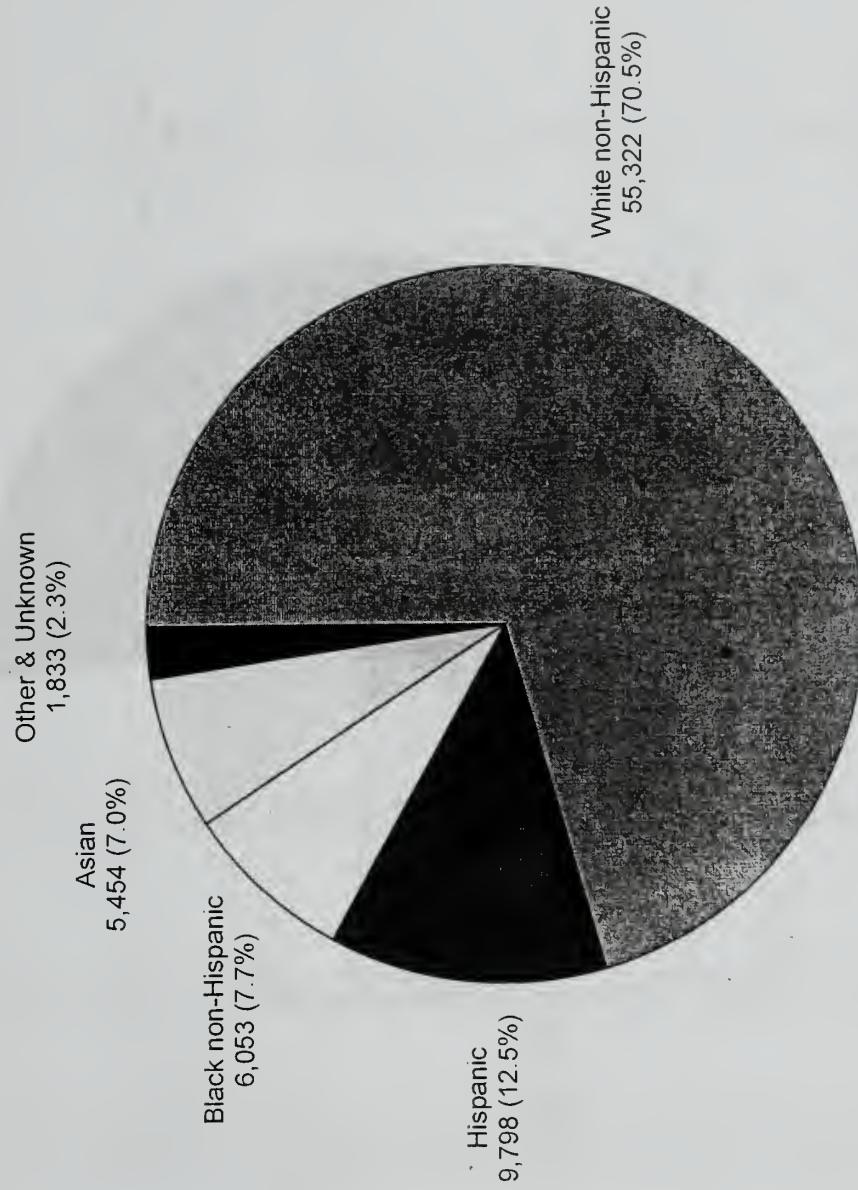
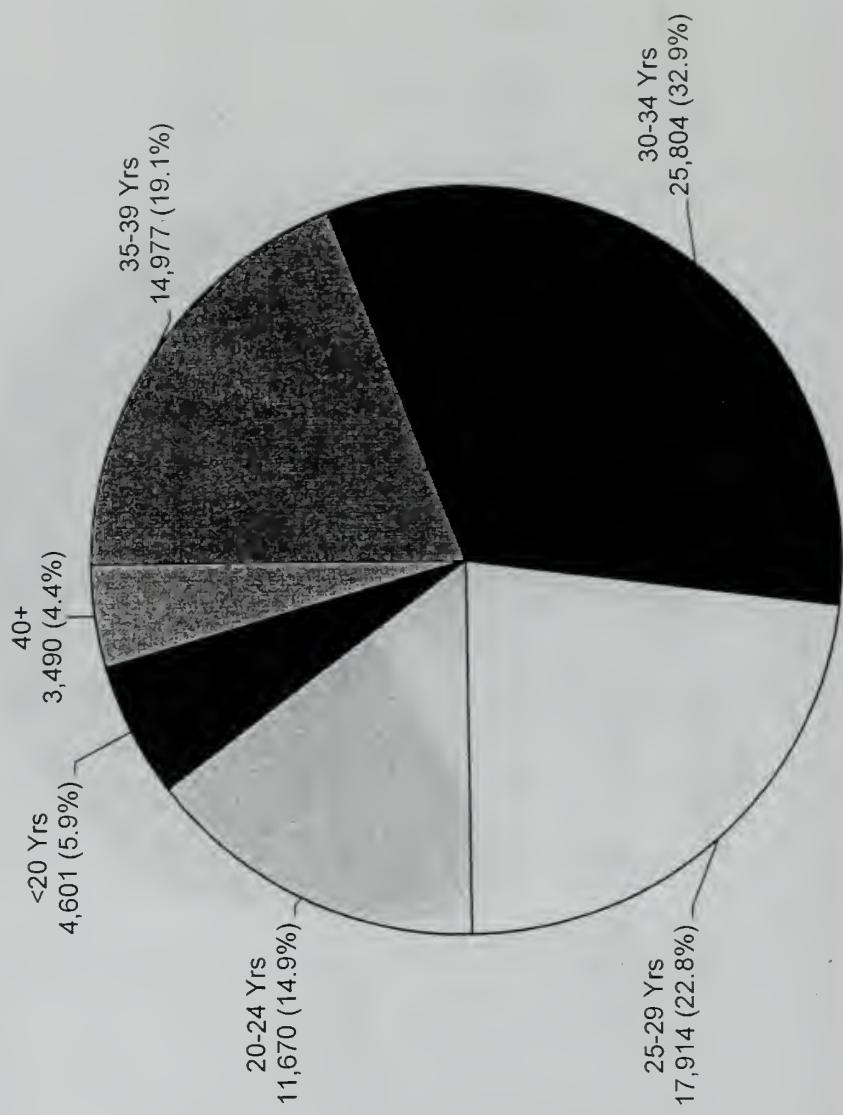


Figure B-3. Resident Live Births by Mother's Age, Massachusetts: 2004



1. Percentages based on known values.

Table B-3A. Resident Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2004

Municipality ¹	Rank	Population (by pop. size)	Crude Birth Rate ²	Mother's Race and Ethnicity			Asian or Other ⁴	% ³	Very Low Birthweight (<1500 g)	Low Birthweight (<2500 g)
				White non- Hispanic	Black non- Hispanic	Hispanic				
STATE TOTAL		6,349,097	12.4	70.5	7.7	12.5	9.2	1.5	7.8	
Arlington	29	42,389	13.4	80.3	2.3	3.2	14.2	2.1	6.7	
Attleboro	30	42,068	14.6	81.5	4.5	6.3	7.3	1.3	8.1	
Barnstable	25	47,821	9.4	84.6	4.2	3.3	7.6	1.3	9.2	
Boston	1	589,141	13.1	37.5	27.8	20.7	13.7	1.9	9.0	
Brockton	6	94,304	16.9	36.1	38.4	11.0	14.5	2.6	10.9	
Brookline	17	57,107	12.2	69.9	2.0	5.0	23.1	1.0	7.9	
Cambridge	5	101,355	10.8	57.0	16.0	7.6	19.1	1.4	6.8	
Chicopee	21	54,653	11.2	78.3	2.5	15.8	3.4	2.5	8.5	
Fall River	8	91,938	12.9	80.7	5.5	7.6	6.2	1.5	8.6	
Framingham	14	66,910	14.1	70.0	5.3	15.0	9.8	1.7	8.4	
Haverhill	16	58,969	14.8	78.2	3.2	14.6	4.0	1.4	9.3	
Lawrence	13	72,043	19.7	17.4	2.5	77.1	3.0	2.1	9.5	
Lowell	4	105,167	15.7	45.1	7.5	17.6	29.8	2.0	9.0	
Lynn	9	89,050	16.0	37.3	11.8	40.8	10.1	1.4	7.6	
Malden	18	56,340	15.2	47.9	16.8	9.2	25.8	0.8	8.2	
Medford	20	55,765	11.1	75.0	9.2	4.2	11.3	2.3	7.1	
Methuen	28	43,789	14.2	72.0	2.1	19.9	5.9	1.1	7.4	
New Bedford	7	93,768	14.7	63.7	6.8	19.7	9.4	1.4	8.0	
Newton	11	83,829	10.1	81.3	1.4	2.6	14.6	1.5	9.1	
Peabody	24	48,129	10.7	86.4	1.0	8.2	4.5	2.9	11.1	
Pittsfield	27	45,793	11.7	78.6	8.7	6.7	5.9	2.0	9.1	
Plymouth	23	51,701	13.3	94.0	1.6	1.9	2.0	.. ₅	7.1	
Quincy	10	88,025	13.3	59.7	5.4	3.3	31.5	1.2	7.1	
Revere	26	47,283	14.6	52.0	5.5	27.9	14.5	1.3	8.3	
Somerville	12	77,478	11.0	60.7	10.6	16.3	12.5	1.6	6.6	
Springfield	3	152,082	15.7	30.4	22.3	43.7	3.5	2.0	10.8	
Taunton	19	55,976	13.8	83.0	5.9	6.6	4.4	1.5	9.9	
Waltham	15	59,226	11.4	56.2	7.2	21.3	15.2	1.5	6.5	
Weymouth	22	53,988	12.9	87.8	3.6	1.0	7.4	1.3	5.9	
Worcester	2	172,648	14.9	55.2	12.4	22.6	9.8	1.6	7.6	

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

1. The 30 largest municipalities are the cities and towns in Massachusetts with the largest populations according to DPH 2000 population estimates, based on U.S. Census 2000 population counts. 2. Crude birth rates represent the number of births per 1,000 residents; teen birth rates refer to the number of births per 1,000 females ages 15-19. 2004 birth rates are calculated using the DPH 2000 population estimates. 3. For the category of Mother's Race and Ethnicity, percentages are calculated based on the state total of resident births, including births for which mother's race/Hispanic ethnicity is unknown. 4. Mothers who designated themselves as Asian, American Indian or Other. 5. Calculations based on fewer than 5 events are excluded. 6. Based on the Adequacy of Prenatal Care Utilization (APNCU) index. Please see Section Definitions for definition. 7. Public payment sources include Commonwealth, Healthy Start, Medicaid/MassHealth, and Medicare (may be HMO or managed care), or free care. 8. Deaths per 1,000 live births. See Section Definitions for an explanation of infant and neonatal mortality rates.

Table B-3A.(continued) Resident Birth Characteristics, 30 Largest Municipalities, Massachusetts: 2004

Municipality ¹	Birth						Deaths		
	Adequate Prenatal Care ⁶		Public Payment ⁷ for Prenatal Care		Unmarried	Teen Mothers	Infant Mortality Rate ⁸	Neonatal Mortality Rate ⁸	
	%	%	%	n	15 to 19 years	Rate ² 2004	2002-2004	2004	
STATE TOTAL	84.2	30.5	28.5	4,559	22.2	4.7	4.8	3.7	3.6
Arlington	93.1	6.9	6.9	7	9.1	8.8	7.2	8.8	6.6
Attleboro	78.1	23.6	24.2	37	32.1	— ⁵	2.7	— ⁵	2.7
Barnstable	89.0	38.9	26.3	21	16.3	— ⁵	6.6	— ⁵	4.4
Boston	84.9	46.1	43.5	578	26.0	6.0	6.4	4.7	4.8
Brockton	76.8	58.6	50.7	161	48.7	10.7	7.4	7.5	5.8
Brookline	95.3	5.6	3.2	3	— ⁵	— ⁵	3.9	— ⁵	3.9
Cambridge	89.2	19.4	17.9	25	6.7	— ⁵	4.3	— ⁵	3.4
Chicopee	82.0	47.3	46.4	64	35.4	13.1	8.1	— ⁵	4.9
Fall River	87.2	60.0	50.9	171	58.7	5.0	5.8	4.2	4.9
Framingham	86.9	32.9	22.4	44	22.9	8.5	6.2	6.4	4.5
Haverhill	88.6	29.2	28.9	56	31.2	— ⁵	5.3	— ⁵	4.2
Lawrence	76.9	70.8	65.6	226	79.4	9.2	6.9	6.4	5.0
Lowell	68.4	53.3	48.0	194	49.6	4.9	9.0	3.6	6.0
Lynn	72.6	61.2	49.3	135	45.2	6.3	7.1	5.6	5.5
Malden	85.2	36.9	27.0	28	20.1	— ⁵	3.6	— ⁵	3.6
Medford	87.8	21.7	15.2	16	9.1	8.1	4.3	— ⁵	3.3
Methuen	84.5	24.2	27.0	38	30.1	— ⁵	3.3	— ⁵	— ⁵
New Bedford	79.2	62.9	57.1	183	61.5	— ⁵	6.2	— ⁵	3.2
Newton	89.8	5.0	6.8	9	2.6	— ⁵	3.7	— ⁵	3.7
Peabody	86.2	27.1	21.8	24	18.5	0.0	3.2	0.0	— ⁵
Pittsfield	64.9	48.9	50.8	59	43.4	— ⁵	5.0	— ⁵	— ⁵
Plymouth	83.2	18.9	21.2	27	17.1	— ⁵	4.2	— ⁵	3.7
Quincy	88.5	30.7	22.8	34	17.4	4.3	4.9	— ⁵	3.7
Revere	83.8	50.9	37.6	42	34.6	— ⁵	2.9	— ⁵	2.9
Somerville	85.5	39.8	28.9	36	17.2	5.9	3.0	— ⁵	2.6
Springfield	74.6	70.2	67.2	428	70.9	6.3	6.8	3.8	4.3
Taunton	78.8	35.2	38.2	54	32.7	— ⁵	5.3	— ⁵	4.4
Waltham	82.8	30.4	25.4	18	8.0	— ⁵	4.3	— ⁵	4.3
Weymouth	89.2	21.0	20.0	27	20.3	— ⁵	5.6	— ⁵	5.2
Worcester	77.2	44.3	44.2	250	36.1	6.6	6.6	4.7	4.6

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

1. The 30 largest municipalities are the cities and towns in Massachusetts with the largest populations according to DPH 2000 population estimates, based on U.S. Census 2000 population counts. 2. Crude birth rates represent the number of births per 1,000 residents; teen birth rates refer to the number of births per 1,000 females ages 15-19. 2004 birth rates are calculated using the DPH 2000 population estimates. 3. For the category of Mother's Race and Ethnicity, percentages are calculated based on the state total of resident births, including births for which mother's race/Hispanic ethnicity is unknown. 4. Mothers who designated themselves as Asian, American Indian or Other. 5. Calculations based on fewer than 5 events are excluded. 6. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. Please see Section Definitions for definition. 7. Public payment sources include Commonwealth, Healthy Start, Medicaid/MassHealth, and Medicare (may be HMO or managed care), or free care. 8. Deaths per 1,000 live births. See Section Definitions for an explanation of infant and neonatal mortality rates.

Table B-3B: Resident Birth Characteristics, Community Health Network Areas (CHNAs), Massachusetts: 2004

CHNA	Population	Mother's Race and Ethnicity						Very Low Birthweight (<1500 g) %	Low Birthweight (<2500 g) %
		Crude Birth Rate ¹	White non-Hispanic % ³	Black non-Hispanic % ³	Asian or Hispanic % ³	Other ² % ³			
STATE TOTAL	6,349,097	12.4	70.5	7.7	12.5	9.2	1.5	7.8	
Community Health Network of Berkshire County	134,953	9.6	86.7	4.5	4.7	4.1	1.7	7.2	
Upper Valley Health Web (Franklin County)	86,889	9.7	91.3	1.5	3.7	2.6	1.9	7.8	
Partnership for Health in Hampshire County (Northampton)	150,077	8.6	85.9	2.0	6.0	6.1	0.6	6.8	
The Community Health Connection (Springfield)	291,665	13.1	53.0	14.4	28.9	3.6	1.7	9.1	
Community Health Network of Southern Worcester County	113,702	12.0	85.9	1.9	9.2	2.9	1.0	7.8	
Community Partners for Health (Milford)	152,117	14.2	91.9	0.6	3.2	4.1	0.6	5.6	
Community Health Network of Greater Metro West (Framingham)	374,478	13.0	82.6	2.0	6.3	9.0	1.1	6.8	
Community Wellness Coalition (Worcester)	289,834	14.1	66.7	8.4	15.1	9.8	1.7	7.8	
Fitchburg/Gardner Community Health Network	250,362	11.8	80.2	3.3	11.8	4.7	1.2	7.0	
Greater Lowell Community Health Network	270,083	13.4	67.0	4.3	9.3	19.4	1.5	8.1	
Greater Lawrence Community Health Network	182,025	15.1	47.1	2.2	45.0	5.7	1.6	8.3	
Greater Haverhill Community Health Network	144,275	12.7	87.4	1.9	7.6	3.2	1.3	8.4	
Community Health Network North (Beverly/Gloucester)	118,280	10.1	92.5	0.8	2.1	4.6	1.5	7.3	
North Shore Community Health Network	278,839	12.5	65.6	5.9	21.6	6.8	1.7	8.5	
Greater Woburn/Concord/Littleton Community Health Network	208,406	11.7	80.0	2.2	2.5	15.2	1.1	6.8	
North Suburban Health Alliance (Medford/Malden/Melrose)	261,844	12.5	71.1	8.5	7.7	12.5	1.4	7.0	
Greater Cambridge/Somerville Community Health Network	278,402	11.3	67.1	9.3	8.5	14.9	1.3	6.8	
West Suburban Health Network (Newton/Waltham)	253,187	10.8	77.9	2.9	7.5	11.6	1.3	7.4	
Alliance for Community Health (Boston/Chestnut/Revere/Winthrop)	746,914	13.3	40.0	22.6	23.5	13.8	1.8	8.8	
Blue Hills Community Health Alliance (Greater Quincy)	365,457	12.5	74.7	7.0	2.6	15.5	1.4	7.3	
Four (For) Communities (Holyoke, Chicopee, Ludlow, Westfield)	159,254	11.7	66.9	2.4	28.1	2.6	2.1	8.6	
Greater Brockton Community Health Network	232,260	14.0	63.6	20.6	6.3	9.4	2.1	9.5	
South Shore Community Partners in Prevention (Plymouth)	180,609	12.5	95.3	1.2	0.9	2.3	0.7	7.2	
Greater Attleboro-Taunton Health & Education Response	242,659	13.3	89.0	2.8	3.5	4.4	1.3	8.0	
Partners for a Healthier Community (Fall River)	140,256	11.2	84.8	4.1	5.8	5.1	1.7	7.9	
Greater New Bedford Health & Human Services Coalition	195,533	12.1	75.2	4.7	12.2	7.6	1.6	7.8	
Cape and Islands Community Health Network	246,737	9.0	87.2	3.6	3.7	5.3	1.7	7.9	

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

1. Births per 1,000 residents (male and female). 2004 birth rates are calculated using DHH 2000 population estimates; based on U.S. Census 2000 population counts. 2. Mothers who designated themselves as Asian, American Indian or Other. 3. For the category of Mother's Race and Ethnicity, percentages are calculated based on the state total of resident births, including births for which mother's race/Hispanic ethnicity is unknown. 4. Births per 1,000 female residents ages 15-19. 5. Calculations based on fewer than 5 events are excluded. 6. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. Please see Section Definitions for definition. 7. Public payment sources include Commonwealth, Healthy Start, Medicaid/MassHealth, and Medicare (may be HMO or managed care), or free care. 8. Deaths per 1,000 live births. See Section Definitions for definitions of infant and neonatal mortality rates.

Table B-3B.(continued) Resident Birth Characteristics, Community Health Network Areas (CHNAs), Massachusetts: 2004

CHNA Number and CHNA	Adequate Prenatal Care ⁶ %	Births					Deaths				
		Public Payment ⁷ for Prenatal Care %	Unmarried 15 to 19 years %	Teen Mothers n	Teen Mothers Rate ⁴	Mortality Rate ⁸		Infant Mortality Rate ⁸ 2004	Infant Mortality Rate ⁸ 2002-2004	Neonatal Mortality Rate ⁸ 2004	Neonatal Mortality Rate ⁸ 2002-2004
						2004	2002-2004				
STATE TOTAL	84.2	30.5	28.5	4,559	22.2	4.7	4.8	3.7	3.6		
1. Community Health Network of Berkshire County	73.5	43.1	41.0	122	25.8	6.2	5.8	3.9	3.7		
2. Upper Valley Health Web (Franklin County)	83.5	34.1	37.9	69	24.1	8.3	3.6	8.3	3.2		
3. Partnership for Health in Hampshire County (Northampton)	87.2	24.4	26.4	72	8.0	— ^b	3.4	— ^b	2.3		
4. The Community Health Connection (Springfield)	78.0	54.2	50.0	493	46.9	6.0	6.9	3.7	4.5		
5. Community Health Network of Southern Worcester County	81.5	26.1	30.6	92	25.1	8.1	7.1	6.6	5.2		
6. Community Partners for Health (Milford)	87.5	13.8	15.3	70	15.5	3.7	4.0	2.8	3.1		
7. Community Health Network of Greater Metro West (Framingham)	87.8	15.0	12.5	102	10.3	4.5	4.0	4.1	3.4		
8. Community Wellness Coalition (Worcester)	78.6	31.5	32.3	278	26.8	5.6	5.8	4.1	4.4		
9. Fitchburg/Gardner Community Health Network	83.8	26.1	27.8	186	22.7	4.1	4.4	3.0	3.0		
10. Greater Lowell Community Health Network	77.3	29.9	28.5	247	28.8	3.3	5.2	2.2	3.3		
11. Greater Lawrence Community Health Network	82.2	43.8	42.2	273	43.7	5.8	4.8	3.6	3.3		
12. Greater Haverhill Community Health Network	90.0	19.9	21.2	86	20.4	3.3	4.7	— ^b	3.9		
13. Community Health Network North (Beverly/Gloucester)	92.3	19.7	17.1	30	8.1	4.2	3.7	— ^b	3.2		
14. North Shore Community Health Network	80.5	37.9	31.9	201	24.2	4.6	5.1	3.7	3.8		
15. Greater Woburn/Canton/Littleton Community Health Network	88.0	7.4	8.1	37	6.9	2.1	2.2	2.1	1.7		
16. North Suburban Health Alliance (Medford/Malden/Melrose)	87.6	24.8	19.3	92	13.3	3.4	3.4	3.1	2.7		
17. Greater Cambridge/Somerville Community Health Network	89.2	20.9	17.1	74	9.4	4.8	4.1	3.8	3.2		
18. West Suburban Health Network (Newton/Waltham)	88.7	11.3	10.5	36	3.7	2.6	3.1	2.2	2.7		
19. Alliance for Community Health (Boston/Chestnut/Winthrop)	85.2	44.6	40.9	703	26.6	5.8	5.9	4.6	4.5		
20. Blue Hills Community Health Alliance (Greater Quincy)	88.4	19.0	16.9	109	11.3	4.6	4.9	4.2	4.4		
21. Four (For) Communities (Holyoke, Chicopee, Ludlow, Westfield)	80.3	51.3	47.2	218	37.0	10.2	6.1	7.0	4.6		
22. Greater Brockton Community Health Network	82.1	37.5	34.3	214	25.9	8.0	5.7	6.2	4.5		
23. South Shore Community Partners in Prevention (Plymouth)	87.5	13.4	16.4	73	13.0	3.1	3.4	— ^b	2.4		
24. Greater Attleboro-Taunton Health & Education Response	80.3	22.1	22.8	143	18.8	2.8	3.3	2.5	3.0		
25. Partners for a Healthier Community (Fall River)	88.9	51.8	43.2	187	42.1	5.7	5.6	3.8	4.6		
26. Greater New Bedford Health & Human Services Coalition	79.5	46.8	43.8	241	36.9	2.1	5.1	— ^b	3.0		
27. Cape and Islands Community Health Network	86.8	32.3	25.5	111	18.0	4.0	5.1	3.1	3.7		

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

1. Births per 1,000 residents (male and female). 2004 birth rates are calculated using DPH 2000 population estimates, based on U.S. Census 2000 population count. 2. Mothers who designated themselves as Asian, American Indian or Other. 3. For the category of Mother's Race and Ethnicity, percentages are calculated based on the state total of resident births, including births for which mother's race/Hispanic ethnicity is unknown. 4. Births per 1,000 female residents ages 15-19. 5. Calculations based on fewer than 5 events are excluded. 6. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. Please see Section Definitions for definition. 7. Public payment sources include CommonHealth, Healthy Start, Medicaid/MassHealth, and Medicare (may be HMO or managed care). 8. Deaths per 1,000 live births. See Section Definitions for definitions of Infant and neonatal mortality rates.

Table B-4. Age-Specific and Crude Birth Rates, Massachusetts: 1990 and 2004

Mother's Age	1990		2004		Percent Change in Rate
	Births ¹	Rate	Births	Rate ²	
10-14	124	1.3	42	0.3	-76.9
15-19	7,258	35.1	4,559	22.2	-36.8
20-24	18,115	69.5	11,670	56.8	-18.3
25-29	29,913	107.2	17,914	81.2	-24.3
30-34	25,687	93.9	25,804	103.1	9.8
35-39	9,795	40.1	14,977	54.6	36.2
40-44	1,522	6.9	3,308	12.4	79.7
45+ ³	46	0.3	182	0.7	133.3
Birth rate, ages 15-44⁴	92,290	62.2	78,232	55.0	-11.6
Crude Birth Rate⁵	92,461	15.4	78,460	12.4	-19.5

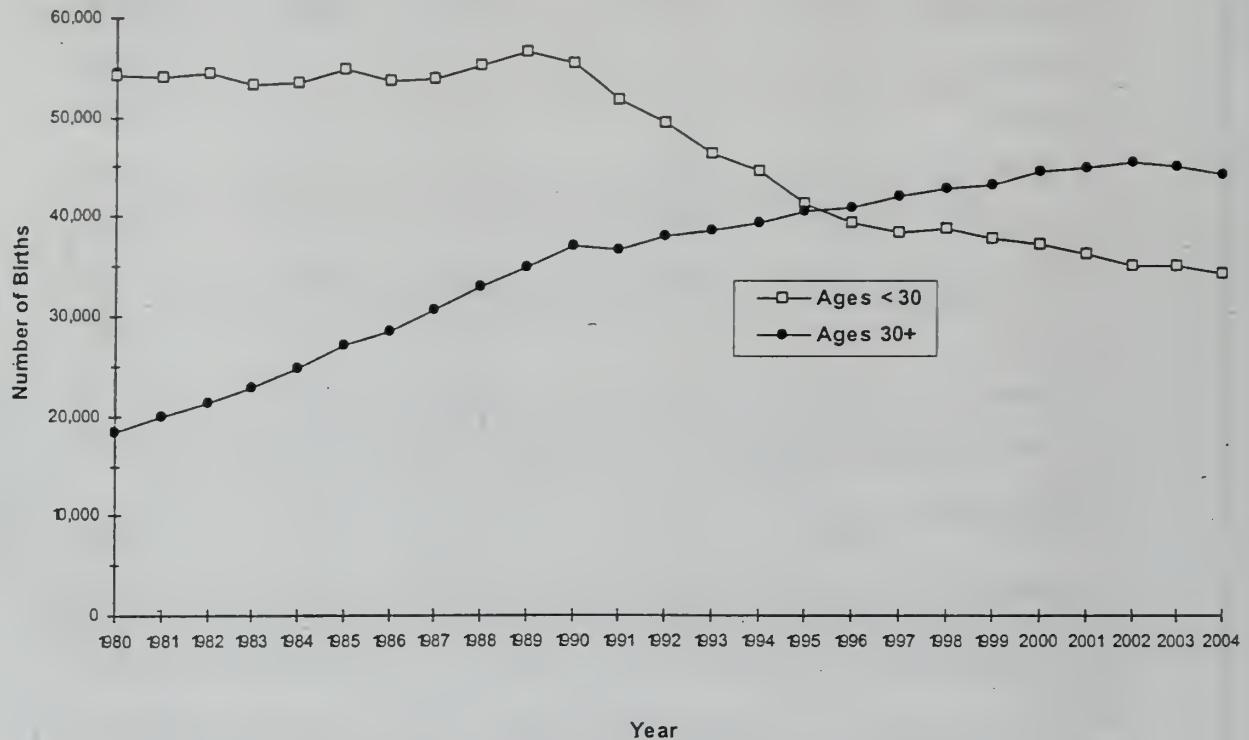
NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.

1. Differences in the number of births from previous publications are the result of updating of the birth files. The number of births for all age groups does not always add to the total number of births as mother's age is sometimes not recorded on the birth certificate.

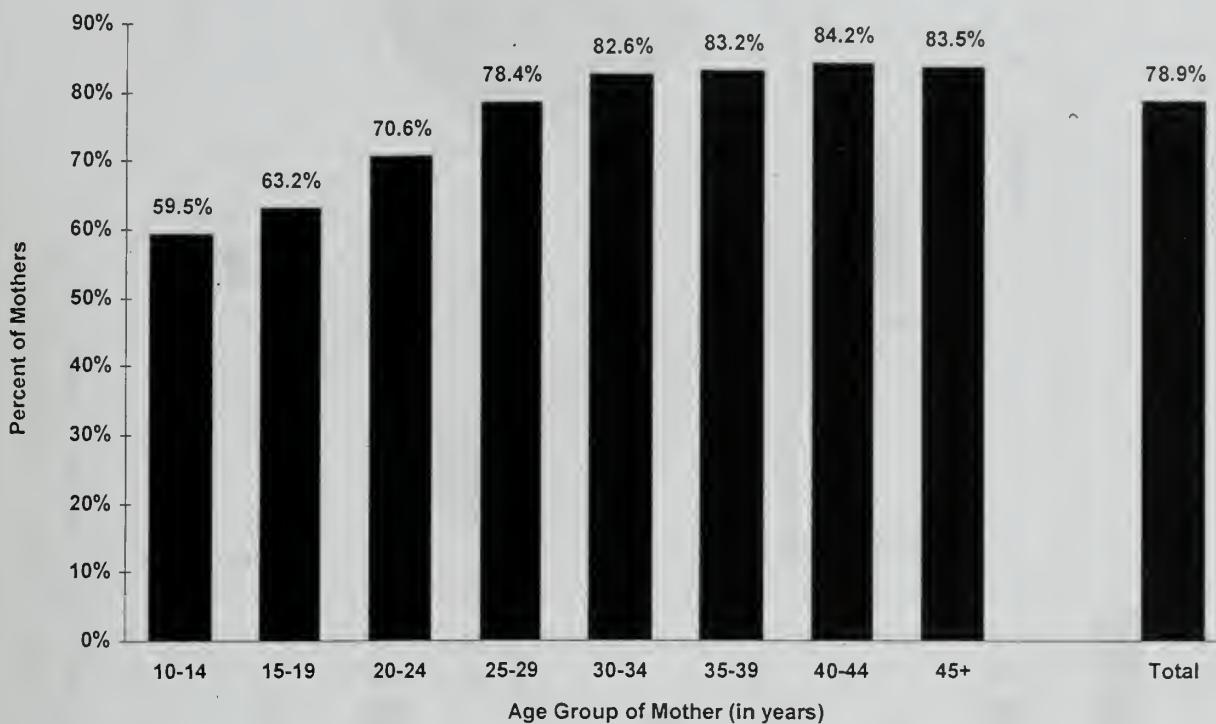
2. 2004 birth rates are calculated using DPH 2000 population estimates, based on U.S. Census 2000 population counts

3. Denominator is female population ages 45-49. 4. Rate represents the total number of births to women age 15-44 per 1,000 women age 15 to 44. 5. Births per 1,000 residents (male and female). Includes births to mothers of all age groups and mothers for whom age is unknown.

**Figure B-4. Trends in the Number of Births by Mother's Age Group,
Massachusetts: 1980-2004**



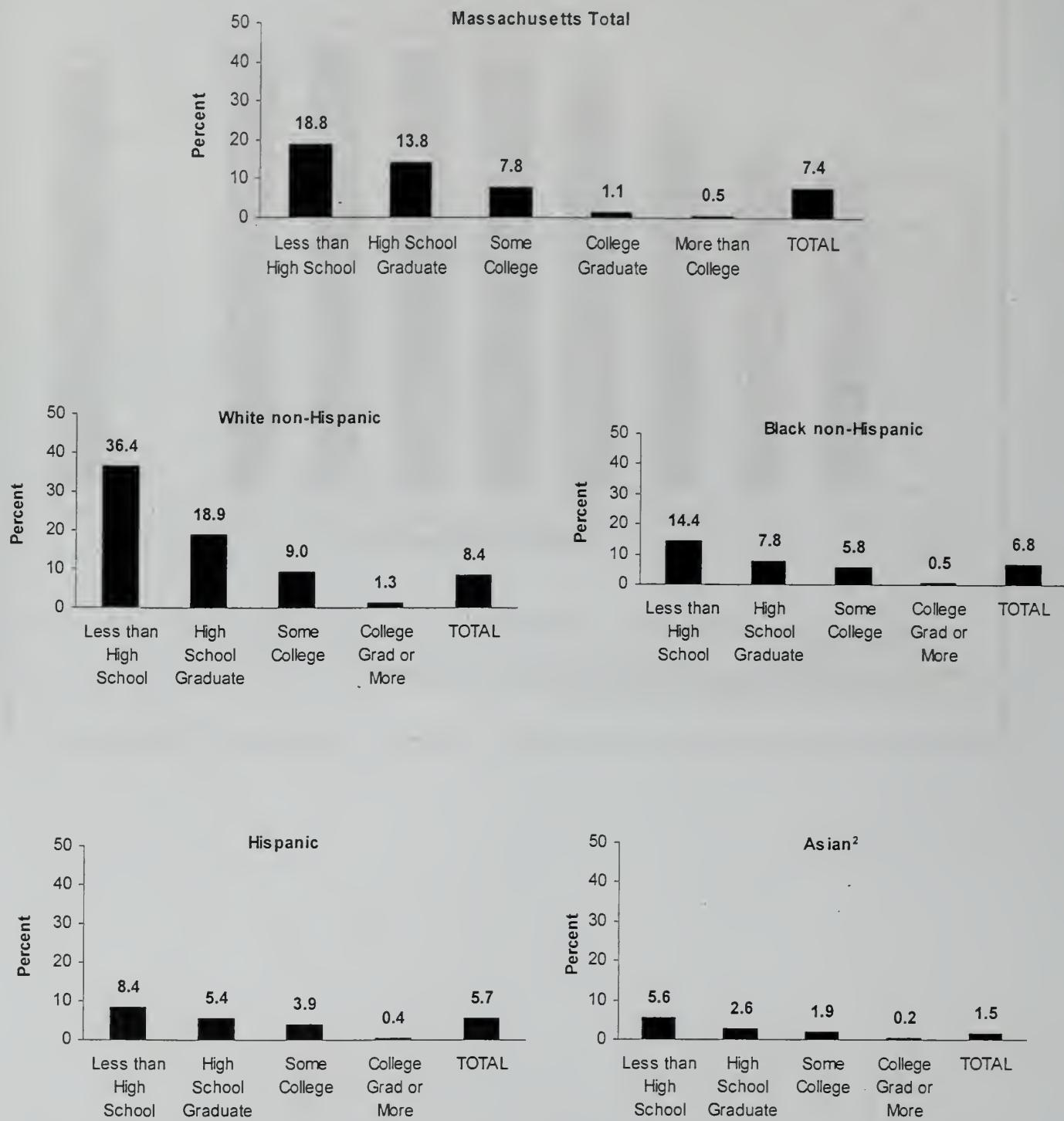
**Figure B-5. Percent of Mothers Breastfeeding or Intending to Breastfeed¹
by Age Group, Massachusetts² 2004**



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

1. Information about breastfeeding is reported by the mother at the time of the birth.
2. For race-specific breastfeeding rates see Table B-2A.

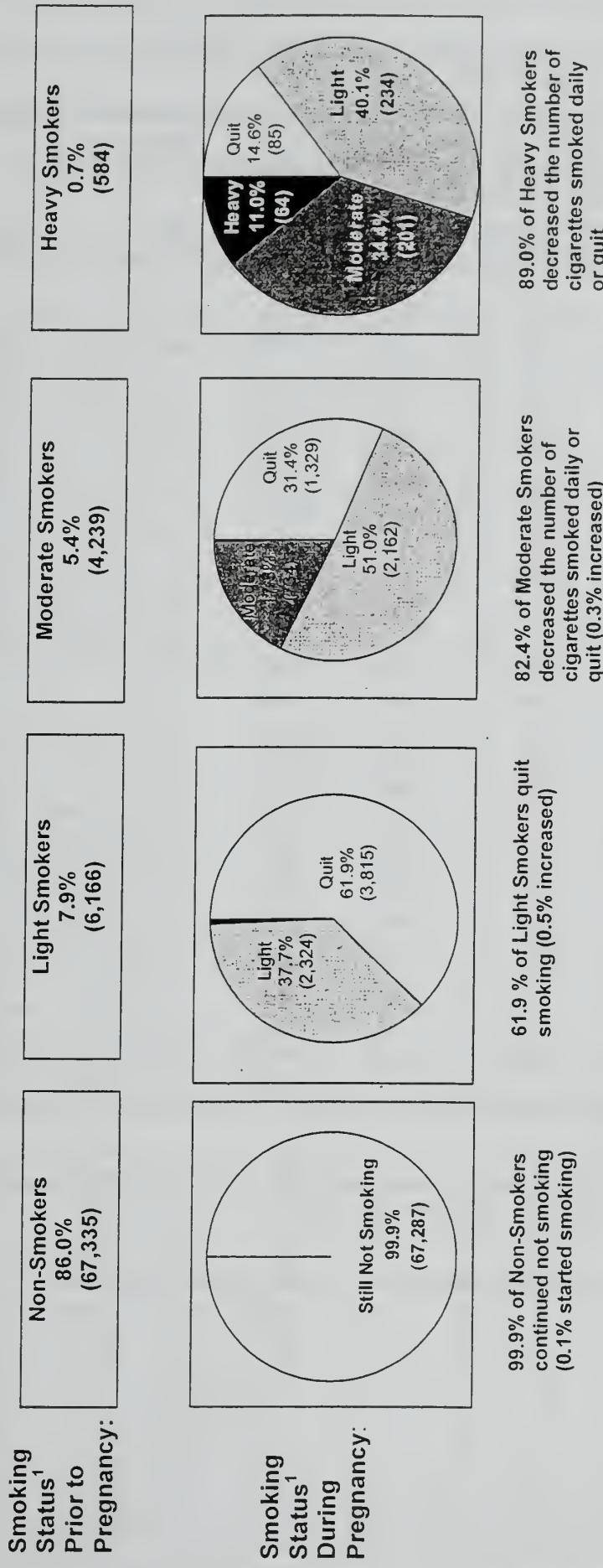
Figure B-6. Percent of Mothers who Smoked During Pregnancy¹, by Mother's Race/Hispanic Ethnicity and Educational Attainment, Massachusetts: 2004



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

1. Based on information provided on parent worksheet. Because smoking is self-reported, data on smoking prevalence should be interpreted cautiously. Mothers with multiples are counted for each birth. 2. Caution should be used with Asian data because of small numbers.

Figure B-7. Distribution of Smoking Status¹ during Pregnancy by Smoking Status Prior to Pregnancy, Massachusetts: 2004



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

1. Light Smokers=1-10 cigarettes daily, Moderate Smokers=11-20 cigarettes daily, Heavy Smokers=21 cigarettes or more daily

Table B-5. Parity¹ by Age of Mother, Massachusetts: 2004

Age of Mother (years)		Total Births	1st	2nd	3rd	4th	5th+
STATE TOTAL	n ²	78,460	34,702	27,053	11,139	3,538	1,838
	% ³	100.0	44.3	34.6	14.2	4.5	2.3
10-14	n	42	41	1	0	0	0
	%	100.0	97.6	2.4	0.0	0.0	0.0
15-19	n	4,559	3,909	561	69	5	0
	%	100.0	86.0	12.3	1.5	0.1	0.0
20-24	n	11,670	6,561	3,627	1,132	240	76
	%	100.0	56.4	31.2	9.7	2.1	0.7
25-29	n	17,914	8,766	5,802	2,262	720	317
	%	100.0	49.1	32.5	12.7	4.0	1.8
30-34	n	25,804	10,093	10,060	3,823	1,158	619
	%	100.0	39.2	39.1	14.8	4.5	2.4
35-39	n	14,977	4,314	5,813	3,179	1,084	557
	%	100.0	28.9	38.9	21.3	7.3	3.7
40-44	n	3,308	935	1,135	656	317	254
	%	100.0	28.4	34.4	19.9	9.6	7.7
45+	n	182	80	54	18	14	14
	%	100.0	44.4	30.0	10.0	7.8	7.8

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

1. The number of live births including this birth. 2. State totals include births of unknown parity and unknown mother's age. 3. Percents may not sum to 100.0 due to rounding.

**Table B-6. Trends in Number and Percent Distribution of Births¹ by Plurality and Age,
Massachusetts: 1991-2004**

Age Group	Year	Singletons		Multiples ²				Total births			
				Twins		Triplets or more		Total Multiples			
		n	%	n	%	n	%	n	%	n	%
All Ages											
1991	85,802	97.3	2,285	2.6	89	0.1	2,374	2.7	88,176	100.0	
1992	84,722	97.2	2,347	2.7	133	0.2	2,480	2.8	87,202	100.0	
1993	82,055	97.0	2,367	2.8	205	0.2	2,572	3.0	84,627	100.0	
1994	81,187	96.9	2,357	2.8	214	0.3	2,571	3.1	83,758	100.0	
1995	78,935	96.8	2,429	3.0	198	0.2	2,627	3.2	81,562	100.0	
1996	77,355	96.5	2,621	3.3	194	0.2	2,815	3.5	80,164	100.0	
1997	77,203	96.1	2,856	3.6	262	0.3	3,118	3.9	80,321	100.0	
1998	78,004	95.8	3,114	3.8	288	0.4	3,402	4.2	81,406	100.0	
1999	77,473	95.8	3,147	3.9	246	0.3	3,393	4.2	80,866	100.0	
2000	78,075	95.7	3,263	4.0	244	0.3	3,507	4.3	81,582	100.0	
2001	77,409	95.6	3,371	4.2	234	0.3	3,605	4.4	81,014	100.0	
2002	76,673	95.1	3,708	4.6	243	0.3	3,951	4.9	80,624	100.0	
2003	76,367	95.3	3,551	4.4	249	0.3	3,800	4.7	80,167	100.0	
2004	74,677	95.2	3,538	4.5	245	0.3	3,783	4.8	78,460	100.0	
Ages <35											
1991	74,810	97.5	1,863	2.4	76	0.1	1,939	2.5	76,749	100.0	
1992	73,043	97.3	1,914	2.6	103	0.1	2,017	2.7	75,060	100.0	
1993	70,042	97.2	1,849	2.6	158	0.2	2,007	2.8	72,049	100.0	
1994	68,644	97.2	1,844	2.6	164	0.2	2,008	2.8	70,652	100.0	
1995	65,669	97.2	1,787	2.6	141	0.2	1,928	2.9	67,597	100.0	
1996	63,560	96.9	1,935	2.9	126	0.2	2,061	3.1	65,621	100.0	
1997	62,598	96.7	1,949	3.0	170	0.3	2,119	3.3	64,717	100.0	
1998	62,719	96.4	2,193	3.4	170	0.3	2,363	3.6	65,082	100.0	
1999	61,816	96.4	2,147	3.3	150	0.2	2,297	3.6	64,113	100.0	
2000	61,659	96.4	2,205	3.4	130	0.2	2,335	3.6	63,994	100.0	
2001	60,704	96.3	2,211	3.5	134	0.2	2,345	3.7	63,049	100.0	
2002	59,736	96.0	2,379	3.8	127	0.2	2,506	4.0	62,242	100.0	
2003	59,347	95.9	2,389	3.9	118	0.2	2,507	4.1	61,854	100.0	
2004	57,618	96.0	2,229	3.7	142	0.2	2,371	4.0	59,989	100.0	
Ages 35+											
1991	10,987	96.2	422	3.7	13	0.1	435	3.8	11,422	100.0	
1992	11,675	96.2	433	3.6	30	0.3	463	3.8	12,138	100.0	
1993	12,007	95.5	518	4.1	47	0.4	565	4.5	12,572	100.0	
1994	12,543	95.7	513	3.9	50	0.4	563	4.3	13,106	100.0	
1995	13,264	95.0	642	4.6	57	0.4	699	5.0	13,963	100.0	
1996	13,793	94.8	686	4.7	68	0.5	754	5.2	14,547	100.0	
1997	14,602	93.6	907	5.8	92	0.6	999	6.4	15,601	100.0	
1998	15,282	93.6	921	5.6	118	0.7	1,039	6.4	16,321	100.0	
1999	15,657	93.5	1,000	6.0	96	0.6	1,096	6.5	16,753	100.0	
2000	16,412	93.3	1,058	6.0	114	0.6	1,172	6.7	17,584	100.0	
2001	16,703	93.0	1,160	6.5	100	0.6	1,260	7.0	17,963	100.0	
2002	16,936	92.1	1,329	7.2	116	0.6	1,445	7.9	18,381	100.0	
2003	17,015	92.9	1,162	6.3	131	0.7	1,293	7.1	18,308	100.0	
2004	17,055	92.4	1,309	7.1	103	0.6	1,412	7.6	18,467	100.0	

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

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

Table B-7. Selected Birth Characteristics by Maternal Education, Massachusetts: 2004

	<u>Less than High School</u>		<u>High School Graduate</u>		<u>Some College</u>		<u>College Graduate</u>		<u>More than College</u>	
	n	% ¹	n	% ¹	n	% ¹	n	% ¹	n	% ¹
State Total	8,103	10.3	19,072	24.4	17,298	22.1	21,417	27.4	12,409	15.8
Race										
White non-Hispanic	2,855	5.2	11,518	20.8	12,611	22.8	17,918	32.4	10,358	18.7
Black non-Hispanic	842	13.9	2,234	36.9	1,870	30.9	842	13.9	263	4.3
Hispanic	3,482	35.6	3,651	37.3	1,652	16.9	720	7.4	285	2.9
Asian	610	11.2	989	18.2	797	14.6	1,685	30.9	1,367	25.1
Age										
20-29	4,010	13.6	10,260	34.8	7,822	26.5	5,568	18.9	1,858	6.3
30-39	1,534	3.8	6,404	15.7	8,472	20.8	14,638	36.0	9,658	23.7
40+	148	4.3	557	16.0	702	20.2	1,180	33.9	891	25.6
Non-U.S.-born²	3,359	41.5	5,849	30.7	3,715	21.5	4,096	19.1	2,738	22.1
Unmarried	5,936	73.3	9,558	50.1	5,009	29.0	1,406	6.6	428	3.5
Publicly-financed prenatal care	6,546	82.4	10,354	55.4	4,798	28.5	1,412	6.7	286	2.4
Very low birthweight³	142	1.8	307	1.6	237	1.4	312	1.5	140	1.1
Low birthweight⁴	774	9.6	1,640	8.6	1,303	7.5	1,555	7.3	834	6.7
Adequate prenatal care⁵	5,593	70.2	15,185	80.6	14,449	84.7	18,932	88.8	11,130	90.2
Cesarean section delivery	1,908	23.6	5,618	29.5	5,639	32.7	7,091	33.2	4,009	32.3
Breastfeeding⁶	5,094	63.6	13,029	69.3	12,882	76.4	18,524	88.0	11,135	91.6
Multiple births	189	2.3	670	3.5	788	4.6	1,320	6.2	801	6.5
Smoking during pregnancy	1,521	18.8	2,635	13.8	1,347	7.8	239	1.1	64	0.5

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, race and age categories, percentages are based on row totals. For all other categories, percentages are based on state column totals. 2. Includes women born outside of the 50 U.S. States, Washington D.C., and Puerto Rico/U.S. territories (the U.S. Virgin Islands, and Guam). 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. Beginning with the 2001 publication, the Adequacy of Prenatal Care Utilization Index has replaced the Kessner Index as the measure of adequate prenatal care. 6. Mother was breastfeeding or was intending to breastfeed at the time the birth certificate was completed.

**Table B-8A. Interpregnancy Intervals¹ (IPI) and Birth Outcomes.
Pregnancies to Multiparous² Mothers, Massachusetts: 2004**

IPI (months)	Pregnancies ³	<u>Birth Weight (BW)</u>				<u>Gestational Age (GA)</u>				
		Low Birthweight (<2,500 g)		Very Low Birthweight (<1,500 g)		Preterm ⁴ (<37 wk)		Very Early ⁵ (<28 wk)		
		n	% LBW ⁶	n	% VLBW	n	% Preterm	n	% VEGA	
State Total	41,373	2,189	5.3%	358	0.9%	2,889	7.0%	160	0.4%	
<5	1,786	110	6.2	13	0.7	163	9.2	5	0.3	
6-11	4,849	201	4.1	36	0.7	284	5.9	21	0.4	
12-17	6,079	244	4.0	39	0.6	391	6.4	20	0.3	
18-23	5,348	220	4.1	31	0.6	310	5.8	14	0.3	
24-29	4,338	198	4.6	30	0.7	268	6.2	13	0.3	
30-35	3,216	168	5.2	23	0.7	230	7.2	10	0.3	
36-41	2,525	128	5.1	18	0.7	167	6.6	3	-- ²	
42-47	2,092	108	5.2	19	0.9	141	6.8	6	0.3	
48+	11,140	812	7.3	149	1.3	935	8.4	68	0.6	
Short	< 12	6,635	311	4.7	49	0.7	447	6.8	26	0.4
	12-35	18,981	830	4.4	123	0.6	1,199	6.3	57	0.3
	36+	15,757	1,048	6.7	186	1.2	1,243	7.9	77	0.5

Note: 1. Interpregnancy Interval (IPI) is calculated in months between the date of last menstrual period of the current pregnancy and the date of previous live birth, among pregnancies to multiparous mothers (parity >1). 2. Multiparous is defined as having given birth 2 or more times. 3. IPIs are calculated based upon pregnancies rather than births, i.e., multiple births are counted as 1 pregnancy. 4. Also known as premature delivery. 5. Very early gestational age (VEGA) refers to birth delivery before 28 weeks of gestation age and is also known as extremely preterm delivery. 6. These are the row percentages, that is, the relevant column N/the row totals.

**Table B-8B. Interpregnancy Interval¹ (IPI) by Maternal Characteristics
Pregnancies to Multiparous Mothers², Massachusetts: 2004**

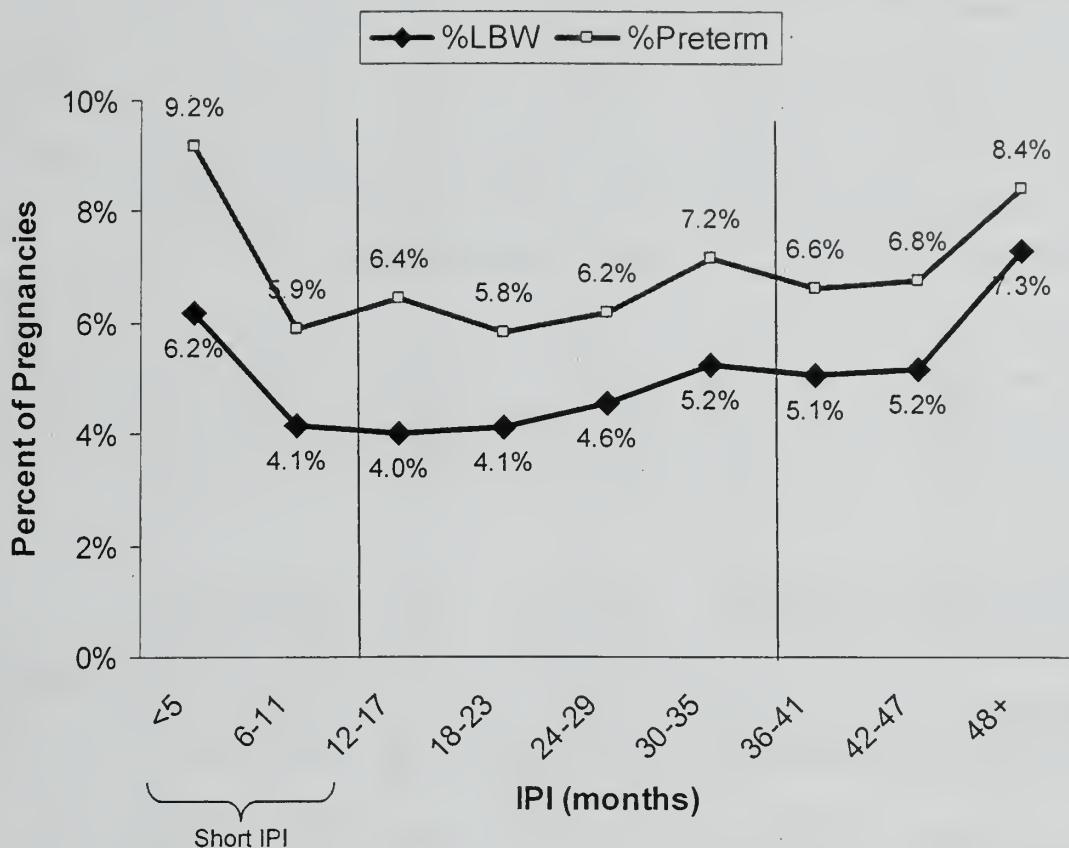
	Total Pregnancies Parity >1		IPI					
	N	%	Short (< 12 months)		(12-35 months)		(36+ months)	
			N	%	N	%	N	%
State Total³	41,373	100%	6,635	16.0%	18,981	45.9%	15,757	38.1%
Age								
< 20	592	1.4	233	39.4	315	53.2	44	7.4
20-34	28,472	68.8	4,908	17.2	13,256	46.6	10,308	36.2
35+	12,309	29.8	1,494	12.1	5,410	44.0	5,405	43.9
Race Ethnicity								
White non-Hispanic	29,000	70.1	4,899	16.9	14,533	50.1	9,568	33.0
Black non-Hispanic	3,354	8.1	495	14.8	1,109	33.1	1,750	52.2
Hispanic	5,574	13.5	771	13.8	1,951	35.0	2,852	51.2
Asian non-Hispanic	2,583	6.2	355	13.7	1,091	42.2	1,137	44.0
Education								
High school or less	14,904	36.0	2,230	15.0	5,422	36.4	7,252	48.7
College or some college	20,437	49.4	3,376	16.5	9,970	48.8	7,091	34.7
More than college	5,976	14.4	1,016	17.0	3,564	59.6	1,396	23.4
Delivery Payment Source								
Public	12,877	31.1	2,063	16.0	4,512	35.0	6,302	48.9
Private	27,342	66.1	4,366	16.0	13,905	50.9	9,071	33.2
EOHHS Region of Residency								
Western	5,031	12.2	851	16.9	2,213	44.0	1,967	39.1
Central	5,889	14.2	948	16.1	2,625	44.6	2,316	39.3
Northeast	8,597	20.8	1,307	15.2	4,012	46.7	3,278	38.1
Metrowest	9,159	22.1	1,536	16.8	4,795	52.4	2,828	30.9
Southeast	8,050	19.5	1,345	16.7	3,556	44.2	3,149	39.1
Boston	4,647	11.2	648	13.9	1,780	38.3	2,219	47.8
Town of Residency⁴					<u>10 Largest by %</u>	<u>10 Largest by %</u>	<u>10 Largest by %</u>	
					Holyoke (21.4%)	Needham (63.3%)	Chelsea (59.6%)	
					Attleboro (20.8%)	North Andover (62.9%)	Randolph (52.2%)	
					Mansfield (20.3%)	Newton (61.7%)	Everett (52.0%)	
					Pittsfield (19.1%)	Arlington (60.8%)	Lawrence (51.8%)	
					Quincy (18.9%)	Marshfield (56.7%)	Revere (50.8%)	
					Westfield (18.8%)	Natick (56.5%)	Lynn (49.6%)	
					Waltham (18.2%)	Peabody (56.0%)	Brockton (49.2%)	
					Springfield (18.2%)	Chelmsford (54.5%)	New Bedford (48.5%)	
					Natick (18.2%)	Brookline (54.2%)	Boston (47.2%)	
					Framingham (18.1%)	Franklin (53.9%)	Malden (46.9%)	

NOTE: Percentages are calculated based on pregnancies to mothers who gave birth to their 2nd or later child in 2004 and with known values for the characteristic(s) of interest, unless otherwise stated.

1. See Table B-8A. 2. Multiparous is defined as having given birth 2 or more times. 3. State total includes pregnancies with known IPI.

4. Among towns with at least 200 mothers giving birth to their 2nd or later child.

Figure B-8. Interpregnancy Interval (IPI)¹ vs. LBW² and Preterm³ Pregnancies to Multiparous Mothers⁴, Massachusetts: 2004



NOTE: Percentages are calculated based on pregnancies to mothers who gave birth to their 2nd or later child in 2004 and with known values for the characteristic(s) of interest, unless otherwise stated.

1. See Table B-8A.
2. Low birthweight: less than 2,500 grams or 5.5 pounds.
3. Preterm delivery is defined as gestational age less than 37 weeks. It is also known as premature delivery.
4. Multiparous is defined as having given birth 2 or more times.

**Table B-9. Comparison of Massachusetts Perinatal Health Indicators
with Healthy People 2010 Objectives¹**

Healthy People 2010 Objectives (Focus Area 16: Maternal, Infant and Child Health ²)	HP2010 Target	Massachusetts				Has Massachusetts achieved HP2010 target? ✓ = YES ○ = NO, but within 25% of target ● = NO, > 25% from target
		2001	2002	2003	2004	
Fetal, Infant, and Maternal Deaths						
16-1a. Fetal Mortality Rate ³	4.1	4.7	4.6	5.7	5.3	●
16-1b. Perinatal Mortality Rate ⁴	4.5	5.6	4.7	5.8	5.8	●
16-1c. Infant Mortality Rate ⁵	4.5	5.0	4.9	4.8	4.7	○
16-1d. Neonatal Mortality Rate ⁶	2.9	3.8	3.7	3.6	3.7	●
16-1e. Postneonatal Mortality Rate ⁷	1.2	1.2	1.2	1.2	1.1	✓
16-4. Maternal Mortality Ratio ⁸	3.3	4.9	2.4	4.9	6.3	●
Risk Factors						
16-10a. Low Birthweight ⁹ (%)	5.0	7.2	7.5	7.6	7.8	●
16-10b. Very Low Birthweight ¹⁰ (%)	0.9	1.4	1.4	1.4	1.5	●
16-11a. Preterm ¹¹ (%)	7.6	8.0	8.5	8.7	9.2	○
Prenatal Care						
16-6a. Care beginning in first trimester (%)	90.0	84.3	84.2	83.9	83.5	○
16-6b. Early and adequate care ¹² (%)	90.0	85.2	85.0	84.5	84.2	○
Obstetrical Care						
16-8. Very Low Birthweight ¹⁰ Infants born at Level III Hospitals ¹³ (%)	90.0	79.1	81.2	79.1	80.1	○
16-9a. Cesarean Sections: Low-Risk ¹⁴ Women Giving Birth for the First Time (%)	15.0	22.0	24.0	25.0	26.7	●
16-9b. Cesarean Sections: Low-Risk ¹⁴ Women with Prior Cesarean Section (%)	63.0	79.2	84.2	86.7	87.9	●
Breastfeeding						
16-19a. Breastfeeding ¹⁵ (%)	75.0	75.3	76.1	78.1	78.9	✓
Prenatal Substance Exposure						
16-17c. Abstinence from Smoking (%)	99.0	90.9	92.1	92.3	92.6	○

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

1. National health promotion and disease prevention agenda established by the U.S. Dept. of Health and Human Services. 2. Goal: to improve the health and well-being of women, infants, children, and families. 3. Number of fetal deaths per 1,000 fetal deaths plus live births. 4. Number of fetal and infant deaths in perinatal period (from 28 weeks gestation (inclusive) to 6 days (inclusive) after birth per 1,000 fetal deaths plus live births. 5. Number of infant deaths (under one year of age) per 1,000 live births. 6. Number of deaths to infants less than 28 days of age per 1,000 live births. 7. Number of deaths to infants 28-364 days of age per 1,000 live births. 8. See explanation of rates in Section Definitions. 9. Less than 2,500 grams, or 5.5 pounds. 10. Less than 1,500 grams, or 3.3 pounds. 11. Born before completion of 37th week of gestation. 12. Based on Adequacy of Prenatal Care Utilization Index (see Section Definitions). 13. Facilities for high-risk deliveries and neonates that can provide care to very small infants, including mechanical ventilation and neonatal surgery and special care for transferred patients and for which a full-time neonatologist serves as the director. 14. "Low-risk"= full term birth, singleton, vertex presentation. 15. HP2010 specifies objective as mother breastfeeding in "early postpartum period." Massachusetts data is based on mother's self-report of current breastfeeding or intention to breastfeed.

Table B-10. Summary of Selected Teen Birth Characteristics, Massachusetts: 2004

	Age 15-17		Age 18-19		Combined Ages 15-19	
	N	% ¹	N	% ¹	N	% ¹
State total	1,454	31.9	3,105	68.1	4,559	100.0
Maternal Demographics						
Race/Hispanic Ethnicity	N	% ²	N	% ²	N	% ²
White non-Hispanic	557	38.3	1,571	50.7	2,128	46.7
Black non-Hispanic	210	14.5	381	12.3	591	13.0
Asian	63	4.3	89	2.9	152	3.3
Hispanic	560	38.5	939	30.3	1,499	32.9
Other	63	4.3	121	3.9	184	4.0
Birthplace						
U.S. States / D.C.	1,121	77.2	2,312	74.5	3,433	75.3
Puerto Rico / US Terr.	149	10.3	226	7.3	375	8.2
Non-U.S.-born	183	12.6	566	18.2	749	16.4
Prenatal care funding						
Public	1,063	74.9	2,341	77.0	3,404	76.3
Private, other	357	25.1	698	23.0	1,055	23.7
Pregnancy-Related Factors						
Adequacy of Prenatal Care³						
Adequate Total ⁴	997	69.3	2,200	71.9	3,197	71.1
Adequate Intensive	490	34.1	1,048	34.3	1,538	34.2
Adequate Basic	507	35.3	1,152	37.7	1,659	36.9
Intermediate	121	8.4	304	9.9	425	9.5
Inadequate/None	320	22.3	555	18.1	875	19.5
Unknown	16	1.1	46	1.5	62	1.4
Parity⁶						
1	1,348	93.0	2,561	82.7	3,909	86.0
2	96	6.6	465	15.0	561	12.3
3+	5	0.3	69	2.2	74	1.6
Smoking during Pregnancy						
Yes	165	11.3	485	15.6	650	10.3
No	1,289	88.7	2,615	84.4	3,904	86.7
Birth Outcomes						
Birthweight						
< 500 g	5	0.3	7	0.2	12	0.3
500-1,499 g	96	2.1	41	1.3	74	1.6
1,500-2,499 g	133	9.2	248	8.0	381	8.4
LBW (<2,499 g)	168	11.6	296	10.0	464	10.3
2,500-3,999 g	1,221	84.3	2,612	84.3	3,833	84.3
4000+ g	59	4.1	192	6.2	251	5.5
Gestational age						
< 28 weeks	16	1.1	24	0.8	40	0.9
< 37 weeks	161	11.2	297	9.6	458	10.1
37-42 weeks	1,279	88.8	2,791	90.4	4,070	89.8
43+ weeks	1	-- ⁵	1	-- ⁵	2	-- ⁵
Plurality						
Singleton	1,425	98.0	3,055	98.4	4,480	98.3
Multiple birth	29	2.0	50	1.6	79	1.7

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 women ages 15-19. For the rest of the table, percentages are based on births for a given age group and characteristic. 2. Percents are based on state total of the age group. 3. Based on Adequacy of Prenatal Care Utilization (APNCU) Index. 4.

Adequate Total = Adequate Basic + Adeq. Intensive. 5. Calculations based on fewer than five events are excluded. 6. Number of live births including the current birth.

Figure B-10. Comparison of Teen vs. Adult Births, Selected Characteristics, Massachusetts:2004

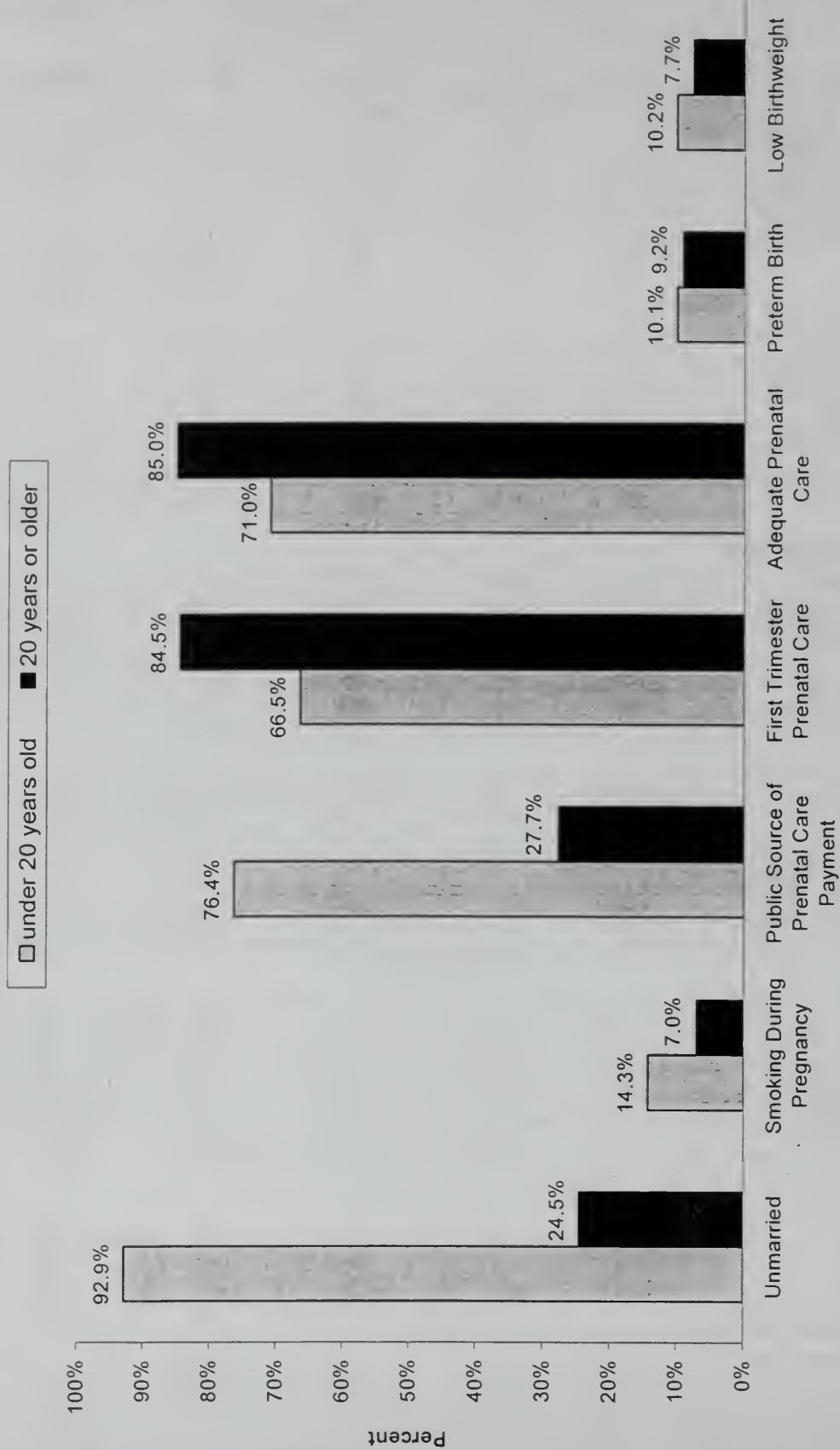


Table B-11. Resident Teen Birth Characteristics, 30 Largest Municipalities¹, Massachusetts: 2004

Municipality	Total Population Rank	Female Population, age 15-19	Number of Teen Births	Teen Birth Rate ²	Mother's Race and Hispanic Ethnicity (% of teen births)			
					White non-Hispanic	Black non-Hispanic	Hispanic	Asian or other ³
State Total		205,277	4,559	22.2	46.7	13.0	32.9	7.4
Arlington	29	767	7	9.1	71.4	14.3	14.3	0.0
Attleboro	30	1,151	37	32.2	64.9	16.2	10.8	8.1
Barnstable	25	1,287	21	16.3	85.7	4.8	9.5	0.0
Boston	1	22,240	578	26.0	12.6	41.2	34.1	11.9
Brockton	6	3,304	161	48.7	30.4	35.4	19.3	14.9
Brookline	17	1,382	3	-- ⁴	-- ⁴	-- ⁴	-- ⁴	-- ⁴
Cambridge	5	3,733	25	6.7	28.0	44.0	16.0	12.0
Chicopee	21	1,809	64	35.4	71.9	3.1	25.0	0.0
Fall River	8	2,915	171	58.7	71.9	3.5	14.6	9.9
Framingham	14	1,925	44	22.9	52.3	4.5	40.9	2.3
Haverhill	16	1,793	56	31.2	57.1	3.6	37.5	1.8
Lawrence	13	2,847	226	79.4	11.1	0.9	87.2	0.9
Lowell	4	3,913	194	49.6	31.4	3.6	34.5	30.4
Lynn	9	2,990	135	45.2	18.5	7.4	57.8	16.3
Malden	18	1,391	28	20.1	64.3	21.4	3.6	10.7
Medford	20	1,749	16	9.1	50.0	12.5	18.8	18.8
Methuen	28	1,264	38	30.1	57.9	2.6	39.5	0.0
New Bedford	7	2,978	183	61.5	48.1	6.0	36.1	9.3
Newton	11	3,411	9	2.6	88.9	0.0	11.1	0.0
Peabody	24	1,300	24	18.5	58.3	4.2	37.5	0.0
Pittsfield	27	1,361	59	43.4	72.9	13.6	8.5	5.1
Plymouth	23	1,577	27	17.1	92.6	0.0	3.7	3.7
Quincy	10	1,950	34	17.4	52.9	17.7	14.7	14.7
Revere	26	1,215	42	34.6	40.5	11.9	40.5	7.1
Somerville	12	2,087	36	17.3	47.2	11.1	36.1	5.6
Springfield	3	6,037	428	70.9	14.7	24.5	57.2	3.5
Taunton	19	1,652	54	32.7	64.8	3.7	16.7	13.0
Waltham	15	2,251	18	8.0	33.3	11.1	50.0	5.6
Weymouth	22	1,331	27	20.3	81.5	3.7	3.7	11.1
Worcester	2	6,918	250	36.1	44.0	8.4	42.8	4.4

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 DPH 2000 population estimates, based on the U.S. Census 2000 population counts. Birth rates represent the number of births per 1,000 females age 15-19. 3. Mothers who designated themselves as Asian, American Indian, or Other. 4. Calculations based on fewer than five teen births overall are excluded. 5. Less than 2,500 grams or 5.5 pounds. 6. Less than 37 weeks gestational age. 7. Based on Adequacy of Prenatal Care Utilization (APNCU) Index. Please see Section Definitions for definitions of index and adequacy categories.

**Table B-11 (continued). Resident Teen Birth Characteristics, 30 Largest Municipalities,
Massachusetts: 2004**

Municipality	Public payment for prenatal care ⁴ (%)	Unmarried (%)	Low Birthweight ⁵ (%)	Preterm ⁶ (%)	Adequacy of Prenatal Care ⁷			
					Adequate Intensive	Adequate Basic	Intermediate	Inadequate
State Total	76.3	92.8	10.2	10.1	34.2	36.9	9.5	19.5
Arlington	57.1	100.0	0.0	14.3	16.7	16.7	0.0	66.7
Attleboro	59.4	100.0	5.6	5.4	19.4	22.2	16.7	41.7
Barnstable	61.9	76.2	14.3	14.3	47.6	42.9	0.0	9.5
Boston	78.9	96.0	12.2	12.8	35.2	42.8	7.8	14.3
Brockton	87.0	98.1	14.9	18.0	34.2	25.5	9.9	30.4
Brookline	— ⁴	— ⁴	— ⁴	— ⁴	— ⁴	— ⁴	— ⁴	— ⁴
Cambridge	64.0	88.0	4.0	8.0	48.0	28.0	4.0	20.0
Chicopee	80.3	90.6	9.4	12.7	28.6	46.0	6.4	19.0
Fall River	83.8	90.6	10.6	5.9	70.5	12.7	1.2	15.7
Framingham	77.3	72.7	6.8	2.3	50.0	40.9	6.8	2.3
Haverhill	75.0	87.5	8.9	7.1	33.9	42.9	7.1	16.1
Lawrence	84.4	96.5	11.1	12.4	27.0	43.4	14.6	15.0
Lowell	78.4	94.3	10.4	9.3	29.4	28.4	13.9	28.4
Lynn	90.2	89.6	6.7	8.9	32.8	27.6	13.4	26.1
Malden	67.9	96.4	10.7	3.6	25.0	42.9	7.1	25.0
Medford	62.5	87.5	12.5	6.3	25.0	56.3	6.3	12.5
Methuen	68.4	92.1	13.2	15.8	39.5	39.5	5.3	15.8
New Bedford	85.5	92.9	7.3	6.0	28.6	40.6	12.6	18.3
Newton	33.3	44.4	0.0	0.0	44.4	22.2	11.1	22.2
Peabody	87.5	83.3	16.7	20.8	25.0	29.2	12.5	33.3
Pittsfield	78.0	91.5	6.8	5.1	8.5	47.5	28.8	15.3
Plymouth	73.1	100.0	0.0	3.7	44.4	14.8	14.8	25.9
Quincy	73.5	88.2	5.9	14.7	23.5	55.9	8.8	11.8
Revere	71.4	97.6	9.5	9.5	52.4	16.7	0.0	31.0
Somerville	69.4	88.9	8.3	8.3	34.3	37.1	8.6	20.0
Springfield	89.4	96.0	12.9	10.7	27.2	38.8	10.4	23.6
Taunton	76.5	90.7	14.8	9.3	32.7	26.9	17.3	23.1
Waltham	66.7	77.8	16.7	16.7	38.9	22.2	16.7	22.2
Weymouth	59.3	88.9	0.0	0.0	33.3	40.7	7.4	18.5
Worcester	74.5	94.0	11.2	9.6	31.9	36.3	14.1	17.7

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 DPH 2000 population estimates, based on the U.S. Census 2000 population counts. 2. Birth rates represent the number of births per 1,000 females ages 15-19. 3. Mothers who designated themselves as Asian, American Indian, or Other. 4. Calculations based on fewer than five teen births overall are excluded. 5. Less than 2,500 grams or 5.5 pounds. 6. Less than 37 weeks gestational age. 7. Based on Adequacy of Prenatal Care Utilization (APNCU) Index. Please see Section Definitions for definitions of index and adequacy categories.

**Table B-12. Trends in Teen Birth Rates for Selected Communities¹, Ranked by 2004 Teen Birth Rate²,
Massachusetts: 1994, 2003, 2004**

2004 Rank	Municipality	1994 ³	2003	2004
		Number of Teen Births	Number of Teen Births	Number of Teen Births
		Teen Birth Rate	Teen Birth Rate	Teen Birth Rate
	State Total	6,412	33.2	4,639
1	Lawrence	338	134.2	236
2	Holyoke	196	143.6	139
3	Springfield	563	105.0	479
4	Southbridge	50	90.3	37
5	Chelsea	97	116.0	68
6	New Bedford	265	87.4	169
7	Fall River	166	60.2	163
8	Lowell	237	67.2	174
9	Brockton	204	75.5	148
10	Fitchburg	106	66.8	75
11	Lynn	197	85.9	145
12	Pittsfield	48	36.0	72
13	Worcester	345	56.2	263
14	Chicopee	69	40.7	59
15	Revere	49	50.7	50
16	Everett	39	41.9	41
17	Taunton	87	59.1	58
18	Attleboro	49	48.2	45
19	Haverhill	76	50.8	53
20	Methuen	52	42.9	29
21	Boston	982	53.3	573
22	Framingham	53	28.1	38
23	Westfield	39	24.1	24
24	Quincy	42	21.2	43
25	Somerville	73	42.9	46

1. Selected communities include the 25 Massachusetts cities and towns with the greatest number of teen births. Ranking is by 2004 teen birth rate. 2. Rates are per 1,000 females ages 15-19 per city/town.
3. Source for 1994 births and rates: Massachusetts Community Health Information Profile (MassCHIP), MDPH, v3.0 r313, January 2006; natality dataset and MISER 1994 population estimate.

Table B-13. Births by Birthweight, Race and Hispanic Ethnicity, Massachusetts: 2004

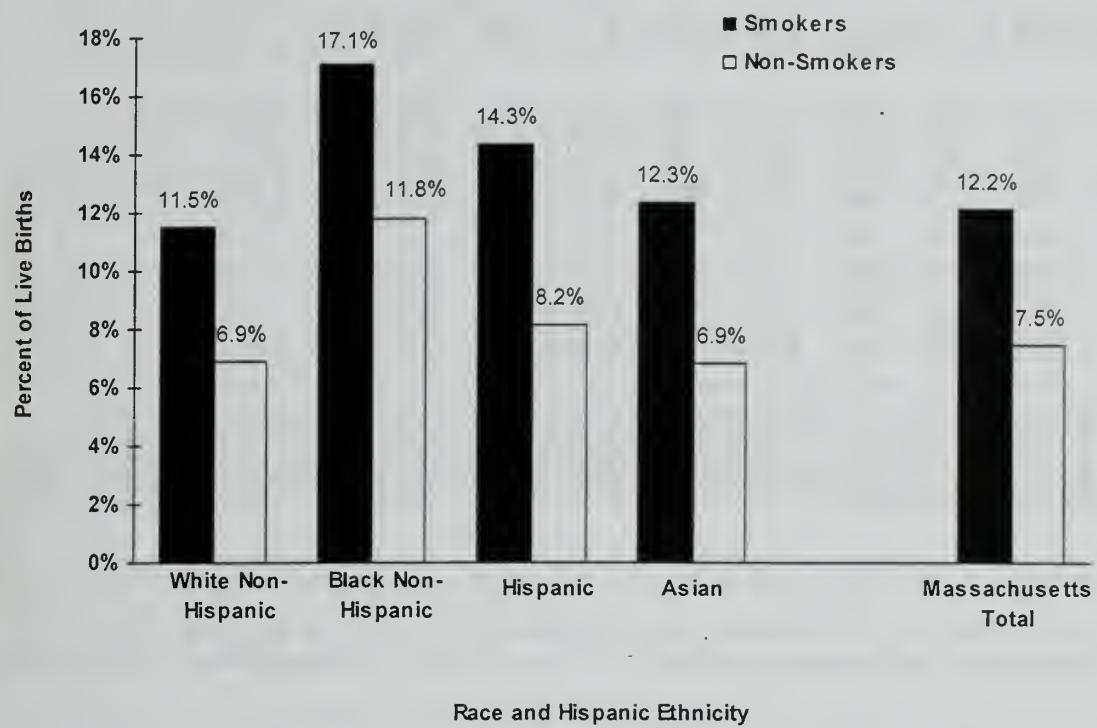
Birthweight (in grams)	Total		White non-Hispanic		Black non-Hispanic		Hispanic		Asian		Other		Unknown race/ethnicity	
	n	% ¹	n	% ¹	n	% ¹	n	% ¹	n	% ¹	n	% ¹	n	% ¹
State Total	78,460	100.0	55,322	100.0	6,053	100.0	9,798	100.0	5,454	100.0	1,730	100.0	103	
<500	125	0.2	59	0.1	32	0.5	23	0.2	4	— ²	5	0.3	2	
500-999	380	0.5	222	0.4	70	1.2	49	0.5	21	0.4	17	1.0	1	
1000-1499	643	0.8	406	0.7	111	1.8	81	0.8	32	0.6	12	0.7	1	
1500-1999	1,288	1.6	883	1.6	143	2.4	172	1.8	68	1.2	22	1.3	0	
2000-2499	3,689	4.7	2,454	4.4	377	6.2	509	5.2	253	4.6	92	5.3	4	
2500-2999	12,193	15.5	7,642	13.8	1,211	20.0	1,784	18.2	1,239	22.7	308	17.8	9	
3000-3499	28,780	36.7	19,604	35.4	2,279	37.7	3,846	39.3	2,380	43.6	651	37.6	20	
3500-3999	23,100	29.4	17,510	31.7	1,395	23.0	2,505	25.6	1,197	21.9	478	27.6	15	
4000-4499	6,879	8.8	5,472	9.9	353	5.8	703	7.2	224	4.1	119	6.9	8	
4500-4999	1,155	1.5	934	1.7	69	1.1	102	1.0	32	0.6	18	1.0	0	
>=5000	101	0.1	83	0.2	7	0.1	10	0.1	0	0.0	1	0.1	0	
Unknown birthweight	127	0.2	53	0.1	6	0.1	14	0.1	4	— ²	7	0.4	43	
VLBW ³ (0-1,499 g)	1,148	1.5	687	1.2	213	3.5	153	1.6	57	1.0	34	2.0	4	
LBW ⁴ (0-2,499 g)	6,125	7.8	4,024	7.3	733	12.1	834	8.5	378	6.9	148	8.6	8	

NOTE: Percentages for detailed birthweight rows ("<500" through "Unknown birthweight") are calculated based on births including those with unknown birthweight. Percentages for VLBW and LBW rows are calculated based on births with known birthweights only

1. Percentages are based on column totals. 2. Calculations based on fewer than five events 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.)

Figure B-11. Low Birthweight¹ Among Smoking and Nonsmoking² Mothers by Race and Hispanic Ethnicity, Massachusetts: 2004



NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated. Maternal smoking is self-reported on the Parent Worksheet of the Birth Certificate; these data should be interpreted cautiously.

1. Low birthweight: less than 2,500 grams or 5.5 pounds.
2. Based on information provided on the parent worksheet for birth certificates

**Table B-14. Low Birthweight (LBW)¹ by Maternal Age, Race and Hispanic Ethnicity,
Massachusetts: 2004**

Mother's Age (in years)	Total LBW Infants n	Total LBW Infants % ³	White non- Hispanic n	White non- Hispanic % ³	Black non- Hispanic n	Black non- Hispanic % ³	Hispanic n	Hispanic % ³	Asian n	Asian % ³	Other ⁴ n	Other ⁴ % ³	Unknown ⁵ n
State Total²	6,125	7.8	4,024	7.3	733	12.1	834	8.5	378	6.9	148	8.6	8
<18	171	11.5	49	8.7	26	12.1	73	12.5	9	13.4	14	22.2	0
18-19	296	9.5	129	8.2	46	12.1	95	10.1	9	10.1	16	13.2	1
20-24	938	8.1	436	6.9	166	12.5	256	8.5	45	7.5	34	8.1	1
25-29	1,208	6.8	726	6.1	172	11.4	185	7.4	92	6.3	33	7.0	0
30-34	1,872	7.3	1,397	7.0	186	12.1	126	7.2	135	6.4	24	5.8	4
35-39	1,221	8.2	955	7.9	100	11.8	74	9.1	72	7.6	19	9.9	1
40+	417	12.0	330	11.8	37	15.1	25	12.8	16	9.0	8	14.5	1

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

1. Low Birthweight (LBW): less than 2,500 grams or 5.5 pounds at birth. 2. State totals include women of unknown age. 3. Percentages are based upon the number of low birthweight infants divided by the total births in each age and race/ethnicity category. 4. Other races include American Indian and others not specified. 5. Race and/or mother's age unknown.

Table B-15. Low Birthweight by Plurality, Massachusetts: 1994-2004

Age Group	Year	Singleton										Multiples										Total Births														
		VLBW ¹					LBW ²					Twin					Triplets or more					Total Multiples					VLBW ¹					LBW ²				
		n	%	n	%	n	n	%	n	%	n	n	%	n	n	%	n	n	%	n	n	%	n	n	%	n	n	%	n	n	%					
All Ages	1994	687	0.8	4,015	5.0	223	9.5	1,122	47.9	66	30.8	198	92.5	289	11.3	1,320	51.6	976	1.2	5,335	6.4															
	1995	674	0.9	3,867	4.9	227	9.4	1,128	46.6	63	31.8	-	-	290	11.1	1,307	49.9	964	1.2	5,174	6.4															
	1996	657	0.9	3,674	4.8	227	8.8	1,264	49.1	45	24.5	167	90.8	272	9.9	1,431	51.9	929	1.2	5,105	6.4															
	1997	731	0.9	3,938	5.1	292	10.3	1,439	50.5	75	28.6	240	91.6	367	11.8	1,679	54.0	1,098	1.4	5,617	7.0															
	1998	690	0.9	3,819	4.9	298	9.6	1,570	50.7	82	28.5	266	92.4	380	11.2	1,836	54.2	1,070	1.3	5,655	7.0															
	1999	731	0.9	3,869	5.0	324	10.3	1,617	51.6	65	26.5	222	90.6	389	11.5	1,839	54.5	1,120	1.4	5,708	7.1															
	2000	722	0.9	3,886	5.1	284	8.9	1,603	50.0	84	35.0	222	92.5	368	10.7	1,825	53.0	1,090	1.4	5,711	7.1															
	2001	730	0.9	3,931	5.1	310	9.2	1,654	49.2	74	32.9	210	93.3	384	10.7	1,864	52.0	1,114	1.4	5,795	7.2															
	2002	699	0.9	3,972	5.2	342	9.2	1,855	50.2	68	28.0	233	95.9	410	10.4	2,088	53.0	1,109	1.4	6,060	7.5															
	2003	713	0.9	4,006	5.3	331	9.3	1,877	52.9	71	28.5	232	93.2	402	10.6	2,109	55.6	1,115	1.4	6,115	7.6															
	2004	740	1.0	4,015	5.4	324	9.2	1,879	53.2	84	34.4	231	94.7	408	10.8	2,110	55.9	1,148	1.5	6,125	7.8															
Ages < 35	1994	567	0.8	3,397	5.0	181	9.9	891	48.5	47	28.7	150	91.5	228	11.4	1,041	52.0	796	1.1	4,438	6.3															
	1995	543	0.8	3,187	4.9	196	11.0	852	47.9	52	36.9	135	95.7	248	12.9	987	51.4	791	1.2	4,174	6.2															
	1996	501	0.8	2,937	4.7	194	10.2	944	49.9	32	27.1	111	94.1	226	11.2	1,055	52.5	727	1.1	3,992	6.1															
	1997	566	0.9	3,179	5.1	214	11.0	1,030	53.0	46	27.1	153	90.0	260	12.3	1,183	55.9	826	1.3	4,362	6.8															
	1998	540	0.9	3,086	4.9	248	11.4	1,148	52.5	60	35.3	153	90.0	308	13.1	1,301	55.2	848	1.3	4,387	6.8															
	1999	569	0.9	3,082	5.0	231	10.8	1,124	52.6	49	32.9	138	92.6	280	12.3	1,262	55.2	849	1.3	4,344	6.8															
	2000	555	0.9	3,096	5.1	204	9.4	1,097	50.7	49	38.0	125	96.9	253	11.0	1,222	53.3	808	1.3	4,318	6.9															
	2001	576	1.0	3,147	5.2	235	10.7	1,156	52.4	41	31.3	120	91.6	276	11.8	1,276	54.6	852	1.4	4,423	7.0															
	2002	537	0.9	3,129	5.2	237	10.0	1,229	51.9	42	33.1	125	98.4	279	11.2	1,354	54.2	816	1.3	4,483	7.2															
	2003	539	0.9	3,161	5.3	256	10.7	1,325	55.5	38	32.2	114	96.6	294	11.7	1,439	57.5	833	1.3	4,600	7.5															
	2004	565	1.0	3,128	5.4	207	9.3	1,224	55.0	56	39.7	133	94.3	263	11.1	1,357	57.3	828	1.4	4,485	7.5															
Ages 35+	1994	120	1.0	618	4.9	42	8.3	231	45.6	19	38.0	48	96.0	61	11.0	279	50.1	181	1.4	897	6.9															
	1995	130	1.0	679	5.1	31	4.8	276	43.0	11	19.3	44	77.2	42	6.0	320	45.8	172	1.2	999	7.2															
	1996	156	1.1	737	5.4	33	4.9	320	47.1	13	19.7	56	84.8	46	6.2	376	50.5	202	1.4	1,113	7.7															
	1997	165	1.1	759	5.2	78	8.6	409	45.3	29	31.5	87	94.6	107	10.8	496	49.9	272	1.7	1,255	8.1															
	1998	150	1.0	733	4.8	50	5.5	422	46.2	22	18.6	113	95.8	72	7.0	535	51.8	222	1.4	1,268	7.8															
	1999	162	1.0	787	5.0	93	9.3	493	49.5	16	16.7	84	87.5	109	10.0	577	52.8	271	1.6	1,364	8.2															
	2000	167	1.0	790	4.9	80	7.7	506	48.6	35	31.5	97	87.4	115	10.0	603	52.3	282	1.6	1,393	8.1															
	2001	154	0.9	784	4.7	75	6.5	498	43.2	33	35.1	90	95.7	108	8.7	588	47.2	262	1.5	1,372	7.7															
	2002	161	1.0	842	5.0	105	7.9	626	47.1	26	22.4	108	93.1	131	9.1	734	50.8	292	1.6	1,576	8.6															
	2003	174	1.0	844	5.0	75	6.5	552	47.5	33	25.2	118	90.1	108	8.4	670	51.9	282	1.5	1,514	8.3															
	2004	174	1.0	886	5.2	117	9.0	655	50.2	28	27.2	98	95.1	145	10.3	753	53.5	319	1.7	1,639	8.9															

NOTE: 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 fewer than five events are excluded.

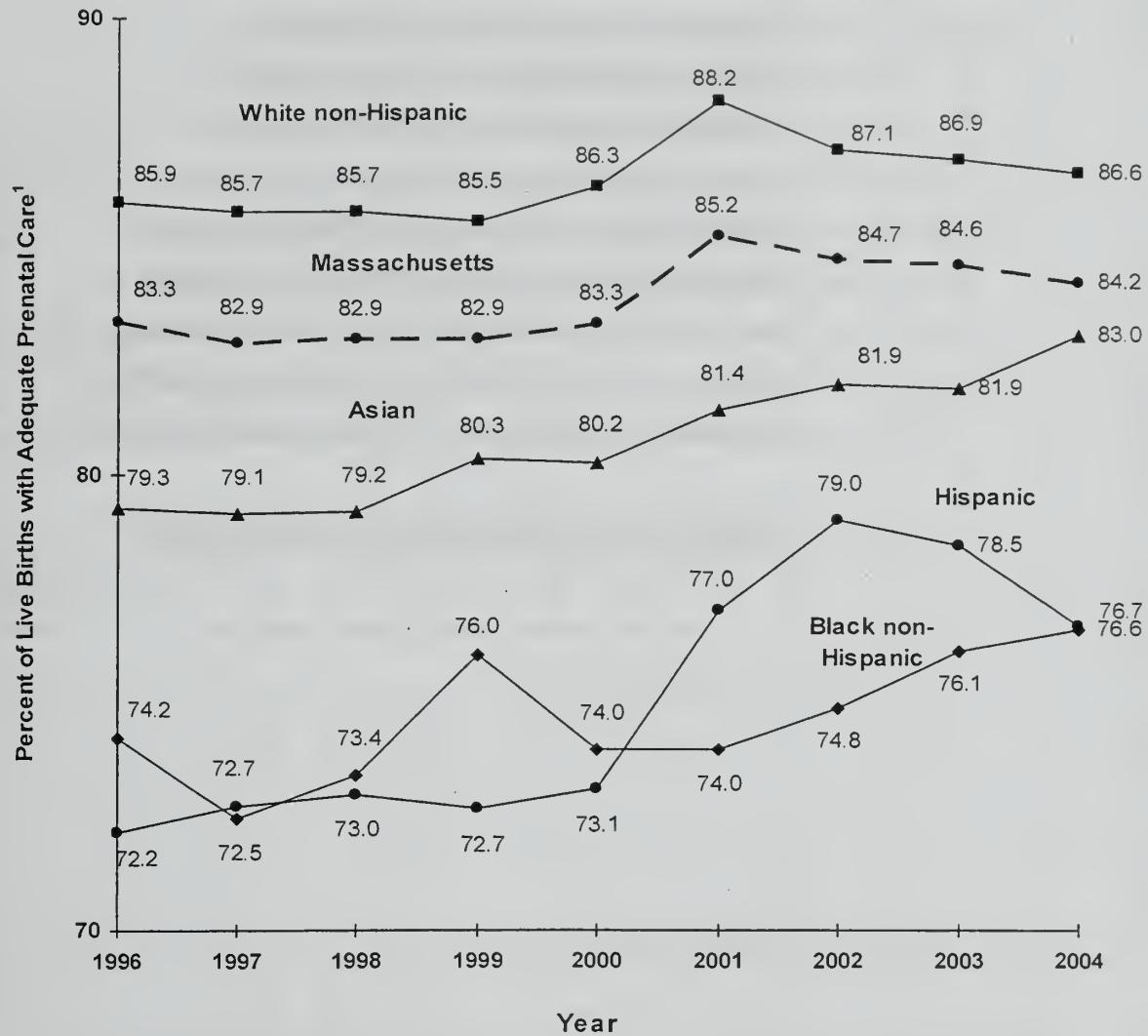
Table B-16. Births by Gestational Age¹, Race and Hispanic Ethnicity, Massachusetts: 2004

Gestational Age ⁴ (weeks completed)	Total n	% ²	White non- Hispanic n	% ²	Black non- Hispanic n	% ²	Hispanic n	% ²	Asian n	% ²	Other ³ n	% ²	Unknown n
State Total	78,460	100.0	55,322	100.0	6,053	100.0	9,798	100.0	5,454	100.0	1,730	100.0	103
<20	24	0.0	8	0.0	7	0.1	7	0.1	2	— ⁸	0	0.0	0
20-23	149	0.2	77	0.1	32	0.5	25	0.3	5	0.1	7	0.4	3
24-27	322	0.4	198	0.4	57	0.9	38	0.4	17	0.3	12	0.7	0
28-31	750	1.0	507	0.9	118	1.9	81	0.8	31	0.6	12	0.7	1
32-35	3,296	4.2	2,340	4.2	289	4.8	417	4.3	173	3.2	73	4.2	4
36	2,681	3.4	1,932	3.5	280	4.6	278	2.8	139	2.5	49	2.8	3
37-39	37,810	48.2	26,598	48.1	2,773	45.8	4,756	48.5	2,865	52.5	800	46.2	18
40	23,989	30.6	16,996	30.7	1,757	29.0	2,992	30.5	1,674	30.7	544	31.4	26
41	8,416	10.7	6,043	10.9	643	10.6	1,034	10.6	503	9.2	189	10.9	4
42	716	0.9	439	0.8	76	1.3	137	1.4	34	0.6	30	1.7	0
43	22	0.0	10	0.0	3	— ⁸	5	0.1	3	— ⁸	1	— ⁸	0
44+	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Unknown⁵	285	0.4	174	0.3	18	0.3	28	0.3	8	0.1	13	0.8	44
Very early gestation, <28 weeks⁶													
Preterm, <37 weeks⁷	495	0.6	283	0.5	96	1.6	70	0.7	24	0.4	19	1.1	3
<37 weeks⁷	7,222	9.2	5,062	9.2	783	13.0	846	8.7	367	6.7	153	8.9	11

NOTE: Percentages for detailed gestational age category rows ("<20" through "Unknown") are calculated based on births including those with unknown gestational age. Percentages for "Very early gestation" and "Preterm" rows are calculated based on births with known gestational age only.

1. A clinical estimate of the number of weeks of pregnancy completed, as estimated by the attendant at birth or the postnatal physician. 2. Percentages are based on column total. 3. Other races include American Indian and others not specified. 4. Normal gestational age is defined as 37-42 weeks. 5. Estimate of gestational age not provided. 6. Also known as extremely premature delivery, or preterm delivery. 7. Also known as early gestational age, premature delivery, or preterm delivery. 8. Calculations based on fewer than five events are excluded.

Figure B-12. Trends in Adequacy of Prenatal Care¹ by Race and Hispanic Ethnicity, Massachusetts: 1996-2004

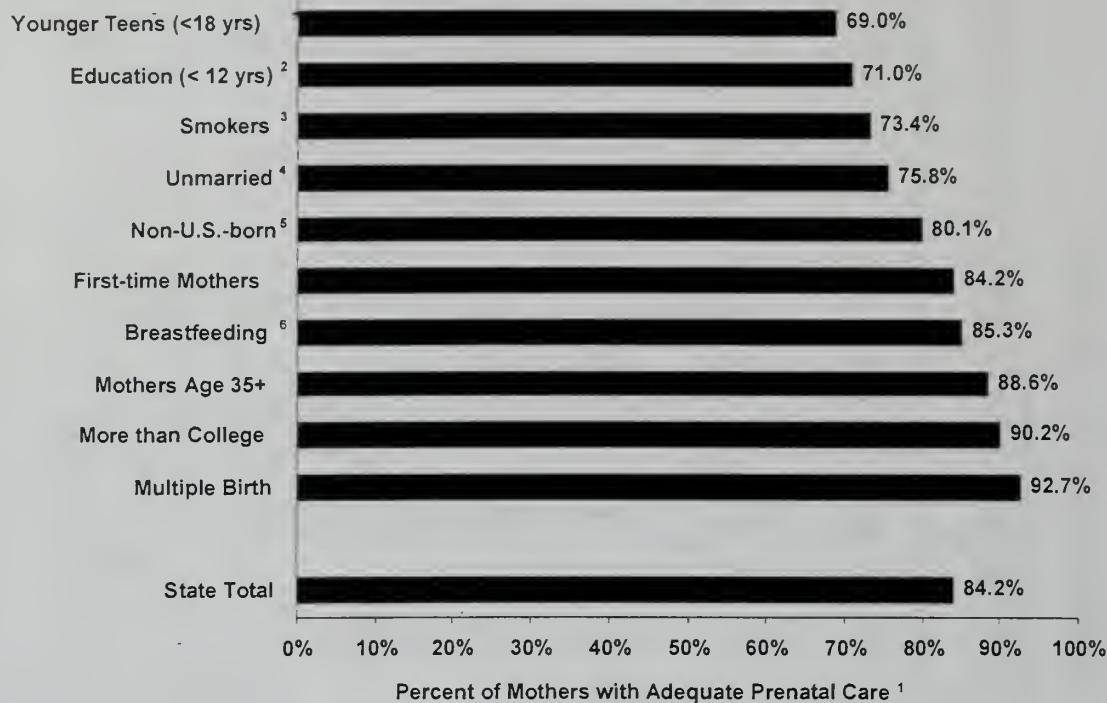


PLEASE NOTE THAT THE VERTICAL SCALE OF GRAPH REPRESENTS A SMALL INTERVAL (from 70% to 90%) FOR PURPOSES OF VISUAL REPRESENTATION.

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

1. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. Please note: The APNCU is an assessment of the timing and number of prenatal care visits and not an evaluation of the quality of care delivered.

Figure B-13. Adequacy of Prenatal Care¹ for Selected Maternal Characteristics, Massachusetts: 2004



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

1. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. 2. Women 20 years of age and older. 3. Smoking during pregnancy is self-reported by the mother and should be interpreted with caution. 4. Marital status at time of birth. 5. Non-U.S.-born includes women born outside of the 50 U.S. states, District of Columbia, and U.S. territories (Puerto Rico, U.S. Virgin Islands, Guam). 6. Mother was or was intending to breastfeed at the time the birth certificate was completed.

Table B-17. Adequacy of Prenatal Care¹ by Selected Characteristics, Massachusetts: 2004

	Adequate Total ²		Adequate Intensive		Adequate Basic		Intermediate		Inadequate		Unknown
	n	%	n	%	n	%	n	%	n	%	n
State Total	65,362	84.2%	31,062	40.0%	34,300	44.2%	5,938	7.6%	6,322	8.1%	838
Age	Maternal Demographics										
<18	1,021	69.0	503	34.0	518	35.0	121	8.2	337	22.8	17
18-19	2,200	71.9	1,048	34.3	1,152	37.7	304	9.9	555	18.1	46
20-24	8,867	76.9	4,179	36.2	4,688	40.7	1,016	8.8	1,648	14.3	139
25-29	14,690	83.1	6,849	38.7	7,841	44.3	1,504	8.5	1,494	8.4	226
30-34	22,373	87.5	10,303	40.3	12,070	47.2	1,847	7.2	1,350	5.3	234
35-39	13,152	88.6	6,468	43.6	6,684	45.1	954	6.4	730	4.9	141
40+	3,058	88.5	1,712	49.5	1,346	38.9	191	5.5	208	6.0	33
Educational Attainment											
< than High School	5,593	70.2	2,876	36.1	2,717	34.1%	826	10.4	1,552	19.5	132
High School	15,185	80.6	7,301	38.8	7,884	41.8%	1,535	8.1	2,121	11.3	231
Some college	14,449	84.7	7,225	42.3	7,224	42.3%	1,311	7.7	1,302	7.6	236
College	18,932	88.8	8,396	39.4	10,536	49.4%	1,504	7.1	880	4.1	101
More than college	11,130	90.2	5,230	42.4	5,900	47.8%	756	6.1	448	3.6	75
Race/Hispanic Ethnicity											
Hispanic	7,429	76.7	3,587	37.0	3,842	39.6%	885	9.1	1,377	14.2	107
White non-Hispanic	47,512	86.6	22,442	40.9	25,070	45.7%	4,052	7.4	3,297	6.0	461
Black non-Hispanic	4,522	76.6	2,305	39.0	2,217	37.5%	459	7.8	924	15.6	148
Asian	4,509	83.0	2,093	38.5	2,416	44.5%	403	7.4	518	9.5	24
Other	1,347	79.9	612	36.3	735	43.6%	135	8.0	203	12.0	45
Birthplace											
U.S. States/D.C.	48,133	85.8	22,917	40.9	25,216	44.9%	4,206	7.5	3,759	6.7	582
Puerto Rico/U.S. Terr.	1,530	79.5	727	37.8	803	41.7%	153	8.0	241	12.5	25
Non-U.S.-Born	15,674	80.1	7,403	37.8	8,271	42.3%	1,574	8.0	2,321	11.9	223
Parity ³	Pregnancy-Related Factors										
1	28,988	84.2	13,524	39.3	15,464	44.9%	2,643	7.7	2,790	8.1	281
2-3	32,249	85.3	15,435	40.8	16,814	44.5%	2,841	7.5	2,727	7.2	375
4+	4,049	76.5	2,065	39.0	1,984	37.5%	449	8.5	793	15.0	85
Smoking ⁴											
Yes	4,211	73.4	2,233	38.9	1,978	34.5%	539	9.4	988	17.2	71
No	61,090	85.1	28,797	40.1	32,293	45.0%	5,395	7.5	5,318	7.4	715
Plurality	Birth Outcomes										
Singleton	61,914	83.8	28,048	38.0	33,866	45.8%	5,866	7.9	6,123	8.3	774
Multiple birth	3,448	92.7	3,014	81.0	434	11.7%	72	1.9	199	5.4	64
Birthweight											
<500 g	95	89.6	87	82.1	8	7.5%	0	0.0	11	10.4	19
500-1,499 g	877	89.4	810	82.6	67	6.8%	23	2.3	81	8.3	42
1,499-2,499 g	4,251	86.8	3,483	71.2	768	15.7%	152	3.1	492	10.1	82
2,500-3,999 g	53,320	83.9	24,090	37.9	29,230	46.0%	5,036	7.9	5,184	8.2	533
4,000+ g	6,800	84.2	2,574	31.9	4,226	52.3%	727	9.0	552	6.8	56
Gestational Age											
<28 weeks	409	89.3	384	83.8	25	5.5%	10	2.2	39	8.5	37
<37 weeks	6,314	89.5	5,603	79.4	711	10.1%	175	2.5	569	8.1	164
37-42 weeks	58,924	83.7	25,398	36.1	33,526	47.6%	5,746	8.2	5,724	8.1	537

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

1. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. See Section Definitions for and explanation of Index and its categories. 2. Adequate Total is the sum of Adequate Intensive and Adequate Basic. 3. Parity is the number of live births including this birth. 4. Smoking during pregnancy is self-reported by the mother and should be interpreted with caution. 4. Calculations based on fewer than five events are excluded.

Table B-18. Adequacy of Prenatal Care Initiation¹ by Selected Characteristics, Massachusetts: 2004

	<u>Adequate Total</u> ²		<u>Adequate Intensive</u>		<u>Adequate Basic</u>		<u>Intermediate</u>		<u>Inadequate</u>		<u>Unknown</u>
	n	%	n	%	n	%	n	%	n	%	n
State Total	71,799	92.5%	31,944	41.2%	39,855	51.3%	3,626	4.7%	2,197	2.8%	838
Age											
<18	1,153	78.0	382	25.8	771	52.1%	203	13.7	123	8.3	17
18-19	2,534	82.8	973	31.8	1,561	51.0%	332	10.9	193	6.3	46
20-24	9,980	86.5	4,081	35.4	5,899	51.2%	972	8.4	579	5.0	139
25-29	16,327	92.3	7,315	41.4	9,012	50.9%	859	4.9	502	2.8	226
30-34	24,365	95.3	11,266	44.1	13,099	51.2%	748	2.9	457	1.8	234
35-39	14,174	95.5	6,481	43.7	7,693	51.9%	398	2.7	264	1.8	141
40+	3,264	94.4	1,445	41.8	1,819	52.6%	114	3.3	79	2.3	33
Educational Attainment											
< than High School	6,521	81.8	2,295	28.8	4,226	53.0%	927	11.6	523	6.6	132
High School	16,865	89.5	7,149	37.9	9,716	51.6%	1,234	6.5	742	3.9	231
Some college	15,868	93.0	7,077	41.5	8,791	51.5%	744	4.4	450	2.6	236
College	20,529	96.3	9,819	46.1	10,710	50.2%	473	2.2	314	1.5	101
More than college	11,935	96.8	5,572	45.2	6,363	51.6%	241	2.0	158	1.3	75
Race/Hispanic Ethnicity											
Hispanic	8,403	86.7	3,626	37.4	4,777	49.3%	827	8.5	461	4.8	107
White non-Hispanic	51,855	94.5	23,558	42.9	28,297	51.6%	1,897	3.5	1,109	2.0	461
Black non-Hispanic	5,043	85.4	2,186	37.0	2,857	48.4%	475	8.0	387	6.6	148
Asian	4,944	91.0	1,872	34.5	3,072	56.6%	329	6.1	157	2.9	24
Other	1,507	89.4	675	40.1	832	49.4%	96	5.7	82	4.9	45
Birthplace											
U.S. States/D.C.	52,668	93.9	23,807	42.4	28,861	51.4%	2,200	3.9	1,230	2.2	582
Puerto Rico/U.S. Terr.	1,710	88.9	730	37.9	980	50.9%	144	7.5	70	3.6	25
Non-U.S.-Born	17,391	88.9	7,387	37.7	10,004	51.1%	1,282	6.6	896	4.6	223
Parity³											
1	31,823	92.5	14,331	41.6	17,492	50.8%	1,579	4.6	1,019	3.0	281
2-3	35,329	93.4	15,725	41.6	19,604	51.8%	1,597	4.2	891	2.4	375
4+	4,565	86.3	1,819	34.4	2,746	51.9%	448	8.5	278	5.3	85
Smoking⁴											
Yes	4,823	84.1	1,838	32.0	2,985	52.0%	540	9.4	375	6.5	71
No	66,909	93.2	30,084	41.9	36,825	51.3%	3,080	4.3	1,814	2.5	715
Plurality											
Singleton	68,269	92.4	30,186	40.8	38,083	51.5%	3,498	4.7	2,136	2.9	774
Multiple birth	3,530	94.9	1,758	47.3	1,772	47.6%	128	3.4	61	1.6	64
Birthweight											
<500 g	95	89.6	40	37.7	55	51.9%	3	-- ⁴	8	7.5	19
500-1,499 g	906	92.4	483	49.2	423	43.1%	48	4.9	27	2.8	42
1,499-2,499 g	4,435	90.6	2,097	42.8	2,338	47.8%	284	5.8	176	3.6	82
2,500-3,999 g	58,757	92.5	25,961	40.9	32,796	51.6%	2,973	4.7	1,810	2.8	533
4,000+ g	7,587	93.9	3,357	41.6	4,230	52.4%	318	3.9	174	2.2	56
Gestational Age											
<28 weeks	421	91.9	223	48.7	198	43.2%	22	4.8	15	3.3	37
<37 weeks	6,520	92.4	3,232	45.8	3,288	46.6%	317	4.5	221	3.1	164
37-42 weeks	65,137	92.5	28,648	40.7	36,489	51.8%	3,301	4.7	1,956	2.8	537

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

1. Based on the Adequacy of Initiation Index, a component index of the APNCU Index. See Section Definitions for an explanation of Index and its categories.

2. Adequate Total is the sum of Adequate Intensive and Adequate Basic. 3. Parity is the number of live births including this birth. 4. Smoking during pregnancy is self-reported by the mother and should be interpreted with caution. 4. Calculations based on fewer than five events are excluded.

Table B-19. Adequacy of Prenatal Care Visits¹ by Selected Characteristics, Massachusetts: 2004

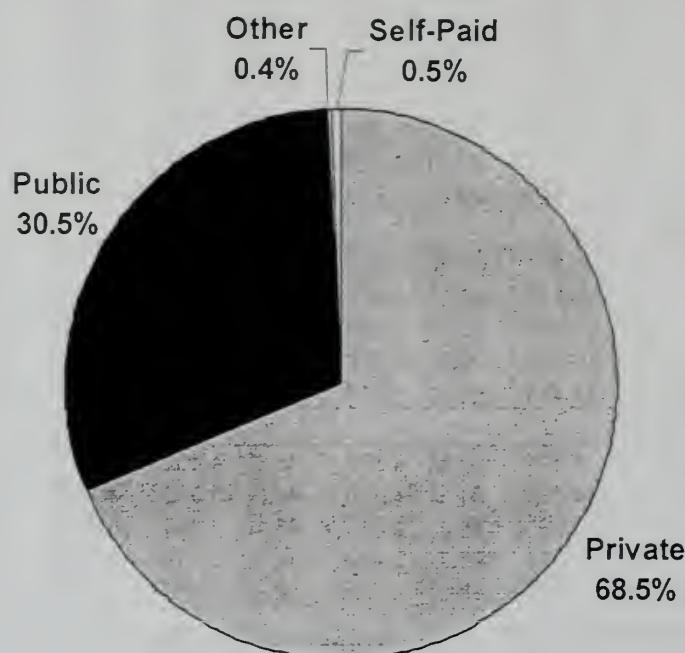
	Adequate Total ²		Adequate Intensive		Adequate Basic		Intermediate		Inadequate		Unknown
	n	%	n	%	n	%	n	%	n	%	n
State Total	70,246	90.5%	34,784	44.8%	35,462	45.7%	6,505	8.4%	871	1.1%	838
Age											
<18	1,288	87.1	707	47.8	581	39.3	154	10.4	37	2.5	17
18-19	2,638	86.2	1,393	45.5	1,245	40.7	359	11.7	62	2.0	46
20-24	10,135	87.9	5,130	44.5	5,005	43.4	1,180	10.2	216	1.9	139
25-29	15,844	89.6	7,686	43.5	8,158	46.1	1,636	9.2	208	1.2	226
30-34	23,406	91.5	11,105	43.4	12,301	48.1	1,961	7.7	203	0.8	234
35-39	13,713	92.4	6,925	46.7	6,788	45.8	1,005	6.8	118	0.8	141
40+	3,221	93.2	1,838	53.2	1,383	40.0	209	6.0	27	0.8	33
Educational Attainment											
< than High School	6,766	84.9	3,748	47.0	3,018	37.9	989	12.4	216	2.7	132
High School	16,816	89.3	8,527	45.3	8,289	44.0	1,740	9.2	285	1.5	231
Some college	15,475	90.7	8,008	46.9	7,467	43.8	1,410	8.3	177	1.0	236
College	19,614	92.0	8,938	41.9	10,676	50.1	1,576	7.4	126	0.6	101
More than college	11,488	93.1	5,516	44.7	5,972	48.4	782	6.3	64	0.5	75
Race/Hispanic Ethnicity											
Hispanic	8,491	87.6	4,389	45.3	4,102	42.3	1,030	10.6	170	1.8	107
White non-Hispanic	50,062	91.3	24,410	44.5	25,652	46.8	4,319	7.9	480	0.9	461
Black non-Hispanic	5,235	88.7	2,840	48.1	2,395	40.6	544	9.2	126	2.1	148
Asian	4,923	90.7	2,406	44.3	2,517	46.4	454	8.4	53	1.0	24
Other	1,491	88.5	715	42.4	776	46.1	153	9.1	41	2.4	45
Birthplace											
U.S. States/D.C.	50,958	90.8	25,089	44.7	25,869	46.1	4,550	8.1	590	1.1	582
Puerto Rico/U.S. Terr.	1,704	88.6	851	44.2	853	44.3	181	9.4	39	2.0	25
Non-U.S.-Born	17,559	89.7	8,829	45.1	8,730	44.6	1,769	9.0	241	1.2	223
Parity³											
1	31,215	90.7	15,244	44.3	15,971	46.4	2,869	8.3	337	1.0	281
2-3	34,323	90.8	17,016	45.0	17,307	45.8	3,095	8.2	399	1.1	375
4+	4,623	87.4	2,478	46.8	2,145	40.5	536	10.1	132	2.5	85
Smoking⁴											
Yes	4,913	85.6	2,760	48.1	2,153	37.5	646	11.3	179	3.1	71
No	65,264	90.9	31,984	44.5	33,280	46.3	5,852	8.2	687	1.0	715
Plurality											
Singleton	66,630	90.2	31,624	42.8	35,006	47.4	6,433	8.7	840	1.1	774
Multiple birth	3,616	97.2	3,160	85.0	456	12.3	72	1.9	31	0.8	64
Birthweight											
<500 g	98	92.5	90	84.9	8	7.5	0	0.0	8	7.5	19
500-1,499 g	924	94.2	853	87.0	71	7.2	28	2.9	29	3.0	42
1,499-2,499 g	4,630	94.6	3,799	77.6	831	17.0	177	3.6	88	1.8	82
2,500-3,999 g	57,342	90.2	27,138	42.7	30,204	47.5	5,524	8.7	674	1.1	533
4,000+ g	7,233	89.5	2,886	35.7	4,347	53.8	775	9.6	71	0.9	56
Gestational Age											
<28 weeks	428	93.4	400	87.3	28	6.1	13	2.8	17	3.7	37
<37 weeks	6,730	95.4	5,964	84.5	766	10.9	202	2.9	126	1.8	164
37-42 weeks	63,382	90.0	28,750	40.8	34,632	49.2	6,283	8.9	729	1.0	537

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

1. Based on the Adequacy of Received Services (Visits) Index, a component index of the APNCU Index. See Section Definitions for an explanation of Index and its categories. 2. Adequate Total is the sum of Adequate Intensive and Adequate Basic. 3. Parity is the number of live births including this birth. 4.

Smoking during pregnancy is self-reported by the mother and should be interpreted with caution. 4. Calculations based on fewer than five events are excluded.

**Figure B-14 Distribution of Prenatal Care Payment Source¹,
Massachusetts: 2004**



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

1. Private: Commercial indemnity plan, commercial managed care (HMO, PPO, IPP, IPA, and other), or other private insurance. Public: 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.

Table B-20. Birth Characteristics by Race/Hispanic Ethnicity and Source of Prenatal Care Payment (Public/Private) -- Massachusetts: 2004

Race/Ethnicity and Payment Source	Births ¹		Teen Births				Birthweight			
	n	%	<18 Years		<20 Years		Very Low ² n	Very Low ² %	Low ³ N	Low ³ %
			n	%	n	%				
STATE TOTAL⁴	78,460	100.0	1,496	1.9	4,601	5.9	1,148	1.5	6,125	7.8
Public	23,422	30.5	1,097	4.7	3,438	14.7	350	1.5	2,042	8.7
Medicaid ⁵	17,727	23.1	873	4.9	2,694	15.2	249	1.4	1,538	8.7
Other Public ⁶	5,695	7.4	224	3.9	744	13.1	101	1.8	504	8.8
Private ⁷	52,551	68.5	353	0.7	1,018	1.9	686	1.3	3,747	7.1
White non-Hispanic	55,322	100.0	566	1.0	2,137	3.9	687	1.2	4,024	7.3
Public	10,448	19.4	328	3.1	1,403	13.4	108	1.0	841	8.0
Medicaid ⁵	8,385	15.6	273	3.3	1,161	13.8	76	0.9	658	7.8
Other Public ⁶	2,063	3.8	55	2.7	242	11.7	32	1.6	183	8.9
Private ⁷	42,952	79.7	218	0.5	654	1.5	499	1.2	2,928	6.8
Black non-Hispanic	6,053	100.0	214	3.5	595	9.8	213	3.5	733	12.1
Public	3,630	60.8	169	4.7	466	12.8	112	3.1	423	11.7
Medicaid ⁵	2,750	46.1	140	5.1	382	13.9	84	3.1	336	12.2
Other Public ⁶	880	14.7	29	3.3	84	9.5	28	3.2	87	9.9
Private ⁷	2,278	38.2	38	1.7	108	4.7	88	3.9	281	12.3
Hispanic	9,798	100.0	585	6.0	1,524	15.6	153	1.6	834	8.5
Public	6,920	71.2	498	7.2	1,311	18.9	104	1.5	584	8.4
Medicaid ⁵	4,635	47.7	366	7.9	924	19.9	67	1.4	383	8.3
Other Public ⁶	2,285	23.5	132	5.8	387	16.9	37	1.6	201	8.8
Private ⁷	2,690	27.7	74	2.8	188	7.0	41	1.5	221	8.2
Asian	5,454	100.0	67	1.2	156	2.9	57	1.0	378	6.9
Public	1,475	27.2	55	3.7	121	8.2	5	0.3	102	6.9
Medicaid ⁵	1,177	21.7	49	4.2	107	9.1	5	0.4	84	7.1
Other Public ⁶	298	5.5	6	2.0	14	4.7	0	0.0	18	6.0
Private ⁷	3,915	72.1	8	0.2	29	0.7	52	1.3	270	6.9
Other⁸	1,730	100.0	63	3.6	184	10.6	34	2.0	148	8.6
Public	941	57.0	47	5.0	136	14.5	21	2.2	91	9.7
Medicaid ⁵	773	46.8	45	5.8	119	15.4	17	2.2	76	9.8
Other Public ⁶	168	10.2	2	-- ⁸	17	10.1	4	-- ⁸	15	8.9
Private ⁷	683	41.3	15	2.2	39	5.7	4	-- ⁸	42	6.1

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. Very low birthweight: less than 1,500 grams or 3.3 pounds. 3. Low Birthweight: less than 2,500 grams or 5.5 pounds. 4. Total births do not equal Public + Private because Workers' Compensation, self-paid, and other are in the state total but not shown in the table. 5. Medicaid/MassHealth. 6. Other Public: Commonwealth, Healthy Start, Medicare, other government programs, and free care. 7. Private: commercial indemnity plans or commercial managed care organizations (HMO, PPO, IPP, or IPA). 8. Calculations based on fewer than five events are excluded. 9. Other: Mothers who designated their race as American Indian or "Other." 10. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. 11. Mother was breastfeeding or intending to breastfeed at the time the birth certificate was completed.

Table B-20. (continued) Birth Characteristics by Race/Hispanic Ethnicity and Source of Prenatal Care Payment (Public/Private) -- Massachusetts: 2004

Race/Ethnicity and Payment Source	Prenatal Care							
	Adequate ¹⁰		Began 1st Trimester		Cesarean Section		Breastfeeding ¹¹	
n	%	n	%	n	%	n	%	
STATE TOTAL⁴	65,362	84.2	64,958	83.5	24,295	31.0	60,718	78.9
Public	17,272	74.6	16,609	71.5	6,184	26.4	16,481	70.4
Medicaid⁵	13,295	75.7	12,793	72.7	4,739	26.8	12,131	68.5
Other Public⁶	3,977	71.1	3,816	67.7	1,445	25.4	4,350	76.4
Private⁷	46,596	89.0	46,815	89.3	17,418	33.2	43,499	82.8
White non-Hispanic	47,512	86.6	47,817	87.0	17,693	32.0	42,032	77.8
Public	7,937	76.5	7,683	73.9	2,810	26.9	6,567	62.9
Medicaid⁵	6,440	77.3	6,210	74.5	2,260	27.0	5,034	60.1
Other Public⁶	1,497	73.2	1,473	71.8	550	26.7	1,533	74.3
Private⁷	38,314	89.4	38,820	90.5	14,320	33.4	34,990	81.5
Black non-Hispanic	4,522	76.6	4,288	72.0	1,987	33.0	4,806	80.0
Public	2,517	71.3	2,390	67.0	1,089	30.1	2,744	75.6
Medicaid⁵	1,974	73.4	1,884	69.4	815	29.8	2,088	76.0
Other Public⁶	543	64.8	506	59.3	274	31.1	656	74.5
Private⁷	1,952	86.8	1,843	81.6	858	37.8	1,994	87.5
Hispanic	7,429	76.7	7,194	74.0	2,625	26.8	7,915	81.0
Public	5,033	73.5	4,921	71.6	1,740	25.2	5,437	78.6
Medicaid⁵	3,433	74.7	3,385	73.5	1,220	26.4	3,648	78.7
Other Public⁶	1,600	71.1	1,536	67.7	520	22.8	1,789	78.3
Private⁷	2,317	86.6	2,201	82.1	840	31.3	2,355	87.5
Asian	4,509	83.0	4,292	78.9	1,502	27.6	4,536	83.4
Public	1,071	73.1	925	62.9	296	20.1	963	65.3
Medicaid⁵	845	72.1	727	61.9	242	20.6	736	62.5
Other Public⁶	226	76.9	198	67.1	54	18.1	227	76.4
Private⁷	3,399	87.1	3,337	85.4	1,194	30.5	3,537	90.3
Other⁹	1,347	79.9	1,323	78.1	470	27.3	1,394	84.0
Public	707	76.4	682	73.3	247	26.3	763	81.3
Medicaid⁵	597	78.3	580	75.7	200	25.9	619	80.3
Other Public⁶	110	67.5	102	61.8	47	28.0	144	85.7
Private⁷	585	86.5	584	86.4	195	28.6	600	88.1

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. Very low birthweight: less than 1,500 grams or 3.3 pounds. 3. Low Birthweight: less than 2,500 grams or 5.5 pounds. 4. Total births do not equal Public + Private because Workers' Compensation, self-paid, and other are in the state total but not shown in the table. 5. Medicaid/MassHealth. 6. Other Public: Commonwealth, Healthy Start, Medicare, other government programs, and free care. 7. Private: commercial indemnity plans or commercial managed care organizations (HMO, PPO, IPP, or IPA). 8. Calculations based on fewer than five events are excluded. 9. Other: Mothers who designated their race as American Indian or "Other." 10. Based on the Adequacy of Prenatal Care Utilization (APNCU) Index. 11. Mother was breastfeeding or intending to breastfeed at the time the birth certificate was completed.

Table B-21. Cesarean Section Deliveries and Vaginal Births after Cesarean Section (VBACs) by Licensed Maternity Facility¹, All Births, Massachusetts: 2004

Facility	Occurrence Births ²	Total C-Sections		Primary C-Section ²		Repeat C-Sections		VBACs ²	
		n	% ^{3,4}	n	% ^{3,5}	n	% ^{3,6}	n	% ⁷
State Total	79,438	24,669	31.1	15,637	22.6	9,032	89.1	1,106	10.9
Anna Jaques Hspt.	743	192	25.8	124	19.1	68	71.6	27	28.4
Baystate Med. Ctr.	4,200	1,285	30.6	822	22.6	463	82.7	97	17.3
Berkshire Med. Ctr.	813	181	22.3	122	16.6	59	77.6	17	22.4
Beth Israel Deaconess Med. Ctr.	5,219	1,987	38.1	1,356	30.1	631	88.7	80	11.3
Beverly Hspt.	2,123	626	29.5	368	20.1	258	87.5	37	12.5
Boston Med. Ctr.	2,238	575	25.7	379	18.7	196	91.6	18	8.4
Brigham And Women's Hspt.	8,864	2,884	32.7	1,956	25.2	928	86.5	145	13.5
Brockton Hspt.	1,271	426	33.5	269	24.7	157	86.7	24	13.3
Cambridge Hspt.	1,096	302	27.6	187	19.4	115	87.1	17	12.9
Cape Cod Hspt.	932	254	27.3	146	18.1	108	87.1	16	12.9
Caritas Good Samaritan Med. Ctr.	974	345	35.4	211	25.4	134	93.1	10	6.9
Caritas Norwood Hspt.	604	189	31.3	123	23.3	66	86.8	10	13.2
Caritas St. Elizabeth's Med.	1,398	555	39.9	328	28.5	227	93.4	16	6.6
Charlton Memorial Hspt.	1,630	477	29.3	325	22.1	152	95.0	8	5.0
Cooley Dickinson Hspt.	906	228	25.2	152	18.6	76	84.4	14	15.6
Emerson Hspt.	1,312	447	34.1	254	23.1	193	91.5	18	8.5
Fairview Hspt.	172	46	26.7	27	17.6	19	100.0	0	0.0
Falmouth Hspt.	653	215	33.5	118	21.7	97	98.0	2	— ⁹
Franklin Med. Ctr.	449	107	23.8	71	17.4	36	87.8	5	12.2
Harrington Memorial Hspt.	460	145	31.5	94	23.6	51	83.6	10	16.4
Heywood Memorial Hspt.	539	116	21.5	62	13.1	54	80.6	13	19.4
Caritas Holy Family Hspt. And Med. Ctr.	1,342	541	40.3	319	28.6	222	98.2	4	— ⁹
Holyoke Hspt.	588	126	21.4	61	11.9	65	87.8	9	12.2
Jordan Hspt.	610	195	32.0	119	22.6	76	91.6	7	8.4
Lawrence General Hspt.	1,739	524	30.1	265	18.1	259	93.5	18	6.5
Leominster Hspt.	1,117	289	26.1	151	15.8	138	93.2	10	6.8

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

1. A licensed maternity facility is a medical unit licensed by the Commonwealth for the care of women during pregnancy and childbirth. 2. See Section Definitions for explanations of occurrence births, primary and repeat Cesarean sections, and VBACs. The percentages provided in this table are based on occurrence births, and may differ from data which are based on resident births, presented elsewhere in this book. 3. The percentage of Cesarean births reported is not adjusted for risk factors such as mother's age, birthweight, or complications of labor and delivery, which would influence the number of procedures in a particular facility. Caution should be used when comparing unadjusted percentages. 4. Percentage of total Cesarean sections= (total Cesarean births/all births) x 100. 5. Percentage primary Cesarean sections= (primary Cesarean sections/all births-repeat Cesarean sections-VBACs) x 100. 6. Percentage repeat Cesarean sections= (repeat Cesarean sections/ (repeat Cesarean sections + VBACs)) x100. 7. Percentage VBACs= (VBAC deliveries/ (repeat Cesarean sections + VBAC)) x 100. 8. This percentage is based on less than 40 total births (in denominator) and should be interpreted with caution. 9. Calculations based on fewer than five events are excluded.

Table B-21. (continued). Cesarean Section Deliveries and Vaginal Births after Cesarean Section (VBACs) by Licensed Maternity Facility¹, All Births, Massachusetts: 2004

Facility	Occurrence Births ²	Total C-Sections		Primary C-Section ²		Repeat C-Section ²		VBACs ²	
		n	% ^{3,4}	n	% ^{3,5}	n	% ^{3,6}	n	% ⁷
Lowell General Hspt.	1,899	550	29.0	339	20.5	211	86.8	32	13.2
Martha's Vineyard Hspt.	131	36	27.7	19	16.8	17	100.0	0	0.0
Massachusetts General Hspt.	3,537	1,072	30.3	731	23.3	341	84.6	62	15.4
Mary Lane Hspt.	130	38	29.2	24	20.7	14	100.0	0	0.0
Melrose-Wakefield Hspt.	1,460	529	36.2	322	25.9	207	95.0	11	5.0
Mercy Med. Ctr.	1,385	314	22.7	194	15.6	120	87.0	18	13.0
Metrowest Med. Ctr.-	2,022	742	36.7	466	26.7	276	100.0	0	0.0
Milford-Whitinsville Regional Hspt.	860	279	32.4	171	23.0	108	93.1	8	6.9
Morton Hspt.	522	188	36.0	118	26.8	70	85.4	12	14.6
Mount Auburn Hspt.	1,824	420	23.0	278	17.0	142	75.5	46	24.5
Nantucket Cottage Hspt.	103	18	17.5	16	15.8	2	-- ⁹	0	0.0
Newton Wellesley Hspt.	3,067	1,154	37.6	738	28.2	416	92.9	32	7.1
North Adams Regional Hspt.	292	78	26.7	54	20.2	24	96.0	1	-- ⁹
North Shore Med. Ctr. - Salem Hspt.	1,806	546	30.2	354	22.3	192	88.9	24	11.1
Saint Vincent Hspt.	1,856	478	25.8	293	18.1	185	76.8	56	23.2
Saints Memorial Med. Ctr.	671	219	32.6	142	24.0	77	96.3	3	-- ⁹
South Shore Hspt.	4,104	1,319	32.1	797	22.5	522	91.7	47	8.3
St. Luke's Hspt.	1,561	402	26.5	222	16.7	180	95.2	9	4.8
Sturdy Memorial Hspt.	1,065	346	32.5	235	24.9	111	91.7	10	8.3
Tobey Hspt.	517	105	20.4	73	15.4	32	80.0	8	20.0
Tufts-New England Med. Ctr. Hspt.	1,324	533	40.3	383	33.0	150	92.6	12	7.4
Umass Memorial Med. Ctr. - West Campus	4,480	1,282	28.6	816	20.7	466	87.3	68	12.7
Winchester Hospital	2,219	763	34.4	443	23.5	320	97.0	10	3.0

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

1. A licensed maternity facility is a medical unit licensed by the Commonwealth for the care of women during pregnancy and childbirth. 2. See Section Definitions for explanations of occurrence births, primary and repeat Cesarean sections, and VBACs. The percentages provided in this table are based on occurrence births, and may differ from data which are based on resident births, presented elsewhere in this book. 3. The percentage of Cesarean births reported is not adjusted for risk factors such as mother's age, birthweight, or complications of labor and delivery, which would influence the number of procedures in a particular facility. Caution should be used when comparing unadjusted percentages. 4. Percentage of total Cesarean sections= (total Cesarean births/all births) x 100. 5. Percentage primary Cesarean sections= (primary Cesarean sections/all births-repeat Cesarean sections-VBACs) x 100. 6. Percentage repeat Cesarean sections= (repeat Cesarean sections/ (repeat Cesarean sections + VBACs)) x100. 7. Percentage VBACs= (VBAC deliveries/ (repeat Cesarean sections + VBAC)) x 100. 8. This percentage is based on less than 40 total births (in denominator) and should be interpreted with caution. 9. Calculations based on fewer than five events are excluded.

Table B-22. Cesarean Section Deliveries for Singleton Births by Licensed Maternity Facility¹ and Number of Previous Births, Massachusetts: 2004

Facility	First Birth			Second or Later Birth without prior C-section			Second or Later Birth with prior C-section		
	Births ²	C-section		Births ²	C-section		Births ²	C-section	
		n	% ³		n	% ³		n	% ³
State Total	34,006	10,410	30.6	31,713	2,972	9.4	9,508	8,422	88.6
Anna Jaques Hspt.	317	86	27.1	308	23	7.5	94	67	71.3
Baystate Medical Ctr.	1,645	482	29.3	1,752	170	9.7	530	433	81.7
Berkshire Medical Ctr.	363	86	23.7	356	26	7.3	74	57	77.0
Beth Israel Deaconess Med. Ctr.	2,349	827	35.2	1,757	189	10.8	649	571	88.0
Beverly Hspt.	881	273	31.0	880	57	6.5	277	240	86.6
Boston Medical Ctr.	998	234	23.4	961	114	11.9	210	192	91.4
Brigham And Women's Hspt.	3,997	1,209	30.2	3,029	254	8.4	888	752	84.7
Brockton Hspt.	548	190	34.7	517	64	12.4	171	149	87.1
Cambridge Hspt.	628	155	24.7	323	26	8.0	126	109	86.5
Cape Cod Hspt.	414	111	26.8	372	21	5.6	122	106	86.9
Caritas Good Samaritan Med.Ctr.	398	142	35.7	401	47	11.7	141	131	92.9
Caritas Norwood Hspt.	280	96	34.3	233	21	9.0	75	66	88.0
Caritas St. Elizabeth's Medical Ctr.	603	233	38.6	470	51	10.9	235	219	93.2
Charlton Memorial Hspt.	737	216	29.3	682	78	11.4	151	143	94.7
Cooley Dickinson Hspt.	414	116	28.0	364	17	4.7	86	72	83.7
Emerson Hspt.	538	172	32.0	523	49	9.4	200	182	91.0
Fairview Hspt.	74	21	28.4	79	6	7.6	19	19	100.0
Falmouth Hspt.	263	79	30.0	266	33	12.4	89	87	97.8
Franklin Medical Ctr.	204	45	22.1	184	16	8.7	41	36	87.8
Harrington Memorial Hspt.	190	62	32.6	203	28	13.8	61	51	83.6
Heywood Memorial Hspt.	232	49	21.1	229	11	4.8	67	54	80.6
Caritas Holy Family Hspt. And Medical Ctr.	555	225	40.5	512	58	11.3	221	217	98.2
Holyoke Hspt.	243	37	15.2	265	20	7.5	70	61	87.1
Jordan Hspt.	246	81	32.9	268	29	10.8	79	72	91.1
Lawrence General Hspt.	680	165	24.3	738	63	8.5	267	249	93.3
Leominster Hspt.	429	96	22.4	501	38	7.6	144	134	93.1
Lowell General Hspt.	786	218	27.7	820	90	11.0	229	197	86.0

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

1. A licensed maternity facility is a medical unit licensed by the Commonwealth for the care of women during pregnancy and childbirth. 2. Occurrence births (See Section Definitions for definition.) 3. The percentage of Cesarean births reported is not adjusted for risk factors such as mother's age, birthweight, or complications of labor and delivery, which would influence the number of procedures in a particular facility. Caution should be used when comparing unadjusted percentages. 4. This percentage is based on less than 40 total births (in denominator) and should be interpreted with caution. 5. Calculations based on fewer than five events are excluded.

Table B-22 (continued). Cesarean Section Deliveries for Singleton Births by Licensed Maternity Facility and Number of Previous Births, Massachusetts: 2004

Facility	First Birth			Second or Later Birth without prior C-section			Second or Later Birth with prior C-section		
	Births ²	C-section n	% ³	Births ²	C-section n	% ³	Births ²	C-section n	% ³
Martha's Vineyard Hspt.	65	15	23.1	43	2	-- ⁵	16	16	100.0
Mary Lane Hspt.	52	19	36.5	64	5	7.8	14	14	100.0
Massachusetts General Hspt.	1,588	508	32.0	1,381	137	9.9	371	309	83.3
Melrose-Wakefield Hspt.	615	232	37.7	596	66	11.1	212	201	94.8
Mercy Medical Ctr.	525	146	27.8	702	41	5.8	134	116	86.6
Metrowest Medical Ctr.-	894	326	36.5	793	101	12.7	268	268	100.0
Milford-Whitinsville Regional Hspt.	350	123	35.1	377	39	10.3	116	108	93.1
Morton Hspt.	184	75	40.8	241	30	12.4	82	70	85.4
Mount Auburn Hspt.	885	223	25.2	702	31	4.4	186	140	75.3
Nantucket Cottage Hspt.	64	11	17.2	37	5	13.5	2	2	-- ⁵
Newton Wellesley Hspt.	1,351	531	39.3	1,107	96	8.7	421	391	92.9
North Adams Regional Hspt.	129	38	29.5	131	11	8.4	25	24	96.0
North Shore Medical Ctr. - Salem Hspt.	789	249	31.6	745	65	8.7	211	188	89.1
Saint Vincent Hspt.	805	212	26.3	780	66	8.5	231	175	75.8
Saints Memorial Medical Ctr.-St.	311	107	34.4	266	25	9.4	76	73	96.1
South Shore Hspt.	1,650	523	31.7	1,702	138	8.1	540	493	91.3
St. Luke's Hspt.	621	151	24.3	679	64	9.4	182	173	95.1
Sturdy Memorial Hspt.	458	182	39.7	465	42	9.0	116	108	93.1
Tobey Hspt.	205	43	21.0	251	18	7.2	36	28	77.8
Tufts-New England Med. Ctr. Hspt.	543	222	40.9	486	73	15.0	138	126	91.3
Umass Memorial Medical Ctr. - West Campus	1,841	477	25.9	1,880	211	11.2	493	426	86.4
Winchester Hspt.	863	291	33.7	950	107	11.3	316	306	96.8

NOTE: All percentages are calculated based on only those births with known values for the characteristic(s) of interest, unless otherwise stated.
 1. A licensed maternity facility is a medical unit licensed by the Commonwealth for the care of women during pregnancy and childbirth. 2. Occurrence births (See Section Definitions for definition.) 3. The percentage of Cesarean births reported is not adjusted for risk factors such as mother's age, birthweight, or complications of labor and delivery, which would influence the number of procedures in a particular facility. Caution should be used when comparing unadjusted percentages. 4. This percentage is based on less than 40 total births (in denominator) and should be interpreted with caution. 5. Calculations based on fewer than five events are excluded.

Table B-23. Birth Characteristics by Licensed Maternity Facility¹, Massachusetts: 2004

Facility	Location	Occurrence Births ² (n)	Low Birthweight ³ (%)	Public Payment for Delivery ⁴ (%)	Adequate Prenatal Care ⁵ (%)
STATE TOTAL⁶		79,438	7.8	29.8	84.2
Anna Jaques Hspt.	Newburyport	743	3.9	18.1	88.8
Baystate Medical Ctr.	Springfield	4,200	13.2	44.1	80.9
Berkshire Medical Ctr.	Pittsfield	813	5.9	39.4	64.6
Beth Israel Deaconess Medical Ctr.	Boston	5,219	12.3	17.1	95.1
Beverly Hspt.	Beverly	2,123	4.7	26.0	93.3
Boston Medical Ctr.	Boston	2,238	9.3	83.0	53.9
Brigham And Women's Hspt.	Boston	8,864	11.3	18.8	98.1
Brockton Hspt.	Brockton	1,271	7.9	60.6	80.5
Cambridge Birth Ctr.	Cambridge	108	0.0	28.7	81.5
Cambridge Hspt.	Cambridge	1,096	3.3	72.1	78.0
Cape Cod Hspt.	Barnstable	932	6.3	38.2	88.7
Caritas Good Samaritan Medical Ctr.	Brockton	974	7.0	48.7	66.5
Caritas Norwood Hspt.	Norwood	604	4.6	17.3	78.6
Charlton Memorial Hspt.	Fall River	1,630	5.8	44.0	90.5
Cooley Dickinson Hspt.	Northampton	906	3.3	23.7	91.0
Emerson Hspt.	Concord	1,312	4.6	3.4	84.7
Fairview Hspt.	Great Barrington	172	— ⁷	43.0	87.8
Falmouth Hspt.	Falmouth	653	2.7	32.5	85.8
Franklin Medical Ctr.	Greenfield	449	4.9	37.0	82.9
Harrington Memorial Hspt.	Southbridge	460	4.8	48.4	85.2
Heywood Memorial Hspt.	Gardner	539	3.2	36.6	83.9
Caritas Holy Family Hspt. and Medical Ctr.	Methuen	1,342	4.8	18.6	83.3
Holyoke Hspt.	Holyoke	588	4.4	64.9	76.2
Jordan Hspt.	Plymouth	610	4.3	26.7	73.2
Lawrence General Hspt.	Lawrence	1,739	7.8	61.3	82.2
Leominster Hspt.	Leominster	1,117	2.6	39.0	86.1
Lowell General Hspt.	Lowell	1,899	5.3	39.5	64.5
Martha's Vineyard Hspt.	Oak Bluffs	131	3.8	35.7	88.4
Mary Lane Hspt.	Ware	130	3.8	53.8	71.5
Massachusetts General Hspt.	Boston	3,537	8.6	28.8	87.5
Melrose-Wakefield Hspt.	Melrose	1,460	5.3	19.5	89.0

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

1. A licensed maternity facility is a medical unit licensed by the Commonwealth for the care of women during pregnancy and childbirth. 2. See Section Definitions for definition of occurrence births. 3. Less than 2,500 grams (5.5 lbs.) 4. Public payment for delivery includes Medicaid/MassHealth, Commonwealth, Medicare, Healthy Start, other government programs, and free care. 5. Based on the APNCU Index. 6. The percentages provided in this row are based on occurrence births and may differ from data presented elsewhere in this book which are based on resident births. 7. Calculations based on values of 1-4 for medical characteristics of facilities with less than 200 births are suppressed based Guidelines for Release of Births Data, Ctr. for Health Information, Statistics, Research and Evaluation, Massachusetts Department of Public Health.

Table B-23. (continued) Births Characteristics by Licensed Maternity Facility¹, Massachusetts: 2004

Facility	Location	Occurrence Births ² (n)	Low Birthweight ³ (%)	Public Payment for Delivery ⁴ (%)	Adequate Prenatal Care ⁵ (%)
Mercy Medical Ctr.	Springfield	1,385	3.7	58.3	77.0
Metrowest Medical Ctr.	Framingham	2,022	5.3	27.2	92.5
Milford-Whitinsville Regional Hspt.	Milford	860	2.9	19.6	90.2
Morton Hspt.	Taunton	522	5.9	40.8	73.6
Mount Auburn Hspt.	Cambridge	1,824	4.2	14.1	92.0
Nantucket Cottage Hspt.	Nantucket	103	-- ⁷	32.0	84.5
Newton Wellesley Hspt.	Newton	3,067	5.6	2.5	77.3
North Adams Regional Hspt.	North Adams	292	2.4	51.7	92.8
North Shore Birth Ctr.	Beverly	80	0.0	16.3	91.3
North Shore Medical Ctr. - Salem Hspt.	Salem	1,806	6.8	43.2	69.6
Saint Vincent Hspt.	Worcester	1,856	3.6	8.5	94.8
Saints Memorial Medical Ctr.	Lowell	671	5.1	36.3	83.2
South Shore Hspt.	Weymouth	4,104	5.4	11.3	90.1
Caritas St. Elizabeth's Medical Ctr.	Boston	1,398	13.2	20.5	85.7
St. Luke's Hspt.	New Bedford	1,561	6.7	57.0	80.7
Sturdy Memorial Hspt.	Attleboro	1,065	3.9	16.9	71.2
The Birthplace At Wellesley	Wellesley	111	-- ⁷	0.0	82.7
Tobey Hspt.	Wareham	517	4.3	27.1	62.8
Tufts-New England Medical Ctr. Hspt.	Boston	1,324	26.1	33.8	85.5
Winchester Hospital	Winchester	2,219	5.2	5.2	86.2
Umass Memorial Medical Ctr. - West Campus	Worcester	4,480	10.8	34.9	71.6
Other Hospitals		11	-- ⁷	42.9	63.6

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

1. A licensed maternity facility is a medical unit licensed by the Commonwealth for the care of women during pregnancy and childbirth. 2. See Section Definitions for definition of occurrence births. 3. Less than 2,500 grams (5.5 lbs.) 4. Public payment for delivery includes Medicaid/MassHealth, Commonwealth, Medicare, Healthy Start, other government programs, and free care. 5. Based on the APNCU Index. 6. The percentages provided in this row are based on occurrence births and may differ from data presented elsewhere in this book which are based on resident births. 7. Calculations based on values of 1-4 for medical characteristics of facilities with less than 200 births are suppressed based Guidelines for Release of Births Data, Ctr. for Health Information, Statistics, Research and Evaluation, Massachusetts Department of Public Health.

**Table B-24A. Birth Characteristics¹: Occurrence and Resident Births and Infant Deaths,
Massachusetts Municipalities: 2004**

Community	Occurrence Births ²	Resident Births ³	Low Birthweight ⁴	Teen Births (15-19 years)	Infant Deaths ⁵	Neonatal Deaths ⁶	Fetal Deaths ⁷
STATE TOTAL	79,438	78,460	6,125	4,559	372	288	417
Abington	0	182	16	7	0	0	2
Acton	0	234	21	--	0	0	3
Acushnet	2	72	--	5	0	0	0
Adams	0	90	10	14	3	3	0
Agawam	0	270	22	14	3	2	1
Alford	0	2	0	0	0	0	0
Amesbury	0	192	12	10	0	0	1
Amherst	6	191	10	8	0	0	1
Andover	0	310	25	--	0	0	2
Aquinnah (Gay Head)	0	3	--	0	0	0	0
Arlington	1	569	38	7	5	5	5
Ashburnham	1	66	0	--	0	0	0
Ashby	2	27	--	--	0	0	0
Ashfield	0	15	--	--	0	0	0
Ashland	0	238	14	--	0	0	0
Athol	1	132	6	15	2	2	0
Attleboro	1,066	616	50	37	4	4	2
Auburn	1	169	17	--	1	1	2
Avon	0	64	--	--	0	0	0
Ayer	1	108	8	--	1	1	0
Barnstable	934	448	41	21	1	1	6
Barre	0	68	--	6	0	0	0
Becket	0	19	--	--	0	0	0
Bedford	2	140	5	5	0	0	2
Belchertown	1	173	15	8	1	1	0
Bellingham	2	202	11	10	1	1	0
Belmont	0	286	18	--	1	0	2
Berkley	2	86	9	--	1	1	0
Berlin	0	26	--	--	0	0	0
Bernardston	0	18	0	--	0	0	0
Beverly	2,207	416	26	11	0	0	2
Billerica	0	455	40	13	1	1	0
Blackstone	0	114	9	8	0	0	0
Blandford	0	7	0	0	0	0	0
Bolton	0	64	6	0	0	0	1
Boston	22,627	7,721	693	578	46	36	57
Bourne	1	226	16	7	1	1	1
Boxborough	0	57	--	0	0	0	0
Boxford	1	80	8	--	0	0	0
Boylston	1	52	0	0	1	1	0
Braintree	0	375	23	6	0	0	0
Brewster	1	58	--	--	0	0	0
Bridgewater	0	241	20	--	0	0	2
Brimfield	0	39	5	--	0	0	1

— Due to small numbers for births (n=1-4), exact count not provided.

1. Values of 1-4 for medical characteristics of communities with less than 200 births are suppressed based on Guidelines for Release of Birth Data, Ctr. for Health Information, Statistics, Research and Evaluation, Massachusetts Department of Public Health. 2. Births occurring in a geographical place (state, city/town) regardless of the residency of the mother. 3. Births to mothers who report their usual place of residence as a particular geographical place (state, or city/town). 4. Less than 2,500 grams (5.5 lbs.). 5. Death of a child whose age is less than one year. 6. Death of a child whose age is less than 28 days. 7. A stillbirth delivered, extracted or expelled, at 20 weeks gestation or more and/or weighs 350 grams or more.

**Table B-24A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths,
Massachusetts Municipalities: 2004**

Community	Occurrence Births ²	Resident Births ³	Low Birthweight ⁴	Teen Births (15-19 years)	Infant Deaths ⁵	Neonatal Deaths ⁶	Fetal Deaths ⁷
Brockton	2,252	1,592	174	161	17	12	8
Brookfield	0	27	--	--	0	0	0
Brookline	2	697	55	--	1	1	1
Buckland	0	17	0	0	0	0	0
Burlington	2	305	27	--	2	2	0
Cambridge	3,034	1,095	74	25	4	3	8
Canton	0	269	21	--	1	1	0
Carlisle	0	49	7	0	0	0	0
Carver	0	104	8	8	0	0	1
Charlemont	0	11	--	0	0	0	0
Charlton	2	132	8	--	0	0	1
Chatham	0	31	--	0	0	0	3
Chelmsford	0	395	30	12	2	1	2
Chelsea	4	678	55	73	7	5	3
Cheshire	0	25	--	--	0	0	0
Chester	0	16	--	0	0	0	0
Chesterfield	2	12	--	0	0	0	0
Chicopee	0	612	52	64	8	4	6
Chilmark	0	9	0	0	0	0	0
Clarksburg	0	12	0	0	0	0	0
Clinton	1	186	14	14	2	1	3
Cohasset	0	102	11	0	0	0	1
Colrain	0	12	--	--	0	0	0
Concord	1,314	156	8	0	0	0	3
Conway	1	23	--	0	2	2	0
Cummington	0	13	0	0	0	0	0
Dalton	0	55	7	--	0	0	0
Danvers	1	233	21	--	0	0	1
Dartmouth	1	275	18	15	1	1	0
Dedham	0	302	31	5	0	0	0
Deerfield	0	44	--	--	1	1	0
Dennis	0	113	6	8	0	0	0
Dighton	0	60	--	--	0	0	0
Douglas	0	116	9	0	2	2	1
Dover	0	50	--	0	1	0	1
Dracut	1	384	20	14	0	0	2
Dudley	1	113	8	--	1	0	0
Dunstable	0	35	--	0	0	0	0
Duxbury	1	131	8	0	0	0	0
East Bridgewater	0	160	6	7	3	2	2
East Brookfield	0	19	--	--	0	0	0
East Longmeadow	0	161	11	--	0	0	0
Eastham	0	27	6	--	0	0	0
Easthampton	0	154	8	16	0	0	0
Easton	0	249	23	--	0	0	0
Edgartown	0	34	--	0	0	0	2
Egremont	0	11	--	0	0	0	0

— Due to small numbers for births (n=1-4), exact count not provided.

1. Values of 1-4 for medical characteristics of communities with less than 200 births are suppressed based on Guidelines for Release of Birth Data, Ctr. for Health Information, Statistics, Research and Evaluation, Massachusetts Department of Public Health. 2. Births occurring in a geographical place (state, city/town) regardless of the residency of the mother. 3. Births to mothers who report their usual place of residence as a particular geographical place (state, or city/town). 4. Less than 2,500 grams (5.5 lbs.). 5. Death of a child whose age is less than one year. 6. Death of a child whose age is less than 28 days. 7. A stillbirth delivered, extracted or expelled, at 20 weeks gestation or more and/or weighs 350 grams or more.

**Table B-24A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths,
Massachusetts Municipalities: 2004**

Community	Occurrence Births ²	Resident Births ³	Low Birthweight ⁴	Teen Births (15-19 years)	Infant Deaths ⁵	Neonatal Deaths ⁶	Fetal Deaths ⁷
Erving	0	19	--	—	0	0	0
Essex	0	30	—	0	0	0	1
Everett	1	512	35	34	1	1	4
Fairhaven	1	146	16	11	1	1	0
Fall River	1,631	1,189	102	171	6	5	9
Falmouth	655	298	26	25	4	2	2
Fitchburg	2	550	53	70	5	4	0
Florida	0	5	0	0	0	0	0
Foxborough	1	166	11	—	1	1	1
Framingham	2,026	943	79	44	8	6	8
Franklin	2	414	24	7	2	1	0
Freetown	0	94	9	—	0	0	0
Gardner	541	235	17	28	0	0	3
Georgetown	0	102	8	0	0	0	1
Gill	0	13	--	--	0	0	0
Gloucester	0	312	28	15	1	1	0
Goshen	1	11	--	0	0	0	0
Gosnold	0	0	0	0	0	0	0
Grafton	1	243	13	5	1	0	0
Granby	0	47	--	--	0	0	0
Granville	0	10	--	0	0	0	1
Great Barrington	175	68	--	--	1	1	0
Greenfield	451	171	20	13	1	1	0
Groton	1	109	6	—	0	0	0
Groveland	0	64	--	--	0	0	0
Hadley	1	46	--	--	0	0	0
Halifax	0	75	5	--	1	0	0
Hamilton	0	86	7	0	3	3	0
Hampden	1	34	—	--	0	0	0
Hancock	0	10	0	--	0	0	0
Hanover	0	157	8	--	0	0	1
Hanson	1	140	13	--	0	0	1
Hardwick	0	37	--	--	0	0	0
Harvard	0	45	8	--	0	0	0
Harwich	0	100	9	6	1	1	0
Hatfield	1	27	--	0	0	0	0
Haverhill	2	872	81	56	3	2	4
Hawley	0	2	0	0	0	0	0
Heath	0	5	0	0	0	0	0
Hingham	1	254	16	--	0	0	0
Hinsdale	0	24	--	--	0	0	0
Holbrook	1	141	7	12	0	0	1
Holden	0	194	15	0	2	2	0
Holland	0	25	--	--	0	0	0
Holliston	0	153	9	--	1	1	0
Holyoke	591	608	66	115	6	4	0
Hopedale	1	92	6	--	0	0	1

-- Due to small numbers for births (n=1-4), exact count not provided.

1. Values of 1-4 for medical characteristics of communities with less than 200 births are suppressed based on Guidelines for Release of Birth Data, Ctr. for Health Information, Statistics, Research and Evaluation, Massachusetts Department of Public Health. 2. Births occurring in a geographical place (state, city/town) regardless of the residency of the mother. 3. Births to mothers who report their usual place of residence as a particular geographical place (state, or city/town). 4. Less than 2,500 grams (5.5 lbs.). 5. Death of a child whose age is less than one year. 6. Death of a child whose age is less than 28 days. 7. A stillbirth delivered, extracted or expelled, at 20 weeks gestation or more and/or weighs 350 grams or more.

**Table B-24A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths,
Massachusetts Municipalities: 2004**

Community	Occurrence Births ²	Resident Births ³	Low Birthweight ⁴	Teen Births (15-19 years)	Infant Deaths ⁵	Neonatal Deaths ⁶	Fetal Deaths ⁷
Hopkinton	0	180	6	--	1	1	0
Hubbardston	0	35	--	0	0	0	0
Hudson	0	236	19	--	3	3	1
Hull	0	105	8	--	1	1	1
Huntington	4	19	0	--	0	0	0
Ipswich	0	141	7	--	0	0	1
Kingston	0	151	14	--	0	0	0
Lakeville	0	120	8	6	0	0	1
Lancaster	1	59	0	0	0	0	0
Lanesborough	0	22	--	--	0	0	0
Lawrence	1,741	1,417	134	226	13	9	13
Lee	1	49	--	--	0	0	0
Leicester	0	128	13	8	1	1	0
Lenox	0	39	--	--	0	0	0
Leominster	1,117	511	34	26	2	2	3
Leverett	0	13	0	0	0	0	0
Lexington	0	222	16	--	0	0	0
Leyden	0	0	0	0	0	0	0
Lincoln	0	102	--	--	0	0	0
Littleton	0	111	8	--	1	1	2
Longmeadow	0	136	7	0	0	0	3
Lowell	2,574	1,649	149	194	8	6	14
Ludlow	1	184	18	6	5	5	0
Lunenburg	1	102	--	--	0	0	0
Lynn	6	1,428	108	135	9	8	7
Lynnfield	0	99	9	0	2	1	0
Malden	2	856	70	28	2	2	6
Manchester-by-the-Sea	0	51	7	0	1	0	0
Mansfield	0	316	25	--	0	0	1
Marblehead	0	223	11	--	0	0	0
Marion	0	55	--	--	0	0	0
Marlborough	3	566	28	21	1	1	1
Marshfield	0	332	24	7	1	0	0
Mashpee	1	160	10	10	0	0	0
Mattapoisett	0	47	--	--	0	0	0
Maynard	1	156	14	--	0	0	2
Medfield	1	124	5	0	0	0	1
Medford	2	617	44	16	5	4	5
Medway	0	163	14	6	1	1	0
Melrose	1,460	330	15	--	1	1	1
Mendon	1	67	--	0	1	1	1
Merrimac	0	57	--	--	0	0	0
Methuen	1,343	622	46	38	3	1	0
Middleborough	0	267	20	11	1	1	2
Middlefield	0	4	0	--	0	0	0
Middleton	0	71	--	--	0	0	0
Milford	860	357	15	16	0	0	1

-- Due to small numbers for births (n=1-4), exact count not provided.

1. Values of 1-4 for medical characteristics of communities with less than 200 births are suppressed based on Guidelines for Release of Birth Data, Ctr. for Health Information, Statistics, Research and Evaluation, Massachusetts Department of Public Health. 2. Births occurring in a geographical place (state, city/town) regardless of the residency of the mother. 3. Births to mothers who report their usual place of residence as a particular geographical place (state, or city/town). 4. Less than 2,500 grams (5.5 lbs.). 5. Death of a child whose age is less than one year. 6. Death of a child whose age is less than 28 days. 7. A stillbirth delivered, extracted or expelled, at 20 weeks gestation or more and/or weighs 350 grams or more.

**Table B-24A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths,
Massachusetts Municipalities: 2004**

Community	Occurrence Births ²	Resident Births ³	Low Birthweight ⁴	Teen Births (15-19 years)	Infant Deaths ⁵	Neonatal Deaths ⁶	Fetal Deaths ⁷
Millbury	0	148	13	5	0	0	0
Millis	0	100	6	--	1	1	0
Millville	0	56	7	--	0	0	0
Milton	0	331	23	6	3	3	0
Monroe	0	0	0	0	0	0	0
Monson	0	86	7	--	1	0	1
Montague	2	86	10	10	0	0	1
Monterey	0	9	0	0	0	0	0
Montgomery	0	9	0	0	0	0	0
Mount Washington	0	2	0	0	0	0	0
Nahant	0	25	0	--	0	0	0
Nantucket	105	149	14	--	0	0	0
Natick	1	436	43	--	2	2	5
Needham	0	348	23	0	1	1	2
New Ashford	0	1	0	0	0	0	0
New Bedford	1,563	1,378	108	183	3	2	12
New Braintree	0	4	0	0	0	0	0
New Marlborough	0	16	0	0	0	0	0
New Salem	0	7	0	0	0	0	0
Newbury	0	77	5	--	2	2	0
Newburyport	744	197	19	7	0	0	0
Newton	3,070	844	77	9	4	4	5
Norfolk	0	98	8	--	0	0	1
North Adams	292	151	8	20	0	0	2
North Andover	1	329	19	5	0	0	0
North Attleboro	0	374	24	11	0	0	0
North Brookfield	0	46	--	--	0	0	0
North Reading	0	175	13	--	0	0	0
Northampton	910	242	21	16	0	0	0
Northborough	0	164	9	--	0	0	0
Northbridge	2	221	14	10	0	0	0
Northfield	2	36	--	--	0	0	0
Norton	2	243	16	8	0	0	0
Norwell	0	107	9	--	1	1	1
Norwood	605	371	36	--	1	1	3
Oak Bluffs	131	44	--	--	0	0	0
Oakham	0	12	0	--	0	0	0
Orange	0	84	6	13	1	1	1
Orleans	0	38	--	0	0	0	0
Otis	0	13	--	--	0	0	0
Oxford	1	148	13	7	2	2	2
Palmer	0	135	6	9	0	0	0
Paxton	0	45	5	--	0	0	0
Peabody	2	513	57	24	0	0	2
Pelham	0	4	0	0	0	0	0
Pembroke	0	222	11	8	2	1	0

-- Due to small numbers for births (n=1-4), exact count not provided.

1. Values of 1-4 for medical characteristics of communities with less than 200 births are suppressed based on Guidelines for Release of Birth Data, Ctr. for Health Information, Statistics, Research and Evaluation, Massachusetts Department of Public Health. 2. Births occurring in a geographical place (state, city/town) regardless of the residency of the mother. 3. Births to mothers who report their usual place of residence as a particular geographical place (state, or city/town). 4. Less than 2,500 grams (5.5 lbs.). 5. Death of a child whose age is less than one year. 6. Death of a child whose age is less than 28 days. 7. A stillbirth delivered, extracted or expelled, at 20 weeks gestation or more and/or weighs 350 grams or more.

**Table B-24A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths,
Massachusetts Municipalities: 2004**

Community	Occurrence Births ²	Resident Births ³	Low Birthweight ⁴	Teen Births (15-19 years)	Infant Deaths ⁵	Neonatal Deaths ⁶	Fetal Deaths ⁷
Pepperell	1	115	13	—	1	1	0
Peru	0	8	—	—	0	0	0
Petersham	0	8	—	—	0	0	0
Phillipston	0	15	—	—	0	0	0
Pittsfield	814	538	49	59	3	1	4
Plainfield	0	5	0	0	0	0	0
Plainville	0	97	6	—	0	0	2
Plymouth	615	688	49	27	2	2	6
Plympton	0	30	—	0	0	0	0
Princeton	1	36	—	—	0	0	0
Provincetown	1	18	—	0	0	0	0
Quincy	4	1,168	83	34	5	4	3
Randolph	0	414	32	18	4	3	1
Raynham	0	168	16	5	0	0	0
Reading	0	273	13	—	0	0	1
Rehoboth	0	108	8	—	0	0	0
Revere	0	689	57	42	3	3	4
Richmond	0	8	0	0	0	0	0
Rochester	0	47	—	—	0	0	1
Rockland	1	228	19	13	1	1	0
Rockport	0	59	—	—	0	0	0
Rowe	0	4	0	—	0	0	0
Rowley	0	74	5	—	0	0	0
Royalston	0	15	—	—	0	0	0
Russell	1	17	—	0	0	0	0
Rutland	1	102	9	0	0	0	0
Salem	1,807	526	53	26	2	2	1
Salisbury	0	78	6	—	1	0	0
Sandisfield	0	8	0	0	0	0	0
Sandwich	0	177	8	8	0	0	1
Saugus	0	281	23	7	3	2	2
Savoy	0	3	0	0	0	0	0
Scituate	0	193	14	—	0	0	0
Seekonk	0	104	5	—	1	1	0
Sharon	0	190	18	—	1	1	0
Sheffield	1	29	—	—	1	0	1
Shelburne	0	13	0	0	0	0	0
Sherborn	2	39	0	—	0	0	0
Shirley	0	60	5	0	0	0	0
Shrewsbury	0	469	45	7	0	0	1
Shutesbury	2	19	—	0	0	0	0
Somerset	1	145	—	7	0	0	0
Somerville	4	849	56	36	5	4	9
South Hadley	0	158	8	5	1	1	0
Southampton	1	41	—	—	0	0	0

— Due to small numbers for births (n=1-4), exact count not provided.

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**Table B-24A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths,
Massachusetts Municipalities: 2004**

Community	Occurrence Births ²	Resident Births ³	Low Birthweight ⁴	Teen Births (15-19 years)	Infant Deaths ⁵	Neonatal Deaths ⁶	Fetal Deaths ⁷
Southborough	0	125	6	0	0	0	2
Southbridge	463	261	24	38	4	4	2
Southwick	0	92	--	--	1	1	0
Spencer	1	125	10	9	1	1	1
Springfield	5,596	2,390	258	428	15	9	20
Sterling	1	83	7	--	0	0	0
Stockbridge	0	13	--	0	0	0	0
Stoneham	0	213	14	--	1	1	2
Stoughton	1	345	42	6	5	5	0
Stow	0	100	6	0	1	1	2
Sturbridge	1	100	--	--	2	1	0
Sudbury	2	200	15	0	1	1	1
Sunderland	1	31	--	--	0	0	0
Sutton	0	111	--	--	0	0	1
Swampscott	2	157	14	--	0	0	0
Swansea	0	133	12	--	2	1	0
Taunton	524	775	77	54	2	1	3
Templeton	0	69	--	--	0	0	1
Tewksbury	0	318	23	8	0	0	2
Tisbury	1	35	--	0	0	0	0
Tolland	0	3	0	0	0	0	0
Topsfield	0	56	7	0	0	0	0
Townsend	1	97	--	7	1	0	1
Truro	1	12	--	--	0	0	0
Tyngsborough	0	140	10	--	1	0	0
Tyringham	0	3	0	0	0	0	0
Upton	1	97	6	0	0	0	1
Uxbridge	0	153	--	5	1	0	1
Wakefield	2	298	25	6	1	1	0
Wales	0	18	--	--	0	0	0
Walpole	0	276	13	--	1	1	2
Waltham	5	676	44	18	1	1	2
Ware	130	110	8	13	0	0	0
Wareham	517	244	21	18	0	0	0
Warren	2	59	--	--	0	0	0
Warwick	0	3	0	0	0	0	0
Washington	0	2	0	--	0	0	0
Watertown	0	335	27	--	0	0	1
Wayland	1	124	8	0	0	0	2
Webster	0	216	23	13	1	1	3
Wellesley	111	274	15	--	0	0	1
Wellfleet	0	24	--	0	0	0	0
Wendell	0	7	--	0	0	0	0
Wenham	1	41	--	0	0	0	0
West Boylston	0	71	--	0	0	0	0
West Bridgewater	0	73	6	5	1	1	1

-- Due to small numbers for births (n=1-4), exact count not provided.

1. Values of 1-4 for medical characteristics of communities with less than 200 births are suppressed based on Guidelines for Release of Birth Data, Ctr. for Health Information, Statistics, Research and Evaluation, Massachusetts Department of Public Health. 2. Births occurring in a geographical place (state, city/town) regardless of the residency of the mother. 3. Births to mothers who report their usual place of residence as a particular geographical place (state, or city/town). 4. Less than 2,500 grams (5.5 lbs.). 5. Death of a child whose age is less than one year. 6. Death of a child whose age is less than 28 days. 7. A stillbirth delivered, extracted or expelled, at 20 weeks gestation or more and/or weighs 350 grams or more.

**Table B-24A. Birth Characteristics: Occurrence and Resident Births and Infant Deaths,
Massachusetts Municipalities: 2004**

Community	Occurrence Births ²	Resident Births ³	Low Birthweight ⁴	Teen Births (15-19 years)	Infant Deaths ⁵	Neonatal Deaths ⁶	Fetal Deaths ⁷
West Brookfield	0	38	0	0	0	0	0
West Newbury	0	34	—	0	0	0	0
West Springfield	1	351	22	30	3	2	3
West Stockbridge	0	12	0	0	0	0	0
West Tisbury	0	23	5	0	0	0	0
Westborough	1	235	19	7	1	1	2
Westfield	4	425	23	32	0	0	2
Westford	1	249	18	—	0	0	2
Westhampton	1	13	—	0	0	0	0
Westminster	0	49	—	—	0	0	1
Weston	1	84	5	—	0	0	0
Westport	0	109	7	5	1	0	0
Westwood	1	156	6	—	0	0	1
Weymouth	4,105	699	41	27	4	4	4
Whately	0	17	0	—	0	0	0
Whitman	0	205	14	6	0	0	1
Wilbraham	0	112	7	—	0	0	0
Williamsburg	0	23	—	0	0	0	0
Williamstown	1	42	—	—	0	0	0
Wilmington	1	298	16	7	1	1	1
Winchendon	0	103	—	8	0	0	1
Winchester	2,219	275	15	—	1	1	1
Windsor	0	8	—	—	0	0	0
Winthrop	0	176	12	7	1	1	0
Woburn	0	481	36	14	0	0	4
Worcester	6,357	2,579	196	250	17	12	18
Worthington	0	14	0	0	0	0	0
Wrentham	1	118	9	—	0	0	0
Yarmouth	1	202	15	14	2	2	1

— Due to small numbers for births (n=1-4), exact count not provided.

1. Values of 1-4 for medical characteristics of communities with less than 200 births are suppressed based on Guidelines for Release of Birth Data, Ctr. for Health Information, Statistics, Research and Evaluation, Massachusetts Department of Public Health. 2. Births occurring in a geographical place (state, city/town) regardless of the residency of the mother. 3. Births to mothers who report their usual place of residence as a particular geographical place (state, or city/town). 4. Less than 2,500 grams (5.5 lbs.). 5. Death of a child whose age is less than one year. 6. Death of a child whose age is less than 28 days. 7. A stillbirth delivered, extracted or expelled, at 20 weeks gestation or more and/or weighs 350 grams or more.

Table B-24B. Birth Characteristics, Occurrence and Resident Births and Infant Deaths by County Massachusetts: 2004

County Name	Occurrence Births ¹	Resident Births ²			Deaths		
		Number	Low Birthweight ³	Teen Births (15-19 years)	Infant ⁴	Neonatal ⁵	Fetal ⁶
STATE TOTAL	79,438	78,460	6,125	4,559	372	288	417
Barnstable	1,595	1,932	148	104	9	7	14
Berkshire	1,284	1,297	94	122	8	5	7
Bristol	4,793	6,640	535	535	22	17	27
Dukes	132	148	13	3	0	0	2
Essex	7,858	9,253	764	590	43	31	38
Franklin	459	670	55	49	5	5	2
Hampden	6,195	5,740	515	716	42	27	38
Hampshire	1,058	1,307	87	73	2	2	1
Middlesex	15,738	17,954	1,303	575	69	58	112
Nantucket	105	149	14	4	0	0	0
Norfolk	4,837	8,054	577	167	34	30	26
Plymouth	3,388	6,150	500	311	31	22	31
Suffolk	22,631	9,264	817	700	57	45	64
Worcester	9,365	9,902	703	610	50	39	54

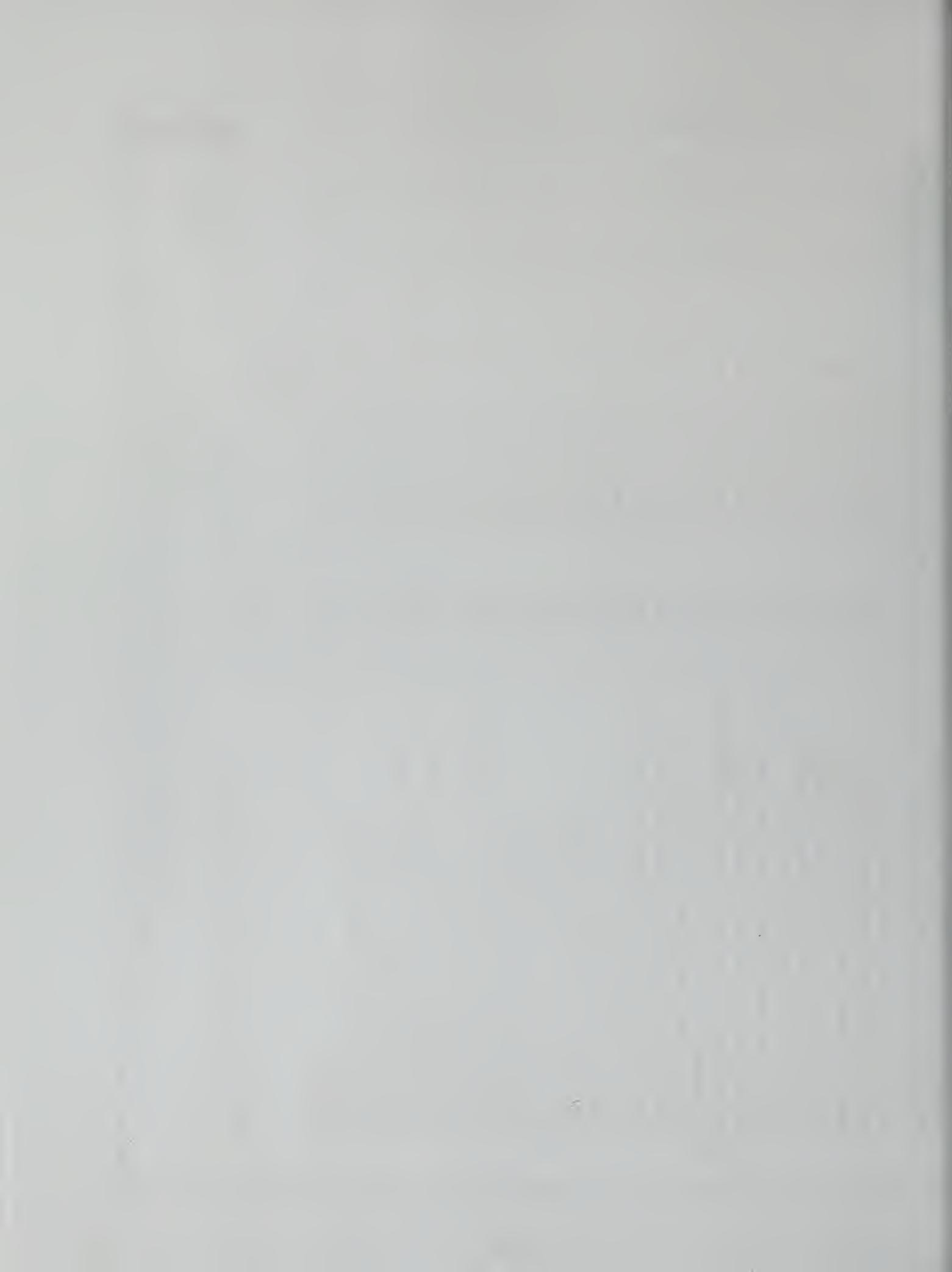
1. Births occurring in a geographical place (state, city/town) regardless of the residency of the mother. 2. Births to mothers who report their usual place of residence as a particular geographical place (state, or city/town). 3. Less than 2,500 grams (5.5 lbs.). 4. Death of a child whose age is less than one year. 5. Death of a child whose age is less than 28 days. 6. A stillbirth delivered, extracted or expulsed, at 20 weeks gestation or more and/or weighs 350 grams or more.

**Table B-24C. Birth Characteristics, Occurrence and Resident Births and Infant Deaths,
Massachusetts Community Health Network Areas (CHNAs): 2004**

Community Health Network Area (CHNA Number)	Occurrence Births ¹	Resident Births ²			Deaths		
		Number	LBW ³	Teen Births (15-19 years)	Infant ⁴	Neonatal ⁵	Fetal ⁶
STATE TOTAL	79,438	78,460	6,125	4,559	372	288	417
Community Health Network of Berkshire County (1)	1,284	1,297	94	122	8	5	7
Upper Valley Health Web (Franklin County) (2)	460	840	65	69	7	7	2
Partnership for Health in Hampshire County (Northampton) (3)	1,054	1,288	87	72	2	2	1
The Community Health Connection (Springfield) (4)	5,599	3,813	346	493	23	14	29
Community Health Network of Southern Worcester County (5)	471	1,366	107	92	11	9	10
Community Partners for Health (Milford) (6)	869	2,163	122	70	8	6	7
Community Health Network of Greater Metro West (Framingham) (7)	2,040	4,874	333	102	22	20	33
Community Wellness Coalition (Worcester) (8)	6,360	4,098	318	278	23	17	21
Fitchburg/Gardner Community Health Network (9)	1,673	2,958	207	186	12	9	14
Greater Lowell Community Health Network (10)	2,576	3,625	292	247	12	8	22
Greater Lawrence Community Health Network (11)	3,085	2,749	228	273	16	10	15
Greater Haverhill Community Health Network (12)	747	1,827	153	86	6	4	6
Community Health Network North (Beverly/Gloucester) (13)	2,208	1,192	87	30	5	4	4
North Shore Community Health Network (14)	1,818	3,485	296	201	16	13	13
Greater Woburn/Concord/Littleton Community Health Network (15)	3,538	2,430	164	37	5	5	16
North Suburban Health Alliance (Medford/Malden/Melrose) (16)	1,467	3,274	229	92	11	10	19
Greater Cambridge/Somerville Community Health Network (17)	3,039	3,134	213	74	15	12	25
West Suburban Health Network (Newton/Waltham) (18)	3,188	2,734	203	36	7	6	12
Alliance for Community Health (Boston/Chelsea/Revere/Winthrop) (19)	22,633	9,961	872	703	58	46	65
Blue Hills Community Health Alliance (Greater Quincy) (20)	4,715	4,578	335	109	21	19	14
Four (For) Communities (Holyoke, Chicopee, Ludlow, Westfield) (21)	600	1,864	161	218	19	13	8
Greater Brockton Community Health Network (22)	2,254	3,252	309	214	26	20	17
South Shore Community Partners in Prevention (Plymouth) (23)	618	2,258	163	73	7	4	9
Greater Attleboro-Taunton Health & Education Response (24)	1,594	3,237	260	143	9	8	9
Partners for a Healthier Community (Fall River) (25)	1,632	1,576	125	187	9	6	9
Greater New Bedford Health & Human Services Coalition (26)	2,084	2,358	181	241	5	4	13
Cape and Islands Community Health Network (27)	1,832	2,229	175	111	9	7	16

1. Births occurring in a geographical place (state, city/town) regardless of the residency of the mother. 2. Births to mothers who report their usual place of residence as a particular geographical place (state, city/town). 3. Less than 2,500 grams (5.5 lbs.). 4. Death of a child whose age is less than one year. 5. Death of a child whose age is less than 28 days. 6. A stillbirth delivered, extracted or expelled, at 20 weeks gestation or more and/or weighs 350 grams or more.

DEATHS



SECTION C

DEATHS

The number of Massachusetts resident deaths decreased from 2003 (56,194 deaths) to 2004 (54,419 deaths). Using MassCHIP population estimates, the 2004 crude death rate of 848.1 per 100,000 population was lower than the 2003 crude death rate of 875.2. As with live births, Massachusetts resident deaths include all deaths to Massachusetts residents regardless of the state in which the deaths occurred. Most data presented in this section are resident data. Occurrence deaths are used only to analyze cases referred to the medical examiner.

DEATHS BY RACE/ETHNICITY

From 2003 to 2004, the number of deaths by race/ethnicity remained relatively constant with White non-Hispanic residents comprising 92.7% of the total deaths in Massachusetts. Black non-Hispanic deaths totaled 4.1% of the total deaths, Hispanic deaths 2.1%, Asian non-Hispanic deaths 1.0%, and other and unknown race deaths 0.2%.

Prior to 1989, only a race question was included on death certificates. A separate item on Hispanic origin was added to the death record beginning January 1, 1989. This item asks whether the decedent was of Hispanic origin. If answered affirmatively, then specific Hispanic origin (e.g., Puerto Rican, Dominican, Cuban, etc.) is requested.

DEATHS BY AGE

Persons 75 years of age or older accounted for 63.73% of all resident deaths. The percent of deaths to residents in this age group varied widely by sex and race/ethnicity.

SEX	RACE	% OF DEATHS UNDER AGE 75	% OF DEATHS 75 YEARS AND OLDER
MALE	WHITE NON-HISPANIC	43.8	56.2
	BLACK NON-HISPANIC	69.6	30.4
	HISPANIC	83.5	16.5
	ASIAN	61.9	38.1
	OTHER/UNKNOWN	74.2	25.8
	TOTAL	46.3	53.7
FEMALE	WHITE NON-HISPANIC	25.8	74.2
	BLACK NON-HISPANIC	52.2	47.8
	HISPANIC	68.4	31.6
	ASIAN	42.0	58.0
	OTHER/UNKNOWN	41.3	58.7
	TOTAL	27.5	72.5
TOTAL	WHITE NON-HISPANIC	34.0	66.0
	BLACK NON-HISPANIC	61.6	38.4
	HISPANIC	77.4	22.6
	ASIAN	52.5	47.5
	OTHER/UNKNOWN	60.7	39.3
	TOTAL	36.3	63.7

DEATHS BY PLACE OF OCCURRENCE

Between 2003 and 2004, there was little variation in the sites where deaths occurred. The data are presented below:

SITE	% OF DEATHS 2004	% OF DEATHS 2003
HOSPITAL	43.3	44.4
NURSING OR REST HOME	30.3	30.1
AT HOME	22.6	22.1
EN ROUTE TO HOSPITAL OR DEAD ON ARRIVAL	1.7	1.6
OTHER AND UNKNOWN ¹	2.1	1.8
TOTAL	100.0	100.0

¹ Other and Unknown includes prison or other institutions and all other places.

DEATHS BY CAUSE

Cause of death statistics in this report are based on the Tenth Revision of the International Classification of Diseases (ICD-10). The methodology of coding cause of death from death certificates is consistent nationally, using the Automated Classification of Medical Entities (ACME) developed by the National Center for Health Statistics (NCHS). The ACME system requires every disease or condition mentioned on the record to be coded. The underlying cause is then selected by a computer program which incorporates the ICD-10 rules and conventions. Cause of death information in this report is based on underlying cause, except where otherwise noted.

The leading causes of death differed somewhat by race and ethnicity in 2004, as in previous years. Nine of the ten leading causes of death for White non-Hispanics were chronic conditions (e.g., heart disease, cancer, stroke, respiratory illness, and diabetes) which usually afflict older people. The leading causes of death for Black non-Hispanics included homicide and AIDS/HIV-related diseases which occur more frequently among younger people. For Asian non-Hispanics, suicide was among the top ten leading causes of death. For Hispanics, AIDS/HIV-related diseases, perinatal conditions, homicide and injuries of undetermined intent were among the leading causes of death in 2004.

ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

In 2004, 211 Massachusetts residents died from AIDS and HIV-related illnesses. This represents a 6.6% decrease from 2003. The overall age adjusted rate of death was 3.1 in 2004, down from 3.4 in 2003.

Leading Causes of Death by Race/Ethnicity, 2004

White non-Hispanic		Black non-Hispanic		Hispanic		Asian non-Hispanic		Total			
Cause	#	%	Cause	#	%	Cause	#	%	Cause	#	%
Heart disease	13,021	25.8	Cancer	504	22.7	Cancer	209	18.7	Cancer	138	26.0
Cancer	12,432	24.6	Heart disease	484	21.8	Heart disease	184	16.5	Heart disease	67	12.6
Stroke	3,006	6.0	Stroke	129	5.8	Stroke	65	5.8	Stroke	46	8.7
Chronic Lower Respiratory Disease	2,471	4.9	Nephritis	89	4.0	AIDS/HIV-related diseases	55	4.9	Diabetes	21	4.0
Pneumonia & Influenza	1,847	3.7	Diabetes	83	3.7	Unintentional Injuries ¹	46	4.1	Unintentional Injuries ¹	19	3.6
Alzheimer's Disease	1,617	3.2	Homicide	70	3.1	Diabetes	45	4.0	Chronic Lower Respiratory Disease	16	3.0
Unintentional Injuries ¹	1,224	2.3	Septicemia	61	2.7	Perinatal Conditions	44	3.9	Nephritis	16	3.0
Diabetes	1,172	2.4	AIDS/HIV-related diseases	55	2.5	Injuries of Undetermined intent ²	43	3.9	Pneumonia & Influenza	12	2.3
Nephritis	1,110	2.2	Perinatal Conditions	51	2.3	Homicide	40	3.6	III Defined Conditions	9	1.7
Septicemia	873	1.7	Chronic Lower Respiratory Disease	48	2.2	Nephritis	32	2.9	Suicide	9	1.7
All other causes	11,666	23.1	All other causes	651	29.3	All other causes	352	31.6	All other causes	178	33.5
Total ³	50,439	100	Total ³	2,225	100	Total ³	1,115	100	Total ³	531	100

¹Unintentional Injuries such as vehicular accidents, falls, fires, and drowning that were not intended to occur. ²Injuries such as falls, fires, and drownings where there was not enough information to determine intent. ³Percent may not sum to 100 due to rounding.

DEATHS CERTIFIED BY MEDICAL EXAMINERS

The total number of deaths occurring in Massachusetts that were certified by medical examiners decreased from 4,011 in 2003 to 3,859 in 2004. Of the deaths certified by medical examiners, 37.8% were reported as a result of natural causes. The percentage of deaths due to natural causes (i.e., non-injury related causes) certified by medical examiners varies somewhat by county, from a high of 63.6% in Dukes County to a low of 32.2% in Worcester County. The Dukes County value is based on only 7 deaths by natural causes and should be interpreted with caution. Suffolk County had the greatest percentage of deaths (31.0%) that were referred to medical examiners, while the highest number of such deaths was in Middlesex County with 2,520 deaths.

COMMUNITY HEALTH NETWORK AREAS (CHNA)

The Department of Public Health, in collaboration with health service providers, coalition members, and other interested citizens, has designated 27 geographic areas for community health planning. It is the Department's intention to foster in each of these areas the development of Community Health Networks: a consortia of health care providers, human service agencies, schools, churches, youth, parents, elders, advocacy groups, and individual consumers to address the health needs of the community. These community coalitions will participate in monitoring outcomes and the progress of strategies and responses to those health needs. The data published in this edition reflect the new definitions of CHNAs instituted in January 1997.

A Community Health Network Area (CHNA) is defined as an aggregation of cities and towns. The city of Boston constitutes its own Community Health Network Area. It is hoped that the Networks will mobilize around key health issues impacting the community, promote prevention efforts, enhance access to health care, provide opportunities for more collaboration among agencies, and create a client-centered, outcome-oriented health service delivery system. Community Health Networks will also promote efficiency in service delivery by working to reduce duplication and overlap, and by identifying gaps in service.

DEFINITIONS IMPORTANT FOR THIS SECTION INCLUDE:

AGE-ADJUSTED RATE

A procedure for adjusting rates, designed to minimize the effects of differences in age distribution when comparing rates for different populations. This procedure is accomplished by the computational process known as age standardization, whereby mortality statistics are adjusted to a reference population. For this publication, the reference population is the 2000 US population, the same used by the National Center for Health Statistics. The result of the process is a summary index that can be used to compare rates of different populations throughout the nation and over time.

DEATH CERTIFICATE

A vital record signed by a licensed physician that includes cause of death, decedent's name, sex, birth date, place of residence, and place of death.

INTERNATIONAL CLASSIFICATION OF DISEASES, NINTH REVISION

The International Classification of Disease (ICD) classifies cause of death information for statistical purposes. The ICD was first used in 1900 and has since been revised about every 10 years. The Ninth Revision, published in 1977, is used to code mortality data beginning with 1979. The International Classification of Diseases, Tenth Revision (ICD-10) replaced the International Classification of Diseases, Ninth Revision (ICD-9) for coding all mortality data in 1999.

MASSCHIP

MassCHIP is a free on-line interactive public health and sociodemographic data dissemination service developed by the Department of Public Health. It contains 36 major data sets which users may query by downloading the application onto their computer and accessing MassCHIP data servers through the Internet. MassCHIP returns counts of events and a wide variety of statistical measures, including percentages, age-specific and age-adjusted rates, and standardized incidence ratios. The system provides charting and mapping options and results may be exported to EXCEL. The system also offers 48 fixed-format topic-specific reports as web pages, for which users can choose geographic areas of interest.

MISER

The Massachusetts Institute for Social and Economic Research. This research institute, located at the University of Massachusetts in Amherst, produces the official population estimates and projections for the Department of Public Health through 1998.

OCCURRENCE DEATH

Occurrence deaths include all deaths that occur within the state, including deaths of non-residents. An interstate exchange agreement among the 50 states and Canada, Puerto Rico, Guam, the Virgin Islands, and the District of Columbia provides for exchanges of copies of birth and death records. These records are used for statistical purposes only, and allow each state or province to track the births and deaths of residents.

RACE

For death records, race is provided by the death record informant (for example; spouse, next of kin, or funeral director).

RESIDENT DEATH

The death of a person whose usual place of residence or permanent address (as reported by the informant) is in one of the 351 cities or towns of Massachusetts, regardless of where the death took place. Unless otherwise noted, all data in this publication are resident data. An interstate exchange agreement among the 50 states, Canada, Puerto Rico, Guam, the Virgin Islands, and the District of Columbia provides for exchange of copies of birth and death records. These records are used for statistical purposes only, and allow each state or province to track the births and deaths of residents.

UNDERLYING CAUSE OF DEATH

The underlying cause of death is: 1.) the disease or injury that initiated the series of events leading to death, or 2.) the circumstances of the unintentional or intentional injury that resulted in the death. See the Appendix for the Death Certificate.

RATES IMPORTANT FOR THIS SECTION INCLUDE:

AGE-SPECIFIC DEATH RATE	$\frac{\text{Number of Resident Deaths in Specific Age Group} \times 100,000}{\text{Total Population of Specific Age Group}}$
CAUSE-SPECIFIC DEATH RATE	$\frac{\text{Number of Resident Deaths for a Specific Cause} \times 100,000}{\text{Total Population}}$
CRUDE DEATH RATE	$\frac{\text{Number of Resident Deaths in a Year} \times 100,000}{\text{Total Population}}$

ICD-10 and ICD-9 Codes Used in this Publication
 (Sorted by ICD-10 Codes)

<u>Cause of Death</u>	<u>ICD-10 Code</u>	<u>ICD-9 Code</u>
Infectious and parasitic diseases	A00-B99	001-139
Septicemia	A40-A41	038
Human Immunodeficiency Virus (HIV) disease	B20-B24	042-044
Cancer (Malignant Neoplasms)	C00-C97	140-208
of esophagus	C15	150
of stomach	C16	151
of colon, rectum, rectum and anus	C18-C21	153-154, 159.9
of pancreas	C25	157
of trachea, bronchus and lung	C33-C34	162
of female breast	C50	174
of cervix uteri	C53	180
of corpus uteri and uterus, part unspecified	C54-C55	179, 182
of ovary	C56	183.0
of prostate	C61	185
of kidney and renal pelvis	C64-C65	189.0-189.1
of bladder	C67	188
of meninges, brain & other parts of central nervous system	C70-C72	191-192
Hodgkin's Disease	C81	201
Non-Hodgkin's lymphoma	C82-C85	200, 202 (except 202.4)
Leukemia	C91-C95	202.4, 204-208
Multiple myeloma and immunoproliferative neoplasms	C88, C90	203
Diabetes Mellitus	E10-E14	250
Alzheimer's disease	G30	331.0
Heart Disease	I00-I09, I11, I13, I20-I51	390-398, 402, 404-429
Stroke (Cerebrovascular disease)	I60-I69	430-438
Influenza and pneumonia	J10-J18	480-487
Chronic lower respiratory diseases ¹	J40-J47	490-496
Chronic liver disease and cirrhosis	K70, K73-K74	571
Nephritis	N00-N07, N17-N19, N25-N27	580-589
Congenital malformations, deformations, and chromosomal abnormalities	Q00-Q99	740-759
Certain conditions originating in the perinatal period (Perinatal Conditions)	P00-P96	760-779
Signs and symptoms	R00-R99	780-797, 798.1-798.9, 799
Sudden infant death syndrome (SIDS)	R95	798.0
External causes of injuries and poisonings (intentional, unintentional and of undetermined intent)	V01-Y89	E800-E999
Accidents (Unintentional Injuries)	V01-X59, Y85-Y86	E800-E949
Motor Vehicle-related injuries	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2	E810-E825
Unintentional non-transport injuries	W00-X59, Y86	E850-E869, E880-E928, E929.2-E929.9
Suicide	X60-X84, Y87.0	E950-E959
Homicide	X85-Y09, Y87.1	E960-E969
Injuries of undetermined intent	Y10-Y34, Y87.2, Y89.9	E980-E989

1. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title).

ICD-10 and ICD-9 Codes Used in this Publication
(Sorted by Cause of Death)

<u>Cause of Death</u>	<u>ICD-10 Code</u>	<u>ICD-9 Code</u>
Alzheimer's Disease	G30	331.0
Cancer (Malignant Neoplasms)	C00-C97	140-208
of bladder	C67	188
of cervix uteri	C53	180
of colon, rectum, rectum and anus	C18-C21	153-154, 159.9
of corpus uteri and uterus, part unspecified	C54-C55	179,182
of esophagus	C15	150
of female breast	C50	174
Hodgkin's Disease	C81	201
of kidney and renal pelvis	C64-C65	189.0-189.1
Leukemia	C91-C95	202.4, 204-208
of meninges, brain & other parts of central nervous system	C70-C72	191-192
Multiple myeloma and immunoproliferative neoplasms	C88, C90	203
Non-Hodgkin's lymphoma	C82-C85	200, 202 (except 202.4)
of ovary	C56	183.0
of prostate	C61	185
of stomach	C16	151
of pancreas	C25	157
of trachea, bronchus and lung	C33-C34	162
Certain conditions originating in the perinatal period (Perinatal Conditions)	P00-P96	760-779
Chronic liver disease and cirrhosis	K70, K73-K74	571
Chronic lower respiratory diseases ¹	J40-J47	490-496
Congenital malformations, deformations, and chromosomal abnormalities	Q00-Q99	740-759
Diabetes Mellitus	E10-E14	250
External causes of injuries and poisonings (intentional, unintentional and of undetermined intent)	V01-Y98	E800-E999
Homicide	X85-Y09, Y87.1	E960-E969
Injuries of undetermined intent	Y10-Y34, Y87.2, Y89.9	E980-E989
Suicide	X60-X84, Y87.0	E950-E959
Accidents (Unintentional Injuries)	V01-X59	E800-E949
Motor Vehicle-related injuries	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2	
Unintentional non-transport injuries	VW00-X59, Y86	E810-E825 E850-E869, E880-E928, E929.2-E929.9
Heart Disease	I00-I09, I11, I13, I20-I51	390-398, 402, 404-429
Infectious and parasitic diseases	A00-B99	001-139
Human Immunodeficiency Virus (HIV) disease (AIDS)	B20-B24	042-044
Septicemia	A40-A41	038
Influenza and pneumonia	J10-J18	480-487
Nephritis	N00-N07, N17-N19, N25-N27	580-589
Stroke (Cerebrovascular disease)	I60-I69	430-438
Signs and symptoms	R00-R99	780-797, 798.1-798.9, 799
Sudden infant death syndrome (SIDS)	R95	798.0

1. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title).

ICD-10 Injury Codes Used in this Publication

<u>Cause of Death</u>	<u>ICD-10 Code</u>
Suicide	
Poisoning	X60-X84, Y87.0
Hanging, strangulation or suffocation	X60-X69
Firearm	X70
Other and unspecified	X72-X74
	Residual
Homicide	
Firearm	X85-Y09, Y87.1
Cut or pierce	Y93-Y95
Other and unspecified	X99
	Residual
Unintentional Injuries (Accidents)	
Falls	V01-X59, Y85-Y86
Hanging, strangulation or suffocation	W00-W19
Drowning or submersion	W75-W84
Smoke, fire and flames	W65-W74
Poisoning	X00-X19
Firearm	X40-X49
Motor Vehicle-related	
Injury to pedestrian	W32-W34
Injury to pedal cyclist	V02-V04, V09.0, V09.2, V12- V14, V19.0-V19.2, V19.4- V19.6, V20-V79, V80.3-
	V80.5, V81.0-V81.1, V82.0-
	V82.1, V83-V86, V87.0-
	V87.8, V88.0-V88.8, V89.0, V89.2
Injury to motorcyclist	V02-V04, V09.0
Injury to occupant	V12-V14, V19.0, V19.2, V19.4, V19.5, V19.6 V20-V29
	V30-V79, V80.3, V80.4, V80.5, V81.0-V81.1, V82.0, V82.1, V83-V86
Other and unspecified	Residual
Other and unspecified	Residual
Events of Undetermined Intent	
Poisoning	Y10-Y34, Y87.2, Y89.9
Drowning or submersion	Y10-Y19
Other and unspecified	Y21
	Residual
Legal Intervention	
Firearm	Y35.-Y36, Y89.0, Y89.1 Y35.0
Adverse Effects	
Drugs	Y40-Y59, Y60-Y84, Y88
Medical Care	Y40-Y59, Y88.0 Y60-Y84, Y88.1, Y88.2, Y88.3

ICD-10 Poisoning Codes Used in this Publication

<u>Manner of Death</u>	<u>ICD-10 Code</u>
All Poisoning Deaths	X40-X49, X60-X69, X85-X90, Y10-Y19, Y35.2
Narcotics and psychodysleptics	X42, X62, Y12
Other and unspecified drugs, medicaments, biological substances	X44, X64, X89, Y14
Antiepileptic, sedative-hypnotic, antiparkinsonism & psychotropic	X41, X61, Y11
Gases and vapours	X47, X67, X86, X88, Y17, Y35.2
Nonopioid analgesics, antipyretics & antirheumatics	X40, X60, Y10
Alcohol	X45, X65, Y15
Organic solvents and halogenated hydrocarbons	X46, X66, Y16
Other drugs acting on autonomic nervous system	X43, X63, Y13
Other and unspecified chemicals and noxious substances	Remaining causes

ICD-10 Codes for Selected Healthy People 2010 Mortality Objectives Used in this Publication
(Sorted by Objective Number)

Objective Number	Cause of Death	ICD-10 Identifying Codes
3-1	Cancer (all sites)	C00-C97
3-2	Lung cancer	C33-C34
3-3	Female breast cancer	C50
3-4	Uterine Cervix cancer	C53
3-5	Colorectal cancer	C18-C21
3-6	Oropharyngeal cancer	C00-C14
3-7	Prostate cancer	C61
3-8	Malignant melanoma	C43
12-1	Coronary heart disease	I11, I20-I25
12-7	Stroke	I60-I69
13-14	HIV infection	B20-B24
15-3	Firearm-related deaths	W32-W34, X72-X74, X93-X95, Y22-Y24, Y35.0, Y93-Y95
15-8	Poisoning	X40-X49, X60-X69, X85-X90, Y10-Y19, Y35.2
15-9	Hanging, strangulation or suffocation	W75-W84, X70, X91, Y20
15-13	Unintentional injuries (Accidents)	V01-X59, Y85-Y86
15-15	Motor vehicle-related	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2
15-25	Residential fire deaths	X00, X02
15-27	Falls	W00-W19, X80, Y01, Y30
15-29	Drownings	W65-W74, X71, X92, Y21
15-32	Homicides	X85-Y09, Y87.1
16-1f	Birth defects	Q00-Q99
16-1g	Congenital heart and vascular defects	Q20-Q24
16-1h	Sudden infant death syndrome (SIDS)	R95
18-1-	Suicide	X60-X84, Y87.0
24-1	Asthma	J45-J46
26-1	Motor-vehicle crash deaths	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2
26-2	Cirrhosis	K74
26-3	Drug induced deaths	F11.0-F11.5, F11.7-F11.9, F12.0-F12.5, F12.7-F12.9, F13.0-F13.5, F13.7-F13.9, F14.0-F14.5, F14.7-F14.9, F15.0-F15.5, F15.7-F15.9, F16.0-F16.5, F16.7-F16.9, F17.0, F17.3-F17.5, F17.7-F17.9, F18.0-F18.5, F18.7-F18.9, F19.0-F19.5, F19.7-F19.9, X40-X44, X60-64, X85, Y10-Y14

*These Healthy People 2010 objectives use underlying cause of death data.

Figure C-1

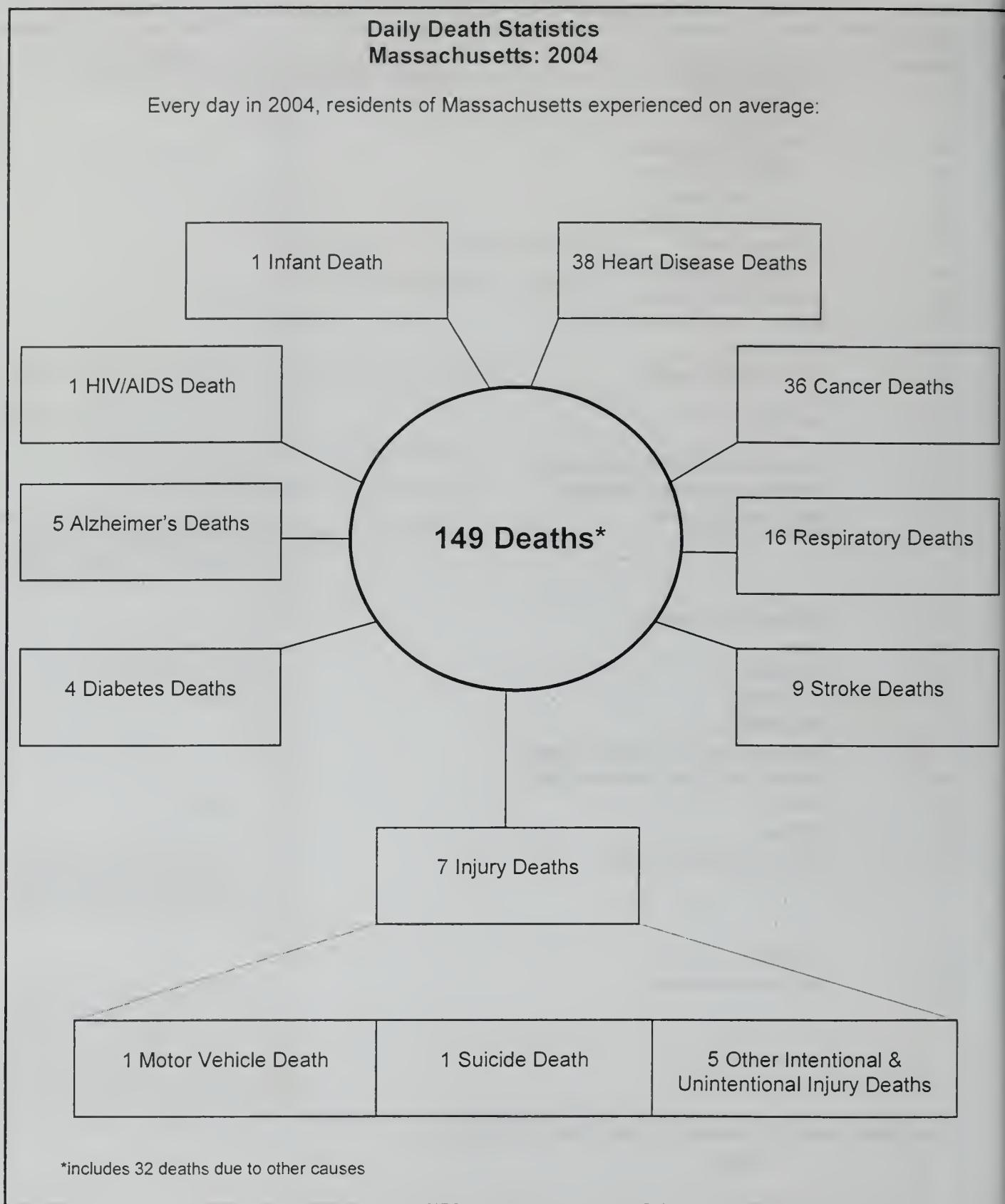


Table C-1. Trends in Mortality Characteristics, Massachusetts: 1994 - 2004

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Resident deaths ¹											
Number	54,914	55,296	55,187	54,634	55,204	55,763	56,591	56,733	56,881	56,194	54,419
Crude rate ^{2,3,4}	899.2	900.2	892.4	877.3	877.5	881.9	889.5	887.1	887.0	875.2	848.1
Age-adjusted rate ⁵	868.2	866.2	853.0	834.8	808.8	808.8	812.2	803.4	793.8	772.6	739.3
Race/ethnicity of decedent ^{6,7}											
White non-Hispanic	Number	51,600	51,785	51,917	51,398	51,829	52,282	52,959	52,792	52,050	50,439
	Percent ⁸	94.0	93.7	94.1	94.1	93.9	93.8	93.6	93.1	92.6	92.7
	Age-adjusted rate	864.2	860.1	852.2	835.1	808.5	808.7	814.5	804.4	796.0	775.2
Black non-Hispanic	Number	2,079	2,136	2,025	2,033	1,969	2,018	2,109	2,226	2,275	2,378
	Percent	3.8	3.9	3.7	3.7	3.6	3.6	3.7	3.9	4.0	4.2
	Age-adjusted rate	1,176.7	1,193.0	1,141.1	1,142.1	1,076.6	995.2	933.5	951.0	935.6	949.1
Asian non-Hispanic	Number	335	403	398	403	413	449	467	510	531	579
	Percent	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.9	1.0	4.1
	Age-adjusted rate	521.2	565.2	534.5	512.0	500.7	422.4	401.4	396.9	397.6	411.9
Hispanic	Number	865	936	803	749	924	975	1,014	1,059	1,166	1,121
	Percent	1.6	1.7	1.5	1.4	1.7	1.7	1.8	1.9	2.0	2.1
	Age-adjusted rate	482.7	504.7	430.0	391.0	463.8	507.8	585.2	556.5	591.0	520.6
Gender of decedent ⁷											
Female	Number	28,733	29,262	29,152	29,261	29,568	29,786	30,465	30,780	30,427	29,053
	Age-adjusted rate	712.6	717.6	702.7	699.0	678.0	676.9	688.8	689.5	674.4	659.3
Male	Number	26,181	26,034	26,035	25,373	25,635	25,977	26,126	25,953	26,454	26,141
	Age-adjusted rate	1,096.9	1,080.6	1,074.0	1,035.0	1,000.8	1,001.6	988.7	957.6	955.1	923.3
Age of decedent ⁷											
<1 year	Number	499	419	403	425	414	418	377	407	397	383
1-14 years	Number	192	204	197	174	128	165	181	169	167	149
15-24 years	Number	473	452	434	422	413	407	403	444	460	490
25-44 years	Number	3,210	3,196	2,720	2,348	2,373	2,397	2,375	2,571	2,490	2,484
45-64 years	Number	7,766	7,611	7,477	7,416	7,501	7,431	7,841	8,004	8,344	8,476
65-74 years	Number	11,394	10,858	10,711	10,286	10,216	9,782	9,746	9,323	8,922	8,611
75-84 years	Number	16,092	16,497	16,839	16,884	16,946	17,397	17,554	17,416	17,262	16,973
85+ years	Number	15,283	16,054	16,400	16,677	17,213	17,765	18,113	18,395	18,838	18,627

1. Deaths presented in all tables and figures are resident deaths. 2. Deaths per 100,000 residents. 3. See Section Definitions for further definition of terms and rates. 4. Rate calculations are based on resident population estimates from MISER for 1994-1995 (released in September 1999), 1996-1997 (released in November 1999), and 1998 (released in September 2000). Resident deaths rates for 2000-2004 have been recalculated using 2000-2004 new population estimates. 5. Rates are age-adjusted per 100,000 residents using the 2000 US standard population. 6. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 7. Column sum may not equal total because the race, gender or age of some decedents was unknown. 8. Percent of all resident deaths in that year.

Table C-2. Five Leading Causes of Death¹ Comparability Unmodified and Comparability Modified Age-Adjusted Rates Massachusetts and United States: 1994-2004

Year ²	Heart Disease				Cancer				Stroke				
	MA	US											
1994	Comparability Unmodified ³	Comparability Modified ⁴											
Rate	265.3	261.5	304.5	300.2	224.7	226.3	211.0	212.4	51.7	54.7	63.3	60.1	
% of Total	30.8	32.7	25.3	23.2	25.3	23.2	6.1	6.1	6.7	6.7			
1995	Rate	259.4	255.7	301.3	297.0	225.6	227.2	209.6	211.0	52.9	55.9	63.9	61.3
% of Total	30.2	32.4	25.4	23.1	25.4	22.7	23.1	211.0	6.3	6.3	6.8	6.8	
1996	Rate	257.1	253.4	293.4	289.2	221.2	222.7	206.7	208.1	50.5	53.4	63.2	61.0
% of Total	30.4	32.2	32.2	25.2	25.2	23.1	23.1	208.1	6.1	6.1	6.9	6.9	
1997	Rate	249.0	245.5	285.7	281.6	215.4	216.8	203.7	205.1	50.6	53.5	61.8	60.1
% of Total	30.2	32.0	32.0	25.0	25.0	23.1	23.1	205.1	6.2	6.2	6.9	6.9	
1998	Rate	231.0	227.7	272.4	273.9	209.0	210.4	202.4	204.4	47.1	49.7	59.5	63.1
% of Total	29.0	31.6	31.6	25.0	25.0	23.0	23.0	204.4	6.0	6.0	6.8	6.8	
1999	Rate	222.1 ⁷	222.1 ⁷	265.9	260.7	206.6 ⁷	206.6 ⁷	201.6	201.6	50.2 ⁷	50.2 ⁷	61.4	
% of Total	27.9	30.3	30.3	24.8	24.8	24.8	24.8	201.6	23.0	23.0	6.4	7.0	
2000	Rate	216.7 ⁷	216.7 ⁷	258.2	258.2	206.1 ⁷	206.1 ⁷	200.9	200.9	50.9 ⁷	50.9 ⁷	60.9	
% of Total		27.1	29.5	24.8	24.8	24.8	24.8	200.9	23.0	23.0	6.4	6.9	
2001	Rate	211.0 ⁷	211.0 ⁷	247.7	247.7	200.0 ⁷	200.0 ⁷	195.8	195.8	46.7 ⁷	46.7 ⁷	57.9	
% of Total		26.7	28.9	24.2	24.2	24.2	24.2	195.8	22.9	22.9	6.2	6.8	
2002	Rate	201.1 ⁷	201.1 ⁷	240.4	240.4	200.1 ⁷	200.1 ⁷	194.0	194.0	48.1 ⁷	48.1 ⁷	56.3	
% of Total		26.0	28.4	24.0	24.0	24.0	24.0	194.0	22.8	22.8	6.0	6.7	
2003	Rate	196.6 ⁷	196.6 ⁷	232.3	232.3	193.0 ⁷	193.0 ⁷	190.1	190.1	45.0 ⁷	45.0 ⁷	53.5	
% of Total		26.0	28.0	24.1	24.1	24.1	24.1	190.1	22.7	22.7	6.0	6.5	
2004	Rate	182.8 ⁷	182.8 ⁷	217.5 ⁸	217.5 ⁸	188.4 ⁷	188.4 ⁷	184.6 ⁸	184.6 ⁸	42.5 ⁷	42.5 ⁷	50.0 ⁸	
% of Total		25.3	27.3	24.5	24.5	24.5	24.5	184.6 ⁸	22.9	22.9	6.0	6.3	

1. Cause of death; the disease or injury that initiated the events leading to death, or the circumstances of the unintentional or intentional injury that resulted in the death. 2. 1990-1998 data coded according to ICD-9. 1999-2003 data coded according to ICD-10. ICD-9 and ICD-10 codes used in this publication are listed in the Section Definitions. 3. Comparability unmodified rate: this rate has not been modified to account for changes from ICD-9 to ICD-10. 4. Comparability Modified Rate: this rate is adjusted using the preliminary comparability ratio (CR) from NCHS, February 2001 in order to account for changes from ICD-9 to ICD-10. 5. All rates are age-adjusted per 100,000 residents using the 2000 US standard population. U.S. data for years 1994-1998 obtained from Compressed Mortality File on CDC Wonder, February 2001. 6. NA: comparability ratio is not applicable for years prior to 1994. 7. When comparing data over time between 1994 through 2004, please use the comparability modified rates for years 1994-1998. Resident deaths rates for 2000-2004 have been recalculated using 2000-2004 new population estimates. 8. U.S. data for 2004 obtained from NCHS. Deaths: Preliminary Data for 2004. National Vital Statistics Report, Vol. 54, No. 19, June 28, 2006.

Table C-2 (continued). Five Leading Causes of Death¹ Comparability Unmodified and Comparability Modified Age-Adjusted Rates, Massachusetts and United States: 1994-2004

Year ²	Influenza/Pneumonia				Unintentional Injuries				All Causes	
	MA	US	Comparability Unmodified ³	Comparability Modified ⁴	MA	US	Comparability Unmodified ³	Comparability Modified ⁴	MA	US
1994	Rate % of Total	40.4 4.8	28.2 3.5	33.4 3.5	23.3 2.4	20.6 2.4	35.7 4.0	35.1 3.5	868.2 920.0	
1995	Rate % of Total	41.2 4.9	28.7 3.6	33.5 3.6	23.4 2.1	18.8 18.8	36.0 4.0	35.4 4.0	866.2 918.4	
1996	Rate % of Total	41.5 5.1	29.0 3.6	32.9 3.6	23.0 2.3	19.5 19.5	36.2 4.1	35.6 4.1	853.0 902.1	
1997	Rate % of Total	39.1 4.9	27.3 3.7	33.3 3.7	23.3 2.3	19.7 19.7	36.0 4.1	35.3 4.1	834.8 887.0	
1998	Rate % of Total	40.2 5.2	28.1 3.9	34.6 3.9	24.2 2.3	19.9 19.8	35.0 4.2	36.1 4.2	808.8 875.4	
1999	Rate % of Total	30.3 ⁷ 3.9	23.4 2.7	19.3 ⁷ 2.3	23.4 2.3	35.9 4.1			808.8 881.9	
2000	Rate % of Total	29.1 ⁷ 3.7	23.7 2.8	20.2 ⁷ 2.4	23.7 2.8	35.6 3.9			812.2 872.0	
2001	Rate % of Total	24.0 ⁷ 3.1	21.8 2.6	21.9 ⁷ 2.6	21.8 2.6	34.3 4.0			803.5 855.0	
2002	Rate % of Total	27.3 ⁷ 4.0	22.7 2.7	20.5 ⁷ 2.0	22.7 2.7	35.3 4.2			793.8 846.8	
2003	Rate % of Total	26.0 ⁷ 3.6	22.0 2.7	20.1 ⁷ 2.5	22.0 2.5	37.3 4.3			772.6 832.7	
2004	Rate % of Total	24.9 ⁷ 3.6	20.4 ⁸ 2.6	19.4 ⁷ 2.5	20.4 ⁸ 2.6	36.6 ⁸ 4.5			739.3 801.1 ⁸	

1. Cause of death; the disease or injury that initiated the events leading to death; or the circumstances of the unintentional or intentional injury that resulted in the death. 2. 1994-1998 data coded according to ICD-9. 1999-2004 data coded according to ICD-10. ICD-9 and ICD-10 codes used in this publication are listed in the Section Definitions. 3. Comparability unmodified rate; this rate has not been modified to account for changes from ICD-9 to ICD-10. 4. Comparability Modified Rate; this rate is adjusted using the preliminary comparability ratio (CR) from NCHS, February 2001 in order to account for changes from ICD-9 to ICD-10. 5. All rates are age-adjusted per 100,000 residents using the 2000 US standard population. U.S. data for years 1994-1998 obtained from Compressed Mortality File on CDC Wonder, February 2001. 6. NA: comparability ratio is not applicable for years prior to 1994. 7. When comparing data over time between 1994 through 2004, please use the comparability modified rate for years 1994-1998. Resident deaths for 2000-2004 have been recalculated using 2000-2004 new population estimates. 8. U.S. data for 2004 obtained from NCHS. Deaths: Preliminary Data for 2004. National Vital Statistics Report, Vol. 54, No. 19, June 28, 2006.

Table C-3A. Leading Underlying Causes of Death*, Numbers and Age-Specific Rates by Gender, Massachusetts: 2004

Age	Cause of death ¹	Total		Female		Male	
		Number	Rate ²	Number	Rate ²	Number	Rate ²
1-14 years	TOTAL	137	12.1	58	10.5	79	13.6
	Unintentional Injuries	41	3.6	15	2.7	26	4.5
	Cancer	23	2.0	11	2.0	12	2.1
	Congenital Malformations	14	1.2	6	1.1	8	1.4
	Homicide	7	0.6	2	- ⁵	5	0.9
15-24 years	TOTAL	517	60.7	119	28.3	398	92.3
	Unintentional Injuries	165	19.3	42	9.8	123	28.5
	Homicide	80	9.4	7	1.7	73	16.9
	Injuries of Undetermined Intent	73	8.6	13	3.1	60	13.9
	Suicide	51	6.0	8	1.9	43	10.0
25-44 years	TOTAL	2,247	117.6	779	80.4	1,468	155.9
	Cancer	410	21.5	224	23.1	186	19.8
	Injuries of Undetermined Intent	325	17.0	102	10.5	223	23.7
	Heart Disease	285	14.9	78	8.0	207	22.0
	Unintentional Injuries	263	13.8	64	6.6	199	21.1
45-64 years	TOTAL	8,347	525.2	3,214	391.0	5,133	669.1
	Cancer	3,126	196.7	1,509	183.6	1,617	210.8
	Heart Disease	1,697	106.7	452	55.0	1,245	162.2
	Unintentional Injuries	279	17.6	82	10.0	197	25.7
	Chronic Lower Respiratory Disease ³	256	16.1	123	15.0	133	17.3
65+ years ⁴	TOTAL	42,795	5,009.1	24,746	4,870.1	18,049	5,212.8
	Heart Disease	11,783	1,379.2	6,703	1,319.2	5,080	1,467.2
	Cancer	9,723	1,138.1	4,965	977.1	4,758	1,374.2
	Stroke	2,975	348.2	1,919	377.7	1,056	304.7
	Chronic Lower Respiratory Disease ³	2,298	269.0	1,309	257.6	989	285.7

1. Cause of Death classified using ICD-10. See Section Definitions for ICD-10 codes. 2. Number of deaths per 100,000 residents in each age group. 3. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title). 4. See Table C-3B for leading causes of death for detailed age groups for persons ages 65+ years. 5. Calculations based on fewer than 5 events are excluded.

* Ranking based on number of deaths for all persons.

Table C-3B. Leading Underlying Causes of Death, Numbers and Age-Specific Rates (Ages 65 and older) by Gender, Massachusetts: 2004

Age	Cause of death ¹	<u>Total</u>		<u>Female</u>		<u>Male</u>	
		Number	Rate ²	Number	Rate ²	Number	Rate ²
65-74 years	TOTAL	8,126	2,051.6	3,680	1,692.6	4,446	2,335.8
	Cancer	3,138	792.3	1,536	706.5	1,602	841.8
	Heart Disease	1,853	467.8	732	336.7	1,121	589.1
	Chronic Lower Respiratory Disease ³	487	123.0	245	112.7	242	127.2
	Stroke	359	90.6	176	80.9	183	95.6
75-84 years	TOTAL	16,342	5,073.0	8,575	4,390.9	7,767	6,456.7
	Cancer	4,273	1,326.5	2,093	1,071.7	2,180	1,812.2
	Heart Disease	4,167	1,293.6	2,070	1,060.0	2,097	1,743.2
	Stroke	1,100	341.5	619	317.0	481	399.9
	Chronic Lower Respiratory Disease ³	1,033	320.7	575	294.4	458	380.7
85+ years	TOTAL	18,327	13,463.4	12,491	13,092.5	5,836	18,857.4
	Heart Disease	5,763	4,233.6	3,901	4,088.8	1,862	6,016.5
	Cancer	2,312	1,698.4	1,336	1,400.3	976	3,153.7
	Stroke	1,516	1,113.7	1,124	1,178.1	392	1,266.6
	Influenza and Pneumonia	1,108	814.0	737	772.5	371	1,198.8

1. Cause of Death classified according to ICD-10. See Section Definitions for ICD-10 codes. 2. Number of deaths per 100,000 residents in each age group. 3. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title).

Figure C-2

**Expected Years of Life Remaining at Different Ages
by Race/Hispanic Ethnicity, Massachusetts: 2004**

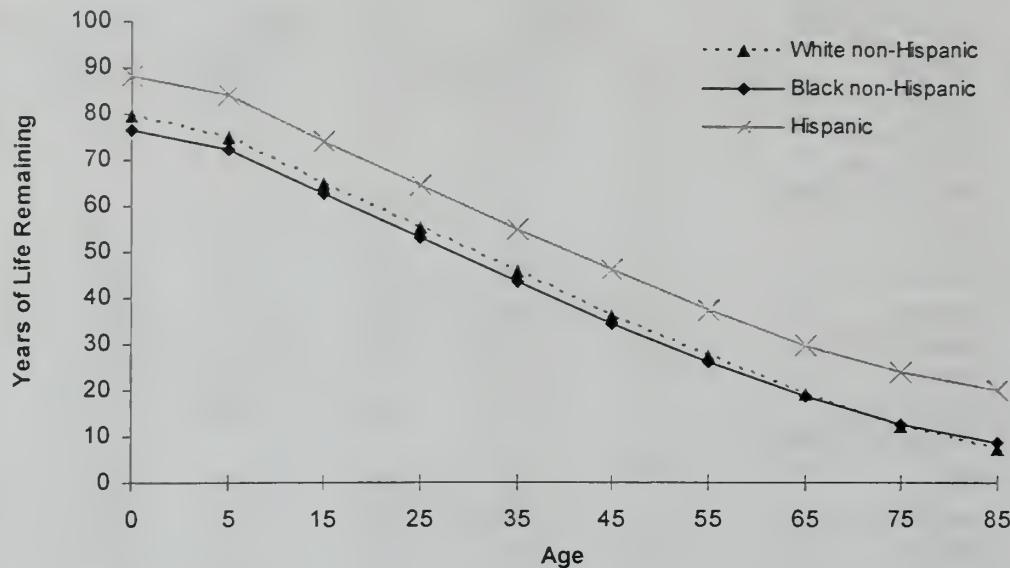


Table C-4. Years of Life Remaining¹, Massachusetts: 2004

At Age:	All	Females	White non-Hispanic Females	Black non-Hispanic Females	Hispanic Females	Males	White non-Hispanic Males	Black non-Hispanic Males	Hispanic Males
Birth	79.6	81.9	81.9	80.1	92.9	77.1	77.2	72.3	83.2
1 year old	78.9	81.2	81.1	79.9	92.5	76.5	76.5	72.1	82.8
5 years old	75.0	77.2	77.1	75.9	88.6	72.6	72.5	68.3	78.9
15 years old	65.1	67.3	67.1	66.0	78.6	62.6	62.6	58.4	69.0
25 years old	55.4	57.4	57.3	56.2	68.8	53.2	53.1	49.4	59.6
35 years old	45.8	47.7	47.5	46.7	59.1	43.6	43.6	40.2	50.2
45 years old	36.4	38.2	38.0	37.4	49.8	34.4	34.4	31.2	41.2
55 years old	27.5	29.0	28.8	28.7	40.8	25.8	25.7	22.9	33.2
65 years old	19.3	20.4	20.2	20.8	32.2	17.9	17.7	16.0	26.1
75 years old	12.5	13.2	13.0	14.0	25.7	11.4	11.3	10.9	21.0
85 years old	7.4	7.6	7.5	9.0	22.0	7.0	6.8	7.7	17.3

1. Years of Life Remaining calculated using the Greville Abridged Life Table Method (source: Dublin LI. Length of Life - A Study of the Life Table. Ronald Press Co. New York. 1949.) New population estimate for 2004 are used as the denominator.

Figure C-3

Trends in Percentage of Deaths from Selected Causes,
Massachusetts: 1842-2004

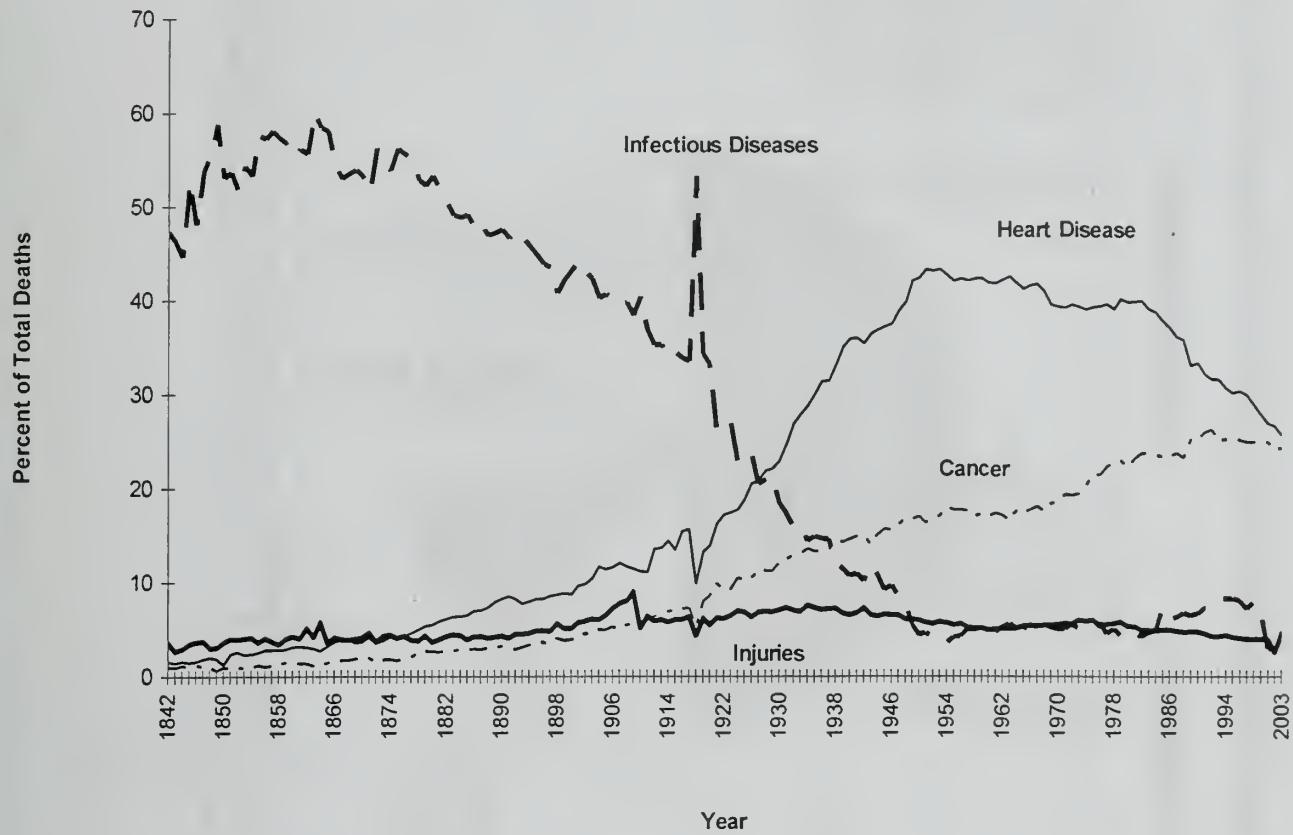


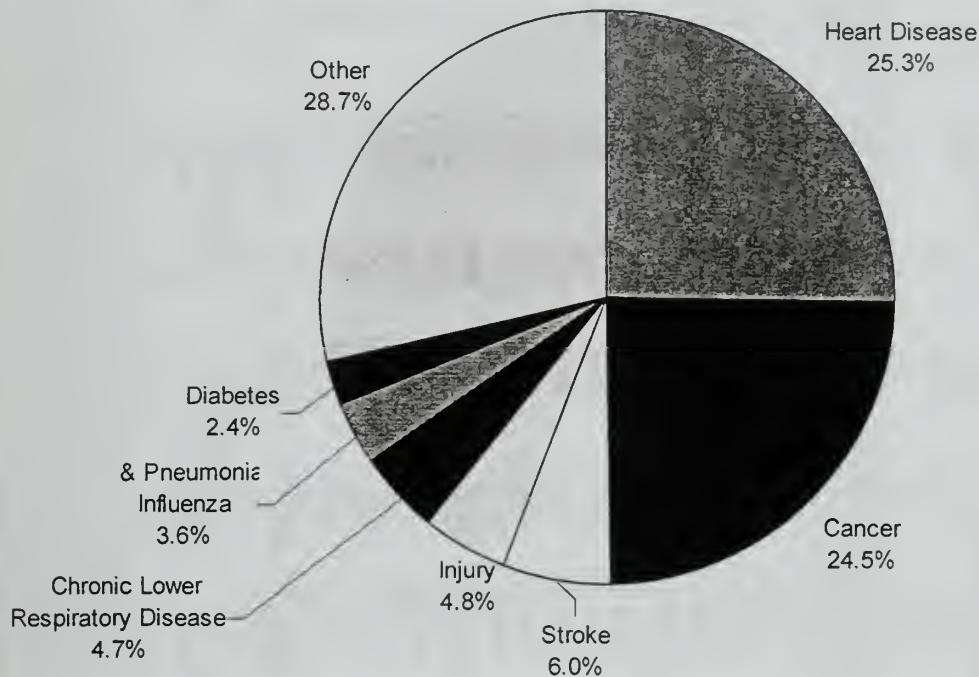
Table C-5. Leading Causes of Death¹ and Age-Adjusted Death Rates by Race and Hispanic Ethnicity, Massachusetts: 2004

<u>White, non-Hispanic²</u>		<u>Black, non-Hispanic²</u>		<u>Asian, non-Hispanic²</u>		<u>Hispanic</u>		
Cause ³	#	Rate ⁴	Cause	#	Rate	Cause	#	Rate
Total	50,439	744.7	Total	2,225	866.2	Total	531	353.7
Heart disease	13,021	185.7	Cancer	504	200.1	Cancer	149	93.1
Cancer	12,432	192.5	Heart Disease	484	198.8	Heart Disease	76	56.1
Stroke	3,006	41.9	Stroke	129	56.2	Stroke	47	34.1
Chronic Lower Resp. Disease ⁵	2,471	36.4	Nephritis	89	37.8	Diabetes	24	17.7
Influenza and Pneumonia	1,874	25.4	Diabetes	83	34.3	Unintentional injuries ⁶	24	10.2
Alzheimer's Disease	1,617	21.4	Homicide	70	15.7	Chronic Lower Resp. Disease ⁵	19	15.2
Unintentional injuries ⁶	1,224	20.3	Septicemia	61	24.6	Nephritis	16	12.8
Diabetes	1,172	17.6	HIV/AIDS	55	15.8	Influenza and Pneumonia	14	11.2
Nephritis	1,110	15.7	Perinatal Conditions	51	10.0	III defined conditions	11	6.0
Septicemia	873	12.8	Chronic Lower Resp. Disease ⁵	48	19.7	Suicide	10	2.7
						Total		
						Cause	#	Rate
						Total	54,419	739.3
						Heart disease	13,792	182.8
						Cancer	13,312	188.4
						Stroke	3,252	42.5
						Chronic Lower Respiratory Disease ⁵	2,573	35.2
						Influenza and Pneumonia	1,955	24.9
						Alzheimer's Disease	1,671	20.8
						Unintentional injuries ⁶	1,350	19.4
						Diabetes	1,327	18.4
						Nephritis	1,249	16.6
						Septicemia	961	13.1

1. Ranking based on number of deaths. 2. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 3. Underlying Cause of Death based on ICD-10 (Please refer to Section Definitions for list of ICD-10 codes used). 4. All rates are age-adjusted per 100,000 residents using the 2000 US standard population. 5. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title). 6. Unintentional injuries such as motor vehicle-related and other transportation related deaths, falls, fires, and drownings that were not intended to occur.

Figure C-4

Percent Distribution of Leading Underlying Causes of Death¹
Massachusetts: 2004



¹Total Number of Deaths = 54,419
Causes of Death are classified according to ICD-10

Table C-6A. Number and Age-Specific Rates for Selected Causes of Death by Race and Hispanic Ethnicity, Massachusetts: 2004

Selected Causes ²	<u>Total</u>		<u>White, non-Hispanic¹</u>		<u>Black, non-Hispanic¹</u>		<u>Asian, non-Hispanic¹</u>		<u>Hispanic</u>	
	#	Rate ³	#	Rate	#	Rate	#	Rate	#	Rate
Age: 1-14, TOTAL										
Unintentional Injuries ⁴	137	12.1	91	10.7	18	19.9	10	17.6	17	12.8
Cancer	41	3.6	31	3.7	4	5	2	5	3	5
Congenital malformations	23	2.0	15	1.8	3	5	1	5	4	5
Homicide	14	1.2	10	1.2	1	5	2	5	1	5
	7	0.6	3	— ⁵	2	5	0	5	2	5
Age: 15-24, TOTAL										
Unintentional Injuries ⁴	517	60.7	368	57.0	71	110.0	14	28.7	59	65.4
Homicide	165	19.3	137	21.2	9	13.9	4	5	13	14.4
Injuries of Undetermined Intent ⁶	80	9.4	16	2.5	43	66.6	2	5	16	17.7
Suicide	73	8.6	68	10.5	0	— ⁵	0	5	5	5.5
	51	6.0	42	6.5	4	— ⁵	2	5	3	— ⁵
Age: 25-44, TOTAL										
Cancer	2,247	117.6	1,755	117.9	217	179.1	48	38.6	211	122.7
Injuries of Undetermined Intent ⁶	410	21.5	337	22.6	34	28.1	9	7.2	29	16.9
Heart Disease	325	17.0	274	18.4	18	14.9	3	5	28	16.3
Unintentional Injuries ⁴	285	14.9	235	15.8	30	24.8	5	4.0	14	8.1
	263	13.8	217	14.6	15	12.4	9	7.2	20	11.6
Age: 45-64, TOTAL										
Cancer	8,346	525.2	7,320	527.1	588	782.8	91	174.0	327	470.1
Heart Disease	3,126	196.7	2,831	203.9	170	226.3	41	78.4	83	119.3
Unintentional Injuries ⁴	1,697	106.7	1,487	107.0	130	173.1	13	24.9	63	90.6
Chronic Lower Respiratory Disease ⁷	279	17.6	255	18.4	10	13.3	3	5	6	8.6
	256	16.1	227	16.3	14	18.6	2	5	10	14.4
Age: 65+, TOTAL⁸										
Heart Disease	42,795	5,009.1	40,695	5,150.8	1,256	4,610.5	353	2,016.0	426	2,336.3
Cancer	11,783	1,379.2	11,286	1,428.5	314	1,152.6	56	319.8	105	575.8
Stroke	9,723	1,138.1	9,229	1,168.1	293	1,075.5	95	542.5	91	499.1
Chronic Lower Respiratory Disease ⁷	2,975	348.2	2,800	354.4	96	352.4	36	205.6	38	208.4
	2,298	269.0	2,229	282.1	31	113.8	17	97.1	20	109.7

1. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 2. Deaths are coded according to ICD-10. Please see Section Definitions for a list of ICD-10 codes used in this table. 3. Number of deaths per 100,000 persons in each age group. 4. Unintentional injuries include injuries such as motor vehicle-related and other transportation related deaths, falls, fires, and drownings that were not intended to occur. 5. Calculations based on fewer than five events are excluded. 6. Injuries of undetermined intent include deaths from falls, fires, drownings, and drug overdoses, where the investigation has not determined whether the injuries were accidental or purposely inflicted. 7. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title). 8. Please see Table C-6B for causes of death for detailed age groups for persons ages 65+ years.

Table C-6B . Number and Age-Specific Rates for Selected Causes of Death, Persons Ages 65+
by Race and Hispanic Ethnicity, Massachusetts: 2004

<u>Selected Causes²</u>	<u>Total</u>	<u>White, non-Hispanic¹</u>	<u>Black, non-Hispanic¹</u>	<u>Asian, non-Hispanic¹</u>	<u>Hispanic</u>
	#	Rate ³	#	#	#
Age: 65-74, TOTAL	8,126	2,051.6	7,428	2,071.1	401
Cancer	3,138	792.3	2,920	814.1	127
Heart Disease	1,853	467.8	1,683	469.2	105
Chronic Lower Respiratory Disease ⁴	487	123.0	469	130.8	10
Stroke	359	90.6	310	86.4	20
Age: 75-84, TOTAL	16,342	5,073.0	15,537	5,141.6	485
Cancer	4,273	1,326.5	4,060	1,343.6	125
Heart Disease	4,167	1,293.6	3,997	1,322.7	110
Stroke	1,100	341.5	1,035	342.5	40
Chronic Lower Respiratory Disease ⁴	1,033	320.7	1,011	334.6	9
Age: 85+, TOTAL	18,327	13,463.4	17,730	13,720.6	370
Heart Disease	5,763	4,233.6	5,606	4,338.3	99
Cancer	2,312	1,698.4	2,249	1,740.4	41
Stroke	1,516	1,113.7	1,455	1,126.0	36
Influenza and Pneumonia	1,108	814.0	1,082	837.3	14

1. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 2. Deaths are coded according to ICD-10. Please see Section Definitions for a list of ICD-10 codes used in this table. 3. Number of deaths per 100,000 persons in each age group. 4. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title). 5. Calculations based on fewer than five events are excluded.

**Table C-7. Heart Disease and Cancer Deaths by Race and Gender,
Comparability Unmodified and Comparability Modified Age-Adjusted Rates¹, Massachusetts: 1998-2004**

Heart Disease

Year	Male	<u>White non-Hispanic²</u>		Total	Male	<u>Black non-Hispanic²</u>		Total
		Comparability Modified ³	Comparability Unmodified			Comparability Modified ^{4,5}	Comparability Unmodified	
1998	300.0	295.7	186.6	233.2	229.9	357.2	352.1	286.9
1999	289.8		178.4	224.3		296.5		248.0
2000	282.4		174.4	219.3		235.1		221.9
2001	265.9		174.0	213.4		295.2		228.6
2002	254.7		163.5	202.3		242.2		205.9
2003	250.3		160.2	198.5		272.1		223.9
2004	233.1		150.3	185.7		268.1		198.8
<hr/>								
Year	Male	<u>Asian non-Hispanic²</u>		Total	Male	<u>Hispanic Female</u>		Total
		Comparability Modified ³	Comparability Unmodified			Comparability Modified ^{4,5}	Comparability Unmodified	
1998	150.6	148.5	98.5	97.1	121.0	119.3	114.0	112.4
1999	119.6		73.7		94.7		143.4	83.5
2000	111.2		65.5		85.6		122.1	106.6
2001	113.5		62.6		85.1		148.7	110.0
2002	94.6		69.5		79.9		174.1	101.2
2003	115.2		65.0		87.6		124.8	96.2
2004	56.9		54.3		56.1		129.9	77.4

1. Rates are per 100,000 age-adjusted to the 2000 US standard population. 2. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 3. Comparability unmodified rate: this rate has not been modified. 4. Comparability modified rate: this rate has been adjusted using the preliminary comparability ratio (CR) provided by the NCHS (February 2001). 5. 1999-2004 are coded according to ICD-10. When comparing data over time between 1994 through 2004, please use the comparability modified rate for years 1994-1998. Resident death rates for 2000-2004 have been recalculated using 2000-2004 new population estimates. 6. The Census 2000 count for Hispanics 65+ years is lower than the number previously estimated. Thus, the death rate (the number of deaths divided by the population) is increased relative to past calculations.

**Table C-7 (continued). Heart Disease and Cancer Deaths by Race and Gender,
Comparability Unmodified and Comparability Modified Age-Adjusted Rates¹, Massachusetts: 1998-2004**

<u>Cancer</u>												
Year	<u>White non-Hispanic²</u>					<u>Black non-Hispanic²</u>						
	Male	Female	Total	Male	Female	Total	Male	Female	Total			
	Comparability Unmodified ³	Comparability Modified ⁴ ₅	Comparability Unmodified	Comparability Modified ⁴ ₅								
1998	264.1	265.9	177.8	179.0	210.0	211.4	380.2	382.8	218.1	219.6	280.1	282.0
1999	263.4	263.4	174.3	207.7	337.2	195.7	251.5	251.5	348.1	167.4	237.8	
2000	258.7	258.7	179.0	209.0	348.1	176.4	212.1	212.1	264.7	203.5	245.2	
2001	249.2	249.2	175.8	203.5	293.5	179.5	224.3	224.3	202.2	175.3	245.7	
2002	245.7	245.7	175.3	195.7	304.5	199.0	238.7	238.7	169.4	168.4	237.1	
2003	237.1	237.1	168.4	192.5	277.6	155.7	200.1	200.1	192.5	192.5	230.4	
2004	-	-	-	-	-	-	-	-	-	-	-	
<u>Asian non-Hispanic²</u>												
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total			
	Comparability Unmodified ³	Comparability Modified ⁴ ₅	Comparability Unmodified	Comparability Modified ⁴ ₅								
1998	143.5	144.5	103.7	104.4	120.2	121.0	160.2	161.3	89.5	90.1	117.2	118.0
1999	162.8	116.9	136.7	141.8	92.5	92.5	113.8	104.5	151.9	104.5	123.8	
2000	104.7	92.1	99.0	142.9	142.9	142.9	116.4	144.3	144.3	144.3	116.4	
2001	98.3	105.6	103.1	103.1	103.1	103.1	103.1	103.3	103.3	103.3	103.3	
2002	145.8	90.0	114.3	114.3	110.0	110.0	120.6	110.0	110.0	110.0	120.6	
2003	134.6	87.4	109.3	109.3	76.6	76.6	90.0	76.6	76.6	76.6	90.0	
2004	109.5	79.7	93.1	125.6	82.5	82.5	100.4	82.5	82.5	82.5	100.4	

1. Rates are per 100,000 age-adjusted to the 2000 US standard population. 2. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 3. Comparability unmodified rate: this rate has not been modified. 4. Comparability modified rate: this rate has been adjusted using the preliminary comparability ratio (CR) provided by the NCHS (February 2001). 5. 1999-2004 are coded according to ICD-10. When comparing data over time between 1994 through 2004, please use the comparability modified rate for years 1994-1998. Resident deaths rates for 2000-2004 have been recalculated using 2000-2004 new population estimates. 6. The Census 2000 count for Hispanics 65+ years is lower than the number previously estimated. Thus, the death rate (the number of deaths divided by the population) is increased relative to past calculations.

Table C-8. Number and Age-Adjusted Rates of Cancer Deaths by Selected Causes and Gender, Massachusetts: 2004

Cause of Death ¹	ICD-10 Code	Total		Female		Male	
		#	Rate ^{2,3}	#	Rate	#	Rate
Total Cancer Deaths	C00-C97	13,312	188.4	6,718	164.0	6,594	226.6
Bladder	C67	375	5.2	109	2.5	266	9.3
Brain and nervous system	C70-C72	273	4.0	128	3.3	145	4.7
Cervix	C53	64	1.7	64	1.7	NA	NA
Colorectal	C18-C21	1,286	17.7	684	15.5	602	20.7
Esophagus	C15	353	5.1	84	2.1	269	9.1
Female breast	C50 ⁴	971	24.2	971	24.2	NA	NA
Hodgkin's disease	C81	25	0.4	12	0.3	13	0.4
Kidney and other urinary organs	C64, C65	284	4.0	102	2.4	182	6.2
Leukemia	C91-C95	499	7.1	241	5.8	258	8.8
Lung	C33, C34	3,607	52.0	1,726	43.4	1,881	64.7
Melanoma of the skin	C43	190	2.7	65	1.7	125	4.2
Multiple myeloma	C88, C90	240	3.3	112	2.6	128	4.3
Non-Hodgkin's lymphoma	C82-C85	517	7.2	264	6.1	253	8.8
Ovary	C56	370	9.3	370	9.3	NA	NA
Pancreas	C25	789	11.2	420	10.1	369	12.5
Prostate	C61	650	23.4	NA	NA	650	23.4
Stomach	C16	295	4.1	128	3.0	167	5.8
Uterus	C54, C55	173	4.3	173	4.3	NA	NA
All other cancers	Residual	2,351	33.3	1,065	25.6	1,286	43.7

1. Common terms are used to describe the causes of cancer deaths. For detailed terminology of cancer sites, please refer to ICD-10 code list in the Section Definitions. 2. All rates are age-adjusted by the direct method using the 2000 US standard population. Rates are per 100,000 population. 3. The total resident population is used to calculate all "Total Rates" except for ICD-10 C50, C53-C56, which are based on the total female population, and ICD-10 C61, which is based on the total male population. 4. Includes only female breast cancer.

Table C-9. Selected Causes of Cancer Deaths by Age, Massachusetts: 2004

Age	Cause of death ¹	ICD-10 Code	Number	Age-specific rate ²
1 – 14 years	TOTAL		23	2.0
	Brain and nervous system	C70-C72	8	0.7
	Leukemia	C91-C95	5	0.4
	Kidney and other urinary organs,	C64, C65	2	— ³
	Lung	C33, C34	1	— ³
15 - 24 years	TOTAL		30	3.5
	Leukemia	C91-C95	10	1.2
	Brain and nervous system	C70-C72	2	— ³
	Colorectal	C18-C21	1	— ³
	Pancreas	C25	1	— ³
25 – 44 years	TOTAL		410	21.5
	Lung	C33, C34	62	3.2
	Female breast ⁴	C50	58	6.0
	Colorectal	C18-C21	39	2.0
	Leukemia	C91-C95	34	1.8
45 – 64 years	TOTAL		3,126	196.7
	Lung	C33, C34	857	53.9
	Female breast ⁴	C50	293	35.6
	Colorectal	C18-C21	246	15.5
	Pancreas	C25	199	12.5
65 + years	TOTAL		9,723	1,138.1
	Lung	C33, C34	2,687	314.5
	Colorectal	C18-C21	1,000	117.0
	Female breast ⁴	C50	620	122.0
	Prostate ⁵	C61	603	174.2
65-74 years	TOTAL		3,138	792.3
	Lung	C33, C34	1,055	266.4
	Colorectal	C18-C21	242	61.1
	Female Breast ⁴	C50	203	93.4
	Pancreas	C25	200	50.5
75-84 years	TOTAL		4,273	1,326.5
	Lung	C33, C34	1,220	378.7
	Colorectal	C18-C21	424	131.6
	Prostate ⁵	C61	273	215.2
	Pancreas	C25	250	77.6
85+ years	TOTAL		2,312	1,698.4
	Lung	C33, C34	412	302.7
	Colorectal	C18-C21	334	245.4
	Prostate ⁵	C61	235	577.1
	Female Breast ⁴	C50	172	180.3

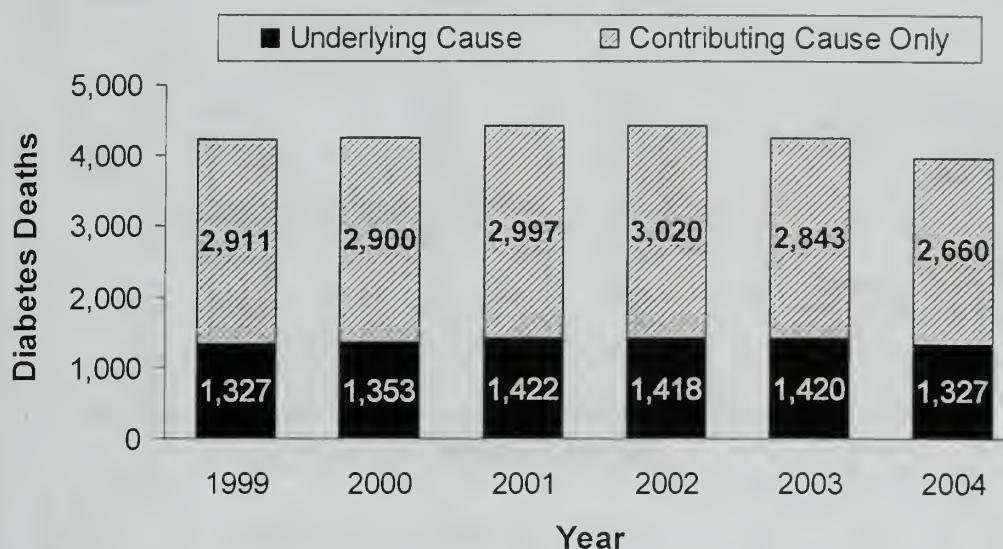
1. Common terms are used to describe causes of cancer death. For detailed terminology, please refer to the ICD-10 codes listed in the Section Definitions. 2. Number of deaths per 100,000 residents in each age group. 3. Calculations based on fewer than five events are excluded. 4. Calculation based on female population in specified age group. 5. Calculation based on male population in specified age group.

Table C-10. Leading Causes of Cancer Deaths and Age-Adjusted Rates by Race and Hispanic Ethnicity, Massachusetts: 2004

<u>Cause²</u>	#	Rate ³	<u>White non-Hispanic¹</u>	<u>Black non-Hispanic¹</u>			<u>Asian non-Hispanic¹</u>			<u>Hispanic</u>		
				#	Rate	Cause	#	Rate	Cause	#	Rate	Cause
Lung	3,411	53.8	Lung	125	50.8	Lung	32	21.6	Lung	34	17.1	
Colorectal	1,216	18.2	Colorectal	42	16.3	Colorectal	12	7.1	Colorectal	16	7.2	
Female Breast	921	25.4	Prostate	40	52.5	Leukemia	11	6.5	Pancreas	16	8.7	
Pancreas	739	11.5	Female Breast	32	19.0	Non-Hodgkin's Lymphoma	9	6.0	Female Breast	13	11.0	
Prostate	597	23.1	Pancreas	27	10.6	Stomach	8	5.5	Leukemia	13	4.7	
Total Cancer	12,432	192.5	Total Cancer	504	200.1	Total Cancer	149	93.1	Total Cancer	209	100.1	

1. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 2. ICD-10 codes used. Please refer to the ICD-10 codes listing in the Section Definitions for detailed terminology. 3. All rates are age-adjusted by the direct method using the 2000 US standard population. Rates are per 100,000 population.

**Figure C-5. Diabetes Deaths
Massachusetts: 1999-2004**



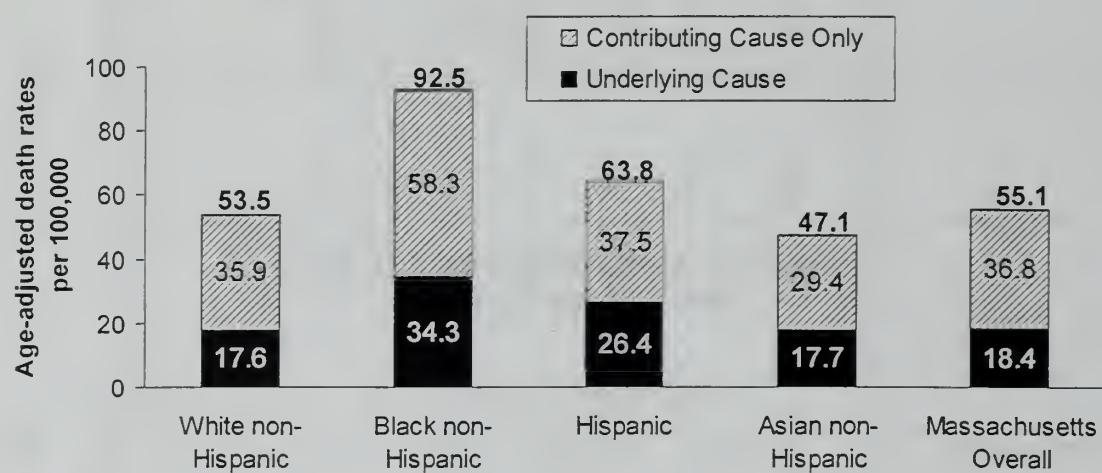
**Table C-11. Diabetes Deaths by Gender
Massachusetts: 2004**

Cause of death	Proportion of all deaths (%)			Number		
	Males	Females	Total	Males	Females	Total
Underlying	2.6%	2.3%	2.4%	653	674	1,327
Contributing/Associated	5.2%	4.7%	4.9%	1,307	1,353	2,660
Total diabetes deaths	7.7%	7.0%	7.3%	1,960	2,027	3,987
<i>Total deaths</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>	<i>25,350</i>	<i>29,067</i>	<i>54,421</i>

**Table C-12. Diabetes Deaths by Race and Hispanic Ethnicity
Massachusetts: 2004**

Cause of death	Race/Hispanic Ethnicity				
	White non-Hispanic	Black non-Hispanic	Hispanic	Asian non-Hispanic	Total
Number					
Underlying	1,172	83	45	24	1,327
Contributing/Associated	2,400	140	75	38	2,660
<i>Total diabetes-related</i>	3,572	223	120	62	3,987
<i>Total deaths</i>	50,439	2,225	1,115	531	54,421
Proportion of all deaths (%)					
Underlying	2.3	3.7	4.0	4.5	2.4
Contributing/Associated	4.8	6.3	6.7	7.2	4.9
<i>Total diabetes-related</i>	7.1	10.0	10.8	11.7	7.3

**Figure C-6. Diabetes Death Rates by Race/Hispanic Ethnicity
Massachusetts: 2004**



**Figure C-7. Age Composition of Diabetes Deaths
Massachusetts: 2004**

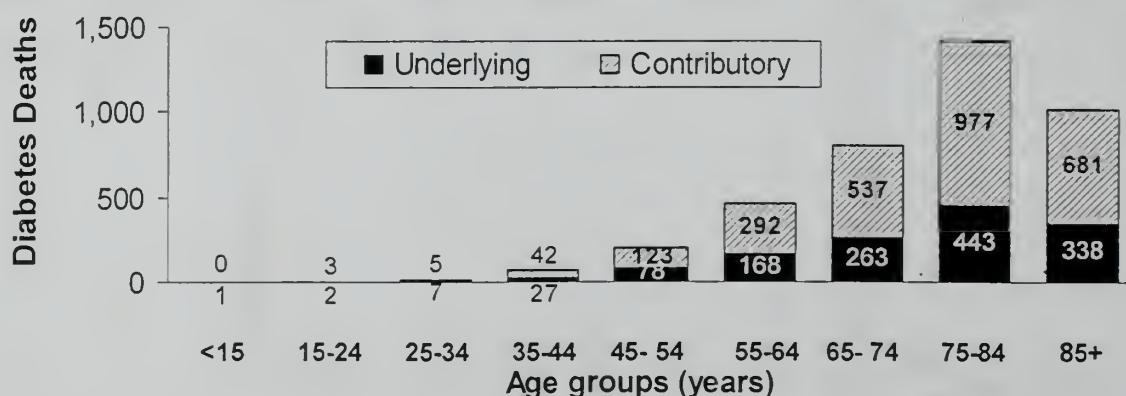


Table C-13A. Injury Deaths¹ by Leading Causes, Gender, Age, Race and Hispanic Ethnicity: Numbers, Age-Adjusted, and Age-Specific Rates, Massachusetts: 2004

	ALL	Poisoning ²	Motor Vehicle-related ³	Hanging, strangulation, or suffocation	Falls	Firearm	Other ⁴	
	Number	Rate ⁵	Number	Rate	Number	Rate	Number	Rate
All Persons	2,615	38.6	734	11.2	526	8.0	299	4.4
<1	8	10.0	0	— ⁶	0	— ⁶	1	— ⁶
1-14	55	4.9	3	— ⁶	21	1.9	6	— ⁶
15-24	373	43.8	83	9.7	132	15.5	27	3.2
25-44	818	42.8	390	20.4	151	7.9	95	5.0
45-64	642	40.4	237	14.9	122	7.7	80	5.0
65-74	137	34.6	8	2.0	24	6.1	17	4.3
75-84	283	87.9	8	2.5	49	15.2	35	8.6
85+	299	219.7	5	3.7	27	19.8	37	10.9
All Females	891	23.0	234	6.9	168	4.6	89	2.2
<1	0	— ⁶	0	— ⁶	0	— ⁶	0	— ⁶
1-14	21	3.8	2	— ⁶	9	1.6	0	— ⁶
15-24	72	17.1	17	4.0	31	7.4	7	1.7
25-44	215	22.2	126	13.0	35	3.6	16	1.7
45-64	183	22.3	79	9.6	33	4.0	19	2.3
65-74	52	23.9	2	— ⁶	11	5.1	8	3.7
75-84	147	75.3	4	— ⁶	29	14.8	17	8.7
85+	201	210.7	4	— ⁶	20	21.0	22	23.1
All Males	1,724	55.3	500	15.6	358	11.4	210	6.7
<1	8	19.5	0	— ⁶	0	— ⁶	2	— ⁶
1-14	34	5.9	1	— ⁶	12	2.1	6	1.0
15-24	301	69.8	66	15.3	101	23.4	20	4.6
25-44	603	64.0	264	28.0	116	12.3	79	8.4
45-64	459	59.8	158	20.6	89	11.6	61	8.0
65-74	85	47.6	6	3.4	13	7.3	9	5.0
75-84	136	107.2	4	— ⁶	20	15.8	18	14.2
85+	98	240.7	1	— ⁶	7	17.2	15	36.8

1. Data presented in this table are classified according to ICD-10. Please refer to the Section Definitions for list of ICD-10 codes used in this table. 2. Includes drug overdoses, which account for the largest percentage (74%).

3. Motor vehicle deaths to occupants, pedestrians, motorcyclists and bicyclists. 4. All remaining injury causes. 5. Number of deaths per 100,000 persons in each age group; rates for all rows except the age group rows are age-adjusted to the 2000 US standard population. 6. Calculations based on fewer than five events are excluded.

Table C-13A (continued). Injury Deaths¹ by Leading Causes, Gender, Age, Race and Hispanic Ethnicity: Numbers, Age-Adjusted, and Age-Specific Rates, Massachusetts, 2004

		ALL		Poisoning ²		Motor Vehicle-related ³		Hanging, strangulation, or suffocation		Falls		Firearm		Other ⁴		
	Number	Rate ⁵	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
White non-Hispanic	2,244	39.1	643	12.1	452	8.3	274	4.7	279	4.2	114	2.1	482	7.7		
Females	815	24.2	211	7.6	150	4.9	86	2.5	135	3.2	9	0.3	224	5.8		
Males	1,429	55.1	432	16.7	302	11.8	188	7.2	144	5.5	105	4.0	258	9.9		
Black non-Hispanic	161	41.6	38	10.3	25	6.3	5	1.5	2	— ⁶	60	13.3	31	9.4		
Females	31	15.8	8	3.9	10	5.0	2	— ⁶	2	— ⁶	3	1.4	6	3.3		
Males	130	70.9	30	17.5	15	8.0	3	— ⁶	0	— ⁶	57	25.4	25	17.5		
Asian non-Hispanic	42	16.2	3	— ⁶	13	5.1	5	1.8	5	3.5	2	— ⁶	14	4.8		
Females	14	11.8	2	— ⁶	5	3.4	0	— ⁶	4	— ⁶	0	— ⁶	3	— ⁶		
Males	28	20.0	1	— ⁶	8	7.2	5	3.7	1	— ⁶	2	— ⁶	11	6.9		
Hispanic	144	29.2	43	8.6	29	5.6	13	3.5	4	— ⁶	27	4.7	28	5.8		
Females	26	11.8	11	3.8	3	— ⁶	1	— ⁶	0	— ⁶	1	— ⁶	10	5.5		
Males	118	46.9	32	13.7	26	10.5	12	6.3	4	— ⁶	26	9.0	18	5.3		

1. Data presented in this table are classified according to ICD-10. Please refer to the Section Definitions for list of ICD-10 codes used in this table. 2. Includes drug overdoses, which account for the largest percentage (74%).
 3. Motor vehicle deaths to occupants, pedestrians, motorcyclists and bicyclists. 4. All remaining injury causes. 5. Number of deaths per 100,000 persons in each age group; rates for all rows except the age group rows are age-adjusted to the 2000 US standard population. 6. Calculations based on fewer than five events are excluded.

**Table C-13B. Intentional Injury Deaths¹ by
Gender, Age, Race and Hispanic Ethnicity: Numbers,
Age-Adjusted, and Age-Specific Rates, Massachusetts: 2004**

	<u>All Intentional</u>		<u>Suicide</u>		<u>Homicide</u>	
	<u>Number</u>	<u>Rate²</u>	<u>Number</u>	<u>Rate²</u>	<u>Number</u>	<u>Rate²</u>
All Persons	604	9.2	429	6.4	175	2.8
<1	3	-- ³	0	-- ³	3	-- ³
1-14	10	0.9	3	-- ³	7	0.6
15-24	131	15.4	51	6.0	80	9.4
25-44	225	11.8	165	8.6	60	3.1
45-64	161	10.1	141	8.9	20	1.3
65-74	32	8.1	29	7.3	3	-- ³
75-84	28	8.7	26	8.1	2	-- ³
85+	14	10.3	14	10.3	0	-- ³
All Females	119	3.5	87	2.5	32	1.0
<1	0	-- ³	0	-- ³	0	-- ³
1-14	2	-- ³	0	-- ³	2	-- ³
15-24	15	3.6	8	1.9	7	1.7
25-44	46	4.7	33	3.4	13	1.3
45-64	39	4.7	32	3.9	7	0.9
65-74	8	3.7	6	2.8	2	-- ³
75-84	5	2.6	4	-- ³	1	-- ³
85+	4	-- ³	4	-- ³	0	-- ³
All Males	485	15.4	342	10.9	143	4.5
<1	3	-- ³	0	-- ³	3	-- ³
1-14	8	1.4	3	-- ³	5	0.9
15-24	116	26.9	43	10.0	73	16.9
25-44	179	19.0	132	14.0	47	5.0
45-64	122	15.9	109	14.2	13	1.7
65-74	24	13.4	23	12.9	1	-- ³
75-84	23	18.1	22	17.3	1	-- ³
85+	10	24.6	10	24.6	0	-- ³

1. Data presented in this table are classified according to ICD-10. Please refer to the Section Definitions for a list of ICD-10 codes used in this table. 2. Number of deaths per 100,000 persons in each age group; rates for all rows except the age group rows are age-adjusted to the 2000 US standard population. 3. Calculations based on fewer than five events are excluded.

**Table C-13B. (continued) Intentional Injury Deaths¹ by
Gender, Age, Race and Hispanic Ethnicity: Numbers,
Age-Adjusted, and Age-Specific Rates, Massachusetts: 2004**

	<u>All Intentional</u>		<u>Suicide</u>		<u>Homicide</u>	
	<u>Number</u>	<u>Rate²</u>	<u>Number</u>	<u>Rate²</u>	<u>Number</u>	<u>Rate²</u>
White non- Hispanic	447	8.2	391	7.1	56	1.1
Females	102	3.6	81	2.8	21	0.8
Males	345	13.2	310	11.8	35	1.4
Black non- Hispanic	81	18.6	11	2.9	70	15.7
Females	8	3.8	3	— ³	5	2.3
Males	73	33.4	8	4.0	65	29.4
Asian non- Hispanic	14	4.3	10	2.7	4	— ³
Females	2	— ³	2	— ³	0	— ³
Males	12	7.9	8	4.8	4	3.1
Hispanic	53	9.2	12	2.3	41	6.9
Females	5	1.9	0	— ³	5	1.9
Males	48	16.5	12	4.6	36	11.9

1. Data presented in this table are classified according to ICD-10. Please refer to the Section Definitions for a list of ICD-10 codes used in this table. 2. Number of deaths per 100,000 persons in each age group; rates for all rows except the age group rows are age-adjusted to the 2000 US standard population. 3. Calculations based on fewer than five events are excluded.

Table C-13C. Injury¹ Deaths by Intent, Method and Gender: Number and Age-Adjusted Rates², Massachusetts: 2004

Type of Injury	<u>All</u>			<u>Female</u>			<u>Male</u>		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Suicide									
Hanging, strangulation or suffocation	429	6.4	87	2.5	342	10.9	148	4.7	
Poisoning	180	2.7	32	0.9	54	1.7	54	1.7	
Firearm	95	1.4	41	1.2	— ³	—	92	3.0	
Other and unspecified	94	1.4	2	—	—	—	—	—	
Homicide*									
Firearm	60	0.9	12	0.3	48	1.5	48	1.5	
Cut or pierce	175	2.8	32	1.0	143	4.5	143	4.5	
Other and unspecified	105	1.7	10	0.3	95	3.0	95	3.0	
Unintentional Injuries (Accidents)									
Motor Vehicle-related	1,352	19.4	564	13.4	788	25.8	788	25.8	
Injury to pedestrian	526	8.0	168	4.6	358	11.4	358	11.4	
Injury to pedal cyclist	89	1.3	43	0.2	46	1.5	46	1.5	
Injury to motorcyclist	4	— ³	0	— ³	4	—	4	—	
Injury to occupant	70	1.1	3	— ³	67	2.1	67	2.1	
Other and unspecified	111	1.7	38	1.0	73	2.3	73	2.3	
Falls	252	3.8	84	2.4	168	5.3	168	5.3	
Hanging, strangulation or suffocation	272	3.7	135	2.9	137	4.7	137	4.7	
Poisoning	109	1.5	53	1.2	56	1.9	56	1.9	
Drowning or submersion	99	1.5	30	0.8	69	2.2	69	2.2	
Smoke, fire and flames	42	0.6	13	0.4	29	0.9	29	0.9	
Firearm	33	0.5	15	0.4	18	0.6	18	0.6	
Other and unspecified	4	— ³	1	— ³	3	— ³	3	— ³	
Injury Deaths of Undetermined Intent									
Poisoning	267	3.5	149	3.0	118	4.0	118	4.0	
Drowning or submersion	602	9.2	176	5.3	426	13.2	426	13.2	
Fall	23	0.3	5	0.1	18	0.5	18	0.5	
Other and unspecified	6	0.1	2	— ³	4	—	4	—	
Legal Intervention	33	0.5	6	0.2	27	0.8	27	0.8	
Firearm	2	— ³	0	— ³	2	— ³	2	— ³	
Other and unspecified	1	— ³	0	— ³	1	— ³	1	— ³	
Adverse Effects									
Medical Care	55	0.8	32	0.8	23	0.8	23	0.8	
Drugs	49	0.7	26	0.6	23	0.8	23	0.8	
ALL INJURIES									
	2,615	38.6	891	23.0	1,724	55.3			

1. Data presented in this table are classified according to ICD-10. Please refer to Section Definitions for a list of ICD-10 codes used in this table. 2. Number of deaths per 100,000 persons; rates are adjusted to the 2000 US standard population. 3. Calculations based on fewer than five events are excluded. * Does not include terrorist-related deaths.

Table C-13D. Type of Injury¹ Deaths by Method / Intent Categories: Number and Age-Adjusted Rates², Massachusetts: 2004

Method	Intent						Other ³ Legal Intervention			
	<u>Unintentional</u> "Accidents"		<u>Suicide</u>		<u>Intentional</u> Homicide					
<u>ALL</u> <u>Total</u>	Total Number	Rate	Total Number	Rate	Total Number	Rate	Total Number	Rate	Total Number	Rate
Poisoning	734	11.2	99	1.5	95	1.4	0	-- ⁴	540	8.3
Transport Injuries	549	8.3	549	8.3	0	-- ⁴	0	-- ⁴	0	-- ⁴
Motor vehicle-related	526	8.0	526	8.0	0	-- ⁴	0	-- ⁴	0	-- ⁴
Injury to pedestrian	89	1.3	89	1.3	0	-- ⁴	0	-- ⁴	0	-- ⁴
Injury to pedal cyclist	4	-- ⁴	4	-- ⁴	0	-- ⁴	0	-- ⁴	0	-- ⁴
Injury to motorcyclist	70	1.1	70	1.1	0	-- ⁴	0	-- ⁴	0	-- ⁴
Injury to occupant	111	1.7	111	1.7	0	-- ⁴	0	-- ⁴	0	-- ⁴
Other and unspecified	252	3.8	252	3.8	0	-- ⁴	0	-- ⁴	0	-- ⁴
Other transport	23	0.4	23	0.4	0	-- ⁴	0	-- ⁴	0	-- ⁴
Hanging, strangulation or suffocation	299	4.4	109	1.5	180	2.7	4	-- ⁴	6	0.1
Falls	291	4.0	272	3.7	12	0.2	1	-- ⁴	6	0.1
Firearm	205	3.2	4	-- ⁴	94	1.4	105	1.7	1	-- ⁴
Drowning and submersion	75	1.1	42	0.6	10	0.2	0	-- ⁴	23	0.3
Cut or pierce	63	1.0	1	-- ⁴	21	0.3	39	0.6	2	-- ⁴
Smoke, fire and flames	40	0.6	33	0.5	4	-- ⁴	0	-- ⁴	3	-- ⁴
Other and unspecified	304	4.1	243	3.2	13	0.2	26	0.4	21	0.3
Adverse Effects	55	0.8	NA	NA	NA	NA	NA	NA	NA	NA
ALL INJURIES	2,615	38.6	1,352	19.4	429	6.4	175	2.8	602	9.2

1. Data presented in this table are classified according to ICD-10. Please refer to the Section Definitions for a list of ICD-10 codes used in this table. 2. Number of deaths per 100,000, rates are adjusted to the 2000 US standard population. 3. Includes legal intervention and operations of war. 4. Calculations based on fewer than five events are excluded.

Table C-14A. HIV/AIDS¹ Deaths by Place of Occurrence, Massachusetts: 1992-2004

Year	Total		Place of Occurrence				Hospice/Nursing Home/Other			
			At Home		Hospital		Out of State			
	Comparability Unmodified	Comparability Modified ²	Comparability Unmodified	Comparability Modified ²	Comparability Unmodified	Comparability Modified ²	Comparability Unmodified	Comparability Modified ²	Comparability Unmodified	Comparability Modified ²
1992	#	701	NA	171	NA	394	NA	14	NA	122
	%	100.0		24.4		56.2		2.0		17.4
1993	#	777	NA	218	NA	413	NA	14	NA	127
	%	100.0		28.1		53.2		1.8		16.3
1994	#	938	998	265	282	514	547	13	14	142
	%	100.0		28.3		54.8		1.4		15.1
1995	#	937	997	303	322	500	532	7	7	127
	%	100.0		32.3		53.4		0.7		13.5
1996	#	609	648	154	164	336	357	9	10	110
	%	100.0		25.3		55.2		1.5		18.1
1997	#	242	277	59	68	158	181	4	5	21
	%	100.0		24.4		24.5		5		24
1998	#	213	244	46	53	130	149	2	2	8.6
	%	100.0		21.6		21.7		5		8.7
1999	#	242 ⁴		55		61.0	61.1			35
	%	100.0		22.7						40
2000	#	226 ⁴		48		58.7		2		43
	%	100.0		21.2				5		17.8
2001	#	249 ⁴		47		64.2		0		33
	%	100.0		18.9				5		14.6
2002	#	229 ⁴		33		164		4		34
	%	100.0		14.4		65.9		5		13.7
2003	#	226 ⁴		55		68.1		4		36
	%	100.0		24.3		156		5		15.7
2004	#	211 ⁴		45		134		5		32
	%	100.0		21.3		59.3		2.2		14.2
								1		31
								5		14.7

*PLEASE NOTE: this table has been updated June 2001 to reflect the revised comparability ratio of HIV Disease Deaths, issued by the National Center for Health Statistics. 1 AIDS: Acquired Immune Deficiency Syndrome, HIV: Human Immunodeficiency Virus. The deaths reported are cases for which AIDS or HIV-related disease was the underlying cause of death. Deaths for 1992-1998 were coded according to the ICD-9 classification schedule, which began with 1987 death data (codes 042-044). Deaths for 1999-2004 were coded according to the ICD-10 (codes B20-B24).

2. Comparability Modified (CM): this number has been adjusted using the preliminary comparability ratio (CR) from NCHS (revised June 2001). CM data for 1994-1996 use 1996 based CR, CM data for 1997-1998 use revised 1998 based CR. 3. NA: Comparability ratio is not applicable for years prior to 1994. 4. When comparing data over time between 1994 through 2004, please use the comparability modified number for years 1994-1998. 5. Calculations based on fewer than 5 events are excluded.

Table C-14B. HIV/AIDS¹ Deaths by Age, Massachusetts: 1992-2004

Year	Age (in years)									
	<15			15-24			25-34			35-44
	Comparability Unmodified	Comparability Modified ²	Comparability Unmodified	45+						
1992	#	6	NA	5	NA	243	NA	304	NA	143
	%	0.8		0.7		34.7		43.4		20.4
1993	#	10	NA	5	NA	234	NA	359	NA	169
	%	1.3		0.6		30.1		46.2		21.8
1994	#	7	7	8	9	272	289	464	494	187
	%	0.7	0.7	0.9	0.9	29.0	29.0	49.5	49.5	19.9
1995	#	11	12	5	5	272	289	443	471	206
	%	1.2	1.2	0.5	0.5	29.0	29.0	47.3	47.2	21.9
1996	#	4	4	8	9	154	164	300	319	143
	%	0.7	0.6	1.3	1.4	25.3	25.3	49.3	49.2	152
1997	#	5	6	1	1	35	40	135	155	23.5
	%	2.1	2.2	5	5	14.5	14.4	55.8	56.0	22.0
1998	#	0	0	0	0	47	54	106	121	66
	%	5	5	5	5	22.1	22.1	49.8	50.0	76
1999	#	2 ⁴	2 ⁴	9 ⁴	9 ⁴	34 ⁴	34 ⁴	112 ⁴	112 ⁴	27.4
	%	- ⁵	- ⁵	3.7		14.0		46.3		28.3
2000	#	4 ⁴	4 ⁴	0 ⁴	0 ⁴	26 ⁴	26 ⁴	104 ⁴	104 ⁴	35.1
	%	- ⁵	- ⁵	0.0 ⁴	0.0 ⁴	11.5 ⁴	11.5 ⁴	46.0	46.0	92 ⁴
2001	#	1 ⁴	1 ⁴	2 ⁴	2 ⁴	25 ⁴	25 ⁴	111 ⁴	111 ⁴	40.7 ⁴
	%	- ⁵	- ⁵	- ⁵	- ⁵	10 ⁴	10 ⁴	44.6	44.6	110 ⁴
2002	#	1 ⁴	1 ⁴	1 ⁴	1 ⁴	10 ⁴	10 ⁴	91 ⁴	91 ⁴	44.2 ⁴
	%	- ⁵	- ⁵	- ⁵	- ⁵	4.4	4.4	126 ⁴	126 ⁴	114 ⁴
2003	#	1 ⁴	1 ⁴	3 ⁴	3 ⁴	14 ⁴	14 ⁴	39.7	39.7	55.0 ⁴
	%	- ⁵	- ⁵	- ⁵	- ⁵	6.2	6.2	41.6	41.6	50.4
2004	#	0 ⁴	0 ⁴	2 ⁴	2 ⁴	9 ⁴	9 ⁴	79 ⁴	79 ⁴	121 ⁴
	%	- ⁵	- ⁵	- ⁵	- ⁵	4.3	4.3	37.4	37.4	57.4

¹PLEASE NOTE: this table has been updated June 2001 to reflect the revised comparability ratio of HIV Disease Deaths, issued by the National Center for Health Statistics. 1. AIDS-Acquired Immune Deficiency Syndrome, HIV- Human Immunodeficiency Virus. The deaths reported are cases for which AIDS or HIV-related disease was the underlying cause of death. Deaths for 1992-1998 were coded according to the ICD-9 classification schedule, which began with 1987 death data (codes 042-044). Deaths for 1999-2004 were coded according to the ICD-10 (codes B20-B24). 2. Comparability Modified (CM): this number has been adjusted using the preliminary comparability ratio (CR) from NCHS (revised June 2001). CM data for 1996 use 1996 based CR, CM data for 1997-1998 use revised 1998 based CR. 3. NA: Comparability ratio is not applicable for years prior to 1994. 4. When comparing data over time between 1994 through 2004, please use the comparability modified number for years 1994-1998.. 5. Calculations based on fewer than 5 events are excluded.

Table C-14C. HIV/AIDS¹ Deaths by Gender, Race and Hispanic Ethnicity, Massachusetts: 1992-2004

Year	Gender		Race and Ethnicity				Hispanic ²	
	Male		Female		Black, non-Hispanic ²		Other ³	
	Comparability Modified ⁴	Comparability Unmodified						
1992	#	605	NA	96	NA	463	NA	141
	%	86.3		13.7		66.0	20.1	2
1993	#	663	NA	114	NA	518	NA	5
	%	85.3		14.7		66.7	20.6	5
1994	#	763	812	175	186	581	193	205
	%	81.3	81.4	18.7	18.6	61.9	20.6	20.5
1995	#	753	801	184	196	554	223	237
	%	80.4	80.3	19.6	19.7	59.1	23.8	23.8
1996	#	494	525	115	122	341	363	161
	%	81.1	81.0	18.9	18.8	56.0	26.4	171
1997	#	190	218	52	60	121	139	74
	%	78.5	78.7	21.5	21.7	50.0	50.2	30.6
1998	#	169	193	44	50	104	119	51
	%	79.3	79.1	20.7	20.5	48.8	48.8	58
1999	#	177 ⁶	65 ⁶	126 ⁶	126 ⁶	51 ⁶	51 ⁶	2
	%	73.1	26.9	52.1	21.1	5	5	63 ⁶
2000	#	161 ⁶	65 ⁶	104 ⁶	61 ⁶	2 ⁶	2 ⁶	26.0
	%	71.2	28.8	46.0	27.0	5	5	59 ⁶
2001	#	182 ⁶	67 ⁶	125 ⁶	73 ⁶	0 ⁶	0 ⁶	26.1
	%	73.1	26.9	50.2	29.3	5	5	51 ⁶
2002	#	163 ⁶	66 ⁶	108 ⁶	68 ⁶	1 ⁶	1 ⁶	20.5
	%	71.2	28.8	47.1	29.7	5	5	52 ⁶
2003	#	150 ⁶	76 ⁶	113 ⁶	58 ⁶	0 ⁶	0 ⁶	22.7
	%	66.4	33.6	50.0	25.7	5	5	53 ⁶
2004	#	151 ⁶	60 ⁶	97 ⁶	55 ⁶	4 ⁶	4 ⁶	23.5
	%	71.6	28.4	46.0	26.1	5	5	55 ⁶
						-	-	27.2
								27.0

¹ PLEASE NOTE: this table was updated in June 2001 to reflect the revised comparability ratio of HIV Disease Deaths, issued by the National Center for Health Statistics. 1. AIDS: Acquired Immune Deficiency Syndrome, HIV: Human Immunodeficiency Virus. The deaths reported are cases for which AIDS or HIV-related disease was the underlying cause of death. Deaths for 1992-1998 were coded according to the ICD-9 classification schedule, which began with 1987 death data (codes 042-044). Deaths for 1999-2004 were coded according to the ICD-10 (codes B20-B24). 2. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 3. The "Other" category represents Asian, non-Hispanics, American Indian, non-Hispanics, and other non-Hispanics. 4. Comparability Modified: this number has been adjusted using the preliminary comparability ratio (CR) from NCHS (June 2001). CR data for 1994-1996 use 1996 based CR. CM data for 1997-1998 use revised 1998 based C.R. 5. Calculations based on fewer than 5 events are excluded. 6. When comparing data over time between 1994 through 2004, please use the comparability modified number for years 1994-1998.

**Table C-14D. HIV/AIDS¹ Deaths by Gender, Race and Hispanic Ethnicity
Numbers, Percent and Age-adjusted Rates, Massachusetts: 2000-2004**

<u>TOTAL</u>	<u>White non-Hispanic²</u>			<u>Black non-Hispanic²</u>			<u>Hispanic</u>		
Year	#	Percent	Rate ³	#	Percent	Rate ³	#	Percent	Rate ³
2000	104	46%	1.9	61	27%	18.3	59	26%	17.4
2001	125	50%	2.2	73	29%	21.1	51	20%	13.5
2002	108	47%	1.9	68	30%	20.3	52	23%	13.5
2003	113	50%	2.0	58	26%	17.2	53	23%	14.9
2004	97	46%	1.7	55	26%	15.8	55	26%	13.9
MALE									
2000	77	48%	2.8	40	25%	26.0	42	26%	27.7
2001	92	51%	3.3	50	27%	31.4	40	22%	22.5
2002	86	53%	3.1	43	26%	27.9	34	21%	18.7
2003	74	49%	2.7	36	24%	23.4	39	26%	23.8
2004	74	49%	2.7	39	26%	24.0	34	23%	18.4
FEMALE									
2000	27	42%	1.0	21	32%	11.4	17	26%	8.6
2001	33	49%	1.2	23	34%	12.1	11	16%	5.4
2002	22	33%	0.8	25	38%	13.8	18	27%	8.7
2003	39	51%	1.4	22	29%	12.0	14	18%	7.1
2004	23	38%	0.8	16	27%	8.7	21	35%	10.0

1. AIDS and HIV disease deaths coded using ICD-10: B20-B24. 2. Race and ethnicity data in this table are presented as mutually exclusive categories. Persons of Hispanic ethnicity are not included in a race category. 3. Number of deaths per 100,000 persons; rates are age-adjusted to the 2000 U.S. standard population.
Resident deaths rates for 2000-2004 have been recalculated using 2000-2004 new population estimates

Table C-15A. Medical Examiner Certified Deaths by Cause, Race, Sex, and Age, Massachusetts Occurrence: 2004

Age	Race/Sex	Certified by Medical Examiner	Total Deaths	Legal Intervention/					All Other Injuries	Non-Violent Causes	III Defined & Unknown Causes
				Motor Vehicle Injuries	Suicide	Homicide	Undeter. Injury				
Total	White M	2283	295	309	49	395	265	889	81		
	F	1066	143	83	23	163	176	432	46		
	Black M	219	12	10	67	21	8	85	16		
	F	61	8	3	5	8	5	29	3		
	Other M	184	36	22	35	27	18	33	13		
	F	45	5	4	4	9	2	13	8		
<1	White M	24	0	0	1	1	2	5	15		
	F	12	0	0	0	0	0	2	10		
	Black M	5	0	0	0	0	0	0	5		
	F	2	0	0	0	0	0	0	2		
	Other M	8	0	0	2	1	0	0	5		
	F	4	0	0	0	0	0	1	3		
1-14	White M	28	9	1	1	1	11	4	1		
	F	19	6	0	2	2	4	5	0		
	Black M	3	0	0	2	0	0	0	1		
	F	6	2	0	0	1	1	2	0		
	Other M	8	1	2	2	0	2	0	1		
	F	1	0	0	0	0	1	0	0		
15-19	White M	81	38	11	5	13	5	7	2		
	F	28	13	6	0	2	3	2	2		
	Black M	24	2	1	20	0	0	1	0		
	F	3	2	1	0	0	0	0	0		
	Other M	18	7	1	7	0	1	2	0		
	F	0	0	0	0	0	0	0	0		
20-29	White M	259	61	46	17	79	20	24	12		
	F	87	17	10	4	23	12	15	6		
	Black M	49	4	6	32	0	1	4	2		
	F	7	0	0	4	0	0	3	0		
	Other M	49	13	5	15	5	5	5	1		
	F	9	2	1	1	2	0	0	3		

Table C-15A (continued). Medical Examiner Certified Deaths by Cause, Race, Sex, and Age, Massachusetts Occurrence: 2004

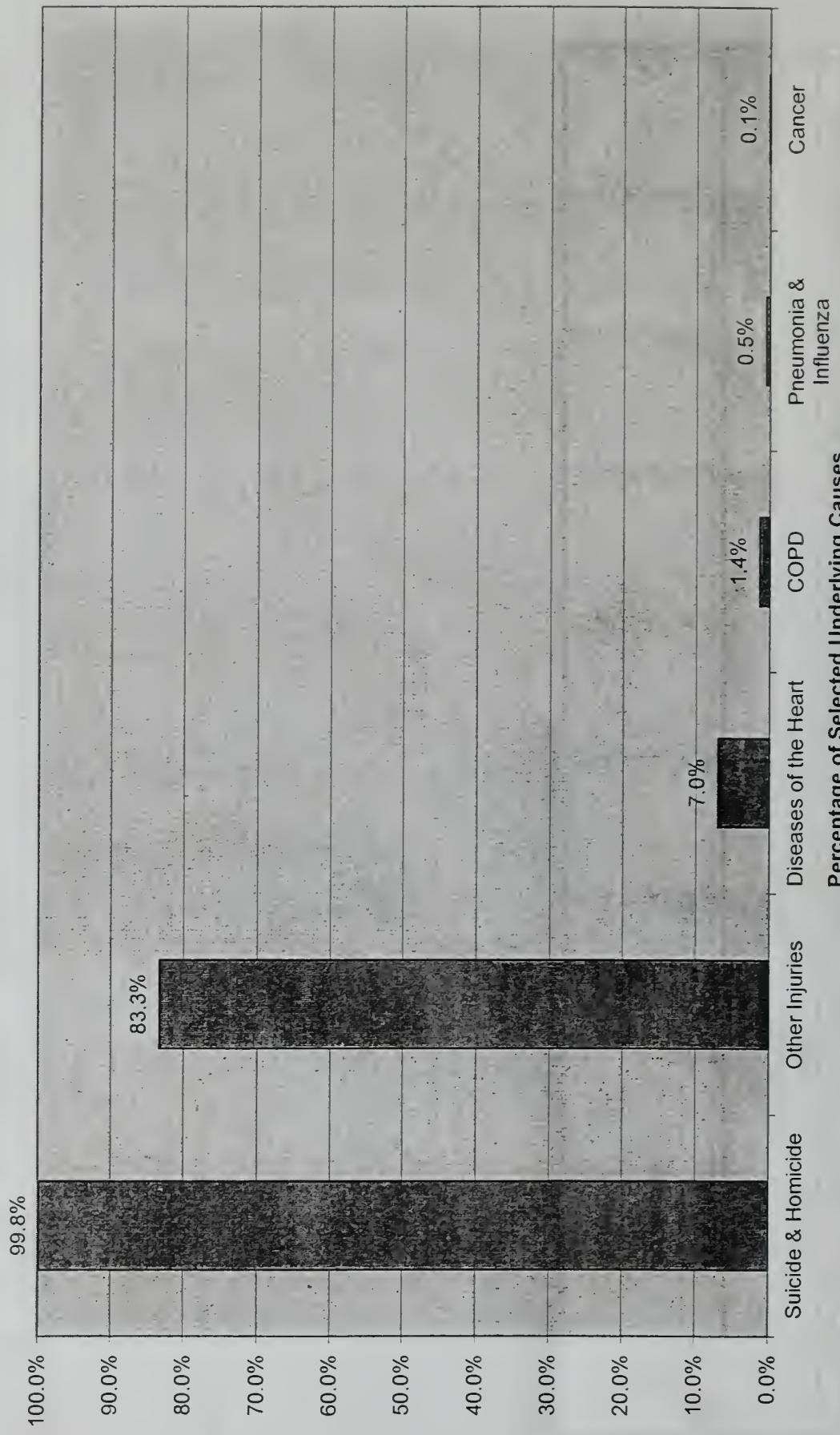
Age	Race/Sex	Medical Examiner Certified	Total Deaths	Motor Vehicle Injuries	Suicide	Homicide	Undeter.	Injury	Legal	All Other Injuries	Non-Violent Causes	III Defined & Unknown Causes
									Intervention/			
30-39	White M	346	60	53	8	112	28	68	17	32	7	7
	F	113	15	14	3	35	7	32	5	8	5	1
	Black M	35	3	1	10	6	2	1	4	4	0	3
	F	12	2	1	1	3	0	0	0	0	5	0
40-49	Other M	40	6	5	5	9	6	6	6	6	6	3
	F	15	1	3	2	5	0	0	0	3	1	1
	White M	563	44	77	10	130	47	233	22	62	12	12
	F	211	17	19	10	74	17	15	15	15	15	1
50-59	Black M	32	1	1	2	9	3	6	6	6	0	0
	F	10	0	0	0	4	0	0	0	0	0	0
	Other M	27	2	4	0	9	2	2	2	8	2	2
	F	5	0	0	1	2	0	0	0	2	0	0
60-69	White M	413	32	54	4	48	36	230	9	71	6	6
	F	142	9	20	1	22	13	22	22	22	22	2
	Black M	33	1	1	1	5	1	3	3	3	3	0
	F	5	0	0	0	0	2	1	1	5	0	0
70-79	Other M	17	4	2	3	2	1	1	1	3	1	1
	F	3	0	0	0	0	0	0	0	3	0	0
	White M	212	23	21	1	7	33	126	1	49	1	1
	F	92	16	7	2	3	14	49	0	17	0	0
	Black M	18	0	0	0	1	0	0	0	3	0	0
	F	5	1	0	0	0	1	1	1	3	0	0
	Other M	10	1	3	1	1	0	0	0	3	1	1
	F	2	1	0	0	0	0	0	0	1	0	0
	White M	179	12	27	1	1	30	107	1	80	1	1
	F	130	17	3	1	2	26	80	0	14	0	0
	Black M	16	1	0	0	0	1	1	5	5	0	0
	F	6	1	0	0	0	0	0	1	2	0	0
	Other M	4	1	0	0	0	0	0	0	0	0	0
	F	1	1	0	0	0	0	0	0	0	0	0

Table C-15A (continued). Medical Examiner Certified Deaths by Cause, Race, Sex, and Age, Massachusetts Occurrence: 2004

Age	Race/Sex	Total Deaths Certified by Medical Examiner	Motor Vehicle Injuries				Suicide	Homicide	Undeter. Injury	Legal Intervention/	All Other Injuries	Non-Violent Causes	Ill Defined & Unknown Causes
			White M	White F	Black M	Black F							
80+	White M	178		16		19		1		3	53	85	1
	White F	232		33		4		0		0	80	114	1
	Black M	4		0		0		0		0	0	4	0
	Black F	5		0		1		0		0	1	3	0
	Other M	3		1		0		0		0	0	2	0
	Other F	5		0		0		0		0	1	3	1

One death has been excluded from the table due to missing age information.

**Figure C-8. Proportion of Deaths Certified by Medical Examiner for Selected Causes of Death,
Massachusetts Occurrence Deaths: 2004**



**Table C-15B. Medical Examiner Certified Deaths by County,
Massachusetts Occurrence: 2004**

County	#	Population	Occurrence Deaths	M.E. Certified	Referred-	Natural Cause
					Not Certified by M.E.	Deaths Certified by M.E.
Total	#	6,438,839	55,127	3,859	9,996	1,458
	%	100.00%	100.00%	7.00%	18.13%	37.78%
Barnstable	#	227,974	2,657	165	412	57
	%	3.54%	4.82%	6.21%	15.51%	34.55%
	Rank	9	9	9	9	9
Berkshire	#	132,474	1,542	109	319	41
	%	2.06%	2.80%	7.07%	20.69%	37.61%
	Rank	11	10	10	10	10
Bristol	#	548,381	4,594	355	800	124
	%	8.52%	8.33%	7.73%	17.41%	34.93%
	Rank	6	7	5	7	7
Dukes	#	15,585	103	11	15	7
	%	0.24%	0.19%	10.68%	14.56%	63.64%
	Rank	13	13	13	13	13
Essex	#	747,290	6,094	376	911	149
	%	11.61%	11.05%	6.17%	14.95%	39.63%
	Rank	3	4	4	5	3
Franklin	#	72,280	488	49	60	26
	%	1.12%	0.89%	10.04%	12.30%	53.06%
	Rank	12	12	12	12	11
Hampden	#	465,730	4,694	345	926	123
	%	7.23%	8.51%	7.35%	19.73%	35.65%
	Rank	8	6	6	4	8
Hampshire	#	154,194	1,006	64	173	24
	%	2.39%	1.82%	6.36%	17.20%	37.50%
	Rank	10	11	11	11	12
Middlesex	#	1,467,263	10,498	619	1,901	277
	%	22.79%	19.04%	5.90%	18.11%	44.75%
	Rank	1	1	2	1	1
Nantucket	#	10,046	61	4	1	2
	%	0.16%	0.11%	6.56%	1.64%	50.00%
	Rank	14	14	14	14	14
Norfolk	#	655,865	4,951	286	827	128
	%	10.19%	8.98%	5.78%	16.70%	44.76%
	Rank	5	5	7	6	6
Plymouth	#	494,423	3,649	278	630	135
	%	7.68%	6.62%	7.62%	17.27%	48.56%
	Rank	7	8	8	8	5
Suffolk	#	664,921	7,973	748	1,723	220
	%	10.33%	14.46%	9.38%	21.61%	29.41%
	Rank	4	2	1	2	2
Worcester	#	782,413	6,817	450	1,298	145
	%	12.15%	12.37%	6.60%	19.04%	32.22%
	Rank	2	3	3	3	4

Note: The percentages and ranks in the Medical Examiner Certified Deaths column and the Referred column are based on totals in the Occurrence Deaths column. The percentages and ranks of natural cause of death are based on total number of medical examiner certified deaths for each county. Total population based on sum of county estimates.

Table C-16A. Selected Causes of Death by Community, Massachusetts: 2004

COMMUNITY	Total Deaths	Crude Death Rate ¹	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer ²	Stroke	Chronic Lower Respiratory Disease	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide	Narcotics ⁵
Massachusetts	54,419	848.1	13,792	13,312	3,607	971	3,252	2,573	1,327	1,955	524	175	429	524
Abington	154	946.9	34	46	14	0	6	5	4	1	3	0	1	1
Acton	98	474.3	21	24	6	4	9	5	2	8	0	0	1	0
Acushnet	107	1,011.2	35	33	12	1	3	7	0	2	0	2	0	0
Adams	132	1,551.5	32	25	9	0	12	4	0	6	2	0	1	2
Agawam	327	1,142.7	69	82	28	5	15	20	9	11	1	0	2	0
Aldorf	4	— ⁴	2	2	0	0	0	0	0	0	0	0	0	0
Amesbury	155	926.1	46	28	7	1	11	5	12	8	1	0	2	0
Amherst	120	350.3	33	21	6	0	8	9	1	2	2	1	0	0
Andover	220	684.5	62	53	15	4	18	10	5	5	0	1	3	0
Arlington	394	948.3	97	107	16	11	37	16	6	10	1	0	3	0
Ashburnham	29	491.4	11	6	2	0	4	1	1	1	0	0	0	0
Ashby	21	717.7	5	7	2	1	2	1	1	1	0	0	0	0
Ashfield	9	494.5	2	2	0	2	1	0	0	0	0	0	0	0
Ashland	85	547.4	21	27	11	1	7	3	1	1	0	0	1	0
Athol	131	1,122.2	37	29	10	3	8	3	4	9	3	0	1	1
Attleboro	379	871.1	101	95	28	5	18	13	11	10	4	1	5	0
Auburn	179	1,092.7	49	48	12	3	11	11	2	8	3	0	1	1
Avon	40	912.2	10	11	2	0	5	3	1	0	0	0	0	0
Ayer	66	915.1	16	14	2	0	2	4	1	6	1	0	0	0
Barnstable	521	1,073.5	130	149	41	16	35	22	8	18	4	0	6	8
Barre	40	746.7	8	9	4	1	3	2	2	2	0	0	0	0
Becket	12	676.1	6	4	0	1	0	0	1	0	0	0	0	0
Bedford	143	1,142.3	26	37	9	0	5	8	6	2	0	0	1	0
Belchertown	73	527.2	18	19	3	0	2	3	1	1	0	0	4	0
Bellingham	86	545.6	24	33	12	2	5	2	0	2	2	0	1	2
Belmont	159	673.6	36	36	8	1	17	9	3	6	1	1	2	0
Berkley	23	362.1	4	11	3	0	0	1	0	0	0	0	0	0
Berlin	20	747.1	9	2	0	0	1	1	0	0	0	0	1	0
Bernardston	19	857.8	5	4	1	1	2	0	0	1	2	0	0	0
Beverly	394	980.9	105	83	26	3	32	23	11	14	3	0	1	5
Billerica	250	625.8	57	81	23	11	12	14	6	4	0	1	1	3
Blackstone	75	828.3	22	17	7	2	3	1	4	2	1	0	0	1
Blandford	7	553.8	1	5	1	1	0	0	0	0	0	0	0	0
Bolton	14	319.0	4	1	0	1	0	0	0	0	0	0	0	0
Boston	4,063	713.9	910	977	255	71	245	172	101	140	25	58	26	66

Table C-16A. (continued) Selected Causes of Death by Community, Massachusetts: 2004

COMMUNITY	Total Deaths	Crude Death Rate ¹	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer ²	Stroke	Chronic Lower Respiratory Disease ³	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide	Narcotics ⁴
Bourne	226	1,158.0	64	49	17	3	18	18	4	7	4	1	1
Boxborough	16	317.2	5	4	0	0	1	3	2	1	0	0	0
Boxford	39	474.4	10	13	4	1	1	3	2	1	1	0	0
Boylston	24	574.0	5	7	3	1	2	1	1	0	0	0	0
Braintree	362	1,068.7	104	78	20	5	23	18	8	16	3	0	3
Brewster	157	1,514.3	29	40	15	1	11	8	6	5	0	0	2
Bridgewater	155	602.6	43	50	15	3	4	6	4	6	2	1	2
Brimfield	30	833.3	9	11	4	1	2	0	0	1	0	1	0
Brockton	848	892.5	242	178	49	15	43	41	23	19	12	9	8
Brookfield	39	1,257.7	8	12	4	0	3	3	0	0	0	4	1
Brookline	369	656.7	87	98	21	6	24	8	9	18	1	0	4
Buckland	14	704.9	2	4	1	0	0	0	1	2	1	0	0
Burlington	153	658.8	38	42	14	3	9	5	7	1	1	0	1
Cambridge	526	522.0	131	135	30	9	33	15	8	17	3	0	4
Canton	217	1,009.1	42	49	15	3	9	16	1	6	0	0	2
Carlisle	15	310.6	3	2	0	0	1	0	2	2	1	0	0
Carver	103	896.3	38	25	10	1	3	1	2	5	0	1	0
Charlemont	10	716.3	2	4	1	2	0	0	0	1	0	0	0
Charlton	91	740.1	25	22	8	2	3	7	8	2	2	0	2
Chatham	139	2,026.2	38	29	8	2	8	4	1	5	0	0	0
Chelmsford	282	835.1	76	69	16	8	16	9	7	14	3	0	3
Chelsea	299	899.9	68	61	20	3	14	15	14	11	4	2	3
Cheshire	25	745.2	5	9	3	1	2	0	2	2	0	0	0
Chester	10	754.1	2	0	0	0	0	1	1	0	2	0	0
Chesterfield	9	713.2	0	4	1	2	0	0	1	1	0	0	0
Chicopee	589	1,074.1	142	137	36	14	34	39	18	22	4	1	3
Chilmark	4	— ⁴	1	2	0	0	1	0	0	0	0	0	0
Clarksburg	15	899.8	2	6	2	0	0	1	0	2	0	0	0
Clinton	144	1,036.7	33	42	7	3	7	10	3	4	3	1	2
Cohasset	62	852.4	17	10	1	1	7	6	1	3	0	0	0
Colrain	10	537.6	2	4	2	1	0	0	1	0	1	0	0
Concord	136	803.8	28	33	6	6	11	2	0	3	0	0	1
Conway	9	476.4	2	1	1	0	0	1	0	0	0	0	0
Cummington	5	503.0	0	2	2	0	0	0	1	0	0	0	0
Dalton	86	1276.7	17	18	6	1	7	3	4	6	1	0	1
Danvers	291	1134.1	74	66	14	4	20	12	9	10	2	0	1
Dartmouth	258	823.8	68	66	14	4	14	14	3	18	1	0	1

Table C-16A. (continued) Selected Causes of Death by Community, Massachusetts: 2004

COMMUNITY	Total Deaths	Crude Death Rate ¹	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer ²	Stroke	Chronic Lower Respiratory Disease ³	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide	Narcotics ⁶
Dedham	233	1,003.2	60	58	17	4	16	12	3	11	2	0	1
Deerfield	30	625.3	6	5	2	1	6	4	0	0	0	0	0
Dennis	230	1,426.5	62	60	12	4	14	10	5	6	0	4	1
Dighton	48	724.2	13	10	3	1	10	2	2	1	0	0	0
Douglas	47	605.5	12	12	2	2	1	2	0	0	1	0	0
Dover	29	512.6	5	10	3	0	0	0	0	0	0	0	0
Dracut	226	788.0	45	67	18	0	8	14	4	8	1	0	5
Dudley	68	631.1	22	15	2	4	1	8	0	0	0	0	0
Dunstable	13	419.2	3	1	0	0	3	2	0	0	0	0	0
Duxbury	114	776.0	25	26	8	2	10	6	3	6	2	0	3
East Bridgewater	99	723.0	24	33	9	2	7	5	2	5	1	1	0
East Brookfield	24	1,131.5	2	8	4	1	4	0	0	1	2	0	0
East Longmeadow	152	1,026.3	35	39	10	3	4	7	4	0	0	0	2
Eastham	70	1,245.1	15	20	1	4	7	4	0	0	0	0	0
Easthampton	146	907.5	44	33	10	2	6	5	3	1	2	0	0
Easton	136	589.7	32	40	10	7	5	6	5	0	0	0	0
Edgartown	37	939.1	9	10	2	1	1	1	1	0	0	0	0
Egremont	15	1,112.8	6	3	2	0	1	0	0	0	1	0	0
Irving	13	849.7	2	3	1	0	2	1	1	0	1	0	0
Essex	35	1,043.2	8	16	2	2	0	1	1	1	0	0	0
Everett	352	946.4	81	93	24	4	19	17	9	13	1	0	4
Fairhaven	206	1,261.1	75	39	11	1	7	12	3	20	2	0	0
Fall River	1,036	1,119.7	280	215	54	14	78	41	39	41	11	2	6
Falmouth	381	1,127.0	81	96	28	6	28	22	18	11	5	0	3
Fitchburg	366	917.1	91	73	15	10	29	24	16	9	4	1	3
Florida	6	907.7	1	2	2	0	0	0	0	1	0	0	0
Foxborough	101	617.6	20	28	8	4	4	3	3	5	0	1	4
Framingham	549	836.9	159	124	34	12	34	21	13	22	1	1	1
Franklin	161	533.3	47	44	14	5	5	4	4	4	1	2	1
Freetown	55	613.1	12	16	4	0	2	0	0	2	1	0	0
Gardner	223	1,063.6	74	39	3	4	10	11	9	13	2	0	2
Gay Head (Aquinnah)	0	— ⁴	0	0	0	0	0	0	0	0	0	0	0
Georgetown	48	602.9	17	10	3	1	1	5	0	3	1	0	0
Gill	16	1,149.4	7	2	0	1	2	2	0	1	0	0	0
Gloucester	292	947.5	73	67	23	3	18	21	7	9	6	1	0
Goshen	4	— ⁴	1	0	0	0	0	0	1	0	0	0	0

Table C-16A. (continued) Selected Causes of Death by Community, Massachusetts⁴: 2004

COMMUNITY	Total Deaths	Crude Death Rate ¹	Heart Disease	Lung Cancer	Total Cancer	Female Breast Cancer ²	Stroke	Chronic Lower Respiratory Disease ³	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide	Narcotics ⁵
Gosnold	1	— ⁴	0	1	0	0	0	0	0	0	0	0	0
Grafton	95	582.9	20	30	8	3	4	11	2	5	0	2	1
Granby	33	520.6	13	6	1	0	0	1	2	0	0	1	0
Granville	11	676.9	0	3	0	0	1	0	0	0	0	1	2
Great Barrington	104	1,399.0	23	20	7	3	7	11	6	4	2	0	0
Greenfield	227	1,266.3	46	61	7	12	14	12	9	11	1	0	2
Groton	40	385.8	10	14	0	1	3	3	2	2	0	0	0
Groveland	35	540.8	8	11	4	0	0	4	2	2	1	0	0
Hadley	61	1,255.1	15	15	3	1	4	3	2	6	0	0	0
Halifax	69	886.8	14	23	7	1	2	6	0	3	3	0	0
Hamilton	46	545.9	6	14	2	0	4	1	1	3	1	0	0
Hampden	44	827.7	10	8	2	1	4	2	0	0	0	0	0
Hancock	1	— ⁴	0	0	0	0	0	0	0	0	0	0	0
Hanover	91	656.9	25	18	5	0	7	5	3	3	1	2	3
Hanson	74	747.6	15	17	3	3	3	3	1	2	5	1	1
Hardwick	29	1,088.2	4	6	2	0	2	1	1	1	0	1	1
Harvard	39	641.1	10	8	3	1	2	1	1	1	0	0	1
Harwich	178	1,389.6	47	43	8	2	15	3	1	9	0	1	4
Hatfield	29	875.9	7	7	0	0	2	2	2	1	0	0	2
Haverhill	567	937.5	151	126	30	10	37	32	18	28	1	2	6
Hawley	6	1,734.1	1	0	0	0	0	2	0	0	0	0	0
Heath	6	743.5	0	3	1	0	0	0	0	0	0	0	0
Hingham	180	849.1	67	40	4	6	11	6	5	3	2	0	0
Hinsdale	13	712.3	2	5	2	1	4	3	4	4	1	1	0
Holbrook	106	978.6	25	34	15	1	4	3	2	3	0	0	0
Holden	133	801.4	21	43	9	5	8	5	2	1	3	1	0
Holland	13	523.1	3	5	1	0	2	4	4	1	0	0	0
Holliston	73	524.5	16	25	6	4	4	4	3	1	0	0	1
Holyoke	488	1,218.2	117	101	28	4	33	29	18	14	1	1	2
Hopedale	46	739.3	17	8	2	0	2	0	0	0	0	0	0
Hopkinton	60	427.6	13	17	6	3	1	4	1	3	1	3	1
Hubbardston	21	491.5	4	6	1	0	2	2	1	1	1	0	0
Hudson	129	688.9	30	45	12	6	4	7	2	2	0	2	2
Hull	101	892.2	27	35	11	2	3	7	0	0	1	0	0

Table C-16A. (continued) Selected Causes of Death by Community, Massachusetts: 2004

COMMUNITY	Total Deaths	Crude Death Rate ¹	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer ²	Stroke	Chronic Lower Respiratory Disease	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide	Narcotics
Huntington	20	910.3	5	6	1	0	0	0	1	0	0	1	0
Ipswich	110	822.5	28	33	5	1	12	7	2	7	1	0	0
Kingston	136	1,101.7	28	42	10	2	8	2	4	6	2	0	0
Lakeville	63	598.1	12	16	5	1	6	4	2	3	3	0	1
Lancaster	55	818.6	12	18	1	1	1	4	1	5	0	0	0
Lanesborough	19	641.9	5	4	0	1	1	0	0	1	0	0	0
Lawrence	473	658.2	124	101	33	7	23	24	28	8	5	3	1
Lee	76	1,290.8	11	18	5	1	7	4	1	5	0	0	1
Leicester	107	981.3	26	26	8	1	6	10	1	5	4	0	0
Lenox	82	1,588.5	24	11	3	0	6	3	0	2	0	0	0
Leominster	400	954.4	100	96	29	10	31	19	13	18	2	0	2
Leverett	9	510.2	2	4	0	1	0	0	0	1	0	0	0
Lexington	247	812.0	44	64	19	2	25	14	1	8	1	0	1
Leyden	2	— ⁴	1	0	0	0	0	0	0	0	0	0	0
Lincoln	36	450.0	8	8	4	0	3	0	1	1	0	0	0
Littleton	61	711.1	12	18	4	1	3	2	2	2	0	0	1
Longmeadow	160	1,023.6	42	26	7	2	13	7	5	7	0	1	0
Lowell	863	832.6	194	208	53	13	76	41	21	24	4	7	6
Ludlow	173	788.7	50	39	16	3	10	9	4	7	2	0	2
Lunenburg	66	661.3	16	17	5	2	5	2	0	3	0	0	1
Lynn	819	915.2	236	209	58	17	42	25	17	17	6	5	11
Lynnfield	88	756.0	25	24	3	3	9	2	2	3	1	0	0
Malden	464	838.5	124	120	42	9	21	17	7	18	5	2	2
Manchester	40	744.9	6	13	3	1	2	2	1	1	0	0	0
Mansfield	93	404.4	21	26	6	4	5	3	0	4	0	0	5
Marblehead	168	824.7	43	45	12	5	14	4	4	3	2	0	0
Marlborough	60	1,129.9	22	9	3	0	5	4	2	4	1	0	0
Marlborough	299	793.1	74	66	12	6	14	16	5	12	2	2	3
Marshfield	178	717.3	48	54	19	4	9	4	6	7	2	0	1
Mashpee	105	734.2	21	41	13	5	4	7	1	3	1	0	1
Mattapoisett	54	835.0	21	12	4	2	1	3	0	3	6	0	1
Maynard	73	707.2	10	15	4	0	5	5	3	3	0	0	0
Medfield	77	621.1	19	26	10	2	2	3	6	1	1	0	0
Medford	553	1,020.4	114	159	48	13	37	27	12	28	2	3	8
Medway	74	574.3	16	17	4	2	7	4	1	2	1	0	1
Melrose	242	912.1	74	56	16	6	27	9	4	12	1	0	2
Mendon	28	486.0	12	2	0	0	0	0	0	0	0	0	1

Table C-16A. (continued) Selected Causes of Death by Community, Massachusetts: 2004

COMMUNITY	Total Deaths	Crude Death Rate ¹	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer ²	Stroke	Chronic Lower Respiratory Disease	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide	Narcotics
Merimac	42	664.5	10	9	1	0	2	2	2	2	0	1	0
Methuen	411	916.5	132	109	27	6	26	16	13	10	4	3	3
Middleborough	176	833.3	47	40	15	3	7	5	0	10	2	0	4
Middlefield	2	-- ⁴	0	1	0	0	1	0	0	0	0	0	0
Middleton	55	603.9	14	10	2	0	2	6	1	2	1	0	1
Milford	222	809.9	59	56	13	7	10	9	5	8	1	0	0
Millbury	153	1,143.8	42	39	16	4	11	4	2	4	2	0	2
Millis	47	587.7	10	17	4	0	1	2	0	0	0	0	1
Millville	12	408.7	3	1	0	2	1	0	0	0	1	0	0
Milton	243	939.9	58	63	15	5	16	10	7	9	1	1	0
Monroe	1	-- ⁴	1	0	0	0	0	0	0	0	0	0	0
Monson	79	909.7	17	15	4	1	6	2	0	2	3	0	1
Montague	97	1,148.9	26	21	8	4	3	5	3	9	1	1	1
Monterey	6	628.9	4	1	0	2	0	0	0	0	0	0	0
Montgomery	4	-- ⁴	0	2	0	0	0	0	0	0	0	0	0
Mount Washington	1	-- ⁴	1	0	0	0	0	0	0	0	0	0	0
Nahant	37	1,022.1	10	10	4	0	2	3	0	1	0	1	0
Nantucket	64	632.2	15	22	2	2	4	2	2	2	0	1	0
Natick	241	750.5	70	62	21	6	15	12	6	8	1	1	2
Needham	240	827.0	61	65	14	4	16	7	1	9	1	0	3
New Ashford	0	-- ⁴	0	0	0	0	0	0	0	0	0	0	0
New Bedford	1,117	1,188.6	298	218	62	12	65	23	23	67	9	6	29
New Braintree	3	-- ⁴	1	1	0	0	0	0	0	0	0	0	0
New Marlborough	3	-- ⁴	1	1	0	0	0	0	0	0	0	0	0
New Salem	8	809.7	2	0	0	0	0	1	0	0	0	0	0
Newbury	44	639.0	10	13	5	1	2	5	1	0	0	0	0
Newburyport	210	1,196.4	50	54	15	5	14	14	5	6	1	0	3
Newton	602	718.4	151	159	33	9	37	25	10	29	5	0	2
Norfolk	42	400.3	11	16	7	2	0	1	0	0	0	0	0
North Adams	193	1,362.3	40	47	17	3	9	17	5	12	1	0	0
North Andover	204	729.1	66	47	8	2	8	12	2	12	2	0	3
North Attleboro	199	706.3	50	49	16	3	11	7	6	9	3	1	4
North Brookfield	30	623.1	8	6	0	1	2	1	1	0	0	0	0

Table C-16A. (continued) Selected Causes of Death by Community, Massachusetts: 2004

COMMUNITY	Total Deaths	Crude Death Rate ¹	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer ²	Stroke	Chronic Lower Respiratory Disease ³	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide ⁴	Narcotics ⁶
North Reading	75	536.5	19	13	6	1	8	4	5	0	0	0	0
Northampton	285	985.1	58	47	11	2	30	20	3	23	1	1	3
Northborough	94	656.4	17	25	3	2	5	4	3	6	0	1	0
Northbridge	132	950.9	35	25	7	0	6	6	5	8	6	0	0
Northfield	21	661.8	4	4	0	0	4	2	2	1	1	0	0
Norton	119	621.2	25	31	10	2	2	10	3	4	3	0	4
Norwell	92	885.5	22	27	7	3	5	1	3	7	1	0	0
Norwood	324	1,134.9	99	74	19	4	22	14	8	5	3	0	1
Oak Bluffs	45	1,175.5	9	10	6	0	4	5	1	1	0	0	0
Oakham	10	532.2	3	3	1	0	0	0	0	0	0	0	0
Orange	76	1,004.9	30	15	4	1	5	6	0	2	0	0	1
Orleans	103	1,591.0	14	39	7	2	8	2	1	6	0	0	3
Otis	10	723.1	3	4	1	0	0	0	0	0	0	0	0
Oxford	104	757.2	27	18	5	0	6	5	5	3	2	0	1
Palmer	123	953.3	40	25	3	2	7	3	1	4	4	0	1
Paxton	32	704.7	9	9	0	1	1	2	0	1	0	1	0
Peabody	582	1,155.4	178	143	38	12	43	26	12	20	3	0	4
Pelham	5	351.6	1	3	1	1	0	0	0	0	1	0	0
Pembroke	94	530.6	31	28	11	0	2	5	2	2	0	0	2
Pepperell	69	603.5	20	20	6	0	2	3	1	1	0	0	1
Peru	2	-- ⁴	2	0	0	0	0	0	0	0	0	0	0
Petersham	14	1,107.6	5	1	1	0	0	0	0	0	0	0	0
Phillipston	7	404.9	3	1	1	0	0	0	0	0	0	0	0
Pittsfield	543	1,226.1	134	136	36	10	16	29	13	18	8	0	7
Plainfield	3	-- ⁴	0	2	0	0	0	0	0	0	0	0	0
Plainville	50	630.8	9	17	4	1	3	3	1	1	0	0	0
Plymouth	471	862.6	126	123	30	9	14	22	9	21	6	1	5
Plympton	14	508.2	3	4	2	0	0	2	0	0	0	0	0
Princeton	11	314.4	3	3	1	0	1	0	0	0	1	0	0
Provincetown	44	1,275.4	10	8	4	0	3	2	2	0	1	0	0
Quincy	871	968.8	225	223	67	16	44	42	18	25	4	0	7
Randolph	292	949.7	78	63	24	1	17	14	11	9	1	1	1
Raynham	104	780.5	30	28	6	0	7	6	1	2	1	0	1
Reading	197	843.2	50	42	12	2	11	15	3	2	0	0	4
Rehoboth	61	547.7	20	10	2	1	3	1	4	1	5	0	1
Revere	491	1,063.5	137	130	35	7	20	30	19	13	2	3	12
Richmond	14	858.9	1	7	2	0	1	0	0	1	1	0	0
Rochester	21	403.7	4	8	2	1	0	0	0	0	0	0	0

Table C-16A. (continued) Selected Causes of Death by Community, Massachusetts: 2004

COMMUNITY	Total Deaths	Crude Death Rate ¹	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer ²	Stroke	Chronic Lower Respiratory Disease ³	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide	Narcotics ⁶
Rockland	180	1,007.8	46	44	12	5	10	11	4	7	2	0	0
Rockport	60	768.7	16	16	4	0	6	0	1	2	0	0	0
Rowe	4	— ⁴	1	1	0	0	0	0	0	0	0	0	0
Rowley	44	769.2	12	8	2	2	5	2	0	0	1	0	0
Royalston	7	517.0	2	0	0	0	0	2	0	0	0	0	0
Russell	7	408.6	1	2	1	0	0	1	1	0	1	0	0
Rutland	38	524.5	10	14	3	1	2	3	0	0	0	0	0
Salem	375	894.7	101	89	23	3	23	14	10	8	3	1	2
Salisbury	57	698.6	14	15	7	0	3	4	0	3	3	0	0
Sandisfield	10	1,215.1	2	1	0	0	0	1	0	0	0	0	0
Sandwich	151	725.1	34	46	13	0	8	8	2	3	3	0	0
Saugus	266	993.9	73	69	23	4	14	18	3	9	2	2	3
Savoy	2	— ⁴	0	1	0	0	0	0	0	0	0	0	0
Scituate	167	917.8	50	43	10	5	9	5	1	7	2	0	0
Seekonk	92	670.1	27	32	14	4	2	7	3	2	1	3	0
Sharon	96	553.4	18	20	2	2	1	1	0	0	0	1	1
Sheffield	37	1,101.2	9	4	0	1	1	2	0	1	1	1	0
Shelburne	23	1,116.0	4	4	0	1	1	2	0	0	0	0	0
Sherborn	25	591.0	8	8	2	0	1	2	0	0	0	0	0
Shirley	45	592.0	9	19	7	0	3	1	0	0	0	0	0
Shrewsbury	204	615.2	62	54	15	6	8	15	4	9	2	1	3
Shutesbury	5	270.9	1	2	0	1	0	0	0	0	0	0	0
Somerset	217	1,160.9	66	44	11	1	9	11	6	7	6	0	0
Somerville	485	641.4	138	111	35	8	30	18	7	12	7	1	4
South Hadley	167	972.0	39	46	14	3	11	8	3	3	0	2	2
Southampton	38	658.4	14	10	2	0	2	4	1	2	0	1	0
Southborough	45	471.3	16	10	0	0	1	2	1	4	0	0	0
Southbridge	182	1,051.2	52	31	11	0	6	15	7	7	0	3	1
Southwick	84	891.0	16	27	6	2	3	3	0	2	2	0	1
Spencer	92	765.8	26	28	8	3	2	6	1	1	0	1	0
Springfield	1,321	868.6	315	291	81	16	60	61	37	34	20	17	9
Sterling	47	607.1	11	11	5	2	2	2	3	2	3	0	1
Stockbridge	24	1,066.7	7	7	1	1	0	0	2	1	1	0	0
Stoneham	241	1,106.5	60	71	21	2	16	10	2	11	0	1	0
Stoughton	250	929.3	61	60	22	2	11	12	6	9	2	0	5
Show	26	424.9	4	4	0	2	5	2	3	1	0	0	0
Sturbridge	69	793.8	21	12	6	3	5	2	1	0	0	2	1
Sudbury	107	623.4	23	29	3	1	7	3	1	6	0	0	1

Table C-16A. (continued) Selected Causes of Death by Community, Massachusetts⁴: 2004

COMMUNITY	Total Deaths	Crude Death Rate ¹	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer ²	Stroke	Chronic Lower Respiratory Disease ³	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide	Narcotics ⁵
Sunderland	18	473.2	6	1	1	0	0	0	0	1	0	0	0
Sutton	50	563.2	12	19	5	2	2	1	2	0	0	0	0
Swampscott	146	1,011.6	37	30	4	2	12	7	1	4	0	0	1
Swansea	133	815.1	33	44	22	2	5	7	1	2	0	0	1
Taunton	448	790.8	136 ⁴	104	35	8	16	18	15	34	5	2	5
Templeton	72	983.3	23	14	5	2	4	3	0	7	2	0	1
Tewksbury	226	775.8	51	67	19	5	6	14	3	9	4	0	1
Tisbury	30	779.0	8	7	4	0	4	1	0	1	0	3	0
Tolland	1	— ⁴	0	0	0	0	0	0	0	0	0	0	0
Topsfield	52	834.9	13	14	1	1	3	2	0	3	1	0	0
Townsend	46	493.2	4	14	6	0	2	5	0	2	1	0	0
Truro	20	917.4	6	6	4	0	0	0	0	0	1	0	0
Tyngsborough	49	430.3	7	20	6	1	4	2	2	1	0	0	1
Tyningham	4	— ⁴	0	1	0	0	1	0	0	0	0	0	0
Upton	42	670.7	9	13	3	0	3	2	3	0	1	0	0
Uxbridge	74	604.4	22	17	5	2	5	2	4	1	1	0	0
Wakefield	226	920.1	74	63	15	10	14	6	1	11	1	0	3
Wales	11	611.8	1	3	1	0	4	0	0	0	0	0	1
Walpole	174	772.7	47	43	8	3	9	6	8	4	3	0	2
Waltham	470	793.5	118	119	23	10	30	23	8	8	1	0	5
Ware	93	928.0	38	14	2	1	7	3	1	3	4	0	2
Wareham	251	1,182.6	70	60	8	7	15	10	12	8	5	2	0
Warren	35	703.0	8	7	3	0	2	1	0	2	1	0	0
Warwick	10	1,317.5	1	4	0	0	0	0	1	0	0	0	0
Washington	2	— ⁴	0	0	0	0	0	0	0	2	0	0	0
Watertown	280	858.8	66	59	18	4	22	10	3	2	1	0	1
Wayland	104	796.1	27	26	5	3	3	2	1	10	3	1	4
Webster	200	1,184.8	51	52	13	4	10	11	6	3	1	0	1
Wellesley	192	724.1	52	44	6	3	10	7	4	8	0	0	3
Wellfleet	44	1,548.8	8	12	2	0	4	1	4	1	1	0	1
Wendell	5	486.4	0	3	1	1	1	0	0	0	0	0	0
Wenham	29	651.2	8	8	2	0	2	4	0	0	0	0	1
West Boylston	68	892.9	11	17	7	1	5	1	1	2	1	0	0
West Bridgewater	82	1,198.1	27	19	7	1	4	6	1	2	1	0	0
West Brookfield	47	1,205.7	11	6	1	0	1	3	2	2	0	1	0
West Newbury	18	418.9	3	0	1	3	0	1	3	1	2	1	0

Table C-16A. (continued) Selected Causes of Death by Community, Massachusetts: 2004

COMMUNITY	Total Deaths	Crude Death Rate ¹	Heart Disease	Total Cancer	Lung Cancer	Female Breast Cancer ²	Stroke	Chronic Lower Respiratory Disease ³	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide	Narcotics ⁵
West Springfield	269	959.1	63	54	11	6	20	11	13	7	4	2	2	2
West Stockbridge	10	689.2	3	1	0	0	0	1	1	0	0	0	0	0
West Tisbury	12	449.4	5	3	1	0	0	0	0	0	0	0	1	1
Westborough	175	934.0	36	41	10	1	11	8	5	12	0	0	2	1
Westfield	373	919.6	101	81	23	3	31	16	7	6	4	1	2	3
Westford	107	498.3	33	29	0	10	1	2	4	1	0	1	0	0
Westhampton	8	511.8	2	4	2	0	0	0	0	1	0	0	0	0
Westminster	52	712.1	17	14	3	1	4	1	1	3	1	0	0	0
Weston	98	845.2	19	24	2	2	13	3	5	4	1	0	1	0
Westport	114	773.4	25	33	14	0	8	8	0	8	1	0	1	2
Westwood	137	977.2	37	35	11	3	11	5	4	3	1	0	0	1
Weymouth	517	953.8	138	141	43	12	26	26	11	16	6	0	5	6
Whately	13	819.7	5	0	0	1	1	0	0	0	0	0	0	0
Whitman	77	536.5	21	17	7	1	5	6	2	2	0	1	1	1
Wilbraham	136	975.7	35	30	3	3	10	3	2	3	2	0	0	1
Williamsburg	23	941.5	3	9	2	0	3	0	1	0	0	1	0	0
Williamstown	92	1,112.2	19	22	5	1	8	7	2	1	3	0	0	0
Wilmington	159	737.2	39	34	8	1	6	10	6	5	3	0	1	1
Winchendon	69	687.5	19	16	4	1	6	8	1	2	1	0	1	0
Winchester	167	789.0	36	43	13	7	13	11	2	7	0	0	0	0
Windsor	1	— ⁴	0	0	0	0	0	0	0	0	1	0	0	0
Winthrop	197	1,128.2	34	61	24	5	9	5	6	7	1	0	2	2
Woburn	333	889.2	63	99	32	9	23	21	8	10	3	2	2	9
Worcester	1,718	976.3	444	372	101	28	101	69	51	73	12	10	10	10
Worthington	12	923.1	4	1	0	1	1	0	0	0	0	0	0	0
Wrentham	109	983.2	32	25	4	1	11	1	4	5	1	0	0	0
Yarmouth	407	1,629.8	94	109	36	12	23	29	10	7	2	1	3	4

1. All rates are crude death rates calculated using the Census Bureau 2004 Sub-county population estimates. Data presented in this table are classified according to ICD-10. Please refer to Section Definitions for list of ICD-10 codes used in this table. 2. Includes only female breast cancer. 3. The title of this cause of death changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title). 4. Rates based on fewer than five events are excluded. 5. Deaths due to narcotics and hallucinogens including cannabis, cocaine, codeine, heroin, lysergic acid diethylamide (LSD), mescaline, methadone, morphine, and opium (alkaloids)

Table C-16B. Selected Causes of Death by Community Health Network Area (CHNA), Massachusetts: 2004

CHNA (Name and Number)	Total Deaths	Crude Death Rate ¹	Heart Disease	Total Cancer	Lung Cancer	Breast Cancer ²	Stroke	CLRD	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide	Narcotics ⁴
Massachusetts	54,419	848.1	13,792	13,312	3,607	971	3,252	2,573	1,327	1,955	524	175	429	524
Community Health Network of Berkshire (1)	1,544	1,165.0	362	360	105	24	80	87	37	66	28	0	13	8
Upper Valley Health Web (Franklin County) (2)	820	929.1	208	183	45	30	51	50	22	45	14	2	6	5
Partnership for Health in Hampshire County (Northampton) (3)	1,116	735.7	290	244	60	12	77	61	24	44	9	2	16	8
The Community Health Connection (Springfield) (4)	2,725	923.0	644	609	159	42	145	121	70	76	40	19	19	21
Community Health Network of Southern Worcester County (5)	1,035	873.4	274	236	71	19	51	68	35	25	14	0	14	8
Community Partners for Health (Milford) (6)	1,049	658.7	290	264	75	24	52	35	30	31	19	0	6	6
Community Health Network of Greater Metro West (Framingham) (7)	2,685	706.8	672	696	174	60	147	111	68	115	13	5	19	17
Community Wellness Coalition (Worcester) (8)	2,713	907.3	689	645	179	53	156	130	66	111	25	11	22	17
Fitchburg/Gardner Community Health Network (9)	2,035	783.7	527	487	117	42	129	113	57	83	24	2	15	20
Greater Lowell Community Health Network (10)	2,016	743.5	466	542	145	38	135	97	45	64	13	8	18	18
Greater Lawrence Community Health Network (11)	1,363	733.1	398	320	85	19	77	68	49	37	12	4	11	12
Greater Haverhill Community Health Network (12)	1,259	846.1	331	290	78	22	81	76	40	52	16	1	15	7
Community Health Network North (Beverly/Gloucester) (13)	1,058	881.7	263	264	68	11	79	61	24	40	13	1	4	13
North Shore Community Health Network (14)	2,772	975.2	777	685	179	50	179	111	58	75	19	8	23	34
Greater Woburn/Concord/Littleton Community Health Network (15)	1,564	743.4	323	408	115	33	109	79	32	54	11	2	8	12
North Suburban Health Alliance (Medford/Malden/Melrose) (16)	2,350	914.6	596	617	184	47	153	105	43	95	10	5	14	33
Greater Cambridge/Somerville Community Health Network (17)	1,844	672.6	468	448	107	33	139	68	27	56	14	2	14	13
West Suburban Health Network (Newton/Waltham) (18)	2,001	790.7	503	514	109	35	133	82	35	72	12	0	15	12
Alliance for Community Health (Boston/Chestnut/River/Winthrop)	5,419	750.3	1,236	1,327	355	92	312	230	149	189	33	62	38	87
Blue Hills Community Health Alliance (Greater Quincy) (20)	3,524	951.5	945	866	238	65	198	164	76	114	25	5	20	30
Four (For) Communities (Holyoke, Chicopee, Ludlow, Westfield) (21)	1,653	1,027.0	417	364	104	24	108	94	49	50	14	4	10	9
Greater Brockton Community Health Network (22)	1,947	821.3	519	488	150	32	94	93	52	51	25	11	18	23
South Shore Community Partners in Prevention (Plymouth) (23)	1,524	811.4	399	404	117	27	68	67	34	62	24	3	17	7
Greater Attleboro-Taunton Health & Education Response (24)	1,805	712.6	486	452	143	32	87	71	44	79	30	4	22	17
Partners for a Healthier Community (Fall River) (25)	1,500	1,054.0	404	336	101	17	100	67	46	58	20	2	8	29
Greater New Bedford Health & Human Services Coalition (26)	2,129	1,068.0	605	461	120	28	112	115	48	124	22	8	12	35
Cape Cod & Islands Community Health Network (27)	2,969	1,167.0	700	802	224	60	200	149	67	87	25	4	32	23

1. All rates are crude death rates calculated using the Census Bureau 2004 Sub-county population estimates. Data presented in this table are classified according to ICD-10. Please refer to the Section Definitions for list of ICD-10 codes used in this table. 2. Includes only female breast cancer. 3. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title). 4. Deaths due to narcotics and hallucinogens including cannabis, cocaine, codeine, heroin, lysergic acid diethylamide (LSD), mescaline, methadone, morphine, and opium (alkaloids).

Table C-16C. Selected Causes of Death by County, Massachusetts: 2004

County	Total Deaths	Age-Adjusted Death Rate ¹	Heart Disease	Total Cancer	Lung Cancer	Breast Cancer ²	Stroke	Chronic Lower Respiratory Disease ³	Diabetes	Influenza & Pneumonia	Motor Vehicle	Homicide	Suicide	Narcotics ⁴
Massachusetts	54,419	739.3	13,792	13,312	3,607	971	3,252	2,573	1,327	1,955	524	175	429	524
Barnstable	2,776	674.4	653	747	209	57	186	140	63	81	22	3	28	22
Berkshire	1,544	794.5	362	360	105	24	80	87	37	66	28	0	13	8
Bristol	4,945	773.2	1,351	1,144	337	70	270	233	126	236	61	12	39	76
Dukes	129	674.2	32	33	13	1	10	7	2	4	3	0	4	1
Essex	6,452	742.8	1,769	1,559	410	102	416	316	171	204	60	14	53	66
Franklin	661	761.7	161	152	33	27	43	42	17	35	11	2	5	4
Hampden	4,412	804.8	1,069	986	268	67	261	216	120	126	55	23	29	31
Hampshire	1,136	671.0	295	250	61	12	77	61	25	45	9	2	17	8
Middlesex	11,001	686.8	2,659	2,853	748	218	730	495	211	397	66	21	75	104
Nantucket	64	663.6	15	22	2	4	2	2	2	0	1	0	0	0
Norfolk	5,501	686.7	1,412	1,402	392	94	315	235	128	176	39	3	38	42
Plymouth	4,104	825.9	1,132	1,037	287	79	198	177	96	149	61	19	39	30
Suffolk	5,050	794.6	1,149	1,229	334	86	288	222	140	171	32	62	34	86
Worcester	6,643	775.4	1,732	1,538	408	132	374	340	189	263	77	13	55	46

1 All rates are age-adjusted using the 2000 U.S. standard population. Data presented in this table are classified according to ICD-10. Please refer to the Section Definitions for list of ICD-10 codes used in this table. 2 Includes only female breast cancer. 3. The title of this cause of death has changed between ICD-10 and ICD-9. Chronic Lower Respiratory Disease (ICD-10 title) corresponds to Chronic Obstructive Pulmonary Disease (COPD) (ICD-9 title). 4. Deaths due to narcotics and hallucinogens including cannabis, cocaine, codeine, heroin, lysergic acid diethylamide (LSD), mescaline, methadone, morphine, and opium (alkaloids).

Table C-17
RESIDENT DEATHS BY CAUSE, SEX, AND RACE
2004

IDC	Code Cause of Death	Totals			Whites			Blacks			Other		
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
A04	Other bacterial intestinal infections	102	30	72	100	30	70	2	0	2	0	0	0
A08	Viral and other specified intestinal infections	2	1	1	2	1	1	0	0	0	0	0	0
A09	Diarrhea and gastroenteritis of presumed infectious origin	3	2	1	2	1	1	1	1	0	0	0	0
A16	Respiratory tuberculosis, not confirmed bacteriologically or histologically	6	3	3	5	2	3	1	1	0	0	0	0
A18	Tuberculosis of other organs	2	1	1	2	1	1	0	0	0	0	0	0
A20	Plague	1	1	0	1	1	0	0	0	0	0	0	0
A30	Leprosy [Hansen's disease]	1	0	1	1	0	1	0	0	0	0	0	0
A39	Meningococcal infection	3	2	1	3	2	1	0	0	0	0	0	0
A40	Streptococcal septicemia	958	413	545	889	385	504	61	26	35	8	2	6
A41	Other septicemia	1	0	1	1	0	1	0	0	0	0	0	0
A43	Nocardiosis	5	3	2	5	3	2	0	0	0	0	0	0
A48	Other bacterial diseases, not elsewhere classified	32	18	14	30	16	14	1	1	0	1	1	0
A49	Bacterial infection of unspecified site	1	1	0	1	1	0	0	0	0	0	0	0
A52	Late syphilis	3	2	1	3	2	1	0	0	0	0	0	0
A81	Atypical virus infections of central nervous system	4	3	1	4	3	1	0	0	0	0	0	0
A83	Mosquito-borne viral encephalitis	2	2	0	2	2	0	0	0	0	0	0	0
A86	Unspecified viral encephalitis	1	0	1	1	0	1	0	0	0	0	0	0
A89	Unspecified viral infection of central nervous system	1	1	0	1	1	0	0	0	0	0	0	0
B00	Herpes-viral [herpes simplex] infections	4	3	1	4	3	1	0	0	0	0	0	0
B01	Varicella [chickenpox]	1	1	0	1	1	0	0	0	0	0	0	0
B02	Zoster [herpes zoster]	9	4	5	9	4	5	0	0	0	0	0	0
B15	Acute hepatitis A	2	0	2	2	0	2	0	0	0	0	0	0
B16	Acute hepatitis B	10	10	0	8	8	0	2	2	0	0	0	0
B17	Other acute viral hepatitis	66	42	24	61	38	23	4	4	0	1	0	1
B18	Chronic viral hepatitis	9	7	2	7	6	1	1	0	1	0	0	0
B19	Unspecified viral hepatitis	6	3	3	6	3	3	0	0	0	0	0	0
B20	Human immunodeficiency virus [HIV] disease resulting in infectious and parasitic disease	106	78	28	81	60	21	24	17	7	1	1	0
B21	Human immunodeficiency virus [HIV] disease resulting in malignant neoplasms	11	9	2	10	9	1	1	0	1	0	0	0
B22	Human immunodeficiency virus [HIV] disease resulting in other specified diseases	17	15	2	14	12	2	3	0	0	0	0	0
B23	Human immunodeficiency virus [HIV] disease resulting in other conditions	39	24	15	19	10	9	19	13	6	1	1	0
B24	Unspecified human immunodeficiency virus [HIV] disease	38	25	13	27	16	11	9	7	2	2	2	0
B25	Cytomegaloviral disease	2	1	1	2	1	1	0	0	0	0	0	0
B33	Other viral diseases, not elsewhere classified	1	0	1	0	1	0	0	0	0	0	0	0
B34	Viral infection of unspecified site	4	1	3	4	1	3	0	0	0	0	0	0
B37	Candidiasis	4	1	3	3	1	2	1	0	1	0	0	0
B49	Unspecified mycosis	5	0	5	4	0	4	1	0	1	0	0	0
B54	Unspecified malaria	1	1	0	1	1	0	0	0	0	0	0	0
B58	Toxoplasmosis	1	1	0	1	1	0	0	0	0	0	0	0
B59	Pneumocystosis	3	3	0	2	2	0	1	1	0	0	0	0
B60	Other protozoal diseases, not elsewhere classified	1	1	0	1	1	0	0	0	0	0	0	0

Table C-17, 2004 (continued)

IDC	Cause of Death	Totals		Whites		Blacks		Other	
		Male	Fem	Male	Fem	Male	Fem	Male	Fem
B78	Strongyloidiasis	1	1	1	0	0	0	0	0
B90	Sequelae of tuberculosis	1	0	1	1	0	0	0	0
B91	Sequelae of poliomyelitis	9	3	6	9	3	6	0	0
B94	Sequelae of other and unspecified infectious and parasitic disease	49	31	18	45	29	16	2	1
B99	Other and unspecified infectious diseases	12	2	10	9	1	8	3	1
C00	Malignant neoplasm of lip	1	1	0	1	1	0	0	0
C01	Malignant neoplasm of base of tongue	5	2	3	5	2	3	0	0
C02	Malignant neoplasm of other and unspecified parts of tongue	35	24	11	34	24	10	1	0
C03	Malignant neoplasm of gum	1	0	1	1	0	0	0	0
C04	Malignant neoplasm of floor of mouth	3	3	0	3	3	0	0	0
C05	Malignant neoplasm of palate	2	1	1	2	1	1	0	0
C06	Malignant neoplasm of other and unspecified parts of mouth	29	19	10	28	18	10	1	0
C07	Malignant neoplasm of parotid gland	9	6	3	9	6	3	0	0
C08	Malignant neoplasm of other and unspecified major salivary glands	6	3	3	6	3	3	0	0
C09	Malignant neoplasm of tonsil	16	13	3	16	13	3	0	0
C10	Malignant neoplasm of oropharynx	25	15	10	25	15	10	0	0
C11	Malignant neoplasm of nasopharynx	14	9	5	10	6	4	0	0
C12	Malignant neoplasm of pyriform sinus	3	2	1	3	2	1	0	0
C13	Malignant neoplasm of hypopharynx	5	3	2	5	3	2	0	0
C14	Malignant neoplasm of other and ill-defined sites in the lip, oral cavity, and pharynx	37	27	10	35	25	10	2	0
C15	Malignant neoplasm of esophagus	353	269	84	330	254	76	18	11
C16	Malignant neoplasm of stomach	295	167	128	266	150	116	21	15
C17	Malignant neoplasm of small intestine	25	11	14	23	9	14	1	1
C18	Malignant neoplasm of colon	1,049	475	574	1,008	453	555	33	16
C19	Malignant neoplasm of rectosigmoid junction	49	30	19	48	30	18	1	0
C20	Malignant neoplasm of rectum	175	93	82	167	88	79	5	4
C21	Malignant neoplasm of anus and anal canal	13	4	9	9	4	5	3	0
C22	Malignant neoplasm of liver and intrahepatic bile ducts	342	217	125	301	186	115	22	18
C23	Malignant neoplasm of gallbladder	50	15	35	45	14	31	3	0
C24	Malignant neoplasm of other and unspecified parts of biliary tract	45	17	28	42	15	27	1	0
C25	Malignant neoplasm of pancreas	789	369	420	754	349	405	28	17
C26	Malignant neoplasm of other and ill-defined digestive organs	27	18	9	25	17	8	2	1
C31	Malignant neoplasm of accessory sinuses	5	4	1	5	4	1	0	0
C32	Malignant neoplasm of larynx	96	76	20	93	74	19	3	2
C33	Malignant neoplasm of trachea	1	1	0	1	1	0	0	0
C34	Malignant neoplasm of bronchus and lung	3,606	1,880	1,726	3,443	1,788	1,655	126	69
C37	Malignant neoplasm of thymus	4	2	2	3	2	1	0	0
C38	Malignant neoplasm of heart, mediastinum, and pleura	5	3	2	5	3	2	0	0
C40	Malignant neoplasm of bone and articular cartilage of limbs	2	1	1	2	1	1	0	0
C41	Malignant neoplasm of bone and articular cartilage of other and unspecified sites	33	20	13	29	17	12	2	1
C43	Malignant melanoma of skin	190	125	65	190	125	65	0	0
C44	Other malignant neoplasms of skin	52	38	14	48	35	13	3	2
C45	Mesothelioma	83	70	13	83	70	13	0	0

Table C-17, 2004 (continued)

IDC	Code Cause of Death	Totals			Whites			Blacks			Other		
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
C46	Kaposi's sarcoma	1	0	1	1	0	1	0	0	0	0	0	0
C47	Malignant neoplasm of peripheral nerves and autonomic nervous system	4	1	3	3	0	3	1	1	0	0	0	0
C48	Malignant neoplasm of retroperitoneum and peritoneum	27	7	20	25	5	20	2	2	0	0	0	0
C49	Malignant neoplasm of other connective and soft tissue	91	43	48	85	43	42	4	0	4	2	0	2
C50	Malignant neoplasm of breast	988	17	971	948	14	934	35	3	32	5	0	5
C51	Malignant neoplasm of vulva	29	0	29	26	0	26	3	0	3	0	0	0
C52	Malignant neoplasm of vagina	6	0	6	5	0	5	1	0	1	0	0	0
C53	Malignant neoplasm of cervix uteri	64	0	64	58	0	58	6	0	6	0	0	0
C54	Malignant neoplasm of corpus uteri	92	0	92	88	0	88	3	0	3	1	0	1
C55	Malignant neoplasm of uterus, part unspecified	81	0	81	78	0	78	3	0	3	0	0	0
C56	Malignant neoplasm of ovary	370	0	370	353	0	353	11	0	11	6	0	6
C57	Malignant neoplasm of other and unspecified female genital organs	10	0	10	10	0	10	0	0	0	0	0	0
C58	Malignant neoplasm of placenta	1	0	1	1	0	1	0	0	0	0	0	0
C60	Malignant neoplasm of penis	3	3	0	3	3	0	0	0	0	0	0	0
C61	Malignant neoplasm of prostate	650	650	0	604	604	0	40	40	0	6	6	0
C62	Malignant neoplasm of testis	11	11	0	11	11	0	0	0	0	0	0	0
C63	Malignant neoplasm of other and unspecified male genital organs	1	1	0	1	1	0	0	0	0	0	0	0
C64	Malignant neoplasm of kidney, except renal pelvis	281	179	102	269	174	95	7	3	4	5	2	3
C65	Malignant neoplasm of renal pelvis	3	3	0	3	3	0	0	0	0	0	0	0
C66	Malignant neoplasm of ureter	10	7	3	10	7	3	0	0	0	0	0	0
C67	Malignant neoplasm of bladder	375	266	109	365	260	105	8	5	3	2	1	1
C68	Malignant neoplasm of other and unspecified urinary organs	6	5	1	6	5	1	0	0	0	0	0	0
C69	Malignant neoplasm of eye and adnexa	4	2	2	4	2	2	0	0	0	0	0	0
C70	Malignant neoplasm of meninges	2	0	2	2	0	2	0	0	0	0	0	0
C71	Malignant neoplasm of brain	269	143	126	264	139	125	3	2	1	2	2	0
C72	Malignant neoplasm of spinal cord, cranial nerves, & other parts of central nervous system	2	2	0	2	2	0	0	0	0	0	0	0
C73	Malignant neoplasm of thyroid gland	35	18	17	31	16	15	4	2	2	0	0	0
C74	Malignant neoplasm of adrenal gland	11	6	5	11	6	5	0	0	0	0	0	0
C75	Malignant neoplasm of other endocrine glands and related structures	3	3	0	2	2	0	1	1	0	0	0	0
C76	Malignant neoplasm of other and ill-defined sites	47	16	31	45	15	30	1	1	0	1	0	1
C78	Secondary malignant neoplasm of respiratory and digestive organs	81	38	43	76	36	40	4	2	2	1	0	1
C79	Secondary malignant neoplasm of other sites	110	77	33	106	75	31	3	2	1	1	0	1
C80	Malignant neoplasm without specification of site	789	369	420	749	355	394	29	10	19	11	4	7
C81	Hodgkin's disease	25	13	12	24	12	12	1	1	0	0	0	0
C82	Follicular [nodular] non-Hodgkin's lymphoma	2	1	1	2	1	1	0	0	0	0	0	0
C83	Diffuse non-Hodgkin's lymphoma	51	31	20	50	30	20	1	1	0	0	0	0
C84	Peripheral and cutaneous T-cell lymphomas	15	8	7	13	6	7	1	1	0	1	0	1
C85	Other and unspecified types of non-Hodgkin's lymphoma	449	213	236	421	203	218	20	8	12	8	2	6
C88	Malignant immunoproliferative diseases	7	1	6	7	1	6	0	0	0	0	0	0
C90	Multiple myeloma and malignant plasma cell neoplasms	233	127	106	211	112	99	21	15	6	1	0	1
C91	Lymphoid leukemia	125	68	57	123	68	55	2	0	2	0	0	0
C92	Myeloid leukemia	238	124	114	220	112	108	9	6	3	9	6	3
C93	Monocytic leukemia	4	3	1	4	3	1	0	0	0	0	0	0

Table C-17, 2004 (continued)

IDC	Cause of Death	Totals						Other					
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
C94	Other leukemias of specified cell type	1	0	1	0	0	0	1	0	0	0	0	0
C95	Leukemia of unspecified cell type	131	63	68	121	56	65	6	5	1	4	2	2
C96	Other and unspecified malignant neoplasms of lymphoid, hematopoietic, and related tissue	3	2	1	3	2	1	0	0	0	0	0	0
C97	Malignant neoplasms of independent (primary) multiple sites	91	40	51	89	39	50	2	1	1	0	0	0
D15	Benign neoplasm of other and unspecified intrathoracic organs	4	1	3	3	1	2	1	0	1	0	0	0
D18	Hemangioma and lymphangioma, any site	3	2	1	2	0	1	0	1	0	0	0	0
D21	Other benign neoplasms of connective and other soft tissue	1	0	1	1	0	1	0	0	0	0	0	0
D26	Other benign neoplasms of uterus	1	0	1	0	0	0	1	0	0	0	0	0
D32	Benign neoplasm of meninges	23	13	10	21	13	8	1	0	1	0	0	0
D33	Benign neoplasm of brain and other parts of central nervous system	2	0	2	0	2	0	0	0	0	0	0	0
D36	Benign neoplasm of other and unspecified sites	1	0	1	1	0	1	0	0	0	0	0	0
D37	Neoplasm of uncertain or unknown behavior of oral cavity and digestive organs	16	9	7	15	8	7	0	0	0	1	1	0
D38	Neoplasm of uncertain or unknown behavior of middle ear and respiratory and intrathoracic organs	15	4	11	15	4	11	0	0	0	0	0	0
D39	Neoplasm of uncertain or unknown behavior of female genital organs	1	0	1	1	0	1	0	0	0	0	0	0
D40	Neoplasm of uncertain or unknown behavior of male genital organs	1	1	0	1	1	0	0	0	0	0	0	0
D41	Neoplasm of uncertain or unknown behavior of urinary organs	7	6	1	7	6	1	0	0	0	0	0	0
D43	Neoplasm of uncertain or unknown behavior of brain and central nervous system	104	51	53	98	48	50	5	2	3	1	1	0
D44	Neoplasm of uncertain or unknown behavior of endocrine glands	7	4	3	5	3	2	2	1	1	0	0	0
D45	Polycthemia vera	8	3	5	8	3	5	0	0	0	0	0	0
D46	Myelodysplastic syndromes	99	51	48	98	51	47	1	0	1	0	0	0
D47	Other neoplasms of uncertain or unknown behavior of lymphoid, hematopoietic, and related tissue	42	18	24	38	15	23	3	3	0	1	0	1
D48	Neoplasm of uncertain or unknown behavior of other and unspecified sites	12	8	4	12	8	4	0	0	0	0	0	0
D50	Iron deficiency anemia	3	1	2	3	1	2	0	0	0	0	0	0
D51	Vitamin B12 deficiency anemia	1	0	1	1	0	1	0	0	0	0	0	0
D57	Sickle-cell disorders	5	3	2	2	2	0	3	1	2	0	0	0
D58	Other hereditary hemolytic anemias	4	2	2	4	2	2	0	0	0	0	0	0
D59	Acquired hemolytic anemia	2	1	1	2	1	0	0	0	0	0	0	0
D61	Other aplastic anemias	26	9	17	23	9	14	3	0	3	0	0	0
D64	Other anemias	85	25	60	80	24	56	5	1	4	0	0	0
D65	Disseminated intravascular coagulation [defibrination syndrome]	12	7	5	12	7	5	0	0	0	0	0	0
D66	Hereditary factor VIII deficiency	6	5	1	5	4	1	0	0	0	1	1	0
D68	Other coagulation defects	27	9	18	26	9	17	1	0	0	0	0	0
D69	Purpura and other hemorrhagic conditions	22	12	10	20	11	9	2	1	1	0	0	0
D70	Agranulocytosis	9	5	4	8	4	4	0	0	0	1	1	0
D72	Other disorders of white blood cells	1	0	1	1	0	1	0	0	0	0	0	0
D73	Diseases of spleen	2	1	1	2	1	1	0	0	0	0	0	0
D75	Other diseases of blood and blood-forming organs	6	2	4	6	2	4	0	0	0	0	0	0
D81	Combined immunodeficiencies	1	1	0	1	1	0	0	0	0	0	0	0
D84	Other immunodeficiencies	6	4	2	5	3	2	1	1	0	0	0	0
D86	Sarcoidosis	13	5	8	9	3	6	4	2	2	0	0	0
E03	Other hypothyroidism	31	4	27	30	4	26	0	0	1	0	0	0

Table C-17, 2004 (continued)

IDC	Code Cause of Death	Totals			Whites			Blacks			Other		
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
E04	Other non toxic goiter	2	0	2	1	0	1	1	0	1	0	0	0
E05	Thyrotoxicosis [hyperthyroidism]	6	1	5	5	1	4	1	0	1	0	0	0
E06	Thyroiditis	1	0	1	1	0	1	0	0	0	0	0	0
E07	Other disorders of thyroid	1	0	1	1	0	1	0	0	0	0	0	0
E10	Insulin-dependent diabetes mellitus	88	38	50	78	32	46	7	4	3	3	2	1
E11	Noninsulin-dependent diabetes mellitus	174	75	99	170	73	97	1	1	0	3	1	2
E14	Unspecified diabetes mellitus	1,065	540	525	968	495	473	76	37	39	21	8	13
E16	Other disorders of pancreatic internal secretion	7	3	4	6	2	4	0	0	1	1	0	0
E21	Hyperparathyroidism and other disorders of parathyroid gland	1	1	0	1	1	0	0	0	0	0	0	0
E23	Hypofunction and other disorders of the pituitary gland	4	3	1	4	3	1	0	0	0	0	0	0
E27	Other disorders of adrenal gland	7	2	5	7	2	5	0	0	0	0	0	0
E34	Other endocrine disorders	2	1	1	2	1	1	0	0	0	0	0	0
E41	Nutritional marasmus	2	1	1	2	1	1	0	0	0	0	0	0
E43	Unspecified severe protein-energy malnutrition	3	0	3	3	0	3	0	0	0	0	0	0
E45	Retarded development following protein-energy malnutrition	2	0	2	2	0	2	0	0	0	0	0	0
E46	Unspecified protein-energy malnutrition	36	13	23	35	13	22	1	0	1	0	0	0
E53	Deficiency of other B group vitamins	2	1	1	2	1	1	0	0	0	0	0	0
E63	Other nutritional deficiencies	2	0	2	2	0	2	0	0	0	0	0	0
E66	Obesity	67	30	37	60	29	31	7	1	6	0	0	0
E71	Disorders of branched-chain amino-acid metabolism and fatty-acid metabolism	2	2	0	2	2	0	0	0	0	0	0	0
E72	Other disorders of amino-acid metabolism	2	2	0	2	2	0	0	0	0	0	0	0
E75	Disorders of sphingolipid metabolism and other lipid storage disorders	6	2	4	6	2	4	0	0	0	0	0	0
E76	Disorders of glycosaminoglycan metabolism	3	1	2	3	1	2	0	0	0	0	0	0
E78	Disorders of lipoprotein metabolism and other lipidemias	100	62	38	95	58	37	3	2	1	2	2	0
E83	Disorders of mineral metabolism	18	8	10	18	8	10	0	0	0	0	0	0
E84	Cystic fibrosis	12	4	8	11	4	7	1	0	1	0	0	0
E85	Amyloidosis	27	17	10	25	16	9	2	1	1	0	0	0
E86	Volume depletion	119	35	84	115	34	81	4	1	3	0	0	0
E87	Other disorders of fluid, electrolyte, and acid-base balance	79	34	45	73	31	42	5	2	3	1	0	0
E88	Other metabolic disorders	14	5	9	14	5	9	0	0	0	0	0	0
F01	Vascular dementia	1	0	1	1	0	1	0	0	0	0	0	0
F03	Unspecified dementia	1,610	416	1,194	1,551	400	1,151	45	13	32	14	3	11
F05	Delirium, not induced by alcohol and other psychoactive substances	14	5	9	14	5	9	0	0	0	0	0	0
F06	Other mental disorders due to brain damage and dysfunction and to physical disease	99	35	64	98	34	64	1	1	0	0	0	0
F10	Mental and behavioral disorders due to use of alcohol	191	149	42	178	138	40	11	9	2	2	0	0
F11	Mental and behavioral disorders due to use of opioids	5	4	1	5	4	1	0	0	0	0	0	0
F14	Mental and behavioral disorders due to use of cocaine	2	2	0	2	2	0	0	0	0	0	0	0
F17	Mental and behavioral disorders due to use of tobacco	8	6	2	8	6	2	0	0	0	0	0	0
F19	Mental and behavioral disorders due to multiple-drug use and use of other psychoactive substances	24	19	5	22	19	3	2	0	2	0	0	0
F20	Schizophrenia	10	5	5	10	5	5	0	0	0	0	0	0
F22	Persistent delusional disorders	1	0	1	1	0	1	0	0	0	0	0	0
F25	Schizoaffective disorders	2	2	0	2	0	2	0	0	0	0	0	0

Table C-17, 2004 (continued)

IDC	Code	Cause of Death	Totals						Other					
			Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
F29		Unspecified nonorganic psychosis	1	1	0	1	1	0	0	0	0	0	0	0
F31		Bipolar affective disorder	4	2	2	4	2	2	0	0	0	0	0	0
F32		Depressive episode	17	5	12	17	5	12	0	0	0	0	0	0
F50		Eating disorders	1	0	1	1	0	1	0	0	0	0	0	0
F54		Psychological and behavioral factors associated with disorders or diseases classified elsewhere	3	3	0	3	3	0	0	0	0	0	0	0
F70		Mild mental retardation	1	0	1	1	0	1	0	0	0	0	0	0
F72		Severe mental retardation	2	2	0	2	2	0	0	0	0	0	0	0
F73		Profound mental retardation	1	1	0	1	1	0	0	0	0	0	0	0
F79		Unspecified mental retardation	8	7	1	7	6	1	1	0	0	0	0	0
G00		Bacterial meningitis, not elsewhere classified	9	5	4	9	5	4	0	0	0	0	0	0
G03		Meningitis due to other and unspecified causes	4	4	0	3	3	0	1	0	0	0	0	0
G04		Encephalitis, myelitis, and encephalomylitis	4	4	0	4	4	0	0	0	0	0	0	0
G06		Intracranial and intraspinal abscess and granuloma	4	2	2	3	2	1	1	0	0	0	0	0
G09		Sequelae of inflammatory diseases of central nervous system	2	0	2	2	0	2	0	0	0	0	0	0
G10		Huntington's disease	26	16	10	25	15	10	1	0	0	0	0	0
G11		Hereditary ataxia	4	0	4	4	0	4	0	0	0	0	0	0
G12		Spinal muscular atrophy and related syndromes	174	88	86	167	82	85	4	3	1	3	3	0
G20		Parkinson's disease	417	216	201	405	209	196	10	5	5	2	2	0
G21		Secondary parkinsonism	1	0	1	1	0	1	0	0	0	0	0	0
G23		Other degenerative diseases of basal ganglia	8	2	6	8	2	6	0	0	0	0	0	0
G24		Dystonia	3	0	3	3	0	3	0	0	0	0	0	0
G25		Other extrapyramidal and movement disorders	3	2	1	3	2	1	0	0	0	0	0	0
G30		Alzheimer's disease	1,671	440	1,231	1,628	426	1,202	33	10	23	10	4	6
G31		Other degenerative diseases of nervous system, not elsewhere classified	33	13	20	32	12	20	0	0	0	1	1	0
G35		Multiple sclerosis	94	36	58	91	36	55	2	0	2	1	0	1
G37		Other demyelinating diseases of central nervous system	1	0	1	1	0	1	0	0	0	0	0	0
G40		Epilepsy	8	4	4	8	4	4	0	0	0	0	0	0
G41		Status epilepticus	8	3	5	8	3	5	0	0	0	0	0	0
G45		Transient cerebral ischemic attacks and related syndromes	3	1	2	3	1	2	0	0	0	0	0	0
G47		Sleep disorders	4	2	2	3	1	2	1	0	0	0	0	0
G60		Hereditary and idiopathic neuropathy	1	1	0	1	1	0	0	0	0	0	0	0
G61		Inflammatory polyneuropathy	6	5	1	6	5	1	0	0	0	0	0	0
G62		Other polyneuropathies	7	4	3	7	4	3	0	0	0	0	0	0
G70		Myasthenia gravis and other myoneuronal disorders	18	11	7	18	11	7	0	0	0	0	0	0
G71		Primary disorders of muscles	28	18	10	28	18	10	0	0	0	0	0	0
G72		Other myopathies	3	3	0	3	3	0	0	0	0	0	0	0
G80		Infantile cerebral palsy	32	20	12	32	20	12	0	0	0	0	0	0
G81		Hemiplegia	2	1	1	2	1	1	0	0	0	0	0	0
G82		Paraplegia and tetraplegia	15	10	5	14	10	4	1	0	0	0	0	0
G83		Other paralytic syndromes	1	1	0	1	1	0	0	0	0	0	0	0
G90		Disorders of autonomic nervous system	7	2	5	7	2	5	0	0	0	0	0	0
G91		Hydrocephalus	24	10	14	21	8	13	2	1	1	1	1	0

Table C-17, 2004 (continued)

IDC Code	Cause of Death	Totals			Whites			Blacks			Other		
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
G92	Toxic encephalopathy	1	1	0	1	1	0	0	0	0	0	0	0
G93	Other disorders of brain	192	90	102	174	82	92	16	7	9	2	1	1
G95	Other diseases of spinal cord	9	4	5	8	4	4	1	0	1	0	0	0
H35	Other retinal disorders	1	0	1	1	0	1	0	0	0	0	0	0
H70	Mastoiditis and related conditions	2	1	1	2	1	1	0	0	0	0	0	0
I01	Rheumatic fever with heart involvement	2	1	1	2	1	1	0	0	0	0	0	0
I05	Rheumatic mitral valve diseases	26	8	18	25	8	17	0	0	0	1	0	1
I06	Rheumatic aortic valve diseases	3	1	2	3	1	2	0	0	0	0	0	0
I07	Rheumatic tricuspid valve diseases	5	2	3	5	2	3	0	0	0	0	0	0
I08	Multiple valve diseases	15	6	9	15	6	9	0	0	0	0	0	0
I09	Other rheumatic heart diseases	15	4	11	14	4	10	0	0	0	1	0	1
I10	Essential (primary) hypertension	336	117	219	304	104	200	26	12	14	6	1	5
I11	Hypertensive heart disease	277	134	143	253	122	131	22	12	10	2	0	2
I12	Hypertensive renal disease	118	51	67	100	44	56	16	6	10	2	1	1
I13	Hypertensive heart and renal disease	30	12	18	27	10	17	2	1	1	1	0	0
I20	Angina pectoris	8	1	7	8	1	7	0	0	0	0	0	0
I21	Acute myocardial infarction	3,270	1,656	1,614	3,147	1,589	1,558	100	54	46	23	13	10
I24	Other acute ischemic heart diseases	38	19	19	36	19	17	1	0	1	1	0	1
I25	Chronic ischemic heart disease	5,393	2,687	2,706	5,166	2,555	2,611	182	109	73	45	23	22
I26	Pulmonary embolism	147	58	89	129	48	81	16	10	6	2	0	2
I27	Other pulmonary heart diseases	144	51	93	130	46	84	12	4	8	2	1	1
I28	Other diseases of pulmonary vessels	2	1	1	2	1	1	0	0	0	0	0	0
I30	Acute pericarditis	1	0	1	1	0	1	0	0	0	0	0	0
I31	Other diseases of pericardium	21	12	9	18	9	9	3	3	0	0	0	0
I33	Acute and subacute endocarditis	24	11	13	23	11	12	0	0	0	1	0	1
I34	Nonrheumatic mitral valve disorders	56	19	37	55	19	36	1	0	1	0	0	0
I35	Nonrheumatic aortic valve disorders	387	132	255	380	130	250	5	2	3	2	0	2
I37	Pulmonary valve disorders	105	44	61	100	42	58	5	2	3	0	0	0
I38	Endocarditis, valve unspecified	1	1	0	1	1	0	0	0	0	0	0	0
I40	Acute myocarditis	416	246	170	397	235	162	18	11	7	1	0	1
I42	Cardiomyopathy	15	7	8	14	6	8	1	1	0	0	0	0
I44	Atrioventricular and left bundle-branch block	5	3	2	5	3	2	0	0	0	0	0	0
I45	Other conduction disorders	600	282	318	574	266	308	22	13	9	4	3	1
I46	Cardiac arrest	10	5	5	10	5	5	0	0	0	0	0	0
I47	Paroxysmal tachycardia	193	103	90	176	91	85	13	10	3	4	2	2
I48	Atrial fibrillation and flutter	291	91	200	278	84	194	10	6	4	3	1	2
I49	Other cardiac arrhythmias	442	237	205	409	223	186	29	11	18	4	3	1
I50	Heart failure	1,849	713	1,136	1,797	685	1,112	46	25	21	6	3	3
I51	Complications and ill-defined descriptions of heart disease												
I60	Subarachnoid hemorrhage	138	48	90	119	43	76	5	11	3	0	3	0
I61	Intracerebral hemorrhage	377	191	186	350	172	178	12	8	4	15	11	4
I62	Other nontraumatic intracranial hemorrhage	246	122	124	234	118	116	10	4	6	2	0	2
I63	Cerebral infarction	206	75	130	199	72	126	2	1	5	2	3	2

Table C-17, 2004 (continued)

IDC	Cause of Death	Totals			Whites			Blacks			Other		
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
I64	Stroke, not specified as hemorrhage or infarction	1,558	535	1,023	1,484	511	973	55	16	39	19	8	11
I67	Other cerebrovascular diseases	160	60	100	152	57	95	8	3	5	0	0	0
I69	Sequelae of cerebrovascular disease	567	182	385	530	168	362	28	9	19	9	5	4
I70	Atherosclerosis	237	92	145	234	91	143	2	1	1	1	0	1
I71	Aortic aneurysm and dissection	283	156	127	271	146	125	11	9	2	1	1	0
I72	Other aneurysm	14	7	7	13	6	7	1	1	0	0	0	0
I73	Other peripheral vascular diseases	222	95	127	211	92	119	9	3	6	2	0	2
I74	Arterial embolism and thrombosis	12	3	9	12	3	9	0	0	0	0	0	0
I77	Other disorders of arteries and arterioles	20	8	12	19	8	11	1	0	1	0	0	0
I80	Phlebitis and thrombophlebitis	62	21	41	55	17	38	5	3	2	2	1	1
I82	Other venous embolism and thrombosis	1	1	0	0	0	0	1	0	0	0	0	0
I83	Varicose veins of lower extremities	9	7	2	9	7	2	0	0	0	0	0	0
I85	Esophageal varices	4	3	1	3	2	1	1	0	0	0	0	0
I86	Varicose veins of other sites	1	1	0	0	0	0	0	0	0	0	0	0
I87	Other disorders of veins	1	0	1	0	1	0	0	0	0	0	0	0
I89	Other noninfective disorders of lymphatic vessels and lymph nodes	1	0	1	0	1	0	0	0	0	0	0	0
I95	Hypotension	9	7	2	9	7	2	0	0	0	0	0	0
I99	Other and unspecified disorders of circulatory system	10	7	3	10	7	3	0	0	0	0	0	0
J02	Acute pharyngitis	1	1	0	1	1	0	0	0	0	0	0	0
J04	Acute laryngitis and tracheitis	3	1	2	3	1	2	0	0	0	0	0	0
J06	Acute upper respiratory infections of multiple and unspecified sites	2	0	2	2	0	2	0	0	0	0	0	0
J10	Influenza due to identified influenza virus	6	5	1	6	5	1	0	0	0	0	0	0
J11	Influenza, virus not identified	37	19	18	37	19	18	0	0	0	0	0	0
J12	Viral pneumonia, not elsewhere classified	1	0	1	1	0	1	0	0	0	0	0	0
J13	Pneumonia due to Streptococcus pneumoniae	4	1	3	4	1	3	0	0	0	0	0	0
J15	Bacterial pneumonia, not elsewhere classified	61	35	26	58	33	25	3	2	1	0	0	0
J18	Pneumonia, organism unspecified	1,846	770	1,076	1,793	741	1,052	37	19	18	16	10	6
J20	Acute bronchitis	2	0	2	2	0	2	0	0	0	0	0	0
J22	Unspecified acute lower respiratory infection	4	0	4	4	0	4	0	0	0	0	0	0
J38	Diseases of vocal cords and larynx, not elsewhere classified	2	1	1	2	1	1	0	0	0	0	0	0
J39	Other diseases of upper respiratory tract	5	2	3	5	2	3	0	0	0	0	0	0
J40	Bronchitis, not specified as acute or chronic	10	5	5	10	5	5	0	0	0	0	0	0
J42	Unspecified chronic bronchitis	8	1	7	8	1	7	0	0	0	0	0	0
J43	Emphysema	287	138	149	280	133	147	6	4	2	1	1	0
J44	Other chronic obstructive pulmonary disease	2,159	954	1,205	2,105	924	1,181	35	14	21	19	16	3
J45	Asthma	74	19	55	67	16	51	3	1	1	0	1	0
J46	Status asthmaticus	6	4	2	3	1	2	1	0	2	2	0	0
J47	Bronchiectasis	29	8	21	29	8	21	0	0	0	0	0	0
J61	Pneumoconiosis due to asbestos and other mineral fibers	15	15	0	15	15	0	0	0	0	0	0	0
J63	Pneumoconiosis due to other inorganic dusts	1	1	0	1	1	0	0	0	0	0	0	0
J67	Hypersensitivity pneumonitis due to organic dust	1	1	0	1	1	0	0	0	0	0	0	0
J69	Pneumonitis due to solids and liquids	562	286	276	535	274	261	16	9	7	11	3	8
J80	Adult respiratory distress syndrome	31	15	16	27	12	15	3	2	1	1	1	0

Table C-17, 2004 (continued)

IDC	Code Cause of Death	Totals						Whites						Blacks					
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
J81	Pulmonary edema	11	6	5	10	5	5	1	1	0	0	0	0	0	0	0	0	0	0
J82	Pulmonary eosinophilia, not elsewhere classified	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
J84	Other interstitial pulmonary diseases	373	199	174	351	188	163	15	9	6	7	2	5						
J85	Abscess of lung and mediastinum	12	8	4	11	8	3	1	0	1	0	0	0	0	0	0	0	0	0
J86	Pyothorax	8	5	3	8	5	3	0	0	0	0	0	0	0	0	0	0	0	0
J87	Pleural effusion, not elsewhere classified	41	18	23	40	17	23	0	0	0	0	1	1	0	0	0	0	0	0
J93	Pneumothorax	9	3	6	9	3	6	0	0	0	0	0	0	0	0	0	0	0	0
J94	Other pleural conditions	3	2	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0
J96	Respiratory failure, not elsewhere classified	253	96	157	242	90	152	10	5	5	1	1	0						
J98	Other respiratory disorders	135	58	77	128	54	74	6	4	2	1	0	1	0	0	0	0	0	0
K08	Other disorders of the teeth and supporting structures	3	2	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0
K11	Diseases of salivary glands	4	1	3	3	0	3	0	3	1	1	0	0	0	0	0	0	0	0
K12	Stomatitis and related lesions	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
K20	Esophagitis	6	2	4	5	1	4	1	1	0	0	0	0	0	0	0	0	0	0
K21	Gastroesophageal reflux disease	12	7	5	10	5	5	1	1	1	0	0	1	1	0	0	1	1	0
K22	Other diseases of esophagus	29	10	19	27	9	18	1	1	0	0	1	0	1	0	1	0	1	0
K25	Gastric ulcer	13	6	7	13	6	7	0	0	0	0	0	0	0	0	0	0	0	0
K26	Duodenal ulcer	18	10	8	17	9	8	1	1	0	0	0	0	0	0	0	0	0	0
K27	Peptic ulcer, site unspecified	16	8	8	14	7	7	1	1	0	0	1	1	0	0	0	0	0	0
K29	Gastritis and duodenitis	6	3	3	6	3	3	0	0	0	0	0	0	0	0	0	0	0	0
K31	Other diseases of stomach and duodenum	9	3	6	9	3	6	0	0	0	0	0	0	0	0	0	0	0	0
K35	Acute appendicitis	7	1	6	6	0	6	1	1	0	0	0	0	0	0	0	0	0	0
K40	Inguinal hernia	7	5	2	6	4	2	1	1	0	0	0	0	0	0	0	0	0	0
K41	Femoral hernia	3	0	3	3	0	3	0	3	0	0	0	0	0	0	0	0	0	0
K42	Umbilical hernia	2	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0
K43	Ventral hernia	7	2	5	7	2	5	0	0	0	0	0	0	0	0	0	0	0	0
K44	Diaphragmatic hernia	7	2	5	7	2	5	0	0	0	0	0	0	0	0	0	0	0	0
K46	Unspecified abdominal hernia	6	4	2	6	4	2	0	0	0	0	0	0	0	0	0	0	0	0
K50	Crohn's disease [regional enteritis]	12	2	10	12	2	10	0	0	0	0	0	0	0	0	0	0	0	0
K51	Ulcerative colitis	7	5	2	6	4	2	1	1	0	0	0	0	0	0	0	0	0	0
K52	Other noninfective gastroenteritis and colitis	41	18	23	41	18	23	0	0	0	0	0	0	0	0	0	0	0	0
K55	Vascular disorders of intestine	231	76	155	222	69	153	7	5	2	2	2	0						
K56	Paralytic ileus and intestinal obstruction without hernia	185	70	115	175	67	108	7	2	5	3	1	2						
K57	Diverticular disease of intestine	80	22	58	77	21	56	3	1	2	0	0	0						
K59	Other functional intestinal disorders	65	24	41	64	24	40	1	0	1	0	0	0						
K61	Abscess of anal and rectal regions	40	15	25	36	12	24	4	3	1	0	0	0						
K62	Other diseases of anus and rectum	6	3	3	5	3	2	1	0	1	0	0	0						
K63	Other diseases of intestine	160	113	47	154	109	45	6	4	2	0	0	0						
K65	Peritonitis	1	1	0	1	1	0	0	0	0	0	0	0						
K66	Other disorders of peritoneum	145	90	55	134	82	52	8	6	2	3	2	1						

Table C-17, 2004 (continued)

IDC	Code	Cause of Death	Totals			Whites			Blacks			Other		
			Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
K73		Chronic hepatitis, not elsewhere classified	3	2	1	3	2	1	0	0	0	0	0	0
K74		Fibrosis and cirrhosis of liver	371	257	114	348	240	108	20	15	5	3	2	1
K75		Other inflammatory liver diseases	18	3	15	17	3	14	0	0	1	0	1	0
K76		Other diseases of liver	151	112	39	140	105	35	9	7	2	2	0	2
K80		Cholelithiasis	19	7	12	18	7	11	1	0	1	0	0	0
K81		Cholecystitis	36	13	23	35	13	22	1	0	1	0	0	0
K82		Other diseases of gallbladder	6	2	4	6	2	4	0	0	0	0	0	0
K83		Other diseases of biliary tract	36	14	22	34	14	20	2	0	2	0	0	0
K85		Acute pancreatitis	46	27	19	42	24	18	4	3	1	0	0	0
K86		Other diseases of pancreas	11	6	5	10	6	4	1	0	1	0	0	0
K90		Intestinal malabsorption	12	4	8	11	3	8	1	1	0	0	0	0
K92		Other diseases of the digestive system	255	105	150	239	96	143	11	6	5	5	3	2
L00		Staphylococcal scalded skin syndrome	1	1	0	0	0	0	0	0	0	0	0	0
L02		Cutaneous abscess, furuncle, and carbuncle	6	4	2	6	4	2	0	0	0	0	0	0
L03		Cellulitis	27	5	22	26	5	21	1	0	1	0	0	0
L08		Other local infections of skin and subcutaneous tissue	14	3	11	14	3	11	0	0	0	0	0	0
L12		Pemphigoid	1	0	1	1	0	1	0	1	0	0	0	0
L51		Erythema multiforme	2	0	2	1	0	1	0	0	0	0	1	0
L53		Other erythematous conditions	1	0	1	1	0	1	0	0	0	0	0	0
L89		Decubitus ulcer	21	7	14	21	7	14	0	0	0	0	0	0
L93		Lupus erythematosus	6	1	5	5	1	4	0	0	0	0	1	0
L97		Ulcer of lower limb, not elsewhere classified	3	0	3	3	0	3	0	0	0	0	0	0
L98		Other disorders of skin and subcutaneous tissue, not elsewhere classified	2	1	1	2	1	1	1	0	0	0	0	0
M00		Pyogenic arthritis	3	2	1	1	1	1	0	1	1	1	0	0
M05		Seropositive rheumatoid arthritis	5	4	1	5	4	1	0	0	0	0	0	0
M06		Other rheumatoid arthritis	48	7	41	47	7	40	1	0	1	0	0	0
M10		Gout	3	2	1	3	2	1	0	0	0	0	0	0
M13		Other arthritis	7	1	6	7	1	6	0	0	0	0	0	0
M15		Polyarthrosis	1	0	1	1	0	1	0	0	0	0	0	0
M19		Other arthrosis	15	1	14	15	1	14	0	0	0	0	0	0
M31		Other necrotizing vasculopathies	18	5	13	17	5	12	1	0	1	0	0	0
M32		Systemic lupus erythematosus	10	3	7	8	2	6	2	1	0	0	0	0
M33		Dermatopolymyositis	3	1	2	3	1	2	0	0	0	0	0	0
M34		Systemic sclerosis	28	3	25	26	3	23	1	0	1	1	0	1
M35		Other systemic involvement of connective tissue	11	4	7	9	3	6	0	0	2	1	1	1
M40		Kyphosis and lordosis	1	0	1	1	0	1	0	0	0	0	0	0
M41		Scoliosis	4	1	3	4	1	3	0	0	0	0	0	0
M45		Ankylosing spondylitis	1	1	0	1	1	0	0	0	0	0	0	0
M46		Other inflammatory spondylopathies	7	5	2	7	5	2	0	0	0	0	0	0
M47		Spondylosis	1	0	1	1	0	1	0	0	0	0	0	0
M48		Other spondylopathies	3	1	2	3	1	2	0	0	0	0	0	0
M54		Dorsalgia	3	1	2	3	1	2	0	0	0	0	0	0
M60		Myositis	5	4	1	5	4	1	2	0	0	0	0	0

Table C-17, 2004 (continued)

IDC	Cause of Death	Tot	Male	Fem	Whites	Male	Fem	Blacks	Male	Fem	Tot	Male	Fem	Other Male	Fem
M62	Other disorders of muscle	10	7	3	10	7	3	0	0	0	0	0	0	0	0
M72	Fibroblastic disorders	10	3	7	10	3	7	0	0	0	0	0	0	0	0
M79	Other soft tissue disorders, not elsewhere classified	1	1	0	1	1	0	0	0	0	0	0	0	0	0
M80	Osteoporosis with pathological fracture	9	1	8	9	1	8	0	0	0	0	0	0	0	0
M81	Osteoporosis without pathological fracture	19	1	18	19	1	18	0	0	0	0	0	0	0	0
M84	Disorders of continuity of bone	2	0	2	2	0	2	0	0	0	0	0	0	0	0
M86	Osteomyelitis	52	20	32	48	17	31	4	3	1	0	0	0	0	0
M87	Osteonecrosis	1	0	1	0	1	0	0	0	0	0	0	0	0	0
M89	Other disorders of bone	3	1	2	3	1	2	0	0	0	0	0	0	0	0
N02	Recurrent and persistent hematuria	1	1	0	1	1	0	0	0	0	0	0	0	0	0
N03	Chronic nephritic syndrome	4	4	0	4	4	0	0	0	0	0	0	0	0	0
N04	Nephrotic syndrome	2	1	1	2	1	1	0	0	0	0	0	0	0	0
N10	Acute tubulo-interstitial nephritis	1	1	0	1	1	0	0	0	0	0	0	0	0	0
N12	Tubulo-interstitial nephritis, not specified as acute or chronic	5	0	5	5	0	5	0	0	0	0	0	0	0	0
N13	Obstructive and reflux uropathy	7	3	4	7	3	4	0	0	0	0	0	0	0	0
N14	Drug- and heavy-metal-induced tubulo-interstitial and tubular conditions	1	0	1	1	0	1	0	0	0	0	0	0	0	0
N15	Other renal tubulo-interstitial diseases	1	1	0	1	1	0	0	0	0	0	0	0	0	0
N17	Acute renal failure	266	121	145	250	110	140	14	10	4	2	1	1	0	0
N18	Chronic renal failure	452	236	216	395	205	190	47	25	22	10	6	4	0	0
N19	Unspecified renal failure	524	240	284	490	223	267	28	13	15	6	4	2	0	0
N20	Calculus of kidney and ureter	4	1	3	4	1	3	0	0	0	0	0	0	0	0
N28	Other disorders of kidney and ureter, not elsewhere classified	17	10	7	14	9	5	2	1	1	0	1	0	1	0
N30	Cystitis	1	0	1	1	0	1	0	0	0	0	0	0	0	0
N32	Other disorders of bladder	4	4	0	4	4	0	0	0	0	0	0	0	0	0
N35	Urethral stricture	1	1	0	1	1	0	0	0	0	0	0	0	0	0
N39	Other disorders of urinary system	362	114	248	340	104	236	18	9	9	4	1	3	0	0
N40	Hyperplasia of prostate	13	0	13	0	13	0	0	0	0	0	0	0	0	0
N41	Inflammatory diseases of prostate	1	1	0	1	1	0	0	0	0	0	0	0	0	0
N42	Other disorders of prostate	2	2	0	2	2	0	0	0	0	0	0	0	0	0
N48	Other disorders of penis	1	1	0	1	1	0	0	0	0	0	0	0	0	0
N49	Inflammatory disorders of male genital organs, not elsewhere classified	3	2	1	3	2	1	0	0	0	0	0	0	0	0
N70	Salpingitis and oophoritis	1	0	1	0	1	0	0	0	0	0	0	0	0	0
N73	Other female pelvic inflammatory diseases	2	0	2	0	2	0	0	0	0	0	0	0	0	0
N82	Fistulae involving female genital tract	1	0	1	0	1	0	0	0	0	0	0	0	0	0
N83	Noninflammatory disorders of ovary, fallopian tube, and broad ligament	4	0	4	3	0	3	1	0	1	0	0	0	0	0
N93	Other abnormal uterine and vaginal bleeding	3	0	3	3	0	3	0	0	0	0	0	0	0	0
O15	Eclampsia	1	0	1	1	0	1	0	0	0	0	0	0	0	0
O68	Labor and delivery complicated by fetal stress [distress]	1	0	1	1	0	1	0	0	0	0	0	0	0	0
O75	Other complications of labor and delivery, not elsewhere classified	1	0	1	1	0	1	0	0	0	0	0	0	0	0
O85	Puerperal sepsis	1	0	1	1	0	1	0	0	0	0	0	0	0	0
O88	Obstetric embolism	2	0	2	0	2	0	0	0	1	0	0	0	0	0
P01	Newborn affected by maternal conditions that may be unrelated to present pregnancy	39	23	16	24	15	9	13	7	6	2	1	1	0	0

Table C-17, 2004 (continued)

IDC	Code Cause of Death	Totals						Whites						Blacks					
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
P02	Newborn affected by complications of placenta, cord, and membranes	29	13	16	18	7	11	10	5	5	1	1	0	1	0	0	0	0	0
P03	Newborn affected by other complications of labor and delivery	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
P07	Disorders related to short gestation and low birthweight, not elsewhere classified	84	55	29	67	42	25	13	11	2	4	2	2	2	2	2	2	2	2
P15	Other birth injuries	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
P20	Intrauterine hypoxia	2	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0
P21	Birth asphyxia	11	7	4	10	6	4	4	1	1	0	0	0	0	0	0	0	0	0
P22	Respiratory distress of newborn	10	5	5	10	5	5	5	0	0	0	0	0	0	0	0	0	0	0
P25	Interstitial emphysema and related conditions originating in the perinatal period	4	3	1	3	0	3	0	1	0	0	0	0	0	0	0	0	0	0
P26	Pulmonary hemorrhage originating in the perinatal period	3	2	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0
P27	Chronic respiratory disease originating in the perinatal period	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P28	Other respiratory conditions originating in the perinatal period	6	1	5	5	1	4	1	0	1	0	0	0	0	0	0	0	0	0
P29	Cardiovascular disorders originating in the perinatal period	17	9	8	11	8	3	6	1	5	0	0	0	0	0	0	0	0	0
P35	Congenital viral diseases	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
P36	Bacterial sepsis of newborn	4	4	0	3	3	0	1	1	0	0	0	0	0	0	0	0	0	0
P37	Other congenital infectious and parasitic diseases	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
P50	Fetal blood loss	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1
P52	Intracranial nontraumatic hemorrhage of fetus and newborn	4	1	3	2	1	1	1	2	0	2	0	0	0	0	0	0	0	0
P77	Necrotizing enterocolitis of newborn	10	7	3	7	4	3	3	3	3	0	0	0	0	0	0	0	0	0
P83	Other conditions of integument specific to newborn	4	2	2	4	2	2	0	2	0	0	0	0	0	0	0	0	0	0
Q00	Anencephaly and similar malformations	3	1	2	2	2	0	2	1	1	0	0	0	0	0	0	0	0	0
Q02	Microcephaly	2	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Q03	Congenital hydrocephalus	3	2	1	1	1	0	2	1	1	0	0	0	0	0	0	0	0	0
Q04	Other congenital malformations of brain	3	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Q05	Spina bifida	2	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Q07	Other congenital malformations of nervous system	2	1	1	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0
Q20	Congenital malformations of cardiac chambers and connections	3	2	1	8	1	7	8	1	7	0	0	0	0	0	0	0	0	0
Q21	Congenital malformations of cardiac septa	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0
Q22	Congenital malformations of pulmonary and tricuspid valves	6	4	2	6	4	2	6	4	2	0	0	0	0	0	0	0	0	0
Q23	Congenital malformations of aortic and mitral valves	14	8	6	12	6	6	12	6	6	1	0	1	1	0	0	0	0	0
Q24	Other congenital malformations of heart	10	4	6	9	4	5	5	2	3	1	0	1	0	0	0	0	0	0
Q25	Congenital malformations of great arteries	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Q26	Congenital malformations of great veins	6	3	3	5	2	4	5	2	3	1	0	0	0	0	0	0	0	0
Q27	Other congenital malformations of peripheral vascular system	6	6	2	4	5	3	3	0	0	0	0	0	0	0	0	0	0	0
Q28	Other congenital malformations of circulatory system	11	6	5	8	5	3	3	0	0	0	0	0	0	0	0	0	0	0
Q32	Congenital malformations of trachea and bronchus	3	0	3	3	0	3	3	0	0	0	0	0	0	0	0	0	0	0
Q33	Congenital malformations of lung	2	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Q44	Congenital malformations of gallbladder, bile ducts, and liver	3	2	1	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0
Q61	Cystic kidney disease	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Q64	Other congenital malformations of urinary system	2	0	2	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0
Q77	Osteochondrodysplasia with defects of growth of tubular bones and spine	4	3	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0
Q78	Other osteochondrodysplasias	1	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0
Q79	Congenital malformations of musculoskeletal system, not elsewhere classified	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Q81	Epidermolysis bullosa	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table C-17, 2004 (continued)

IDC	Cause of Death	Totals			Whites			Blacks			Other		
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
Q85	Phakomatoses, not elsewhere classified	3	0	3	3	0	3	0	0	0	0	0	0
Q87	Other specified congenital malformation syndromes affecting multiple systems	3	2	1	3	2	1	0	0	0	0	0	0
Q89	Other congenital malformations, not elsewhere classified	5	3	2	3	2	1	2	1	1	0	0	0
Q90	Down's syndrome	17	12	5	16	11	5	1	1	0	0	0	0
Q91	Edwards' syndrome and Patau's syndrome	12	6	6	9	4	5	2	1	1	1	1	0
Q99	Other chromosome abnormalities, not elsewhere classified	1	0	1	1	0	1	0	0	0	0	0	0
R00	Abnormalities of heart beat	6	1	5	5	1	4	1	0	1	0	0	0
R02	Gangrene, not elsewhere classified	5	3	2	5	3	2	0	0	0	0	0	0
R04	Hemorrhage from respiratory passages	8	5	3	7	4	3	1	1	0	0	0	0
R06	Abnormalities of breathing	11	3	8	9	3	6	2	0	2	0	0	0
R07	Pain in throat and chest	1	1	0	1	1	0	0	0	0	0	0	0
R09	Other symptoms and signs involving the circulatory and respiratory systems	112	36	76	107	33	74	2	1	1	3	2	1
R10	Abdominal and pelvic pain	2	0	2	0	0	0	0	0	0	0	0	0
R13	Dysphagia	4	2	2	4	2	2	0	0	0	0	0	0
R14	Flatulence and related conditions	1	0	1	1	0	1	0	0	0	0	0	0
R19	Other symptoms and signs involving the digestive system and abdomen	9	2	7	8	2	6	0	0	0	1	0	1
R50	Fever of unknown origin	4	1	3	4	1	3	0	0	0	0	0	0
R53	Malaise and fatigue	58	10	48	55	9	46	3	1	2	0	0	0
R54	Senility	25	3	22	25	3	22	0	0	0	0	0	0
R55	Syncope and collapse	2	2	0	2	2	0	0	0	0	0	0	0
R56	Convulsions, not elsewhere classified	29	14	15	27	12	15	2	0	0	0	0	0
R57	Shock, not elsewhere classified	39	17	22	37	16	21	2	1	1	0	0	0
R58	Hemorrhage, not elsewhere classified	12	5	7	10	4	6	1	0	1	1	0	0
R62	Lack of expected normal physiological development	149	39	110	142	37	105	7	2	5	0	0	0
R63	Symptoms and signs concerning food and fluid intake	2	2	0	2	2	0	0	0	0	0	0	0
R64	Cachexia	11	1	10	11	1	10	0	0	0	0	0	0
R79	Other abnormal findings of blood chemistry	1	0	1	1	0	1	0	0	0	0	0	0
R91	Abnormal findings on diagnostic imaging of lung	4	3	1	4	3	1	0	0	0	0	0	0
R95	Sudden infant death syndrome	33	24	9	27	19	8	6	5	1	0	0	0
R96	Other sudden death, cause unknown	13	6	7	12	5	7	1	1	0	0	0	0
R99	Other ill-defined and unspecified causes of mortality	191	130	61	160	107	53	17	13	4	14	10	4
V02	Pedestrian injured in collision with two- or three-wheeled motor vehicle	1	1	0	1	1	0	0	0	0	0	0	0
V03	Pedestrian injured in collision with car, pickup truck, or van	25	8	17	22	7	15	1	1	0	2	0	2
V04	Pedestrian injured in collision with heavy transport vehicle or bus	4	2	2	3	1	2	0	0	0	1	1	0
V05	Pedestrian injured in collision with railway train or railway vehicle	4	2	2	4	2	2	0	0	0	0	0	0
V09	Pedestrian injured in other and unspecified transport accidents	60	36	24	52	31	21	6	3	3	2	2	0
V13	Pedal cyclist injured in collision with car, pickup truck, or van	3	3	0	3	3	0	0	0	0	0	0	0
V15	Pedal cyclist injured in collision with railway train or railway vehicle	1	1	0	1	1	0	0	0	0	0	0	0
V19	Pedal cyclist injured in other and unspecified transport accidents	2	2	0	2	2	0	0	0	0	0	0	0
V22	Motorcycle rider injured in collision with two- or three-wheeled motor vehicle	1	1	0	1	1	0	0	0	0	0	0	0
V23	Motorcycle rider injured in collision with car, pickup truck, or van	9	9	0	9	9	0	0	0	0	0	0	0
V24	Motorcycle rider injured in collision with heavy transport vehicle or bus	4	4	0	4	0	4	0	0	0	0	0	0
V27	Motorcycle rider injured in collision with fixed or stationary object	11	11	0	11	0	11	0	0	0	0	0	0

Table C-17, 2004 (continued)

IDC	Code	Cause of Death	Totals			Whites			Blacks			Other		
			Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
V28	Motorcycle rider injured in noncollision transport accident		5	4	1	5	4	1	0	0	0	0	0	0
V29	Motorcycle rider injured in other and unspecified transport accidents		40	38	2	35	33	2	2	2	0	3	3	0
V43	Car occupant injured in collision with car, pickup truck, or van		22	13	9	22	13	9	0	0	0	0	0	0
V44	Car occupant injured in collision with heavy transport vehicle or bus		2	2	0	2	2	0	0	0	0	0	0	0
V47	Car occupant injured in collision with fixed or stationary object		38	25	13	33	21	12	3	3	0	2	1	1
V48	Car occupant injured in noncollision transport accident		13	9	4	13	9	4	0	0	0	0	0	0
V49	Car occupant injured in other and unspecified transport accidents		13	6	7	13	6	7	0	0	0	0	0	0
V52	Occupant of pickup truck or van injured in collision with two-or three-wheeled motor vehicle		1	0	1	1	0	1	0	0	0	0	0	0
V53	Occupant of pickup truck or van injured in collision with car, pickup truck, or van		1	0	1	1	0	1	0	0	0	0	0	0
V57	Occupant of pickup truck or van injured in collision with fixed or stationary object		3	1	2	2	1	1	0	1	0	0	0	0
V58	Occupant of pickup truck or van injured in noncollision transport accident		3	2	1	3	2	1	0	0	0	0	0	0
V63	Occupant of heavy transport vehicle injured in collision with two- or three-wheeled motor vehicle		1	1	0	1	1	0	0	0	0	0	0	0
V68	Occupant of heavy transport vehicle injured in noncollision transport accident		1	1	0	1	1	0	0	0	0	0	0	0
V69	Occupant of heavy transport vehicle injured in other and unspecified transport accidents		1	1	0	1	1	0	0	0	0	0	0	0
V80	Animal-rider or occupant of animal-drawn vehicle injured in transport accident		1	1	0	1	1	0	0	0	0	0	0	0
V84	Occupant of special vehicle mainly used in agriculture injured in transport accident		2	2	0	2	2	0	0	0	0	0	0	0
V85	Occupant of special construction vehicle injured in transport accident		2	2	0	2	2	0	0	0	0	0	0	0
V86	Occupant of special all-terrain or other motor vehicle designed primarily for off-road use, injured in transport accident		8	8	0	8	8	0	0	0	0	0	0	0
V87	Traffic accident of specified type but victim's mode of transport unknown		15	9	6	13	7	6	0	0	0	2	2	0
V88	Nontraffic accident of specified type but victim's mode of transport unknown		5	4	1	5	4	1	0	0	0	0	0	0
V89	Motor- or nonmotor-vehicle accident, type of vehicle unspecified		232	155	77	211	142	69	13	7	6	8	6	2
V90	Accident to watercraft causing drowning and submersion		7	6	1	5	4	1	1	0	1	1	0	0
V92	Water-transport-related drowning and submersion without accident to watercraft		1	1	0	1	1	0	0	0	0	0	0	0
V94	Other and unspecified water transport accidents		3	2	1	3	2	1	0	0	0	0	0	0
V95	Accident to powered aircraft causing injury to occupant		4	3	1	4	3	1	0	0	0	0	0	0
W00	Fall on same level involving ice and snow		2	1	1	2	1	1	0	0	0	0	0	0
W01	Fall on same level from slipping, tripping, and stumbling		11	3	8	11	3	8	0	0	0	0	0	0
W02	Fall involving ice skates, skis, roller skates, or skateboards		2	1	1	2	1	1	0	0	0	0	0	0
W05	Fall involving wheelchair		2	1	1	2	1	1	0	0	0	0	0	0
W06	Fall involving bed		11	6	5	11	6	5	0	0	0	0	0	0
W07	Fall involving chair		4	3	1	4	3	1	0	0	0	0	0	0
W10	Fall on and from stairs and steps		54	21	33	54	21	33	0	0	0	0	0	0
W11	Fall on and from ladder		4	4	0	4	4	0	0	0	0	0	0	0
W13	Fall from, out of, or through building or structure		25	17	8	25	17	8	0	0	0	0	0	0
W14	Fall from tree		2	1	1	2	1	1	0	0	0	0	0	0
W15	Fall from cliff		2	2	0	2	2	0	0	0	0	0	0	0
W17	Other fall from one level to another		9	6	3	9	6	3	0	0	0	0	0	0
W18	Other fall on same level		24	17	7	24	17	7	0	0	0	0	0	0
W19	Unspecified fall		120	54	66	115	53	62	1	0	1	4	1	3
W20	Struck by thrown, projected, or falling object		7	6	1	7	6	1	0	0	0	0	0	0
W21	Striking against or struck by sports equipment		1	0	1	1	0	1	0	0	0	0	0	0

Table C-17, 2004 (continued)

IDC	Code Cause of Death	Totals			Whites			Blacks			Other		
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
W22	Striking against or struck by other objects	1	0	1	1	0	1	0	0	0	0	0	0
W28	Contact with powered lawn mower	1	1	0	1	1	0	0	0	0	0	0	0
W30	Contact with agricultural machinery	1	1	0	1	1	0	0	0	0	0	0	0
W31	Contact with other and unspecified machinery	5	4	1	5	4	1	0	0	0	0	0	0
W34	Discharge from other and unspecified firearms	4	3	1	4	3	1	0	0	0	0	0	0
W49	Exposure to other and unspecified inanimate mechanical forces	1	1	0	0	0	0	0	0	0	0	0	0
W50	Hit, struck, kicked, bitten, or scratched by another person	1	1	0	1	1	0	0	1	1	0	0	0
W64	Exposure to other and unspecified animate mechanical forces	1	0	1	1	0	1	0	0	0	0	0	0
W65	Drowning and submersion while in swimming pool	7	1	6	7	1	6	0	0	0	0	0	0
W67	Drowning and submersion while in bathtub	2	1	1	2	1	1	0	0	0	0	0	0
W68	Drowning and submersion following fall into swimming pool	1	1	0	1	1	0	0	0	0	0	0	0
W69	Drowning and submersion while in natural water	14	11	3	13	11	2	1	0	1	0	0	0
W70	Drowning and submersion following fall into natural water	1	1	0	1	1	0	0	0	0	0	0	0
W73	Other specified drowning and submersion	13	10	3	9	7	2	1	0	1	3	3	0
W74	Unspecified drowning and submersion	4	4	0	4	4	0	0	0	0	0	0	0
W75	Accidental suffocation and strangulation in bed	2	2	0	2	2	0	2	0	0	0	0	0
W78	Inhalation of gastric contents	6	2	4	5	1	4	1	1	0	0	0	0
W79	Inhalation and ingestion of food causing obstruction of respiratory tract	18	10	8	17	9	8	0	0	0	1	1	0
W80	Inhalation and ingestion of other objects causing obstruction of respiratory tract	80	39	41	79	38	41	1	1	0	0	0	0
W83	Other specified threats to breathing	1	1	0	1	1	0	0	0	0	0	0	0
W84	Unspecified threat to breathing	2	2	0	1	1	0	0	0	0	0	0	0
W85	Exposure to electric transmission lines	5	5	0	4	4	0	1	1	0	0	1	0
W87	Exposure to unspecified electric current	1	1	0	1	1	0	0	0	0	0	0	0
W92	Exposure to excessive heat of man-made origin	1	0	1	0	1	0	0	0	0	0	0	0
X00	Exposure to uncontrolled fire in building or structure	28	13	15	24	11	13	2	1	1	2	1	1
X01	Exposure to uncontrolled fire, not in building or structure	2	2	0	2	2	0	0	0	0	0	0	0
X02	Exposure to controlled fire in building or structure	1	1	0	0	0	0	0	0	0	0	0	0
X04	Exposure to ignition of highly flammable material	1	1	0	1	1	0	0	0	0	0	0	0
X06	Exposure to ignition or melting of other clothing and apparel	1	1	0	1	1	0	0	0	0	0	0	0
X23	Contact with hornets, wasps, and bees	1	0	1	0	1	0	0	0	0	0	0	0
X30	Exposure to excessive natural heat	2	0	2	2	0	2	0	0	0	0	0	0
X31	Exposure to excessive natural cold	14	6	8	12	5	7	2	1	1	0	0	0
X41	Accidental poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs, not elsewhere classified	6	2	4	6	2	4	0	0	0	0	0	0
X42	Accidental poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified	52	42	10	48	38	10	3	3	0	1	1	0
X44	Accidental poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances	37	21	16	34	19	15	3	2	1	0	0	0
X45	Accidental poisoning by and exposure to alcohol	1	1	0	1	1	0	0	0	0	0	0	0
X47	Accidental poisoning by and exposure to other gases and vapors	3	3	0	3	3	0	0	0	0	0	0	0
X59	Exposure to unspecified factor	192	70	122	188	68	120	2	2	0	2	0	2
X60	Intentional self-poisoning (suicide) by and exposure to nonopioid analgesics, antipyretics, and antirheumatics	6	2	4	5	2	3	1	0	1	0	0	0

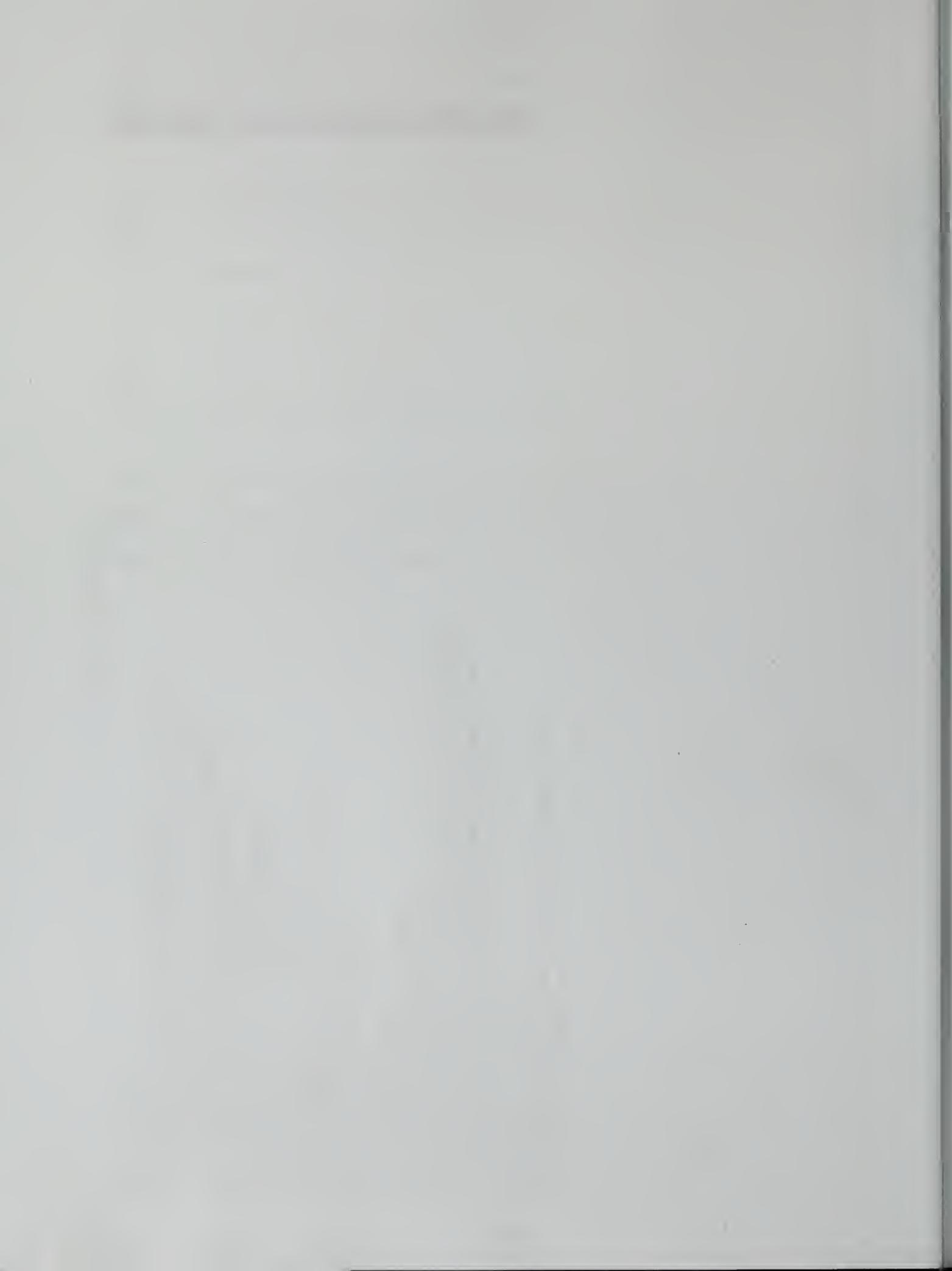
Table C-17, 2004 (continued)

IDC	Code Cause of Death	Totals		Whites		Blacks		Other		Tot	Male	Fem										
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
X61	Intentional self-poisoning (suicide) by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs, not elsewhere classified	13	7	6	11	6	5	0	0	0	2	1	1	1	1	1	1	1	1	1	1	1
X62	Intentional self-poisoning (suicide) by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified	19	11	8	17	9	8	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
X64	Intentional self-poisoning (suicide) by and exposure to other and unspecified drugs, medicaments, and biological substances	27	9	18	25	8	17	1	1	0	1	0	1	0	1	0	1	0	1	0	0	0
X65	Intentional self-poisoning (suicide) by and exposure to alcohol	1	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
X66	Intentional self-poisoning (suicide) by and exposure to organic solvents and halogenated hydrocarbons and their vapors	3	2	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
X67	Intentional self-poisoning (suicide) by and exposure to other gases and vapors	24	21	3	24	21	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
X69	Intentional self-poisoning (suicide) by and exposure to other and unspecified chemicals	2	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
X70	Intentional self harm (suicide) by hanging, strangulation, and suffocation	180	148	32	172	141	31	3	2	1	5	5	5	5	5	5	5	5	5	5	5	5
X71	Intentional self harm (suicide) by drowning and submersion	10	9	1	8	7	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0
X72	Intentional self harm (suicide) by handgun discharge	2	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
X73	Intentional self harm (suicide) by rifle, shotgun, and larger firearm discharge	12	12	0	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
X74	Intentional self harm (suicide) by other and unspecified firearm discharge	80	78	2	75	73	2	4	4	0	1	1	0	1	1	0	1	1	0	1	1	0
X76	Intentional self harm (suicide) by smoke, fire, and flames	4	3	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
X78	Intentional self harm (suicide) by sharp object	21	19	2	21	19	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
X80	Intentional self harm (suicide) by jumping from a high place	12	8	4	10	7	3	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0
X81	Intentional self harm (suicide) by jumping or lying before moving object	8	5	3	8	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
X83	Intentional self harm (suicide) by other specified means	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
X84	Intentional self harm (suicide) by unspecified means	2	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
X91	Assault (homicide) by hanging, strangulation, and suffocation	4	0	4	3	0	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
X94	Assault (homicide) by rifle, shotgun, and larger firearm discharge	2	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
X95	Assault (homicide) by other and unspecified firearm discharge	103	94	9	44	38	6	56	53	3	3	3	3	3	3	3	3	3	3	3	3	0
X99	Assault (homicide) by sharp object	39	29	10	24	15	9	11	10	1	4	4	4	4	4	4	4	4	4	4	4	0
Y00	Assault (homicide) by blunt object	2	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y01	Assault (homicide) by pushing from high place	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y04	Assault (homicide) by bodily force	8	3	5	7	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y06	Neglect and abandonment	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y07	Other maltreatment syndromes	2	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y08	Assault (homicide) by unspecified means	5	4	1	4	3	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Y09	Assault (homicide) by undetermined intent	7	7	0	5	5	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Y10	Poisoning by and exposure to nonopiod analgesics, antipyretics, and antirheumatics, psychotropic drugs, not elsewhere classified, undetermined intent	29	11	18	29	11	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y11	Poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs, not elsewhere classified, undetermined intent	453	334	119	419	308	111	31	24	7	3	2	1	1	0	1	0	1	0	1	0	1
Y12	Poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified, undetermined intent	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y13	Poisoning by and exposure to other drugs acting on the autonomic nervous system, undetermined intent	50	26	24	50	26	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y14	Poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances, undetermined intent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table C-17, 2004 (continued)

IDC Code Cause of Death		Totals			Whites			Blacks			Other		
		Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem	Tot	Male	Fem
Y15	Poisoning by and exposure to alcohol, undetermined intent	3	3	0	3	3	0	0	0	0	0	0	0
Y16	Poisoning by and exposure to organic solvents and halogenated hydrocarbons and their vapors, undetermined intent	1	1	0	1	1	0	0	0	0	0	0	0
Y17	Poisoning by and exposure to other gases and vapors, undetermined intent	1	1	0	1	1	0	0	0	0	0	0	0
Y20	Hanging, strangulation, and suffocation, undetermined intent	6	6	0	6	6	0	0	0	0	0	0	0
Y21	Drowning and submersion, undetermined intent	23	18	5	22	18	4	0	0	0	1	0	1
Y24	Other and unspecified firearm discharge, undetermined intent	1	1	0	1	1	0	0	0	0	0	0	0
Y26	Exposure to smoke, fire, and flames, undetermined intent	3	2	1	2	1	1	0	0	0	1	1	0
Y28	Contact with sharp object, undetermined intent	2	2	0	2	2	0	0	0	0	0	0	0
Y30	Falling, jumping, or pushed from a high place, undetermined intent	6	4	2	5	4	1	0	0	0	1	0	1
Y33	Other specified events, undetermined intent	4	4	0	4	4	0	0	0	0	0	0	0
Y34	Unspecified event, undetermined intent	15	11	4	14	11	3	1	0	1	0	0	0
Y35	Legal intervention	1	1	0	0	0	0	1	1	0	0	0	0
Y43	Primarily systemic agents	1	0	1	0	1	0	0	0	0	0	0	0
Y44	Agents primarily affecting blood constituents	1	0	1	0	1	0	0	0	0	0	0	0
Y57	Other and unspecified drugs and medicaments	4	0	4	4	0	4	0	0	0	0	0	0
Y83	Surgical operation and other surgical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure	42	21	21	39	18	21	3	3	0	0	0	0
Y84	Other medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure	7	2	5	7	2	5	0	0	0	0	0	0
Y85	Sequelae of transport accidents	2	1	1	2	1	1	0	0	0	0	0	0
Y86	Sequelae of other accidents	7	3	4	6	2	4	1	1	0	0	0	0
Y87	Sequelae of intentional self harm, assault, and events of undetermined intent	4	2	2	4	2	2	0	0	0	0	0	0
Y89	Sequelae of other external causes	1	1	0	1	0	0	0	0	0	0	0	0

INFANT & NEONATAL DEATHS



SECTION D

INFANT AND NEONATAL DEATHS

The total number of resident infant deaths (deaths of children less than 1 year of age) decreased by 1.8% in Massachusetts from 383 in 2003 to 376 in 2004. The rate of infant deaths remained stable at 4.8 infant deaths per 1,000 live births in between 2003 and 2004. As with live births and other deaths, all Massachusetts resident infant deaths are included regardless of the state in which they occurred. Neonatal deaths (deaths of infants under 28 days of age) rose slightly from 285 in 2003 to 291 in 2004, an increase of 2.1%. The rate of neonatal deaths increased, from 3.6 in 2003 to 3.7 in 2004.

INFANT DEATHS BY RACE

Beginning with the publication of 1989 data, several changes occurred in the method of calculating infant mortality rates (IMRs) by race and ethnicity. These changes affect only the calculation of race/ethnic infant mortality rates; all other data presented in this publication are comparable to information from previous years. These changes are the result of new federal recommendations for analyzing birth information, including infant mortality data, and the implementation of the new Massachusetts Standard Certificate of Death in 1989. Counts and rates in this report may differ slightly from previously published reports due to updating files and population estimates.

Infants born to Black non-Hispanic mothers continue to have the highest infant mortality rates. The IMR for Black non-Hispanics in 2004 was 11.5 per 1,000 live births. This represents a decrease of 1.2 (11.7%) from the 2003 rate, but it is over triple the IMR for White non-Hispanic infants.

In 2004, the IMR for Hispanics increased to 7.6 per 1,000 live births from 5.6 per 1,000 live births in 2003. This change is a 35.7% increase. The mortality rate of infants born to Hispanic mothers is more similar to the rate of infants born to Black non-Hispanic mothers than to White non-Hispanic mothers. The 2004 IMR of 7.6 for Hispanic infants is 200.0% the White non-Hispanic rate and 66.1% of the Black non-Hispanic rate.

Asian mothers had the lowest rates of infant mortality compared to the other race/ethnicity groups. This is consistent with prior years with the exception of 1995 and 2000, when the rate rose above that of White Non-Hispanics. In 2003, the Asian IMR was 2.7 deaths per 1,000 live births. However, caution should be used when interpreting this rate since it is based on a small number (15) of deaths.

INFANT DEATHS BY CAUSE

"Certain conditions originating in the perinatal period" (medical conditions arising from approximately 28 weeks gestation to 28 days of age) was the leading cause of death for White non-Hispanic, Black non-Hispanic, Asian non-Hispanic and Hispanic infants. Congenital anomalies represented the second leading cause of death among these same subgroups.

The overall leading causes of infant death were "Conditions arising in the perinatal period" (227 deaths) and congenital anomalies (59 deaths), which underwent 1.3% and 3.2% decreases, respectively, from 2003. Other causes of infant death were: Sudden Infant Death Syndrome, or SIDS, (33 deaths), "Disorders relating to short gestation and unspecified low birthweight" (83 deaths), "Other respiratory conditions of newborn" (14 deaths), and "Homicide" (3 deaths). There were 4 more deaths from SIDS in 2004 than there were in 2003, representing a 13.8% increase. The number of homicide deaths (3) has remained relatively constant since 1994.

SIDS remains the leading cause of death in the post-neonatal period (28-364 days), while "disorders relating to short gestation and low birthweight" was the leading cause in the neonatal period (1-27 days).

NEONATAL AND POST NEONATAL MORTALITY RATES

The neonatal mortality rate was 3.7 deaths per 1,000 live births in 2004. Among White non-Hispanic mothers, the neonatal mortality rate decreased slightly (3.2%), from 3.1 in 2003 to 3.0 in 2004. During this same time period, the rate decreased by 11.6% among Black non-Hispanic mothers (from 9.5 in 2003 to 8.4 in 2004) and increased by 48.7% among Hispanic mothers (from 3.9 in 2003 to 5.8 in 2004). Among Asians, the number of neonatal deaths increased from 10 to 12 in between 2003 and 2004, with the rates rising from 1.9 to 2.2. These rates should be interpreted cautiously since they are based on very few deaths.

The overall post neonatal mortality rate, representing the number of deaths of infants between 28 and 364 days of age per 1,000 live births, decreased slightly between 2004 and 2003, falling from 1.2 to 1.1. The post neonatal mortality rate among infants of White non-Hispanic mothers fell from 1.0 deaths per 1,000 live births in 2003 to 0.8 in 2004. Among infants of Black non-Hispanic mothers, the post neonatal mortality rate declined between 2003 and 2004, from 3.2 to 3.1 deaths per 1,000 births; a 3.1% decrease.

There was a small increase in the rate of post neonatal deaths among Hispanics, from 1.7 to 1.8, corresponding to a rate increase of 5.9%. The number of post neonatal deaths among Asians went from 4 to 3 between 2003 and 2004.

DEFINITIONS IMPORTANT FOR THIS SECTION INCLUDE:

INFANT DEATH

Death of a child whose age is less than one year (365 days).

NEONATAL DEATH

Death of a child whose age is less than 28 days.

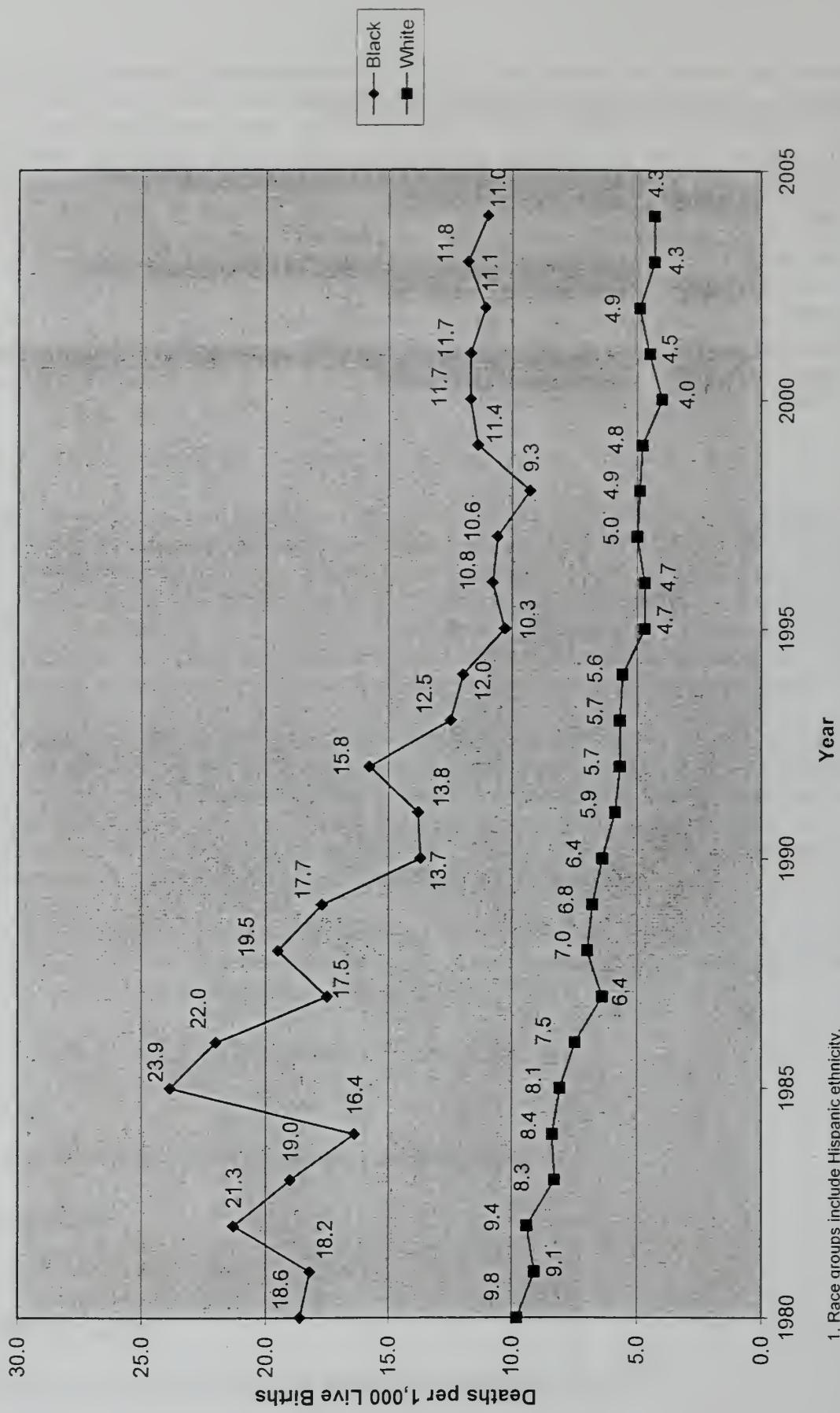
POST NEONATAL DEATH

Death of a child whose age is at least 28 days, but less than one year.

RATES IMPORTANT FOR THIS SECTION INCLUDE:

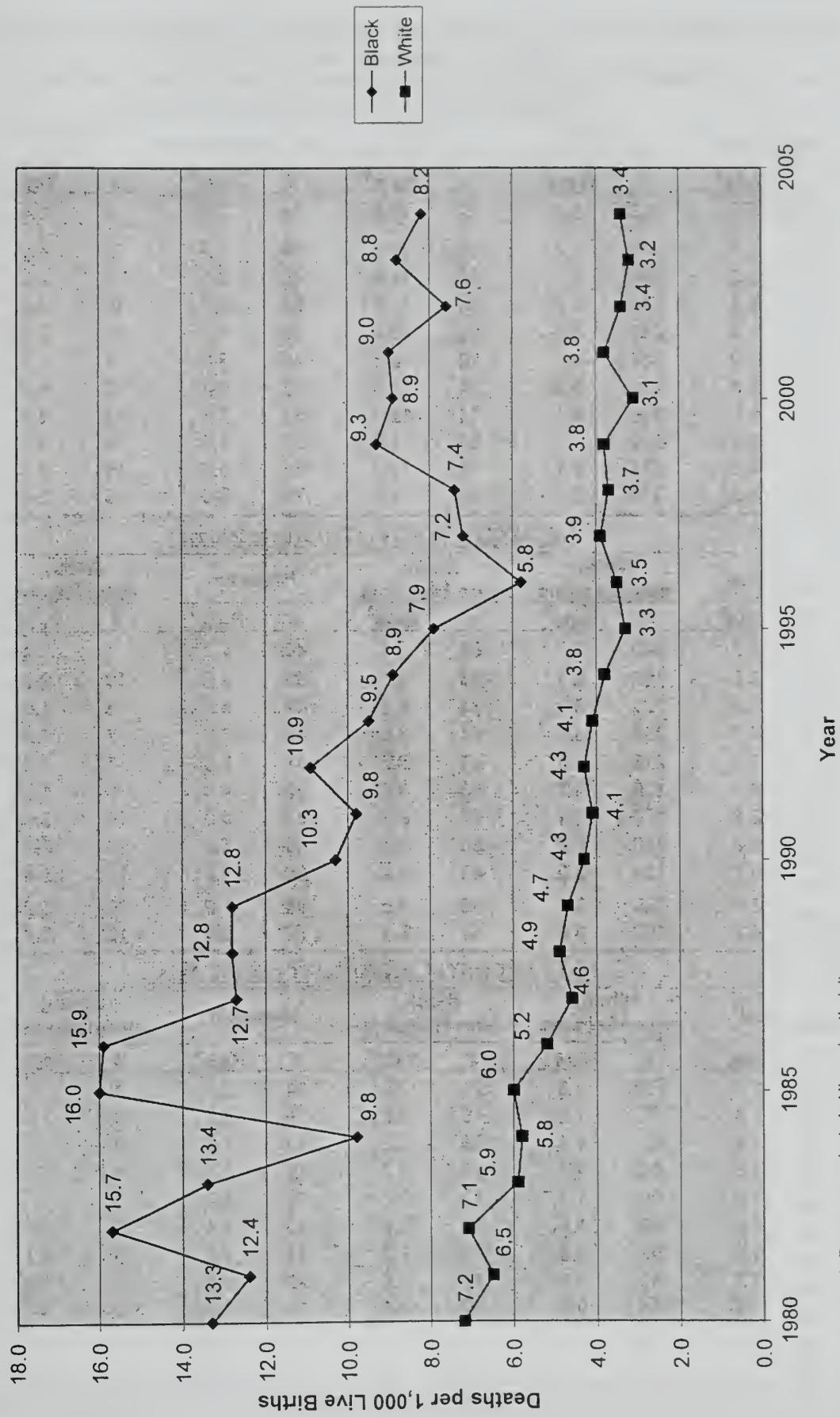
INFANT MORTALITY RATE (IMR)	$\frac{\text{# of Resident Deaths at Less than 1 Year of Age} \times 1,000}{\text{Total Resident Live Births}}$
NEONATAL MORTALITY RATE (NMR)	$\frac{\text{# of Resident Deaths at Less than 28 Days of Age} \times 1,000}{\text{Total Resident Live Births}}$
POST NEONATAL MORTALITY RATE (PNMR)	$\frac{\text{# of Resident Deaths at Least 28 Days of Age but <365 Days of Age} \times 1,000}{\text{Total Resident Live Births}}$

Figure D-1. Infant Mortality Rates by Race¹, Massachusetts: 1980-2004



1. Race groups include Hispanic ethnicity.

Figure D-2. Neonatal Mortality Rates by Race¹, Massachusetts: 1980-2004



¹ Race groups include Hispanic ethnicity.

Table D-1. Trends in Infant, Neonatal, and Post Neonatal Mortality, by Race and Hispanic Ethnicity, Massachusetts: 1994-2004

INFANT MORTALITY (less than one year of age)												
	State Total ¹		White, non-Hispanic		Black, non-Hispanic		Hispanic		Asian, non-Hispanic		Other ²	
Year	#	Rate ³	#	Rate ³	#	Rate ³	#	Rate ³	#	Rate ³	#	Rate ³
1994	499	6.0	343	5.3	79	12.6	64	7.6	8	2.4	5	5.3
1995	419	5.1	275	4.4	65	11.1	58	7.2	19	5.5	2	-- ⁴
1996	403	5.0	289	4.7	63	11.4	40	5.1	8	2.2	2	-- ⁴
1997	425	5.3	294	4.8	64	11.7	55	6.7	10	2.6	2	-- ⁴
1998	414	5.1	287	4.6	59	10.6	58	6.7	10	2.7	0	-- ⁴
1999	418	5.2	285	4.7	72	12.3	49	5.5	8	1.9	4	-- ⁴
2000	377	4.6	232	3.8	74	12.8	48	5.2	19	4.1	4	-- ⁴
2001	407	5.0	245	4.1	71	12.1	69	7.3	15	3.1	7	4.1
2002	397	4.9	239	4.1	69	11.6	67	7.0	16	3.0	6	3.8
2003	383	4.8	235	4.1	75	12.7	55	5.6	14	2.7	4	-- ⁴
2004	376	4.8	210	3.8	70	11.5	75	7.6	15	2.7	6	3.5
NEONATAL MORTALITY (birth to 27days)												
	State Total ¹		White, non-Hispanic		Black, non-Hispanic		Hispanic		Asian, non-Hispanic		Other ²	
Year	#	Rate ³	#	Rate ³	#	Rate ³	#	Rate ³	#	Rate ³	#	Rate ³
1994	349	4.2	240	3.7	58	9.3	40	4.7	7	2.1	4	-- ⁴
1995	298	3.6	198	3.1	50	8.5	39	4.8	10	2.9	1	-- ⁴
1996	290	3.6	222	3.6	34	6.2	27	3.5	5	1.4	1	-- ⁴
1997	323	4.0	228	3.7	44	8.0	43	5.2	7	1.8	1	-- ⁴
1998	315	3.9	218	3.5	47	8.5	43	5.0	7	1.9	0	-- ⁴
1999	332	4.1	226	3.7	58	9.9	39	4.4	5	1.2	4	-- ⁴
2000	288	3.5	177	2.9	57	9.9	37	4.0	14	3.0	3	-- ⁴
2001	308	3.8	190	3.2	56	9.5	49	5.2	10	2.1	3	-- ⁴
2002	299	3.7	185	3.2	49	8.2	50	5.2	13	2.4	2	-- ⁴
2003	285	3.6	179	3.1	56	9.5	38	3.9	10	1.9	2	-- ⁴
2004	291	3.7	167	3.0	51	8.4	57	5.8	12	2.2	4	-- ⁴
POST NEONATAL MORTALITY (28-365 days)												
	State Total ¹		White, non-Hispanic		Black, Non-Hispanic		Hispanic		Asian, non-Hispanic		Other ²	
Year	#	Rate ³	#	Rate ³	#	Rate ³	#	Rate ³	#	Rate ³	#	Rate ³
1994	150	1.8	103	1.6	21	3.3	24	2.8	1	-- ⁴	1	-- ⁴
1995	121	1.5	77	1.2	15	2.6	19	2.3	9	2.6	1	-- ⁴
1996	113	1.4	67	1.1	29	5.3	13	1.7	3	-- ⁴	1	-- ⁴
1997	102	1.3	66	1.1	20	3.7	12	1.5	3	-- ⁴	1	-- ⁴
1998	99	1.2	69	1.1	12	2.2	15	1.7	3	-- ⁴	0	-- ⁴
1999	86	1.1	59	1.0	14	2.4	10	1.1	3	-- ⁴	0	-- ⁴
2000	89	1.1	55	0.9	17	2.9	11	1.2	5	1.1	1	-- ⁴
2001	99	1.2	55	0.9	15	2.6	20	2.1	5	1.0	4	-- ⁴
2002	98	1.2	54	0.9	20	3.4	17	1.8	3	-- ⁴	4	-- ⁴
2003	98	1.2	56	1.0	19	3.2	17	1.7	4	-- ⁴	2	-- ⁴
2004	85	1.1	43	0.8	19	3.1	18	1.8	3	-- ⁴	2	-- ⁴

1. Deaths of infants of unknown race are included in the total calculation. For rate computations, births of infants of unknown race are allocated into the race categories according to the distribution of births of known race. 2. Other: American Indian and Other races. 3. Rates are expressed per 1,000 live births. 4. Calculations based on fewer than five events are excluded.

Table D-2. Trends in Infant, Neonatal, and Post Neonatal Mortality, by Race¹, Massachusetts: 1980-2004

INFANT MORTALITY (less than one year of age)								
Year	State Total ²		White		Black		Asian/Other ³	
	n	Rate ⁴	n	Rate ⁴	n	Rate ⁴	n	Rate
1980	748	10.3	655	9.8	87	18.6	5	4.6
1981	710	9.6	616	9.1	85	18.2	8	6.1
1982	764	10.1	656	9.4	102	21.3	5	3.3
1983	682	9.0	579	8.3	89	19.0	12	7.4
1984	699	8.9	601	8.4	82	16.4	13	7.5
1985	745	9.1	608	8.1	126	23.8	11	6.1
1986	695	8.4	560	7.5	123	22.0	11	4.6
1987	608	7.2	486	6.4	110	17.5	12	4.5
1988	693	7.9	546	7.0	133	19.5	13	3.8
1989	697	7.6	549	6.8	131	17.7	17	4.8
1990	649	7.0	519	6.4	106	13.7	24	6.5
1991	577	6.5	461	6.0	102	13.8	14	3.9
1992	569	6.5	438	5.7	114	15.8	17	4.7
1993	523	6.2	423	5.7	87	12.5	13	3.5
1994	499	6.0	407	5.6	81	12.0	11	2.9
1995	419	5.1	333	4.7	65	10.3	21	5.5
1996	403	5.0	329	4.7	65	10.8	8	2.0
1997	425	5.3	349	5.0	66	10.6	10	2.4
1998	414	5.1	345	4.9	59	9.3	10	2.3
1999	418	5.2	334	4.8	75	11.4	9	1.9
2000	377	4.6	280	4.0	76	11.7	19	3.6
2001	407	5.0	314	4.5	77	11.7	16	3.0
2002	397	4.9	306	4.5	74	11.1	17	2.9
2003	383	4.8	290	4.3	78	11.8	15	2.6
2004	377	4.8	285	4.4	75	11.2	15	2.5

1. Hispanic origin could not be identified from the Massachusetts death certificate before 1989; thus, Hispanic trend data are not available. Most Hispanics are included in the race category of white. Hispanic infant mortality data for the years 1990 through 2004 are presented in Table 12B. 2. Deaths of infants of unknown race are included in the total calculation. For rate computations, infants of unknown race are allocated into the race categories according to the distribution of births of known race. 3. Other: American Indian and Other races. 4. Rates are expressed per 1,000 live births. 5. Calculations based on fewer than five events are excluded.

Table D-2 Continued (continued). Trends in Infant, Neonatal, and Post
Neonatal Mortality, by Race¹, Massachusetts: 1980-2004

NEONATAL MORTALITY (birth to 27 days)								
Year	State Total ²		White		Black		Asian/Other ³	
	n	Rate ⁴	n	Rate ⁴	n	Rate ⁴	n	Rate ⁴
1980	550	7.6	483	7.2	62	13.3	5	4.6
1981	510	6.9	442	6.5	59	12.4	5	3.8
1982	573	7.6	494	7.1	75	15.7	3	— ⁵
1983	482	6.3	411	5.9	63	13.4	7	4.3
1984	472	6.0	411	5.8	49	9.8	8	4.6
1985	538	6.6	447	6.0	85	16.0	5	2.8
1986	478	5.8	383	5.2	89	15.9	5	2.1
1987	432	5.1	343	4.6	80	12.7	9	3.4
1988	477	5.4	383	4.9	87	12.8	6	1.8
1989	479	5.2	376	4.7	95	12.8	8	2.3
1990	446	4.8	347	4.3	80	10.3	9	5.1
1991	401	4.5	319	4.1	72	9.8	10	2.8
1992	415	4.8	325	4.3	79	10.9	11	3.1
1993	375	4.4	300	4.1	66	9.5	9	2.4
1994	349	4.2	280	3.8	60	8.9	9	2.4
1995	298	3.6	237	3.3	50	7.9	11	2.9
1996	290	3.6	249	3.5	35	5.8	5	1.2
1997	323	4.0	271	3.9	45	7.2	7	1.7
1998	315	3.9	261	3.7	47	7.4	7	1.6
1999	332	4.1	265	3.8	61	9.3	6	1.3
2000	288	3.5	214	3.1	58	8.9	14	2.7
2001	308	3.8	239	3.5	59	9.0	10	1.9
2002	299	3.7	235	3.4	51	7.6	13	2.2
2003	285	3.6	217	3.2	58	8.8	10	1.8
2004	291	3.7	221	3.4	55	8.2	16	2.2

1. Hispanic origin could not be identified from the Massachusetts death certificate before 1989; thus, Hispanic trend data are not available. Most Hispanics are included in the race category of white. Hispanic infant mortality data for the years 1990 through 2004 are presented in Table 12B. 2. Deaths of infants of unknown race are included in the total calculation. For rate computations, infants of unknown race are allocated into the race categories according to the distribution of births of known race. 3. Other: American Indian and Other races. 4. Rates are expressed per 1,000 live births. 5. Calculations based on fewer than five events are excluded.

Table D-2 (continued). Trends in Infant, Neonatal, and Post Neonatal Mortality, by Race¹, Massachusetts: 1980-2004

POST NEONATAL MORTALITY (28-364 days)								
Year	State Total ²		White		Black		Asian/Other ³	
	n	Rate ⁴	n	Rate ⁴	n	Rate ⁴	n	Rate ⁴
1980	198	2.7	172	2.6	25	5.3	0	0.0
1981	200	2.7	174	2.6	26	5.8	3	-- ⁵
1982	191	2.5	162	2.3	27	5.6	2	-- ⁵
1983	200	2.7	168	2.4	26	5.6	5	3.1
1984	227	2.9	190	2.6	33	6.6	5	2.9
1985	207	2.5	161	2.1	41	7.8	6	3.3
1986	217	2.6	177	2.3	34	6.1	6	2.5
1987	176	2.1	143	1.8	30	4.8	3	-- ⁵
1988	216	2.5	163	2.1	46	6.7	7	2.0
1989	218	2.4	173	2.1	36	4.9	9	2.5
1990	203	2.2	172	2.1	26	3.4	5	1.4
1991	176	2.0	142	1.8	30	4.1	4	-- ⁵
1992	154	1.8	113	1.5	35	4.8	6	1.7
1993	148	1.7	123	1.7	21	3.0	4	-- ⁵
1994	150	1.8	127	1.7	21	3.1	2	-- ⁵
1995	121	1.5	96	1.3	15	2.4	10	2.6
1996	113	1.4	80	1.1	30	5.0	3	-- ⁵
1997	102	1.3	78	1.1	21	3.4	3	-- ⁵
1998	99	1.2	84	1.2	12	1.9	3	-- ⁵
1999	86	1.1	69	1.0	14	2.1	3	-- ⁵
2000	89	1.1	66	0.9	18	2.8	5	1.0
2001	99	1.2	75	1.1	18	2.7	6	1.1
2002	98	1.2	71	1.0	23	3.4	4	-- ⁵
2003	98	1.2	73	1.1	20	3.0	5	0.9
2004	85	1.1	61	0.9	19	2.8	5	0.8

1. Hispanic origin could not be identified from the Massachusetts death certificate before 1989; thus, Hispanic trend data are not available. Most Hispanics are included in the race category of white. Hispanic infant mortality data for the years 1990 through 2004 are presented in Table 12B. 2. Deaths of infants of unknown race are included in the total calculation. For rate computations, infants of unknown race are allocated into the race categories according to the distribution of births of known race. 3. Other: American Indian and Other races. 4. Rates are expressed per 1,000 live births. 5. Calculations based on fewer than five events are excluded.

Table D-3. Infant, Neonatal, and Post Neonatal Deaths by Cause, Massachusetts: 2004

Cause of Death ¹	ICD-10 Code	Infant (<1 year)		Neonatal (<28 days)		Post Neonatal (28-365 days)	
		#	% ² , ³	#	% ² , ³	#	% ² , ³
TOTAL		376	100.0	291	100.0	85	100.0
Infectious and parasitic diseases							
Cancer	A00-B99	2	-.3	1	-.3	1	-.3
Diseases of the blood and blood forming organs (anemia)	C00-C97	0	-.3	0	-.3	0	-.3
Diseases of nervous system and ear	D50-D89	1	-.3	1	-.3	0	-.3
Diseases of the respiratory system	G00-G98, H60-H93	3	-.3	0	-.3	3	-.3
Diseases of digestive system	J00-J98	12	3.2	2	-.3	10	11.8
Congenital malformations							
Congenital malformations of nervous system	K00-K92	3	-.3	0	-.3	3	-.3
Anencephalus and similar malformations	K00-K99	59	15.7	46	15.8	13	15.3
Congenital malformations of eye, ear, face, and neck	Q00-Q07	7	1.9	5	1.7	2	-.3
Congenital malformations of heart	Q00	3	-.3	3	-.3	0	-.3
Other congenital malformations of circulatory system	Q10-Q18	0	-.3	0	-.3	0	-.3
Congenital malformations of respiratory system	Q20-Q24	9	2.4	8	2.7	1	-.3
Cleft palate and other digestive tract malformations	Q25-Q28	6	1.6	5	1.7	1	-.3
Congenital malformations of genitourinary system	Q30-Q34	12	3.2	12	4.1	0	-.3
Congenital malformations of musculoskeletal system	Q35-Q45	0	-.3	0	-.3	0	-.3
Chromosomal abnormalities	Q50-Q54	0	-.3	0	-.3	0	-.3
Certain conditions originating in the perinatal period							
Newborn affected by maternal conditions which may be unrelated to present pregnancy	P00	0	-.3	0	-.3	0	-.3
Newborn affected by maternal complications of pregnancy	P01	39	10.4	38	13.1	1	-.3
Newborn affected by complications of placenta, cord and membrane	P02	28	7.4	28	9.6	0	-.3
Newborn affected by other complications of labor and delivery	P03	1	-.3	0	-.3	1	-.3
Disorders relating to short gestation and low birthweight	P07	83	22.1	82	28.2	1	-.3
Birth trauma	P10-P15	1	-.3	0	-.3	1	-.3
Intrauterine hypoxia and birth asphyxia	P20-P21	13	3.5	13	4.5	0	-.3
Respiratory distress of newborn	P22	9	2.4	9	3.1	0	-.3
Other respiratory conditions of newborn	P23-P28	14	3.7	13	4.5	1	-.3
Infections specific to the perinatal period	P35-P39	6	1.6	6	2.1	0	-.3
Neonatal hemorrhage	P50-P52, P54	5	1.3	5	1.7	0	-.3
Other and ill-defined conditions originating in the perinatal period	P90-P96	0	0	0	0	0	-.3
Symptoms, signs, and ill-defined conditions	R00-R99	43	11.4	10	3.4	33	38.8
Sudden infant Death Syndrome (SIDS)	R95	33	8.8	6	2.1	27	31.8
Unintentional Injuries	V01-X59	3	-.3	1	-.3	2	-.3
Homicide	X85-Y09	3	-.3	0	-.3	3	-.3
All other causes	Residual	15	4.0	4	-.3	11	12.9

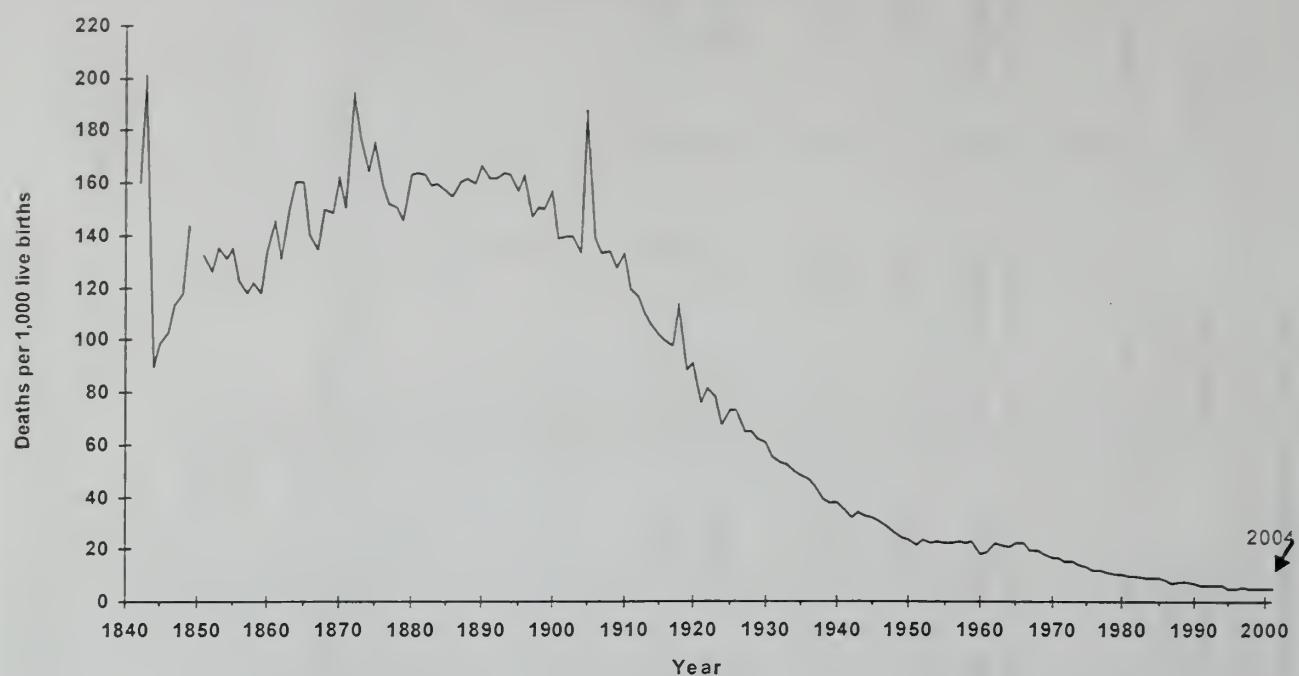
1. Please refer to the Section Definitions in the Appendix for an explanation of ICD-10 codes 2. Percents not calculated for subcategories. 3. Calculations based on fewer than five events are excluded.

**Table D-4. Infant Deaths by Major Causes, Race and Hispanic Ethnicity,
Massachusetts: 2004**

Cause of Death ²	ICD-10 Code	#	%	#	%	#	%	#	%	#	%
TOTAL		210	100.0%	70	100.0%	15	100.0%	75	100.0%		
Congenital malformations	Q00-Q99	31	14.8%	10	14.3%	5	33.3%	13	17.3%		
Certain conditions originating in the perinatal period	P00-P96	130	61.9%	46	65.7%	7	46.7%	44	58.7%		
Symptoms, signs, and ill-defined conditions	R00-R99	25	11.9%	7	10.0%	2	--3	9	12.0%		
SIDS	R95	19	9.0%	6	9.0%	0	--3	8	11.0%		
Unintentional Injuries	V01-X59	3	--3	0	--3	0	--3	0	--3		
Homicide	X85-Y09	1	--3	0	--3	0	--3	2	--3		
All other causes	Residual	20	9.5%	7	10.0%	1	--3	7	9.3%		

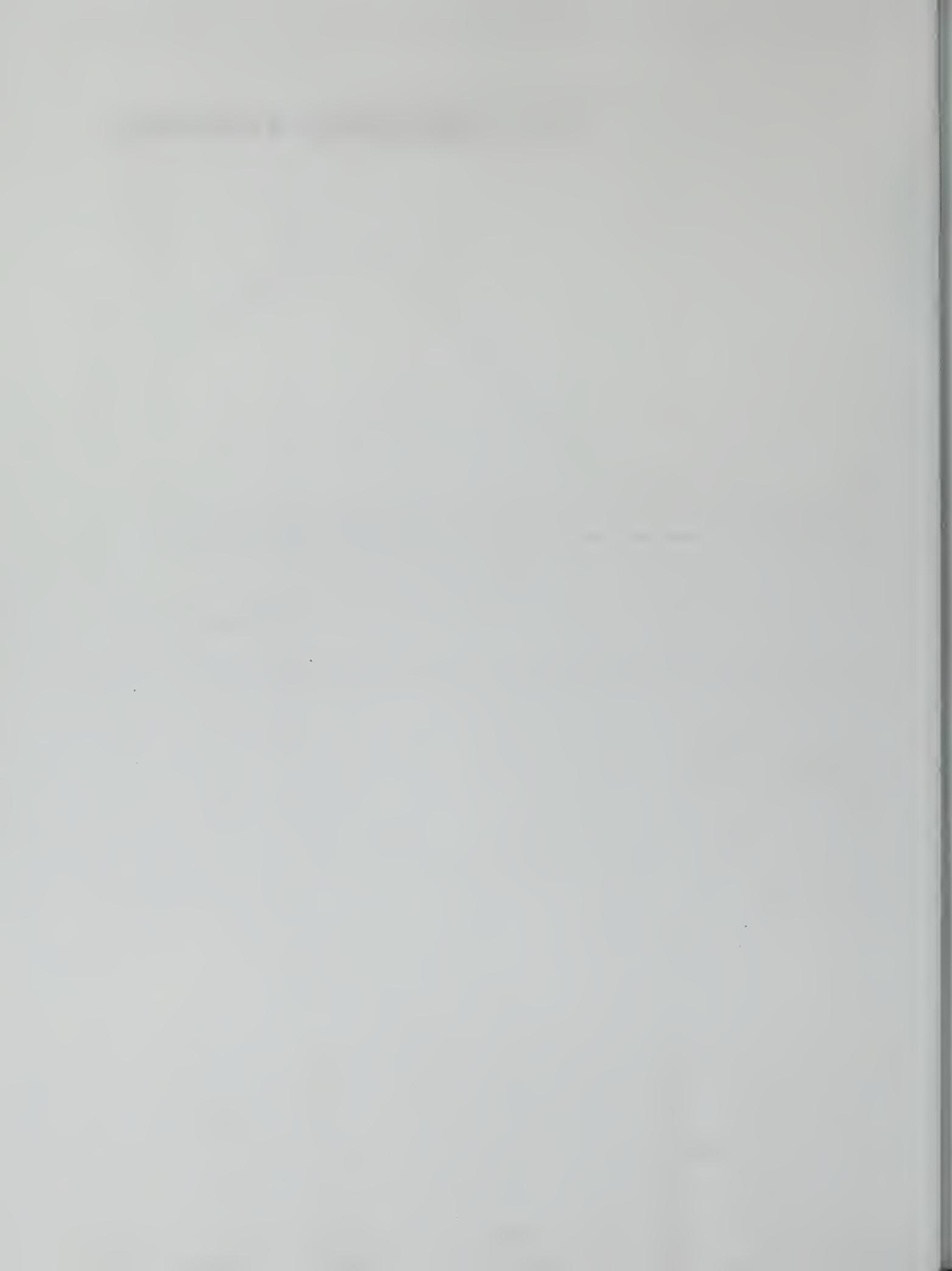
1. Race and ethnicity data in this table are presented as mutually exclusive categories and Cape Verdeans are not included with Blacks. Persons of Hispanic ethnicity are not included in a race category. Six deaths to infants of unknown race have not been included. 2. Deaths are coded according to ICD-10. 3. Calculations based on fewer than five events are excluded

**Figure D-3. Infant Mortality Rates
Massachusetts: 1842-2004¹**



1. Data not available for 1850.

MARRIAGES & DIVORCES



SECTION E

MARRIAGES AND DIVORCES

Introduction

The statistics in the 2004 edition of PD-1 reflect final counts and statistical tables for marriages and divorces in calendar year 2004. Notably, this edition of PD-1 reflects changes in state law regarding access to civil marriage. On November 18, 2003 the Massachusetts Supreme Judicial Court issued its historic ruling in *Goodridge v. Department of Public Health*, 440 Mass. 309 (2003), making marriage licenses available equally to couples of the same and opposite gender. The ruling went into effect May 17, 2004.

To implement the *Goodridge* decision, the Department of Public Health's Registry of Vital Records and Statistics (RVRS) revised the Notice of Intention to Marry (Form R-202) and provided uniform instructions to city and town clerks who issue marriage licenses so as to be able to capture and report aggregated and disaggregated statistics regarding marriages occurring in Massachusetts.

- The revised Notice of Intention and related forms use gender neutral nouns "Party A" and "Party B" where prior forms used "bride" and "groom".
- The revised forms require parties to self-identify gender as "male" or "female" for statistical purposes to allow for disaggregation of statistical counts of marriage and divorce. The decision to capture gender and disaggregate annual and monthly counts was made after consultation with the Data Acquisition and Evaluation Branch of the Division of Vital Statistics within the National Center for Health Statistics of the Centers for Disease Control & Prevention regarding the Vital Statistics Cooperative Project Contract.
- Between May 5 and May 12, RVRS offered a series of regional training and information sessions to provide uniform instructions to all 350 city and town clerks and the Boston Registrar. The Governor's Chief Legal Counsel Daniel J. Winslow, Registrar Stanley E. Nyberg, Assistant Registrar Karin Barrett and RVRS Director of Registration Pauline McNulty participated in these sessions.
- All city and town clerks and the Boston Registrar were provided with a supply of revised forms, a Notice of Intention of Marriage Fact Book, a Marriage Certificate Update, and a Guide to Marriage Impediments prior to May 17.

Litigation¹ ensued challenging the executive branch's interpretation and enforcement of several state marriage statutes: G.L. c.207, §§ 11, 12, 13 and 50.² Clerks throughout the

¹ On June 18, 2004, eight nonresident same-gender couples from Vermont, New York, Connecticut, Rhode Island, Maine, and New Hampshire brought an action in state court (styled *Cote Whitacre v. Massachusetts Department of Public Health*) against the Department of Public Health, the commissioner, the registry of vital records and statistics, and the registrar challenging the constitutionality of G.L. c.207, §§11 and 12, as well as the interpretation and enforcement of these statutory provisions to prohibit the issuance of Massachusetts marriage licenses to non-resident applicants whose home state law made void or prohibited or did not allow marriage between persons of the same gender. Simultaneously, municipal clerks for Provincetown, Somerville, Worcester, Acton, Burlington, Cambridge, Marblehead, Nantucket,

commonwealth acted professionally in administering their duties under state law pending the outcome of judicial appeals³ and legislative processes that culminated with the enactment of Chapter 216 of the Acts of 2008 repealing G.L. c.207, §§ 11, 12, 13 and 50 effective July 31, 2008.

Northampton, Plymouth, Sherborn, Westford and Rowe brought a companion action (styled *Johnstone v. Thomas Reilly*) against the Attorney General, the commissioner, and the registrar, seeking to enjoin the defendants from prosecuting them under G.L. c.207, §50, or from otherwise requiring that they enforce the provisions of §§ 11 and 12. The Superior Court consolidated these actions and denied the plaintiffs' motion for a preliminary injunction, leaving the challenged statutes in force. *Cote Whitacre v. Massachusetts Department of Public Health*, 18 Mass. L. Rptr. 190 (August 18, 2004) aff'd 446 Mass. 350 (2006).

² Prior to its repeal, General Laws c. 207, § 11 provided as follows:

"No marriage shall be contracted in this commonwealth by a party residing and intending to continue to reside in another jurisdiction if such marriage would be void if contracted in such other jurisdiction, and every marriage contracted in this commonwealth in violation hereof shall be null and void." *Text effective until July 31, 2008. Repealed by 2008, 216, Sec. 1.*

Prior to its repeal, General Laws c. 207, §12 provided as follows:

"Before issuing a license to marry a person who resides and intends to continue to reside in another state, the officer having authority to issue the license shall satisfy himself, by requiring affidavits or otherwise, that such person is not prohibited from intermarrying by the laws of the jurisdiction where he or she resides." *Text effective until July 31, 2008. Repealed by 2008, 216, Sec. 1.*

Prior to its repeal, General Laws c. 207, §13 directed at the construction of §§11 and 12, provided as follows:

"The . . . preceding sections shall be so interpreted and construed as to effectuate their general purpose to make uniform the law of those states which enact like legislation." *Text effective until July 31, 2008. Repealed by 2008, 216, Sec. 1.*

Prior to its repeal, General Laws c. 207, §50 directed at the construction of §§11 and 12, provided as follows:

"Any official issuing a certificate of notice of intention of marriage knowing that the parties are prohibited by section eleven from intermarrying, and any person authorized to solemnize marriage who shall solemnize a marriage knowing that the parties are so prohibited, shall be punished by a fine of not less than one hundred or more than five hundred dollars or by imprisonment for not more than one year, or both." *Text effective until July 31, 2008. Repealed by 2008, 216, Sec. 2.*

³ See *Cote Whitacre v. Massachusetts Department of Public Health*, 446 Mass. 350 (2006).

Marriage Tables, Counts and Rates

The statistics in this edition of PD-1 reflect final marriage counts and statistical tables for calendar year 2004. As a service to the public and in response to public demand for statistical information about the Commonwealth's experience with marriage equity, DPH released a series of statistical tables with "preliminary numbers" of marriage certificates issued and registered in Massachusetts from May 17 to December 31, 2004, pending publication of the 2004 edition of PD-1. Statistics published herein supersede any and all preliminary tables that DPH released prior to this publication.

Consistent with past practice, most tables in this section continue to report marriage by place of occurrence of the vital event (marriage), not by place of residence or place of marriage licensure. For example, Table E-1 displays marriages by county. Consequently, if two people apply for a license in Boston are married in Barnstable County, the vital event (marriage) will be reported in Table E-1 as a Barnstable County marriage, irrespective of the residence that each party identified on the application for the marriage license and irrespective of the place where the license was issued. As in the past, this method of reporting includes parties who identified a Massachusetts residence and parties who identified an out-of-state or out-of-country residence as well as parties who identified the same place of residence for both parties to the marriage and parties who identified different places of residence from each other. Massachusetts residents who marry outside of the state are not included in these statistics as there is no system of interstate exchange for marriage records.

In 2004, a total of 41,571 marriages occurred in Massachusetts compared to a total of 36,224 in 2003, an increase of 14.9%. The 2004 total number of marriages includes 35,450 male/female marriages, 2,176 male/male marriages and 3,945 female/female marriages.

The number of male/female marriages occurring in Massachusetts continued its steady decline since 1985, decreasing by 2.1%. The rate of marriages occurring in Massachusetts was at 5.6 per 1,000 population in 2003 and increased to 6.5 in 2004; yet the disaggregated rate of male/female marriages remained fairly steady with the rate of male/female marriages occurring in Massachusetts being 5.5 per 1,000 in 2004. The 2004 Massachusetts rate of marriage remained below the US rate. The 2004 US rate of marriages per 1,000 population was 7.5, the same as the 2003 US rate.

In 2004, 74.3% of the females who married males had not previously been married. This percentage was slightly lower among the males who married females--72.3%. In marriages between parties of the same gender, 88.4% of the males who married males and 79.1% of the females who married females had never been married before.

The age statistics displayed in Table E-4A through Table E-4D reveal differing age trends for persons entering into marriage with persons of the opposite gender compared with persons entering into marriage with persons of the same gender. For instance, approximately 22.6% of all persons involved in a male-female marriage in 2004 were over the age of 40. Yet of persons entering into marriage with a person of the same gender, 69.0% of males and 66.9% females were over the age of 40.

Table E-6A through Table E-6C reflect whether the 2004 marriage was the first, second, third, forth, fifth or greater number marriage for each party. Of the 35,450 marriages entered into by parties of the opposite gender in 2004, slightly more females (26,327) than males (25,633) married for the first time while slightly more males (8,066) than females (7,582) married for a second time and virtually the same number of females (172) and males (174) married for a fourth time.

Of the 3,943 marriages occurring between female parties in 2004, 2,558 represent the first marriage for each party; 1,014 represent the second marriage for one of the parties; and 214 represent the second marriage for both parties. Of the 2,175 marriages occurring between male parties in 2004, 1,723 represent the first marriage for each party; 381 represent the second marriage for one of the parties; and 43 represent the second marriage for both parties. More females than males who entered into a 2004 marriage with a party of the same gender had been married three or more times before.

Divorce Tables, Counts, and Rates

Divorce reporting differs from marriage, birth or death reporting because the Registry of Vital Records and Statistics does not record and file divorce decrees. Consequently unlike marriage, birth, and death statistics (which the Registry derives from a count of birth, death and marriage certificates on file with the Registry), the Registry derives divorce statistics from secondary sources, namely statistical reports received from different Massachusetts courts of each divorce judgment that is finalized. Massachusetts residents who divorce in a jurisdiction outside of the commonwealth are not included in these statistics.

Consistent with past practice, divorces in this publication are reported by the county in which the parties filed and obtained a final divorce decree from the Massachusetts Family and Probate Court. For example, see Table E-1 which displays the total number of final divorces that occurred in the Commonwealth in 2004 as well as the number of divorces disaggregated by county.

In 2004, 14,137 divorces were granted in Massachusetts, a decrease of 10.2% from the 15,738 divorces granted in 2003. The 2004 rate of divorce per 1,000 population in Massachusetts was 2.2, lower than the 2003 divorce rate of 2.4. This rate was well below the 2003 US rate of 3.8 divorces per 1,000 population. In 2004 there was no gender field on the divorce certification, so divorce statistics for marriages of opposite-sex couples and same-sex couples are not available.

RATES IMPORTANT FOR THIS SECTION INCLUDE:

MARRIAGE RATE

Number of Occurrence Marriages x 1,000
Total Population

DIVORCE RATE

Number of Occurrence Divorces x 1,000
Total Population

Table E-1. Marriages and Divorces by County

Massachusetts Occurrence: 2004

State Total	<u>Marriages</u>			<u>Divorces</u>
	Male-Female	Male-Male ¹	Female-Female ¹	
State Total	35,450	2,176	3,945	14,137
<u>Counties</u>				
Barnstable	2,665	520	863	558
Berkshire	877	48	74	155
Bristol	2,775	86	164	1,356
Dukes	415	16	25	0
Essex	3,837	144	318	1,732
Franklin	376	15	117	275
Hampden	2,483	69	139	887
Hampshire	687	59	402	320
Middlesex	7,037	441	864	2,463
Nantucket	289	22	12	32
Norfolk	3,279	131	192	1,375
Plymouth	2,427	72	153	1,388
Suffolk	4,091	387	324	1,629
Worcester	4,212	166	298	1,966

¹Marriages to partners of the same-sex began on May 17, 2004.

Note: 1 divorce occurred in an unknown county.

Table E-2 Number of Marriage Certificates Issued and Registered in Massachusetts by Month, 2004

<u>Month</u>	<u>Male/Female</u>	<u>Male/Male</u>	<u>Female/Female</u>	<u>Total</u>
Total	35,450	2,176	3,945	41,571
January	1,193	0	0	1,193
February	1,622	0	0	1,622
March	1,472	0	0	1,472
April	2,158	0	0	2,158
May	3,671	579	1,163	5,413
June	4,345	501	937	5,783
July	4,039	339	649	5,027
August	4,253	278	425	4,956
September	4,369	178	280	4,827
October	4,608	166	282	5,056
November	1,981	60	108	2,149
December	1,739	75	101	1,915

Table E-3. Marriages, Divorces, and Rates per 1,000 Population,

Massachusetts Occurrence, Selected Years: 1900-2004

Year	Marriages		Divorces	
	Number	Rate	Number	Rate
1900	24,342	8.7	1,258	0.4
1905	27,184	9.1	1,554	0.5
1910	30,710	9.1	1,929	0.6
1915	31,301	8.5	2,252	0.6
1920	38,048	9.9	3,647	1.0
1925	31,238	7.5	3,395	0.8
1930	27,431	6.5	3,746	0.9
1935	30,019	6.9	4,081	0.9
1940	44,836	10.4	4,502	1.0
1945	38,197	8.5	6,833	1.5
1950	41,711	8.9	6,365	1.4
1955	35,585	7.3	5,601	1.2
1960	34,050	6.6	5,592	1.1
1965	38,281	7.2	7,728	1.5
1970	47,292	8.3	10,818	1.9
1975	42,103	7.3	16,460	2.8
1980	46,273	8.1	17,873	3.1
1985	49,849	8.6	21,573	3.7
1986	49,990	8.6	19,809	3.4
1987	49,034	8.4	16,994	2.9
1988	49,941	8.5	17,676	3.0
1989	49,174	8.4	16,819	2.9
1990	47,786	7.9	16,258	2.7
1991	44,621	7.4	14,987	2.5
1992	43,228	7.1	15,411	2.5
1993	42,355	7.0	14,435	2.4
1994	42,503	7.0	15,450	2.5
1995	41,522	6.8	15,772	2.6
1996	41,234	6.7	15,485	2.5
1997	41,528	6.7	15,942	2.6
1998	38,722	6.2	16,010	2.6
1999	39,425	6.2	15,632	2.5
2000	38,603	6.1	15,980	2.5
2001	40,048	6.3	15,324	2.4
2002	37,735	5.9	16,253	2.5
2003	36,224	5.6	15,738	2.4
2004	41,571	6.5	14,137	2.2

Table E-4A. Marriages by Age and Prior Marital Status of Females in a Male/Female Marriage
Massachusetts Occurrence: 2004

Age	Females in a Male/Female Marriage									
	Total Number	%	Never Married		Widowed		Divorced			
			Number	%	Number	%	Number	%	Number	%
Total	35,450	100.0%	26,327	100.0%	769	100.0%	8,350	100.0%		
<20	857	2.4%	854	3.2%	0	0.0%	3	0.0%		
20-29	16,600	46.8%	15,836	60.2%	16	2.1%	747	8.9%		
30-39	11,081	31.3%	7,852	29.8%	93	12.1%	3,135	37.5%		
40-49	4,521	12.8%	1,453	5.5%	202	26.3%	2,865	34.3%		
50-59	1,781	5.0%	279	1.1%	206	26.8%	1,295	15.5%		
60-69	463	1.3%	45	0.2%	143	18.6%	275	3.3%		
70+	147	0.4%	8	0.0%	109	14.2%	30	0.4%		

4 women were of unknown prior marital status.

Table E-4B. Marriages by Age and Prior Marital Status of Males in a Male/Female Marriage
Massachusetts Occurrence: 2004

Age	Males in a Male/Female Marriage									
	Total Number	%	Never Married		Widowed		Divorced			
			Number	%	Number	%	Number	%	Number	%
Total	35,450	100.0%	25,631	100.0%	719	100.0%	9,098	100.0%		
<20	276	0.8%	276	1.1%	0	0.0%	0	0.0%		
20-29	13,365	37.7%	13,007	50.7%	5	0.7%	352	3.9%		
30-39	12,715	35.9%	9,796	38.2%	38	5.3%	2,881	31.7%		
40-49	5,460	15.4%	2,121	8.3%	109	15.2%	3,229	35.5%		
50-59	2,498	7.0%	354	1.4%	158	22.0%	1,986	21.8%		
60-69	809	2.3%	61	0.2%	213	29.6%	535	5.9%		
70+	327	0.9%	16	0.1%	196	27.3%	115	1.3%		

2 men were of unknown prior marital status.

Table E-4C. Marriages by Age and Prior Marital Status of Males in a Male/Male Marriage
Massachusetts Occurrence: 2004

Age	<u>Males in a Male/Male Marriage</u>								
	Total Number	%	<u>Never Married</u>		<u>Widowed</u>		<u>Divorced</u>		
			Number	%	Number	%	Number	%	
Total	4,349	100.0%	3,847	100.0%	13	100.0%	489	100.0%	
<20	9	0.2%	9	0.2%	0	0.0%	0	0.0%	
20-29	245	5.6%	244	6.3%	0	0.0%	1	0.2%	
30-39	1,096	25.2%	1,029	26.7%	0	0.0%	67	13.7%	
40-49	1,710	39.3%	1,549	40.3%	3	23.1%	158	32.3%	
50-59	936	21.5%	751	19.5%	4	30.8%	181	37.0%	
60-69	279	6.4%	209	5.4%	3	23.1%	67	13.7%	
70+	74	1.7%	56	1.5%	3	23.1%	15	3.1%	

3 men were of unknown prior marital status.

Table E-4D. Marriages by Age and Prior Marital Status of Females in a Female/Female Marriage
Massachusetts Occurrence: 2004

Age	<u>Females in a Female/Female Marriage</u>								
	Total Number	%	<u>Never Married</u>		<u>Widowed</u>		<u>Divorced</u>		
			Number	%	Number	%	Number	%	
Total	7,886	100.0%	6,243	100.0%	51	100.0%	1,592	100.0%	
<20	7	0.1%	7	0.1%	0	0.0%	0	0.0%	
20-29	663	8.4%	643	10.3%	0	0.0%	20	1.3%	
30-39	1,938	24.6%	1,716	27.5%	4	7.8%	218	13.7%	
40-49	3,024	38.3%	2,453	39.3%	13	25.5%	558	35.1%	
50-59	1,817	23.0%	1,201	19.2%	21	41.2%	595	37.4%	
60-69	389	4.9%	195	3.1%	10	19.6%	184	11.6%	
70+	48	0.6%	28	0.4%	3	5.9%	17	1.1%	

4 women were of unknown prior marital status.

Table E-5A. Number of Male/Female Marriages by Age

Massachusetts Occurrence: 2004								
Age of Female	Age of Male							
	Total	<20	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70+
Total	35,448	276	13,363	12,716	5,459	2,498	809	327
<20	855	150	618	72	14	0	0	1
20-29	16,601	124	11,054	4,865	499	55	4	0
30-39	11,080	2	1,591	6,833	2,292	320	39	3
40-49	4,521	0	94	875	2,301	1,084	147	20
50-59	1,781	0	6	67	337	943	374	54
60-69	463	0	0	3	15	92	230	123
70+	147	0	0	1	1	4	15	126

2 marriages are not included due to missing age information.

Table E-5B. Number of Male/Male Marriages by Age

Massachusetts Occurrence: 2004								
Age of Younger Male	Age of Older Male							
	Total	<20	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70+
Total	2,176	1	67	353	891	581	221	62
<20	8	1	5	1	1	0	0	0
20-29	178	-	62	79	33	3	1	0
30-39	744	-	-	273	410	53	8	0
40-49	819	-	-	-	447	314	53	5
50-59	356	-	-	-	-	211	128	17
60-69	59	-	-	-	-	-	31	28
70+	12	-	-	-	-	-	-	12

Table E-5C. Number of Female/Female Marriages by Age

Massachusetts Occurrence: 2004								
Age of Younger Female	Age of Older Female							
	Total	<20	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70+
Total	3,944	1	208	737	1,514	1,149	294	41
<20	6	1	5	0	0	0	0	0
20-29	455	-	203	203	48	1	0	0
30-39	1,201	-	-	534	594	68	5	0
40-49	1,510	-	-	-	872	590	48	0
50-59	669	-	-	-	-	490	166	13
60-69	96	-	-	-	-	-	75	21
70+	7	-	-	-	-	-	-	7

1 marriage is not included due to missing age information.

Table E-6A. Number of Male/Female Marriages by Number of Total Marriages of Each Party

Massachusetts Occurrence: 2004						
Female	Male					
	Total	1	2	3	4	5+
Total	35,450	25,633	8,066	1,538	174	39
1	26,327	22,227	3,623	438	33	6
2	7,582	3,016	3,665	796	89	16
3	1,340	349	681	256	44	10
4	172	35	84	41	7	5
5+	29	6	13	7	1	2

Table E-6B. Number of Male/Male Marriages by Number of Total Marriages of Each Party

Massachusetts Occurrence: 2004				
Male Married Less Often	Number of Male/Male Marriages			
	Male Married More Often			
Male Married Less Often	Total	1	2	3
Total	2,175	1,723	424	28
1	2,124	1,723	381	20
2	50	-	43	7
3	1	-	-	1

Table E-6C. Number of Female/Female Marriages by Number of Total Marriages of Each Party

Massachusetts Occurrence: 2004						
Female Married Less Often	Number of Female/Female Marriages					
	Female Married More Often					
Female Married Less Often	Total	1	2	3	4	5
Total	3,943	2,558	1,228	135	18	4
1	3,688	2,558	1,014	98	16	2
2	252	-	214	34	2	2
3	3	-	-	3	0	0

Totals do not include 1 missing value for male to male marriages and 2 missing values for female to female marriages.

Table E-7. Marriages by Town of Licensure

Massachusetts Occurrence: 2004

Town	Male/Female	Male/Male	Female/Female	Total
Total	35,450	2176	3945	41,571
ABINGTON	70	1	2	73
ACTON	84	2	10	96
ACUSHNET	58	0	3	61
ADAMS	58	1	4	63
AGAWAM	182	3	9	194
ALFORD	1	0	0	1
AMESBURY	91	3	9	103
AMHERST	144	7	50	201
ANDOVER	151	7	14	172
ARLINGTON	241	18	50	309
ASHBURNHAM	10	1	0	11
AQUINNAH	5	1	1	7
ASHBY	8	0	0	8
ASHFIELD	10	0	6	16
ASHLAND	73	4	10	87
ATHOL	57	0	3	60
ATTLEBORO	254	17	43	314
AUBURN	88	4	4	96
AVON	24	1	4	29
AYER	51	2	5	58
BARNSTABLE	404	20	33	457
BARRE	16	2	2	20
BECKET	12	1	1	14
BEDFORD	55	1	5	61
BELCHERTOWN	48	2	13	63
BELLINGHAM	86	3	2	91
BELMONT	148	6	14	168
BERKLEY	5	2	2	9
BERLIN	10	0	0	10
BERNARDSTON	3	0	1	4
BEVERLY	230	8	27	265
BILLERICA	144	4	7	155
BLACKSTONE	46	2	3	51
BLANDFORD	1	0	0	1
BOLTON	11	2	6	19
BOSTON	3,049	321	180	3,550
BOURNE	79	5	7	91
BOXBOROUGH	9	0	2	11
BOXFORD	11	2	0	13
BOYLSTON	21	1	1	23
BRAINTREE	199	6	9	214
BREWSTER	85	4	19	108
BRIDGEWATER	85	1	12	98
BRIMFIELD	9	0	1	10
BROCKTON	597	10	24	631
BROOKFIELD	11	2	0	13
BROOKLINE	466	62	113	641
BUCKLAND	13	0	4	17

Table E-7(continued). Marriages by Town of Licensure

Massachusetts Occurrence: 2004

Town	Male/Female	Male/Male	Female/Female	Total
BURLINGTON	116	4	11	131
CAMBRIDGE	1,086	213	345	1,644
CANTON	104	2	4	110
CARLISLE	14	1	8	23
CARVER	57	1	9	67
CHARLEMONT	5	0	2	7
CHARLTON	29	0	2	31
CHATHAM	88	3	1	92
CHELMSFORD	140	4	15	159
CHELSEA	287	8	3	298
CHESHIRE	6	1	0	7
CHESTER	5	0	0	5
CHESTERFIELD	4	0	0	4
CHICOPEE	282	9	16	307
CHILMARK	13	2	2	17
CLARKSBURG	5	0	0	5
CLINTON	82	1	4	87
COHASSET	48	1	2	51
COLRAIN	10	0	0	10
CONCORD	71	8	14	93
CONWAY	1	0	1	2
CUMMINGTON	2	0	1	3
DALTON	19	0	0	19
DANVERS	139	2	6	147
DARTMOUTH	113	4	6	123
DEDHAM	290	9	23	322
DEERFIELD	33	2	4	39
DENNIS	120	4	10	134
DIGHTON	37	1	0	38
DOUGLAS	29	1	0	30
DOVER	13	0	1	14
DRACUT	120	6	10	136
DUDLEY	42	0	1	43
DUNSTABLE	7	0	3	10
DUXBURY	39	0	5	44
EAST BRIDGEWATER	67	0	3	70
EAST BROOKFIELD	8	0	0	8
EAST LONGMEADOW	88	3	4	95
EASTHAM	28	2	6	36
EASTHAMPTON	98	3	46	147
EASTON	97	3	6	106
EDGARTOWN	112	1	4	117
EGREMONT	2	0	1	3
ERVING	7	0	0	7
ESSEX	18	1	0	19
EVERETT	321	1	8	330
FAIRHAVEN	127	2	6	135
FALL RIVER	597	16	33	646
FALMOUTH	276	4	16	296

Table E-7(continued). Marriages by Town of Licensure

Massachusetts Occurrence: 2004

Town	Male/Female	Male/Male	Female/Female	Total
FITCHBURG	209	11	9	229
FLORIDA	0	0	0	0
FOXBOROUGH	93	0	6	99
FRAMINGHAM	555	12	36	603
FRANKLIN	124	4	10	138
FREETOWN	42	1	2	45
GARDNER	130	0	6	136
GEORGETOWN	15	0	2	17
GILL	2	0	2	4
GLOUCESTER	188	4	21	213
GOSHEN	0	0	1	1
GOSNOLD	2	0	0	2
GRAFTON	70	2	3	75
GRANBY	30	0	2	32
GRANVILLE	8	0	0	8
GREAT BARRINGTON	85	3	12	100
GREENFIELD	129	12	36	177
GROTON	39	1	8	48
GROVELAND	13	1	2	16
HADLEY	11	1	2	14
HALIFAX	28	2	0	30
HAMILTON	31	1	4	36
HAMPDEN	9	2	1	12
HANCOCK	0	0	0	0
HANOVER	63	3	3	69
HANSON	51	0	1	52
HARDWICK	32	2	0	34
HARVARD	11	4	1	16
HARWICH	82	9	13	104
HATFIELD	18	0	2	20
HAVERHILL	270	8	23	301
HAWLEY	1	0	1	2
HEATH	0	0	0	0
HINGHAM	85	3	2	90
HINSDALE	5	0	0	5
HOLBROOK	65	2	4	71
HOLDEN	42	1	6	49
HOLLAND	6	1	1	8
HOLLISTON	47	0	6	53
HOLYOKE	234	3	12	249
HOPEDALE	11	0	0	11
HOPKINTON	46	1	6	53
HUBBARDSTON	9	0	4	13
HUDSON	114	1	4	119
HULL	49	9	16	74
HUNTINGTON	6	0	1	7
IPSWICH	56	10	8	74
KINGSTON	54	0	2	56
LAKEVILLE	32	3	4	39

Table E-7(continued). Marriages by Town of Licensure

Massachusetts Occurrence: 2004

Town	Male/Female	Male/Male	Female/Female	Total
LANCASTER	19	0	2	21
LANESBOROUGH	0	0	0	0
LAWRENCE	280	6	8	294
LEE	38	0	2	40
LEICESTER	46	0	0	46
LENOX	44	5	2	51
LEOMINSTER	275	3	15	293
LEVERETT	5	0	5	10
LEXINGTON	103	7	14	124
LEYDEN	1	0	2	3
LINCOLN	20	2	4	26
LITTLETON	29	0	3	32
LONGMEADOW	82	7	0	89
LOWELL	643	20	25	688
LUDLOW	169	1	8	178
LUNENBURG	36	0	5	41
LYNN	488	11	24	523
LYNNFIELD	44	1	4	49
MALDEN	361	17	14	392
MANCHESTER	30	1	2	33
MANSFIELD	84	3	14	101
MARBLEHEAD	118	4	10	132
MARION	26	0	1	27
MARLBOROUGH	235	6	13	254
MARSHFIELD	87	2	7	96
MASHPEE	80	2	9	91
MATTAPoisETT	31	2	3	36
MAYNARD	48	2	15	65
MEDFIELD	36	1	3	40
MEDFORD	329	12	27	368
MEDWAY	39	4	2	45
MELROSE	115	10	14	139
MENDON	22	1	3	26
MERRIMAC	16	3	2	21
METHUEN	233	8	18	259
MIDDLEBOROUGH	104	2	9	115
MIDDLEFIELD	4	0	0	4
MIDDLETON	28	2	5	35
MILFORD	153	4	6	163
MILLBURY	63	0	7	70
MILLIS	40	0	3	43
MILLVILLE	12	1	2	15
MILTON	112	12	9	133
MONROE	0	0	0	0
MONSON	45	1	3	49
MONTAGUE	35	1	4	40
MONTEREY	8	0	0	8
MONTGOMERY	2	0	0	2
MOUNT WASHINGTON	2	0	0	2

Table E-7(continued). Marriages by Town of Licensure

Massachusetts Occurrence: 2004

Town	Male/Female	Male/Male	Female/Female	Total
NAHANT	16	0	1	17
NANTUCKET	191	17	9	217
NATICK	168	12	22	202
NEEDHAM	112	5	18	135
NEW ASHFORD	0	0	0	0
NEW BEDFORD	530	17	13	560
NEW BRAINTREE	4	0	0	4
NEW MARLBOROUGH	0	0	0	0
NEW SALEM	3	0	2	5
NEWBURY	17	1	5	23
NEWBURYPORT	146	13	37	196
NEWTON	457	46	100	603
NORFOLK	30	0	1	31
NORTH ADAMS	73	3	6	82
NORTH ANDOVER	86	2	8	96
NO. ATTLEBOROUGH	132	0	10	142
NORTH BROOKFIELD	30	0	2	32
NORTH READING	42	4	2	48
NORTHAMPTON	224	41	275	540
NORTHBOROUGH	50	0	16	66
NORTHBRIDGE	90	0	3	93
NORTHLFIELD	12	0	3	15
NORTON	74	2	5	81
NORWELL	41	1	6	48
NORWOOD	174	1	5	180
OAK BLUFFS	44	2	4	50
OAKHAM	3	0	0	3
ORANGE	36	0	6	42
ORLEANS	97	5	13	115
OTIS	7	1	0	8
OXFORD	68	1	3	72
PALMER	80	1	1	82
PAXTON	6	1	0	7
PEABODY	212	3	11	226
PELHAM	1	0	5	6
PEMBROKE	75	4	3	82
PEPPERELL	32	0	1	33
PERU	1	0	0	1
PETERSHAM	4	2	1	7
PHILLIPSTON	3	0	0	3
PITTSFIELD	352	9	26	387
PLAINFIELD	1	0	0	1
PLAINVILLE	39	0	4	43
PLYMOUTH	317	10	21	348
PLYMPTON	5	1	1	7
PRINCETON	25	0	0	25
PROVINCETOWN	30	359	486	875
QUINCY	791	24	20	835
RANDOLPH	193	11	18	222

Table E-7(continued). Marriages by Town of Licensure

Massachusetts Occurrence: 2004

Town	Male/Female	Male/Male	Female/Female	Total
RAYNHAM	54	1	3	58
READING	97	2	6	105
REHOBOTH	38	1	1	40
REVERE	267	3	6	276
RICHMOND	9	0	2	11
ROCHESTER	17	0	0	17
ROCKLAND	93	4	9	106
ROCKPORT	0	0	0	0
ROWE	3	0	0	3
ROWLEY	19	2	2	23
ROYALSTON	3	0	0	3
RUSSELL	5	0	0	5
RUTLAND	23	0	1	24
SALEM	294	15	30	339
SALISBURY	32	4	7	43
SANDISFIELD	1	1	0	2
SANDWICH	117	6	6	129
SAUGUS	94	2	5	101
SAVOY	1	1	0	2
SCITUATE	82	2	5	89
SEEKONK	109	2	8	119
SHARON	58	3	4	65
SHEFFIELD	24	4	2	30
SHELBURNE	12	0	1	13
SHERBORN	10	1	1	12
SHIRLEY	25	1	2	28
SHREWSBURY	155	7	12	174
SHUTESBURY	2	0	7	9
SOMERSET	71	0	3	74
SOMERVILLE	446	55	87	588
SOUTH HADLEY	83	1	16	100
SOUTHAMPTON	14	0	5	19
SOUTHBOROUGH	45	2	0	47
SOUTHBRIIDGE	113	5	2	120
SOUTHWICK	62	2	2	66
SPENCER	71	1	4	76
SPRINGFIELD	842	35	50	927
STERLING	37	0	2	39
STOCKBRIDGE	24	2	2	28
STONEHAM	126	5	4	135
STOUGHTON	167	3	10	180
STOW	10	0	3	13
STURBRIDGE	121	2	6	129
SUDSBURY	40	3	17	60
SUNDERLAND	17	1	5	23
SUTTON	32	1	0	33
SWAMPSCOTT	49	10	6	65
SWANSEA	55	2	6	63
TAUNTON	369	7	18	394

Table E-7(continued). Marriages by Town of Licensure

Massachusetts Occurrence: 2004

Town	Male/Female	Male/Male	Female/Female	Total
TEMPLETON	22	0	1	23
TEWKSBURY	113	3	7	123
TISBURY	43	1	2	46
TOLLAND	1	0	0	1
TOPSFIELD	19	2	0	21
TOWNSEND	31	0	3	34
TRURO	8	10	17	35
TYNGSBOROUGH	70	2	1	73
TYRINGHAM	1	0	0	1
UPTON	28	0	2	30
UXBRIDGE	66	2	6	74
WAKEFIELD	138	4	15	157
WALES	3	0	0	3
WALPOLE	99	4	3	106
WALTHAM	412	11	22	445
WARE	52	1	1	54
WAREHAM	119	3	5	127
WARREN	29	1	1	31
WARWICK	3	0	1	4
WASHINGTON	1	0	0	1
WATERTOWN	286	11	22	319
WAYLAND	30	2	6	38
WEBSTER	131	0	2	133
WELLESLEY	78	9	9	96
WELLFLEET	31	5	8	44
WENDELL	0	0	0	0
WENHAM	8	1	1	10
WEST BOYLSTON	47	2	0	49
WEST BRIDGEWATER	30	1	5	36
WEST BROOKFIELD	8	2	3	13
WEST NEWBURY	7	1	0	8
WEST SPRINGFIELD	154	0	12	166
WEST STOCKBRIDGE	0	0	0	0
WEST TISBURY	23	2	3	28
WESTBOROUGH	77	1	0	78
WESTFIELD	231	3	14	248
WESTFORD	59	0	7	66
WESTHAMPTON	1	0	2	3
WESTMINSTER	36	4	3	43
WESTON	54	1	7	62
WESTPORT	73	2	4	79
WESTWOOD	40	1	0	41
WEYMOUTH	269	8	11	288
WHATELY	3	0	6	9
WHITMAN	104	0	0	104
WILBRAHAM	62	3	2	67
WILLIAMSBURG	7	0	12	19
WILLIAMSTOWN	38	7	10	55
WILMINGTON	94	3	2	99

Table E-7(continued). Marriages by Town of Licensure

Massachusetts Occurrence: 2004

Town	Male/Female	Male/Male	Female/Female	Total
WINCHENDON	33	1	2	36
WINCHESTER	79	7	3	89
WINDSOR	7	0	0	7
WINTHROP	85	1	7	93
WOBURN	212	5	8	225
WORCESTER	1,217	97	148	1,462
WORTHINGTON	5	1	1	7
WRENTHAM	25	0	3	28
YARMOUTH	147	10	24	181
UNKNOWN	2	0	0	2

POPULATION



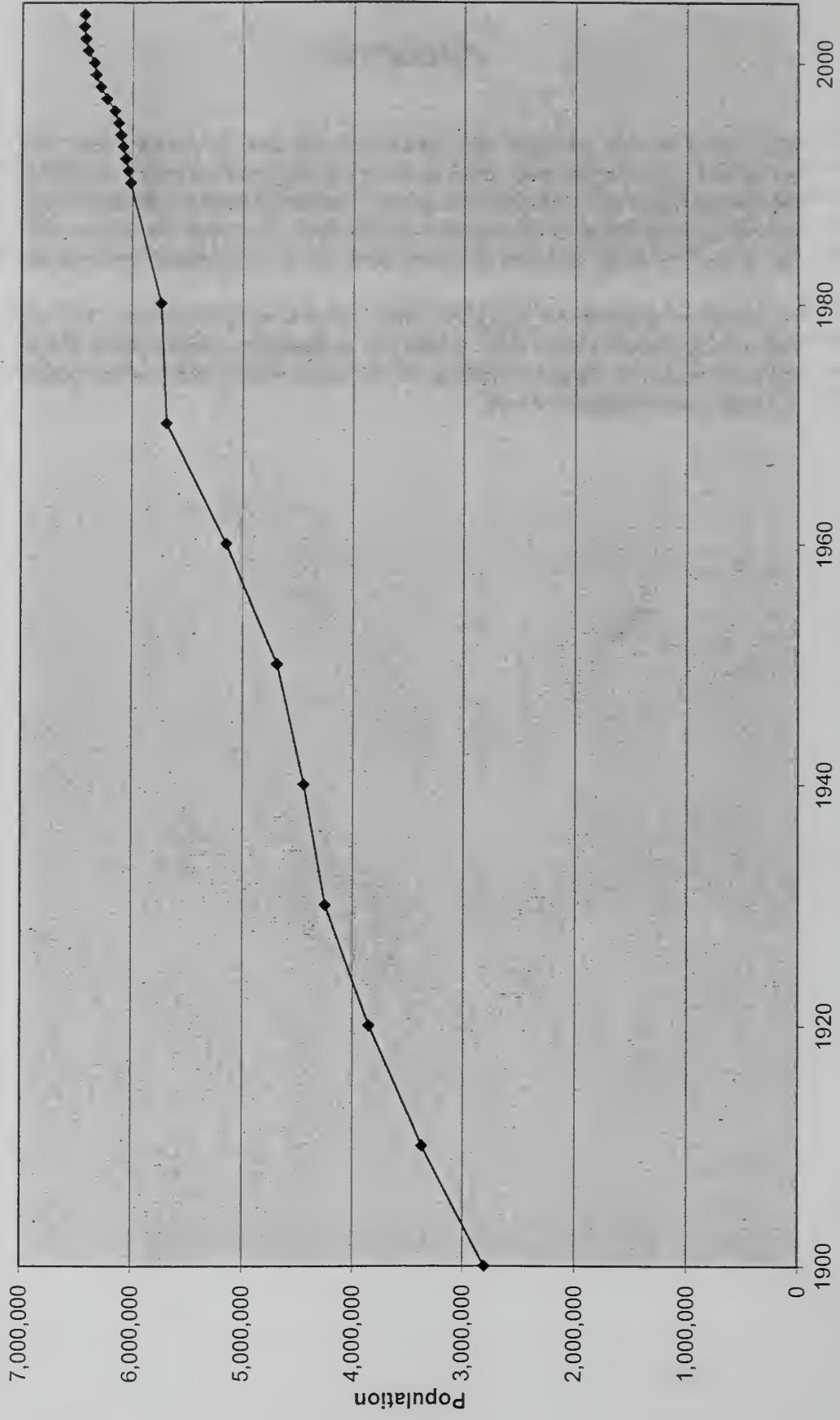
SECTION F

POPULATION

The population data in this section are presented for use in computing rates for small areas and for reporting changes over time by municipality and county. The 2004 population estimates are based upon the National Center for Health Statistics Modified Age, Race and Sex file, and the Census Bureau Population Estimates. The new file is the Massachusetts Modified Age, Race/Ethnicity, Census Estimate and can be accessed through MassCHIP.

In 2004, there were an estimated 6,438,839 residents of Massachusetts. This represents an 8.5% increase in population since 1987, when the population numbered 5,932,611. Among the total 2004 population in Massachusetts, 48.4% were male, 25.5% were below the age of 20, and 7.1% were over 75 years of age.

Figure F-1. Massachusetts Population: 1900-2004



Note: Census years (every 10 years) are from Census counts, the other years are interpolations.

Table F-1. Population Estimates¹ by Race², Hispanic Ethnicity³, Age, and Sex, Massachusetts: 2004

Age	Sex	Total	White	Black	Asian	Amer. Indian
			non-Hispanic	non-Hispanic	Hispanic	non-Hispanic
0-4	Male	203,484	147,730	17,275	26,703	11,443
	Female	193,988	140,885	16,300	25,446	11,007
	Total	397,472	288,615	33,575	52,149	22,450
5-9	Male	201,243	152,938	15,181	22,890	9,730
	Female	192,611	145,444	14,551	21,837	10,317
	Total	393,854	298,382	29,732	44,727	20,047
10-14	Male	220,952	168,819	17,633	24,228	9,697
	Female	209,129	159,329	17,022	22,994	9,205
	Total	430,081	328,148	34,655	47,222	18,902
15-19	Male	216,038	167,754	16,230	21,461	9,988
	Female	205,406	158,729	15,617	19,989	10,492
	Total	421,444	326,483	31,847	41,450	20,480
20-24	Male	215,227	159,465	16,165	25,377	13,593
	Female	214,288	159,328	16,288	23,321	14,694
	Total	429,515	318,793	32,453	48,698	28,287
25-29	Male	208,051	150,264	14,608	25,861	16,789
	Female	213,782	156,113	15,223	24,085	17,796
	Total	421,833	306,377	29,831	49,946	34,585
30-34	Male	225,942	170,134	14,136	22,623	18,539
	Female	232,859	175,780	15,548	22,617	18,404
	Total	458,801	345,914	29,684	45,240	36,943
35-39	Male	245,962	196,153	14,473	20,312	14,449
	Female	253,612	201,954	15,748	20,947	14,385
	Total	499,574	398,107	30,221	41,259	28,834
40-44	Male	264,384	219,901	14,879	16,960	11,989
	Female	272,063	225,643	15,884	18,226	11,625
	Total	536,447	445,544	30,763	35,186	23,614
45-49	Male	245,938	210,944	12,766	12,549	9,076
	Female	257,717	220,215	13,386	13,797	9,697
	Total	503,655	431,159	26,152	26,346	18,773
50-54	Male	212,406	185,804	9,827	8,981	7,276
	Female	225,689	196,083	10,964	10,366	7,768
	Total	438,095	381,887	20,791	19,347	15,044
55-59	Male	180,566	161,235	7,296	6,427	5,220
	Female	195,602	172,921	8,821	7,904	5,528
	Total	376,168	334,156	16,117	14,331	10,748

Table F-1 (Continued). Population Estimates¹ by Race²,
Hispanic Ethnicity³, Age, and Sex, Massachusetts: 2004

Age	Sex	Total	White non-Hispanic	Black non-Hispanic	Hispanic	Asian non-Hispanic	Amer. Indian non-Hispanic
60-64	Male	131,924	118,462	5,111	4,329	3,733	289
	Female	146,283	130,334	6,496	5,203	3,982	268
	Total	278,207	248,796	11,607	9,532	7,715	557
65-69	Male	95,498	86,187	3,596	2,693	2,830	192
	Female	111,556	99,722	4,894	3,721	3,054	165
	Total	207,054	185,909	8,490	6,414	5,884	357
70-74	Male	83,049	76,177	2,682	1,886	2,159	145
	Female	106,469	97,085	4,005	2,721	2,499	159
	Total	189,518	173,262	6,687	4,607	4,658	304
75-79	Male	73,924	69,030	1,946	1,380	1,441	127
	Female	105,204	98,018	3,292	1,898	1,869	127
	Total	179,128	167,048	5,238	3,278	3,310	254
80-84	Male	52,695	49,803	1,200	785	850	57
	Female	89,890	84,963	2,367	1,246	1,186	128
	Total	142,585	134,766	3,567	2,031	2,036	185
85+	Male	40,625	38,301	984	677	606	57
	Female	94,785	90,281	2,095	1,293	978	138
	Total	135,410	128,582	3,079	1,970	1,584	195
Total	Male	3,117,908	437,960	15,519	11,750	11,619	867
	Female	3,320,933	2,691,544	193,618	250,454	151,357	7,407
	Total	6,438,841	3,129,504	209,137	262,204	162,976	8,274

1. MDPH 2004 population estimates taken from MassCHIP. 2. The age-gender-race distributions from MassCHIP.

3. Persons of Hispanic Ethnicity are NOT included in the race categories. These estimates are used to calculate population based rates in this report.

Figure F-2. Population by Age Group, Massachusetts: 2004

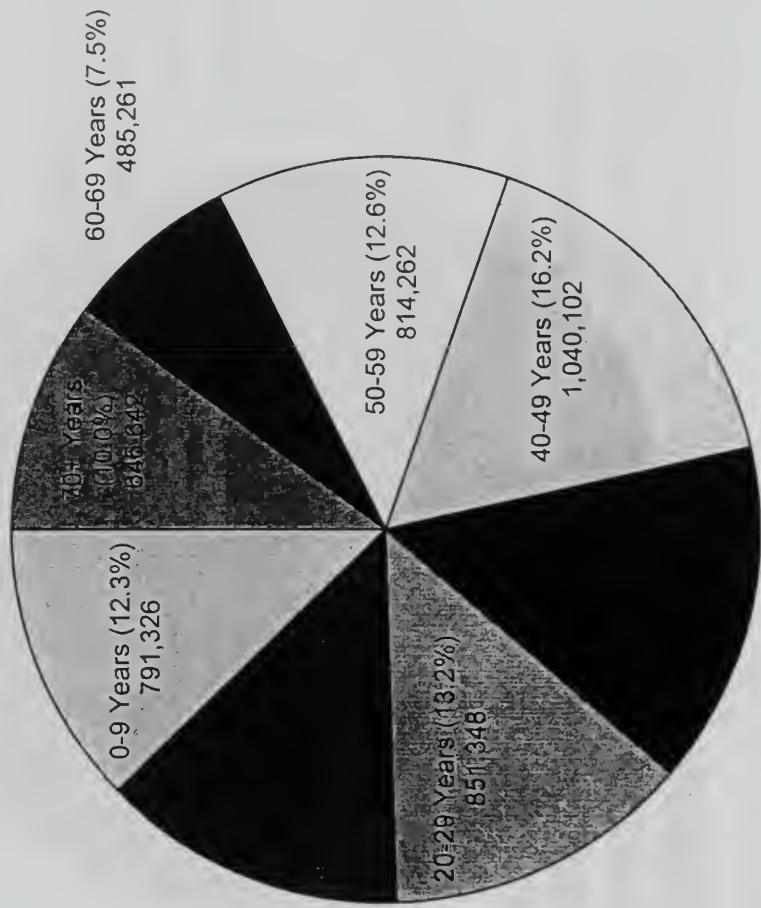


Figure F-3. Population by Race/ Hispanic Ethnicity, Massachusetts: 2004

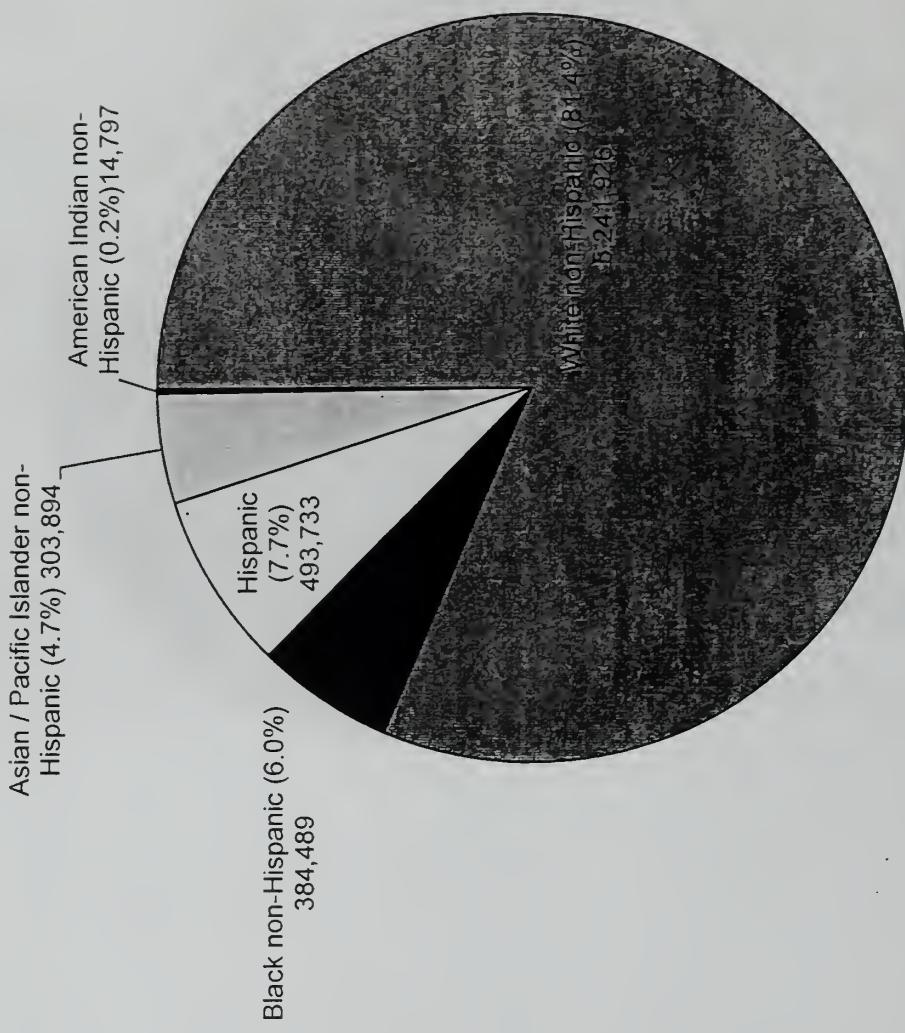
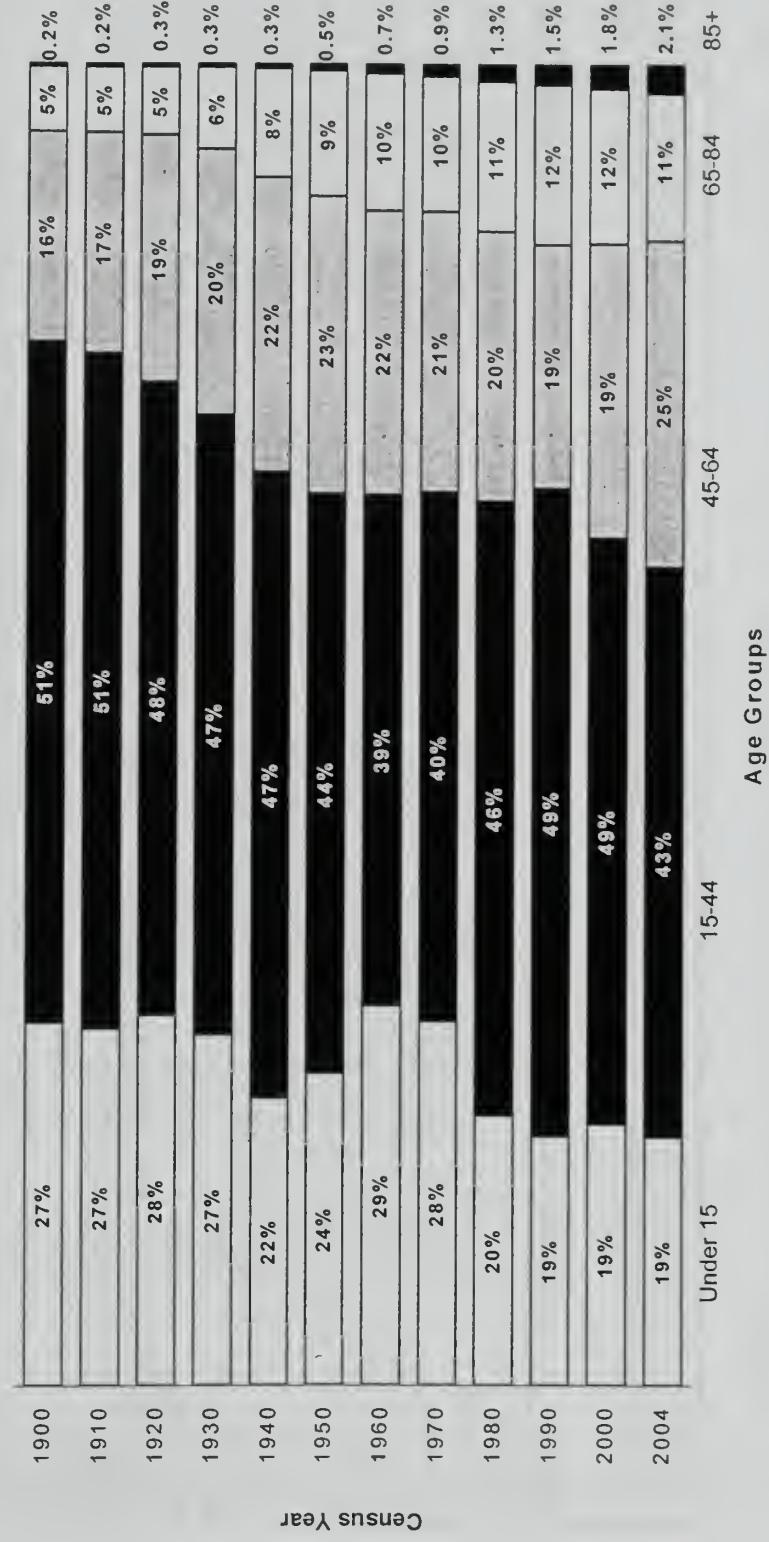


Figure F-4

**Changes in Age Composition of the Population
Massachusetts: 1900-2004**



Source: US Census Bureau 1900-1999. New population estimates for 2000-2004.
Note: Percentages based on counts with known age.

Table F-2. Massachusetts Population by County: 1930-2004

State	1930	1940	1950	1960	1970	1980	1990	2000	2004
Counties	4,249,614	4,316,721	4,690,514	5,148,578	5,689,170	5,737,037	6,016,425	6,349,097	6,438,839
Barnstable	32,305	37,295	46,805	70,286	96,656	147,925	186,605	222,230	227,974
Berkshire	120,700	122,273	132,966	142,135	149,402	145,110	139,352	134,953	132,474
Bristol	364,590	364,637	381,569	398,488	444,301	474,641	506,325	534,678	548,381
Dukes	4,953	5,669	5,633	5,829	6,117	8,942	11,639	14,987	15,585
Essex	498,040	496,313	522,384	568,831	637,887	633,632	670,080	723,419	747,290
Franklin	49,612	49,453	52,747	54,864	59,210	64,317	70,092	71,535	72,280
Hampden	335,496	332,107	367,971	429,353	459,050	443,018	456,310	456,228	465,730
Hampshire	72,801	72,461	87,594	103,229	123,981	138,813	146,568	152,251	154,194
Middlesex	934,924	971,390	1,064,569	1,238,742	1,397,268	1,367,034	1,398,468	1,465,396	1,467,263
Nantucket	3,678	3,401	3,484	3,559	3,774	5,087	6,012	9,520	10,046
Norfolk	299,426	325,180	392,308	510,256	605,051	606,587	616,087	650,308	655,865
Plymouth	162,311	168,824	189,468	248,449	333,314	405,437	435,276	472,822	494,423
Suffolk	879,536	863,248	896,615	791,329	735,190	650,142	663,906	689,807	664,921
Worcester	491,242	504,470	546,401	583,228	637,969	646,352	709,705	750,963	782,413

The United States Census numbers were used from 1930 to 2000 with the 2004 estimate provided by MassCHIP

Table F-3. Massachusetts Population by City and Town: 1980, 1990, And 2000 US Census

City/Town	1980	1990	2000	City/Town	1980	1990	2000
ABINGTON	13,517	13,817	15,111	CANTON	18,182	18,530	20,530
ACTON	17,544	17,872	20,189	CARLISLE	3,306	4,333	4,634
ACUSHNET	8,704	9,554	10,604	CARVER	6,988	10,590	11,414
ADAMS	10,381	9,445	8,829	CHARLEMONT	1,149	1,249	1,325
AGAWAM	26,271	27,323	28,845	CHARLTON	6,719	9,576	11,242
ALFORD	394	418	417	CHATHAM	6,071	6,579	6,728
AMESBURY	13,971	14,997	16,271	CHELMSFORD	31,174	32,383	34,524
AMHERST	33,229	35,228	37,891	CHELSEA	25,431	28,710	31,956
ANDOVER	26,370	29,151	31,590	CHESHIRE	3,124	3,479	3,657
ARLINGTON	48,219	44,630	42,776	CHESTER	1,123	1,280	1,402
ASHBURNHAM	4,075	5,433	5,948	CHESTERFIELD	1,000	1,048	1,162
ASHBY	2,311	2,717	2,793	CHICOPEE	55,112	56,632	53,873
ASHFIELD	1,458	1,715	1,849	CHILMARK	489	650	818
ASHLAND	9,165	12,066	14,415	CLARKSBURG	1,871	1,745	1,772
ATHOL	10,634	11,451	11,330	CLINTON	12,771	13,222	13,508
ATTLEBORO	34,196	38,383	41,282	COHASSET	7,174	7,075	7,463
AUBURN	14,845	15,005	15,783	COLRAIN	1,552	1,757	1,825
AVON	5,026	4,558	4,460	CONCORD	16,293	17,076	18,271
AYER	6,993	6,871	6,288	CONWAY	1,213	1,529	1,811
BARNSTABLE	30,898	40,949	47,188	CUMMINGTON	657	785	917
BARRE	4,102	4,546	5,144	DALTON	6,797	7,155	6,876
BECKET	1,339	1,481	1,754	DANVERS	24,100	24,174	25,523
BEDFORD	13,067	12,996	12,289	DARTMOUTH	23,966	27,244	31,019
BELCHERTOWN	8,339	10,579	12,844	DEDHAM	25,298	23,782	23,288
BELLINGHAM	14,300	14,877	15,567	DEERFIELD	4,517	5,018	5,109
BELMONT	26,100	24,720	25,035	DENNIS	12,360	13,864	15,139
BERKLEY	2,731	4,237	5,750	DIGTON	5,352	5,631	6,316
BERLIN	2,215	2,293	2,386	DOUGLAS	3,730	5,438	6,744
BERNARDSTON	1,750	2,048	2,119	DOVER	4,703	4,915	5,763
BEVERLY	37,655	38,195	40,210	DRACT	21,249	25,594	28,585
BILLERICA	36,727	37,609	38,688	DUDLEY	8,717	9,540	10,009
BLACKSTONE	6,570	8,023	9,020	DUNSTABLE	1,671	2,236	2,893
BLANDFORD	1,038	1,187	1,212	DUXBURY	11,807	13,895	14,862
BOLTON	2,530	3,134	4,239	EAST BRIDGEWATER	9,945	11,104	13,322
BOSTON	562,994	574,283	576,554	EAST BROOKFIELD	1,955	2,033	2,166
BOURNE	13,874	16,064	17,834	EAST LONGMEADOW	12,905	13,367	14,435
BOXBOROUGH	3,126	3,343	4,788	EASTHAM	3,472	4,462	5,170
BOXFORD	5,374	6,266	8,378	EASTHAMPTON	15,580	15,537	15,963
BOYLSTON	3,470	3,517	3,907	EASTON	16,623	19,807	22,437
BRAINTREE	36,337	33,836	34,095	EDGARTOWN	2,204	3,062	3,870
BREWSTER	5,226	8,440	10,110	EGREMONT	1,311	1,229	1,312
BRIDGEWATER	17,202	21,249	25,480	ERVING	1,326	1,372	1,484
BRIMFIELD	2,318	3,001	3,358	ESSEX	2,998	3,260	3,240
BROCKTON	95,172	92,788	92,700	EVERETT	37,195	35,701	37,494
BROOKFIELD	2,397	2,968	3,136	FAIRHAVEN	15,759	16,132	16,119
BROOKLINE	55,062	54,718	58,917	FALL RIVER	92,574	92,703	90,655
BUCKLAND	1,864	1,928	1,973	FALMOUTH	23,640	27,960	30,970
BURLINGTON	23,486	23,302	24,082	FITCHBURG	39,580	41,194	39,613
CAMBRIDGE	95,322	95,802	98,868	FLORIDA	730	742	768

Table F-3. Massachusetts Population by City and Town: 1980 and 1990

City/Town	1980	1990	2000	City/Town	1980	1990	2000
FOXBOROUGH	14,148	14,637	16,462	LANESBOROUGH	3,131	3,032	3,110
FRAMINGHAM	65,113	64,989	66,773	LAWRENCE	63,175	70,207	71,228
FRANKLIN	18,217	22,095	29,267	LEE	6,247	5,849	5,937
FREETOWN	7,058	8,522	8,896	LEICESTER	9,446	10,191	10,439
GARDNER	17,900	20,125	21,154	LENOX	6,523	5,069	4,931
GAY HEAD	220	201	314	LEOMINSTER	34,508	38,145	41,631
GEORGETOWN	5,687	6,384	7,543	LEVERETT	1,471	1,785	1,867
GILL	1,259	1,583	1,523	LEXINGTON	29,479	28,974	31,090
GLoucester	27,768	28,716	29,905	LEYDEN	498	662	777
GOSHEN	651	830	923	LINCOLN	7,098	7,666	8,563
GOSNOLD	63	98	123	LITTLETON	6,970	7,051	8,048
GRAFTON	11,238	13,035	14,881	LONGMEADOW	16,301	15,467	15,460
GRANBY	5,380	5,565	6,063	LOWELL	92,418	103,439	105,854
GRANVILLE	1,204	1,403	1,518	LUDLOW	18,150	18,820	19,693
BARRINGTON	7,405	7,725	7,828	LUNENBURG	8,405	9,117	9,394
GREENFIELD	18,436	18,666	18,031	LYNN	78,471	81,245	86,298
GROTON	6,154	7,511	9,401	LYNNFIELD	11,267	11,274	11,799
GROVELAND	5,040	5,214	6,041	MALDEN	53,386	53,884	55,064
HADLEY	4,125	4,231	4,663	MANCHESTER	5,424	5,286	5,391
HALIFAX	5,513	6,526	7,513	MANSFIELD	13,453	16,568	21,476
HAMILTON	6,960	7,280	8,427	MARBLEHEAD	20,126	19,971	20,771
HAMPDEN	4,745	4,709	4,891	MARION	3,932	4,496	5,560
HANCOCK	643	628	727	MARLBOROUGH	30,617	31,813	35,157
HANOVER	11,358	11,912	13,412	MARSHFIELD	20,916	21,531	23,822
HANSON	8,617	9,028	9,429	MASHPEE	3,700	7,884	11,568
HARDWICK	2,272	2,385	2,684	MATTAPoisett	5,597	5,850	6,249
HARVARD	12,170	12,329	9,885	MAYNARD	9,590	10,325	10,585
HARWICH	8,971	10,275	11,828	MEDFIELD	10,220	10,531	12,213
HATFIELD	3,045	3,184	3,205	MEDFORD	58,076	57,407	56,916
HAVERHILL	46,865	51,418	58,119	MEDWAY	8,447	9,931	12,101
HAWLEY	280	317	339	MELROSE	30,055	28,150	26,912
HEATH	482	716	822	MENDON	3,108	4,010	5,125
HINGHAM	20,339	19,821	20,530	MERRIMAC	4,451	5,166	6,337
HINSDALE	1,707	1,959	2,009	METHUEN	36,701	39,990	42,966
HOLBROOK	11,140	11,041	11,017	MIDDLEBOROUGH	16,404	17,867	19,983
HOLDEN	13,336	14,628	15,875	MIDDLEFIELD	385	392	503
HOLLAND	1,589	2,185	2,412	MIDDLETON	4,135	4,921	7,056
HOLLISTON	12,622	12,926	14,432	MILFORD	23,390	25,355	25,897
HOLYOKE	44,678	43,704	40,504	MILLBURY	11,808	12,228	12,636
HOPEDALE	3,905	5,666	6,071	MILLIS	6,908	7,613	7,836
HOPKINTON	7,114	9,191	12,756	MILLVILLE	1,693	2,236	2,786
HUBBARDSTON	1,797	2,797	3,844	MILTON	25,860	25,725	26,725
HUDSON	16,408	17,233	17,951	MONROE	179	115	102
HULL	9,714	10,466	11,200	MONSON	7,315	7,776	8,835
HUNTINGTON	1,804	1,987	2,236	MONTAGUE	8,011	8,316	8,095
IPSWICH	11,158	11,873	12,566	MONTEREY	818	805	925
KINGSTON	7,362	9,045	11,242	MONTGOMERY	637	759	709
LAKEVILLE	5,931	7,785	9,668	WASHINGTON	93	135	152
LANCASTER	6,334	6,661	7,432	NAHANT	3,947	3,828	3,748

Table F-3. Massachusetts Population by City and Town: 1980 and 1990

City/Town	1980	1990	2000	City/Town	1980	1990	2000
NANTUCKET	5,087	6,012	8,651	READING	22,678	22,539	23,953
NATICK	29,461	30,510	32,094	REHOBOTH	7,570	8,656	10,188
NEEDHAM	27,901	27,557	28,427	REVERE	42,423	42,786	43,681
NEW ASHFORD	159	192	238	RICHMOND	1,659	1,677	1,740
NEW BEDFORD	98,478	99,922	94,347	ROCHESTER	3,205	3,921	4,623
NEW BRAINTREE	671	881	997	ROCKLAND	15,695	16,123	17,608
MARLBOROUGH	1,160	1,240	1,538	ROCKPORT	6,345	7,482	8,043
NEW SALEM	688	802	898	ROWE	336	378	371
NEWBURY	4,529	5,623	6,666	ROWLEY	3,867	4,452	5,434
NEWBURYPORT	15,900	16,317	16,988	ROYALSTON	955	1,147	1,205
NEWTON	83,622	82,585	87,211	RUSSELL	1,570	1,594	1,734
NORFOLK	6,363	9,270	10,506	RUTLAND	4,334	4,936	6,123
NORTH ADAMS	18,063	16,797	15,675	SALEM	38,220	38,091	40,348
NORTH ANDOVER	20,129	22,792	26,785	SALISBURY	5,973	6,882	7,554
NORTH ATTLEBORO	21,095	25,038	26,858	SANDISFIELD	720	667	801
BROOKFIELD	4,150	4,708	4,893	SANDWICH	8,727	15,489	19,908
NORTH READING	11,455	12,002	13,250	SAUGUS	24,746	25,549	25,898
NORTHAMPTON	29,286	29,289	29,435	SAVOY	644	634	697
NORTHBOROUGH	10,568	11,929	13,698	SCITUATE	17,317	16,786	17,380
NORTHBRIDGE	12,246	13,371	13,573	SEEKONK	12,269	13,046	13,789
NORTHFIELD	2,386	2,838	2,955	SHARON	13,601	15,517	17,276
NORTON	12,690	14,265	17,214	SHEFFIELD	2,743	2,910	3,347
NORWELL	9,182	9,279	9,981	SHELBURNE	2,002	2,012	2,178
NORWOOD	29,711	28,700	28,779	SHERBORN	4,049	3,989	4,284
OAK BLUFFS	1,984	2,804	3,692	SHIRLEY	5,124	6,118	7,143
OAKHAM	994	1,503	1,762	SHREWSBURY	22,674	24,146	30,390
ORANGE	6,844	7,312	7,710	SHUTESBURY	1,049	1,561	1,954
ORLEANS	5,306	5,838	6,434	SOMERSET	18,813	17,655	18,067
OTIS	963	1,073	1,281	SOMERVILLE	77,372	76,210	77,838
OXFORD	11,680	12,588	13,457	SOUTH HADLEY	16,399	16,685	17,678
PALMER	11,389	12,054	12,564	SOUTHAMPTON	4,137	4,478	5,321
PAXTON	3,762	4,047	4,551	SOUTHBOROUGH	6,193	6,628	8,419
PEABODY	45,976	47,039	49,595	SOUTHBRIDGE	16,665	17,816	17,489
PELHAM	1,112	1,373	1,463	SOUTHWICK	7,382	7,667	8,885
PEMBROKE	13,487	14,544	16,433	SPENCER	10,774	11,645	11,907
PEPPERELL	8,061	10,098	11,435	SPRINGFIELD	152,319	156,983	151,292
PERU	633	779	850	STERLING	5,440	6,481	7,416
PETERSHAM	1,024	1,131	1,212	STOCKBRIDGE	2,328	2,408	2,315
PHILLIPSTON	953	1,485	1,814	STONEHAM	21,424	22,203	22,020
PITTSFIELD	51,974	48,622	46,284	STOUGHTON	26,710	26,777	28,133
PLAINFIELD	425	571	594	STOW	5,144	5,328	5,715
PLAINVILLE	5,857	6,871	7,913	STURBRIDGE	5,976	7,775	8,082
PLYMOUTH	35,913	45,608	51,447	SUDSBURY	14,027	14,358	16,260
PLYMPTON	1,974	2,384	2,690	SUNDERLAND	2,929	3,399	3,792
PRINCETON	2,425	3,189	3,470	SUTTON	5,855	6,824	8,153
PROVINCETOWN	3,536	3,561	3,372	SWAMPSCOTT	13,837	13,650	14,704
QUINCY	84,743	84,985	87,570	SWANSEA	15,461	15,411	16,079
RANDOLPH	28,218	30,093	31,630	TAUNTON	45,001	49,832	55,183
RAYNHAM	9,085	9,867	11,525	TEMPLETON	6,070	6,438	6,955

Table F-3. Massachusetts Population by City and Town: 1980 and 1990

City/Town	1980	1990	2000	City/Town	1980	1990	2000
TEWKSBURY	24,635	27,266	29,603	WINCHESTER	20,701	20,267	20,892
TISBURY	2,972	3,120	3,674	WINDSOR	598	770	839
TOLLAND	235	289	396	WINTHROP	19,294	18,127	17,750
TOPSFIELD	5,709	5,754	6,330	WOBURN	36,626	35,943	37,148
TOWNSEND	7,201	8,496	9,424	WORCESTER	161,799	169,759	170,915
TRURO	1,486	1,573	1,960	WORTHINGTON	932	1,156	1,305
TYNGSBOROUGH	5,683	8,642	10,716	WRENTHAM	7,580	9,006	10,515
TYRINGHAM	344	369	391	YARMOUTH	18,449	21,174	23,767
UPTON	3,886	4,677	5,540				
UXBRIDGE	8,374	10,415	11,752	Statewide Totals		5,737,037	6,016,425
WAKEFIELD	24,895	24,825	25,045				
WALES	1,177	1,566	1,759				
WALPOLE	18,859	20,212	23,085				
WALTHAM	58,200	57,878	59,243				
WARE	8,953	9,808	9,820				
WAREHAM	18,457	19,232	20,575				
WARREN	3,777	4,437	4,815				
WARWICK	603	740	778				
WASHINGTON	587	615	572				
WATERTOWN	34,384	33,284	32,399				
WAYLAND	12,170	11,874	13,128				
WEBSTER	14,480	16,196	16,313				
WELLESLEY	27,209	26,615	27,716				
WELLFLEET	2,209	2,493	2,687				
WENDELL	694	899	1,062				
WENHAM	3,897	4,212	5,014				
WEST BOYLSTON	6,204	6,611	7,508				
BRIDGEWATER	6,359	6,389	6,760				
WEST BROOKFIELD	3,026	3,532	3,683				
WEST NEWBURY	2,861	3,421	4,027				
WEST SPRINGFIELD	27,042	27,537	28,425				
STOCKBRIDGE	1,280	1,483	1,447				
WEST TISBURY	1,010	1,704	2,338				
WESTBOROUGH	13,619	14,133	17,320				
WESTFIELD	36,465	38,372	40,511				
WESTFORD	13,434	16,392	20,130				
WESTHAMPTON	1,137	1,327	1,515				
WESTMINSTER	5,139	6,191	7,014				
WESTON	11,169	10,200	11,316				
WESTPORT	13,763	13,852	14,805				
WESTWOOD	13,212	12,557	14,015				
WEYMOUTH	55,601	54,063	53,878				
WHATELY	1,341	1,375	1,466				
WHITMAN	13,534	13,240	13,580				
WILBRAHAM	12,053	12,635	13,478				
WILLIAMSBURG	2,237	2,515	2,599				
WILLIAMSTOWN	8,741	8,220	8,731				
WILMINGTON	17,471	17,651	20,839				
WINCHENDON	7,019	8,805	9,532				

Table F-4. Population Counts and Estimates, Massachusetts: 1980, 1985-2004

AGE GROUP	YEAR	TOTAL	MALE	FEMALE
0 - 4	1980	337,215	173,029	164,186
	1985	379,282	194,237	185,045
	1990	421,349	215,445	205,904
	1991	424,617	217,179	207,438
	1992	425,142	217,537	207,605
	1993	424,647	217,471	207,176
	1994	421,986	216,493	205,493
	1995	415,741	213,448	202,293
	1996	409,660	210,345	199,315
	1997	404,223	207,394	196,829
	1998	399,860	204,983	194,877
	1999	399,310	204,397	194,913
	2000	397,268	203,062	194,206
	2001	390,178	199,346	190,832
	2002	394,810	201,751	193,059
	2003	395,047	202,150	192,897
	2004	397,472	203,484	193,988
5 - 9	1980	374,734	191,602	183,132
	1985	375,677	192,542	183,135
	1990	376,619	193,482	183,137
	1991	384,465	197,306	187,159
	1992	388,956	199,564	189,392
	1993	392,430	201,241	191,189
	1994	399,236	204,404	194,832
	1995	404,660	206,980	197,680
	1996	410,066	209,813	200,253
	1997	414,757	212,313	202,444
	1998	414,810	212,483	202,327
	1999	423,609	217,197	206,412
	2000	430,861	221,145	209,716
	2001	413,188	211,921	201,267
	2002	408,718	209,582	199,136
	2003	400,041	204,666	195,375
	2004	393,854	201,243	192,611
10 - 14	1980	461,332	235,669	225,663
	1985	404,174	206,784	197,390
	1990	347,016	177,899	169,117
	1991	355,502	182,288	173,214
	1992	358,775	184,070	174,705
	1993	363,655	186,671	176,984
	1994	368,790	189,353	179,437
	1995	372,452	191,298	181,154
	1996	380,540	195,292	185,248
	1997	388,421	199,263	189,158
	1998	391,860	200,941	190,919
	1999	412,311	211,441	200,870
	2000	431,247	221,168	210,079
	2001	431,303	221,113	210,190
	2002	436,640	223,771	212,869
	2003	434,596	222,868	211,728
	2004	430,081	220,952	209,129

Table F-4 (continued). Population Counts and Estimates, Massachusetts: 1980, 1985-2004

AGE GROUP	YEAR	TOTAL	MALE	FEMALE
15 - 19	1980	548,239	274,859	273,380
	1985	482,135	242,074	240,061
	1990	416,030	209,289	206,741
	1991	391,939	197,402	194,537
	1992	383,111	192,951	190,160
	1993	383,138	192,863	190,275
	1994	389,017	195,597	193,420
	1995	397,926	200,053	197,873
	1996	407,088	204,859	202,229
	1997	410,740	207,139	203,601
	1998	418,478	211,026	207,452
	1999	417,862	211,120	206,742
	2000	415,737	210,460	205,277
	2001	409,422	209,348	200,074
	2002	409,688	210,256	199,432
	2003	415,270	213,161	202,109
	2004	421,444	216,038	205,406
20 - 24	1980	552,902	270,713	282,189
	1985	535,048	263,685	271,363
	1990	517,194	256,657	260,537
	1991	514,576	255,360	259,216
	1992	516,059	256,092	259,967
	1993	508,509	252,385	256,124
	1994	497,732	247,056	250,676
	1995	486,412	241,442	244,970
	1996	469,010	232,807	236,203
	1997	463,895	230,140	233,755
	1998	465,352	230,886	234,466
	1999	435,534	215,192	220,342
	2000	404,279	198,756	205,523
	2001	425,247	209,206	216,041
	2002	432,849	213,925	218,924
	2003	433,897	216,030	217,867
	2004	429,515	215,227	214,288
25 - 29	1980	489,175	239,341	249,834
	1985	522,748	258,318	264,430
	1990	556,320	277,295	279,025
	1991	540,234	268,978	271,256
	1992	529,711	263,810	265,901
	1993	518,304	258,294	260,010
	1994	512,557	255,973	256,584
	1995	510,664	255,351	255,313
	1996	514,088	257,258	256,830
	1997	511,765	256,137	255,628
	1998	502,345	251,390	250,955
	1999	468,891	232,721	236,170
	2000	434,024	213,376	220,648
	2001	422,879	208,425	214,454
	2002	416,009	204,894	211,115
	2003	416,701	205,376	211,325
	2004	421,833	208,051	213,782

Table F-4 (continued). Population Counts and Estimates, Massachusetts: 1980, 1985-2004

AGE GROUP	YEAR	TOTAL	MALE	FEMALE
30 - 34	1980	446,395	217,649	228,746
	1985	494,363	243,175	251,188
	1990	542,330	268,701	273,629
	1991	547,724	272,103	275,621
	1992	543,398	270,256	273,142
	1993	539,945	268,647	271,298
	1994	537,869	267,675	270,194
	1995	529,735	263,782	265,953
	1996	518,478	258,141	260,337
	1997	512,473	255,510	256,963
	1998	502,992	251,066	251,926
	1999	498,617	247,105	251,512
	2000	492,764	242,386	250,378
	2001	492,792	242,263	250,529
	2002	484,509	238,470	246,039
	2003	473,853	233,136	240,717
	2004	458,801	225,942	232,859
35 - 39	1980	348,552	169,502	179,050
	1985	414,863	203,352	211,511
	1990	481,174	237,202	243,972
	1991	492,003	242,601	249,402
	1992	501,299	247,290	254,009
	1993	508,723	251,039	257,684
	1994	517,102	255,251	261,851
	1995	522,467	258,017	264,450
	1996	527,036	260,758	266,278
	1997	525,899	260,595	265,304
	1998	522,796	259,389	263,407
	1999	532,463	263,328	269,135
	2000	540,593	266,507	274,086
	2001	538,710	265,684	273,026
	2002	527,402	260,018	267,384
	2003	515,460	253,838	261,622
	2004	499,574	245,962	253,612
40 - 44	1980	278,748	134,925	143,823
	1985	356,061	173,162	182,899
	1990	433,374	211,399	221,975
	1991	452,459	221,123	231,336
	1992	448,133	219,257	228,876
	1993	450,944	220,919	230,025
	1994	458,221	224,614	233,607
	1995	466,848	229,037	237,811
	1996	477,644	234,298	243,346
	1997	489,729	240,396	249,333
	1998	496,569	243,966	252,603
	1999	510,253	250,285	259,968
	2000	522,402	255,838	266,564
	2001	537,406	263,687	273,719
	2002	537,951	264,609	273,342
	2003	537,967	264,898	273,069
	2004	536,447	264,384	272,063

Table F-4 (continued). Population Counts and Estimates, Massachusetts: 1980, 1985-2004

AGE GROUP	YEAR	TOTAL	MALE	FEMALE
45 - 49	1980	278,261	134,444	143,817
	1985	305,798	148,540	157,258
	1990	333,334	162,636	170,698
	1991	347,758	169,614	178,144
	1992	372,449	181,639	190,810
	1993	388,267	189,222	199,045
	1994	405,627	197,458	208,169
	1995	424,194	206,334	217,860
	1996	440,676	214,576	226,100
	1997	439,700	214,255	225,445
	1998	442,352	215,783	226,569
	1999	452,918	220,796	232,122
	2000	461,945	225,029	236,916
	2001	479,151	233,606	245,545
	2002	488,975	238,190	250,785
	2003	498,397	243,290	255,107
	2004	503,655	245,938	257,717
50 - 54	1980	306,574	146,211	160,363
	1985	284,588	136,396	148,192
	1990	262,601	126,581	136,020
	1991	266,799	128,835	137,964
	1992	274,537	132,602	141,935
	1993	291,124	140,790	150,334
	1994	305,629	148,204	157,425
	1995	317,854	154,500	163,354
	1996	331,747	161,214	170,533
	1997	359,036	174,461	184,575
	1998	376,308	182,775	193,533
	1999	394,565	191,345	203,220
	2000	411,408	199,205	212,203
	2001	437,266	211,839	225,427
	2002	431,172	208,803	222,369
	2003	434,131	210,453	223,678
	2004	438,095	212,406	225,689
55 - 59	1980	310,995	145,603	165,392
	1985	281,585	132,889	148,696
	1990	252,174	120,175	131,999
	1991	243,598	116,332	127,266
	1992	239,741	114,800	124,941
	1993	238,223	114,215	124,008
	1994	240,256	115,150	125,106
	1995	243,035	116,491	126,544
	1996	248,445	119,247	129,198
	1997	258,444	124,059	134,385
	1998	275,482	132,476	143,006
	1999	293,440	141,003	152,437
	2000	310,002	148,841	161,161
	2001	325,492	156,205	169,287
	2002	351,475	168,863	182,612
	2003	363,413	174,457	188,956
	2004	376,168	180,566	195,602

Table F-4 (continued). Population Counts and Estimates, Massachusetts: 1980, 1985-2004

AGE GROUP	YEAR	TOTAL	MALE	FEMALE
60 - 64	1980	277,384	126,323	151,061
	1985	269,645	123,966	145,679
	1990	261,905	121,609	140,296
	1991	252,853	117,797	135,056
	1992	243,758	113,682	130,076
	1993	236,302	110,383	125,919
	1994	229,887	107,716	122,171
	1995	225,426	105,979	119,447
	1996	221,450	104,381	117,069
	1997	220,318	104,206	116,112
	1998	220,073	104,333	115,740
	1999	228,893	108,256	120,637
	2000	236,405	111,504	124,901
	2001	244,247	115,421	128,826
	2002	252,593	119,505	133,088
	2003	267,914	126,808	141,106
	2004	278,207	131,924	146,283
65 - 69	1980	235,574	101,023	134,551
	1985	243,479	105,724	137,755
	1990	251,383	110,424	140,959
	1991	242,200	107,138	135,062
	1992	239,439	106,603	132,836
	1993	236,419	106,028	130,391
	1994	233,259	105,261	127,998
	1995	229,328	103,887	125,441
	1996	226,174	102,090	124,084
	1997	220,342	99,675	120,667
	1998	224,578	102,051	122,527
	1999	221,157	100,777	120,380
	2000	216,498	98,882	117,616
	2001	211,693	97,516	114,177
	2002	208,031	95,834	112,197
	2003	205,850	95,452	110,398
	2004	207,054	95,498	111,556
70 - 74	1980	187,041	73,235	113,806
	1985	197,186	79,388	117,798
	1990	207,331	85,541	121,790
	1991	206,064	85,541	120,523
	1992	207,286	86,411	120,875
	1993	207,610	86,774	120,836
	1994	209,543	88,009	121,534
	1995	211,201	89,345	121,856
	1996	210,014	88,742	121,272
	1997	209,512	89,113	120,399
	1998	217,425	93,318	124,107
	1999	214,991	92,667	122,324
	2000	211,332	91,416	119,916
	2001	206,665	89,544	117,121
	2002	201,885	87,724	114,161
	2003	196,641	85,632	111,009
	2004	189,518	83,049	106,469

Table F-4 (continued). Population Counts and Estimates, Massachusetts: 1980, 1985-2004

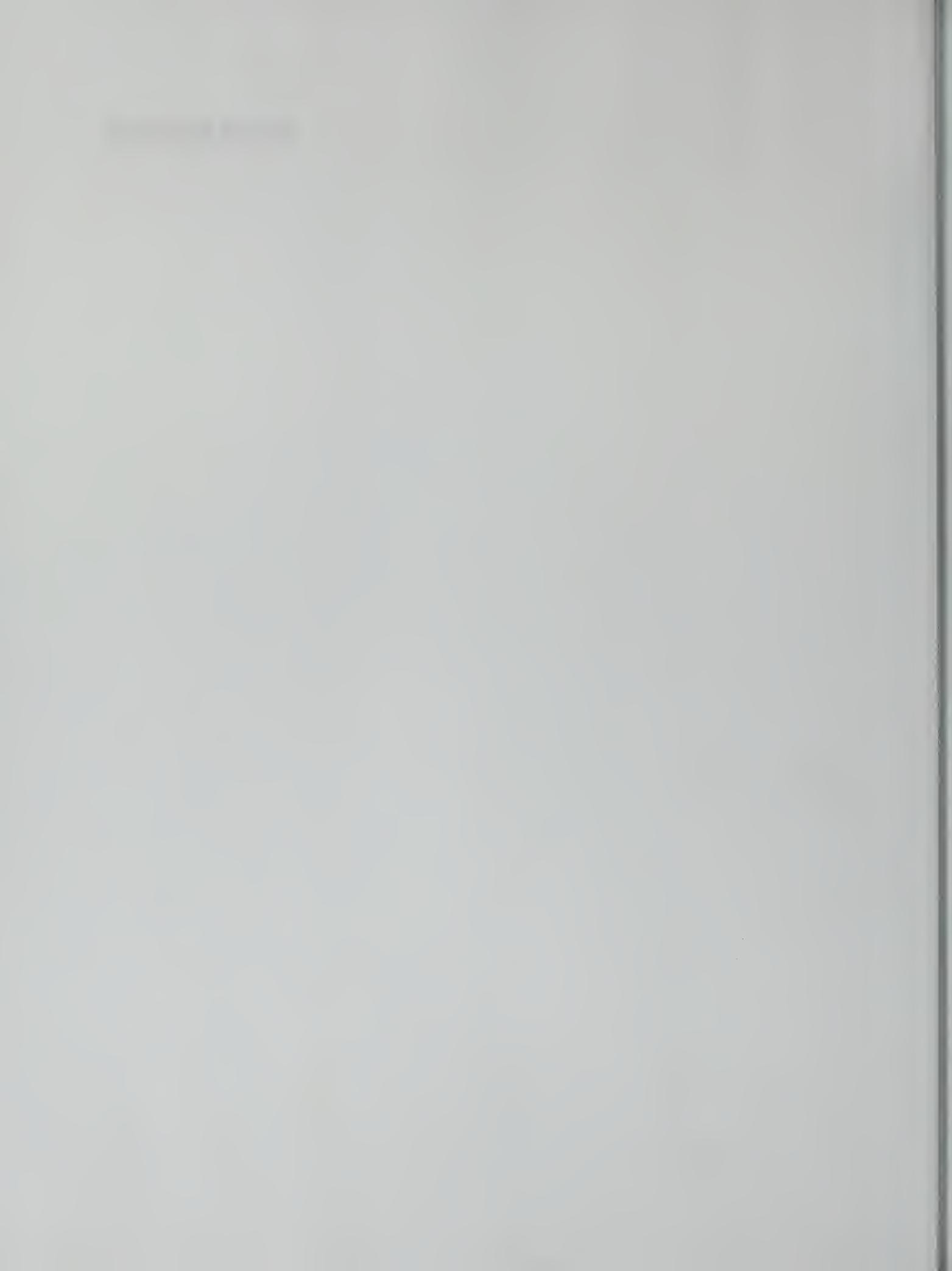
AGE GROUP	YEAR	TOTAL	MALE	FEMALE
75 - 79	1980	137,828	48,145	89,683
	1985	148,741	53,591	95,150
	1990	159,653	59,037	100,616
	1991	157,534	59,176	98,358
	1992	157,819	59,824	97,995
	1993	158,987	60,752	98,235
	1994	161,268	62,072	99,196
	1995	162,986	63,262	99,724
	1996	166,496	64,548	101,948
	1997	169,323	66,029	103,294
	1998	178,254	69,719	108,535
	1999	182,156	72,061	110,095
	2000	184,941	73,829	111,112
	2001	184,811	74,287	110,524
	2002	184,724	75,232	109,492
	2003	183,193	75,076	108,117
	2004	179,128	73,924	105,204
80 - 84	1980	92,180	28,513	63,667
	1985	99,240	30,991	68,249
	1990	106,299	33,468	72,831
	1991	106,558	33,989	72,569
	1992	108,271	34,969	73,302
	1993	109,369	35,782	73,587
	1994	110,817	36,721	74,096
	1995	112,913	37,919	74,994
	1996	114,039	38,664	75,375
	1997	114,787	39,273	75,514
	1998	121,228	41,932	79,296
	1999	126,467	44,435	82,032
	2000	130,699	46,464	84,235
	2001	134,896	48,601	86,295
	2002	136,865	49,486	87,379
	2003	138,872	50,760	88,112
	2004	142,585	52,695	89,890
85+	1980	73,908	20,107	53,801
	1985	82,124	21,006	61,118
	1990	90,339	21,905	68,434
	1991	91,218	22,231	68,987
	1992	99,184	24,479	74,705
	1993	106,943	26,789	80,154
	1994	107,996	27,258	80,738
	1995	108,970	27,600	81,370
	1996	111,703	28,439	83,264
	1997	114,258	29,558	84,700
	1998	120,501	31,447	89,054
	1999	119,093	31,435	87,658
	2000	116,692	30,948	85,744
	2001	121,247	33,490	87,757
	2002	125,466	35,910	89,556
	2003	131,264	38,236	93,028
	2004	135,410	40,625	94,785

Table F-4 (continued). Population Counts and Estimates, Massachusetts: 1980, 1985-2004

AGE GROUP	YEAR	TOTAL	MALE	FEMALE
TOTAL	1980	5,737,037	2,730,893	3,006,144
	1985	5,876,737	2,809,820	3,066,917
	1990	6,016,425	2,888,745	3,127,680
	1991	6,018,101	2,894,993	3,123,108
	1992	6,037,068	2,905,836	3,131,232
	1993	6,063,539	2,920,265	3,143,274
	1994	6,106,792	2,944,265	3,162,527
	1995	6,142,812	2,964,725	3,178,087
	1996	6,184,354	2,985,472	3,198,882
	1997	6,227,622	3,009,516	3,218,106
	1998	6,291,263	3,039,964	3,251,299
	1999	6,332,530	3,055,561	3,276,969
	2000	6,349,097	3,058,816	3,290,281
	2001	6,406,593	3,091,502	3,315,091
	2002	6,429,761	3,106,822	3,322,939
	2003	6,442,506	3,116,285	3,326,221
	2004	6,438,839	3,117,907	3,320,932



APPENDICES



Massachusetts Birth Certificate: 2004

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1. RECORD NUMBER									
768283		3C. CITY/TOWN		 The Commonwealth of Massachusetts DEPARTMENT OF PUBLIC HEALTH REGISTRY OF VITAL RECORDS AND STATISTICS STANDARD CERTIFICATE OF LIVE BIRTH					
A CERTIFICATE NUMBER (DPH USE ONLY)		3B. COUNTY							
		3A. FACILITY NAME-IF NOT IN FACILITY NUMBER AND STREET							
		NAME 4A FIRST		4B. MIDDLE		4C LAST			
		5A. SEX		5B. PLURALITY		5C. BIRTH ORDER		5D. TIME	
		5E. DATE OF BIRTH (Month, Day, Year)						5F. DATE OF BIRTH (Month, Day, Year)	
		6A. NAME		6B. CERTIFIED BY		6C. SIGNATURE		6D. STAMP	
		6E. ADDRESS		6F. CITY/TOWN		6G. STATE/COUNTRY		6H. ZIP CODE	
		6I. NUMBER AND STREET		6J. CITY/TOWN		6K. STATE/COUNTRY		6L. ZIP CODE	
		7A. NAME		7B. FIRST		7C. MIDDLE		7D. LAST	
		8A. BIRTHPLACE		8B. CITY/TOWN		8C. STATE/COUNTRY		8D. DATE OF BIRTH (Month, Day, Year)	
		9A. RESIDENT COPY		9B. DATE SIGNED (Month, Day, Year)		9C. MAILING ADDRESS (If different from item # 13 above)		9D. RELATIONSHIP TO CHILD	
		10A. INITIALS		10B. INFORMATION		10C. DATE OF RECORD (Month, Day, Year)		10D. SUPPLEMENT FILED (Month, Day, Year)	
		11A. INITIALS		11B. CLERK		11C. DATE OF RECORD (Month, Day, Year)		11D. CLERK/REGISTRAR	
		12A. OCCURRENCE		12B. DPH USE ONLY		12C. DPH USE ONLY		12D. DPH USE ONLY	

Massachusetts Death Certificate: 2004

(INSTRUCTIONS ON REVERSE SIDE)



The Commonwealth of Massachusetts STANDARD CERTIFICATE OF DEATH REGISTRY OF VITAL RECORDS AND STATISTICS

REGISTERED NUMBER

STATE USE ONLY

FOR USE BY
PHYSICIANS AND
MEDICAL EXAMINERS

STATE USE
ONLY

4c Hosp

5 Type

6 Hsp Race

10 Age

15 Resid

15 Out-State

DECEDENT

DECEDENT NAME	FIRST	MIDDLE	LAST	SEX	DATE OF DEATH (Mo. Day, Yr.)
				2	3

1 PLACE OF DEATH (City/Town) COUNTY OF DEATH HOSPITAL OR OTHER INSTITUTION - Name (If not in either give street and number)

4a 4b 4c

4a PLACE OF DEATH (Check only one)
HOSPITAL: OTHER
 Inpatient ER/Outpatient DOA Nursing Home Residence Other (Specify)

5 6 7

WAS DECEDENT OF HISPANIC ORIGIN? RACE (e.g. White, Black, American Indian, etc.) DECEDEDNT'S EDUCATION (Highest Grade Completed)

(If yes, Specify Puerto Rican, Dominican Cuban, etc.) NO YES Specified Elementary Sec. (0-12) College (1-4)

8a Specified

8b DATE OF BIRTH (Mo. Day, Yr.) BIRTHPLACE (City and State or Foreign Country)

9

10a 10b 11

MARRIED, NEVER MARRIED LAST PLACE OF RESIDENCE USUAL OCCUPATION (Prior - If Retired) KIND OF BUSINESS OR INDUSTRY

12 13

14b ZIP CODE

15a FATHER - FULL NAME STATE OF BIRTH (If not known name country) MOTHER - NAME (GIVEN) (MAIDEN) STATE OF BIRTH (If not known name country)

16 17 18 19

INFORMANT'S NAME MAILING ADDRESS - NO & ST. CITY/TOWN, STATE, ZIP CODE RELATIONSHIP

20 21 22

23 METHOD OF IMMEDIATE DISPOSITION FUNERAL SERVICE LICENSEE OR OTHER DESIGNEE LICENSE #

BURIAL CREMATION

ENTOMBMENT REMOVAL FROM STATE

DONATION OTH. SPEC.

24

25

PLACE OF DISPOSITION (Name of Cemetery, Crematory or other) LOCATION (City/Town, State)

26a 26b

26c DATE OF DISPOSITION (Mo. Day, Yr.) NAME AND ADDRESS OF FACILITY OR OTHER DESIGNEE

27 28a/b

29 PART I - Enter the diseases, injuries, or complications that caused the death. Do not use only the mode of dying, such as cardiac or respiratory arrest, shock or heart failure

List only one cause on each line (a through d) PRINT OR TYPE LEGIBLY.

IMMEDIATE CAUSE (Final disease or condition resulting in death) a DUE TO (OR AS A CONSEQUENCE OF)

Sequentially list conditions, if any, leading to immediate cause. Enter UNDERLYING CAUSE (disease or injury that initiated events resulting in death) LAST b DUE TO (OR AS A CONSEQUENCE OF)

c DUE TO (OR AS A CONSEQUENCE OF)

d DUE TO (OR AS A CONSEQUENCE OF)

30 PART II - Other significant conditions contributing to death but not resulting in underlying cause given in Part I.

31 32

WAS AUTOPSY PERFORMED? (Yes or No) WERE AUTOPSY AVAILABLE PRIOR TO COMPLETION OF DEATH? (Yes or No)

33 34

35c Work Inj

35f Place

36-37 Cert

38

39

40a Pron

CERTIFIER

Pronouncement of Death Form (R-302) on File:

PERMANENT
BLACK INK ONLY

34 MANNER OF DEATH DATE OF INJURY (Mo. Day, Yr.) TIME OF INJURY (Mo. Day, Yr.) INJURY (Yes or No)

NATURAL HOMICIDE COULD NOT BE DETERMINED

ACCIDENT SUICIDE PENDING INVESTIGATION

35a 35b 35c 35d 35e 35f

36a To the best of my knowledge, death occurred at the time, date, and place and due to the cause(s) stated

(Signature and Title)

DATE SIGNED (Mo. Day, Yr.) HOUR OF DEATH

36b 36c M

NAME OF ATTENDING PHYSICIAN IF NOT CERTIFIER

36d

NAME AND ADDRESS OF CERTIFYING PHYSICIAN OR MEDICAL EXAMINER (Type or Print)

37a On the basis of examination and/or investigation in my opinion death occurred

date, place and due to the cause(s) stated

(Signature and Title)

DATE SIGNED (Mo. Day, Yr.) HOUR OF DEATH

37b 37c

PRONOUNCED DEAD (Mo. Day, Yr.) PRONOUNCED DEAD

37d 37e

LICENSE NO. OF CE

38 WAS THERE A IF YES, DATE IF YES, TIME 40d NAME OF PRONOUNCER TITLE

PRONOUNCEMENT FORM? PRONOUNCED PRONOUNCED M

(Yes or No) (Mo. Day, Yr.) (Mo. Day, Yr.)

40a 40b 40c M

DATE BURIAL PERMIT ISSUED RECEIVED IN THE CITY/TOWN OF DATE OF RECORD

SIGNATURE OF OF CLERK'S SIGNATURE

HEALTH AGENT 41 42

43



DEPARTMENT OF PUBLIC HEALTH
REGISTRY OF VITAL RECORDS AND STATISTICS
REPORT OF FETAL DEATH

DATE OF RECORD

STATE USE ONLY

FACILITY NUMBER	FACILITY NAME (IF NOT HOSPITAL, GIVE STREET AND NUMBER)			DATE OF DELIVERY (Month Day Year)		
FETUS	CITY/TOWN OF DELIVERY	COUNTY OF DELIVERY	TIME OF DELIVERY	PLACE OF DEATH		
				PLURALITY	BIRTH ORDER	
MOTHER	SEX	WEIGHT	WEEKS GESTATION AT DELIVERY DATE	DIED BEFORE LABOR / DURING LABOR OR DELIVERY		
	CURRENT NAME FIRST MIDDLE LAST					
	MAIDEN SURNAME	DATE OF BIRTH	CITY AND STATE/COUNTRY OF BIRTH			
	RESIDENCE ADDRESS NUMBER AND STREET CITY TOWN		COUNTY	STATE	ZIP	
FATHER	CURRENT NAME FIRST MIDDLE LAST					
	DATE OF BIRTH		CITY AND STATE/COUNTRY OF BIRTH			
CAUSE OF FETAL DEATH	ENTER ONLY ONE CAUSE PER LINE FOR (a), (b), and (c)				SPECIFY FETAL OR MATERNAL	
PART I	IMMEDIATE CAUSE (a)					
	DUE TO OR AS A CONSEQUENCE OF (b)					
	DUE TO OR AS A CONSEQUENCE OF (c)					
PART II	OTHER SIGNIFICANT CONDITIONS OF THE FETUS OR THE MOTHER					
	WAS THE CASE REFERRED TO A MEDICAL EXAMINER?	WAS AN AUTOPSY PERFORMED?	WERE AUTOPSY FINDINGS AVAILABLE PRIOR TO THE COMPLETION OF CAUSE OF DEATH?			
	DATE OF INJURY (MATERNAL)	TIME OF INJURY	INJURY AT WORK	PLACE OF INJURY		
	DESCRIBE HOW INJURY OCCURRED		LOCATION OF INJURY			
CERTIFIER	I HEREBY CERTIFY that this delivery occurred on the date stated and the product of conception was not a live birth.					
	Signature of Certifying Physician or Medical Examiner			TITLE	LICENSE #	
	Type or Print - Name of Certifying Physician or Medical Examiner					
ATTENDANT (if different)	STREET ADDRESS CITY/TOWN STATE ZIP CODE				LICENSE #	
DISPOSITION	METHOD	PLACE OF DISPOSITION (Name of Cemetery, Crematory, or other facility)			LOCATION (City or Town and State)	
	FUNERAL SERVICE LICENSEE (If any)					LICENSE #
	NAME OF FACILITY (If any)				DATE OF DISPOSITION	
PERMIT	DATE PERMIT ISSUED		CITY/TOWN ISSUING	ISSUED BY (signature of Health Agent):		

INSTRUCTIONS: Complete a Report of Fetal Death only for fetal deaths of twenty weeks or more gestation OR of a weight of 350 grams or more. Complete front and reverse sides of form within 10 days and send original copy to:

Registry of Vital Records and Statistics/ Natality Data Unit - FD,
150 Mt. Vernon Street, 1st Floor, Dorchester, MA 02125

When forwarding for disposition permit: Do not send the original report to the local Board of Health. Photocopy and forward only the FRONT of this form. The original report must be sent to the Department of Public Health at the address listed above.

**THIS CERTIFICATE IS
NOT TO BE USED
OUTSIDE OF
MASSACHUSETTS.
NOT VALID AFTER:**

THIS IS A PERMANENT RECORD
Use only permanent black ink or
approved black typewriter ribbon. Every
item of information must be carefully
supplied. ALTERATIONS AND ERASURES
IN THIS CERTIFICATE ARE
FORBIDDEN. PENALTY FOR VIOLA-
TION, ONE HUNDRED DOLLARS.

MGL c 207, §§ 28, 28A, 48, 49, 54, 57
and c 46, § 18.

COMMISSION
ON FILE



The Commonwealth of Massachusetts
DEPARTMENT OF PUBLIC HEALTH
REGISTRY OF VITAL RECORDS AND STATISTICS

CERTIFICATE OF MARRIAGE

(State file number)

(City or town making application)

Registered No. _____

Intention No. _____

1 Place of Marriage _____
City or Town _____
(Do not enter name of village or section of city or town) _____

2 Date of Marriage _____
(Month) _____ (Day) _____ (Year) _____

3 FULL NAME PARTY A _____

11 FULL NAME PARTY B _____

3A SURNAME
AFTER MARRIAGE

11A SURNAME
AFTER MARRIAGE

4 DATE OF BIRTH _____

5 OCCUPATION _____

12 DATE OF BIRTH _____

13 OCCUPATION _____

6 RESIDENCE
NO. & ST. _____
CITY/
TOWN _____ ST. _____ ZIP CODE _____

14 RESIDENCE
NO. & ST. _____
CITY/
TOWN _____ ST. _____ ZIP CODE _____

7 NUMBER OF
MARRIAGE
(1st, 2nd, 3rd, etc.)

7A WIDOWED
OR DIVORCED

15 NUMBER OF
MARRIAGE
(1st, 2nd, 3rd, etc.)

15A WIDOWED
OR DIVORCED

8 BIRTHPLACE

(City or town)

(State or country)

(City or town)

(State or country)

9 NAME OF
MOTHER/PARENT

17 NAME OF
MOTHER/PARENT

10 NAME OF
FATHER/PARENT

18 NAME OF
FATHER/PARENT

19 THE INTENTION OF MARRIAGE by the above-mentioned persons was duly entered by me in the records of the Commonwealth of Massachusetts according to law, this _____ day of _____

COURT WAIVER Issued _____ by _____
 AGE ORDER (Month) _____ (Year) _____

(City or Town Clerk or Registrar)

20 I HEREBY CERTIFY that I solemnized the marriage of the above-mentioned persons at No. _____
(If marriage was solemnized in a church, give its NAME instead of street and number)

(Name of city or town)

(Month)

(Day)

(Year)

Signature _____

(Member of the Clergy, Priest, Rabbi, Imam, or Justice of the Peace)

(Print or type name)

Address _____

21 Certificate recorded by city or town clerk

(Month) _____ (Day) _____ (Year) _____

CLERK OR REGISTRAR

22 PARTY A SEX: MALE FEMALE

23 PARTY B SEX: MALE FEMALE

S
O
L
E
M
N
I
Z
E
R



SAMPLE

The Commonwealth of Massachusetts
 DEPARTMENT OF PUBLIC HEALTH
 REGISTRY OF VITAL RECORDS AND STATISTICS
 CERTIFICATE OF ABSOLUTE
 DIVORCE OR ANNULMENT
 (Chap. 208, Sec. 46 G.L.)
 R-408

HUSBAND - NAME

FIRST

MIDDLE

LAST

USUAL RESIDENCE - STREET ADDRESS

CITY, TOWN OR LOCATION

2a

COUNTY

STATE

2c

WIFE - NAME

FIRST

MIDDLE

LAST

NUMBER OF THIS MARRIAGE (1st, 2nd, Specify)

USUAL RESIDENCE - STREET ADDRESS

CITY, TOWN OR LOCATION

5a

COUNTY

STATE

6c

DATE OF THIS MARRIAGE
(Mo. Day Yr.)

NUMBER OF CHILDREN BORN ALIVE OF THIS MARRIAGE

DATE OF BIRTH (Mo. Day Yr.)

NUMBER OF THIS MARRIAGE (1st, 2nd, Specify)

9

10a

7

8

NUMBER OF CHILDREN UNDER AGE 18 IN THIS FAMILY

10b

FOR COURT USE ONLY

COUNTY OF JUDGMENT

TITLE OF COURT

11

DATE OF JUDGMENT NISI (Mo. Day Yr.)

TYPE OF JUDGMENT - DIVORCE OR ANNULMENT
(Specify)

DATE OF JUDGMENT ABSOLUTE (Mo. Day. Yr.)

12

13

14

DOCKET NUMBER

NAME OF PLAINTIFF

CAUSE FOR WHICH GRANTED

15

16

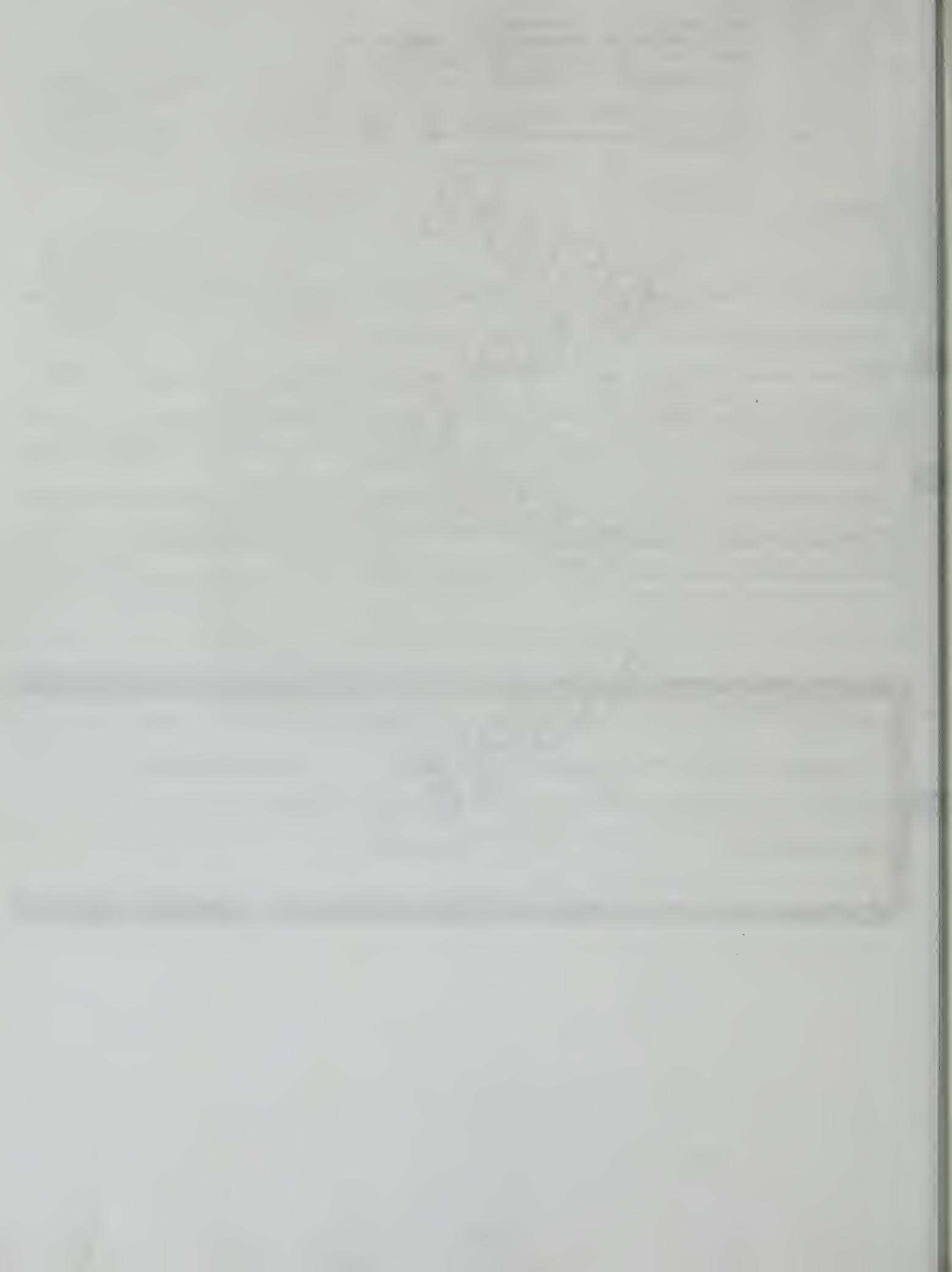
17

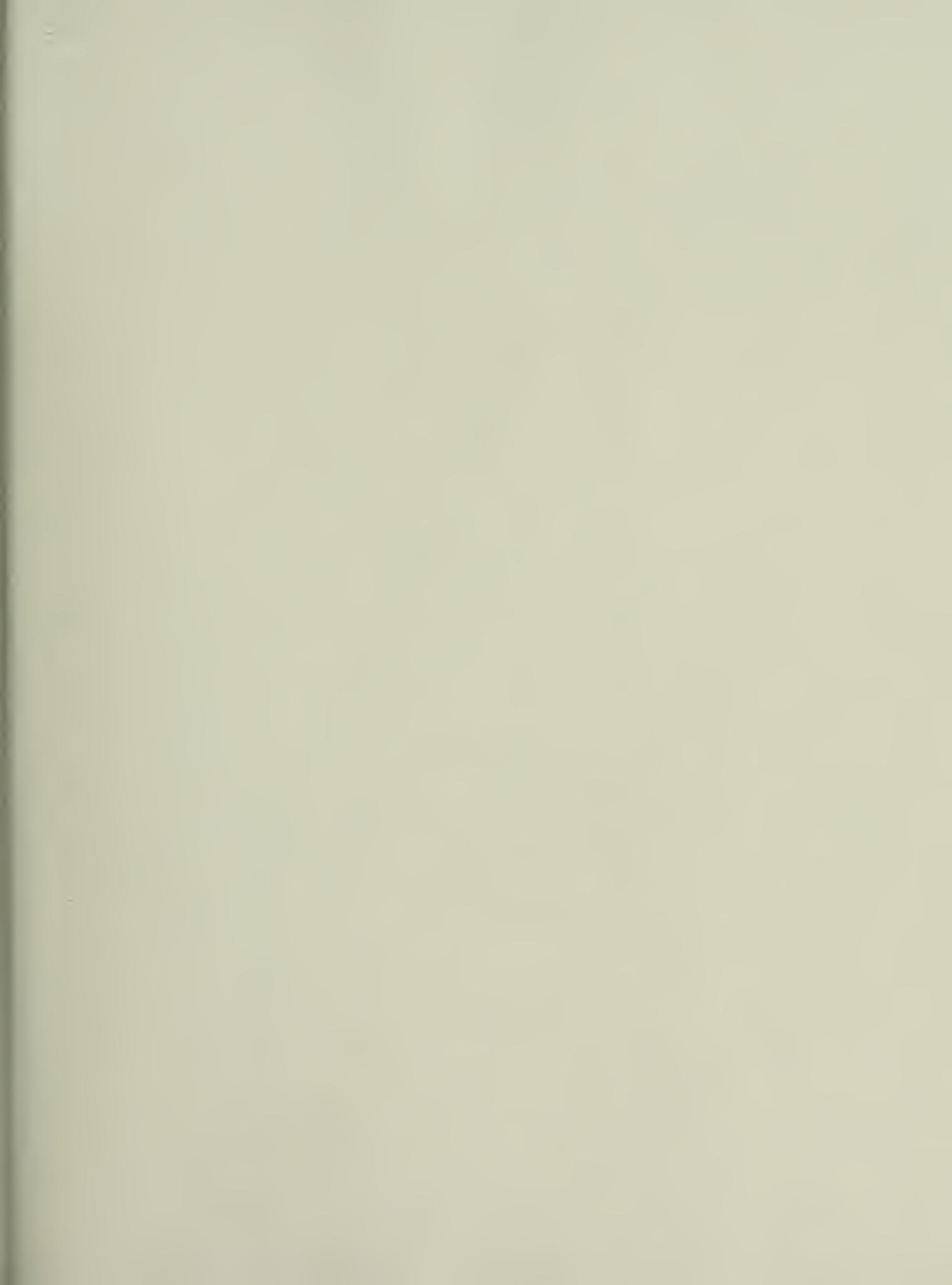
SIGNATURE OF CERTIFYING OFFICIAL

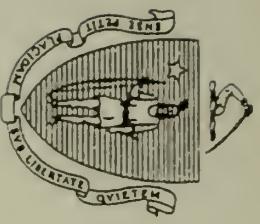
TITLE OF OFFICIAL

18a

18b







Massachusetts Department of Public Health
Center for Health Information, Statistics, Research and Evaluation
Registry of Vital Records and Statistics
150 Mt. Vernon Street, 1st floor
Dorchester MA 02125-3105