THE HEALTH OF BOSTON 2007

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prepared by
THE BOSTON PUBLIC HEALTH COMMISSION
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PREFACE

In 1995, the Legislature passed and the Governor signed legislation establishing the Boston Public Health Commission and requiring it to submit annual reports on various matters related to public health in the city of Boston no later than the second Wednesday in March each fiscal year. *The Health of Boston 2007* report is the eleventh in a series of annual reports in response to this legislation.

ACKNOWLEDGMENTS

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THE HEALTH OF BOSTON 2007

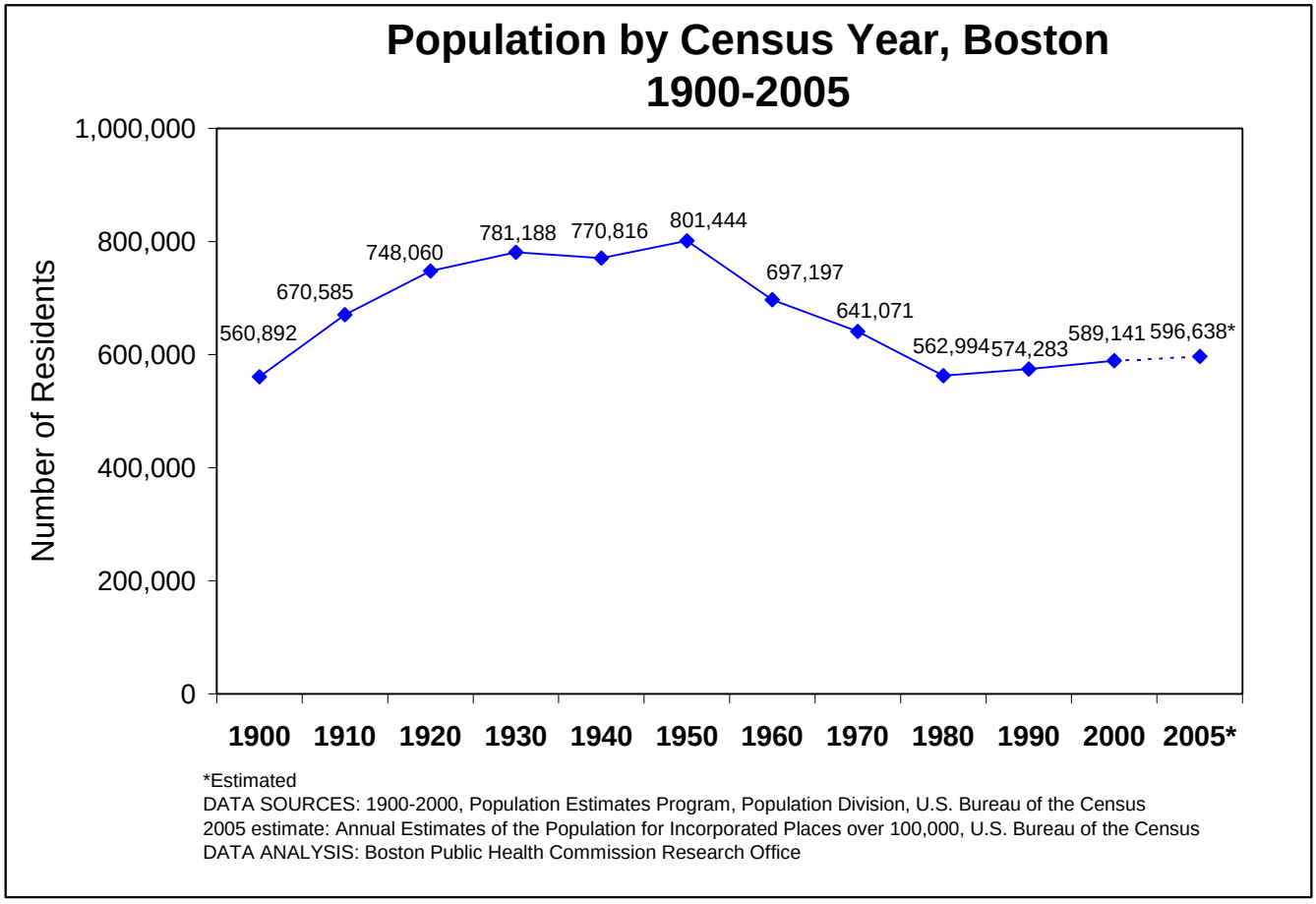
INTRODUCTION

Welcome to *The Health of Boston 2007*. This annual report has been prepared for readers who want an extensive yet readily usable source of Boston health data. We hope that readers will find the report to be a good resource for grant proposal preparation, community program development, monitoring of health trends, general reference, and similar purposes.

The data presented in this report are the most recent available to us at this time for publication. Background information about Boston's 16 neighborhoods has been included to provide readers with a context for understanding the health data presented in *The Health of Boston 2007*. Details about rate calculations, data quality, and related issues can be found in the Technical Notes section.

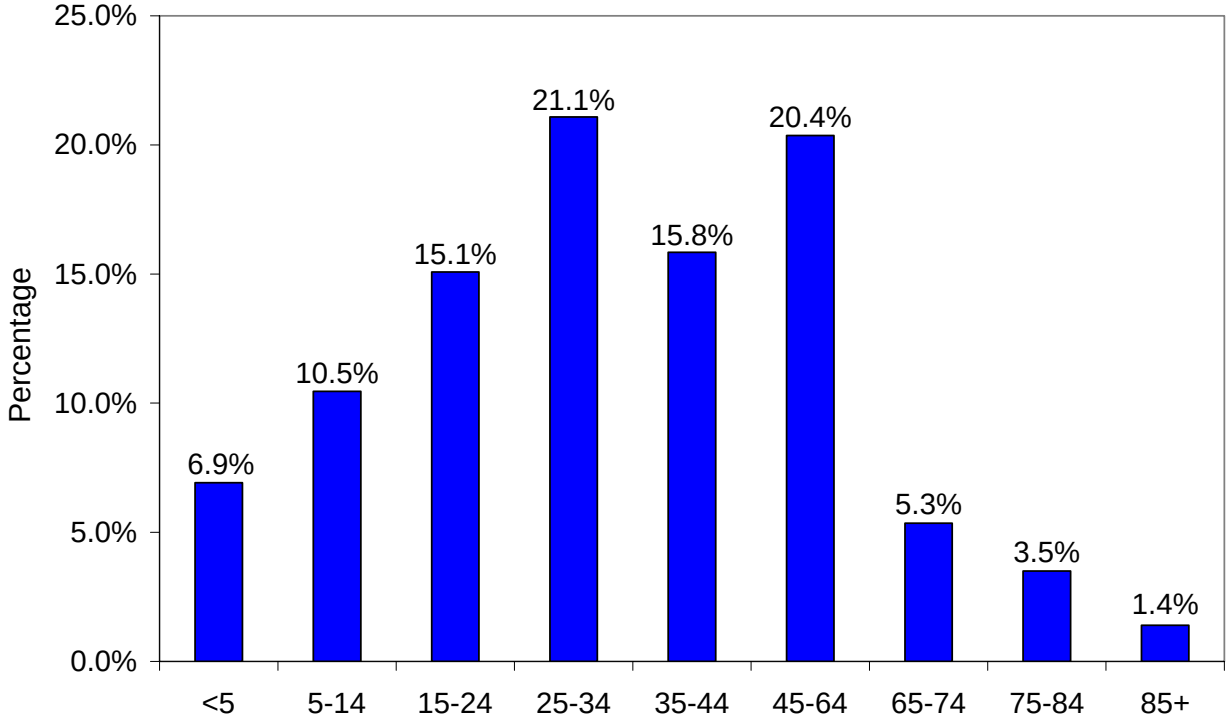
We always welcome comments from readers, and all Boston Public Health Commission reports can be found online at www.bphc.org. Our phone number is (617) 534-4757.

Population Characteristics



- Over the past century, Boston's population changed dramatically in size, growing by 42.9% during the first fifty years, shrinking 29.8% over the next thirty years, and then slowly regaining ground with a 4.6% increase in population over the final twenty years.
- Between the 1910 and 1920 census, Boston's population grew by 77,475. This large increase in population could possibly be a consequence of the annexation of Hyde Park in 1912.
- At its recent low point in 1980, the city's population (562,994) was similar to its level in 1900 (560,892).
- The most recent census count, in 2000 (589,141), represented a ten-year increase of 2.6%.
- The U.S. Bureau of the Census originally estimated that Boston's 2000 population had decreased to approximately 559,034 as of 2005; however, the Census issued a revised estimate for 2005 of 596,638 Boston residents. This revised estimate represents an increase of 6.7%.

Population Characteristics



	<5	5-14	15-24	25-34	35-44	45-64	65-74	75-84	85+
Count	36,035	54,442	78,536	109,780	82,507	106,031	27,852	18,227	7,292

DATA SOURCE: US Department of Commerce, Bureau of the Census, American FactFinder, American Community Survey 2005
DATA ANALYSIS: Boston Public Health Commission Research Office

- The U.S. Bureau of the Census revised estimate of 596,638 for Boston's overall population in 2005 is not available by age, race/ethnicity, sex, poverty level, and neighborhood, but the Census does make available survey data that provides these breakdowns, based on an estimated total population of 520,702[1].

- Using this survey estimate, Boston residents ages 25-64 accounted for about fifty-seven percent of the population in 2005.

- Children under the age of 5 were 6.9%, and adults ages 65 and over 10.2%, of the estimated 2005 Boston population.

[1] See Technical Notes for further information on population estimation.

Population Characteristics

Population by Race/Ethnicity and Year: Counts and Percentage Distributions, Boston, 1900-2005								
American Indian, Eskimo, and Aleut			Asian and Pacific Islander			Black		
Year	Count	Percentage	Year	Count	Percentage	Year	Count	Percentage
1900	3	0.0%	**1900**	1,215	0.2%	**1900**	11,591	2.1%
1910	51	0.0%	**1910**	1,274	0.2%	**1910**	13,564	2.0%
1920	34	0.0%	**1920**	1,191	0.2%	**1920**	16,350	2.2%
1930	43	0.0%	**1930**	1,789	0.2%	**1930**	20,574	2.6%
1940	76	0.0%	**1940**	1,595	0.2%	**1940**	23,679	3.1%
1950	208	0.0%	**1950**	2,202	0.3%	**1950**	40,057	5.0%
1960	549	0.1%	**1960**	4,210	0.6%	**1960**	63,165	9.1%
1970	1,047	0.2%	**1970**	8,218	1.3%	**1970**	104,707	16.3%
1980	1,302	0.2%	**1980**	14,910	2.7%	**1980***	122,203	21.7%
1990	1,531	0.3%	**1990**	29,640	5.3%	**1990***	136,887	23.8%
2000*	1,517	0.3%	**2000***	44,009	7.5%	**2000***	140,305	23.8%
2004*	*711*	*0.1%*	***2004****	*46,395*	*8.9%*	***2004****	*138,439*	*26.4%*
2005*	*1,373*	*0.3%*	***2005****	*45,359*	*8.7%*	***2005****	*122,256*	*23.5%*
Hispanic Origin (of any Race)			Other Race			White		
Year	Count	Percentage	Year	Count	Percentage	Year	Count	Percentage
1900	--	--	**1900**	--	--	**1900**	548,083	97.7%
1910	--	--	**1910**	--	--	**1910**	655,696	97.8%
1920	--	--	**1920**	--	--	**1920**	730,485	97.7%
1930	26	0.0%	**1930**	--	--	**1930**	758,782	97.1%
1940	877	0.1%	**1940**	--	--	**1940***	744,589	96.6%
1950	--	--	**1950**	277	0.0%	**1950**	758,700	94.7%
1960	--	--	**1960**	569	0.1%	**1960**	628,704	90.2%
1970	--	--	**1970**	2,390	0.4%	**1970***	509,768	81.8%
1980	36,068	6.4%	**1980***	6,473	1.1%	**1980***	382,123	67.9%
1990	61,955	10.8%	**1990***	5,536	1.0%	**1990***	338,734	59.0%
2000	85,089	14.4%	**2000***	8,215	1.4%	**2000***	291,561	49.5%
2004	*74,627*	*14.3%*	***2004****	*8,986*	*1.0%*	***2004****	*247,784*	*47.3%*
2005	*76,494*	*14.7%*	***2005****	*15,606*	*3.0%*	***2005****	*253,237*	*48.6%*

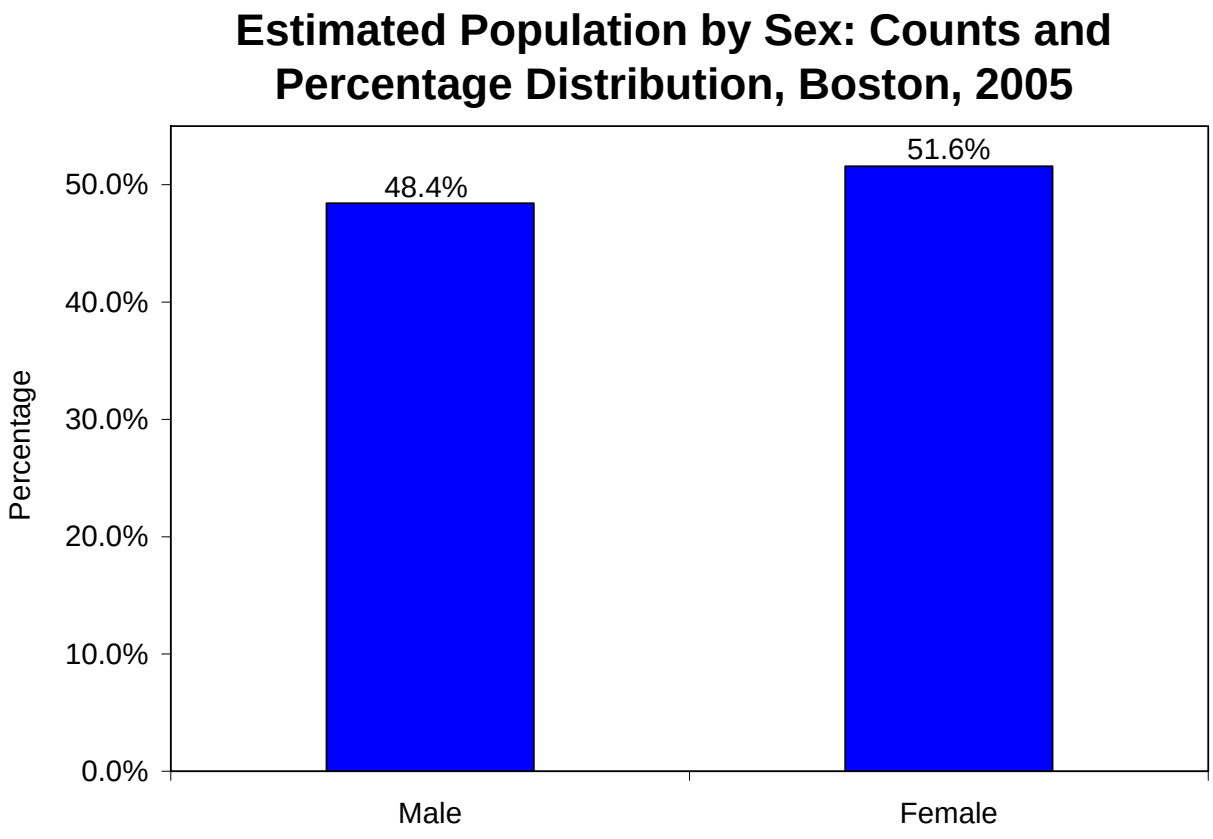
-- Data not collected in this census
* Non-Latino residents of the specified race group only
NOTES: In 2000, an additional 18,174 Boston residents reported belonging to two or more race groups. Population figures for 2004 and 2005 are estimates. In 2004 and 2005, an additional 6,741 and 6,377 Boston residents were estimated to belong to two or more race groups, respectively.
DATA SOURCE: Population Division, Working Paper No. 76, U.S. Census Bureau
DATA ANALYSIS: Boston Public Health Commission Research Office

- The U.S. Bureau of the Census has used a variety of classifications to report on race and ethnicity, modifying them as the American population has changed. (See Technical Notes for details.)

- The population of Boston has become increasingly diverse. In 1900, 97.7% of Boston's 560,892 residents reported that they were White, 2.1% said they were Black, and 0.2% reported being Asian or Pacific Islander. Boston had only 3 American Indian, Eskimo or Aleut residents, and Hispanic or Latino ethnicity was not recorded separately.

- One hundred years later, just under half of the population (49.5%) was non-Latino White, one in four (23.8%) were non-Latino Black, 14.4% were Latino, and 7.5% were Asian or Pacific Islander.

Population Characteristics



	Male	Female
Count	252,170	268,532

DATA SOURCE: US Department of Commerce, Bureau of the Census, American FactFinder, American Community Survey 2005
DATA ANALYSIS: Boston Public Health Commission Research Office

- A slightly higher number of females than males made up the estimated Boston population of 520,702 in 2005.

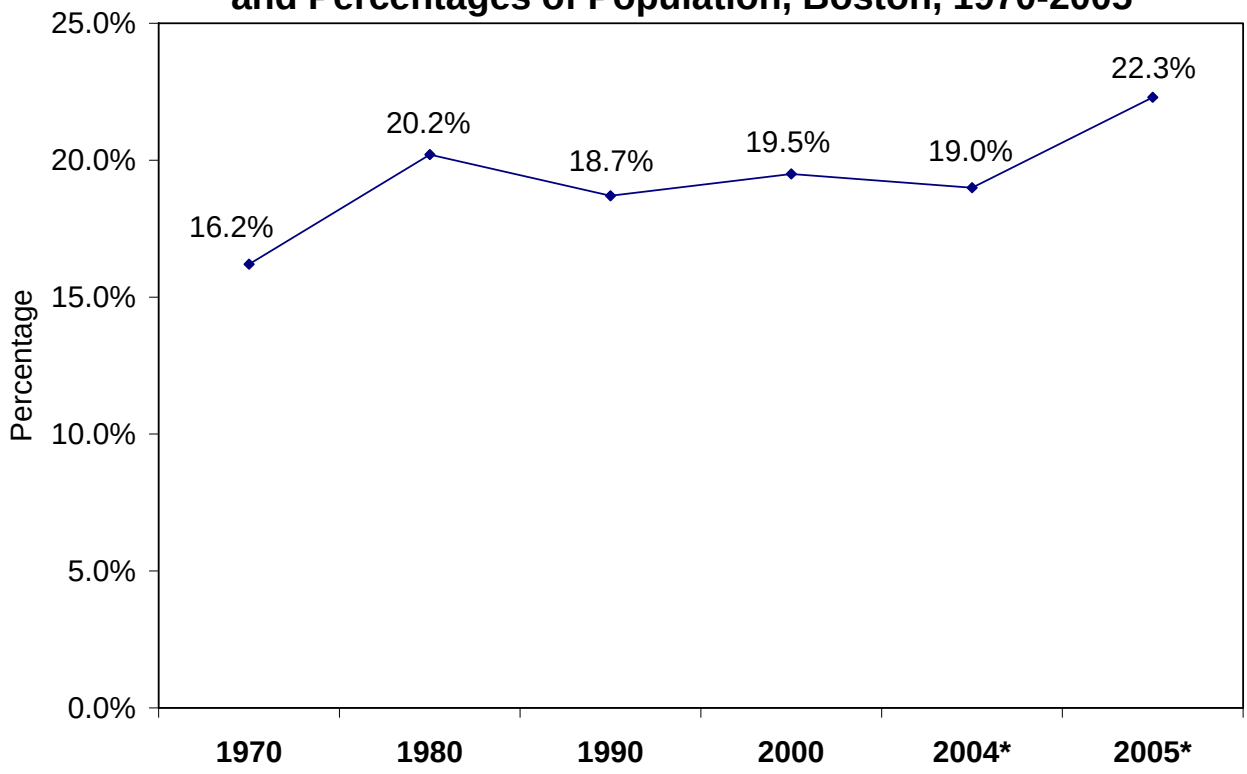
Population Characteristics

Population by Neighborhood, Boston 1990 and 2000			
Neighborhood	**Total Population 1990**	**Total Population 2000**	**Percentage Change 1990-2000**
Allston/Brighton	70,284	69,648	-0.9%
Back Bay/Beacon Hill/West End	35,690	36,235	1.5%
Charlestown	14,718	15,195	3.2%
East Boston	32,941	38,413	16.6%
Fenway	27,333	29,823	9.1%
Hyde Park	32,644	34,420	5.4%
Jamaica Plain	32,032	29,482	-8.0%
Mattapan	19,585	19,724	0.7%
North Dorchester	77,348	83,212	7.6%
North End	12,152	12,114	-0.3%
Roslindale	33,185	35,047	5.6%
Roxbury	53,828	50,349	-6.5%
South Boston	29,433	29,938	1.7%
South End	30,926	33,502	8.3%
South Dorchester	43,663	45,291	3.7%
West Roxbury	27,239	26,108	-4.2%
TOTAL	**574,283**	**589,141**	**2.6%**

DATA SOURCE: Census 2000, US Department of Commerce, Bureau of the Census, American FactFinder
DATA ANALYSIS: Boston Public Health Commission Research Office

- Between 1990 and 2000, Boston's overall population increased 2.6%. However, across Boston neighborhoods, population changes between 1990 and 2000 ranged from a 16.6% increase in East Boston to an 8.0% decrease in Jamaica Plain.
- Eleven of Boston's 16 neighborhoods experienced an increase in population between 1900 and 2000.
- Population figures beyond the year 2000 are not presented because the U.S. Census does not make population estimates available at the neighborhood level.

Population Characteristics



	1970	1980	1990	2000	2004*	2005*
Count	99,262	106,770	102,092	109,128	98,989*	116,110

*Estimated
DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American FactFinder, 2005 American Community Survey, U.S. Department of Commerce, Bureau of the Census, American FactFinder, 2004 American Community Survey, Census 2000, Census 1990 Summary File-Sample Data, Census 1980, Census 1970
DATA ANALYSIS: Boston Public Health Commission Research Office

- The federal poverty threshold for a family of four was $19,971 in 2005. The figures shown in the chart, however, have been adjusted by the Census to account for different family sizes and family compositions. (Additional children, for instance, affect a family's status less than additional adults).

- In 2000, 19.5% of the overall Boston population lived in households with income below the federal poverty threshold. In 2005, the U.S. Census Bureau estimated the percentage living in poverty to be 22.3%.

- In 2005, the estimated percentage of Boston males and females with incomes below the federal poverty threshold were similar, with 21.8% of males and 22.9% of females living below the federal poverty threshold (data not shown).

Population Characteristics

Population Living in Poverty by Age: Counts and Percentages of Population, Boston, 2005

	Percentage
All ages	22.3%
Less than 18 years	32.8%
18-64 years	19.2%
65+ years	22.3%

	Count
All ages	116,110
Less than 18 years	35,403
18-64 years	68,810
65+ years	11,897

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American FactFinder, 2005 American Community Survey
DATA ANALYSIS: Boston Public Health Commission Research Office

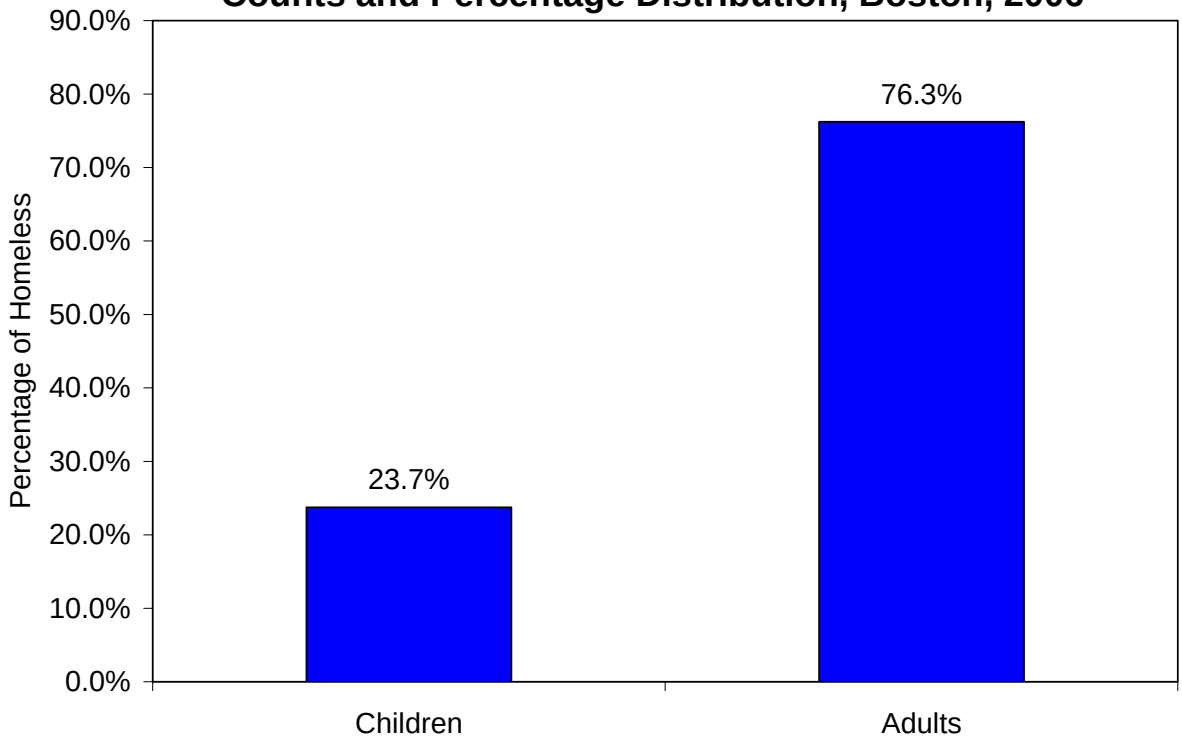
- In 2005, an estimated 22.3% of the Boston population lived in households with income below the federal poverty threshold.
- The estimated percentage of children living in poverty for 2005 was 24.5% higher than the 2004 estimate (data not shown).

Population Characteristics

- Homelessness is defined here as residency on the streets, in a shelter, or temporarily in a medical facility, but without permanent housing.
- According to the 2006 homeless census for Boston, there were 6,413 women, men, and children who were homeless.
- Between 2005 and 2006, the number of homeless persons in Boston increased less than 1%, from 6,365 to 6,413. However, the 2006 count is the highest since 1992.

Population Characteristics

Homeless Residents by Age (Children and Adults): Counts and Percentage Distribution, Boston, 2006

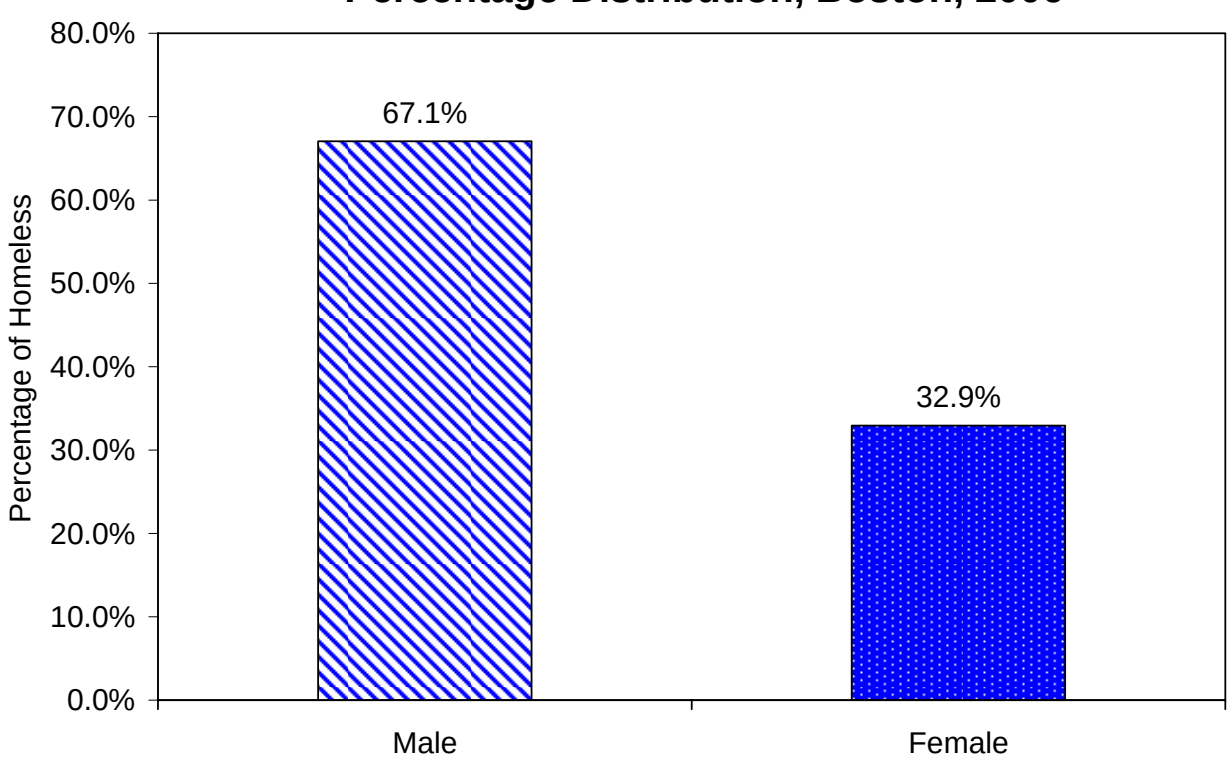


	Children	Adults
Count	1,523	4,890

NOTE: Children are defined in this chart as Boston residents under the age of 18.
DATA SOURCE: Homeless Counts, City of Boston Emergency Shelter
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2006, adults accounted for about three quarters of homeless Boston residents.
- Between 2005 and 2006, the percentage of Boston's homeless residents who were children increased from 21.3% to 23.7% (data not shown).

Population Characteristics



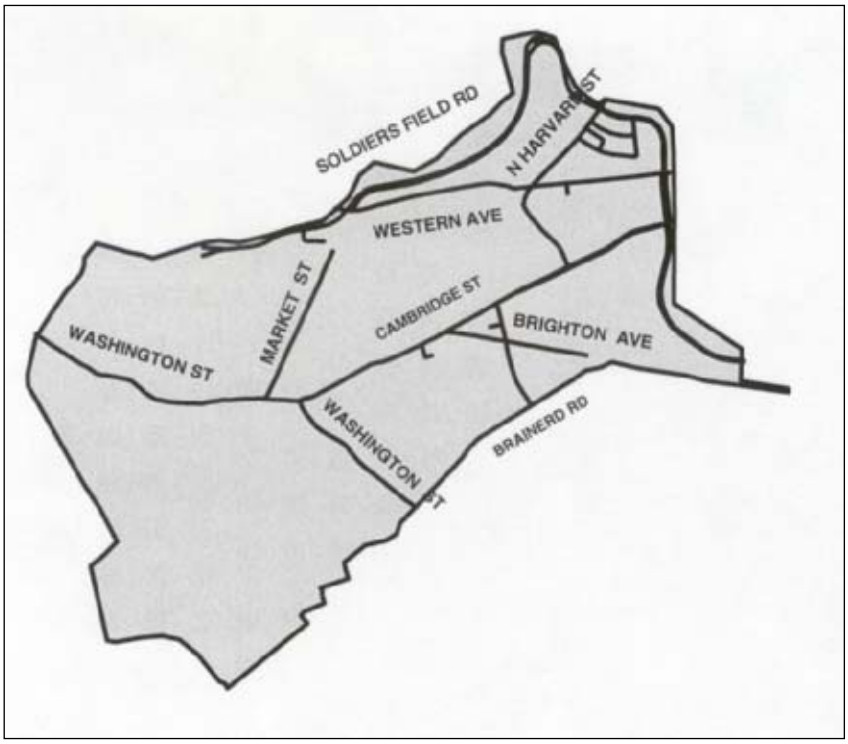
	Male	Female
Count	3,279	1,611

NOTE: These figures exclude homeless residents under the age of 18.
DATA SOURCE: Homeless Counts, City of Boston Emergency Shelter
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2006, there were more than twice as many homeless men as homeless women among Boston residents.
- Between 2005 and 2006, the percentage of Boston's adult homeless residents who were female increased slightly from 31.1% to 32.9%.

INTRODUCTION TO BOSTON NEIGHBORHOODS

Allston/Brighton



Allston/Brighton was first a part of Watertown and then a section of Cambridge called Little Cambridge. In 1807, the neighborhood ceded from Cambridge and took the name Brighton. Allston was created as a section of Brighton in 1868 when a new post office branch was named for painter Washington Allston. In 1873, Allston/Brighton was annexed to Boston.

With a population of 69,648, Allston/Brighton is one of Boston's largest neighborhoods. It has a large college student presence drawn by its proximity to several major universities including Boston College, Boston University, and Harvard University. According to the 2000 census, almost one-third (29.8%) of the neighborhood's population was age 18 to 24, and 3,720 persons lived in group quarters, primarily college dorms.

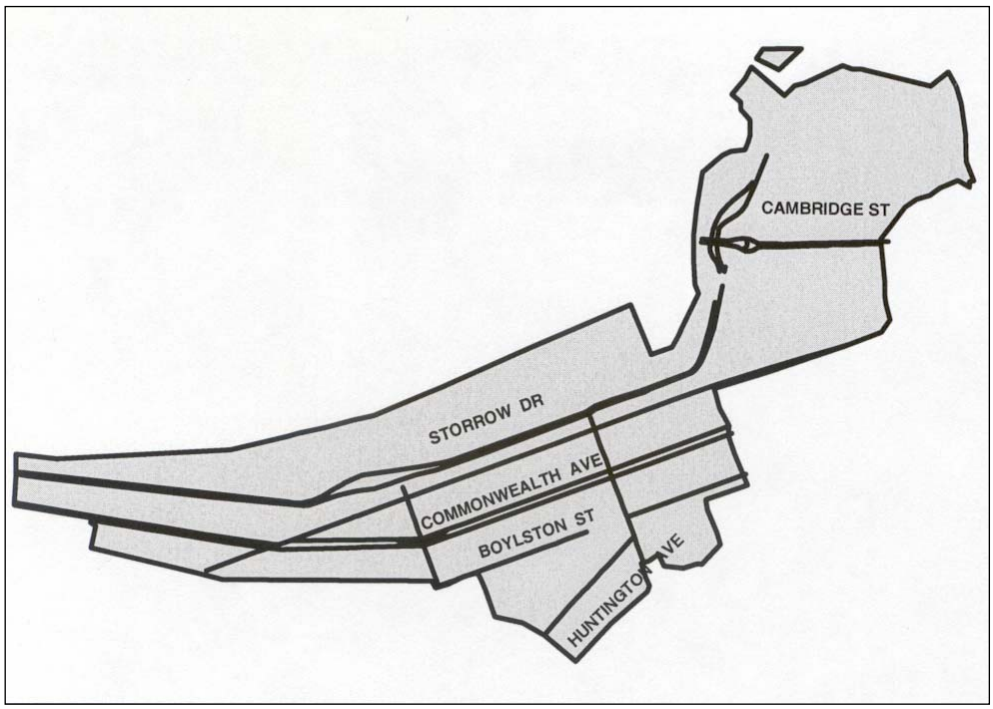
Between 1990 and 2000, the number of Asian residents increased by 2,240 while the number of Black and White residents decreased by 1,540 and 3,560, respectively. In 2000, 68.7% of the population was White, 13.8% was Asian/Pacific Islander, 9.1% was Latino, and 4.5% was Black.

Just over one-third (36.3%) of Allston/Brighton residents speak a language other than English at home. Other than English, the primary languages spoken at home are Spanish (by 8.5% of the population), Chinese (7.6%), Russian (5.3%), and Portuguese/Portuguese Creole (3.1%).

About two-thirds (68.4%) of residents were born in the United States, including 0.9% who were born in Puerto Rico. Other countries in which residents were born include China (5.5%), Brazil (2.7%), Russia (2.3%), Ireland (2.0%), Ukraine (1.7%), and El Salvador (1.0%).

Introduction to Boston Neighborhoods

The Back Bay/Beacon Hill/The West End



The Back Bay/Beacon Hill/The West End area, known as Shawmut by Native Americans, was a narrow peninsula distinguished by a three-peaked hill called Trimount. In 1625, Rev. William Blackstone, an Anglican minister, became the first European colonist to settle in the area. The Massachusetts Bay Company, a group of Puritan businessmen, arrived in 1830 and renamed the area Boston. In 1803, to accommodate a growing need for land, Trimount was reduced in height as its land was removed and used as fill to expand the land mass in the North End and other areas of Boston. In the last half of the 1800s, the tidewater flats of the Charles River were filled in to create the Back Bay. The neighborhood's famous brownstones were built on pilings sunk into this former marshland.

The total population in the Back Bay-Beacon Hill neighborhood in 2000 was 36,235, an increase of 1.5% from 1990. Relatively minor changes occurred in the racial/ethnic composition of the neighborhood between 1990 and 2000. The percentages of both White and Black residents decreased slightly from 86.2% to 80.9% for Whites, and from 3.6% to 3.4% for Blacks. At the same time, the percentage of Asian residents increased from 6.1% to 8.8% and the percentage of Latino residents increased from 4.0% to 4.7%.

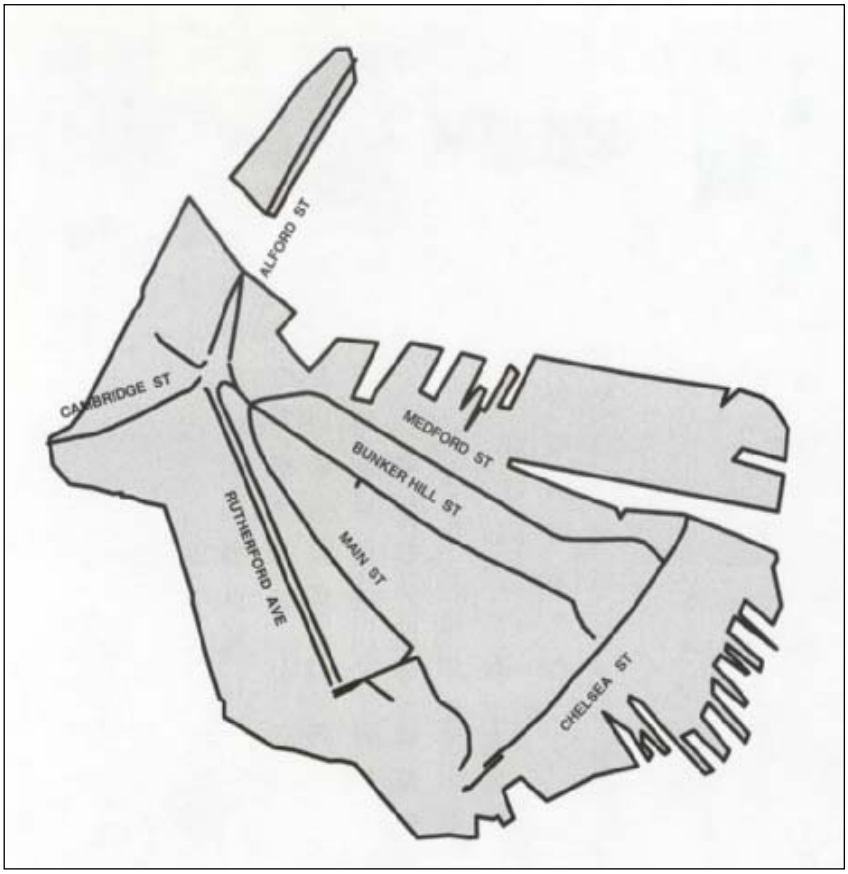
English is spoken at home by 79.4% of the residents. Other than English, the primary languages spoken at home are Spanish, by 4.3% of the population, Chinese by 2.5% of the population, and French by 2.3% of the population.

Most residents (83.4%) were born in the United States (including 0.4% who were born in Puerto Rico); 15.2% were born in another country, the largest numbers of these being from China (1.3%), The United Kingdom (1.0%), Japan (1.0%), and Korea (1.0%).

Introduction to Boston Neighborhoods

Charlestown

Charlestown was settled in 1629 (one year before Boston) and became a city in 1847. In 1874, the City of Charlestown was annexed to Boston. Two of the most visited sites on Boston's Freedom Trail are in Charlestown. The Bunker Hill Monument commemorates one of the bloodiest and most destructive battles of the 1775 Revolutionary War. In this battle, Charlestown was burned to the ground. Although the battle was won by the British, the destruction served to rally the Colonists to support the Revolutionary War.



Charlestown's history and economic development were strongly influenced by the presence of the Charlestown Navy Yard, which operated between 1801 and 1973. The U.S. Navy's oldest commissioned ship, the U.S.S. Constitution, is docked in the Navy Yard.

Charlestown's total population in 2000 was 15,195, an increase of 3.2% from 1990. Though Charlestown remains a predominately White neighborhood, the increases in its Latino, Asian, and Black populations are significant. The percentage of White residents declined from 94.6% to 78.6% between 1990 and 2000, a decrease of 1,981 residents. Corresponding increases occurred in the Latino, Asian, and Black populations. These three groups combined were 4.9% of the population in 1990; in 2000, Latinos comprised 11.6%, Asians 5.0%, and Blacks 3.5% of the Charlestown population.

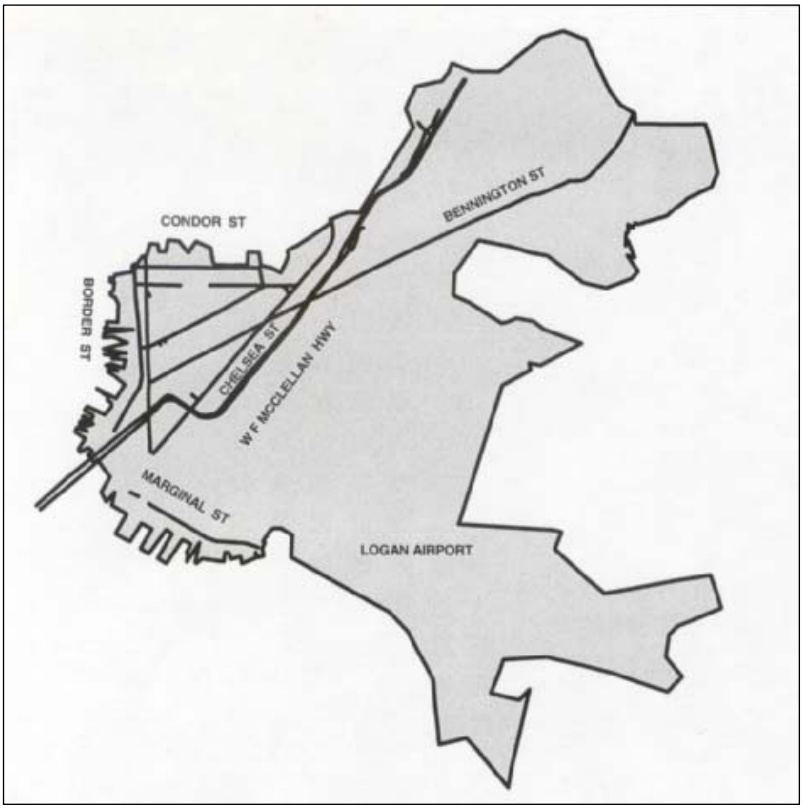
Most residents (81.5%) speak English at home; other primary languages are Spanish and Chinese, spoken by 9.8% and 3.1% of residents, respectively.

Most residents (84.7%) were born in the United States (including 1.4% who were born in Puerto Rico); 13.9% were born in another country, the largest numbers of these being from the Dominican Republic (4.2%) and China (2.4%).

Introduction to Boston Neighborhoods

East Boston

East Boston was created when five Boston Harbor Islands were expanded and connected. The project began in 1830 and took 150 years to complete. The two larger islands, Noodles and Hog Islands, now form the residential section of the neighborhood. Logan Airport, which takes up over half of the neighborhood's 2.5 miles, sits on Apple, Bird, and Governor's Islands.



Throughout its history, East Boston has served as home to various groups of immigrants. The Irish were the first group to settle in East Boston, followed by Russian Jews and Italians in the late 1800s. At the turn of the 20th century, East Boston was home to the largest Jewish community in New England. The neighborhood was predominately Italian for most of the 20th century and is now home to many immigrants from South and Central America, Asia, and the Caribbean.

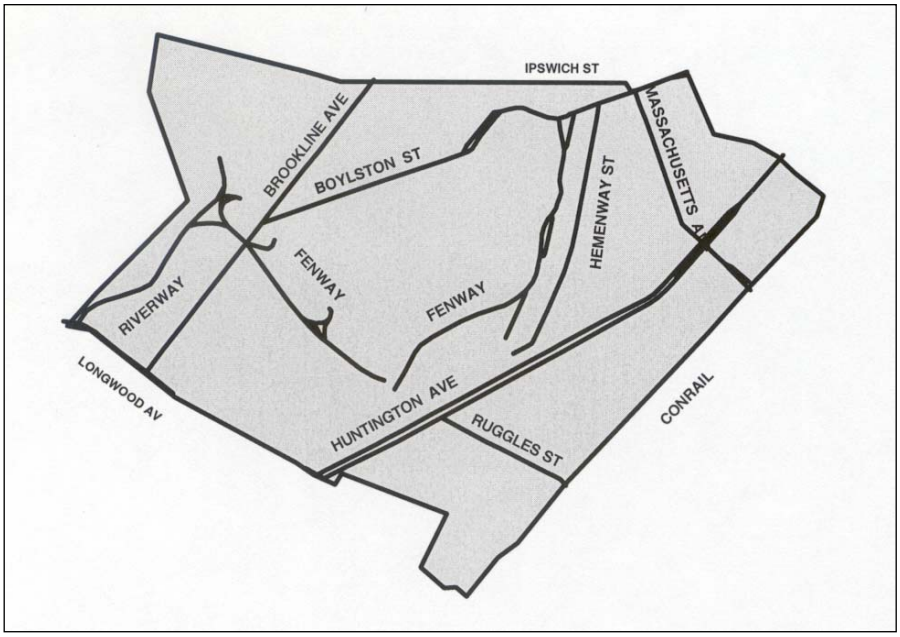
Of all Boston neighborhoods, East Boston has the highest percentage of recent immigrants; the 2000 census reported that fifteen percent of East Boston residents lived outside the United States in 1995. Between 1990 and 2000, the number of Latino residents increased by over 10,000, a 160.0% increase. In 2000, Latinos comprised 39.0% of the neighborhood, compared with 17.6% in 1990. East Boston is now home to the largest Latino community in Boston.

Over half (55.0%) of East Boston residents speak a language other than English at home. Spanish is the primary language spoken by 37.3% of residents, while 5.9% speak Italian, 4.6% speak Portuguese/Portuguese Creole, and 2.3% speak Vietnamese.

Just over half (56.4%) of East Boston residents were born in the United States, including 1.9% who were born in Puerto Rico. East Boston residents have immigrated from a number of other countries, including El Salvador (12.4%), Colombia (7.6%), Brazil (3.8%), Italy (2.6%), Vietnam (2.1%), Mexico (1.9%), Guatemala (1.6%), Peru (1.5%), and the Dominican Republic (1.3%).

Introduction to Boston Neighborhoods

The Fenway



The Fenway neighborhood was annexed to Boston in 1870 and was expanded in the same landfill project that created the Back Bay.

The number of cultural institutions located in the Fenway area (including Boston Symphony Hall, the Museum of Fine Arts, and the Isabella Stewart Gardner Museum) prompted the city to dub the neighborhood's Huntington Avenue the "Avenue of the Arts." The Longwood area includes many of the nation's leading medical institutions including Harvard Medical School, Brigham and Women's Hospital, and the Beth Israel/Deaconess Medical Center. The home of the Boston Red Sox, Fenway Park, is also located in the neighborhood.

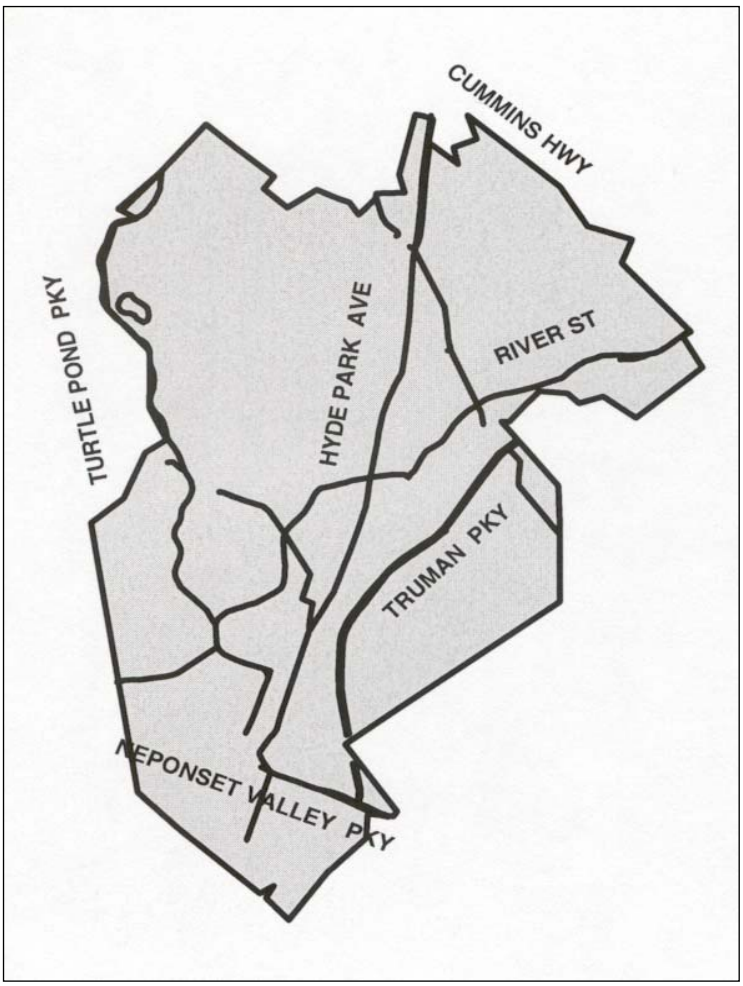
Between 1990 and 2000, the Fenway experienced a population increase of 9.1%. A total of 29,823 individuals lived in the neighborhood in 2000, compared with 27,333 in 1990. The largest increase was seen in the Asian population, which rose by 64.9%. In 1990, Asians made up 7.9% of the population, compared with 12.0% in 2000. Increases were also noted in the Latino and White populations, which increased by 16.1% and 4.6%, respectively. Although the actual number of White residents increased, their percentage share in the neighborhood decreased from 70.3% to 67.4%. The total number of Black residents decreased by 24.9% during the 1990s; their percentage share in the neighborhood also decreased from 12.2% to 8.4%.

English is the language spoken at home by 72.2% of residents followed by Spanish (7.8%), Chinese (3.0%), and Russian (2.0%).

About three-fourths (76.9%) of Fenway residents were born in the United States, including 0.4% who were born in Puerto Rico. Other countries in which residents were born include China (1.3%), Japan (1.7%), Korea (1.3%), Russia (1.0%), and India (1.0%).

Introduction to Boston Neighborhoods

Hyde Park



Hyde Park was known as "Tist" by the area's Wampanoag Indians. It was incorporated as a town in 1868 and in 1912, became the last neighborhood to be annexed to Boston.

The neighborhood has a large amount of open space, including the George Wright Golf Course and the 450-acre Stony Brook Reservation. In the 1800s, several prominent civil right activists, abolitionists and suffragists, including Sarah and Angelina Grimke and William Trotter Munroe, called this neighborhood home. The 54th Regiment, the renowned Black Civil War regiment trained at Camp Meigs in the Readville section of Hyde Park and the city's mayor, Thomas Menino, is a longtime resident of Readville as well. Camp Meigs became the site of the Readville Trotting Park, which raced horses and then cars from 1895 through 1937.

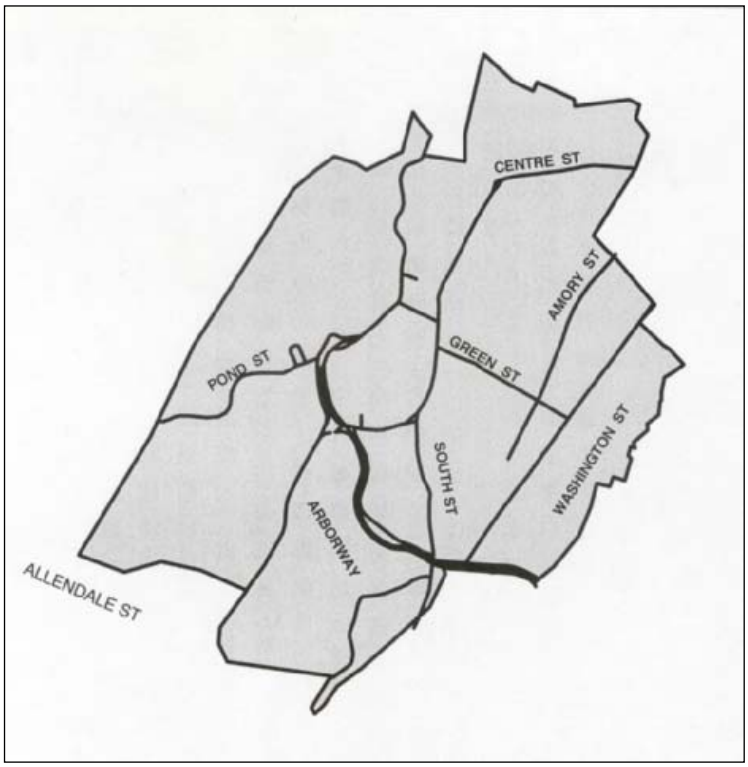
Although the total number of residents remained almost the same, Hyde Park experienced a significant shift in racial/ethnic composition during the 1990s. The total population in 2000 was 34,420, just 1,776 fewer than in 1990. The number of White residents decreased by 8,699, while the number of both Black and Latino residents increased by 6,195 and 2,949, respectively. Between 1990 and 2000, the percentage of White residents in Hyde Park decreased from 70.9% to 42.0%, while the percentage of Black residents rose from 22.3% to 39.2% and the percentage of Latino residents increased from 5.2% to 13.5%.

About two-thirds (65.4%) of residents speak English at home; 12.8% speak Spanish, 12.7% speak French Creole (including Haitian Creole), and 2.2% speak French.

About three-fourths (73.6%) were born in the United States, including 2.5% who were born in Puerto Rico. Other countries in which Hyde Park residents were born include Haiti (10.4%), Jamaica (1.7%), the Dominican Republic (1.6%), Nigeria (1.1%), and Trinidad/Tobago (1.0%).

Introduction to Boston Neighborhoods

Jamaica Plain



Jamaica Plain, originally part of the Town of Roxbury, was annexed to Boston in 1874. In the 1850s, breweries built on the Jamaica Plain/Roxbury line attracted German immigrants who settled around Hyde Square, and the availability of work in area factories also brought Irish immigrants to the neighborhood.

Jamaica Plain has much planned green space. In 1848, the beautiful Forest Hills Cemetery opened, with graves and monuments integrated into the natural landscape. Jamaica Pond and the Arnold Arboretum were incorporated into Boston's Emerald Necklace, Frederick Law Olmstead's world renowned linked series of parklands. Today, the neighborhood is a diverse one, with large Latino and gay and lesbian communities.

The population in Jamaica Plain decreased in size between 1990 and 2000. The total population in 2000 was 29,482, a decrease of 2,550, or 8.0%, from 1990. All populations decreased during this time. The White population decreased by 10.3%; the Black and Latino population decreased by 9.5% and 9.0% respectively. The decrease among the Asian population was 5.3%. The racial/ethnic composition of the neighborhood showed little change between 1990 and 2000. In 2000, the White population made up 51.1% of the population compared with 52.4% in 1990. Similarly, the Latino and Black population made up 29.1% and 14.7% of the population, respectively, compared with 29.4% and 14.9% in 1990. The Asian population made up 2.7% of the population in 1990 and 2000.

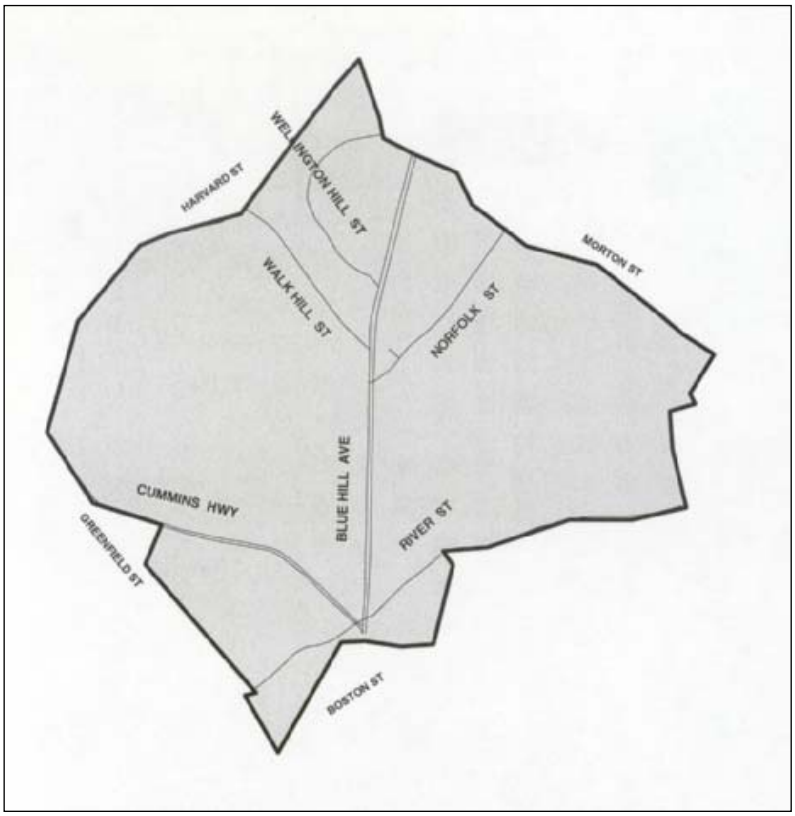
The primary languages spoken at home by Jamaica Plain residents are English (spoken by 63.1% of residents) and Spanish (spoken by 27.8% of residents).

About three-fourths (74.4%) of Jamaica Plain residents were born in the United States, including 4.8% who were born in Puerto Rico. Other countries in which residents were born include the Dominican Republic (7.2%) and China (1.1%).

Introduction to Boston Neighborhoods

Mattapan

Mattapan, originally a section of Dorchester, was annexed to Boston in 1870. Mattapan is the original Mattahunt tribe's name for the area.



At the turn of the 20th century, the neighborhood became home to Irish and Jewish immigrant groups. From the 1920s through the 1950s, Blue Hill Avenue was the center of Boston's Jewish working class culture. In the 1960s a controversial program of redlining by the banking consortium Boston Banks Urban Renewal Group, caused Mattapan to change from a predominately Jewish to a predominately Black neighborhood. To encourage home ownership, "low interest, no-money-down mortgages" were offered to Black home buyers, in the "redlined" area along Blue Hill Avenue while scare tactics were used to create panic selling among Jewish homeowners.

Over the last two decades, Mattapan has become home to many Haitian immigrants seeking to escape the turmoil in their home country. The neighborhood now has the largest Haitian community in Massachusetts.

Mattapan's population in 2000 was 19,724 residents, an increase of just 0.7% from 1990. During this time, the Latino population increased while the Black and the White populations decreased. The number of Latino residents increased by 640, or 80.6%, the number of White residents decreased by 566, or 54.9%, and the number of Black residents decreased by 1,114, or 6.4%. As a result, the percentage of Black residents dropped from 89.2% to 82.9% as the Latino resident population rose from 4.1% to 7.3%.

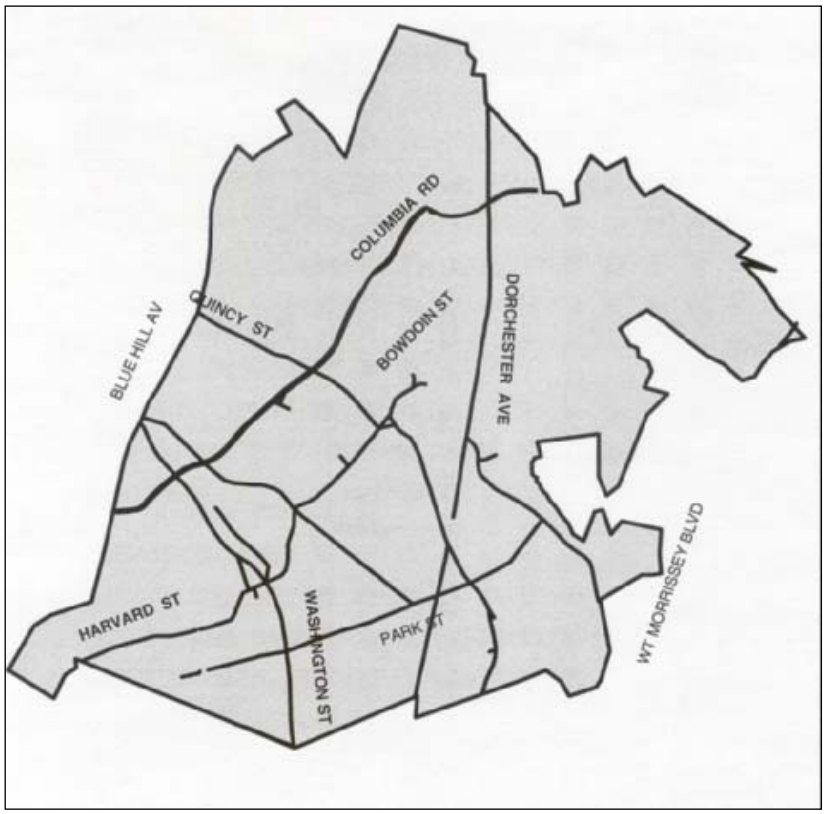
English is the language spoken at home by 69.2% of Mattapan residents; 17.8% speak French Creole (including Haitian Creole), 6.6% speak Spanish, and 3.6% speak French.

About two-thirds (65.2%) of Mattapan residents were born in the United States, including 0.9% who were born in Puerto Rico. Other countries in which Mattapan residents were born include Haiti (15.1%), Jamaica (6.8%), Barbados (1.8%), the Dominican Republic (1.8%), Trinidad (1.6%), and Sierra Leone (1.1%).

Introduction to Boston Neighborhoods

North Dorchester

Dorchester was known as Mattapan by the Wampanoag Indians; the Puritans named the area Dorchester after the English town from which they immigrated. Dorchester was annexed by Boston in 1870.



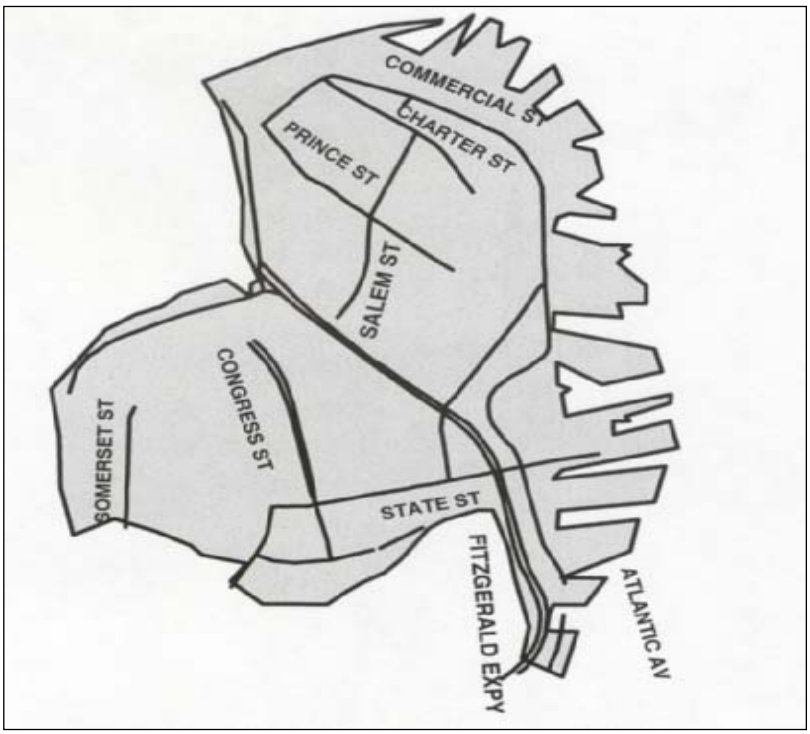
North Dorchester includes Edward Everett Square and Uphams Corner, where the Puritans' first settlement was established. Boston's oldest home, the James Blake House (built in 1648) and one of the country's oldest cemeteries, the Old Burial Ground (established in 1634) are located in this area. The John F. Kennedy Library, the University of Massachusetts/Boston, and the Massachusetts Archives and Historical Museum are located in North Dorchester's Harbor Point (formerly known as Columbia Point). Malibu Beach is also located in North Dorchester.

The total population in North Dorchester in 2000 was 83,212, a 7.6% increase when compared with 1990. A total of 36,026 Black residents lived in North Dorchester in 2000, nearly the same as in 1990. However, because the total neighborhood population increased, the Black population's percentage share decreased from 46.6% in 1990 to 43.3% in 2000. The White population declined by 7,997, or 34.4%, between 1990 and 2000. In 1990, White residents made up 30.0% of the population compared with 18.3% in 2000. In 1990, the 3,011 Asian residents made up 3.9% of the total population; in 2000, the 4,549 Asian residents made up 9.1% of the population. The Latino population grew by 3,032 (a 27.9% increase); in 2000, Latinos represented 16.7% of North Dorchester.

English is the language spoken at home by 57.4% of North Dorchester residents, followed by Spanish (16.0%), Portuguese/Portuguese Creole (7.4%), Vietnamese (7.0%), and French Creole, which includes Haitian Creole (6.3%). About three-fourths (72.8%) of North Dorchester residents were born in the United States, including 1.3% who were born in Puerto Rico. Other countries in which residents were born include Vietnam (5.9%), Haiti (3.0%), the Dominican Republic (2.9%), Jamaica (2.1%), and Trinidad/Tobago (1.8%).

Introduction to Boston Neighborhoods

The North End



The North End is known as Boston's first neighborhood. By the 1750s, it had a thriving commercial base, a busy seaport, and large estates for its wealthy merchants. Puritan Pastors, Increase and Cotton Mather ministered at North Church, which was then located in the North End. Paul Revere, known for his 1775 ride to warn of the approach of British soldiers, was born in the North End and also named Boston's first health officer in 1799.

After the Revolutionary War, the shipping industry propelled growth in wharves, business establishments, and warehouses. Among the new structures was Quincy Marketplace and in 1830, Mill Pond was filled in to accommodate the North End's growth.

The number of Irish immigrants settling in the North End increased dramatically in the 1840s as the Famine Irish arrived. Most were desperately poor and served as servants and laborers on Boston's landfill projects. Around 1870, the Irish began moving to South Boston, and Eastern European Jews began to settle in the North End. At the turn of the century, there were five synagogues and two Jewish Schools in the neighborhood. By the 1920s, many Jews had moved to other Boston neighborhoods, and Italian immigrants became the largest immigrant group. The 1930 census reported that 44,000 residents of Italian descent lived in the North End. Though the population has decreased, the Italian influence continues in the neighborhood's wealth of Italian restaurants, stores, and social clubs.

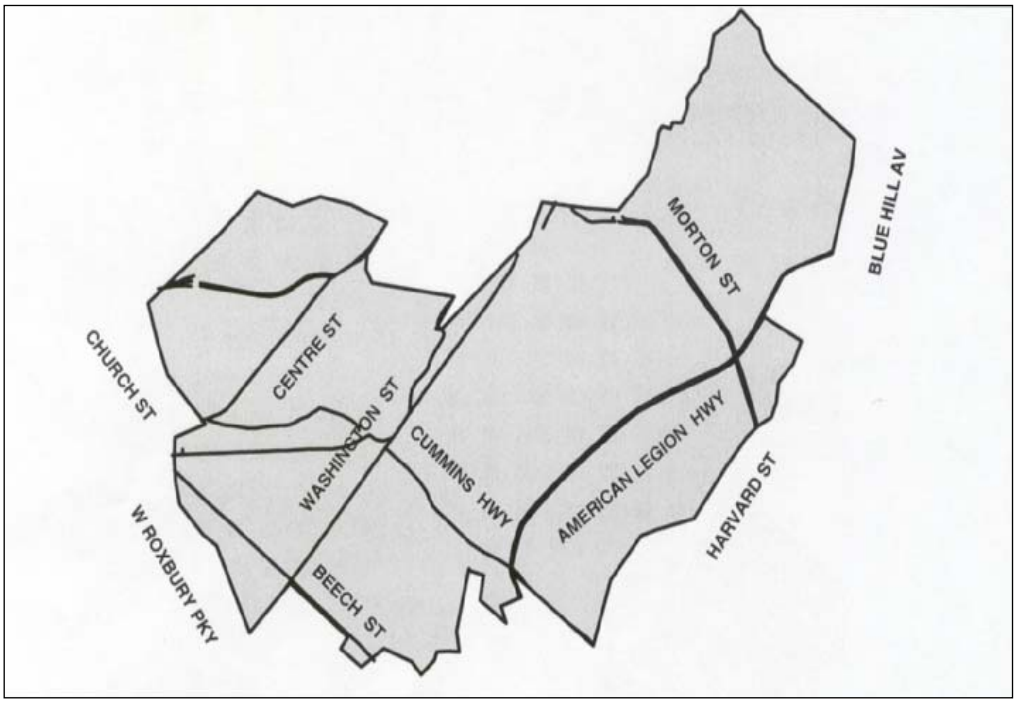
There was little change in either the total population or the racial/ethnic composition of the North End during the 1990s. In 2000, the total population was 12,114, almost identical to 1990, when it was 12,152. The North End continues to be predominately White; in 1990, 94.6% of the residents were White compared with 91.3% in 2000. The percentage of Latino residents declined slightly, from 3.1% in 1990 to 2.9% in 2000. During this time, the percentage of Black residents rose from 0.8% to 1.8%, and the percentage of Asian residents increased from 1.2% to 2.4%.

Most North End residents (81.5%) speak English as their primary language, followed by Italian (8.0%), and Spanish (3.1 %). Most residents (86.8%) were born in the United States, including 0.4% who were born in Puerto Rico; 3.2% of North End residents were born in Italy.

Introduction to Boston Neighborhoods

Roslindale

Roslindale was originally part of the City of Roxbury and was called South Street Crossing. The establishment of a post office branch in 1870 precipitated the name change when the Postal Service rejected the name South Street Crossing. Officials decided to name the area after Roslyn, a town in Scotland; "dale" was added as the area was surrounded by hills. The neighborhood was annexed to the City of Boston with West Roxbury in 1873.



For most of the 20th century, Roslindale Square was a thriving business district. The 1970s brought competition from suburban malls, which forced businesses to close, stores to remain vacant, and the Square to be devoid of shoppers. An active local revitalization effort that began in the 1980s earned Roslindale Square a "Main Street" award from the National Trust for Historic Preservation. It is known nationally as a model of neighborhood economic revitalization.

The total population in Roslindale in 2000 was 35,047, an increase of 5.6% from 1990. A significant shift in the racial composition occurred during the decade. The White population decreased by 20.8%, while the Black and Latino populations increased by 109.7% and 73.5%, respectively. In 2000, Black residents comprised 12.8% of the neighborhood compared with 6.5% in 1990, and Latinos comprised 18.4% compared with 11.2% in 1990. The Asian population also increased from 2.7% of the population to 3.8%.

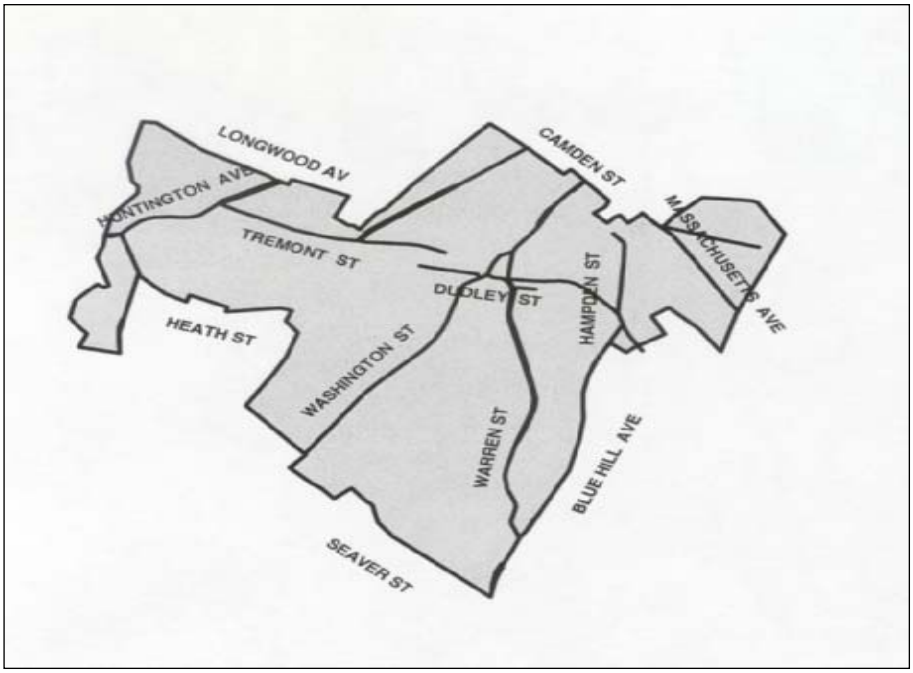
English is the language spoken at home by 63.5% of Roslindale residents; 17.0% speak Spanish, 4.5% speak French Creole (which includes Haitian Creole), and 3.0% speak Greek.

About three-fourths (73.3%) of Roslindale residents were born in the United States, including 2.5% who were born in Puerto Rico. Other countries in which residents were born include Haiti (3.5%), the Dominican Republic (2.5%), Greece (1.7%), and China (1.5%).

Introduction to Boston Neighborhoods

Roxbury

When founded in 1630, Roxbury was a large independent community. In addition to the current land area, it included Mission Hill, West Roxbury, Roslindale, and Jamaica Plain. Roxbury incorporated as a city in 1846 and was annexed to Boston in 1868.



The neighborhood contains numerous historic buildings and landmarks, including the Dillaway-Thomas House, which was built in 1750 as a parsonage and the Shirley Eustis House which was built in 1747 as the Royal Governor's house.

In the 1880s, the 527-acre Franklin Park was designed by Frederick Law Olmsted as the "largest and final jewel" in Boston's Emerald Necklace, and Roxbury's Dudley Square has long served as a neighborhood commercial hub.

English, Irish, and German immigrants were the first Europeans to settle in Roxbury. In the early 1900s, a large Jewish community lived in the Grove Hall area along Blue Hill Avenue. Migration of Blacks from the South to Northern cities in the 1940s and 1950s established Roxbury as the center of the Black community in Boston.

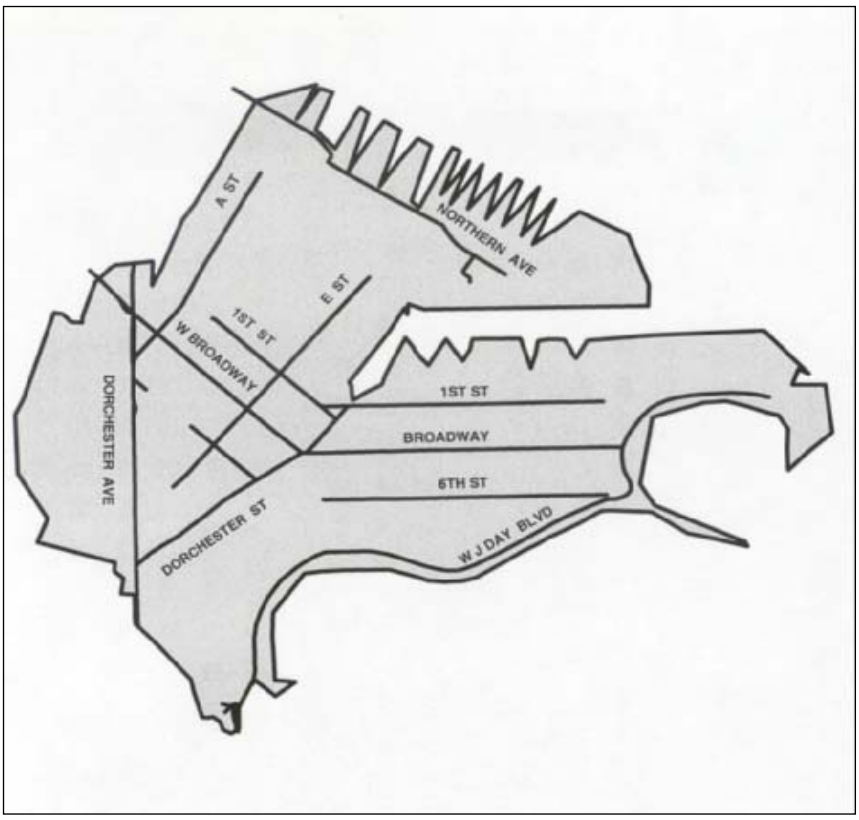
The total population in Roxbury in 2000 was 50,349, a 6.5% decrease from 1990. During this time, the Black population decreased while the Latino and Asian populations grew in size. The Black population decreased by 7,608 or 22.5%. The Latino population grew by 1,012 (a 10.1% increase); the Asian population increased by 743 or 44.7%. Roxbury is now home to the second largest Latino population in the city. The Latino population, which made up 18.7% of the neighborhood in 1990, increased to 22.0% in 2000. During this time, the Black population decreased from 62.8% of the population to 52.0%.

English is the language spoken at home by 64.8% of residents; 20.3% speak Spanish, 3.0% speak French Creole (which includes Haitian Creole), and 2.6% speak Chinese.

About three-fourths (71.4%) of Roxbury residents were born in the United States, including 5.8% who were born in Puerto Rico. Other countries in which residents were born include the Dominican Republic (4.3%), China (1.9%), and Jamaica (1.0%).

Introduction to Boston Neighborhoods

South Boston



Annexed in 1804, South Boston is one of Boston's oldest neighborhoods. During the mid-1800s, the neighborhood was a major industrial center with foundries, machine shops, shipyards, and refineries. The neighborhood's industrial growth led to an influx of Irish and other immigrants in the middle and late 1800s.

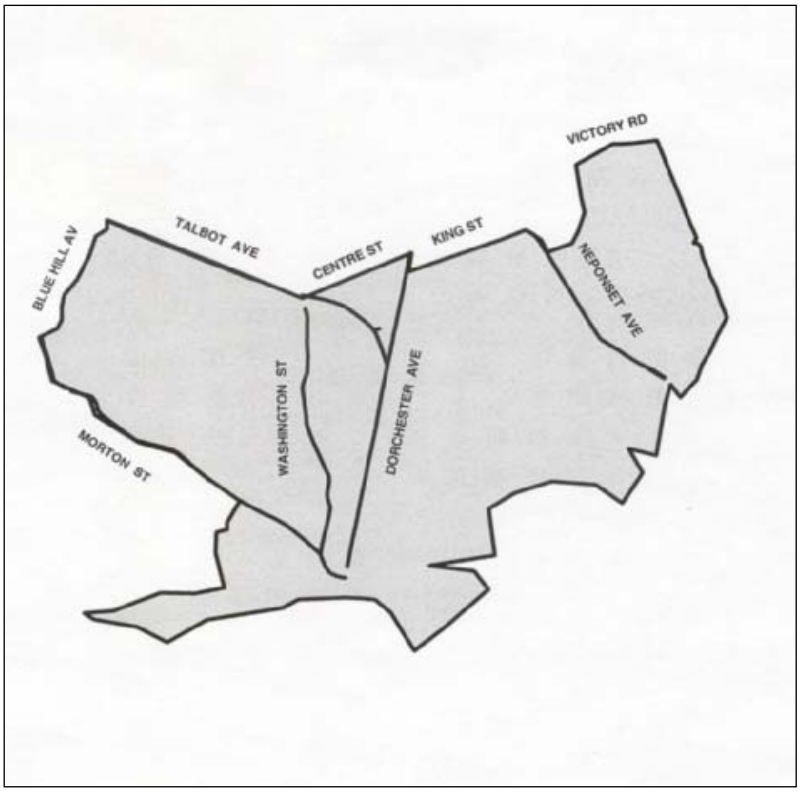
Through the 20th century, the neighborhood's connection to Boston's maritime economy, shipyard, and railroad jobs provided work for South Boston residents. The neighborhood continues to serve as the center of Boston's Irish community, hosting annual events such as the St. Patrick Day's Parade. The neighborhood has miles of beaches and waterfront parks, as well as the Strandway, a Frederick Law Olmstead-designed motorway that runs the length of the beach.

The total population in South Boston in 2000 was 29,938, an increase of only 1.7% from 1990. Although still a predominantly White neighborhood, the percentage of White residents in the neighborhood decreased from 95.5% in 1990 to 84.5% in 2000. A notable increase occurred within the Latino population, from 1.5% of the population in 1990 to 7.5% in 2000. During this time, smaller increases occurred in the size of South Boston's Asian and Black populations. The Asian population increased from 1.8% to 2.9%, and Black population increased from 0.9% to 2.5%.

English is the language spoken at home by 83.2% of residents; 7.3% speak Spanish and 2.6% speak Chinese. About two-thirds (69.1%) of South Boston residents were born in the United States, including 4.2% who were born in Puerto Rico. Other countries in which South Boston residents were born include the Dominican Republic (3.0%), China (1.8%), and Ireland (1.5%).

Introduction to Boston Neighborhoods

South Dorchester



North and South Dorchester, originally one community, were named after the town of Dorchester in England, from which Puritans emigrated. The Wampanoag Indians had called the area Mattapan. Dorchester was annexed to Boston in 1870.

Many historic sites are located in South Dorchester. The Walter Baker Chocolate Mill was established in Lower Mills in 1765. Over the last 20 years, the mill has been converted to apartments and condominiums. The Pierce House, built in 1683, is Boston's second oldest home. William J. Devine Golf Course at Franklin Park, laid out in 1892, is the country's oldest public golf course.

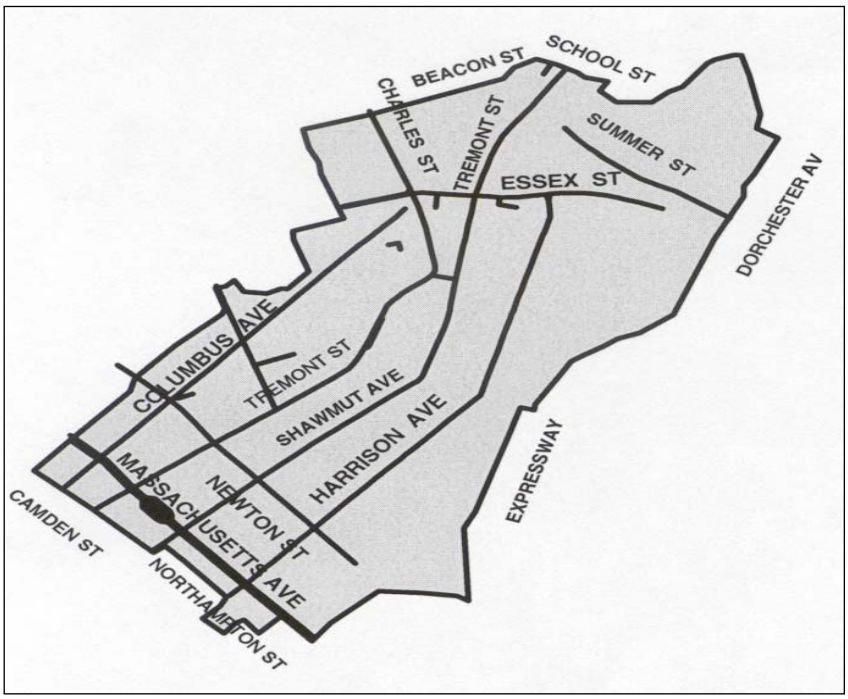
The total population in South Dorchester in 2000 was 45,291, a 3.7% increase when compared with 1990. The White population decreased by 6,794, or 31.7%, between 1990 and 2000. In 1990, White residents made up 49.1% of the population compared with 32.4% in 2000. During this time, the Black population increased by 3,777, or 17.2%. In 2000, Black residents made up 47.7% of South Dorchester, compared with 42.2% in 1990. The Asian population more than tripled, increasing from 828 in 1990 to 2,616 in 2000. In 2000, Asians constituted 5.8% of the neighborhood, compared with 1.8% in 1990. South Dorchester's Latino population also grew during this time. In 2000, the 3,770 Latino residents made up 8.3% of the neighborhood, an increase from 6.4% in 1990.

English is the primary language spoken by 73.8% of the population; 8.5% speak Spanish, 7.2% speak French Creole, and 4.3% speak Vietnamese.

About three-fourths (72.8%) of South Dorchester residents were born in the United States, including 1.3% who were born in Puerto Rico. Other countries in which residents were born include Vietnam (3.9%), Jamaica (3.3%), Haiti (2.8%), Ireland (1.8%), Trinidad/Tobago (1.4%), the Dominican Republic (1.3%), and Barbados (1.1%).

Introduction to Boston Neighborhoods

The South End



The South End was originally called "Boston Neck" as it was a narrow strip of land connecting Boston to the mainland. In the 1830s, the neighborhood was in-filled and Victorian townhouses were built for Boston's wealthy merchant class. In the 1870s, the South End developed into a lodging and boarding house district as wealthy residents moved to the newly built Back Bay. At this time, major institutions were established in the South End including Boston City Hospital (now Boston Medical Center) and the South End House (Boston's first settlement house). Churches and synagogues were built to accommodate growing congregations. Inexpensive housing and the proximity of the neighborhood to social, health, and religious services combined to bring a variety of cultures, religions, and beliefs to the South End.

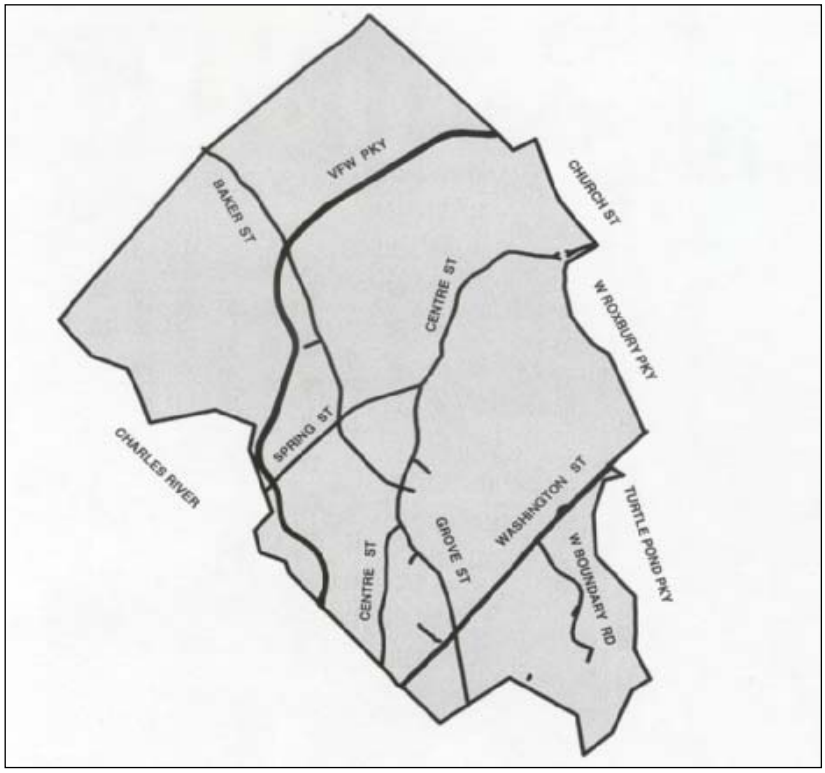
By 1900, large Jewish, Syrian, Greek, Italian, Portuguese, Chinese, West Indian, African-American, Native American, and Puerto Rican communities were established. In the 1960's, housing again shaped neighborhood demographics, as a renewed interest in urban life brought gentrification to the South End. The neighborhood is now home to a large gay and lesbian community and a mix of families and young professionals. As the largest Victorian neighborhood in the United States, the South End is a Landmark District and listed in the National Registry of Historical Places.

The total population in the South End in 2000 was 33,502, an 8.3% increase compared with 1990. The South End is one of the few Boston neighborhoods in which the number of White residents increased. In 2000, the White population grew by 2,570 (a 19.3% increase) while the Black population decreased by 1,429, or 22.2%. Little change occurred in the numbers of Latinos and Asians. The White population, which made up 43.1% of the neighborhood in 1990, increased to 47.5% in 2000; the Black population decreased from 20.8% of the population to 14.9%. The percentage of Latinos stayed about the same (11.9% in 2000 compared with 11.8% in 1990). The number of Asian residents increased by 139, although their percentage share in the neighborhood decreased from 23.8% to 22.4%.

English is the language spoken at home by 63.0% of residents; 17.8% speak Chinese at home and 11.2% speak Spanish. About two-thirds (69.1%) of South End residents were born in the United States, including 4.2% who were born in Puerto Rico. Other countries in which residents were born include China (13.9%), Vietnam (1.3%), and the Dominican Republic (1.0%).

Introduction to Boston Neighborhoods

West Roxbury



When first settled, West Roxbury was part of the town of Roxbury and included the neighborhoods of Roslindale and Jamaica Plain. In 1851, West Roxbury broke away from Roxbury and formed its own government. The neighborhood was annexed by Boston in 1874.

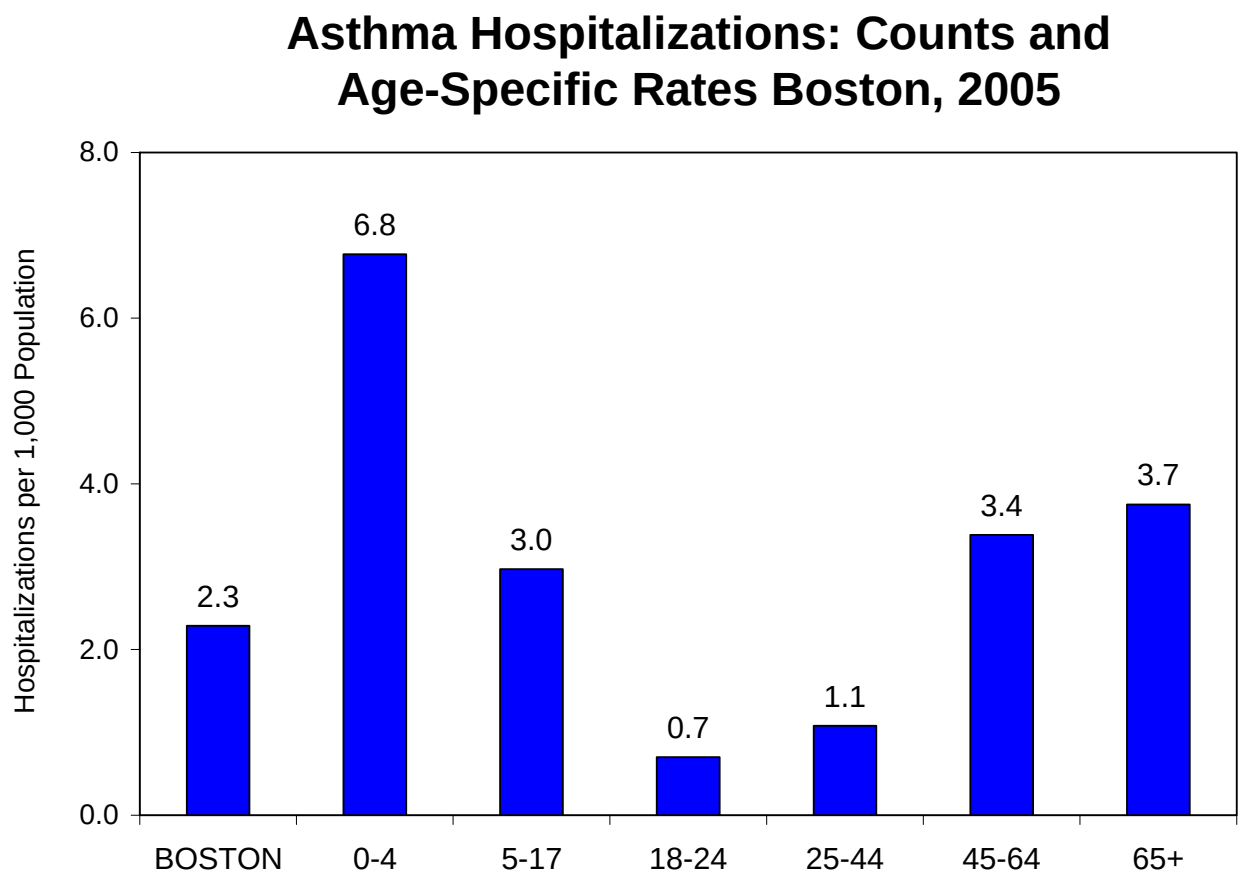
In 1841, Brook Farm was established by Transcendentalists in West Roxbury as an experimental cooperative farm. Its members and regular visitors included many 19th century progressive writers and philosophers including Nathaniel Hawthorne, Ralph Waldo Emerson, Margaret Fuller, and Horace Greeley.

The total population in West Roxbury in 2000 was 26,108, a 4.2% decrease when compared with 1990. Although the White population in West Roxbury decreased by 4,251 (16.4%), the neighborhood remained a predominately White one. In 2000, 83.1% of the population was White compared with 95.2% in 1990. Moderate increases were seen in the number and proportion of Asian, Black, and Latino populations. In 2000, the Asian population made up 3.4% of West Roxbury residents, compared with 1.7% in 1990. During this time, the Latino population grew from 1.6% to 4.7% of the total, and the Black population increased from 1.3% to 6.6% of the total.

West Roxbury has a large population of elders; in 2000, 20.1% of the population was 65 and over. The median income of $53,607 is the highest of all Boston neighborhoods.

English is the language spoken at home by 78.3% of residents; 4.8% speak Spanish, 2.8% speak Greek, and 2.0% speak Italian. Most West Roxbury residents (81.7%) were born in the United States (including 0.4% who were born in Puerto Rico). Other countries in which residents were born include Ireland (2.1%), Haiti (1.3%), Italy (1.2%), Lebanon (1.2%), and China (1.0%).

Asthma

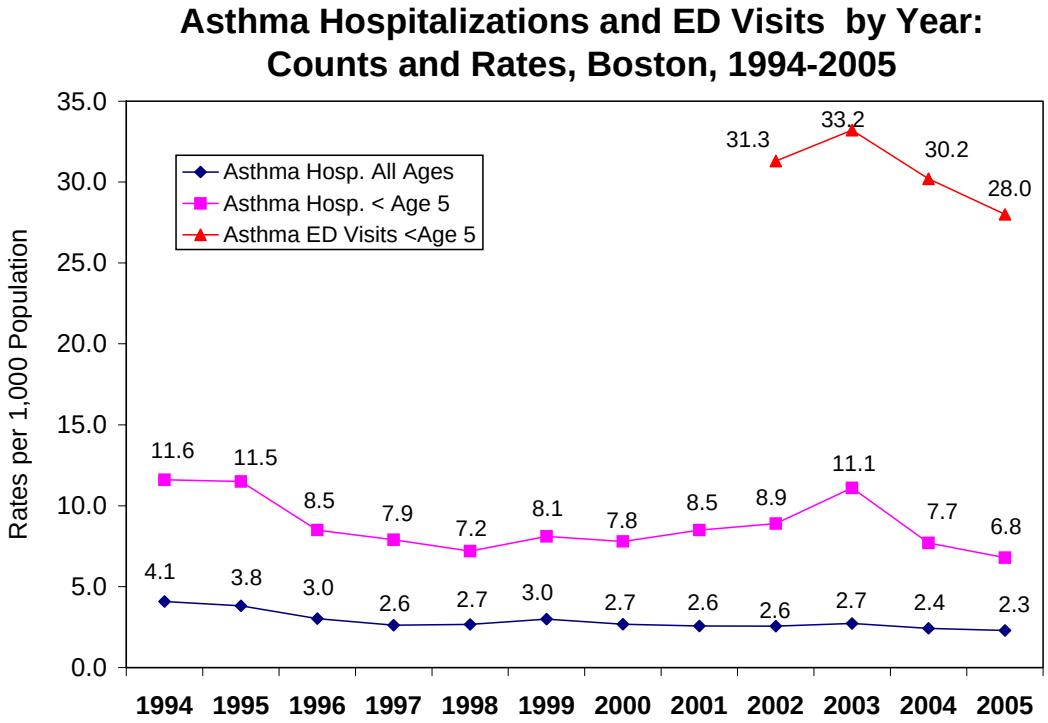


	BOSTON	0-4	5-17	18-24	25-44	45-64	65+
Count	1,347	217	251	67	228	354	230

NOTE: These data do not include persons whose age was not reported, except in the Boston overall rate.
DATA SOURCE: Acute Care Hospital Case Mix Files, Massachusetts Division of Health Care Finance and Policy
DATA ANALYSIS: Boston Public Health Commission Research Office

- The heaviest burden of asthma hospitalization is borne by children under the age of 5. In 2005, the asthma hospitalization rate for the youngest Boston children was about three times the rate for Boston overall.
- Adults between the ages of 18 and 44 had the city's lowest asthma hospitalization rates.

Asthma



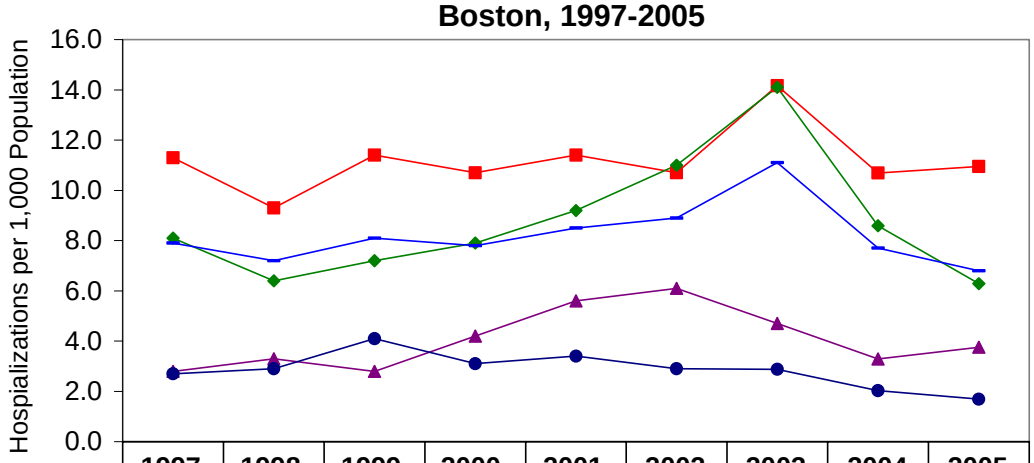
Count	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Asthma Hosp. All Ages	2,248	2,135	1,678	1,455	1,482	1,666	1,579	1,512	1,509	1,607	1,428	1,347
Asthma Hosp. < Age 5	480	448	325	289	261	275	251	273	285	353	247	217
Asthma ED Visits < Age 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1,002	1,064	967	897

NOTE: Hospital Emergency Department Visit Data Base first become available in 2002.
DATA SOURCE: 1994-1996, Acute Care Hospital Discharges, Massachusetts Health Data Consortium, Inc.; 1997-2005, Acute Case Mix Files, Massachusetts Division of Health Care Finance and Policy; Emergency Department Visit Data Base, Massachusetts Division of Health Care Finance and Policy
DATA ANALYSIS: Boston Public Health Commission Research Office

- The number and rate of asthma hospitalizations among Boston residents has generally followed a downward pattern over the past decade, except for slight increases in 1998, 1999, and 2003.
- In 2005, for all ages the asthma hospitalization rate was 43.9% lower than in 1994. The 2005 rate of 2.3 hospitalizations per 1,000 is the lowest observed during the 1994-2005 period.
- Asthma hospitalization rates are highest for Boston children under age five. The rate in 2005 was a sharp drop from 2003, and the lowest during the 12-year period.
- Asthma hospitalization rates and asthma ED visit rates for Boston children under the age of five appear to both be on a downward since 2003. In 2005, the rate for asthma hospitalizations for Boston children was 38.7% lower than in 2003 and the rate for asthma ED visits, 15.7% lower.

Asthma

Asthma Hospitalizations of Children Under Age 5 by Race/Ethnicity and Year: Counts and Rates, Boston, 1997-2005



	1997	1998	1999	2000	2001	2002	2003	2004	2005
Asian	2.8	3.3	2.8	4.2	5.6	6.1	4.7	3.3	3.8
Black	11.3	9.3	11.4	10.7	11.4	10.7	14.2	10.7	10.9
Latino	8.1	6.4	7.2	7.9	9.2	11.0	14.1	8.6	6.3
White	2.7	2.9	4.1	3.1	3.4	2.9	2.9	2.0	1.7
BOSTON	7.9	7.2	8.1	7.8	8.5	8.9	11.1	7.7	6.8

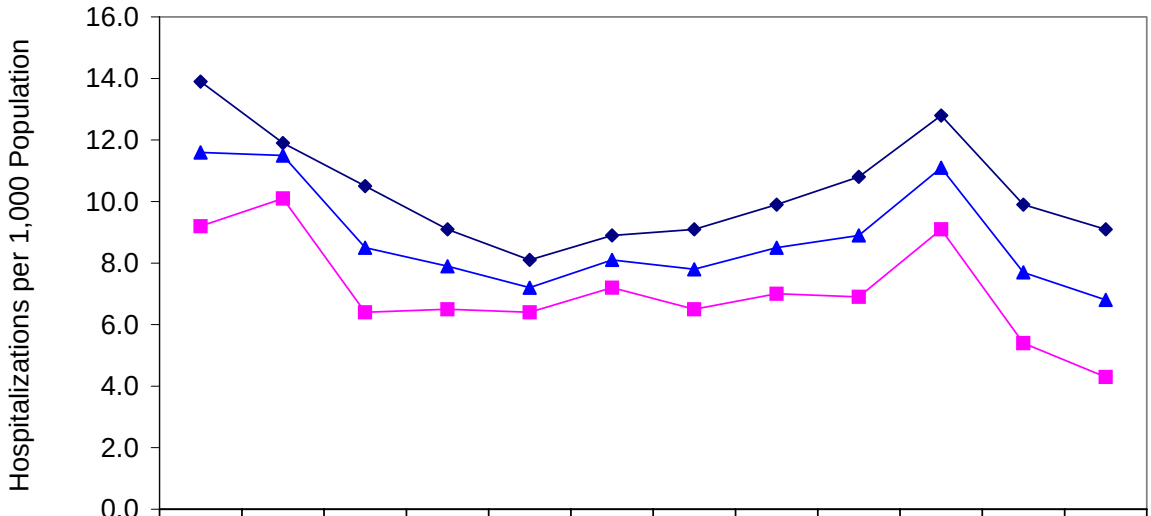
Count	1997	1998	1999	2000	2001	2002	2003	2004	2005
Asian	6	5	6	9	12	13	10	7	8
Black	130	107	131	123	131	123	163	123	126
Latino	63	50	56	62	72	86	110	67	49
White	32	34	48	37	40	34	34	24	20
BOSTON	289	261	275	251	273	285	353	247	217

NOTES: People of Latino ethnicity may be reported in any of the above race/ethnicity categories. See Technical Notes for additional caveats. These data do not include persons whose age was not reported, except in the Boston overall rate.
DATA SOURCE: Acute Care Hospital Case Mix Files, Massachusetts Division of Health Care Finance and Policy
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2005, the asthma hospitalization rate for Boston Black children under the age of five was almost three times higher than for Asian children, almost two times higher than for Latino children, and more than six times higher than for White children.
- Black children consistently had the highest asthma hospitalization rates from 1997 through 2005, with the exception of 2002 where the highest rate was for Latino children under the age of five.
- The highest asthma hospitalization rates for Boston children under five occurred for both Blacks and Latinos in 2003. While the rates for Black children continued to remain the highest, rates for Latino children increased every year from 1999 through 2003 and then sharply dropped. From 2003 to 2005, the rate dropped 55.3% for Latinos and 23.2% for Blacks.

Asthma

Asthma Hospitalizations of Children Under Age 5 by Sex and Year: Counts and Rates, Boston, 1994-2005



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Male	13.9	11.9	10.5	9.1	8.1	8.9	9.1	9.9	10.8	12.8	9.9	9.1
Female	9.2	10.1	6.4	6.5	6.4	7.2	6.5	7.0	6.9	9.1	5.4	4.3
BOSTON	11.6	11.5	8.5	7.9	7.2	8.1	7.8	8.5	8.9	11.1	7.7	6.8

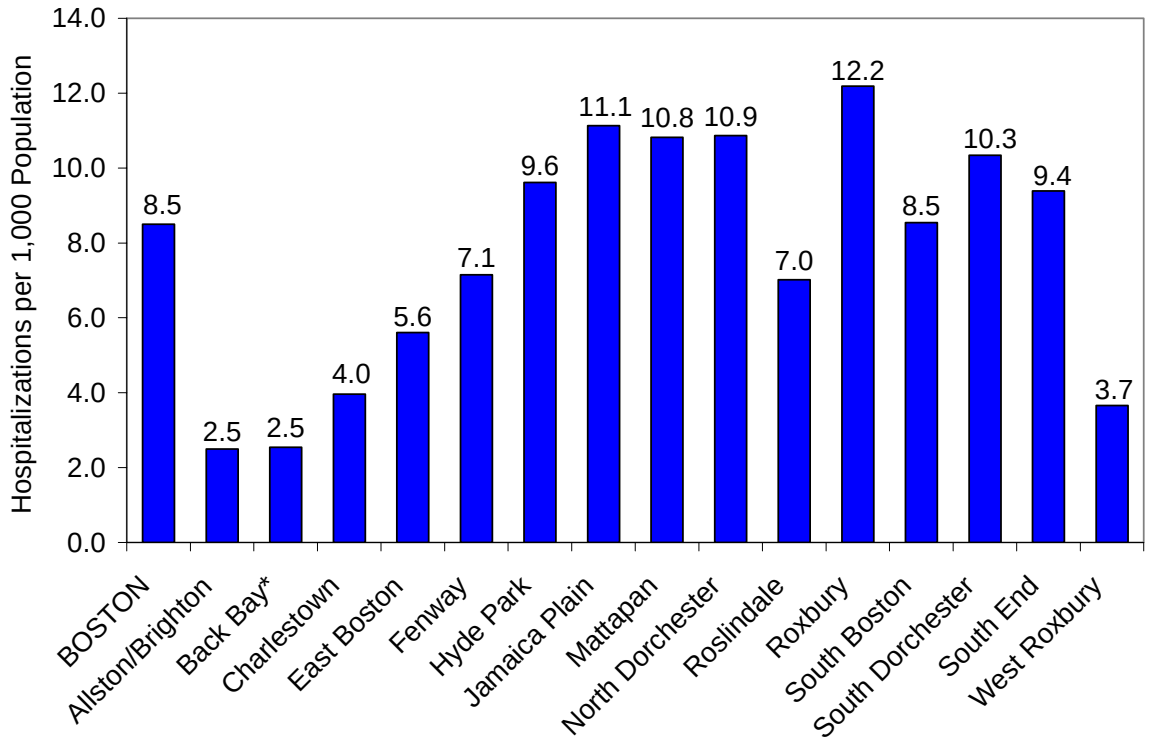
Count	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Male	293	248	205	172	149	156	150	163	177	210	162	149
Female	187	200	120	117	112	119	101	110	108	143	85	68
BOSTON	480	448	325	289	261	275	251	273	285	353	247	217

DATA SOURCE: 1994-1996, Acute Care Hospital Discharges, Massachusetts Health Data Consortium, Inc.; 1997-2005, Acute Care Hospital Case Mix Files, Massachusetts Division of Health Care Finance and Policy
DATA ANALYSIS: Boston Public Health Commission Research Office

- For the years shown, hospitalization rates for male children under age five have been consistently higher than the rates for female children of the same age. The rate for males in 2005 was more than double the rate for females.
- After declining about 32% from 1995 through 1998, hospitalization rates for male children began to climb in 1999 and continued through 2003.
- The 2005 rates for both male and female children under age 5 represent decreases from 1994. The rate for males represents a decrease of 34.5% and the rate for females, a decrease of 53.3%.

Asthma

Asthma Hospitalizations of Children Under Age 5 by Neighborhood: Counts and Rates, Boston 2003-2005



	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	817	16	9	10	46	11	60	61	67	145	47	89	39	173	28	16

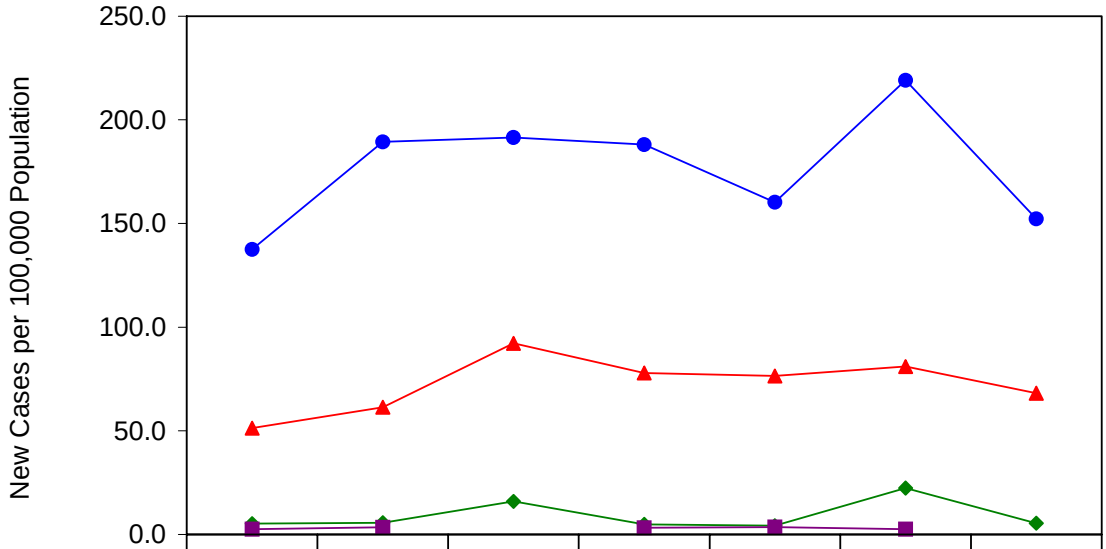
ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
* Includes the North End
DATA SOURCE: Acute Care Hospital Case Mix Files, Massachusetts Division of Health Care Finance and Policy
DATA ANALYSIS: Boston Public Health Commission Research Office

- Although several Boston neighborhoods had asthma hospitalization rates for children under the age of five that exceeded the overall Boston rate for that age group, Roxbury's rate was the highest, followed by Jamaica Plain, North Dorchester, Mattapan, and South Dorchester.

- The rate for Roxbury was almost 50% higher than the overall Boston rate for children under age five.

Hepatitis

Hepatitis Types A, B, and C Cases by Year: Counts and Incidence Rates, Boston, 1999-2005



	1999	2000	2001	2002	2003	2004	2005
Hepatitis A	5.2	5.6	16.0	4.9	4.2	22.4	5.4
Acute Hepatitis B	2.6	3.4	--	3.2	3.6	2.5	--
Chronic Hepatitis B	51.3	61.4	92.2	77.9	76.5	81.0	68.2
Hepatitis C	137.5	189.4	191.5	188.1	160.2	219.1	152.3

Count	1999	2000	2001	2002	2003	2004	2005
Hepatitis A	30	33	94	29	25	132	32
Acute Hepatitis B	15	20	n<5	19	21	15	n<5
Chronic Hepatitis B	311	382	541	459	451	477	402
Hepatitis C	793	1,116	1,128	1,108	944	1,291	897

DATA SOURCE: Communicable Disease Database, Boston Public Health Commission, Communicable Disease Control Division
DATA ANALYSIS: Boston Public Health Commission, Communicable Disease Control Division
GRAPHIC: Boston Public Health Commission Research Office

- Of the four types of hepatitis shown above, incidence rates for Boston residents are highest for hepatitis C. In 2005, the incidence rate for hepatitis C decreased 30.5% from the rate in 2004. The increase in the number of new hepatitis C cases in 2004 resulted from expanded testing that took place to capture unreported cases.
- Hepatitis A has remained relatively stable, except for outbreaks in 2001 and 2004 which resulted in increases for those years.
- For further explanation of hepatitis types A, B, and C, please refer to the glossary of this report.

Hepatitis

Hepatitis Types A, B, and C Cases by Age: Counts and Incidence Rates, Boston, 2005		
Hepatitis A		
	Count	Rate
<10	0	0.0
10-19	n<5	--
20-29	8	5.8
30-39	11	10.6
40-49	n<5	--
50-59	n<5	--
60-69	n<5	--
>69	n<5	--
Chronic Hepatitis B		
	Count	Rate
<10	n<5	--
10-19	16	21.0
20-29	96	69.5
30-39	104	100.5
40-49	81	110.2
50-59	58	110.5
60-69	25	73.2
>69	17	37.4
Hepatitis C		
	Count	Rate
<10	16	24.3
10-19	7	9.2
20-29	131	94.8
30-39	170	164.4
40-49	289	393.3
50-59	209	398.2
60-69	43	126.0
>69	31	68.1
NOTES: Incidence rates are presented only for those age groups that had at least 5 occurrences of disease. Acute hepatitis B is not shown because all age groups had less than 5 occurrences of that infection. The rates shown are new cases per 100,000 population. DATA SOURCE: Communicable Disease Database, Boston Public Health Commission, Communicable Disease Control Division DATA ANALYSIS: Boston Public Health Commission, Communicable Disease Control Division		

- The highest incidence rate of hepatitis A among Bostonians in 2005 was among those age 30-39.
- The highest incidence rates of chronic hepatitis B were among those ages 40-49 and 50-59, 62% higher than the overall Boston rate (data not shown).
- Bostonians ages 40-49 and 50-59 had the highest hepatitis C incidence rate of all age groups. For ages 40-49, the rate was 158% higher than the overall Boston rate, and for ages 50-59,162% higher.

Hepatitis

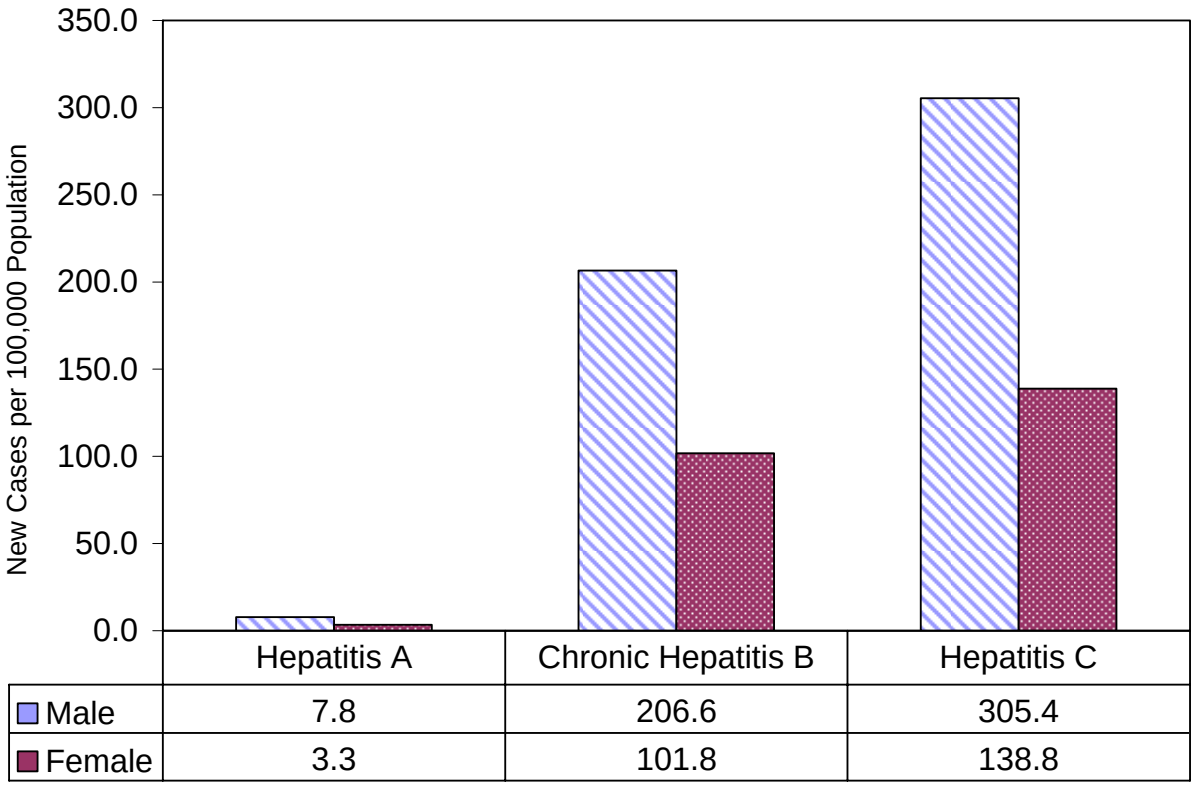
Hepatitis Types A, B, and C Cases by Race/Ethnicity: Counts and Incidence Rates, Boston, 2005		
Hepatitis A		
	Count	Rate
Asian	0	0.0
Black	n<5	--
Latino	9	7.6
White	12	3.1
BOSTON	32	5.4
Chronic Hepatitis B		
	Count	Rate
Asian	180	406.5
Black	64	45.6
Latino	16	18.8
White	36	9.0
BOSTON	402	68.2
Hepatitis C		
	Count	Rate
Asian	26	58.7
Black	196	139.7
Latino	130	152.8
White	273	93.6
BOSTON	897	152.3

NOTES: Incidence rates are presented only for races/ethnicities that had at least 5 occurrences of disease. Acute hepatitis B is not shown because all race/ethnicities had less than 5 occurrences of that infection. Boston totals include those for whom race/ethnicity was Other or for whom race/ethnicity information was missing.
DATA SOURCE: Communicable Disease Database, Boston Public Health Commission, Communicable Disease Control Division
DATA ANALYSIS: Boston Public Health Commission, Communicable Disease Control Division

- Latino residents had Boston's highest incidence of hepatitis A infection in 2005, but information on race/ethnicity was unknown for 25.0% of new cases.
- Asian Boston residents had the highest incidence of chronic hepatitis B infection. This rate was almost six times the overall rate for Boston. However, information on race/ethnicity was unknown for 20.4% of all new cases.
- Latino residents had the highest incidence rate of hepatitis C infection. Information on race/ethnicity was unknown for 29.2 % of all new cases.

Hepatitis

Hepatitis Types A, B, and C Cases by Sex: Counts and Incidence Rates, Boston, 2005



	Hepatitis A	Chronic Hepatitis B	Hepatitis C
Male	7.8	206.6	305.4
Female	3.3	101.8	138.8

Count	**Hepatitis A**	**Chronic Hepatitis B**	**Hepatitis C**
Male	22	247	586
Female	10	155	311

NOTE: Acute hepatitis B is not shown because both sexes had less than 5 occurrences of that infection.
DATA SOURCE: Communicable Disease Database, Boston Public Health Commissions, Communicable Disease Control Division
DATA ANALYSIS: Boston Public Health Commission, Communicable Disease Control Division
GRAPHIC: Boston Public Health Commission Research Office

- In 2005, the incidence rates for all three types of hepatitis shown above were higher for Boston males than Boston females. The disparity was greatest for hepatitis B where the incidence rate for males was 2.6 times higher than the rate for females. However, the hepatitis C and hepatitis A rates for males were 2.2 to 2.4 times higher than rates for females.

Hepatitis

Hepatitis A, B, and C Cases by Neighborhood: Counts and Incidence Rates, Boston, 2005				
	Chronic Hepatitis B		Hepatitis C	
	Count	Rate	Count	Rate
Allston/Brighton	44	63.2	52	74.7
Back Bay*	7	14.5	23	47.6
Charlestown	8	52.6	18	118.5
East Boston	10	26.0	41	106.7
Fenway	18	60.4	15	50.3
Hyde Park	15	43.6	28	81.3
Jamaica Plain	7	23.7	27	91.6
Mattapan	12	60.8	27	136.9
North Dorchester	87	104.5	147	176.7
Roslindale	20	57.1	23	65.6
Roxbury	27	53.6	81	160.9
South Boston	16	53.4	51	170.3
South Dorchester	24	53.0	40	88.3
South End	62	185.1	51	152.2
West Roxbury	15	57.4	18	68.9
BOSTON	402	68.2	897	152.3

*Includes the North End
NOTES: Incidence rates are presented only for neighborhoods that had at least 5 occurrences of disease. Hepatitis A and acute hepatitis B are not shown because all neighborhoods had less than 5 occurrences of those infections. These data do not include homeless persons or individuals whose neighborhood of residence was not reported, except in the Boston overall rate and count. The rates shown are new cases per 100,000 population.
DATA SOURCE: Communicable Disease Database, Boston Public Health Commission, Communicable Disease Control Division
DATA ANALYSIS: Boston Public Health Commission, Communicable Disease Control Division

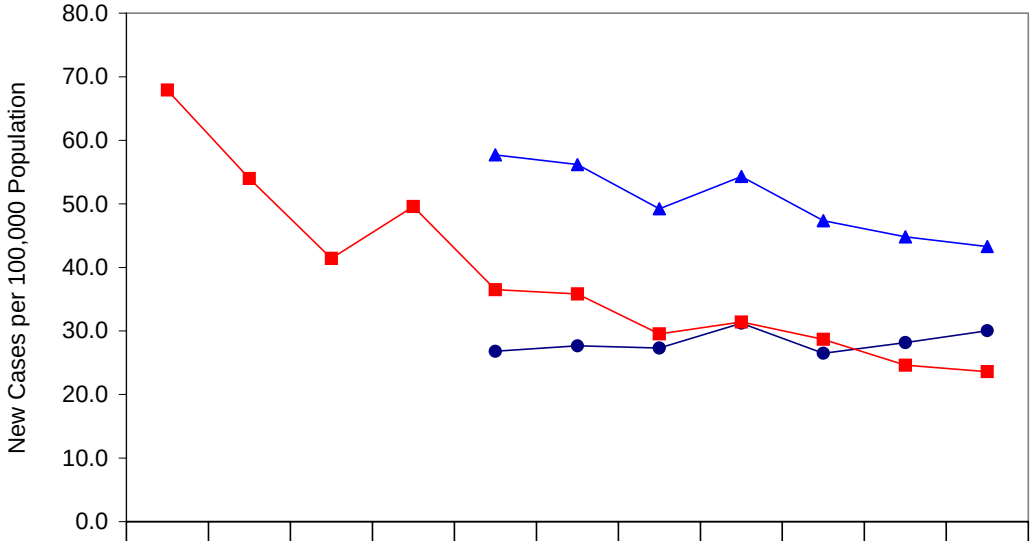
- Rates for hepatitis A and acute hepatitis B by neighborhood are not presented because none of Boston's neighborhoods had at least 5 reported new cases of these diseases for 2005.

- The South End and North Dorchester had the city's highest incidence rates of chronic hepatitis B in 2005. The rate for the South End was almost triple the overall Boston rate. In part, these rates may reflect differences in local screening practices and the immigration of individuals from countries with high rates of chronic hepatitis B.

- The highest incidence rate of hepatitis C among all Boston neighborhoods in 2005 was in North Dorchester, with a rate 16.1% higher than the overall Boston rate. South Boston and Roxbury also had rates that were higher than that of Boston overall.

HIV and AIDS

HIV, AIDS, and HIV/AIDS Cases by Year: Counts and Incidence Rates Boston, 1995-2005



	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
HIV	N/A	N/A	N/A	N/A	26.8	27.7	27.3	31.2	26.5	28.2	30.0
AIDS	67.9	54.0	41.4	49.6	36.5	35.8	29.5	31.4	28.7	24.6	23.6
HIV/AIDS	N/A	N/A	N/A	N/A	57.7	56.2	49.2	54.3	47.4	44.8	43.3

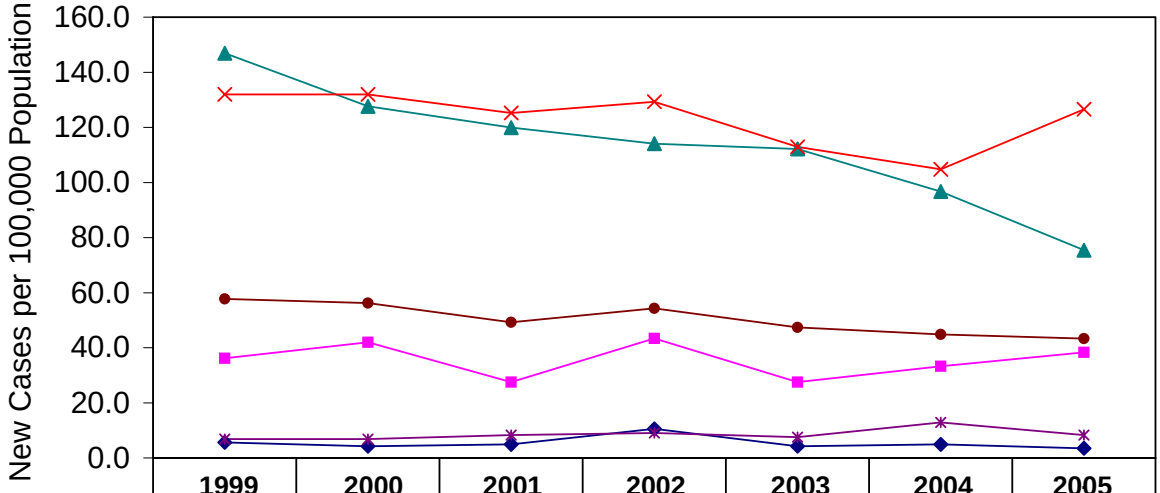
Count	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
HIV	N/A	N/A	N/A	N/A	158	163	161	184	156	166	177
AIDS	400	318	244	292	215	211	174	185	169	145	139
HIV/AIDS	N/A	N/A	N/A	N/A	340	331	290	320	279	264	255

NOTE: In January 1999, Massachusetts began reporting HIV cases. The number of new HIV cases shown excludes those that have progressed to AIDS. None of the data presented include inmates of correctional facilities. Rates for years prior to 2005 may differ from those reported in previous publications due to file updates by the Massachusetts Department of Public Health HIV/AIDS Surveillance Program.
DATA SOURCE: Massachusetts Department of Public Health HIV/AIDS Surveillance Program
DATA ANALYSIS: Boston Public Health Commission Research Office

- Massachusetts began reporting HIV cases in January, 1999. A total of 158 newly diagnosed HIV cases among Boston residents were reported for 1999 and 177 in 2005. However, The trend for Boston HIV incidence rates has been essentially flat for several years,
- The AIDS incidence rate for 2005 was the lowest in a decade, and 65.2% lower than the rate for 1995. AIDS incidence rates have been declining over time, largely due to the effectiveness of newer HIV treatment regimens that slow the progression of HIV infection to AIDS.
- Boston's HIV/AIDS incidence rate in 2005 was similar to the rate in 2004, but it was the lowest HIV/AIDS rate during the period 1999-2005. Generally, HIV/AIDS incidence rates for Boston residents have been declining.
- From time to time, The Health of Boston reports have presented some HIV/AIDS incidence rates. However, for the first time, this report includes HIV/AIDS incidence rates over time by age, race/ethnicity, and gender, and neighborhood rates for the most current year of data available. See pages that follow for these new data.

HIV and AIDS

HIV/AIDS Cases by Age and Year: Counts and Incidence Rates, Boston, 1999-2005



	1999	2000	2001	2002	2003	2004	2005
<20	5.6	4.2	4.9	10.6	4.2	4.9	3.5
20-29	36.2	42.0	27.5	43.4	27.5	33.3	38.4
30-39	147.0	127.6	119.9	114.1	112.2	96.7	75.4
40-49	132.0	132.0	125.2	129.3	113.0	104.8	126.6
50+	6.8	6.8	8.3	9.1	7.6	12.9	8.3
BOSTON	57.7	56.2	49.2	54.3	47.4	44.8	43.3

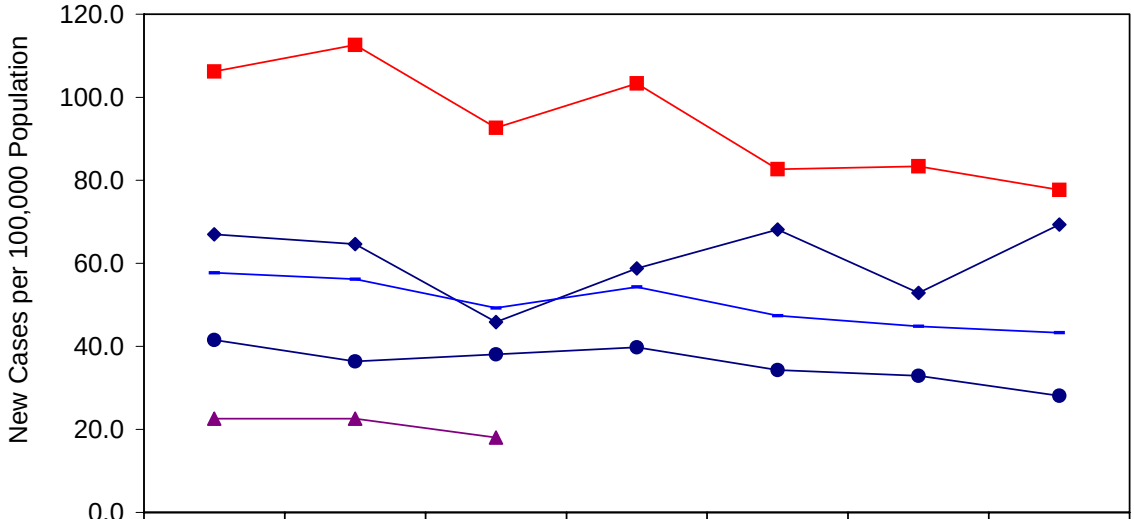
Count	1999	2000	2001	2002	2003	2004	2005
<20	8	6	7	15	6	7	5
20-29	50	58	38	60	38	46	53
30-39	152	132	124	118	116	100	78
40-49	97	97	92	95	83	77	93
50+	9	9	11	12	10	17	11
BOSTON	340	331	290	320	279	264	255

NOTES: These data do not include inmates of correctional facilities. These data do not include persons whose age was not reported, except in the Boston overall rates and counts.
DATA SOURCE: Massachusetts Department of Public Health HIV/AIDS Surveillance Program
DATA ANALYSIS: Boston Public Health Commission Research Office

- Boston residents ages 40-49 had the highest HIV/AIDS incidence rate in 2005 of all Bostonians and three times the rate for the city overall.

HIV and AIDS

HIV/AIDS Cases by Race/Ethnicity and Year: Counts and Incidence Rates, Boston, 1999-2005



	1999	2000	2001	2002	2003	2004	2005
Asian	22.6	22.6	18.1	--	--	--	--
Black	106.2	112.6	92.7	103.3	82.7	83.4	77.7
Latino	67.0	64.6	45.8	58.8	68.2	52.9	69.3
White	41.5	36.4	38.1	39.8	34.3	32.9	28.1
BOSTON	57.7	56.2	49.2	54.3	47.4	44.8	43.3

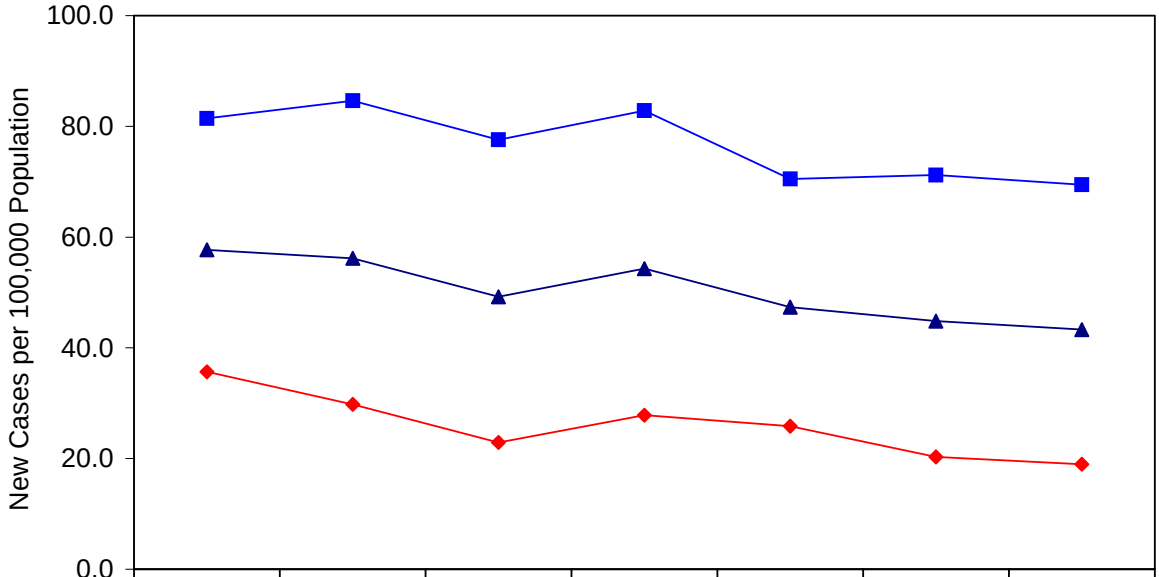
Count	1999	2000	2001	2002	2003	2004	2005
Asian	10	10	8	n<5	n<5	n<5	n<5
Black	149	158	130	145	116	117	109
Latino	57	55	39	50	58	45	59
White	121	106	111	116	100	96	82
BOSTON	340	331	290	320	279	264	255

NOTES: These data do not include persons of other or unknown race/ethnicity, except in the Boston overall rates and counts, or inmates of correctional facilities. There were too few new cases of HIV/AIDS among Asians from years 2002 through 2005 to permit the presentation of incidence rates.
DATA SOURCE: Massachusetts Department of Public Health HIV/AIDS Surveillance Program
DATA ANALYSIS: Boston Public Health Commission Research Office

- For every year between 1999 and 2005, Black Boston residents had a higher rate of new cases of HIV/AIDS, compared with Boston's White and Latino residents.
- The incidence of HIV/AIDS in 2005 was lower for Blacks and Whites and slightly higher for Latinos than it was in 1999. For Blacks, the HIV/AIDS rate was 26.8% lower in 2005 than in 1999, for Whites, 32.3% lower, and for Latinos, 3.4% higher.

HIV and AIDS

HIV/AIDS Cases by Sex and Year: Counts and Incidence Rates, Boston, 1999-2005



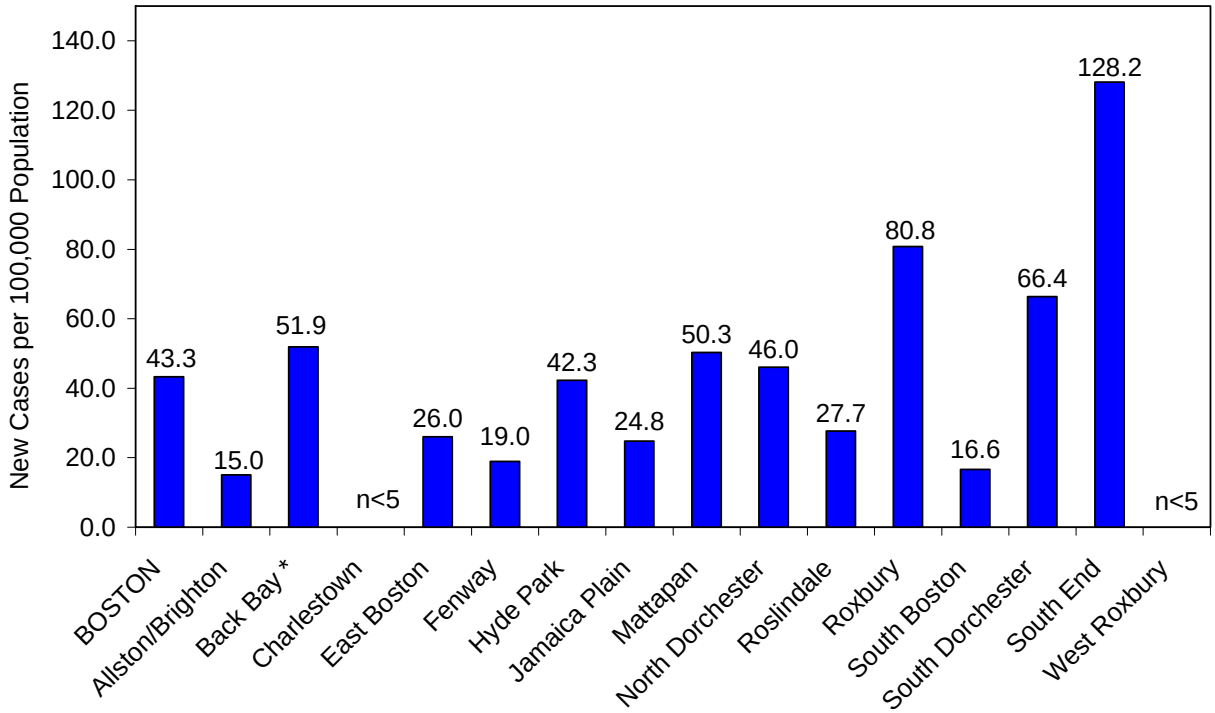
	1999	2000	2001	2002	2003	2004	2005
Female	35.7	29.8	22.9	27.8	25.9	20.3	19.0
Male	81.5	84.6	77.6	82.9	70.5	71.2	69.5
BOSTON	57.7	56.2	49.2	54.3	47.4	44.8	43.3

Count	1999	2000	2001	2002	2003	2004	2005
Female	109	91	70	85	79	62	58
Male	231	240	220	235	200	202	197
BOSTON	340	331	290	320	279	264	255

NOTE: These data do not include inmates of correctional facilities.
DATA SOURCE: Massachusetts Department of Public Health HIV/AIDS Surveillance Program
DATA ANALYSIS: Boston Public Health Commission Research Office

- In each of the years during the seven-year period of 1999 to 2005, the number and rate of HIV/AIDS incidence in Boston males ranged from two to more than three times that of females.

HIV and AIDS

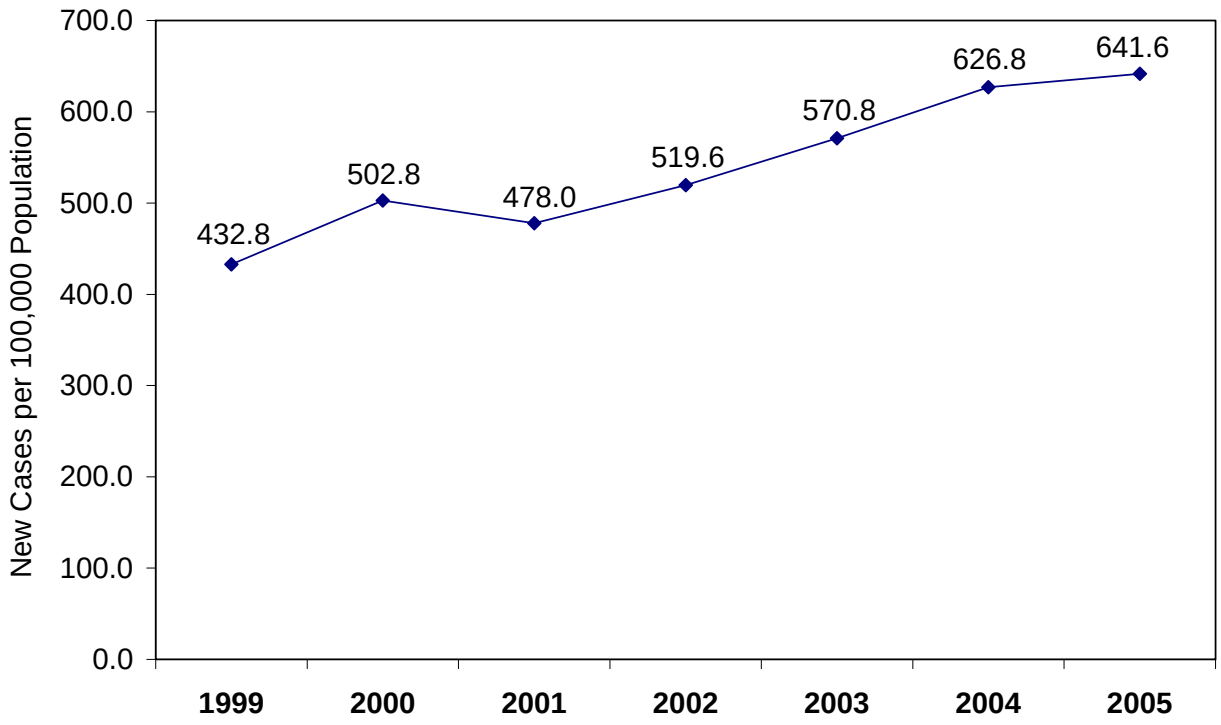


	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	255	10	24	n<5	10	9	12	9	14	27	9	28	5	50	35	n<5

ABBREVIATIONS KEY: A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
* Includes the North End
DATA SOURCE: Massachusetts Department of Public Health HIV/AIDS Surveillance Program
DATA ANALYSIS: Boston Public Health Commission Research Office

- The South End had the city's highest HIV/AIDS incidence rate in 2005, three times that of the city rate.
- Other neighborhoods with rates higher than Boston's were Roxbury, South Dorchester, Back Bay, Mattapan and North Dorchester.

Sexually Transmitted Diseases

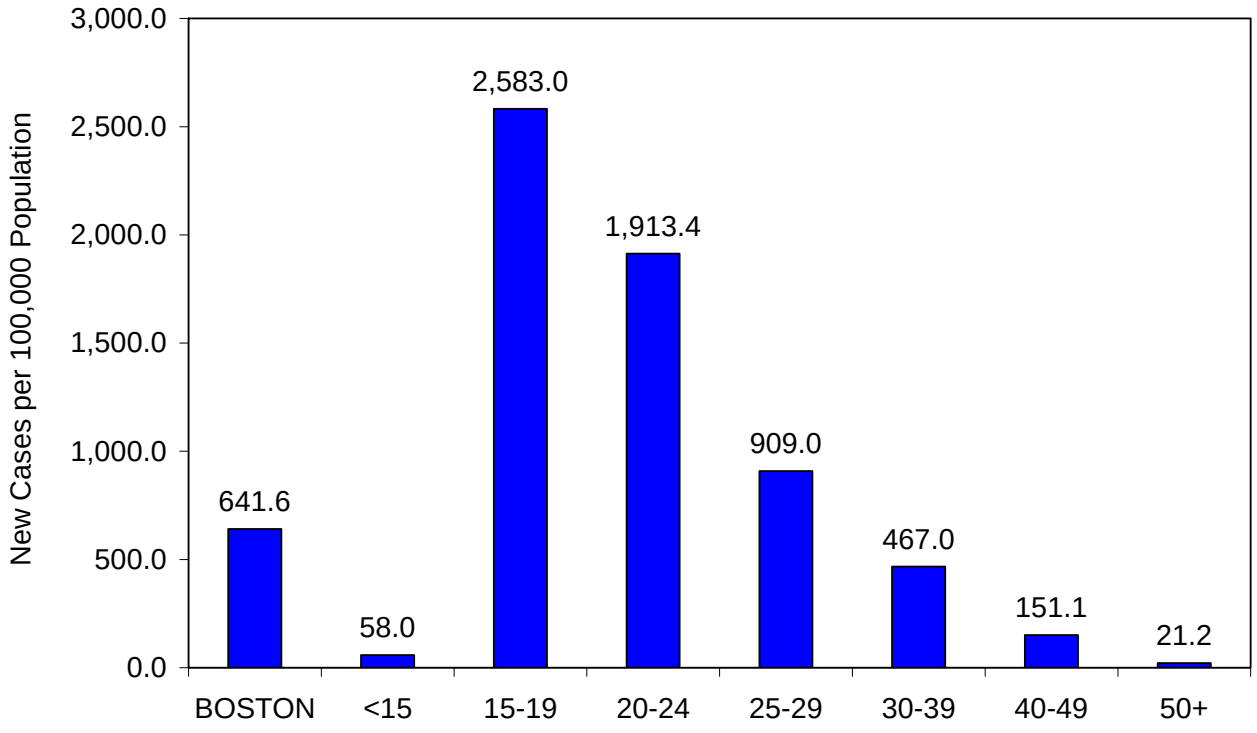


	1999	2000	2001	2002	2003	2004	2005
Count	2,550	2,962	2,816	3,061	3,363	3,693	3,780

NOTE: Rates for previous years may differ from those reported in previous publications due to file updates by the Massachusetts Department of Public Health.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- The number of reported new cases of chlamydia has been rising in recent years, but it is not certain how much of the increase is attributable to more chlamydia infection and how much to screening for the condition.
- The incidence rate of chlamydia among Boston residents in 2005 was 48.2% higher than in 1999.

Sexually Transmitted Diseases



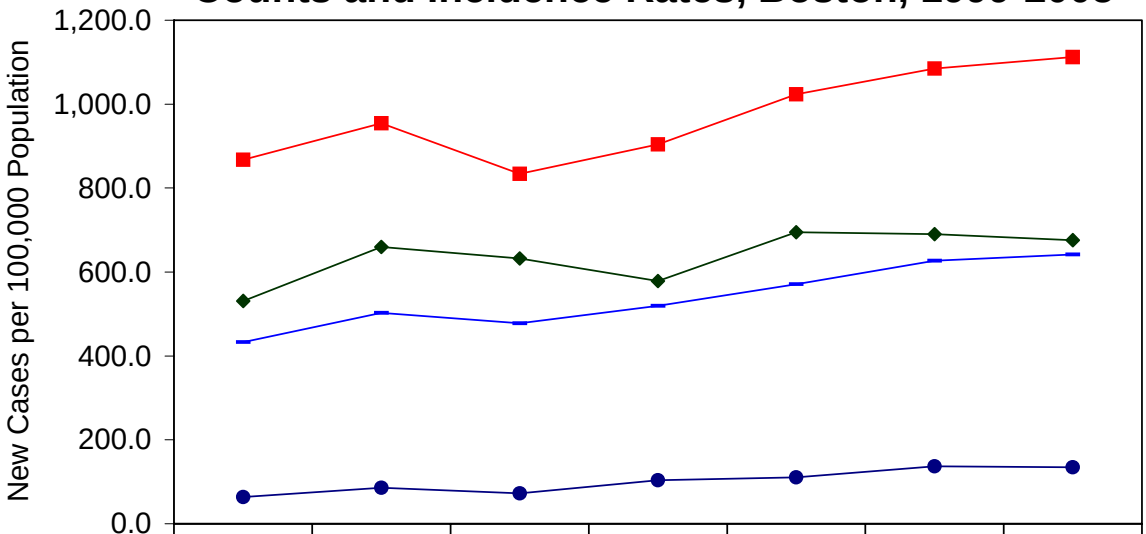
	BOSTON	<15	15-19	20-24	25-29	30-39	40-49	50+
Count	3,780	57	1,127	1,341	619	483	111	28

NOTES: These data do not include persons whose age was not reported, except in the Boston overall rate and count.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research

- Reported chlamydia infection is most common among young people and falls off steeply with increasing age. In Boston 2005, the incidence rate for chlamydia was highest among residents ages 15 to 19.

Sexually Transmitted Diseases

Chlamydia Cases by Race/Ethnicity and Year: Counts and Incidence Rates, Boston, 1999-2005



	1999	2000	2001	2002	2003	2004	2005
Black	867.4	954.3	833.9	903.7	1,023.5	1,084.80	1,111.9
Latino	531.2	659.3	632.3	578.2	694.6	689.9	675.8
White	63.8	86.1	72.7	103.6	110.4	137.2	134.8
BOSTON	432.8	502.8	478.0	519.6	570.8	626.8	641.6

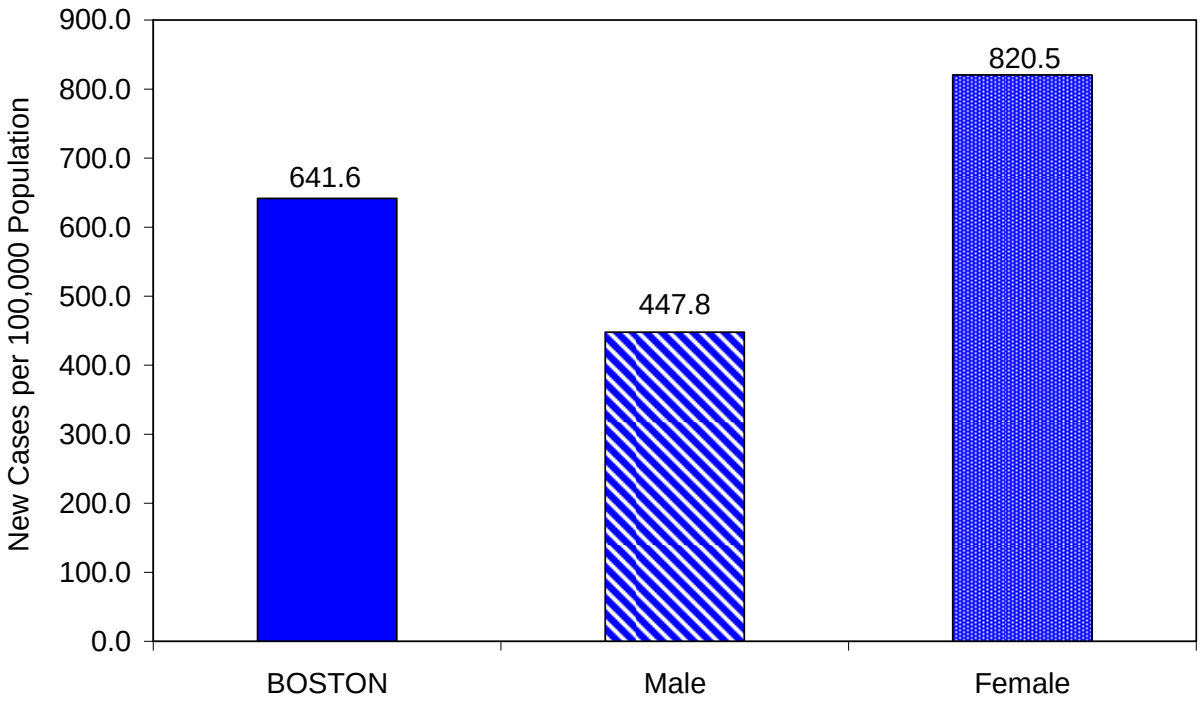
Count	1999	2000	2001	2002	2003	2004	2005
Black	1,217	1,339	1,170	1,268	1,436	1,536	1,560
Latino	452	561	538	492	593	593	575
White	186	251	212	302	322	402	393
BOSTON	2,550	2,962	2,816	3,061	3,363	3,693	3,780

NOTES: These data do not include persons of other or unknown race/ethnicity, except in the Boston overall rates and counts. There were too few cases of chlamydia among Asians to permit the presentation of an incidence rate. Rates for previous years may differ from those reported in previous publications due to file updates by the Massachusetts Department of Public Health.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- For every year between 1999 and 2005, Black Boston residents had far higher numbers and rates of new cases of chlamydia, compared with Boston's White and Latino residents.

- The incidence of chlamydia in 2005 was higher for all three of these race/ethnicity groups than it was in 1999. Among Blacks, the reported chlamydia rate was 28.2% higher in 2005 than in 1999, among Latinos, 27.2% higher, and among Whites, 111.3% higher.

Sexually Transmitted Diseases

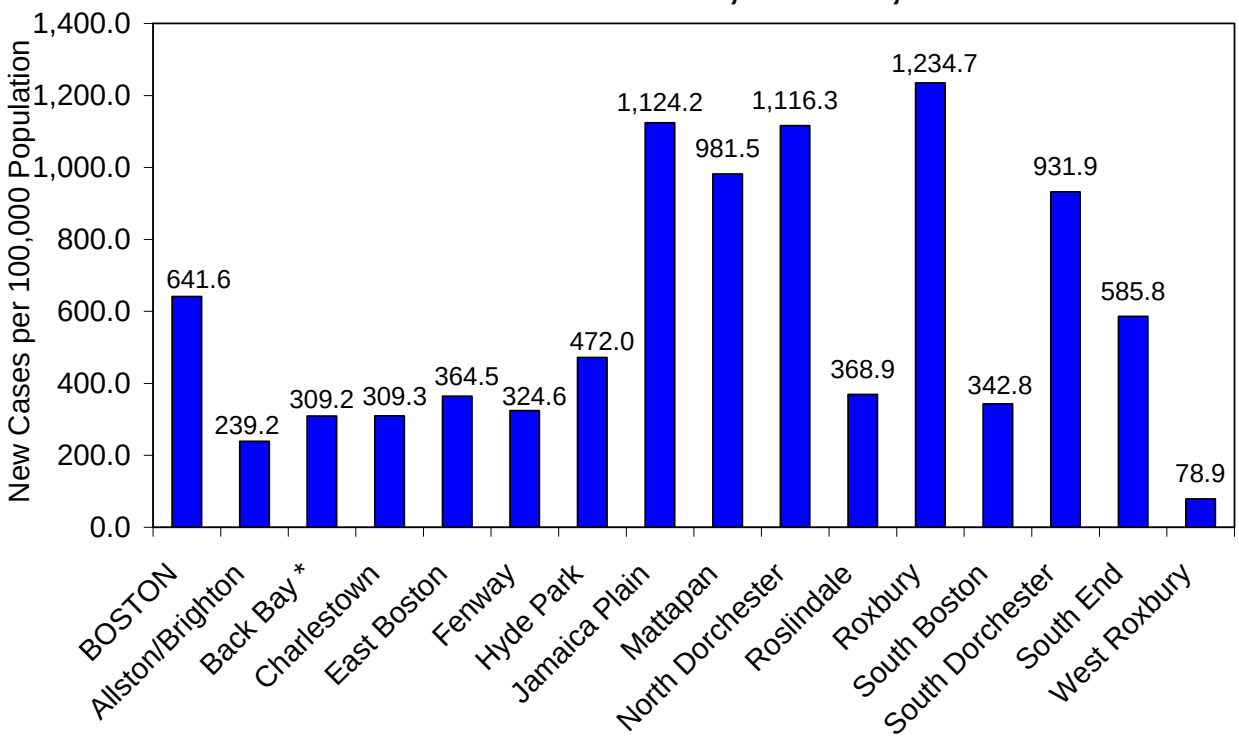


	BOSTON	Male	Female
Count	3,780	1,270	2,507

NOTE: These data do not include persons whose sex was not reported, except in the Boston overall count and rate.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2005, the reported number of new chlamydia cases in females was almost twice the number of new cases reported in Boston males. The resulting incidence rate for females was nearly twice that of males.
- Some of the observed difference in the reported number of new chlamydia cases between males and females is probably due to more screening of females

Sexually Transmitted Diseases

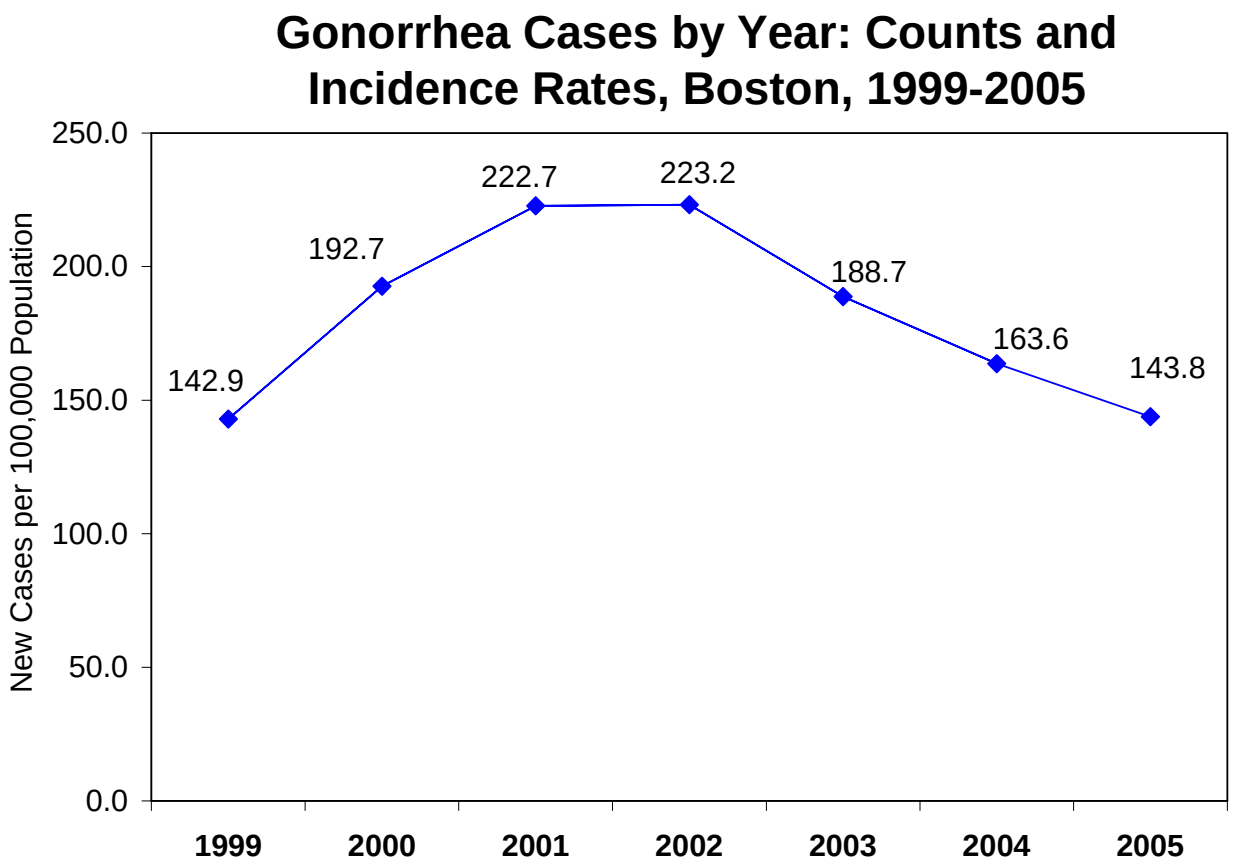


	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	3,780	159	143	47	140	154	134	408	273	655	120	428	103	702	160	19

ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
* Includes the North End
NOTE: These data do not include homeless persons, individuals whose neighborhood of residence was not reported, inmates of correctional facilities, and clients of drug treatment programs, except in the Boston overall rates and counts.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2005, several Boston neighborhoods reported chlamydia incidence rates well above the city average. Roxbury, Jamaica Plain, North Dorchester, and Mattapan rates all had rates more than fifty percent higher than the rate for Boston overall.

Sexually Transmitted Diseases

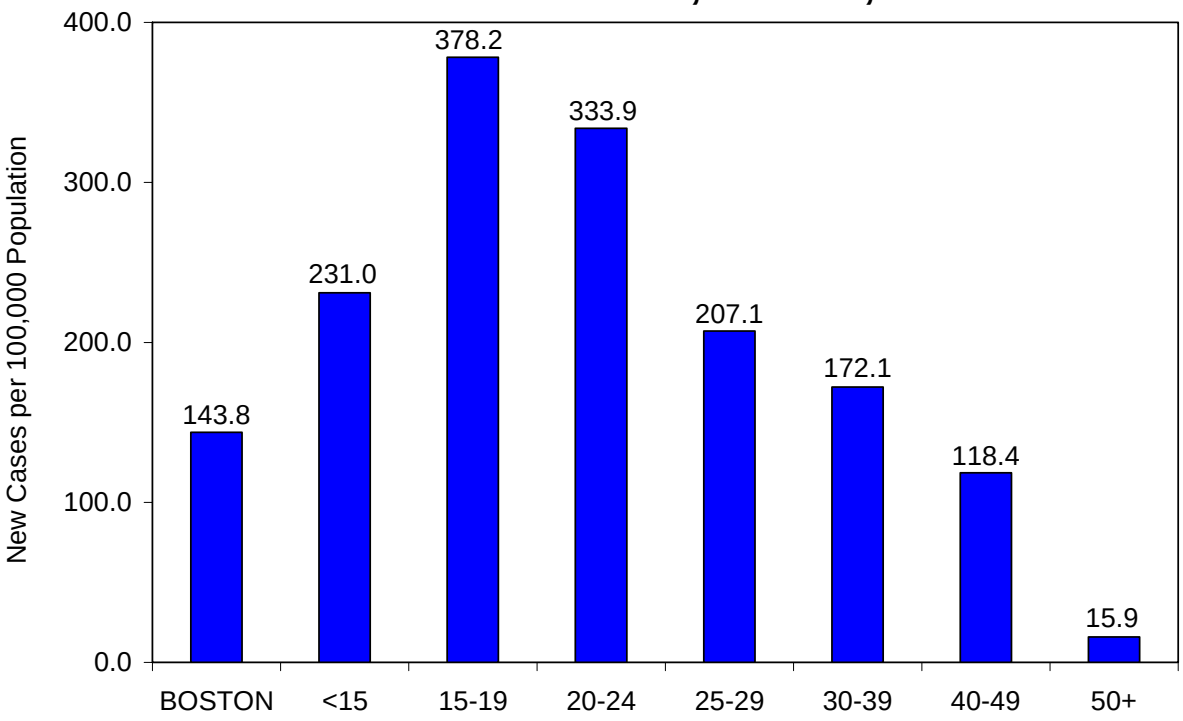


	1999	2000	2001	2002	2003	2004	2005
Count	842	1,135	1,312	1,315	1,112	964	847

NOTE: Rates for previous years may differ from those reported in previous publications due to file updates by the Massachusetts Department of Public Health.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- New cases of gonorrhea have become less common among Boston residents in recent years after rising sharply between 1999 and 2001.
- The gonorrhea incidence rate rose to a high of 223.2 cases per 100,000 population in 2002, and then began to fall. In 2005, the rate declined 12.1% from 2004.

Sexually Transmitted Diseases



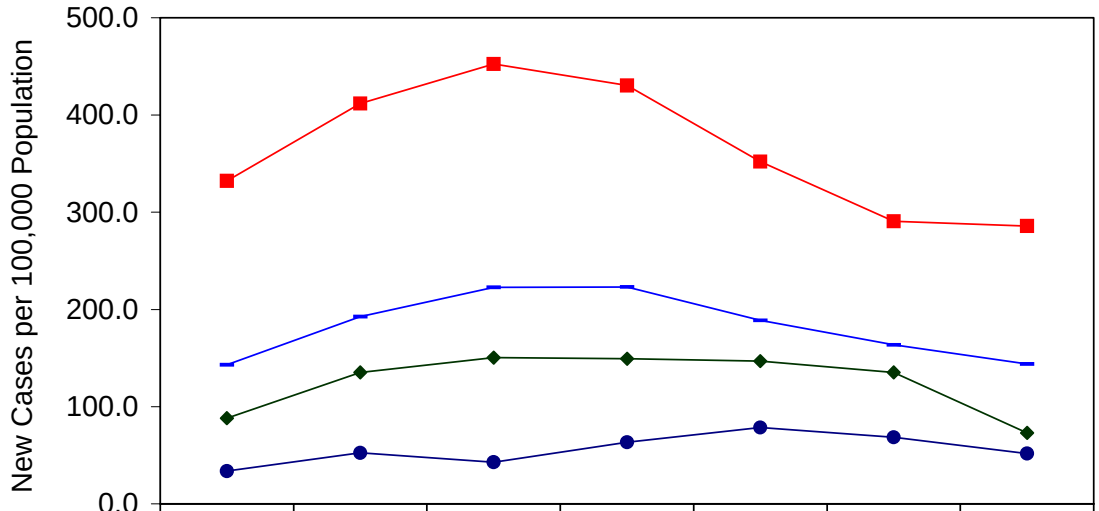
	BOSTON	<15	15-19	20-24	25-29	30-39	40-49	50+
Count	847	176	165	234	141	178	87	21

NOTES: These data do not include persons whose age was not reported, except in the Boston overall rate and count.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- In Boston, as elsewhere, gonorrhea infection is most common among young people. Over half of all new cases among Boston residents in 2005 occurred in people under age 25.
- Gonorrhea is most common among young people. The incidence rate for reported gonorrhea is highest among individuals ages 15 to 19 and 20 to 24.

Sexually Transmitted Diseases

Gonorrhea Cases by Race/Ethnicity and Year: Counts and Incidence Rates, Boston, 1999-2005



	1999	2000	2001	2002	2003	2004	2005
Black	332.1	412.0	452.6	430.5	352.1	290.8	285.8
Latino	88.1	135.2	150.4	149.3	146.9	135.2	72.9
White	33.6	52.5	42.9	63.5	78.5	68.6	51.8
BOSTON	142.9	192.7	222.7	223.2	188.7	163.6	143.8

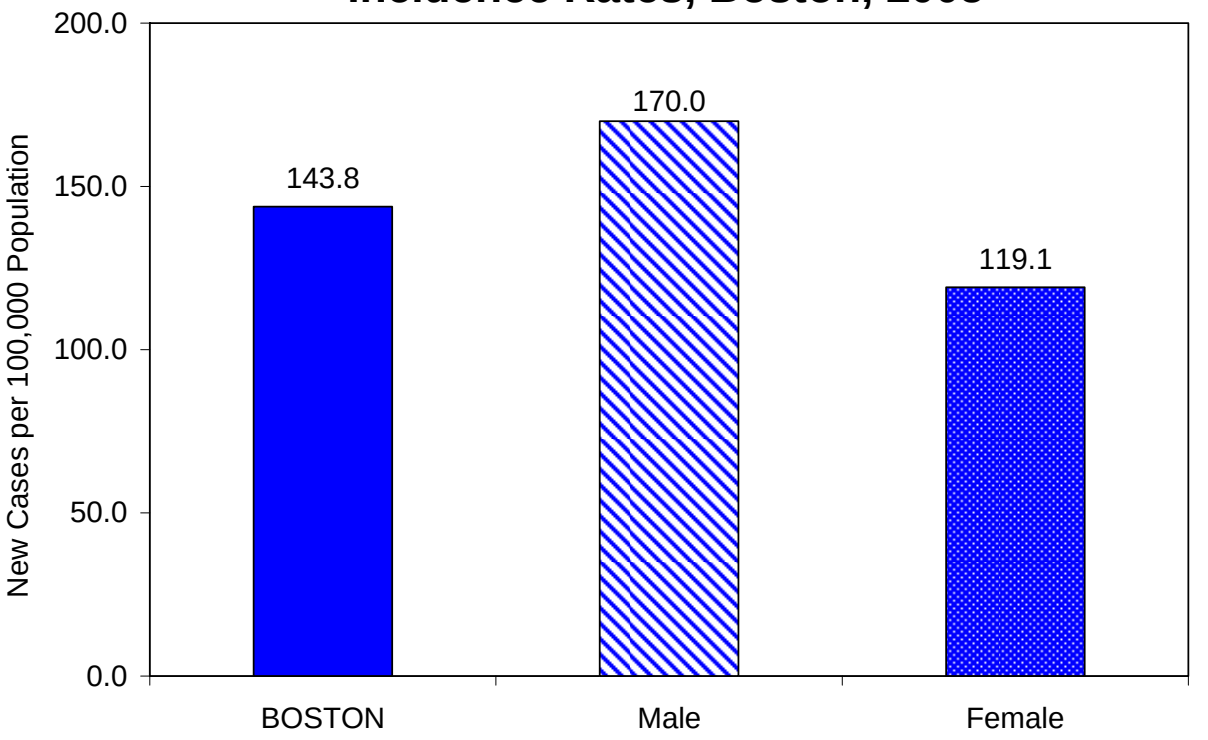
Count	1999	2000	2001	2002	2003	2004	2005
Black	466	578	635	604	494	411	401
Latino	75	115	128	127	125	117	62
White	98	153	125	185	229	201	151
BOSTON	842	1,135	1,312	1,315	1,112	964	847

NOTES: These data do not include persons of other or unknown race/ethnicity, except in the Boston overall rates and counts. There were too few cases of gonorrhea among Asians to permit the presentation of an incidence rate. Rates for previous years may differ from those reported in previous publications due to file updates by the Massachusetts Department of Public Health.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- From 1999 through 2005, incidence of gonorrhea varied substantially by race, with the incidence rate for Black residents substantially higher than incidence rates for Whites and Latinos.

- However, as of 2005, the incidence of gonorrhea in Boston's Black population was 36.9% lower than the highest rate in 2001. Among Latino Bostonians, the 2005 rate was 51.5% lower than their highest rate in 2001. The largest difference between 1999 and 2005 rates was that of White residents, whose incidence rate increased 54.2%.

Sexually Transmitted Diseases



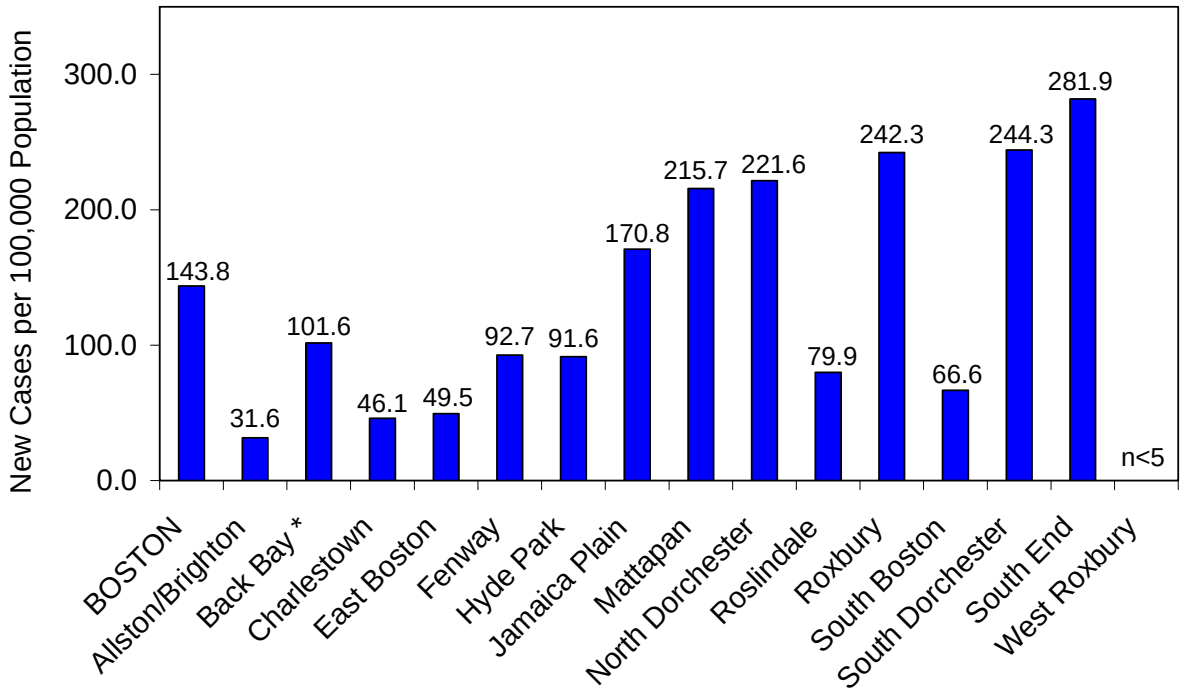
	BOSTON	Male	Female
Count	847	482	364

NOTE: These data do not include persons whose sex was not reported, except in the Boston overall rate and count.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- There is a less pronounced difference by gender in the occurrence of gonorrhea than chlamydia and syphilis.
- The reported gonorrhea incidence rate for Boston males was 42.7% higher than that for Boston females.

Sexually Transmitted Diseases

Gonorrhea Cases by Neighborhood: Counts and Incidence Rates, Boston, 2005



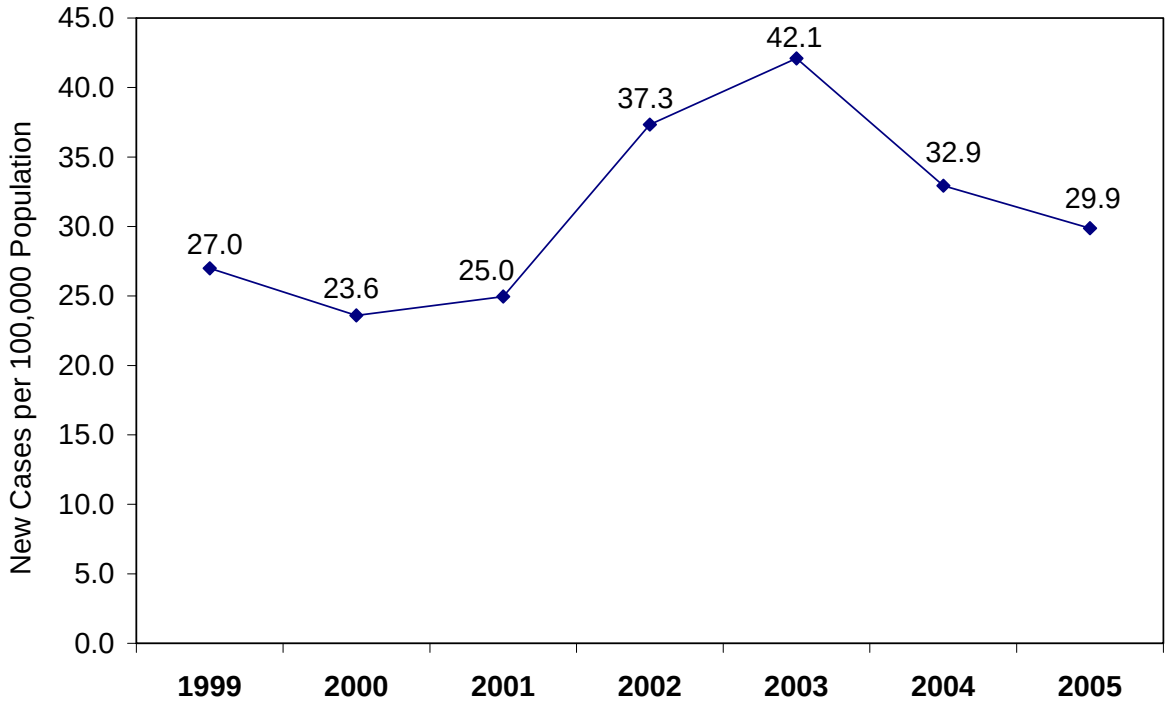
	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	847	21	47	7	19	44	26	62	60	130	26	84	20	184	77	n<5

ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
*Includes the North End
NOTE: These data do not include homeless persons, individuals whose neighborhood of residence was not reported, inmates of correctional facilities, and clients of drug treatment programs, except in the Boston overall rate and count.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- South and North Dorchester had the city's highest numbers of new cases of gonorrhea in 2005, and these numbers are disproportionate to the populations of these neighborhoods. Together, they make up 28.0% of the city's population but had 37.1% of its new cases of gonorrhea.

- The South End had Boston's highest rate of gonorrhea in 2005. This rate was almost double that of the city as a whole.

Sexually Transmitted Diseases

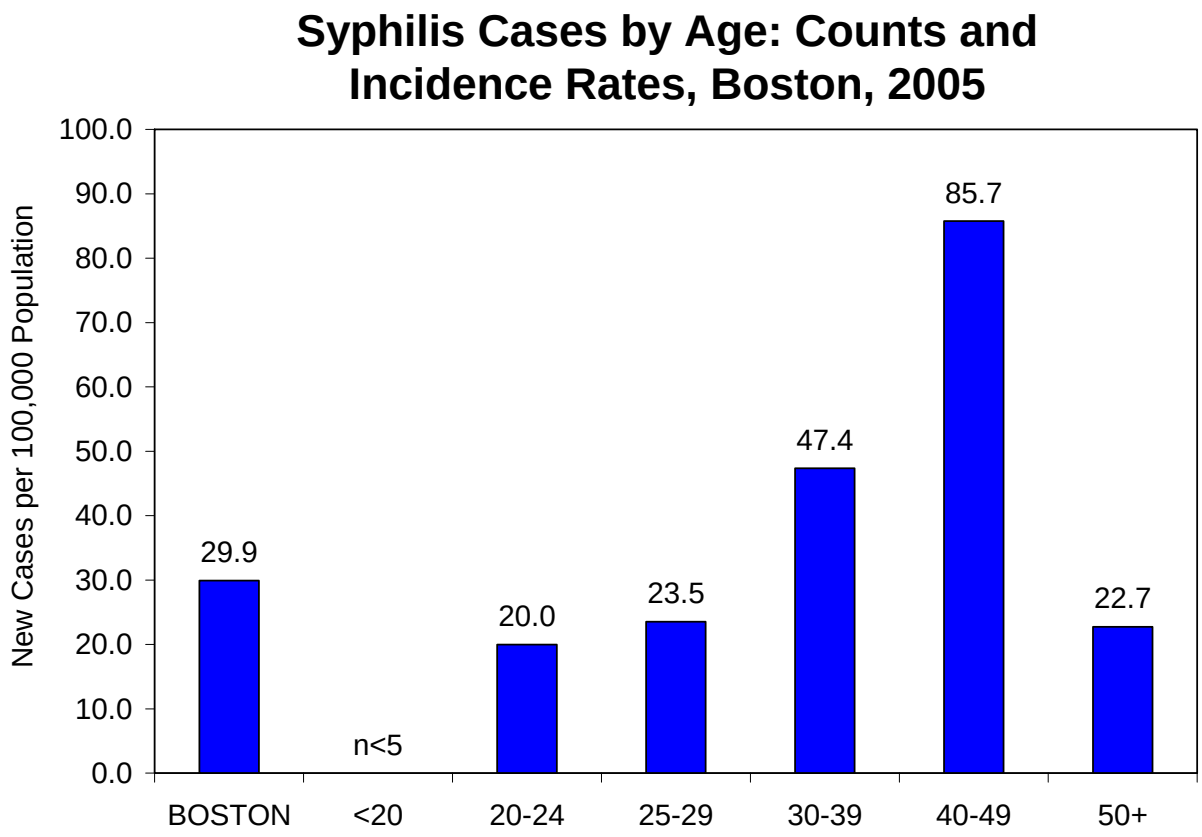


	1999	2000	2001	2002	2003	2004	2005
Count	159	139	147	220	248	201	176

NOTES: Rates for previous years may differ from those reported in previous publications due to file updates by the Massachusetts Department of Public Health. All syphilis cases are included, not just primary and secondary.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- From 1999 to 2003, the incidence rate of syphilis among Boston residents increased by 55.9%. The rate began declining in 2004 and continued for 2005.

Sexually Transmitted Diseases



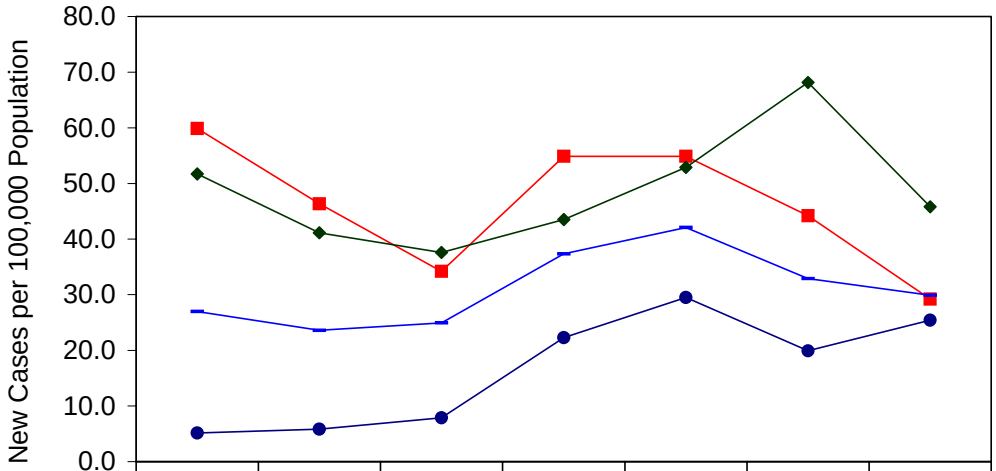
	BOSTON	<20	20-24	20-29	30-39	40-49	50+
Count	176	n<5	14	16	49	63	30

NOTE: All syphilis cases are included, not just primary and secondary. Incidence rates are presented only for those age groups with at least 5 cases of syphilis.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- Syphilis is most common among people ages 30 and older. The incidence rate for reported syphilis is highest among people ages 40 to 49 and 30 to 39.

Sexually Transmitted Diseases

Syphilis Cases by Race/Ethnicity and Year: Counts and Incidence Rates, Boston, 1999-2005



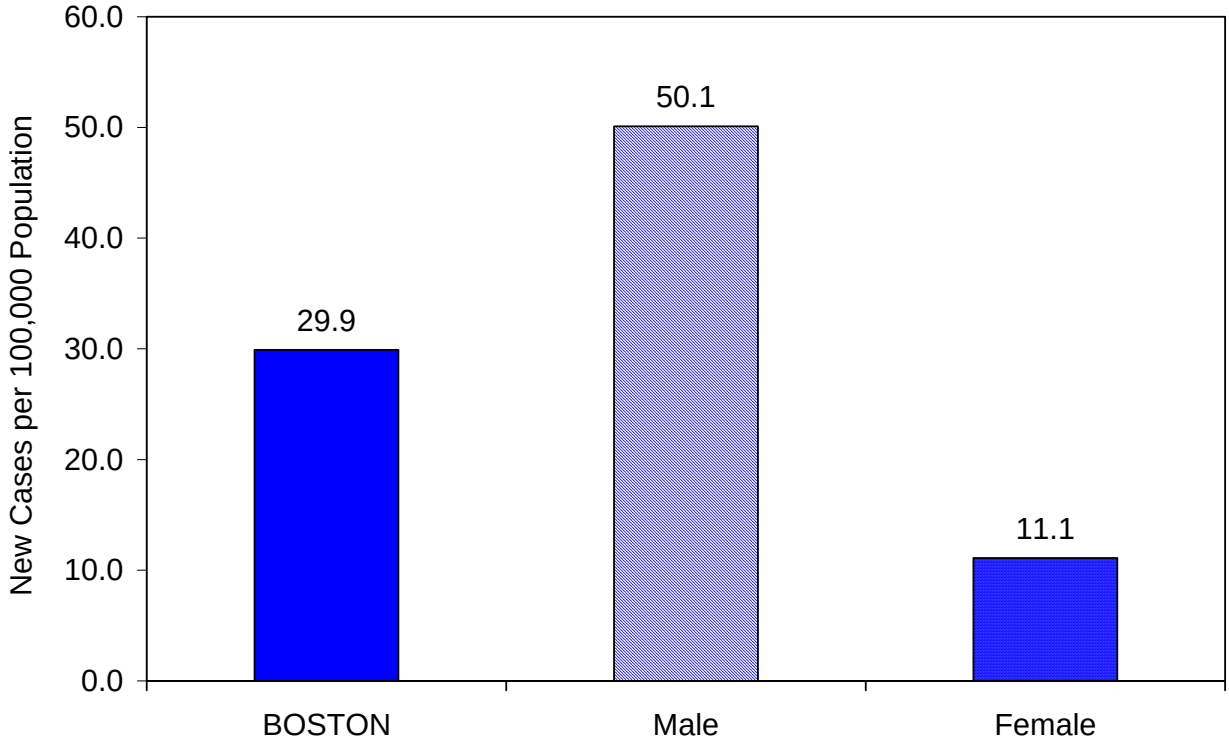
	1999	2000	2001	2002	2003	2004	2005
Black	59.9	46.3	34.2	54.9	54.9	44.2	29.2
Latino	51.7	41.1	37.6	43.5	52.9	68.2	45.8
White	5.1	5.8	7.9	22.3	29.5	19.9	25.4
BOSTON	27.0	23.6	25.0	37.3	42.1	32.9	29.9

Count	1999	2000	2001	2002	2003	2004	2005
Black	84	65	48	77	77	60	41
Latino	44	35	32	37	45	59	39
White	15	17	23	65	86	55	74
BOSTON	159	139	147	220	248	201	176

NOTES: These data do not include persons of other or unknown race/ethnicity, except in the Boston overall rates and counts. There were too few cases of syphilis among Asians to permit the presentation of an incidence rate. Rates for previous years may differ from those reported in previous publications due to file updates by the Massachusetts Department of Public Health. All syphilis cases are included, not just primary and secondary.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- Incidence of syphilis varies by race, with the incidence rates for Blacks and Latinos substantially higher than for Whites.
- The incidence rate for syphilis decreased between 1999 and 2005 for Blacks and Latinos, but increased for Whites.
- Among Black residents, the incidence rate of syphilis was 51.3% lower than in 1999. After reaching a high of 68.2 new cases per 100,000 population in 2004, the syphilis incidence rate for Latinos was 32.8% lower in 2005.
- From 1999 to 2005, the syphilis incidence rate for White residents increased almost 400%.

Sexually Transmitted Diseases

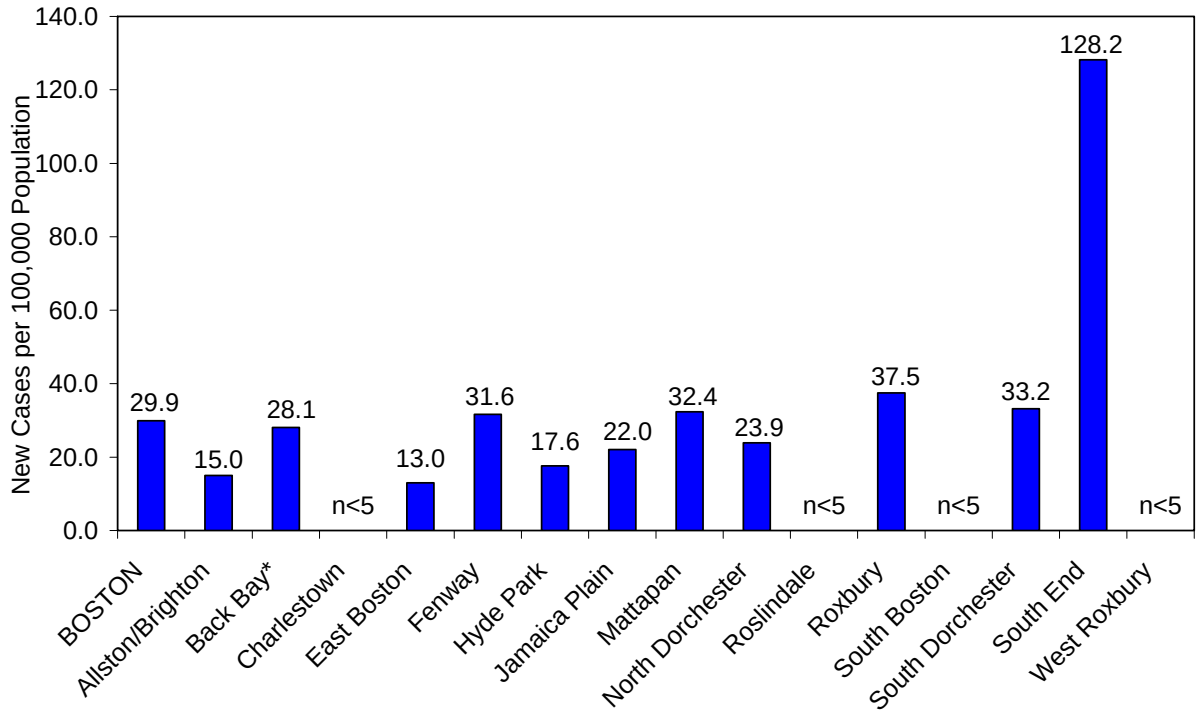


	BOSTON	Male	Female
Count	176	142	34

NOTES: These data do not include persons whose sex was not reported, except in the Boston overall rate and count. All syphilis cases are included, not just primary and secondary.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2005, the rate of syphilis in males was over 4.5 times that of females.

Sexually Transmitted Diseases

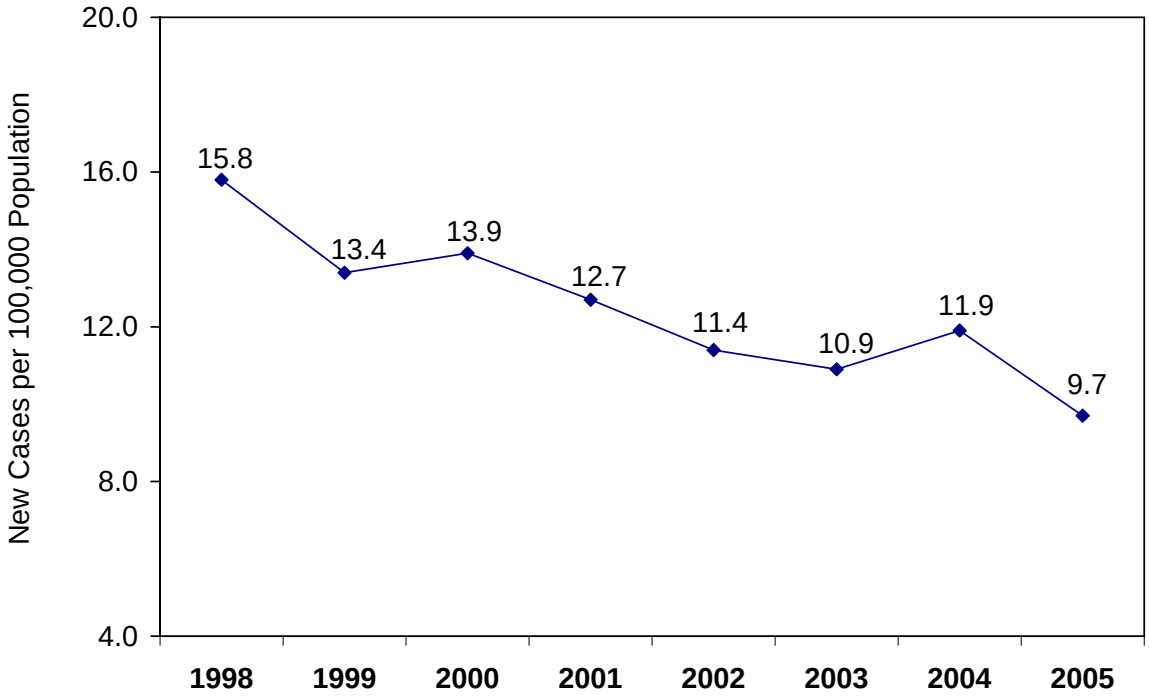


	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	176	10	13	n<5	5	15	5	8	9	14	n<5	13	n<5	25	35	n<5

ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
*Includes the North End
NOTES: These data do not include homeless persons, individuals whose neighborhood of residence was not reported, except in the Boston overall rate and count, inmates of correctional facilities, and clients of drug treatment programs. All syphilis cases are included, not just primary and secondary.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- The South End had the city's highest syphilis incidence rate in 2005, and it was 4.3 times the city rate.
- Other neighborhoods with rates higher than Boston's were Roxbury, South Dorchester, and Fenway.

Tuberculosis

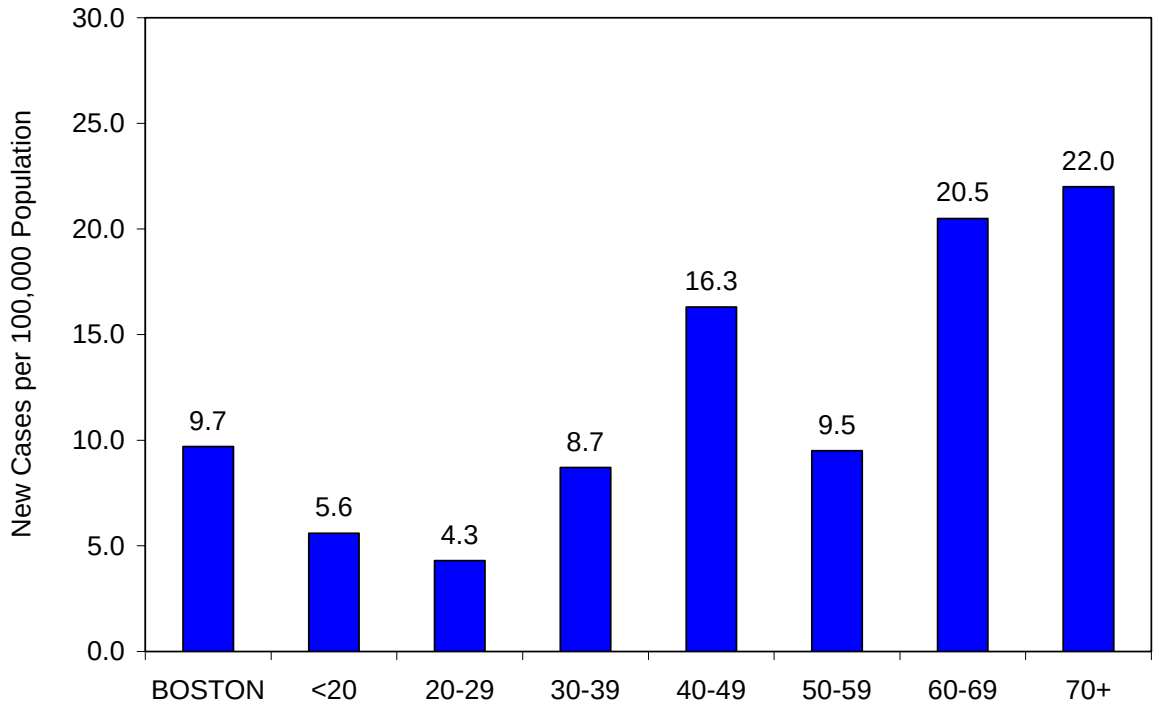


	1998	1999	2000	2001	2002	2003	2004	2005
Count	89	77	82	75	67	64	70	57

DATA SOURCE: Communicable Disease Database, Boston Public Health Commission, Communicable Disease Control Division
DATA ANALYSIS: Boston Public Health Commission, Communicable Disease Control Division
GRAPHIC: Boston Public Health Commission Research Office

- With the exception of a small increase in 2000 and in 2004, the tuberculosis (TB) incidence rate for Boston residents has been falling for the past several years.

Tuberculosis

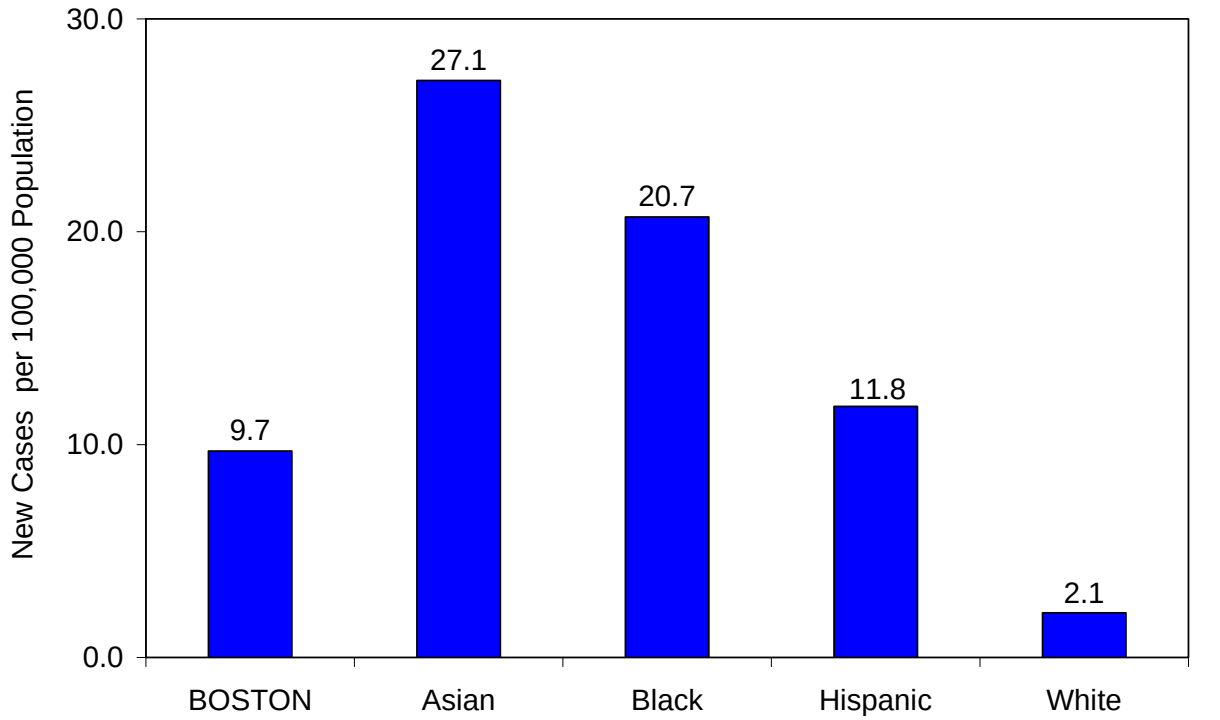


	BOSTON	<20	20-29	30-39	40-49	50-59	60-69	70+
Count	57	8	6	9	12	5	7	10

DATA SOURCE: Communicable Disease Database, Boston Public Health Commission, Communicable Disease Control Division
DATA ANALYSIS: Boston Public Health Commission, Communicable Disease Control Division
GRAPHIC: Boston Public Health Commission Research Office

- In 2005, the highest incidence rate of reported tuberculosis was among Boston residents ages 70 and over, whose rate was almost double that of Boston overall. The highest number of new cases, however, occurred in people in their forties.

Tuberculosis



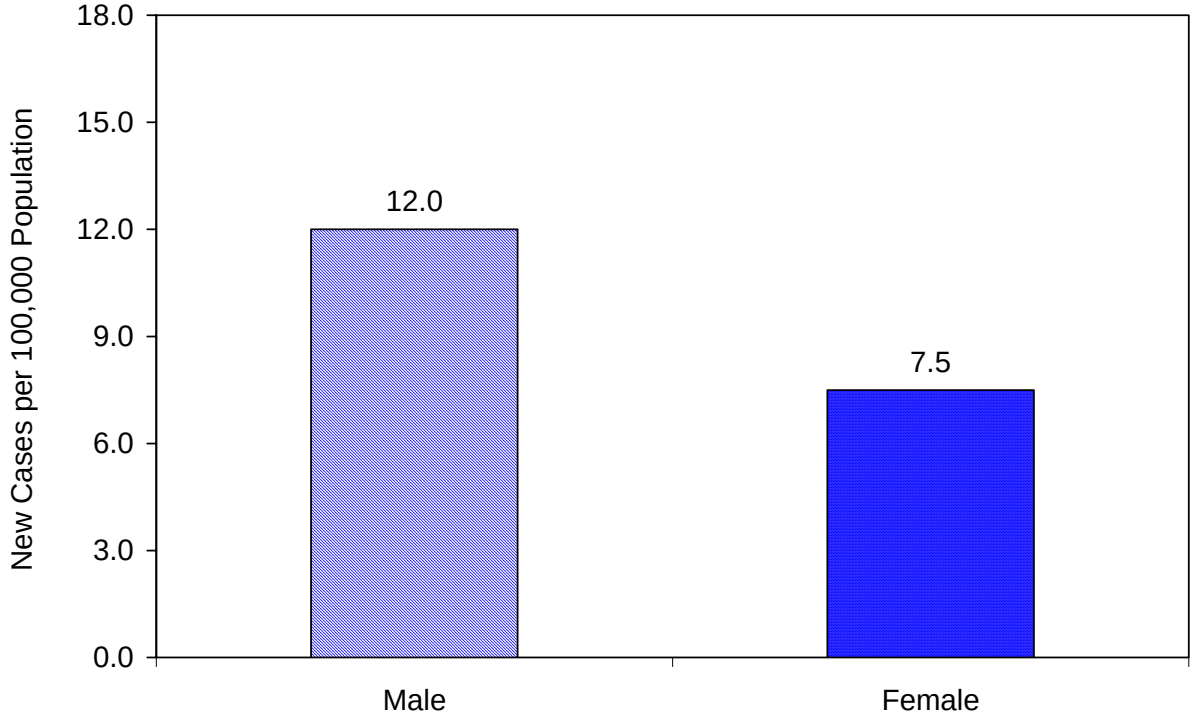
	BOSTON	Asian	Black	Hispanic	White
Count	57	12	29	10	6

DATA SOURCE: Communicable Disease Database, Boston Public Health Commission, Communicable Disease Control Division
DATA ANALYSIS: Boston Public Health Commission, Communicable Disease Control Division
GRAPHIC: Boston Public Health Commission Research Office

- Although Black Bostonians had the city's highest number of new TB cases in 2005, the highest incidence rate was among Asian residents whose rate was almost three times that of Boston overall.

- Differences in rates across racial/ethnic groups may be related to immigration of individuals from countries with high rates of tuberculosis. In 2005, 75.4% of Boston's new cases of TB were among foreign-born residents, primarily from Asian countries (data not shown).

Tuberculosis



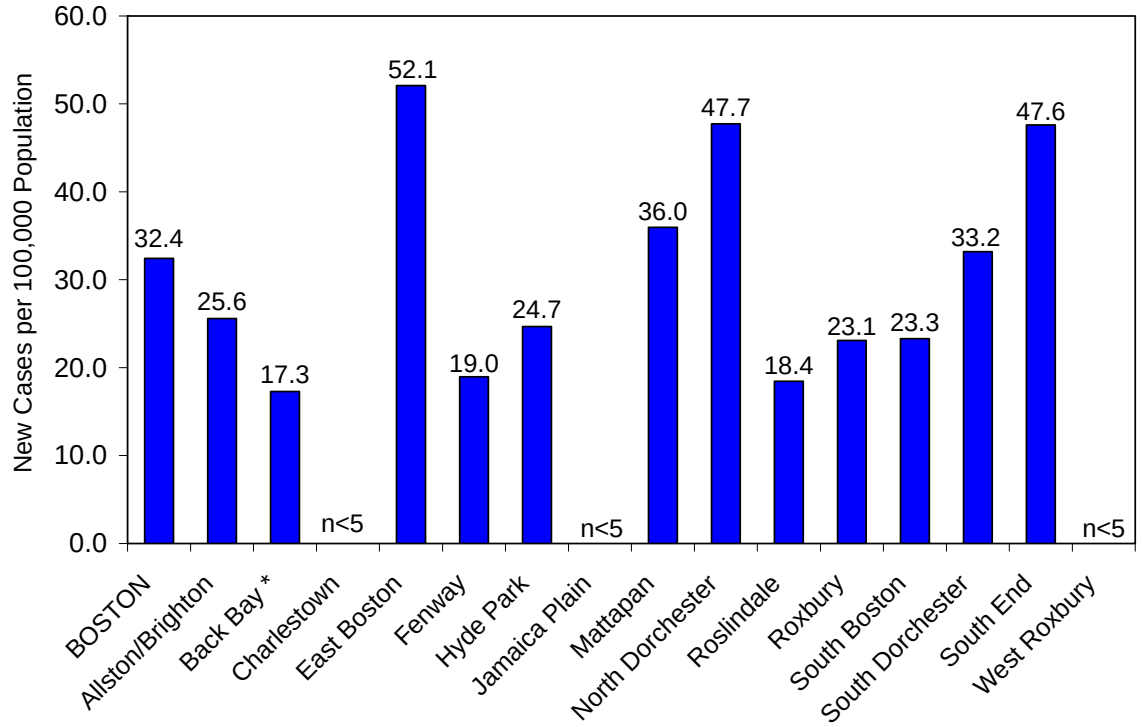
	Male	Female
Count	34	23

NOTE: These data do not include persons whose sex was not reported.
DATA SOURCE: Communicable Disease Database, Boston Public Health Commission, Communicable Disease Control Division
DATA ANALYSIS: Boston Public Health Commission, Communicable Disease Control Division
GRAPHIC: Boston Public Health Commission Research Office

- The incidence rate in 2005 for tuberculosis was 1.6 times higher for Boston males than Boston females.

Tuberculosis

Tuberculosis Cases by Neighborhood: Counts and Incidence Rates, Boston, 2003-2005



	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	191	17	8	n<5	20	9	7	n<5	10	28	6	8	7	25	13	n<5

ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
* Includes the North End
NOTE: These data do not include homeless persons, individuals whose neighborhood of residence was not reported, inmates of correctional facilities, and clients of drug treatment programs, except in the Boston overall rates and counts. Incidence rates are presented only for neighborhoods with at least 5 cases of tuberculosis.
DATA SOURCE: Communicable Disease Database, Boston Public Health Commission, Communicable Disease Control Division
DATA ANALYSIS: Boston Public Health Commission, Communicable Disease Control Division

- For the three-year period 2003-2005, Boston neighborhoods with the three highest TB incidence rates were East Boston, North Dorchester, and the South End. These rates, in part, may be related to immigration of individuals from countries with high rates of tuberculosis.

- East Boston had the highest TB incidence rate of all Boston neighborhoods, and it was almost twice as high as the overall Boston rate.

Other Communicable Diseases

Reportable Diseases: Counts, Boston, 2001-2005											
	2001	2002	2003	2004	2005		2001	2002	2003	2004	2005
AIDS	174	185	169	145	139	Lyme Disease	19	48	31	39	72
Amebiasis	20	52	34	25	21	Malaria	8	12	n<5	8	n<5
Animal Bites	n/a	n/a	513	468	463	Measles	0	0	0	0	0
Anthrax	0	0	0	0	0	Meningitis (Bacterial)	5	n<5	5	n<5	10
Babesiosis	n<5	n<5	n<5	n<5	n<5	Meningitis (Viral)	34	27	26	61	42
Botulism	0	0	0	0	0	Meningococcal Disease	8	6	n<5	7	5
Brucellosis	0	0	0	n<5	n<5	Monkeypox	0	0	0	0	0
Campylobacteriosis	134	151	162	118	130	Mumps	0	n<5	0	n<5	4
Chlamydia	2,816	3,061	3,363	3,693	3,780	Pertussis	36	26	97	114	88
Cholera	0	0	0	0	0	Plague	0	0	0	0	0
Cryptococcosis*	n<5	n<5	n<5	n<5	n<5	Polio	0	0	0	0	0
Cryptosporidium	10	12	9	14	n<5	Prion Disease (Human)	0	0	0	0	0
Cyclosporiasis	n<5	n<5	0	0	8	Psittacosis	0	0	0	n<5	0
Dengue fever	0	0	n<5	n<5	7	Q Fever	0	0	n<5	0	n<5
Diphtheria	0	0	0	0	0	Rabies in Humans	0	0	0	0	0
Ehrlichiosis	0	n<5	0	n<5	n<5	Reye Syndrome	0	0	0	0	0
Encephalitis (Any Cause)	n<5	n<5	5	n<5	5	Rheumatic Fever	0	0	0	0	0
Escherichia coli 0157:H7	9	9	10	8	10	Rickettsialpox	0	0	n<5	n<5	0
Food Poisoning or Toxicity**	0	n<5	n<5	n<5	n<5	Rocky Mountain Spotted Fever	0	0	0	n<5	n<5
Giardiasis	127	129	111	121	84	Rubella	n<5	0	0	0	0
Gonorrhea	1,312	1,315	1,112	964	847	Salmonella	203	161	165	129	144
Group A Streptococcus*	n<5	0	0	0	15	SARS	0	0	0	0	0
Group B Streptococcus*	n<5	5	12	27	18	Shigella	51	50	58	43	33
Guillain Barré Syndrome	0	0	0	n<5	0	Smallpox	0	0	0	0	0
Haemophilus Influenzae	n<5	n<5	5	5	n<5	Streptococcus Pneumoniae*	11	18	29	50	61
Hantavirus Infection	0	0	0	0	0	Syphilis***	147	220	248	194	176
Hemolytic Uremic Syndrome	n<5	0	n<5	0	n<5	Tetanus	0	0	0	0	0
Hepatitis A Infection	94	29	25	132	32	Toxic Shock Syndrome	0	0	0	n<5	0
Hepatitis B Infection (Acute)	n<5	16	20	15	n<5	Toxoplasmosis	n<5	n<5	0	n<5	n<5
Hepatitis B Infection (Chronic)	538	458	449	477	402	Trichinosis	0	0	0	0	0
Hepatitis C Infection	1,115	1,087	933	1,291	897	Tuberculosis	75	67	64	70	57
Hepatitis (Infectious, Other)	0	0	0	n<5	0	Tularemia	0	0	0	n<5	n<5
HIV Infection	161	184	156	166	177	Typhoid Fever	n<5	n<5	n<5	0	n<5
Influenza (Laboratory Confirmed)	0	0	298	290	408	Varicella (Chickenpox)	8	60	25	108	131
Legionellosis	n<5	5	6	6	11	Viral Hemorrhagic Fever	0	0	0	0	0
Leprosy	n<5	n<5	n<5	n<5	n<5	West Nile Virus Infection	0	5	n<5	0	n<5
Leptospirosis	0	0	0	0	0	Yellow Fever	0	0	0	0	0
Listeriosis	n<5	n<5	n<5	n<5	n<5	Yersiniosis	n<5	n<5	n<5	n<5	n<5

*From cerebral spinal fluid or other sterile body fluid
**Includes ciguatera, scombrotoxin, mushroom toxins, tetrodotoxins, paralytic shellfish toxins, amnesic shellfish toxins, and others ***Includes all syphilis cases, not only primary ones
DATA SOURCE: Communicable Disease Database, Boston Public Health Commission, Communicable Disease Control Division
DATA ANALYSIS: Boston Public Health Commission, Communicable Disease Control Division

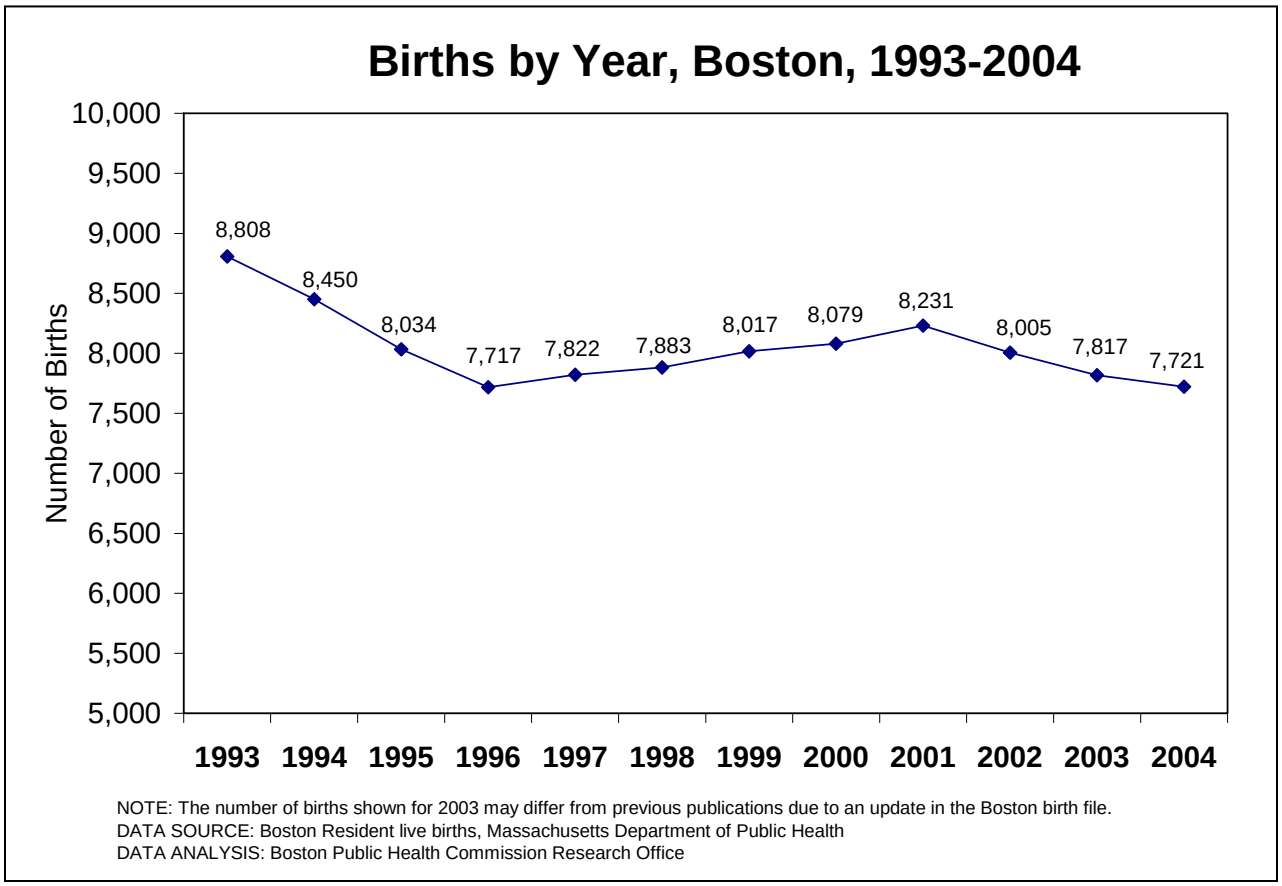
- Currently, a total of 76 communicable diseases are monitored by the Boston Public Health Commission Communicable Disease Control Division.

- The annual number of cases between 2000 and 2005 of each of these diseases is shown in the table on the previous page.

- The most commonly reported communicable diseases are the sexually transmitted infections chlamydia, gonorrhea, and hepatitis C.

- Some diseases such as influenza, campylobacteriosis (see glossary), lyme disease, chlamydia, salmonella, HIV, and chickenpox show increases in the last two years. Many however, are rare and seldom have reported cases, for example, hantavirus infection.

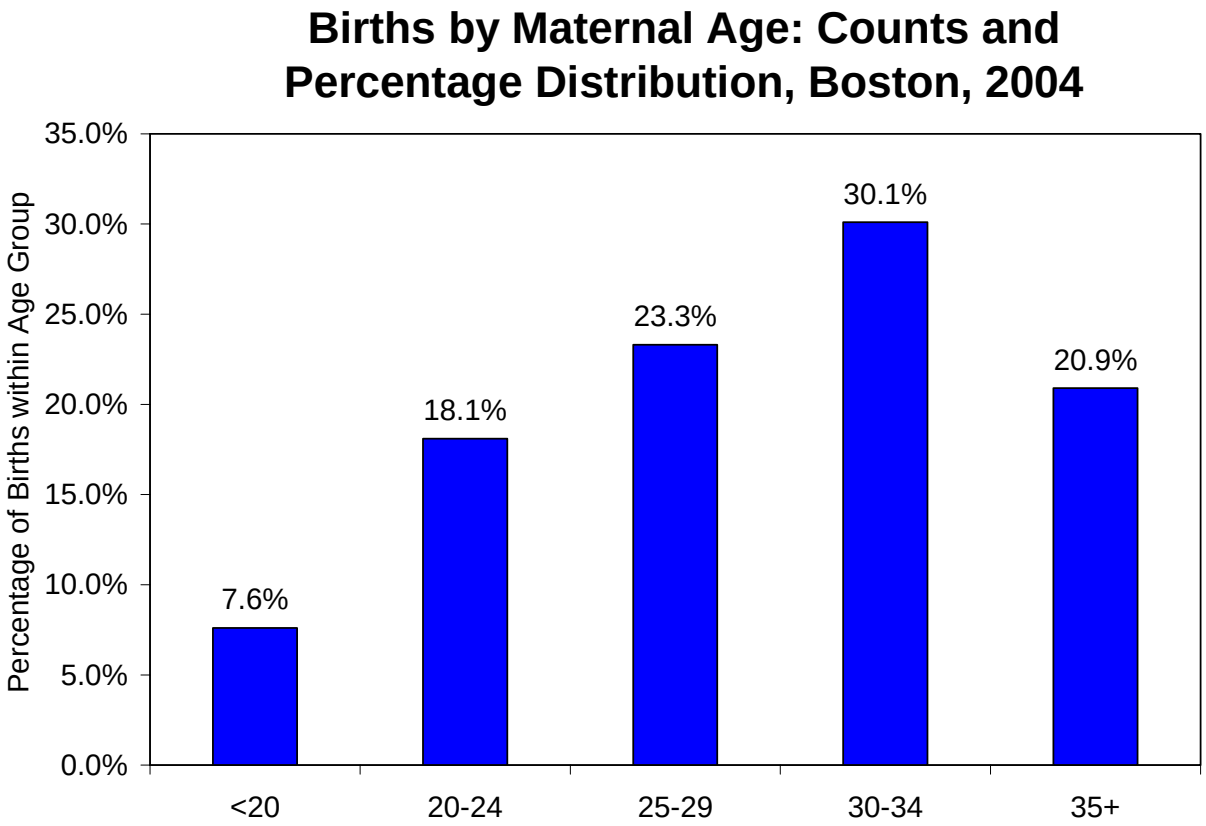
Natality



NOTE: The number of births shown for 2003 may differ from previous publications due to an update in the Boston birth file.
DATA SOURCE: Boston Resident live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- The number of births to Boston residents fell in 2004 to 7,721, down 6.2% from the most recent high of 8,231 in 2001.
- Between 1993 and 2004, the number of Boston births fell 12.3%, despite an annual increase in births between 1996 and 2001.

Natality



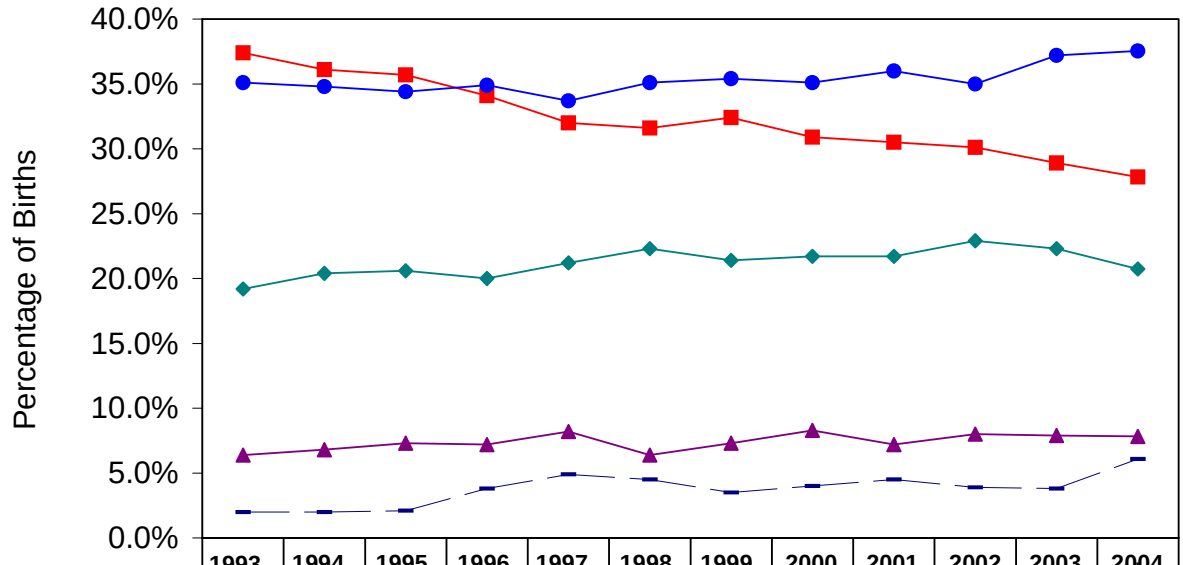
	<20	20-24	25-29	30-34	35+
Count	583	1,399	1,799	2,326	1,614

NOTE: These data do not include persons whose age was not reported.
DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Of the Boston women who gave birth in 2004, about half were women ages 30 and over. One in every thirteen births was to a Boston female less than twenty years of age.

Natality

Births by Race/Ethnicity and Year: Counts and Percentage Distribution, Boston, 1993-2004



	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Asian	6.4%	6.8%	7.3%	7.2%	8.2%	6.4%	7.3%	8.3%	7.2%	8.0%	7.9%	7.8%
Black	37.4%	36.1%	35.7%	34.1%	32.0%	31.6%	32.4%	30.9%	30.5%	30.1%	28.9%	27.8%
Latino	19.2%	20.4%	20.6%	20.0%	21.2%	22.3%	21.4%	21.7%	21.7%	22.9%	22.3%	20.7%
White	35.1%	34.8%	34.4%	34.9%	33.7%	35.1%	35.4%	35.1%	36.0%	35.0%	37.2%	37.5%
Other/Unknown	2.0%	2.0%	2.1%	3.8%	4.9%	4.5%	3.5%	4.0%	4.5%	3.9%	3.8%	6.1%

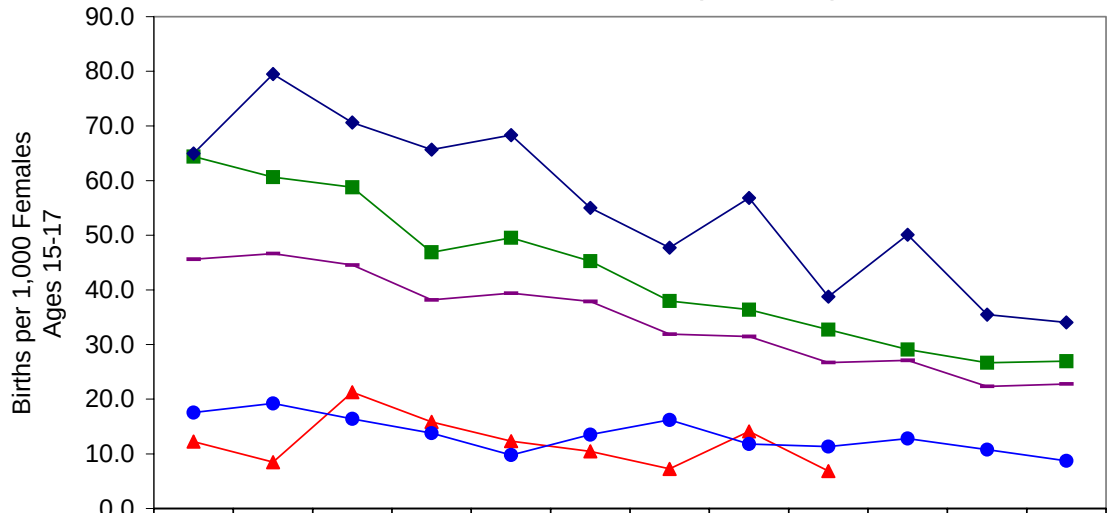
Count	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Asian	558	570	580	555	640	508	584	668	593	642	615	604
Black	3,275	3,035	2,850	2,635	2,506	2,493	2,601	2,498	2,512	2,412	2,256	2,148
Latino	1,682	1,715	1,646	1,542	1,662	1,761	1,716	1,750	1,786	1,834	1,742	1,601
White	3,074	2,925	2,746	2,696	2,634	2,764	2,835	2,837	2,966	2,804	2,907	2,898
Other/Unknown	178	166	170	290	380	357	281	326	374	313	297	470
BOSTON	8,808	8,450	8,034	7,717	7,822	7,883	8,017	8,079	8,231	8,005	7,817	7,721

NOTE: The number of births shown for 2003 may differ from previous publications due to an update in the Boston birth file.
DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2004, White women had the highest percentage of Boston births.
- The percentage of Boston births that were to Asian women, Latinas, and White women was higher in 2004 than in 1993, but lower for Black women.

Natality

Births Among Adolescents Ages 15-17 by Race/Ethnicity and Year: Counts and Rates, Boston, 1993-2004



	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Asian	12.3	8.5	21.3	15.9	12.3	10.5	7.3	14.1	6.9	--	--	--
Black	64.4	60.7	58.8	46.9	49.5	45.2	37.9	36.4	32.7	29.1	26.7	27.0
Latino	65.0	79.5	70.6	65.7	68.3	55.0	47.7	56.8	38.8	50.1	35.5	34.0
White	17.6	19.2	16.4	13.8	9.8	13.5	16.2	11.8	11.3	12.8	10.8	8.7
BOSTON	45.6	46.6	44.5	38.1	39.4	37.9	31.9	31.5	26.7	27.1	22.3	22.8

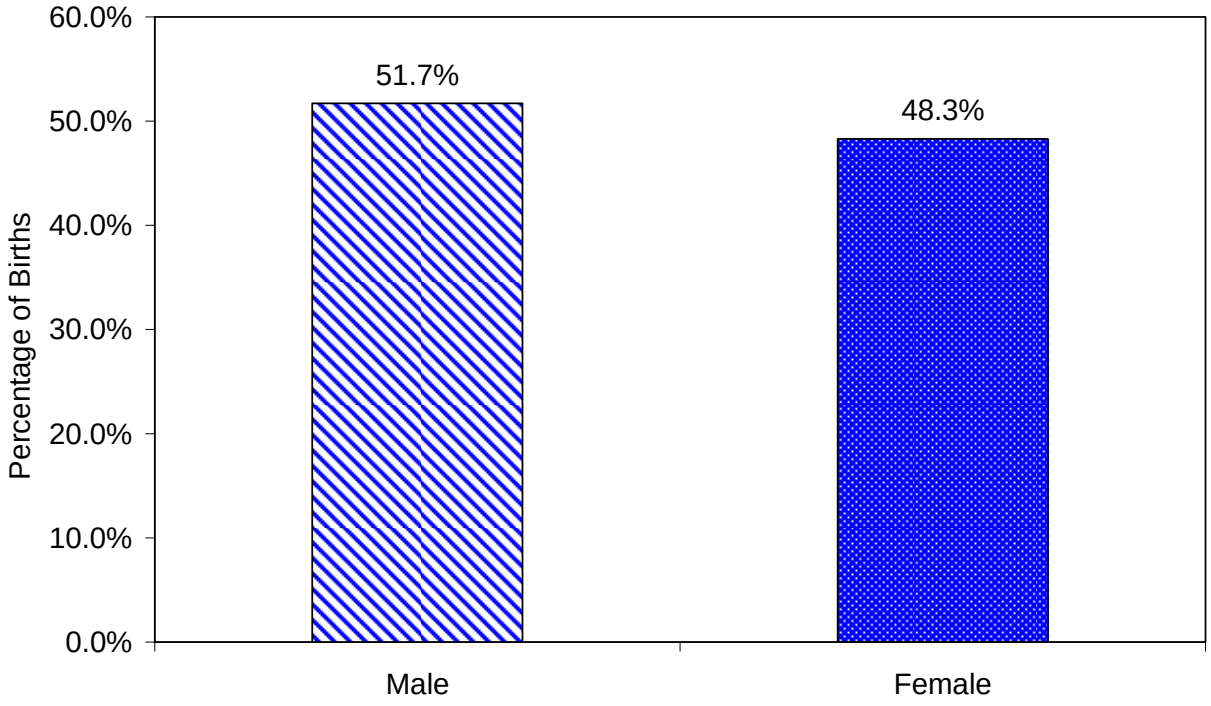
Count	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Asian	7	5	13	10	8	7	5	10	5	n<5	n<5	n<5
Black	212	200	194	155	164	150	126	121	109	97	89	90
Latino	103	130	119	114	122	101	90	110	77	102	74	71
White	49	52	43	35	24	32	37	26	24	26	21	17
BOSTON	381	390	373	320	331	319	269	279	237	241	199	203

DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Boston's adolescent birth rate in 2004 for adolescents ages 15-17 was similar to the national rate of 22.1 per 1,000 females for this age group.
- The Boston adolescent birth rate steeply declined over the past decade, falling 50.0% from the 1993 rate.
- Adolescent birth rates continue to be substantially higher for Latinas and Blacks than for Whites and Asians, but all groups have had declines in recent years. The rates in 2004 for Black and Latina adolescents were significantly higher than the rate for their White counterpart.

Natality

Births by Sex: Counts and Percentage Distribution, Boston, 2004

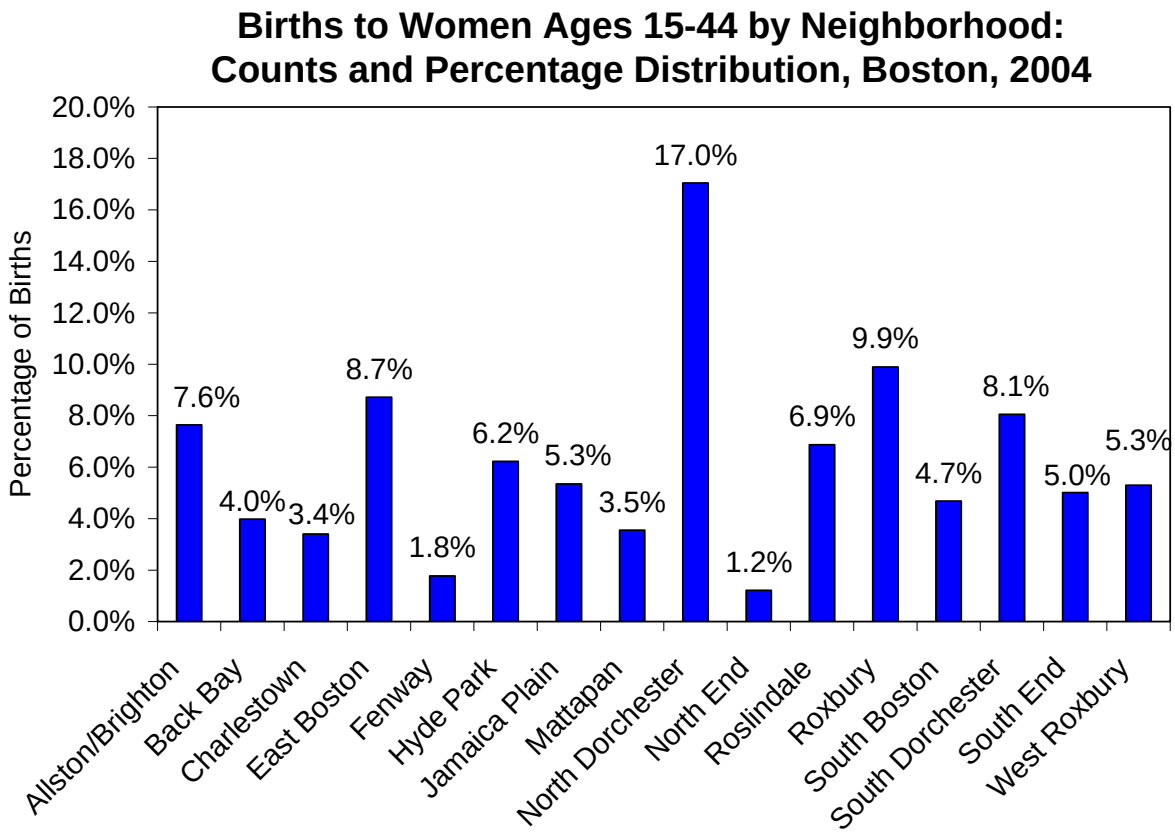


	Male	Female
Count	3,992	3,729

NOTE: These data do not include persons whose sex was not reported.
DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2004, 51.7% of Boston births in which the baby's sex was reported were male infants and 48.3% were female.

Natality



	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	590	307	263	673	137	481	413	274	1,316	94	531	764	362	622	387	409

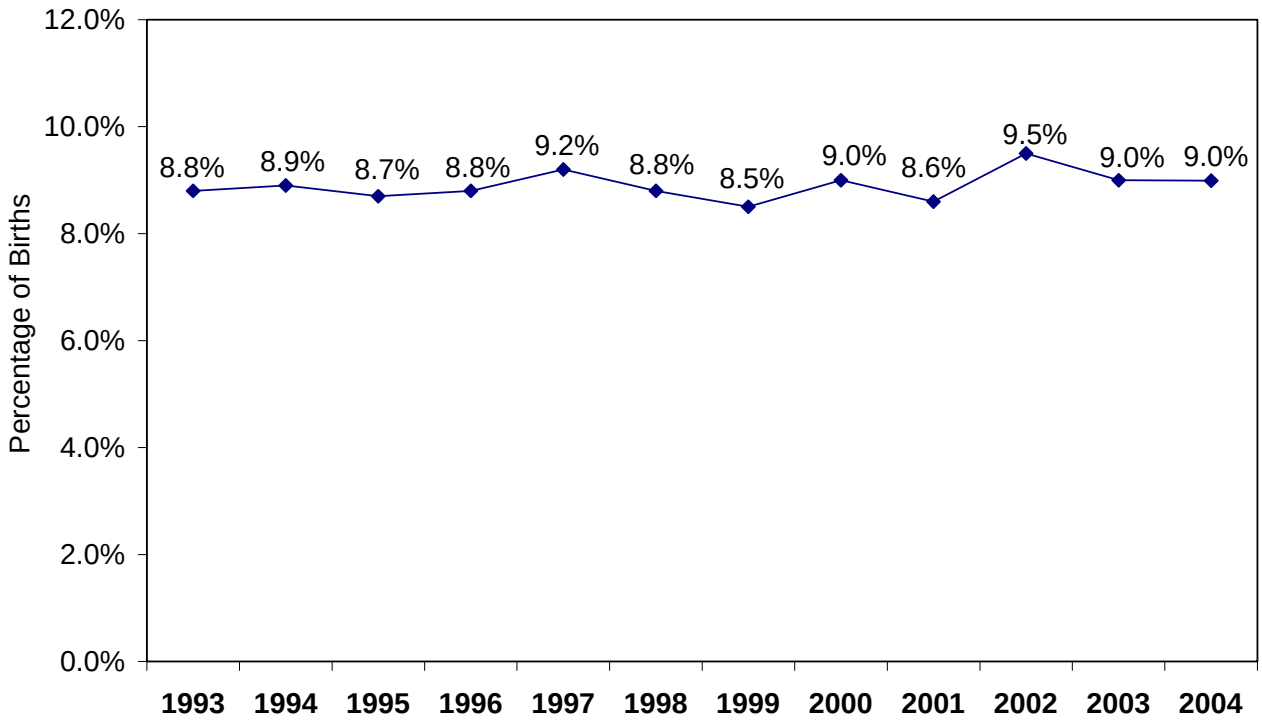
NOTES: Counts and percentage distributions include women between the ages of 15-44 only. These data do not include homeless persons or individuals whose neighborhood of residence was not reported.
ABBREVIATIONS KEY: A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, NE=North End, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- North Dorchester, with 12.9% of Boston's women of childbearing age (data not shown), had 17.0% of the city's births in 2004. Allston/Brighton, conversely, with 15.0% of the childbearing population, had 7.6% of the births (population data not shown).

- The North End and the Fenway accounted for the smallest proportions of all Boston births, each with under two percent of the total.

Natality

Low Birthweight by Year: Counts and Percentages of Births, Boston, 1993-2004



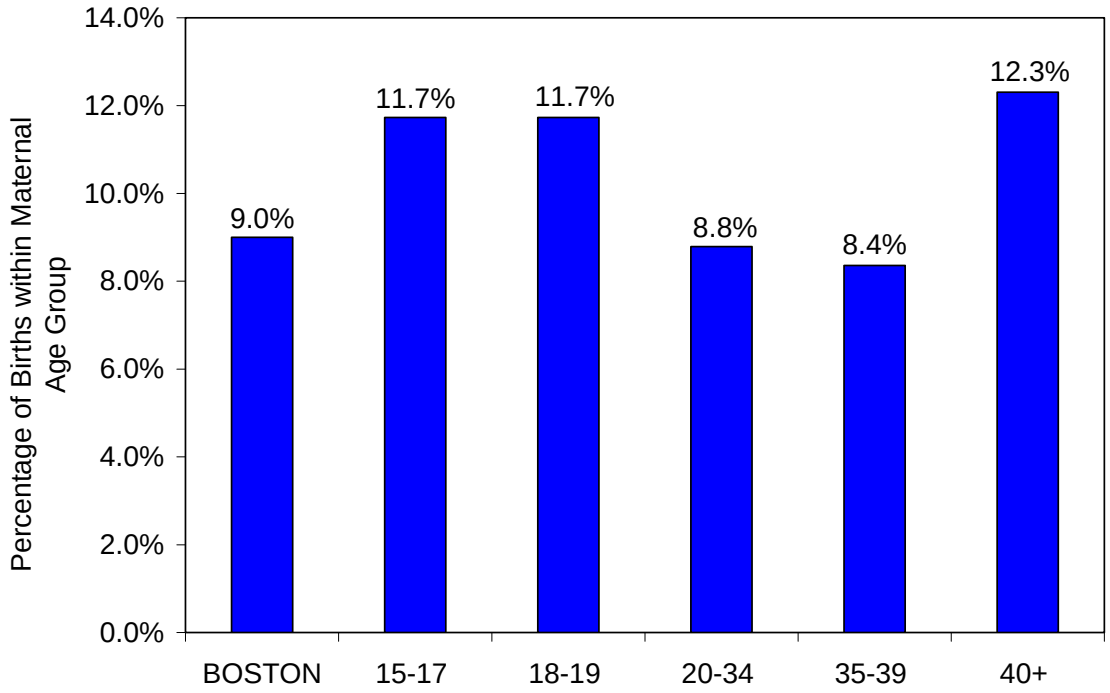
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Count	775	745	695	681	719	694	679	727	703	761	699	694

DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Every year, several hundred Boston infants are born weighing less than 2,500 grams (5.5 lbs). These are considered low birthweight (LBW) infants.
- Between 1993 and 2004, Boston's rate of low birthweight was relatively stable, fluctuating only between 8.5% and 9.5% of all births.
- In 2004, approximately one in every eleven births was of low birthweight, the same as in 2003.

Natality

Low Birthweight by Age: Counts and Percentages of Births, Boston, 2004



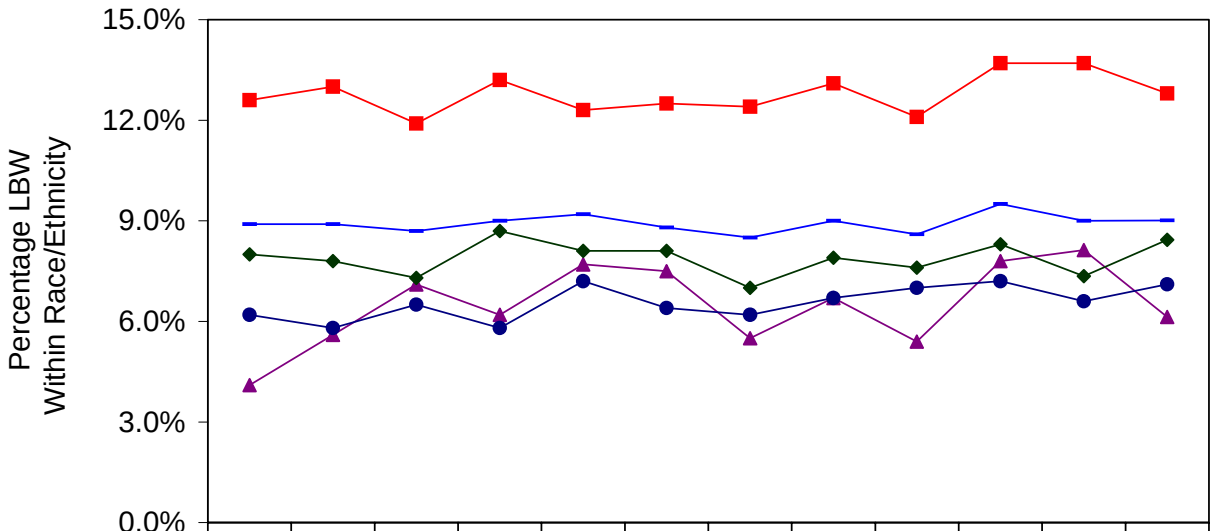
	BOSTON	15-17	18-19	20-34	35-39	40+
Count	694	26	44	476	107	41

NOTE: These data do not include persons whose age was not reported, except in the Boston overall rate and count.
DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In most populations, low birthweight (LBW) occurs most frequently in births to women at the extremes of maternal age.
- In Boston, in 2004, LBW was highest in births to women 40 or older.

Natality

Low Birthweight by Race/Ethnicity and Year: Counts and Percentages of Births, Boston, 1993-2004



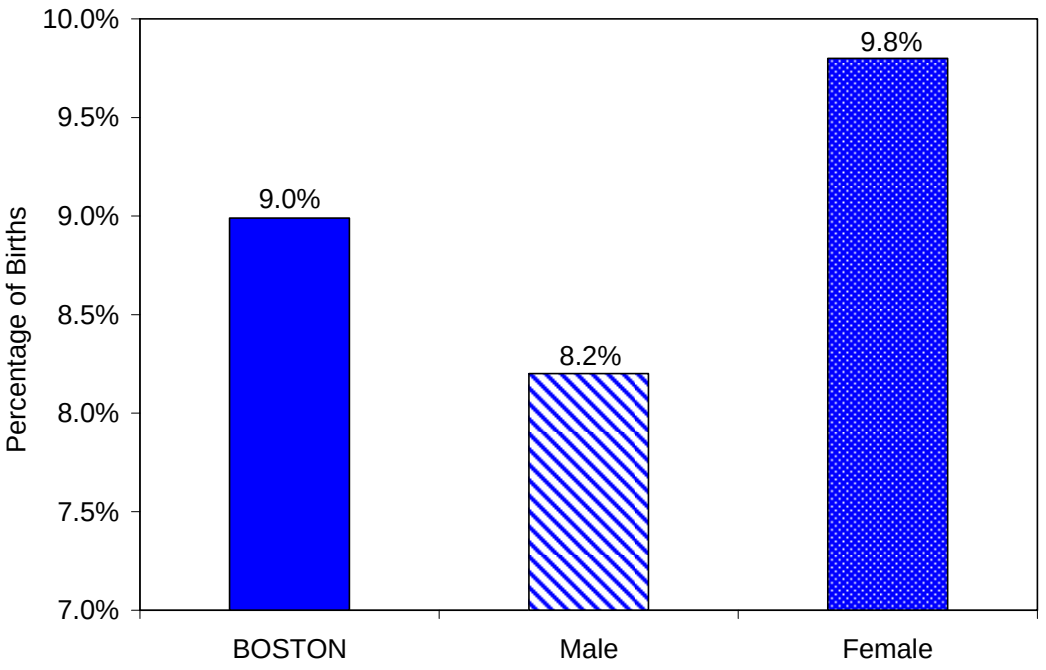
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Asian	4.1%	5.6%	7.1%	6.2%	7.7%	7.5%	5.5%	6.7%	5.4%	7.8%	8.1%	6.1%
Black	12.6%	13.0%	11.9%	13.2%	12.3%	12.5%	12.4%	13.1%	12.1%	13.7%	13.7%	12.8%
Latino	8.0%	7.8%	7.3%	8.7%	8.1%	8.1%	7.0%	7.9%	7.6%	8.3%	7.4%	8.4%
White	6.2%	5.8%	6.5%	5.8%	7.2%	6.4%	6.2%	6.7%	7.0%	7.2%	6.6%	7.1%
BOSTON	8.9%	8.9%	8.7%	9.0%	9.2%	8.8%	8.5%	9.0%	8.6%	9.5%	9.0%	9.0%

Count	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Asian	23	32	41	34	49	38	32	45	32	50	51	37
Black	412	395	338	346	308	312	323	327	304	330	309	275
Latino	135	134	120	133	135	143	120	139	135	152	128	135
White	189	170	178	154	188	178	176	188	206	202	192	206
BOSTON	775	745	695	681	719	692	679	726	703	761	699	694

NOTE: These data do not include persons whose race/ethnicity was not reported, except in the Boston counts and percentages.
DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- LBW rates among Boston's Asian, Latino, and White births have been consistently lower than those for births to Black women, while the rates within each group have remained fairly stable over time.
- The one and a half to two times difference in the frequency of LBW in Black births is a major factor in the higher Black infant mortality rate in Boston.

Natality



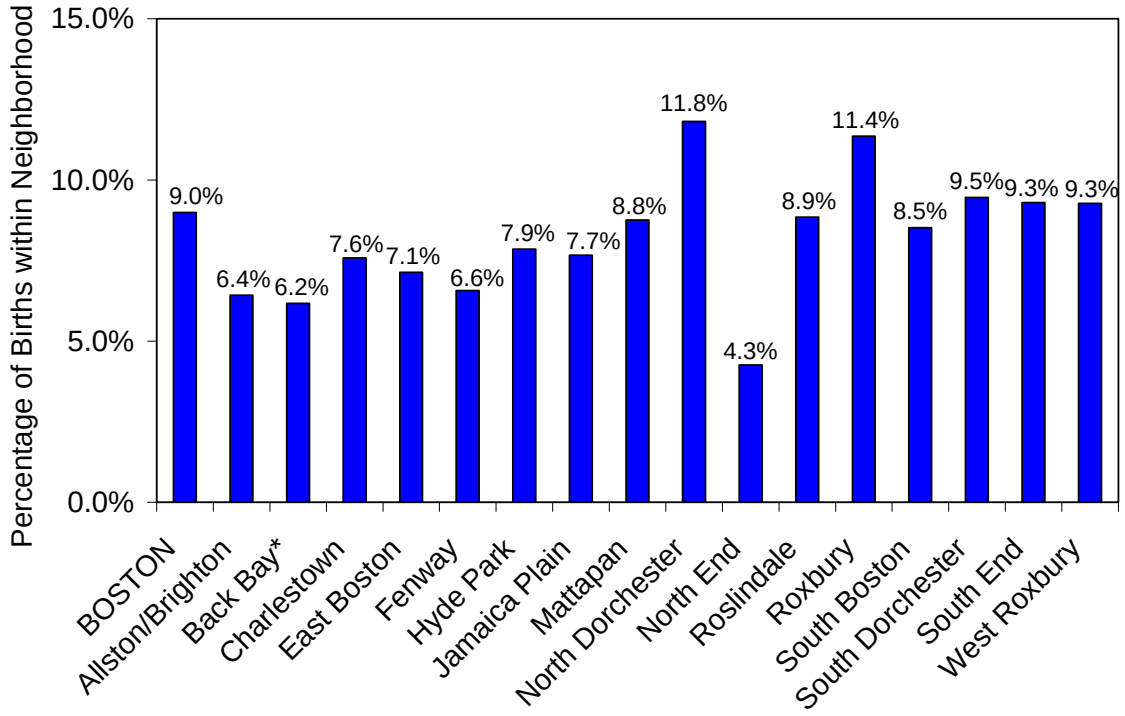
	BOSTON	Male	Female
Count	694	329	365

DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2004, low birthweight occurred less for Boston's male infants than female infants.

Natality

Low Birthweight by Neighborhood: Counts and Percentages of Births, Boston, 2004

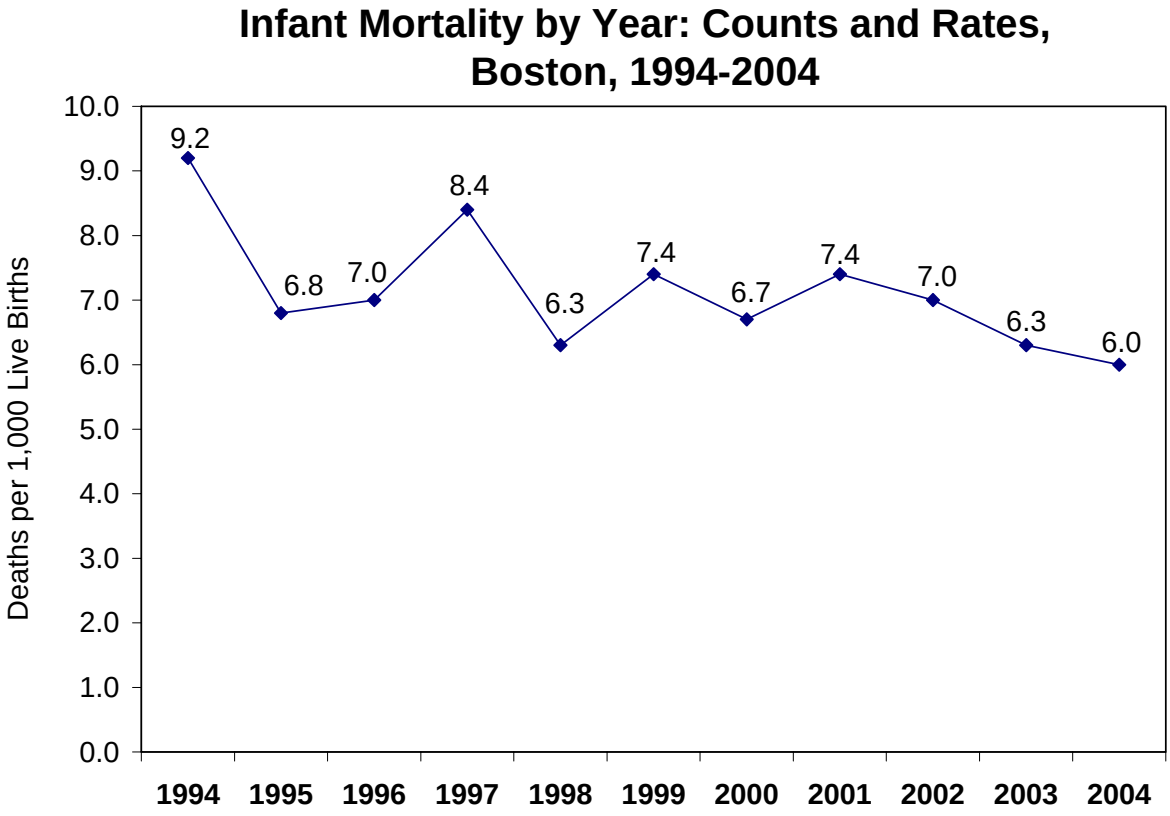


	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	694	38	19	20	48	9	38	32	24	156	n<5	47	87	31	59	36	38

ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, NE=North End, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, WR=West Roxbury
* Includes Beacon Hill and the West End
NOTE: These data do not include homeless persons or individuals whose neighborhood of residence was not reported, except in the Boston overall percentage and count.
DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2004, low birthweight was most frequent in births to residents of North Dorchester and Roxbury.

Natality



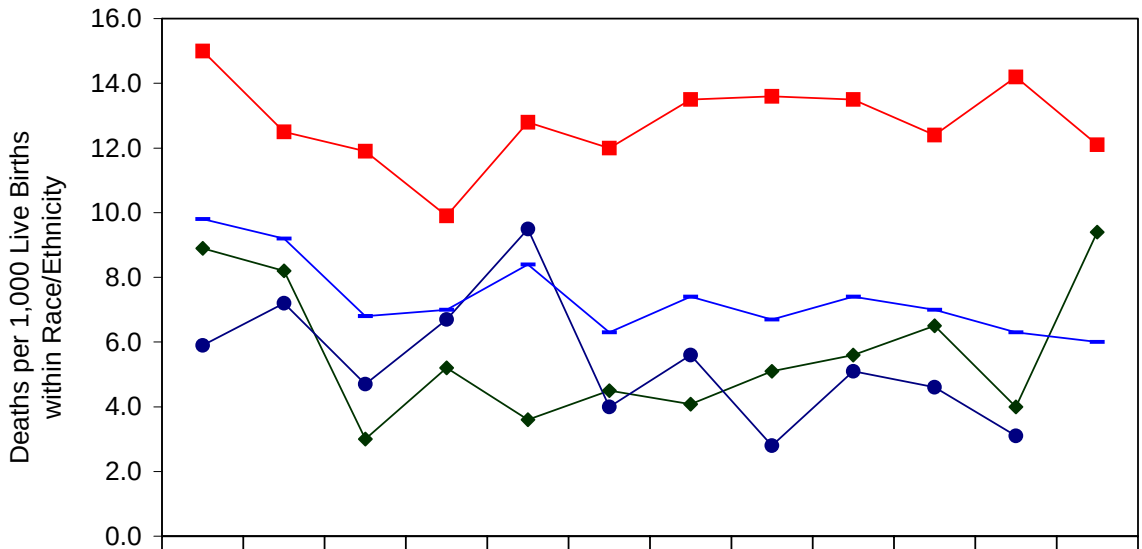
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Count	77	54	54	66	50	59	54	61	56	49	46

DATA SOURCE: Boston resident live births and deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Infant mortality is defined as death between live birth and the first year of life.
- There were 46 deaths of Boston infants in 2004, resulting in an infant mortality rate (IMR) of 6.0 deaths per 1,000 live births.
- The Boston IMR fluctuated during the 1994-2004 period from its highest rate of the period in 1994 to its lowest rate in 2004. The 2004 IMR was 34.8% lower than the rate in 1994.

Natality

Infant Mortality by Race/Ethnicity and Year: Counts and Rates, Boston, 1993-2004



	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Black	15.0	12.5	11.9	9.9	12.8	12.0	13.5	13.6	13.5	12.4	14.2	12.1
Latino	8.9	8.2	3.0	5.2	3.6	4.5	4.1	5.1	5.6	6.5	4.0	9.4
White	5.9	7.2	4.7	6.7	9.5	4.0	5.6	2.8	5.1	4.6	3.1	--
BOSTON	9.8	9.2	6.8	7.0	8.4	6.3	7.4	6.7	7.4	7.0	6.3	6.0

Count	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Black	38	34	26	32	30	35	34	34	30	32	26
Latino	14	5	8	6	8	7	9	7	12	7	15
White	21	13	18	25	11	16	8	16	13	9	n<5
BOSTON	77	54	54	66	50	59	54	61	56	49	46

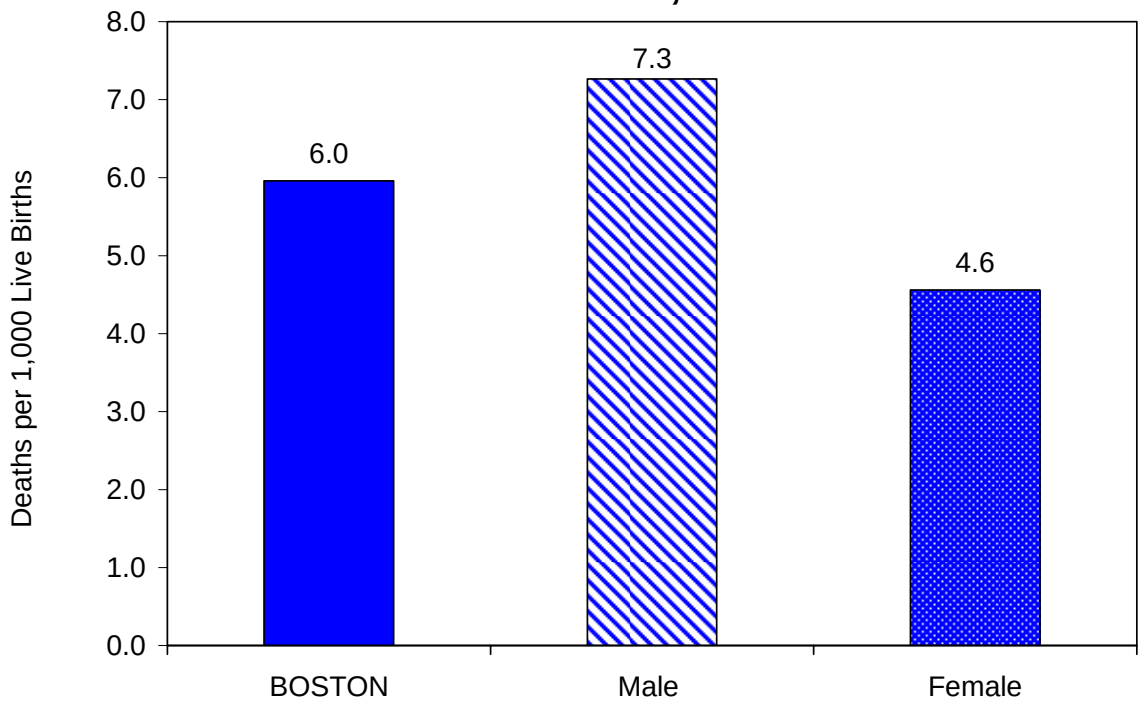
NOTE: There were too few infant deaths among Asians and 2004 Whites to permit the presentation of a mortality rate.
DATA SOURCE: Boston resident deaths and live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Infant mortality rates (IMRs) in Boston have consistently been highest for Black infants. Black infants accounted for 15.0 % of all Boston births in 2004, but 56.6 % of all infant deaths. At no point in the time has the IMR of other race/ethnicity groups exceeded that of Black infants.

- From 2003 to 2004, the IMR fell for Boston overall and for all races/ethnicities except for Latinos whose rate more than doubled.

Natality

Infant Mortality by Sex: Counts and Rates, Boston, 2004

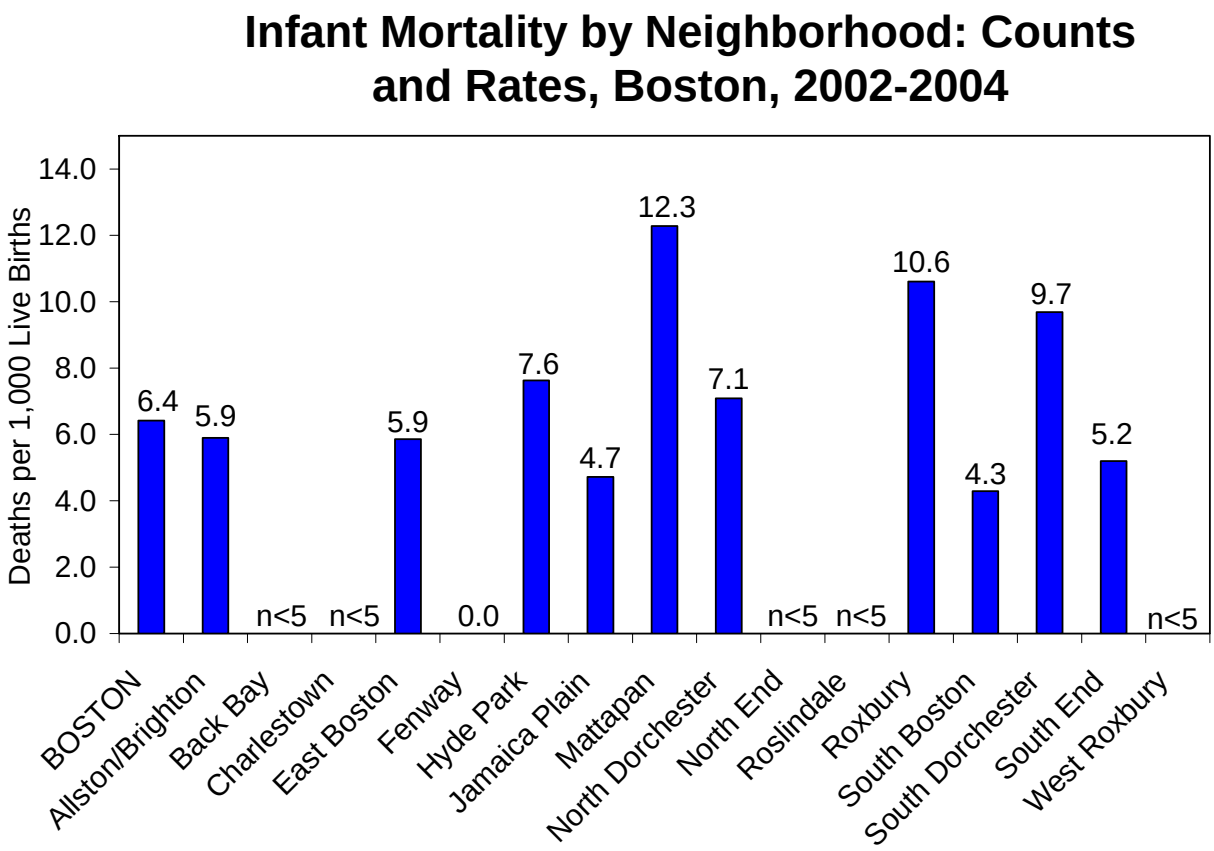


	BOSTON	Male	Female
Count	46	29	17

NOTE: These data do not include persons whose sex was not reported, except in the Boston overall rate and count.
DATA SOURCE: Boston resident deaths and live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2004, the infant mortality rate for Boston male infants was 58.7% higher than for female infants.

Natality



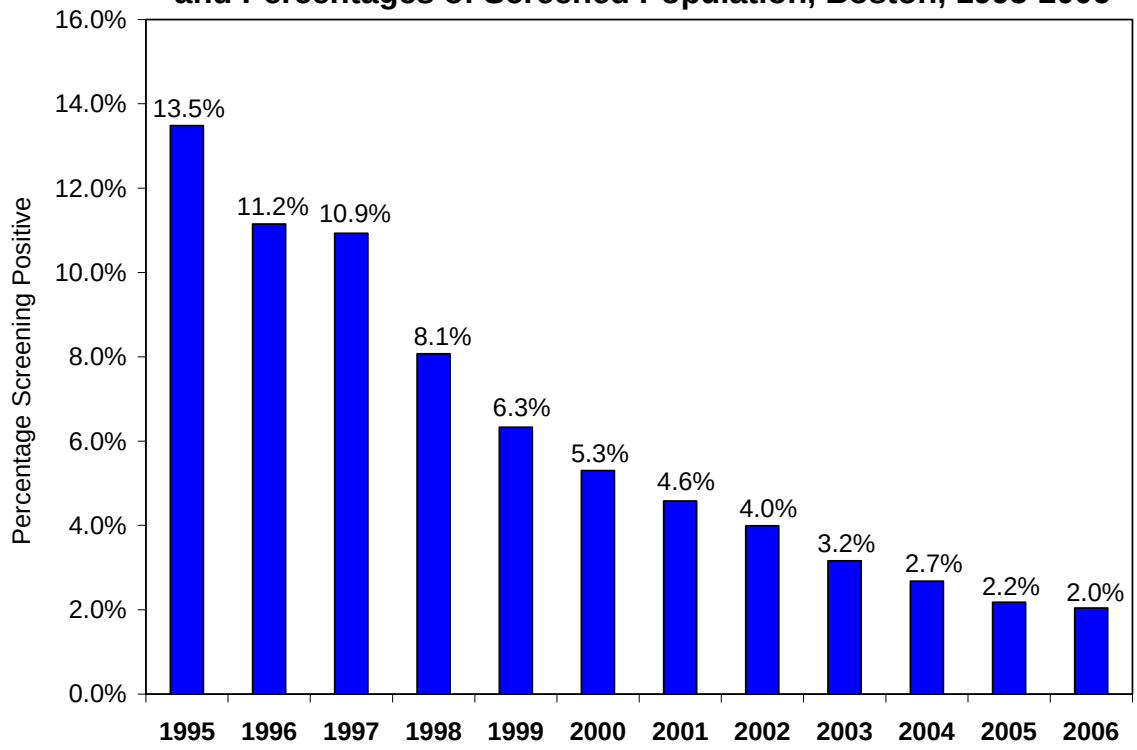
	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	151	10	n<5	n<5	12	0	11	6	11	30	n<5	n<5	25	5	20	6	n<5

ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, NE=North End, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
DATA SOURCE: Boston resident deaths and live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- During 2002-2004, Mattapan had the highest infant mortality rate (IMR) of Boston neighborhoods and almost double the Boston overall rate. Roxbury and South Dorchester had the next highest IMRs after Mattapan.

- Five of Boston's 16 neighborhoods had too few infant deaths during 2002-2004 to permit the presentation of mortality rates. Although Jamaica Plain, South Boston, and the South End did have enough deaths to present IMRs, their counts are based on such small numbers that their rates are subject to substantial random fluctuation and should therefore be interpreted with caution.

Environmental Lead



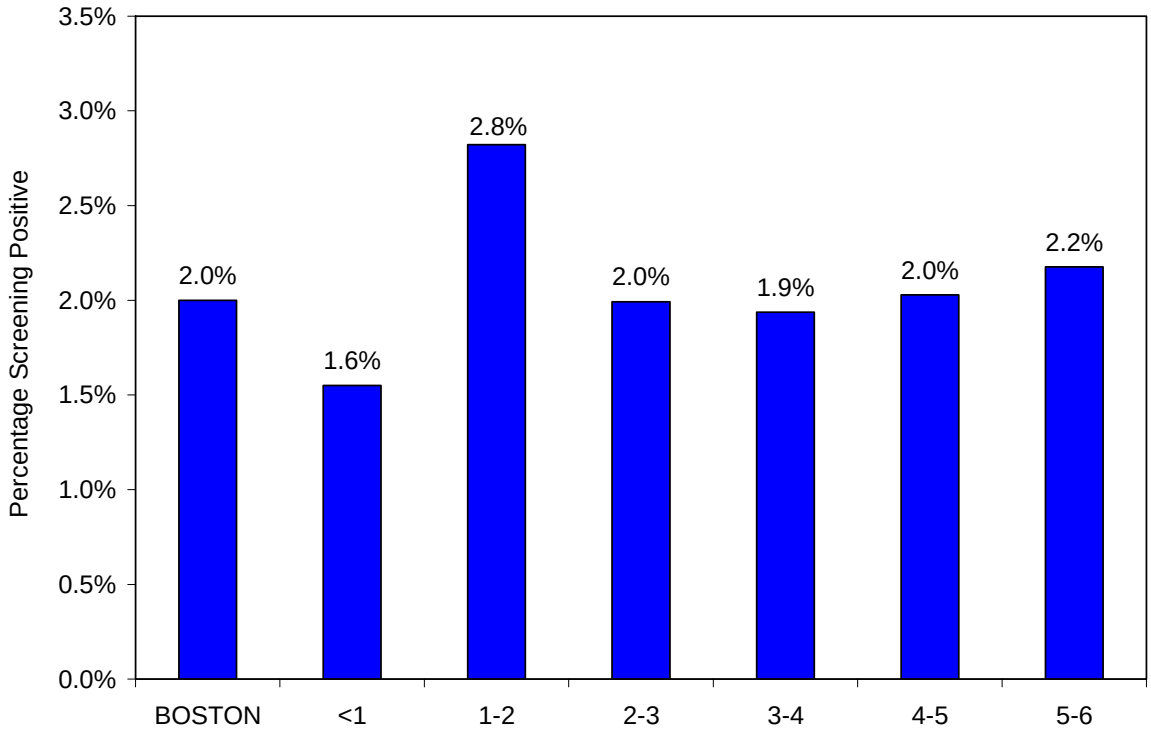
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Count	4,124	3,221	2,351	1,543	1,725	1,350	1,123	964	774	647	497	460

NOTE: These data may include some children over the age of 6 who may be in follow up care.
DATA SOURCE: Lead Screening Data, Boston Public Health Commission Office of Environmental Health
DATA ANALYSIS: Lead Screening Data, Boston Public Health Commission Office of Environmental Health
GRAPHIC: Boston Public Health Commission Research Office

- Over the past 11 years the percentage of Boston children who have tested positive for elevated blood lead levels has dropped by 88.9%
- In 2006, 22,519 Boston children were screened for elevated lead levels in their blood. Of the children screened, 2.0% had elevated blood lead levels defined as 10 micrograms per deciliter (µg/dl) or higher. This represents a 7.4% decrease from 2005.

Environmental Lead

Children With Elevated Blood Lead Levels by Age: Counts and Estimated Percentages of Screened Population, Boston, 2006

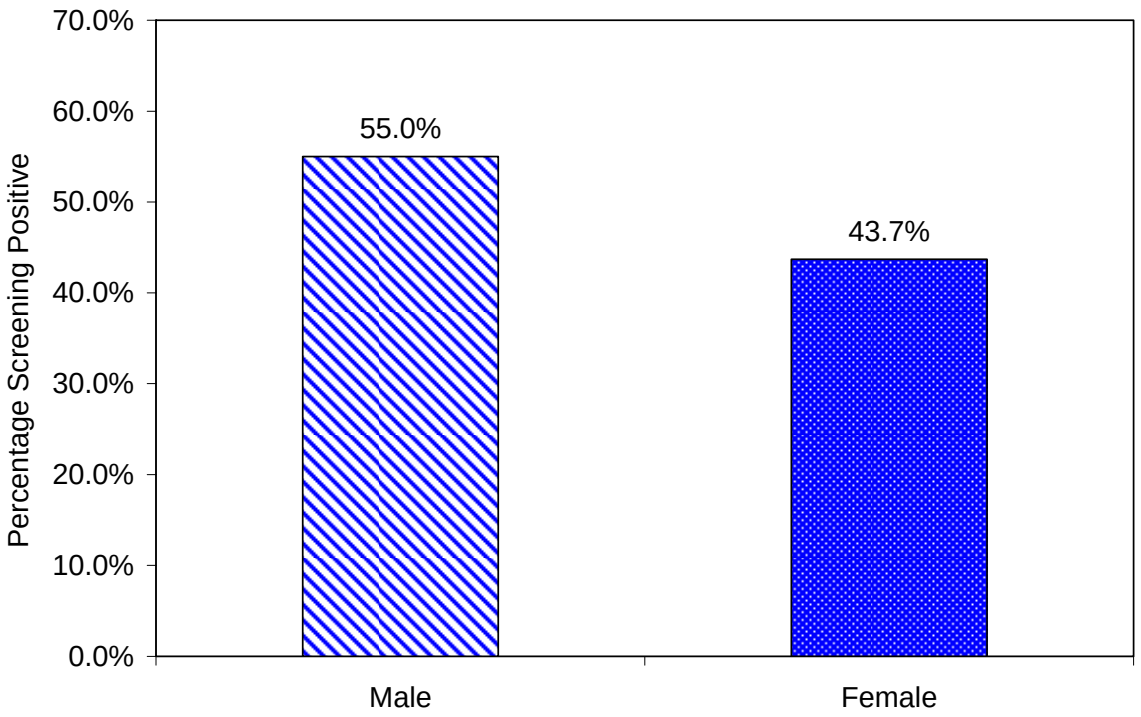


	BOSTON	<1	1-2	2-3	3-4	4-5	5-6
Count	460	106	142	88	66	39	19

NOTE: These data do not include persons whose age was not reported, except in the Boston overall count and percentage.
DATA SOURCE: Lead Screening Data, Boston Public Health Commission Office of Environmental Health
DATA ANALYSIS: Lead Screening Data, Boston Public Health Commission Office of Environmental Health
GRAPHIC: Boston Public Health Commission Research Office

- In 2006, children ages 1-2 had the highest positive screening percentage, meaning elevated blood lead levels of 10 micrograms per deciliter (µg/dl) or higher. That percentage was slightly greater than for Boston overall.

Environmental Lead



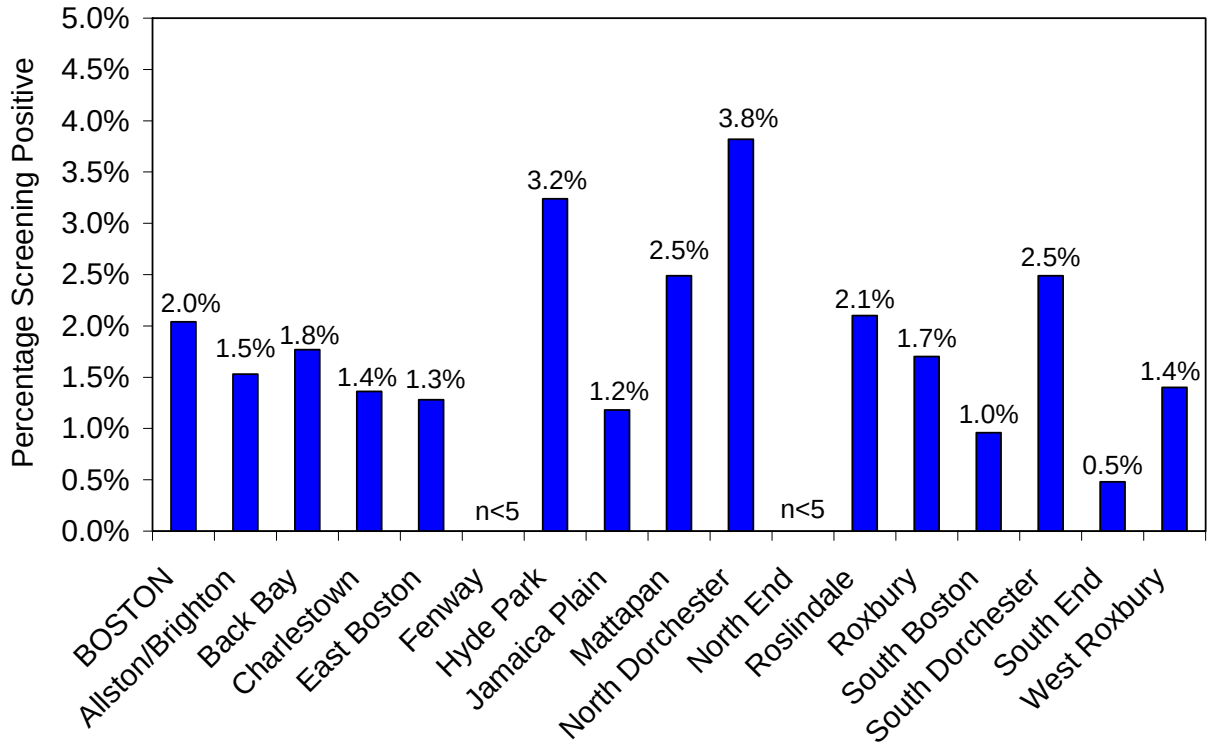
	Male	Female
Count	253	201

NOTE: These data do not include persons whose sex was not reported.
DATA SOURCE: Lead Screening Data, Boston Public Health Commission Office of Environmental Health
DATA ANALYSIS: Lead Screening Data, Boston Public Health Commission Office of Environmental Health
GRAPHIC: Boston Public Health Commission Research Office

- Of those children who were screened in 2006 and found to have elevated blood lead levels, (10 micrograms per deciliter (µg/dl) or higher) over half were males.

Environmental Lead

Children With Elevated Blood Lead Levels by Neighborhood: Counts and Percentages of Screened Population, Boston, 2006

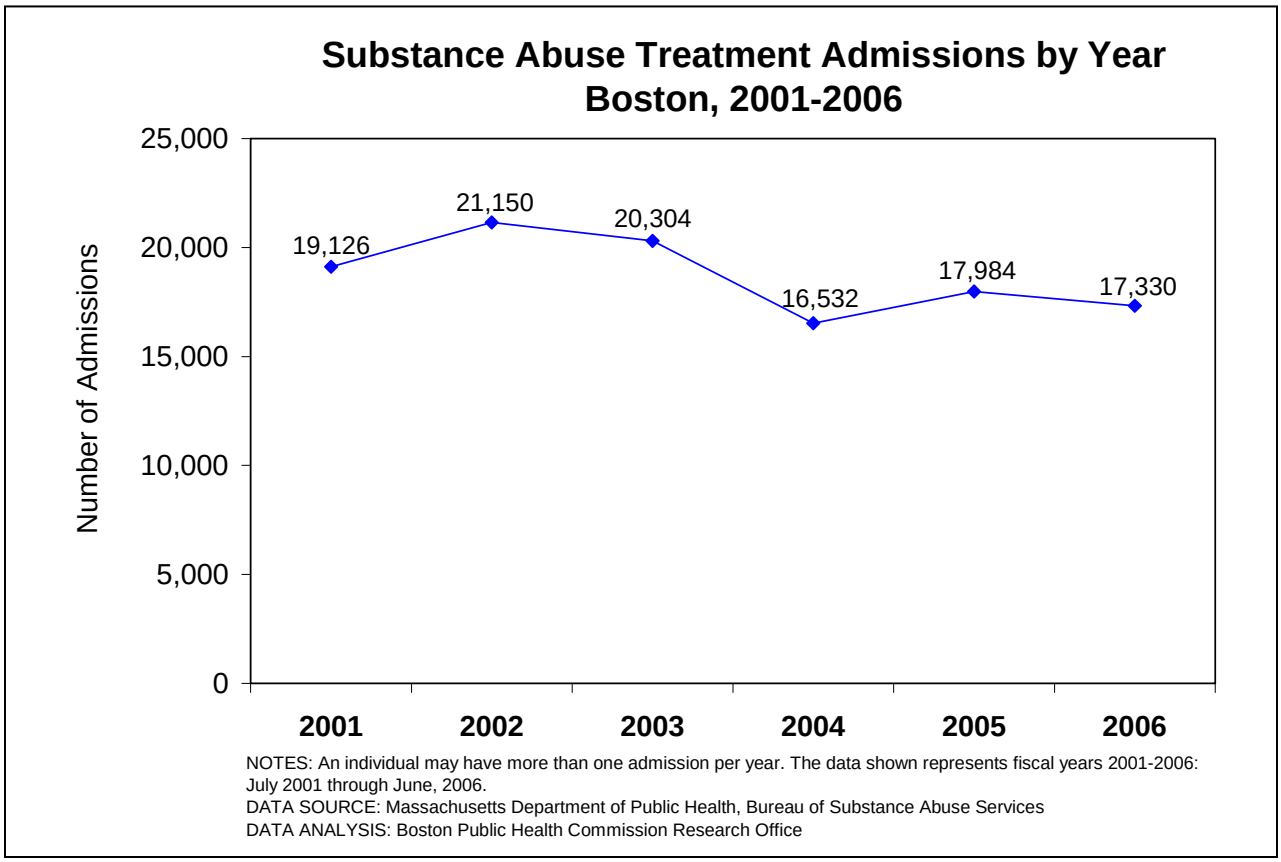


	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	460	17	12	11	34	n<5	42	16	32	119	n<5	31	28	10	85	5	15

ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, NE=North End, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
NOTE: The data shown in the chart do not include those children whose neighborhood of residence is unknown nor those children who are not Boston residents.
DATA SOURCE: Lead Screening Data, Boston Public Health Commission Office of Environmental Health
DATA ANALYSIS: Lead Screening Data, Boston Public Health Commission Office of Environmental Health
GRAPHIC: Boston Public Health Commission Research Office

- In 2006, elevated blood lead levels (10 micrograms per deciliter (µg/dl) or higher) in Boston children were highest in North Dorchester and Hyde Park. Both were greater than for Boston overall.

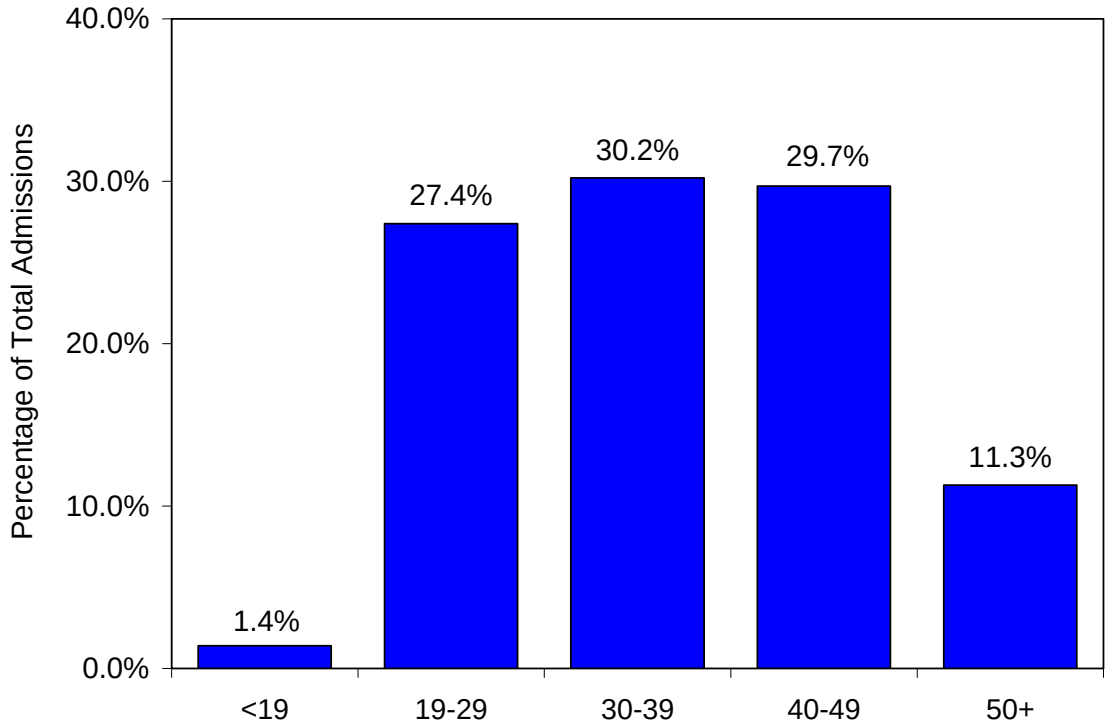
Substance Abuse



- The number of substance abuse treatment admissions declined 3.6% from 2005 to 2006. However, they declined 18.1% from 2002 to 2006.

Substance Abuse

Substance Abuse Treatment Admissions by Age: Counts and Percentage Distribution, Boston, 2006



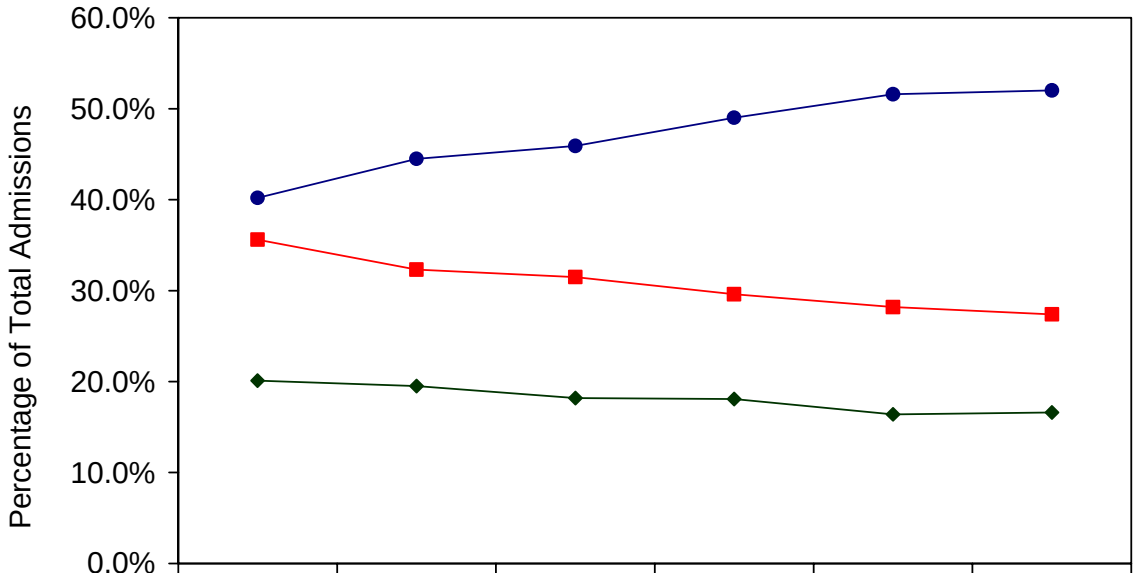
	<19	19-29	30-39	40-49	50+
Count	236	4,752	5,228	5,155	1,959

NOTES: An individual client may have more than one admission per year. The data shown are for fiscal year 2006: July, 2005 through June, 2006. These data do not include persons whose age was not reported.
DATA SOURCE: Massachusetts Department of Public Health, Bureau of Substance Abuse Services
DATA ANALYSIS: Boston Public Health Commission Research Office

- The 30-39 year old age group had the highest percentage of substance abuse treatment admissions in 2006.
- Individuals ages 19-49 accounted for more than 87% of treatment admissions.
- Twenty-nine percent of treatment admissions were individuals under age 30.

Substance Abuse

Substance Abuse Treatment Admissions by Race/Ethnicity and Year: Counts and Percentage Distributions, Boston, 2001-2006



	2001	2002	2003	2004	2005	2006
Black	35.6%	32.3%	31.5%	29.6%	28.2%	27.4%
Latino	20.1%	19.5%	18.2%	18.1%	16.4%	16.6%
White	40.2%	44.5%	45.9%	49.0%	51.6%	52.0%

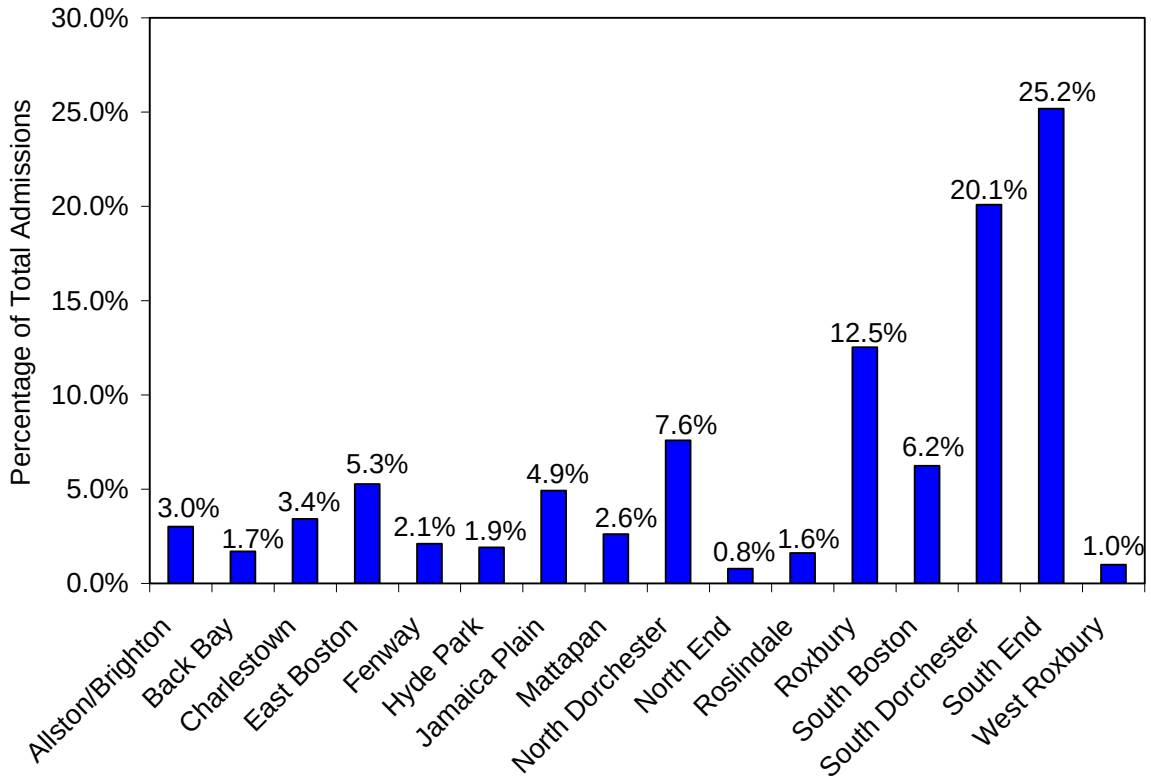
Count	2001	2002	2003	2004	2005	2006
Black	6,799	6,840	6,398	4,891	5,063	4,752
Latino	3,851	4,075	3,690	2,997	2,949	2,872
White	7,679	9,406	9,318	8,100	9,288	9,011
BOSTON	19,126	21,150	20,304	16,532	17,984	17,330

NOTES: An individual client may have more then one treatment admission per year. The data shown represent fiscal years 2001-2006: July, 2001 through June, 2006. There were too few treatment admissions among Asians to permit the presentation of counts and percentages of treatment admissions that occurred in Asians. These data do not include persons of other or unknown race/ethnicity, except in the Boston overall counts and percentages.
DATA SOURCE: Massachusetts Department of Public Health, Bureau of Substance Abuse Services
DATA ANALYSIS: Boston Public Health Commission Research Office

- Boston White clients accounted for more than half of all substance abuse treatment admissions in 2006, similar to 2005.
- The percentage of substance abuse treatment admissions for White clients increased 29.4% from 2001 to 2006.
- The percents of admissions for Black and Latino clients decreased 23.0% and 17.4% respectively, from 2001 to 2006.

Substance Abuse

Substance Abuse Treatment Admissions by Neighborhood: Counts and Percentage Distribution, Boston, 2005



	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	NE	RX	SB	SD	SE	WR
Count	17,984	543	306	616	947	380	344	886	471	1,365	291	141	2,252	1,122	3,614	4,527	179

ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, NE=North End, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury

NOTES: An individual client may be admitted to more than one program or treatment session. The data shown are for Fiscal year 2004: July, 2004 through June, 2005. These data do not include homeless persons or individuals whose neighborhood of residence was not reported.

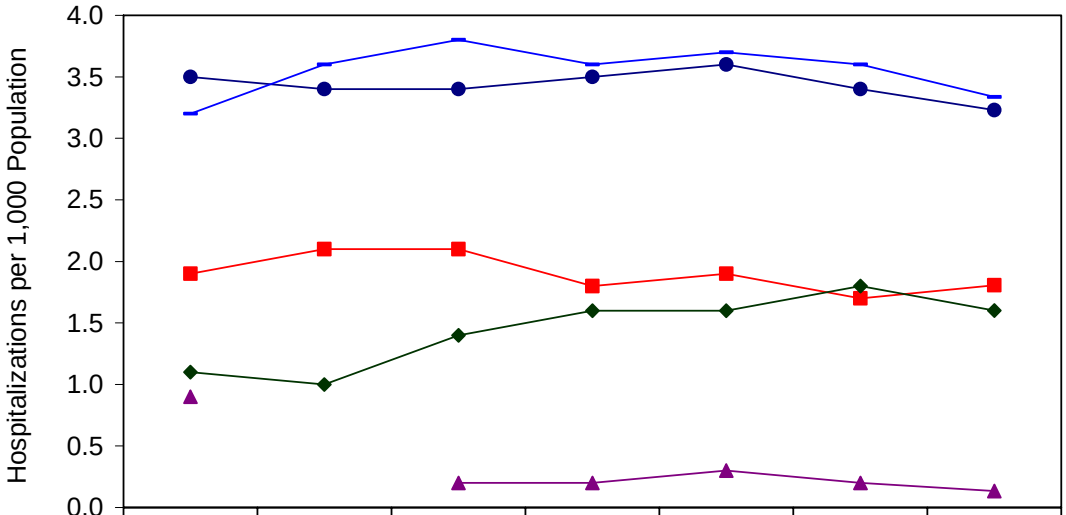
DATA SOURCE: Massachusetts Department of Public Health, Bureau of Substance Abuse Services

DATA ANALYSIS: Boston Public Health Commission Research Office

- Close to half of all admissions for substance abuse treatment were residents from South Dorchester or the South End.
- More than eighty percent of all admissions for substance abuse treatment were residents from one of seven Boston neighborhoods: East Boston, Jamaica Plain, North Dorchester, Roxbury, South Boston, South Dorchester, and the South End.

Substance Abuse

Substance Abuse Hospitalizations by Race/Ethnicity and Year: Counts and Age-Adjusted Rates, Boston, 1999-2005



	1999	2000	2001	2002	2003	2004	2005
Asian	0.9	--	0.2	0.2	0.3	0.2	0.1
Black	1.9	2.1	2.1	1.8	1.9	1.7	1.8
Latino	1.1	1.0	1.4	1.6	1.6	1.8	1.6
White	3.5	3.4	3.4	3.5	3.6	3.4	3.2
BOSTON	3.2	3.6	3.8	3.6	3.7	3.6	3.3

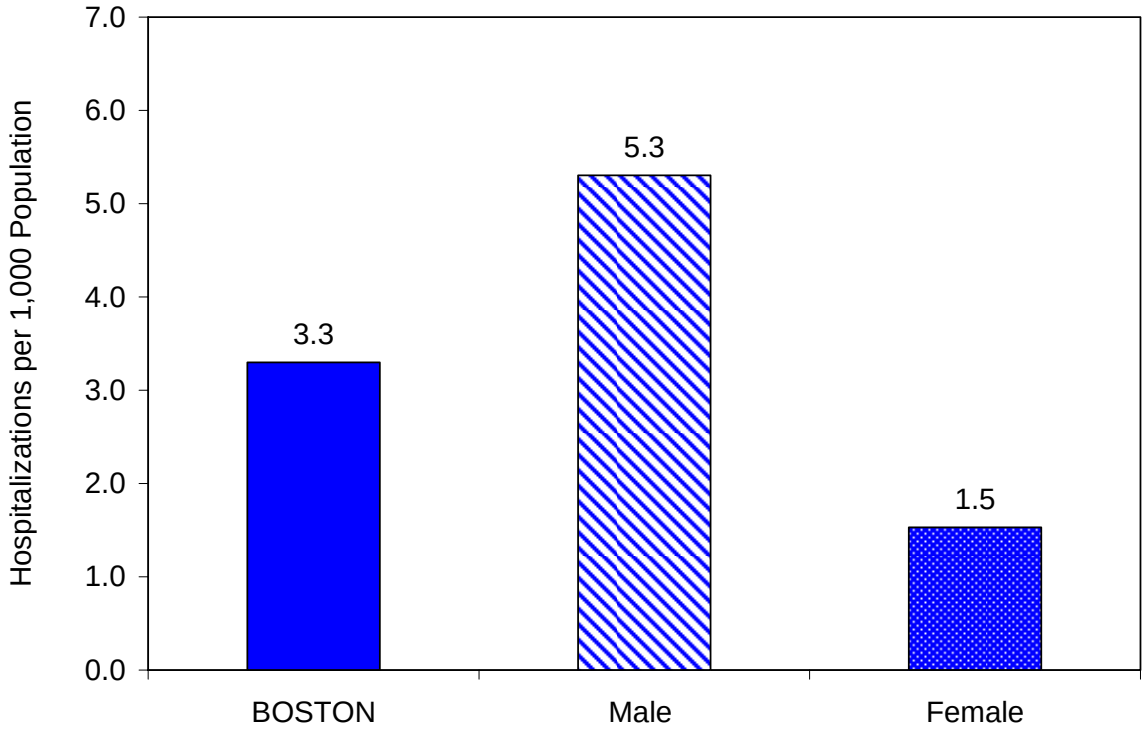
Count	1999	2000	2001	2002	2003	2004	2005
Asian	39	n<5	9	11	17	8	6
Black	274	298	281	242	253	237	245
Latino	82	79	94	119	115	140	118
White	1,136	1,076	1,109	1,169	1,224	1,122	1,036
BOSTON	1,843	2,053	2,206	2,119	2,192	2,080	1,879

NOTES: The rates for years prior to 2003 have been updated and may differ from those reported in previous publications. Individuals may be hospitalized more than once. People of Latino ethnicity may be reported in any of the above race/ethnicity categories. Boston count total and rate includes unknown racial/ethnic groups. There were too few hospitalizations among Asians in 2000 to permit the presentation of a hospitalization rate. See Technical Notes for additional caveats.
DATA SOURCE: Acute Care Hospital Case Mix Files, Massachusetts Division of Health Care Finance and Policy
DATA ANALYSIS: Boston Public Health Commission Research Office

- Whites had the highest substance abuse hospitalization age-adjusted rate every year from 1999-2005.
- The 2005 hospitalization rate for Whites was twice the rate for Latinos and 77.8% higher than the rate for Blacks.
- Asians consistently had the lowest substance abuse hospitalization rates (in 1999 and from 2001-2005).

Substance Abuse

Substance Abuse Hospitalizations by Sex: Counts and Age-Adjusted Rates, Boston, 2005



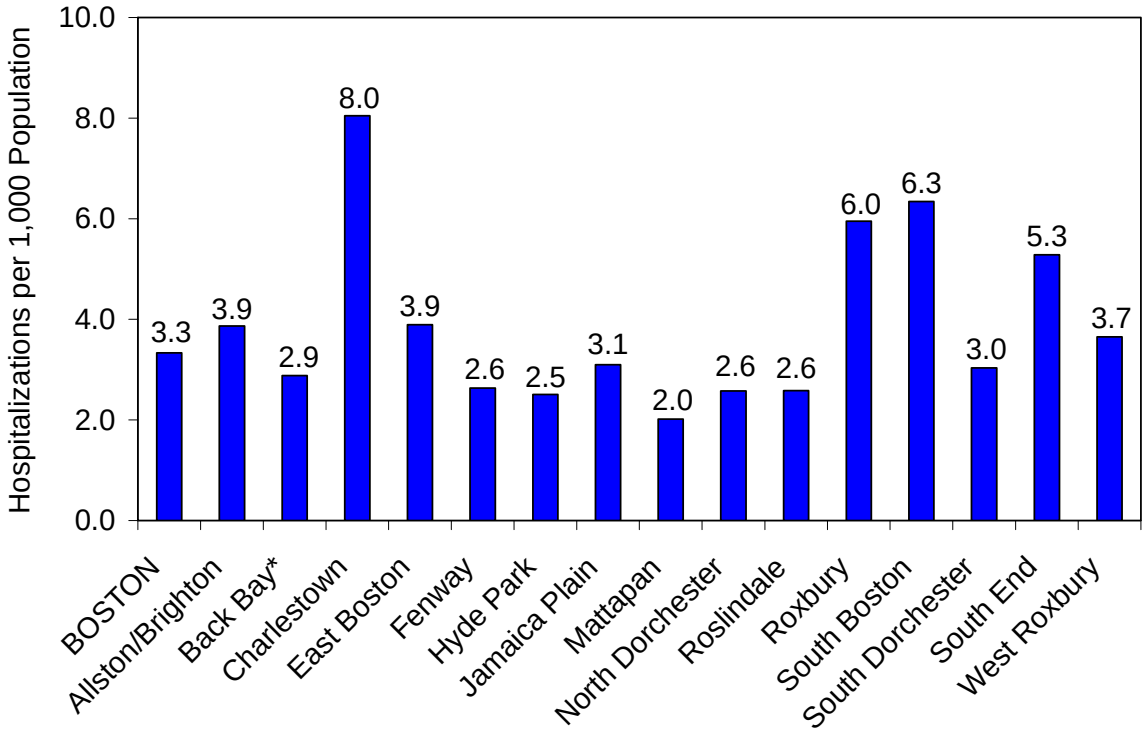
	BOSTON	Male	Female
Count	1,879	1,419	460

NOTES: Individuals may be hospitalized more than once. These data do not include persons whose sex was not reported, except in the Boston overall rates and counts.
DATA SOURCE: Acute Care Hospital Case Mix Files, Massachusetts Division of Health Care Finance and Policy
DATA ANALYSIS: Boston Public Health Commission Research Office

- The age-adjusted substance abuse hospitalization rate for Boston males in 2005 was more than three times the rate for Boston females.

Substance Abuse

Substance Abuse Hospitalizations by Neighborhood: Counts and Age-Adjusted Rates, Boston, 2005

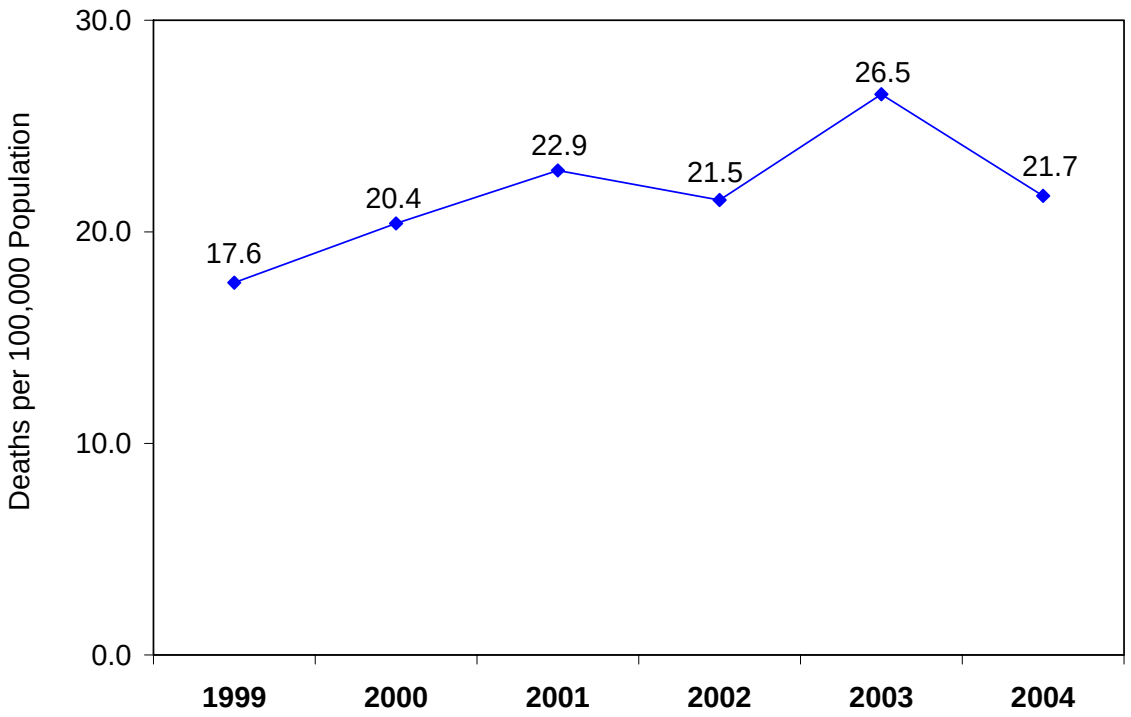


	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	1,879	195	144	116	148	55	73	115	54	139	81	111	197	215	149	87

ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
*Includes the North End
NOTES: These data do not include homeless persons or individuals whose neighborhood of residence was not reported. Individuals may be hospitalized more than once.
DATA SOURCE: Acute Care Hospital Case Mix Files, Massachusetts Division of Health Care Finance and Policy
DATA ANALYSIS: Boston Public Health Commission Research Office

- Charlestown had the highest age-adjusted substance abuse hospitalization rate among Boston neighborhoods in 2005 and more than double the rate for Boston overall.
- Besides Charlestown, six neighborhoods had rates higher than the overall rate for Boston: Allston/Brighton, East Boston, Roxbury, South Boston, the South End, and West Roxbury.

Substance Abuse



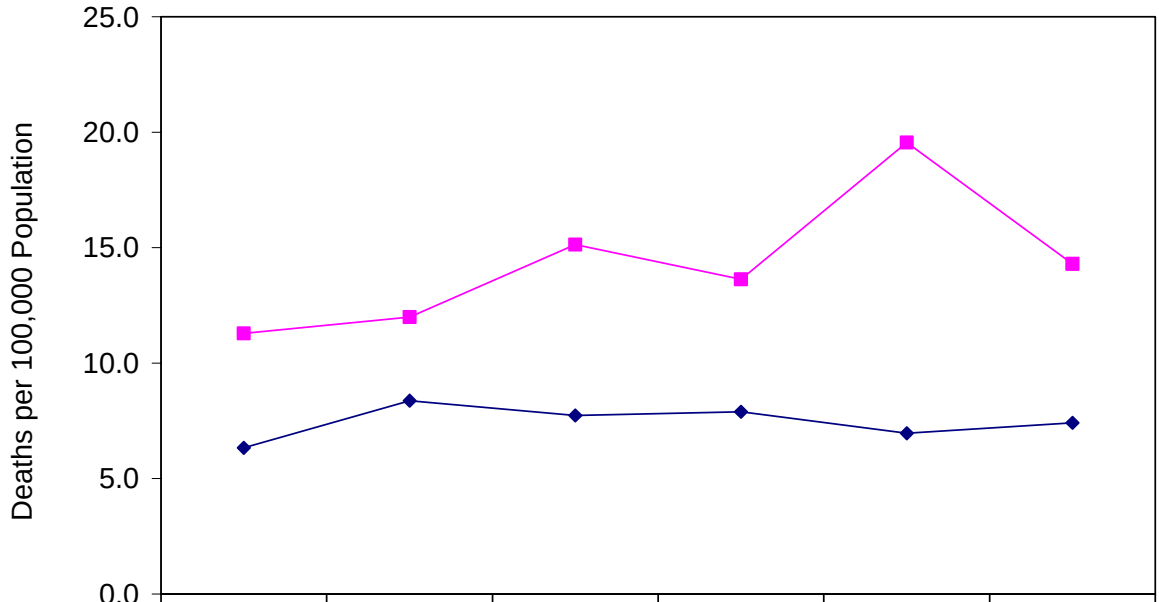
	1999	2000	2001	2002	2003	2004
Count	96	112	127	116	145	118

NOTE: The rates for years prior to 2003 have been updated and may differ from those reported in previous publications.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- The substance abuse mortality age-adjusted rate for Boston residents increased 50.6% from 1999 to 2003 then decreased 18.1% from 2003 to 2004.

Substance Abuse

Substance Abuse Mortality by Type and Year: Counts and Age-Adjusted Rates, Boston, 1999-2004



	1999	2000	2001	2002	2003	2004
Alcohol	6.3	8.4	7.7	7.9	7.0	7.4
Drug	11.3	12.0	15.1	13.6	19.6	14.3

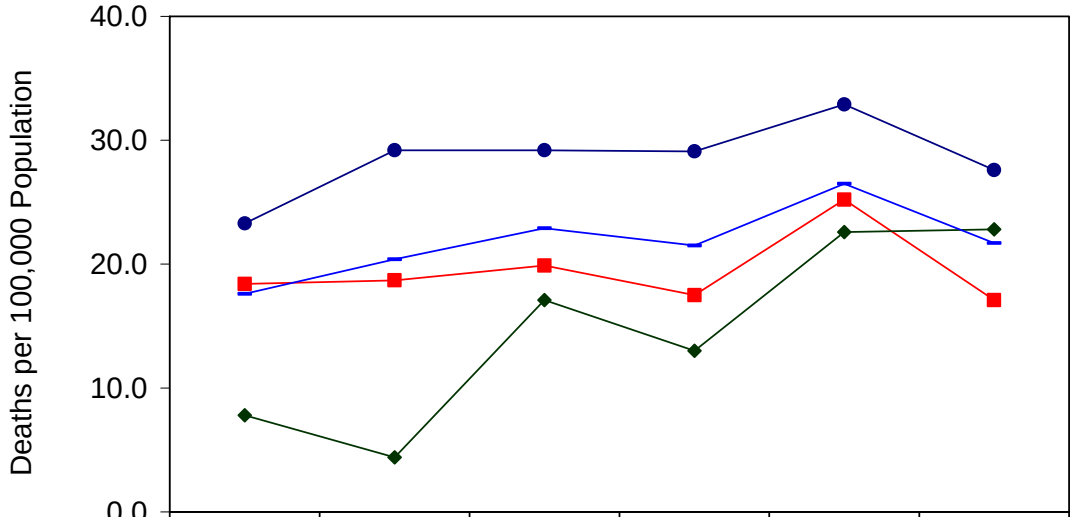
Count	1999	2000	2001	2002	2003	2004
Alcohol	31	42	39	40	34	38
Drug	65	70	88	76	111	80

NOTE: The 1999 rates have been recalculated using U.S. Census 2000 population figures and may differ from those reported in previous publications.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2004, the age-adjusted drug mortality rate for Boston residents was nearly twice the age-adjusted alcohol mortality rate.
- The drug mortality rate decreased 27.0% from 2003 to 2004 and the alcohol mortality rate, 5.7%.
- Between 1999 and 2004, age-adjusted mortality rates increased for both alcohol and drugs.

Substance Abuse

Substance Abuse Mortality by Race/Ethnicity and Year: Counts and Age-Adjusted Rates, Boston, 1999-2004



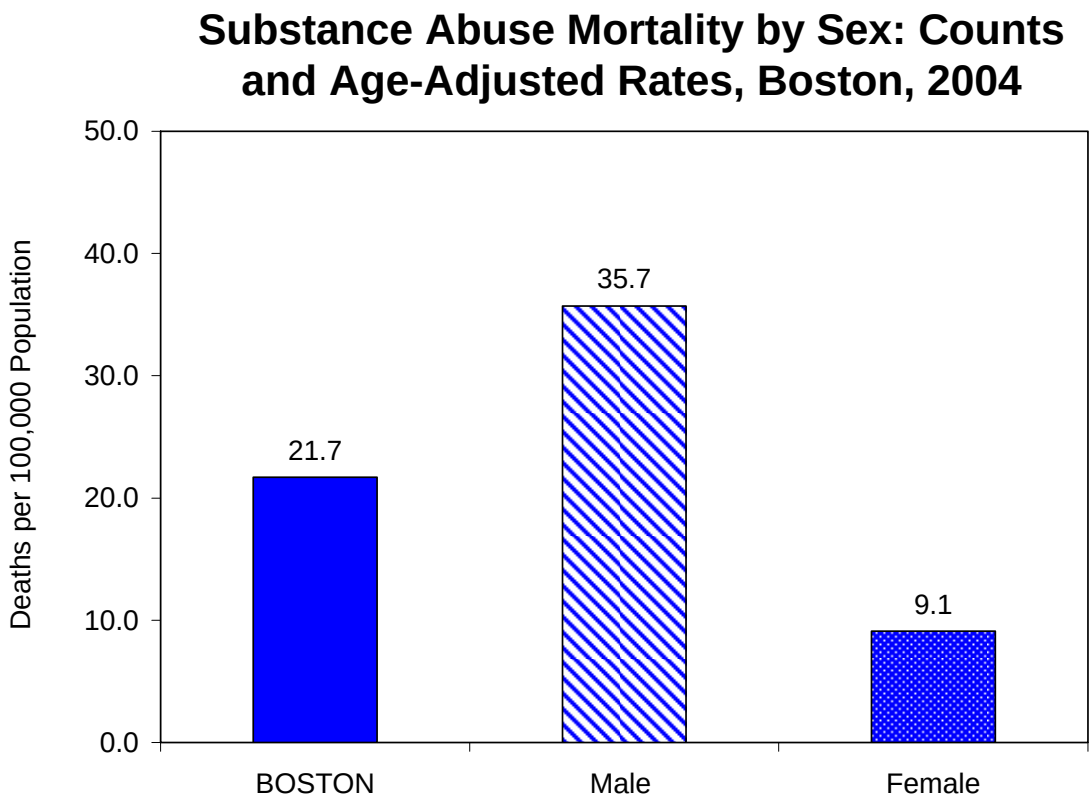
	1999	2000	2001	2002	2003	2004
Black	18.4	18.7	19.9	17.5	25.2	17.1
Latino	7.8	4.4	17.1	13.0	22.6	22.8
White	23.3	29.2	29.2	29.1	32.9	27.6
BOSTON	17.6	20.4	22.9	21.5	26.5	21.7

Count	1999	2000	2001	2002	2003	2004
Black	23	23	26	22	32	22
Latino	6	5	12	11	19	16
White	67	83	85	81	94	78
BOSTON	96	112	127	116	144	118

NOTES: The rates for years prior to 2003 have been updated and may differ from those reported in previous publications. These data do not include persons of Asian, Other, or Unknown race/ethnicity except in the Boston overall rates and counts. There were too few substance abuse deaths among Asians during each year of 1999-2003 to permit the separate presentation of rates.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Boston's White residents had the highest substance abuse mortality age-adjusted rate for each year of the 6-year period 1999-2004. In 2004, the rate for Whites was 27.2% higher than the overall Boston rate.
- Black residents had the second highest rates, except in 2004 when Latino residents had the second highest.
- For five of the six years shown, Latino residents had the lowest substance abuse mortality rates but their rate increased 192.3% from 1999 to 2004.

Substance Abuse



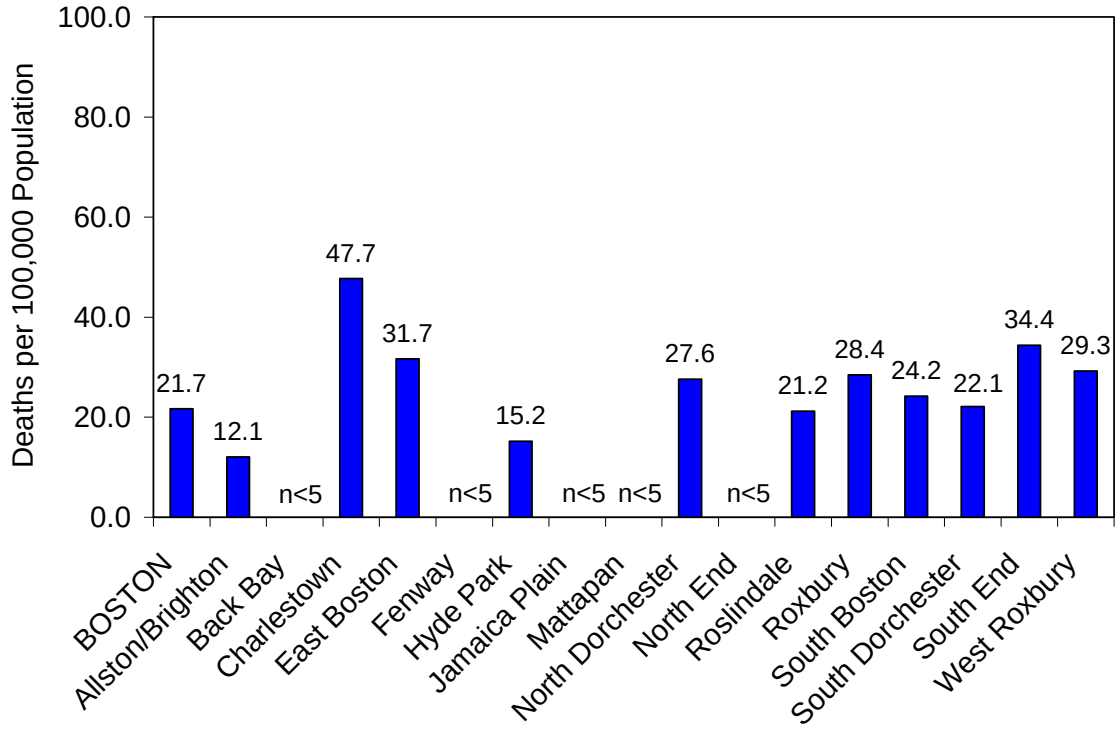
	BOSTON	Male	Female
Count	118	91	27

NOTE: These data do not include persons whose sex was not reported, except in the Boston overall rates and counts.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2004, the male substance abuse mortality age-adjusted rate for Boston was more than three times the female rate.

Substance Abuse

Substance Abuse Mortality by Neighborhood: Counts and Age-Adjusted Rates, Boston, 2004



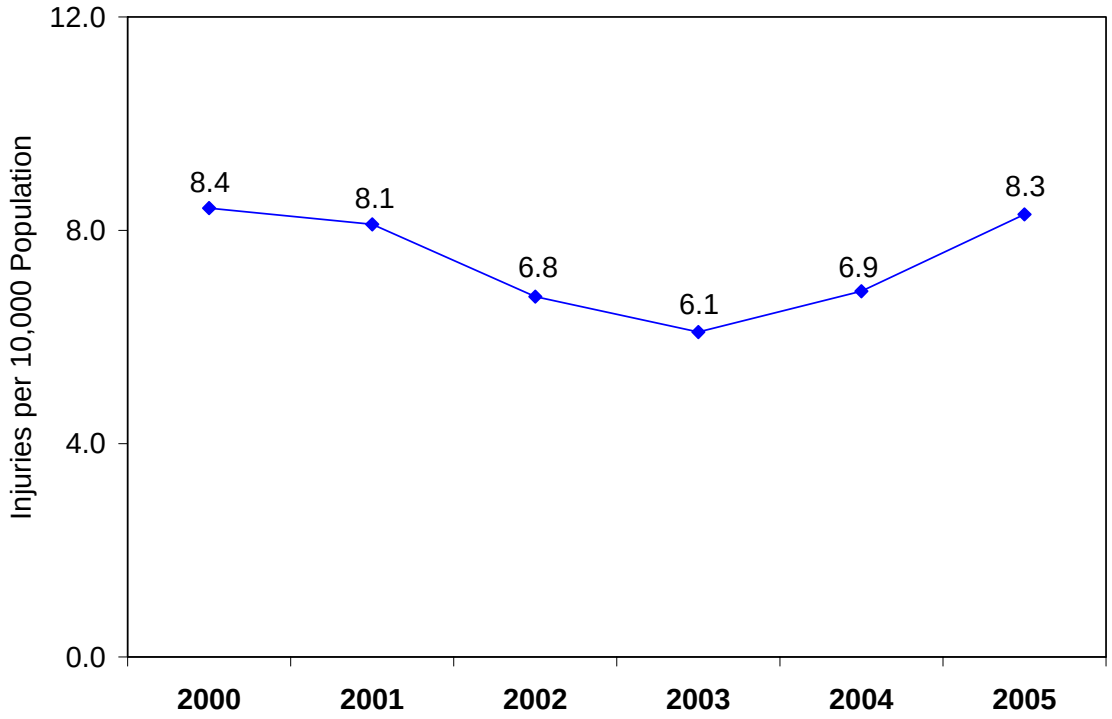
	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	118	7	n<5	6	11	n<5	5	n<5	n<5	21	n<5	8	12	7	10	12	8

ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, NE=North End, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
NOTE: These data do not include homeless persons or individuals whose neighborhood of residence was not reported.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Charlestown had the highest substance abuse mortality age-adjusted rate among all Boston neighborhoods in 2004 and more than twice the overall Boston rate.
- Eight of the neighborhoods had rates higher than Boston's overall rate.

Violence

Nonfatal Assault-Related Gunshot and Stabbing Injuries by Year: Counts and Rates, Boston, 2000-2005



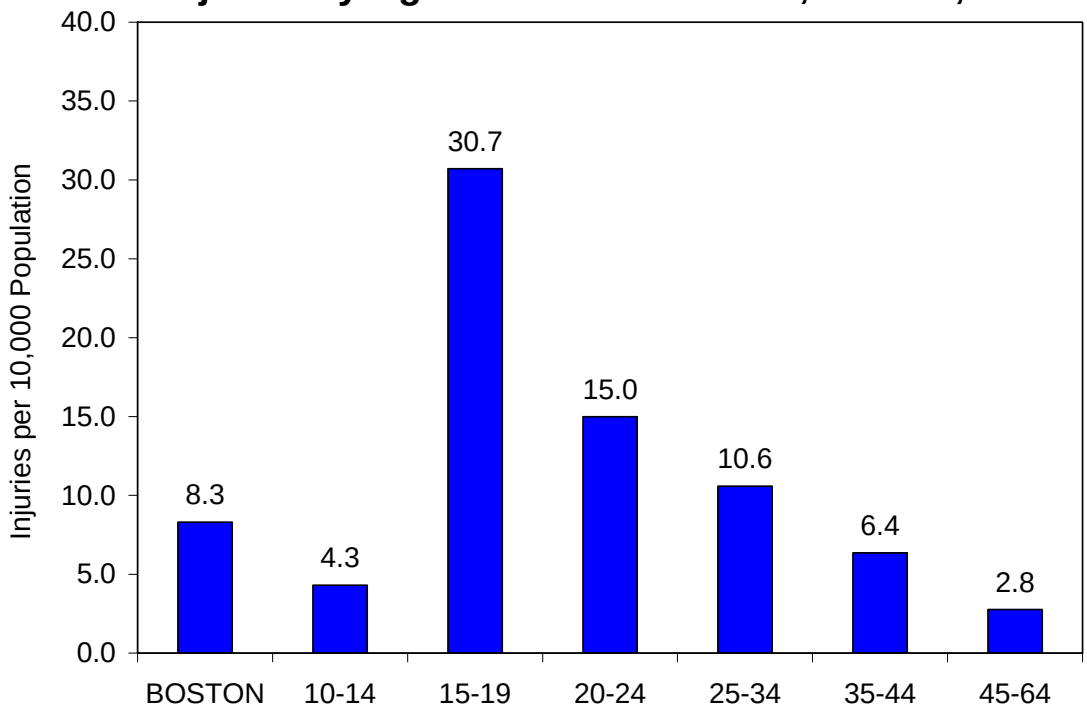
	2000	2001	2002	2003	2004	2005
Count	496	478	398	359	404	489

DATA SOURCE: Weapon-related injuries, Massachusetts Department of Public Health, Weapon-Related Injury Surveillance System
DATA ANALYSIS: Boston Public Health Commission Research Office

- The nonfatal assault-related gunshot and stabbing injuries data presented are based on Boston residents who received treatment in hospital emergency departments for those injuries.
- Of the nonfatal assault-related gunshot and stabbing injuries for Boston residents in 2005, 41% were due to gunshots, and 59% were due to injuries inflicted by knives, razor blades, and other sharp instruments (data not shown).
- The gunshot and stabbing injury rate in 2000 for Boston residents was the highest rate during the six-year period from 2000 to 2005. The gunshot and stabbing injury rate declined 27.4% between 2000 and 2003 then increased 36.1% from 2003 to 2005, returning to approximately the same level as in 2000.

Violence

Nonfatal Assault-Related Gunshot and Stabbing Injuries by Age: Counts and Rates, Boston, 2005



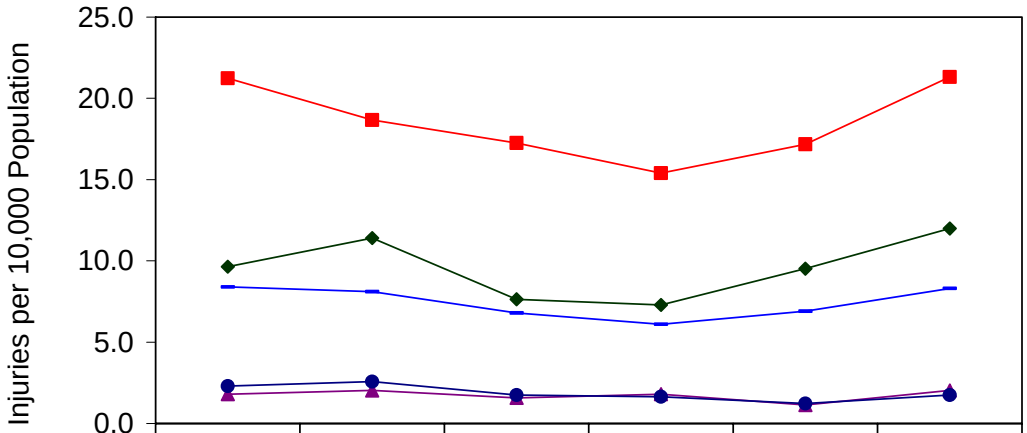
	BOSTON	10-14	15-19	20-24	25-34	35-44	45-64
Count	489	14	134	105	132	55	29

NOTE: These data do not include persons whose age was not reported, except in the Boston overall rate and count.
DATA SOURCE: Weapon-related injuries, Massachusetts Department of Public Health, Weapon-Related Injury Surveillance System
DATA ANALYSIS: Boston Public Health Commission Research Office

- Boston residents ages 15-19 had the highest gunshot and injury rate among all age groups in 2005. That rate was nearly four times the rate for Boston overall.

Violence

Nonfatal Assault-Related Gunshot and Stabbing Injuries by Race/Ethnicity and Year: Counts and Rates, Boston, 2000-2005



	2000	2001	2002	2003	2004	2005
Asian	1.8	2.0	1.6	1.8	1.1	2.0
Black	21.2	18.7	17.2	15.4	17.2	21.3
Latino	9.6	11.4	7.6	7.3	9.5	12.0
White	2.3	2.6	1.7	1.6	1.2	1.7
BOSTON	8.4	8.1	6.8	6.1	6.9	8.3

Count	2000	2001	2002	2003	2004	2005
Asian	8	9	7	8	5	9
Black	298	262	242	216	241	299
Latino	82	97	65	62	81	102
White	67	75	51	48	36	51
BOSTON	496	478	398	359	404	489

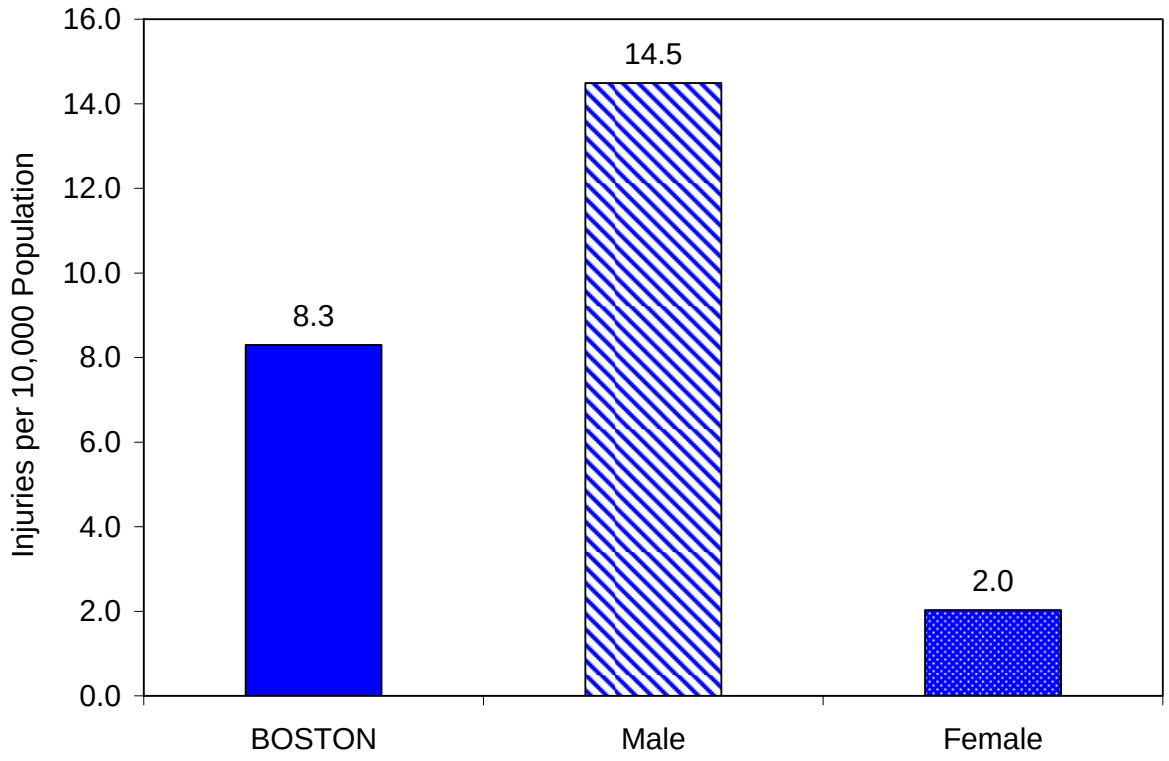
DATA SOURCE: Weapon-related injuries, Massachusetts Department of Public Health, Weapon-Related Injury Surveillance System
DATA ANALYSIS: Boston Public Health Commission Research Office

- Among all race/ethnicity groups, Black Boston residents had the highest nonfatal, assault-related gunshot and stabbing injury rates and Latino Boston residents, the second highest rates for each of the six years.

- Between 2000 and 2003, nonfatal assault-related gunshot and stabbing injury rates fell 27.4% for Black residents before increasing 38.3% between 2003 and 2005.

Violence

Nonfatal Assault-Related Gunshot and Stabbing Injuries by Sex: Counts and Rates, Boston, 2005



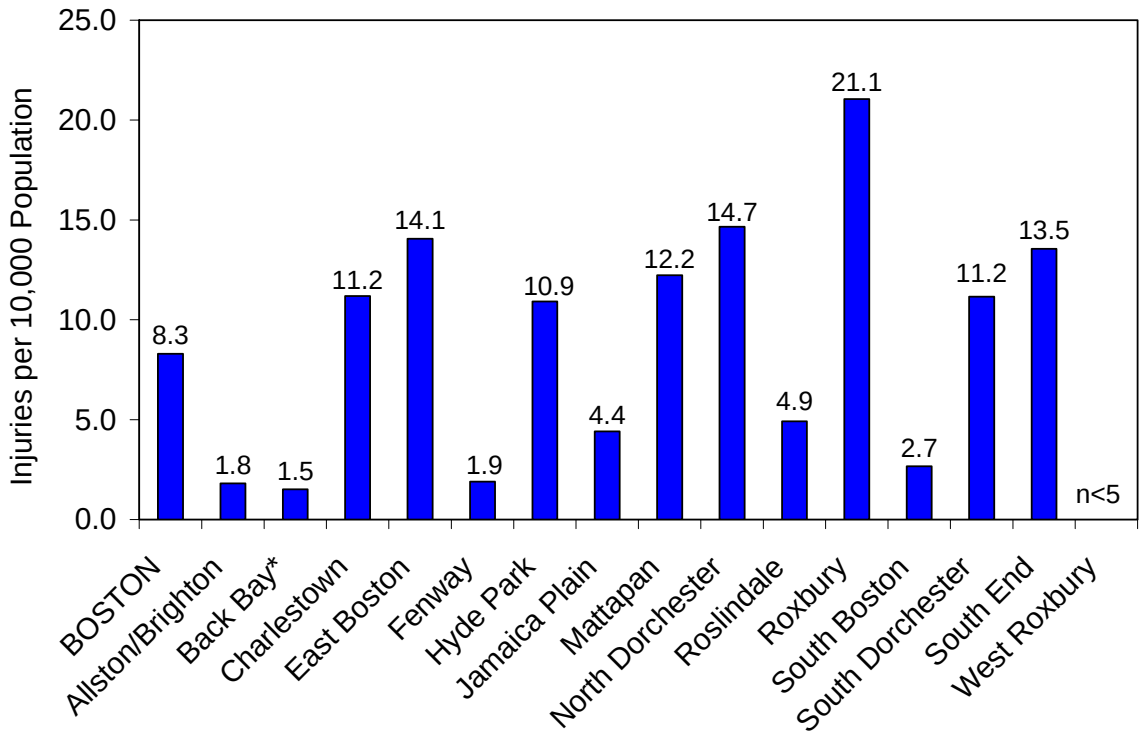
	BOSTON	Male	Female
Count	489	411	62

NOTE: These data do not include persons whose sex was not reported, except in the Boston overall rate and count.
DATA SOURCE: Weapon-related injuries, Massachusetts Department of Public Health, Weapon-Related Injury Surveillance System
DATA ANALYSIS: Boston Public Health Commission Research Office

- The gunshot and stabbing injury rate for Boston males was more than seven times the rate for Boston females in 2005.

Violence

Nonfatal Assault-Related Gunshot and Stabbing Injuries by Neighborhood: Counts and Rates, Boston, 2005



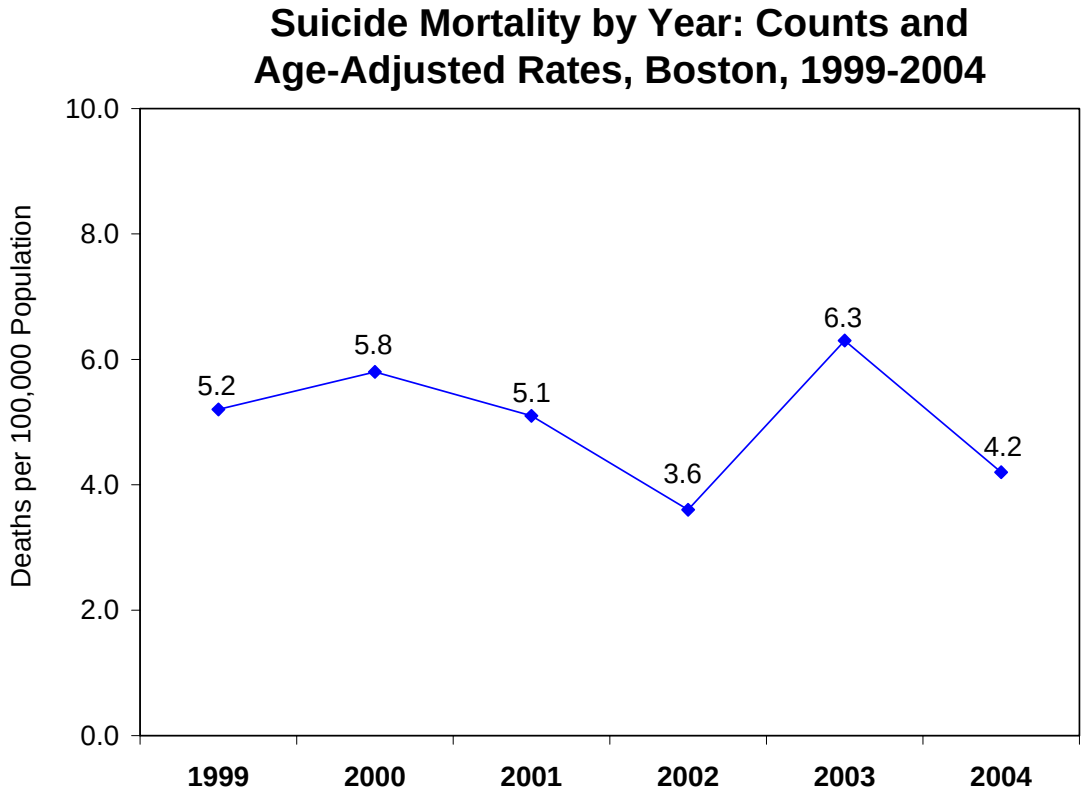
	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	489	12	7	17	54	9	31	16	34	86	16	73	8	84	37	n<5

ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
*Includes the North End
NOTE: These data do not include homeless persons or individuals whose neighborhood of residence was not reported.
DATA SOURCE: Weapon-related injuries, Massachusetts Department of Public Health, Weapon-Related Injury Surveillance System
DATA ANALYSIS: Boston Public Health Commission Research Office

- Roxbury had the highest nonfatal assault-related gunshot and stabbing rate of all Boston neighborhoods in 2005. This rate was fourteen times the rate for Back Bay and two and a half times the rate for Boston overall.

- In addition to Roxbury, rates for North Dorchester, East Boston, and the South End were sixty percent or higher than the overall Boston rate.

Violence



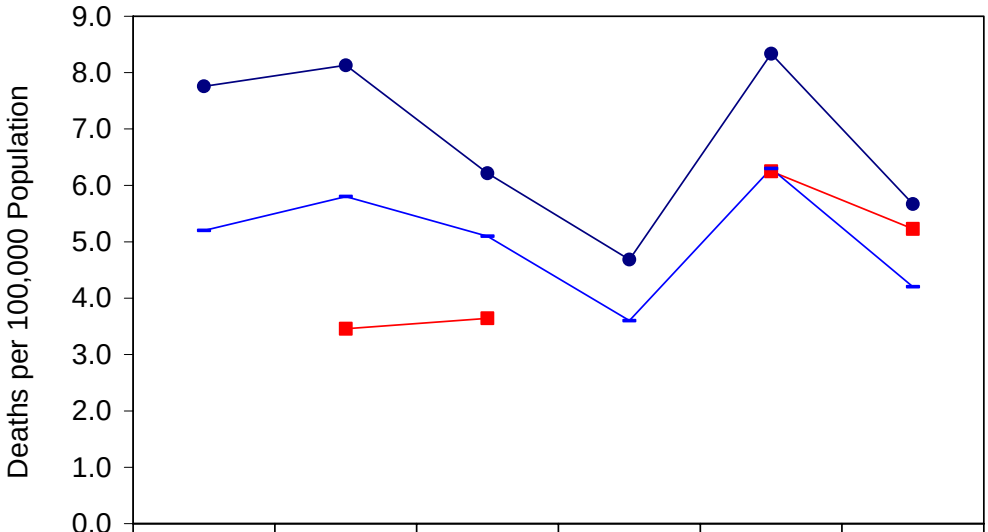
	1999	2000	2001	2002	2003	2004
Count	31	34	32	22	38	26

DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Twenty-six Boston residents died by suicide in 2004. However, there were more suicides in 2003 than during any other year from 1999 to 2004.
- Boston's suicide rate decreased 33.3% from 2003 to 2004.
- In 2004, none of Boston neighborhoods had enough suicides to permit calculation of age-adjusted rates.

Violence

Suicide Mortality by Race/Ethnicity and Year: Counts and Age-Adjusted Rates, Boston, 1999-2004



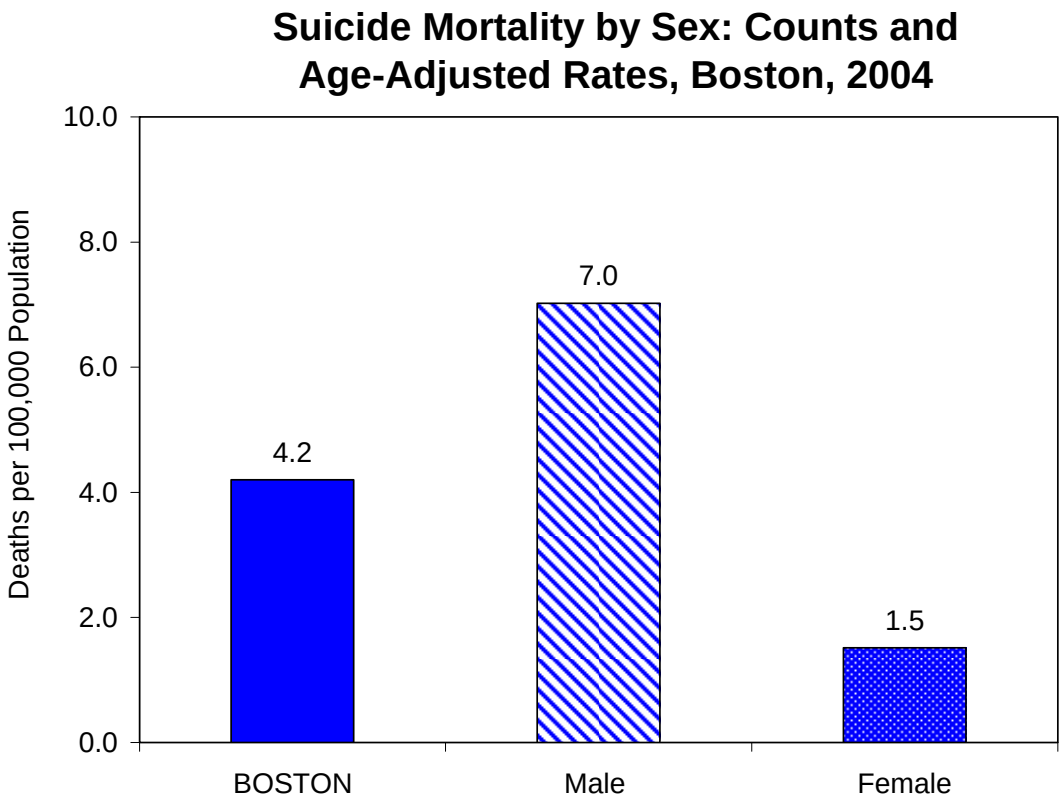
	1999	2000	2001	2002	2003	2004
Black	--	3.5	3.6	--	6.3	5.2
White	7.8	8.1	6.2	4.7	8.3	5.7
BOSTON	5.2	5.8	5.1	3.6	6.3	4.2

Count	1999	2000	2001	2002	2003	2004
Black	n<5	5	5	n<5	9	7
White	23	25	20	15	26	16
BOSTON	31	34	32	22	38	26

NOTE: Rates are not presented for Asians and Latinos due to the small number of suicides they incurred in each of the years shown.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- White Boston residents accounted for 68.3% of the city's suicide deaths between 1999 and 2004, although they make up just under half of the population.
- The age-adjusted suicide rate for White Bostonians was higher than the rate for Black Bostonians in each of the six years of the period 1999-2004.
- The rate for Whites decreased 31.3% from 2003 to 2004 while the rate for Blacks decreased 17.5% during the same period.

Violence

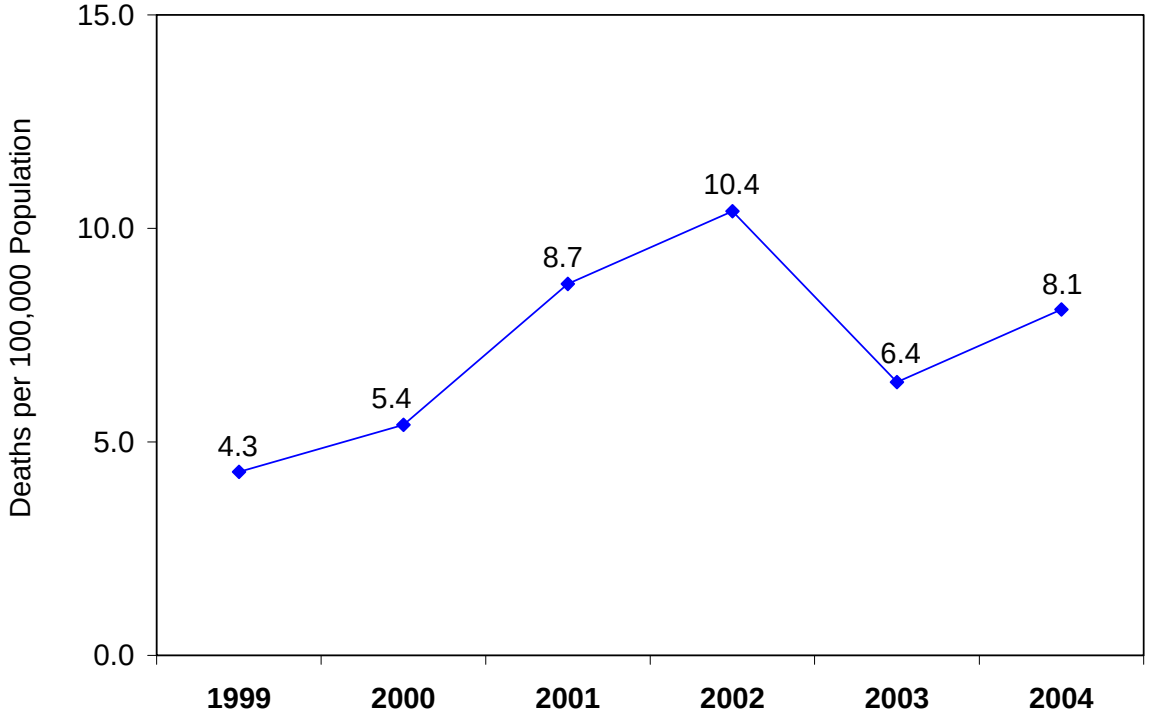


	BOSTON	Male	Female
Count	26	21	5

NOTE: These data do not include persons whose sex was not reported, except in the Boston overall rate and count.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2004, the age-adjusted suicide rate for male Boston residents was more than four times the rate for females.

Violence



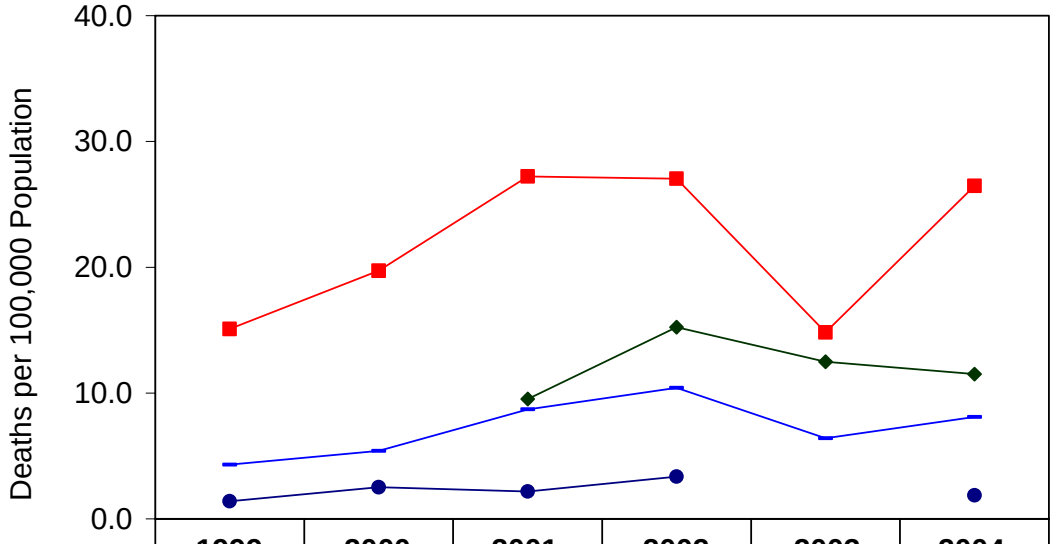
	1999	2000	2001	2002	2003	2004
Count	31	42	62	68	42	58

DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Unlike homicide data from the Boston Police Department, homicide data in this report and other reports published by the Boston Public Health Commission pertain to Boston residents only. (See Technical Notes)
- From 1999 through 2004, 303 homicides occurred among Boston residents.
- From 1999 through 2002, the age-adjusted homicide rate for Boston residents steadily increased, reaching its highest point during the 6-year period in 2002.
- The homicide rate for Boston residents declined 38.5% from 2002 to 2003, but increased 26.6% from 2003 to 2004.

Violence

Homicide Mortality by Race/Ethnicity and Year: Counts and Age-Adjusted Rates, Boston, 1999-2004



	1999	2000	2001	2002	2003	2004
Black	15.1	19.7	27.2	27.0	14.8	26.5
Latino	--	--	9.5	15.2	12.5	11.5
White	1.4	2.5	2.2	3.4	--	1.9
BOSTON	4.3	5.4	8.7	10.4	6.4	8.1

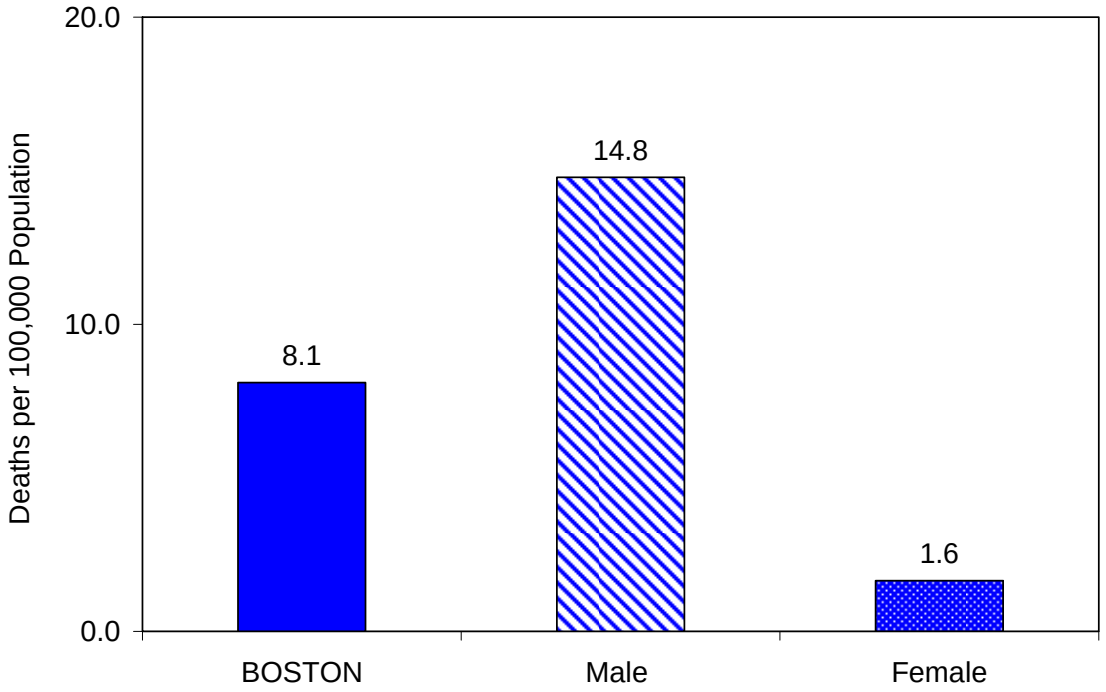
Count	1999	2000	2001	2002	2003	2004
Black	23	31	41	41	23	41
Latino	n<5	n<5	10	15	10	10
White	5	7	7	10	n<5	5
BOSTON	31	42	62	68	42	58

NOTE: There were too few deaths from homicide among Latinos in 1999 and 2000, and among Whites in 2003, to permit the presentation of mortality rates.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Between 1999 and 2004, nearly two-thirds of Boston homicide victims were Black residents. Age-adjusted homicide rates for Black Boston residents exceeded those of other racial/ethnic groups for every year of the 6-year period.
- The 2004 homicide rate for Blacks was a 79.1% increase from the 2003 rate.

Violence

Homicide Mortality by Sex: Counts and Age-Adjusted Rates, Boston, 2004



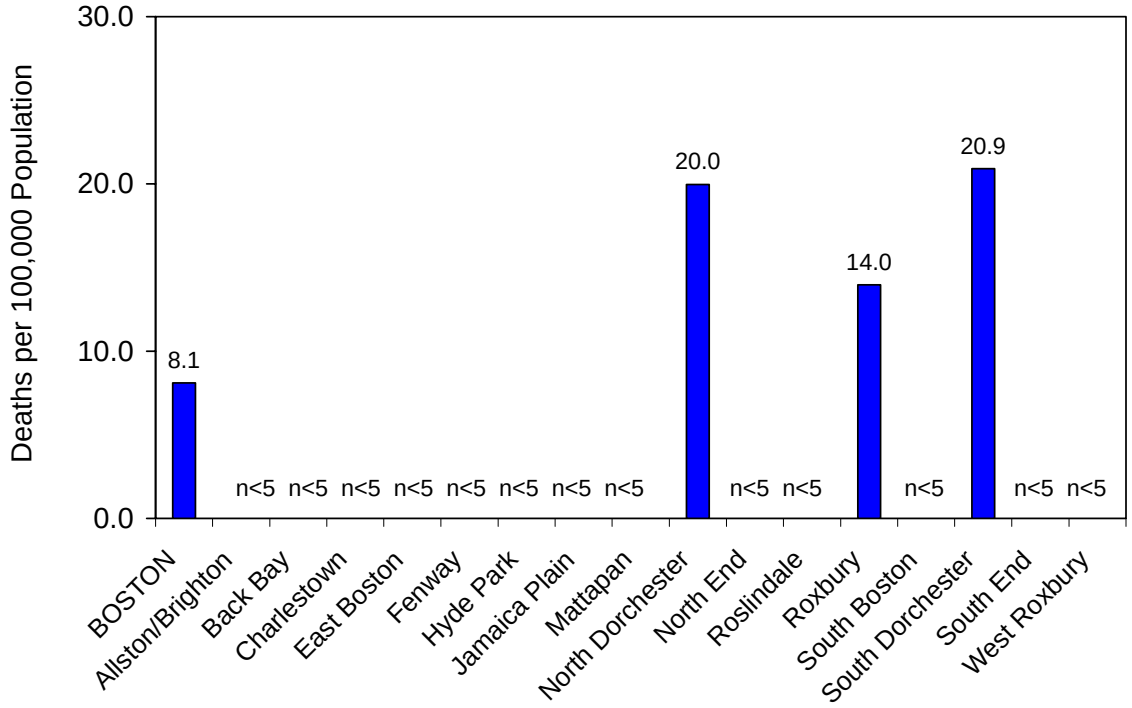
	BOSTON	Male	Female
Count	58	53	5

NOTE: These data do not include persons whose sex was not reported, except in the Boston overall rate and count.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2004, more than 90% of Boston residents who were victims of homicide were males. The age-adjusted rate for Boston males was more than nine times the rate for females.

Violence

Homicide Mortality by Neighborhood: Counts and Age-Adjusted Rates, Boston, 2004

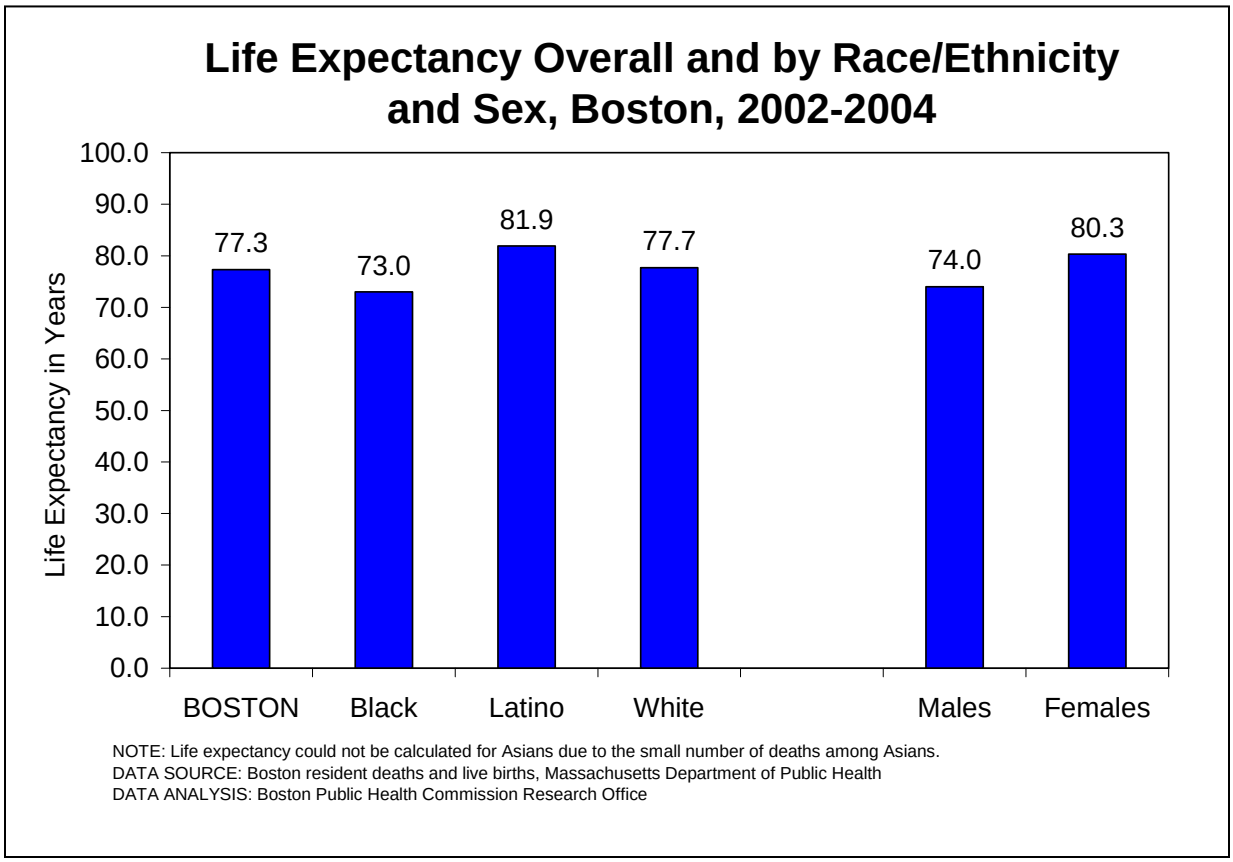


	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	58	n<5	n<5	n<5	n<5	n<5	n<5	n<5	n<5	19	n<5	n<5	9	n<5	10	n<5	n<5

ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, NE=North End, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
NOTE: The number of homicides for most neighborhoods were too small to permit calculation of rates. These data do not include homeless persons or individuals whose neighborhood of residence was not reported.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

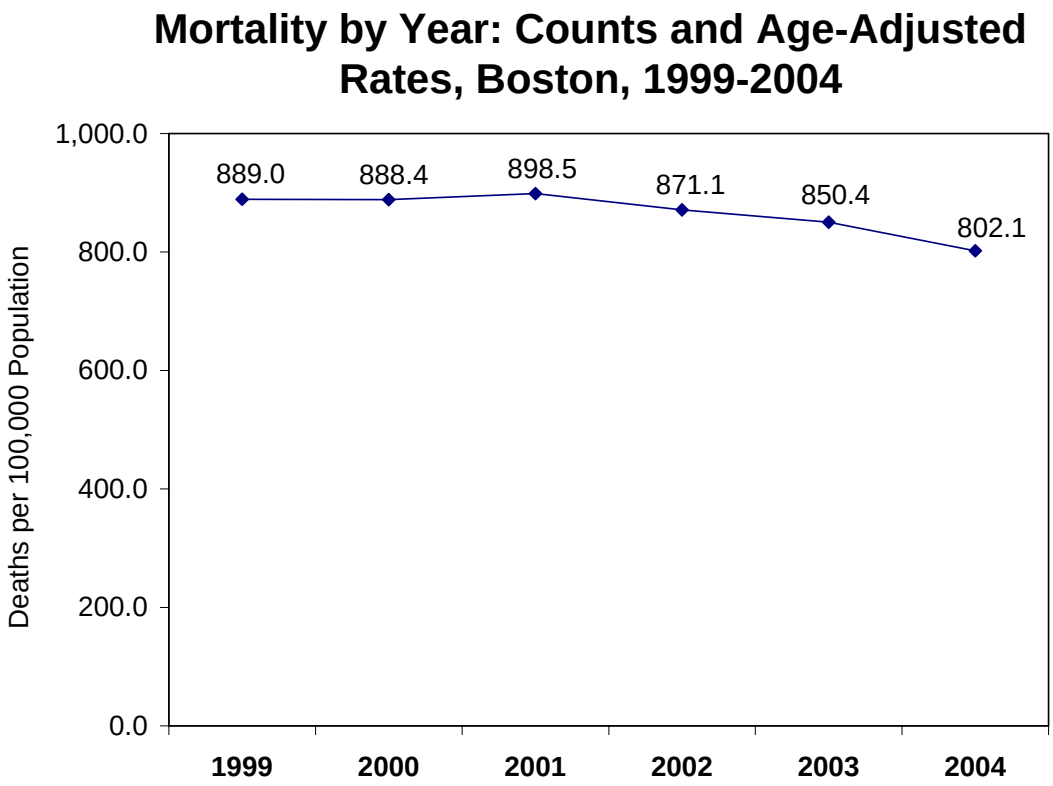
- In 2004, only three neighborhoods had enough homicides to permit calculation of age-adjusted homicide rates: North Dorchester, South Dorchester and Roxbury.
- Age-adjusted homicide rates for all three neighborhoods were about 2-3 times higher than the rate for Boston overall.

Mortality



- Life expectancy is approximately seventy-seven years for the Boston population.
- Boston females born in 2002 to 2004 could expect to live about six years longer than Boston males born during the same period.
- Estimated life expectancy is higher for Boston's Latino and White populations than for its Black residents.

Mortality



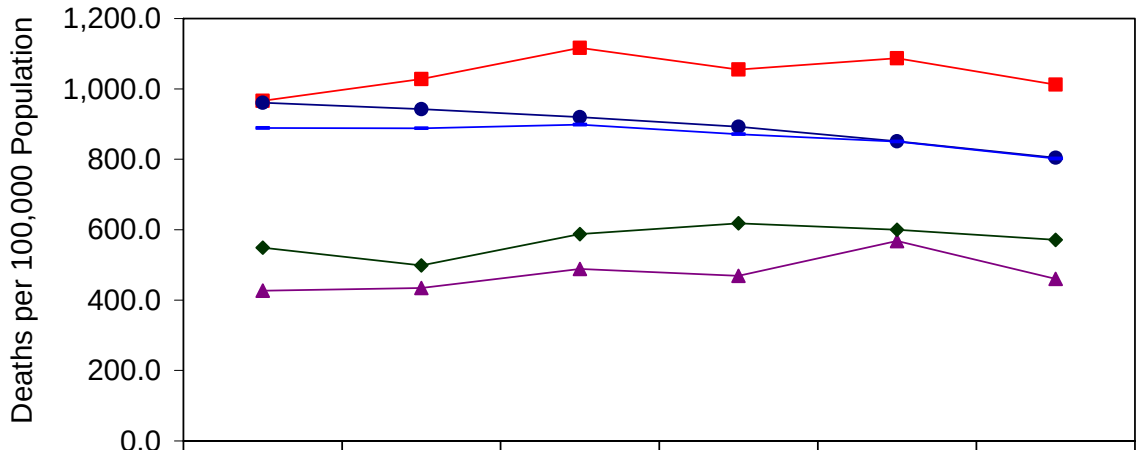
	1999	2000	2001	2002	2003	2004
Count	4,491	4,500	4,575	4,412	4,287	4,063

NOTE: The rate for 1999 has been recalculated based on U.S. Census 2000 population data.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2004, the age-adjusted overall mortality rate for Boston residents represented a one-year change of 5.7%. The 2004 rate was also 10.7% lower than the rate in 2001 (the highest rate of the 6-year period) and 9.8% lower than the rate in 1999.

Mortality

Mortality by Race/Ethnicity and Year: Counts and Age-Adjusted Rates, Boston, 1999-2004



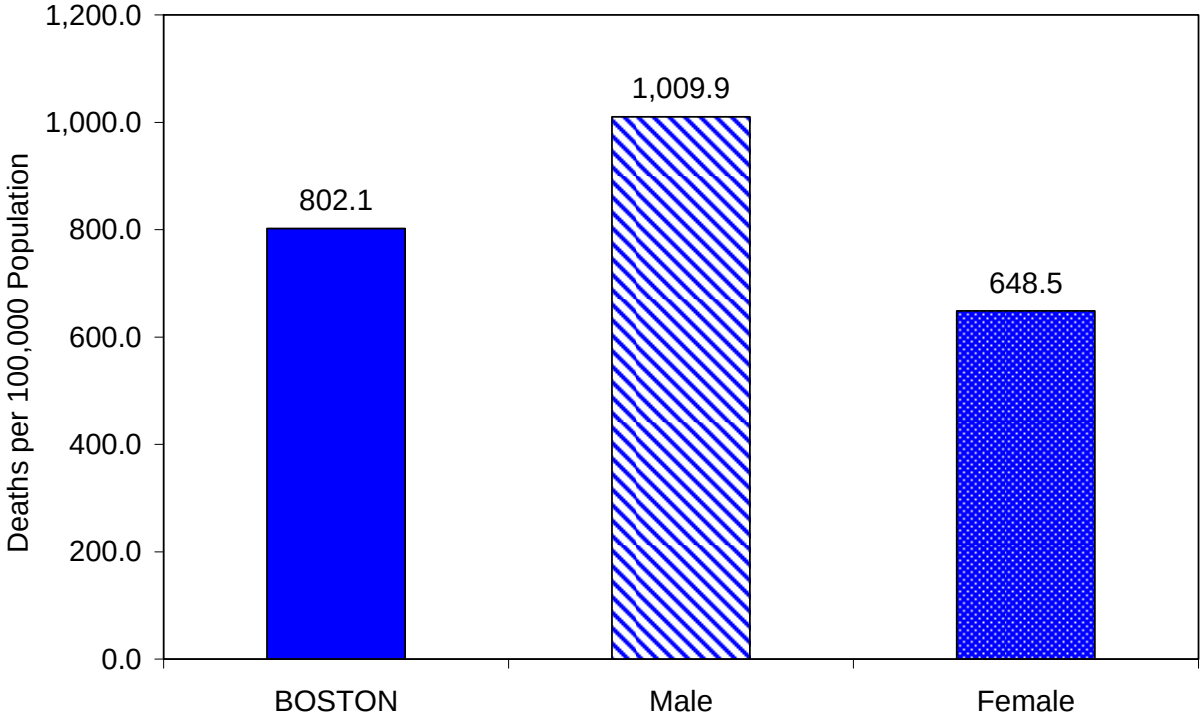
	1999	2000	2001	2002	2003	2004
Asian	426.7	434.7	488.5	469.0	568.0	460.3
Black	966.1	1,028.1	1,116.8	1,054.9	1,087.4	1,012.1
Latino	548.8	498.7	587.7	618.4	600.3	570.9
White	960.9	942.8	919.6	892.6	851.2	804.5
BOSTON	889.0	888.4	898.5	871.1	850.4	802.1

Count	1999	2000	2001	2002	2003	2004
Asian	126	128	147	135	165	135
Black	953	1,015	1,103	1,041	1,058	991
Latino	171	172	197	216	205	200
White	3,232	3,177	3,115	3,005	2,845	2,717
BOSTON	4,491	4,500	4,575	4,412	4,287	4,063

NOTE: Rates for 1999 have been recalculated based on U.S. Census 2000 population data.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In every year shown, age-adjusted mortality rates were higher for Boston's Black residents than for other race/ethnicity groups.
- In 2004, the rate for Black residents was 119.9% higher than the rate for Asian, 77.3% higher than the rate for Latino, and 25.8% higher than the rate for White residents.
- Boston mortality rates were higher in 2004 than in 1999 for every race/ethnicity group except Whites. The difference in rates was 7.9% for Asians, 4.8% for Blacks, and 4.0% for Latinos. The mortality rate for Whites was 16.3% lower in 2003 than in 1999.

Mortality

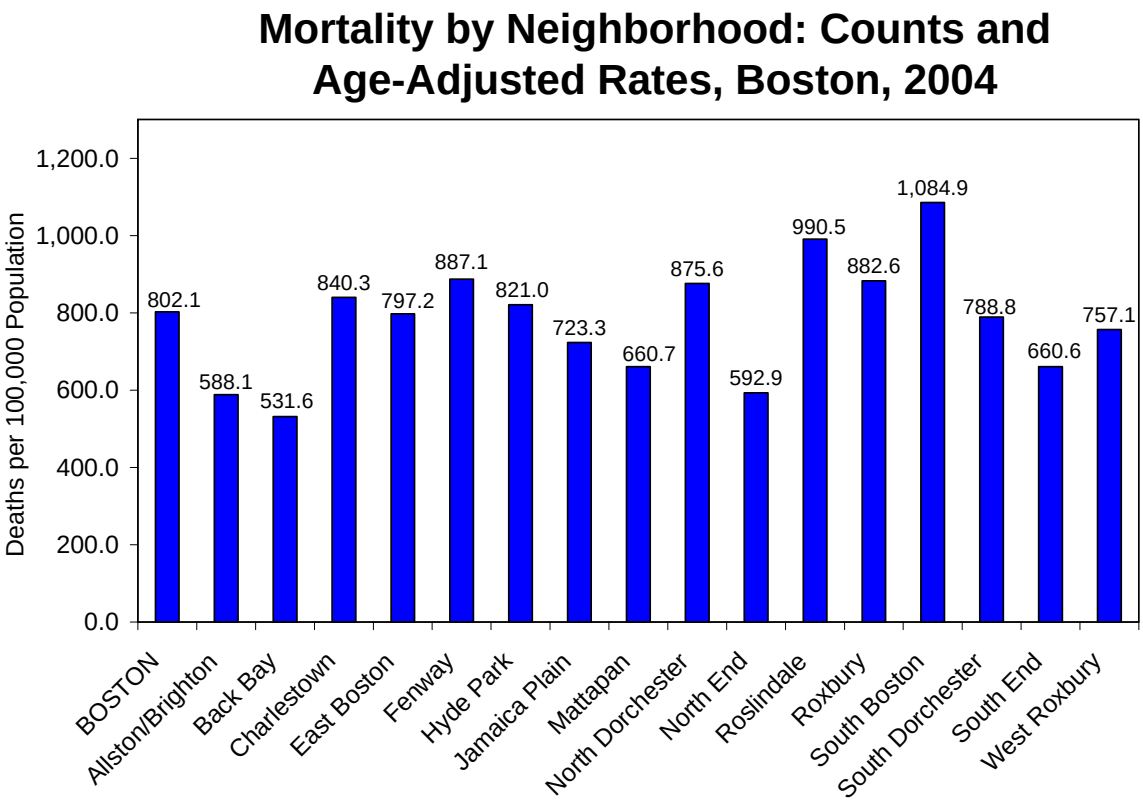


	BOSTON	Male	Female
Count	4,063	1,970	2,093

NOTE: These data do not include persons whose sex was not reported, except in the Boston overall rate and count.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2004, the age-adjusted mortality rate for Boston males was 55.7% higher than the rate for females.

Mortality



	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	4,063	315	135	105	293	98	288	162	89	475	86	453	367	335	304	207	300

ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, NE=North End, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2004, South Boston had the city's highest neighborhood mortality rate. The highest number of deaths, however, occurred among North Dorchester residents (475 deaths).
- Only South Boston residents had mortality rates that exceeded one thousand deaths per 100,000 population.
- The lowest neighborhood mortality rate was for the Back Bay.

Mortality

Leading Causes of Death by Year: Counts and Age-Adjusted Rates, Boston, 2000-2004

	Count	Rate
2000		
Cancer	1,109	226.9
Heart Disease	1,067	211.1
Stroke	270	52.9
Injuries	226	38.0
Chronic Obstructive Pulmonary Disease	172	34.5
All causes	**4,500**	**888.4**
2001		
Heart Disease	1,112	220.1
Cancer	1,030	209.4
Injuries	295	50.0
Stroke	251	49.4
Chronic Obstructive Pulmonary Disease	182	36.6
All causes	**4,575**	**898.5**
2002		
Cancer	1,072	218.4
Heart Disease	964	191.7
Injuries	275	47.6
Stroke	227	44.6
Chronic Obstructive Pulmonary Disease	156	31.6
All causes	**4,412**	**871.1**
2003		
Cancer	1,036	212.3
Heart Disease	992	198.2
Injuries	279	48.2
Stroke	222	43.3
Chronic Obstructive Pulmonary Disease	203	41.2
All causes	**4,287**	**850.2**
2004		
Cancer	977	199.3
Heart Disease	879	174.2
Stroke	245	48.4
Injuries	242	41.4
Chronic Obstructive Pulmonary Disease	172	34.7
All causes	**4,063**	**802.1**

NOTE: The rates shown are deaths per 100,000 population.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Leading causes of death among Boston residents are established by ranking age-adjusted mortality rates.
- Between 2000 and 2004, Boston's leading causes were similar from year to year, with heart disease and cancer always ranking first or second, and stroke, injuries, and chronic obstructive pulmonary disease (COPD) always sharing the next three ranks.
- Mortality rates were lower in 2004 than in 2000 for some leading causes such as nephrites/nephrosis, heart disease, pneumonia/influenza (data not shown) and the difference was greatest (18.3%) for nephrites/neprhosis mortality.
- Higher mortality rates in 2004 than in 2000 were also seen, for example with substance abuse (10.7%, data not shown) and injuries (8.9% higher).
- From 2000 to 2004, mortality rates declined 12.2% for cancer and 17.5% for heart disease.

Mortality

Leading Causes of Death by Race/Ethnicity and Year: Counts and Age-Adjusted Rates Boston, 2000-2004

Asian	Count	Rate
2000		
Cancer	33	112.8
Heart Disease	25	85.6
Stroke	15	53.6
Chronic Obstructive Pulmonary Disease	6	21.7
Injuries	6	16.6
All causes	**128**	**434.7**
2001		
Cancer	35	112.1
Heart Disease	24	85.0
Injuries	16	37.4
Pneumonia/Influenza	9	33.0
Chronic Obstructive Pulmonary Disease	7	24.9
All causes	**147**	**488.5**
2002		
Cancer	47	160.1
Heart disease	18	65.3
Nephritis/Nephrosis	8	29.7
Injuries	9	28.9
Pneumonia/Influenza	6	22.3
All causes	**135**	**469.0**
2003		
Cancer	49	164.3
Heart Disease	33	117.8
Injuries	14	37.4
Stroke	10	35.4
Chronic Obstructive Pulmonary Disease	9	32.9
All causes	**165**	**568.0**
2004		
Cancer	51	169.1
Heart Disease	16	55.9
Chronic Obstructive Pulmonary Disease	8	28.5
Stroke	7	24.3
Injuries	8	22.3
All causes	**135**	**460.3**

NOTE: The rates shown are deaths per 100,000 population.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Boston's Asian residents generally have low age-adjusted mortality rates, as seen in their leading causes of death for 2000 through 2004.
- For every year during this period, cancer was the leading cause of death, followed by heart disease.
- Rates of death from these causes were lower than for Boston's other race/ethnicity groups in nearly every year.
- Between 2000 and 2004, cancer mortality rates for Asian residents increased almost 50% while heart disease rates decreased 34.7%.

Mortality

Leading Causes of Death by Race/Ethnicity and Year: Counts and Age-Adjusted Rates Boston, 2000-2004 (Continued)

Black	Count	Rate
2000		
Cancer	273	276.9
Heart Disease	216	224.8
Stroke	52	59.9
Injuries	72	55.4
Nephritis/Nephrosis	46	49.6
All causes	**1,015**	**1,028.1**
2001		
Cancer	254	254.2
Heart Disease	221	239.6
Injuries	99	74.1
Stroke	66	73.4
Nephritis/Nephrosis	45	49.9
All causes	**1,103**	**1,116.8**
2002		
Cancer	251	257.3
Heart Disease	205	220.7
Stroke	56	63.1
Injuries	76	54.6
Diabetes	47	48.3
All causes	**1,041**	**1,054.9**
2003		
Cancer	268	271.0
Heart Disease	225	239.1
Injuries	85	64.9
Stroke	51	57.9
Diabetes	50	54.9
All causes	**1,058**	**1,087.4**
2004		
Cancer	227	230.2
Heart Disease	182	192.3
Stroke	59	67.2
Injuries	78	55.8
Diabetes	40	42.0
All causes	**991**	**1,012.1**

NOTE: The rates shown are deaths per 100,000 population.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- For Black Bostonians, age-adjusted death rates for leading causes were higher than in other race/ethnicity groups, even though the leading causes themselves were similar.
- Cancer and heart disease were the leading causes of death among Black Boston residents between 2000 and 2004.
- Diabetes was among the top five leading causes of death for every year shown except 2000 and 2001.
- Mortality from cancer was higher for Black residents than Asian, Latino, or White residents.
- Heart disease mortality rates for Black Bostonians were higher than for Asian and Latino residents and similar to those for Whites.
- From 2000 to 2004, cancer mortality rates for Black residents declined 16.9% and heart disease mortality rates, 14.5%. However, stroke mortality rates increased 12.2%.

Mortality

Leading Causes of Death by Race/Ethnicity and Year: Counts and Age-Adjusted Rates Boston, 2000-2004 (Continued)

Latino	Count	Rate
2000		
Cancer	39	128.1
Heart Disease	20	63.3
Stroke	13	62.9
Diabetes	14	52.2
Injuries	17	20.8
All causes	**172**	**498.7**
2001		
Cancer	42	155.4
Heart Disease	32	123.9
Injuries	30	40.2
Stroke	8	31.8
Chronic Obstructive Pulmonary Disease	8	28.0
All causes	**197**	**587.7**
2002		
Cancer	40	138.7
Heart Disease	30	129.8
Stroke	12	50.8
Injuries	38	47.4
Diabetes	11	38.7
All causes	**216**	**618.4**
2003		
Heart Disease	35	140.0
Cancer	38	103.7
Chronic Obstructive Pulmonary Disease	7	37.3
Injuries	32	37.0
Nephritis/Nephrosis	7	28.7
All causes	**205**	**600.3**
2004		
Cancer	41	126.6
Heart Disease	31	112.1
Stroke	13	43.6
Injuries	25	34.7
Nephritis/Nephrosis	6	25.6
All causes	**200**	**570.9**

NOTE: The rates shown are deaths per 100,000 population.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Latino Bostonians had heart disease and cancer as their first and second leading causes of death for the years 2000 through 2004.
- Their age-adjusted rates of death from these causes were lower than those of Black and White residents.
- In comparison with Asian Boston residents, Latinos had similar cancer mortality rates but higher rates of mortality from heart disease.
- Latino residents experience a sharp increase in cancer mortality rates from 2000 to 2001. Between 2000 and 2004, the Latino cancer mortality rate declined only 1.2%.
- Latino heart disease mortality rates steadily increased from 2000 to 2003 but declined in 2004. However, from 2000 to 2004, the Latino heart disease mortality rate nearly doubled.
- Diabetes ranked among the top 5 causes of death in Boston only for Latino and Black residents.

Mortality

Leading Causes of Death by Race/Ethnicity and Year: Counts and Age-Adjusted Rates Boston, 2000-2004 (Continued)

White	Count	Rate
2000		
Cancer	764	240.8
Heart Disease	802	230.6
Stroke	190	52.8
Chronic Obstructive Pulmonary Disease	148	43.0
Injuries	130	42.0
All causes	**3,177**	**942.8**
2001		
Heart Disease	834	238.1
Cancer	698	220.4
Injuries	150	46.8
Stroke	169	46.4
Chronic Obstructive Pulmonary Disease	141	41.9
All causes	**3,115**	**919.6**
2002		
Cancer	733	230.5
Heart Disease	708	205.4
Injuries	150	49.4
Stroke	152	41.3
Chronic Obstructive Pulmonary Disease	123	37.6
All causes	**3,005**	**892.6**
2003		
Cancer	698	214.2
Heart Disease	677	203.8
Chronic Obstructive Pulmonary Disease	158	47.3
Injuries	145	46.5
Stroke	152	41.4
All causes	**2,845**	**851.2**
2004		
Cancer	655	204.3
Heart Disease	645	185.4
Stroke	166	46.0
Injuries	126	42.8
Chronic Obstructive Pulmonary Disease	135	40.4
All causes	**2,717**	**804.5**

NOTE: The rates shown are deaths per 100,000 population.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- White Boston residents, like the city's other major race/ethnicity groups, had heart disease and cancer as their first and second leading causes of death for the years 2000-2004.
- Age-adjusted heart disease mortality rates among White Bostonians were similar to those of the Black population. Cancer mortality rates were lower than among Black Bostonians.
- Between 2000 and 2004, heart disease mortality rates for White Boston residents declined 19.6%, cancer mortality, 15.2%, and stroke mortality, 12.9%.
- Whites were the only Boston race/ethnicity group for whom kidney disease (nephritis/nephrosis) did not rank among the top 5 causes of death.

Mortality

Leading Causes of Death by Sex: Counts and Age-Adjusted Rates, Boston, 2004

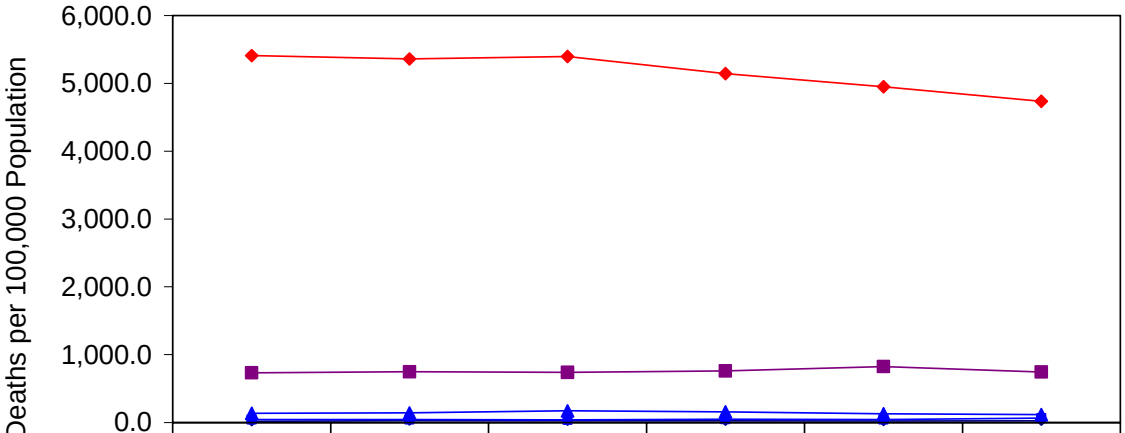
BOSTON MALES				BOSTON FEMALES		
	Count	Rate			Count	Rate
Heart Disease	441	257.4		Cancer	489	165.8
Cancer	488	236.0		Heart Disease	438	129.7
Injuries	173	61.4		Stroke	157	47.2
Stroke	88	49.0		Chronic Obstructive Pulmonary Disease	98	31.2
Chronic Obstructive Pulmonary Disease	74	40.4		Pneumonia/Influenza	87	24.1
Substance Abuse	91	35.7		Injuries	69	22.1
Pneumonia/Influenza	53	32.1		Diabetes	57	19.0
Nephritis/Nephrosis	54	29.5		Alzheimer's Disease	68	18.8
Septicemia	53	28.6		Septicemia	55	17.3
Diabetes	44	22.4		Nephritis/Nephrosis	48	15.4
HIV/AIDS	37	15.3		Substance Abuse	27	9.1
Alzheimer's Disease	16	10.1		HIV/AIDS	12	4.4
All causes	**1970**	**1,009.9**		**All causes**	**2,093**	**648.5**

NOTES: The rates shown are deaths per 100,000 population. These data do not include persons whose sex was not reported.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- For female Boston residents, cancer was the leading cause of death in 2004, while for males, heart disease emerged as the leading cause.
- For each of the 11 leading causes shown above, age-adjusted mortality rates were higher for males than for females. The rate for Alzheimer's disease was higher for females than males.
- Marked differences in mortality rates existed for some causes. For example, the HIV/AIDS mortality rate for males was more than triple the rate for females.

Mortality

Mortality by Year: Counts and Age-Specific Rates, Boston, 1999-2004



	1999	2000	2001	2002	2003	2004
1-17	17.3	28.3	23.7	25.6	21.0	25.6
18-24	42.9	44.0	39.8	48.2	44.0	63.9
25-44	136.4	143.0	171.9	156.7	129.7	115.5
45-64	733.4	749.6	740.0	761.1	824.2	745.8
65+	5,407.9	5,359.0	5,396.5	5,143.8	4,949.8	4,734.6

Count	1999	2000	2001	2002	2003	2004
1-17	19	31	26	28	23	28
18-24	41	42	38	46	42	61
25-44	288	302	363	331	274	244
45-64	767	784	774	796	862	780
65+	3,317	3,287	3,310	3,155	3,036	2904

DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- A total of 4,017 Boston residents ages one and over died in 2004. (In the previous pages which present data on the basis of age-adjusted rates, infants under age one are included.)
- Mortality rates increase by age. In 2004, the age-specific mortality rates for Boston were lowest for children under the age of 18 and highest for residents ages 65 years of age and over.

Mortality

Mortality by Race/Ethnicity and Year: Counts and Age-Specific Rates, Boston, 1999-2004

Asian

Age	1-17		18-24		25-44		45-64		65+	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
1999	n<5	--	n<5	--	8	48.4	25	354.6	88	2,359.9
2000	n<5	--	n<5	--	7	42.3	23	326.2	94	2,520.8
2001	n<5	--	n<5	--	12	72.6	27	383.0	102	2,735.3
2002	n<5	--	n<5	--	8	48.4	16	227.0	110	2,949.9
2003	n<5	--	n<5	--	n<5	--	22	312.1	135	3,620.3
2004	n<5	--	n<5	--	7	42.3	23	326.2	102	2,735.3

Black

Age	1-17		18-24		25-44		45-64		65+	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
1999	9	21.7	21	140.6	112	256.5	258	948.1	519	4,682.0
2000	18	43.5	22	147.3	109	249.7	279	1,025.3	549	4,952.6
2001	14	33.8	19	127.2	149	341.3	284	1,043.7	595	5,367.6
2002	16	38.7	25	167.3	108	247.4	298	1,095.1	564	5,088.0
2003	11	26.6	15	100.4	103	235.9	326	1,198.0	571	5,151.1
2004	18	43.5	33	220.9	92	210.7	275	1,010.6	547	4,934.6

Latino

Age	1-17		18-24		25-44		45-64		65+	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
1999	n<5	--	5	38.7	23	76.1	54	482.7	78	2,644.1
2000	7	26.7	n<5	--	35	115.9	46	411.2	72	2,440.7
2001	6	22.9	6	46.5	40	132.4	53	473.8	81	2,745.8
2002	8	30.5	10	77.4	50	165.5	55	491.6	81	2,745.8
2003	5	19.1	8	61.9	44	145.7	65	581.0	76	2,576.3
2004	n<5	--	11	85.2	33	109.2	60	536.3	78	2,644.1

White

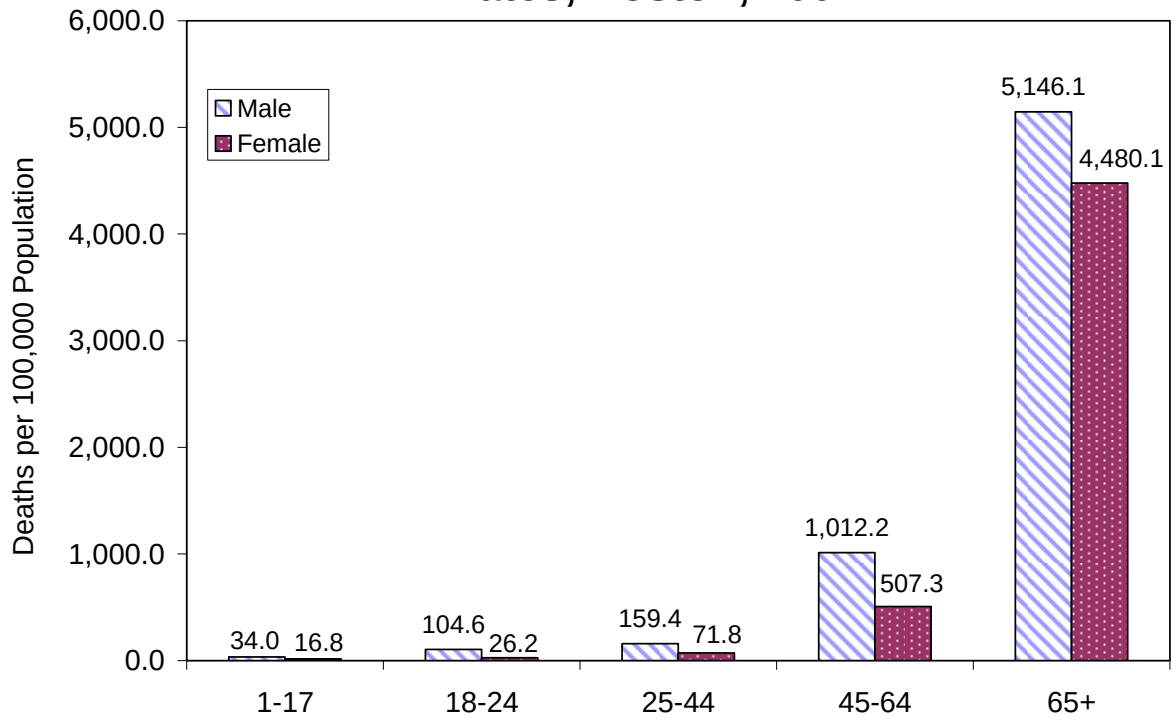
Age	1-17		18-24		25-44		45-64		65+	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
1999	5	18.4	12	22.3	145	130.3	428	777.9	2,626	6,285.5
2000	6	22.0	15	27.9	150	134.8	429	779.7	2,569	6,149.0
2001	n<5	--	10	18.6	151	135.7	408	741.6	2,527	6,048.5
2002	n<5	--	11	20.4	164	147.4	420	763.4	2,393	5,727.8
2003	n<5	--	16	29.7	122	109.7	447	812.5	2,247	5,378.3
2004	5	18.4	16	29.7	106	95.3	417	757.9	2,169	5,191.6

NOTE: Mortality rates are presented only for those age groups that had at least 5 deaths.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Each year during the period 1999-2004, Black Boston residents had the city's highest mortality rates for people under age 65. Whites had the city's highest rates every year among residents ages 65 and over.

- Trends in age-specific mortality rates are not evident except in the case for White Boston residents. The rates for Whites ages 65 and older are dropping over time. However, for Asians in this age group, an upward trend is seen until 2003 but then decreases by 24.4% in 2004. This trend is also similar among Black Bostonians ages 45-64 with a decrease by 15.6% in 2004.

Mortality



Count	1-17	18-24	25-44	45-64	65+	Total
Male	19	48	168	500	1,206	1,970
Female	9	13	76	280	1,698	2,093
BOSTON	28	61	244	780	2,904	4,063

NOTE: These data do not include persons whose sex was not reported, except in the Boston overall rates and counts.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- For all age groups, age specific mortality rates in 2004 were substantially higher for males than females.
- Age-specific mortality rates for males were lowest for Boston residents ages 1-17, while rates for both males and females were highest for ages 65+.

Mortality

Mortality by Neighborhood: Counts and Age-Specific Rates, Boston, 2004								
	Allston/Brighton		**Back Bay**		**Charlestown**		**East Boston**	
Age	Count	Rate	Count	Rate	Count	Rate	Count	Rate
1-17	n<5	--	n<5	--	n<5	--	n<5	--
18-24	n<5	--	n<5	--	n<5	--	5	117.5
25-44	12	42.8	5	33.7	6	89.3	13	92.5
45-64	38	467.6	20	315.9	21	708.3	48	755.9
65+	259	3,954.8	108	3,527.1	77	4,686.5	219	4,663.5
	Fenway		**Hyde Park**		**Jamaica Plain**		**Mattapan**	
Age	Count	Rate	Count	Rate	Count	Rate	Count	Rate
1-17	n<5	--	n<5	--	n<5	--	n<5	--
18-24	n<5	--	n<5	--	n<5	--	n<5	--
25-44	6	76.0	11	102.5	6	50.3	n<5	--
45-64	19	920.5	58	802.1	27	455.2	27	624.3
65+	71	4,730.2	215	4,817.4	125	4,822.5	50	3,090.2
	North Dorchester		**North End**		**Roslindale**		**Roxbury**	
Age	Count	Rate	Count	Rate	Count	Rate	Count	Rate
1-17	10	40.1	n<5	--	n<5	--	7	57.3
18-24	16	170.4	n<5	--	n<5	--	9	120.3
25-44	48	179.7	7	114.2	16	129.0	29	181.7
45-64	136	924.6	8	328.8	51	720.5	106	1,158.1
65+	256	4,152.5	70	4,149.4	382	8,011.7	206	4,184.4
	South Boston		**South Dorchester**		**South End**		**West Roxbury**	
Age	Count	Rate	Count	Rate	Count	Rate	Count	Rate
1-17	n<5	--	n<5	--	n<5	--	n<5	--
18-24	n<5	--	n<5	--	n<5	--	5	346.3
25-44	14	117.9	31	208.1	19	134.0	10	116.4
45-64	59	1,000.5	61	667.3	49	717.9	39	670.4
65+	257	6,418.6	203	4,436.2	133	3,365.4	244	4,770.3

NOTES: Mortality rates are presented only for those age groups that had at least 5 deaths. The rates shown are deaths per 100,000 population. These data do not include homeless persons or individuals whose neighborhood of residence was not reported.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Deaths among people under age 25 were too few to permit the presentation and comparison of mortality rates across neighborhoods, except for East Boston, North Dorchester, and West Roxbury.
- The highest mortality rates for Boston residents ages 25-44 were in South Dorchester, Roxbury, and North Dorchester.
- Roxbury, South Boston, and North Dorchester had the city's highest mortality rates for residents ages 45-64.
- Roslindale had the highest mortality rate of all Boston neighborhoods for people ages 65 and over, followed by South Boston.

APPENDIX

TECHNICAL NOTES

Rates

A rate is a measure of some event, disease, or condition in relation to a population, per year, for instance, the number of deaths due to heart disease per 100,000 population in a given year. Three types of rates are presented in this report: crude rates, age-specific rates (ASRs), and age-adjusted rates (AARs).

Crude rates are used to present data pertaining to the entire population, such as all of Boston, or to present data pertaining to an entire group within a population, such as all males or females. A crude rate is calculated by dividing the number of events for the entire population by the total population. It is usually calculated on the basis of every 100,000 people or, in the case of birth rates, every 1,000 females.

Age-specific rates take into account the size and age distribution of the population. They enable the reader to compare different groups without being concerned that differences in health status are due to differences in the size of the groups or in the distribution of ages. An ASR is calculated by dividing the number of events among people in an age group by the number of people in that age group. ASRs for deaths and for communicable diseases are usually calculated on the basis of every 100,000 people.

Age-adjusted rates are used to present data for comparison among several populations, such as Boston neighborhoods, in which distribution of age can differ considerably. The calculation for AARs takes into account the differences in age distribution and adjusts for them.

The AAR is calculated by applying the age-specific rate in a population for a specific event such as death to a standard population (typically, the 2000 U.S. standard population). AARs are used for Boston mortality data overall, for overall Boston mortality data by sex, by race/ethnicity, and by neighborhood, and for hospitalization data.

New cases of a communicable disease such as hepatitis or AIDS are presented as incidence rates, which may be age-specific or crude. Incidence rates are usually reported on the basis of every 100,000 people per year.

Population

Population statistics are drawn from two main sources. The first is the census of the population taken every ten years by the federal government, a literal count of people living in the United States. The second is population estimates made by the U.S. Census Bureau or other sources between censuses.

The national decennial census provides the best actual count of the U.S. population. It presents data to the level of small areas called census tracts, each of which has only a few thousand residents, to larger areas such as zip codes. Census tracts or zip codes can be combined to produce Boston neighborhood-level analyses.

Population projections or estimates are developed by the U.S. Census Bureau and other institutions using sophisticated statistical methods. The results are designed to take into account in- and out-migration and other changes occurring in the population between census years. And yet estimates of population changes between census years have some drawbacks. They do not typically account for changes in the racial composition of a community, and they do not generally permit neighborhood-level analyses. Perhaps most importantly, even small errors in the accuracy of projections for neighborhoods or other population subgroups can result in large distortions in the resulting statistical estimates.

To provide data on people of Latino ethnicity, who may be of any race, this report uses the 2000 U.S. Census and Massachusetts Department of Public Health population estimates. This avoids the double-counting that would result if Latinos were included in the White, Black, and Asian racial categories as well as in a Latino ethnicity category. However, in hospitalization data, Latinos are reported in the White, Black, Latino, or Asian category, depending on the individual hospital's practices. This produces unreliability in data reporting, and readers must interpret hospitalization data by race/ethnicity with considerable caution.

Zip-code based populations from the 2000 U.S. Census were used in calculating the rates of tuberculosis, sexually transmitted diseases, hospitalizations, emergency department visits, substance abuse treatment, and HIV and AIDS presented in this report.

Racial and Ethnic Designations

The classification of race/ethnicity used in this report varies by data source. All racial and ethnic designations except those from the death certificate, some hospital discharge data, and some emergency department data are self-reported. Several cautions should be kept in mind when using data reported by race/ethnicity.

Race and ethnicity are social constructions, not biological facts. There is often more genetic variation between members of the same race than between members of different races. In addition, the meanings of these designations are highly subject to historical, cultural, and political forces. Not only do these designations change over time, but there is also a very subjective element that influences who is considered a member of one group or another. And the concept of race can be notably vague: the term "Black," for example, includes people describing themselves as African American, African, or Caribbean, groups with distinct histories and differing health risks.

Nevertheless, racial designations are useful in that they are nearly universally used by people in the United States to describe themselves, and they permit us to identify and address the often huge

disparities in health that exist across race/ethnicity groups. Race is often a proxy for such factors as socioeconomic status, inadequate access to health care, and racial discrimination.

Boston-specific data in this report are presented for each racial and ethnic subgroup when numbers are large enough to allow calculation of percentages or reliable rates. Few sources have data in large enough numbers to allow presentation of data about smaller groups such as the many ethnicities included in the category "Asian."

Since Latinos can be of any race, federal data sources often report Latino persons within the race categories Black or White. However, in *The Health of Boston*, Latino ethnicity is presented as a separate category. Exceptions are the hospitalization and asthma hospitalization data, for which race/ethnicity reporting practices vary by hospital. The U.S. Census Bureau does not recommend comparing the population by race in 1990 with the population by race in 2000.

Age-Adjusted Mortality

Age-adjusted rates (AARs) are used to present data for comparison among several populations, such as Boston neighborhoods, in which the distribution of age can differ considerably. The calculation for AARs takes into account differences in age distribution and adjusts for them. The AAR is calculated by applying the age-specific rate in a population (for a specific event such as death) to a standard population. The year 2000 standard U.S. population is used in this report.

The International Classification of Disease (ICD) is a coding system developed by the World Health Organization (WHO) and 10 international centers. The ICD system standardizes medical terms used on death certificates and groups them for statistical purposes. The International Classification of Disease, Ninth Revision, Clinical Modification (ICD-9-CM) is used for categorizing and classifying morbidity data from inpatient and outpatient records of hospitals. It should not be confused with the International Classification of Disease used for categorizing and classifying mortality data from death certificates, whose revision from ICD-9 to ICD-10 became effective with 1999 mortality data.

Mortality data are coded using ICD-10. The change from ICD-9 to ICD-10 means that causes of death classified according to the ICD-10 are not precisely comparable to causes of death classified according to ICD-9.

Boston Neighborhoods

The population of individual census tracts or zip codes is typically so small that there are not a sufficient number of health-related events to permit the presentation of reliable rates. For *The Health of Boston*, census tracts or zip codes, depending upon the data source, are aggregated into Boston neighborhoods for the presentation of health data.

Some of Boston's neighborhoods are clearly defined. West Roxbury, for example, is bordered by the West Roxbury Parkway, the Stony Brook Reservation, and Dedham. The boundaries of most neighborhoods, however, are less distinct and often the subject of dispute. The neighborhood definitions used here were defined by the Boston Public Health Commission in consultation with local residents, health care providers, and advocates throughout the city.

U.S. Census Poverty Designation

There are two predominant definitions of poverty. One is defined by the U.S. Census Bureau and referred to as "poverty thresholds," and the other is defined by the Department of Health and Human Services and referred to as "poverty guidelines." The poverty definition present in *The Health of Boston 2006* is that of the U.S. Bureau of the Census. Poverty estimates are from the censuses of 1970, 1980, 1990, and 2000 and the U.S. Bureau of the Census American Community Survey (ACS) of 2004.

The U.S. Census Bureau's definition of poverty is a federal definition characterized by a series of "poverty thresholds which specify before-taxes, monetary income maximums, in dollars, an individual and/or family can earn in a given year and still be declared impoverished. This definition is based on same household of residence and takes into account family size and whether or not any members in one or two-person familial units are over the age of 65. It does not include any income that may have been generated through federal financial assistance programs, capital gains, or from children under the age of 15; foster children are not included in the calculations.

Starting in 1969 poverty thresholds were modified annually to account for inflation according to rates specified by the Consumer Price Index. Poverty thresholds are not adjusted for regional differences in mean/median income levels, nor do they include prison inmates, residents of nursing homes, students who live in on-campus university housing, and persons who live in military barracks; however, persons living in shelters are included.

Data Sources and Limitations

HIV/AIDS cases. Massachusetts Department of Public Health, Center for Clinical and Laboratory Services, Bureau of Communicable Disease Control, HIV/AIDS Surveillance Program.

HIV/AIDS surveillance data provide information only about individuals who have been tested and whose test results have been reported to the Department of Public Health. Many people with HIV and AIDS do not know they are infected. In 2003, MDPH estimated that one-fourth of the true number of Massachusetts cases had not been diagnosed and reported. (www.mass.gov/dph/aids/edu_promo/testingwk2003.ppt)

Births. Massachusetts Department of Public Health, Center for Health Information, Statistics, Research, and Evaluation, Division of Research and Epidemiology, Registry of Vital Records and Statistics.

The recording of resident live births is nearly complete for Massachusetts resident births, including those that take place at home or out of state but to Massachusetts residents.

Race/ethnicity is self-reported by the mother. Infants are assigned their mother's race/ethnicity, not a combination of both parents'.

There is an approximate 14-month delay between the close of a data year and the Department's releases of the data for outside publication.

Communicable diseases (hepatitis, tuberculosis, and reportable disease listing). Boston Public Health Commission, Communicable Disease Control Division.

Data from communicable disease surveillance systems are limited by the degree to which people with a condition seek health care that results in testing and reporting to the system. Many such diseases are asymptomatic or mild, or are treated presumptively without formal testing, and for some conditions, reporting may be less than complete. All of these factors may contribute to underestimates of the frequency of disease and/or distortions in the pattern of disease seen in the reported data.

Communicable diseases (sexually transmitted diseases). Massachusetts Department of Public Health, Center for Clinical and Laboratory Services, Division of Sexually Transmitted Disease (STD) Prevention.

As noted in the section above, communicable diseases, including those transmitted sexually, are subject to a number of limitations. New cases of chlamydia, syphilis and gonorrhea infection are reported to the Massachusetts Department of Public Health by diagnosing physicians and laboratories. Undiagnosed cases and variations in screening practices and compliance with reporting requirements may influence the accuracy of reported sexually transmitted diseases.

Census 2000, U.S. Department of Commerce, U.S. Census Bureau, American Fact Finder.

The collection and coding of race and ethnicity data has changed significantly over time. Hispanic ethnicity was not asked until 1930, and then was limited to Mexican ancestry. It was collected in 1940 for all Hispanics/Latinos, but not again until 1970, and then only in samples, not in the count of the whole population. Beginning in 1980, Hispanic origin has been a regular part of the data collection.

Similarly, Asian/Pacific Islander race and American Indian, Eskimo, Aleut race were not asked prior to the 1870 census. The capacity to distinguish race groups from Hispanic/Latino origin was not built into the census until 1980.

Another limitation of census data is that censuses are conducted only every ten years and may thus be out of date before a new census has been completed. Another is that undercounts of certain subpopulations may occur when people, for example, illegal immigrants, avoid being recorded in the census for fear of contact with the government or for other reasons.

Deaths. Massachusetts Department of Public Health, Center for Health Information, Statistics, Research, and Evaluation, Division of Research and Epidemiology, Registry of Vital Records and Statistics.

Death data used by the Boston Public Health Commission pertain only to Boston residents. Death due to homicide as reported by the Boston Police Department applies to any homicides that occur in Boston without regard to the actual city of residence of the deceased. As a result, the number of deaths, such as homicides, reported by the Boston Public Health Commission will always be less than those reported by the Boston Police Department.

Death records are completed with the assistance of an informant, typically a family member or funeral director, which may result in errors (for example, in race/ethnicity reporting) that would not occur in self-reported data.

Inconsistencies in the recording of immediate cause of death, intervening causes, and the underlying cause of death have been documented nationally, which may result in under- or overreporting of certain causes. Data are embargoed until after public release by MDPH, which is approximately 14 months after the close of the data year.

Emergency Department Visit Data Base. Massachusetts Division of Health Care Finance and Policy.

ED data have been made available since the 2002 data year (10/01-9/02). As with hospital discharge data, no unique identifier is contained in the data, so an unduplicated count of individuals using emergency department services is not available.

The collection of race/ethnicity information differs by reporting hospital. Some facilities request self-reported information from patients, others have staff report patient race/ethnicity, some consider Hispanic or Latino ethnicity to be a category equivalent to race, while others include Hispanic or Latino ethnicity in the race categories Asian, Black, White, and Other.

There is an approximate 16-month lag time between the close of the data year and the dataset's release.

HIV cases. Massachusetts Department of Public Health, Center for Clinical and Laboratory Services, Bureau of Communicable Disease Control, HIV/AIDS Surveillance Program.

See AIDS

Homeless population. City of Boston Emergency Shelter Commission.

The one-night census of Boston's homeless population counts people in homeless and domestic violence shelters and those living on the street. The 2005 census corrected an undercount that had resulted from an eligibility restriction in place between 2002 and 7/1/05. During that period, some homeless families had been denied shelter because their income was too high to qualify at an income ceiling of 100% of the federal poverty threshold but too low to enable them to pay rent. Easing of that restriction to 130% of the federal poverty threshold enabled many more families to qualify for shelter and thus appear in the homeless census.

A limitation of this dataset is that homeless persons, particularly those living on the streets, can easily be missed in a one-night census, which produces an undercount.

Hospitalizations. Acute Care Hospital Case Mix files. Massachusetts Division of Health Care Finance and Policy.

The hospital discharge data do not represent individuals but rather discharges. Because they do not contain a unique identifier, the data do not permit an unduplicated count of individuals who are hospitalized during a given year.

The collection of race/ethnicity information differs by reporting hospital. Some facilities request self-reported information from patients, while others have staff report patient race/ethnicity; some consider Hispanic or Latino ethnicity to be a category equivalent to race, while others subsume Hispanic or Latino ethnicity into the other race groups (Asian, Black, White, and Other).

There is an approximate one-year lag time between the close of the data year and the data set's release.

Lead screening. Boston Public Health Commission, Environmental Health, Boston Childhood Lead Poisoning Prevention Program.

Blood lead screening of Boston children by their health care providers is not complete. An estimated 11% of children under 5 have not been screened. The data reported in this report are solely related to the screened population. A database limitation results in a small number of non-Boston residents being included in the data; an estimation procedure that applied the age distribution of the total screened population (Boston and non-Boston) to the number of known-to-be Boston residents was used to obtain the age distribution of screened Boston children.

Life expectancy. Boston resident deaths and live births. Massachusetts Department of Public Health, Center for Health Information, Statistics, Research, and Evaluation, Division of Research and Epidemiology, Registry of Vital Records and Statistics.

Estimated life expectancy uses current birth and death patterns to predict the lifespan of people born in the current year. The primary limitation to these estimates is that they assume, in the absence of knowledge about the future, that the factors that influence mortality now remain stable over the whole lifespan.

Population estimates. American Community Survey, 2003, 2004, and 2005. U.S. Department of Commerce, U.S. Census Bureau, Population Division, Population Estimates Program.

The American Community Survey uses a sample of the population to provide information about demographic and housing characteristics of communities for the years between censuses. Only people who live in households are sampled; students and those in institutions or other group quarters are not included. (See http://www.census.gov/acs/www/index.html for more information.)

The ACS uses a sample to describe the Boston population, so its results are subject to the limitations common to all surveys. Samples produce estimates that can never be as precise as tabulations of the whole population. Other kinds of errors can further affect the precision of estimates, and nonrandom (or systematic) error has the potential to bias findings.

Poverty status. U.S. Department of Commerce, U.S. Census Bureau, American FactFinder, 2004 and 2005 American Community Survey, and Census 2000, Census 1990 Summary File-Sample Data, Census 1980, and Census 1970.

The number of Boston residents living in poverty is estimated by the U.S. Census Bureau using income thresholds that vary by family size and composition but not by geographic region. Communities like Boston, which have a high cost of living, may therefore have more poor residents than the official poverty rate suggests. People who avoid being counted in the census are frequently very low-income as well, which contributes to a further underestimate of the true poverty rate.

Substance abuse treatment admissions. Massachusetts Department of Public Health, Center for Community Health, Bureau of Substance Abuse Services.

The MDPH Bureau of Substance Abuse Services funds and licenses treatment facilities, which submit data every year on the population they serve. The data reflect admissions, not individuals: an individual may be admitted for substance abuse treatment more than once.

It should also be noted that this dataset provides information only about people who have been admitted for treatment of substance abuse problems, not the total number who are experiencing such difficulties.

Nonfatal assault-related gunshot and stabbing injuries. Massachusetts Department of Public Health, Center for Health Statistics, Information, Research, and Evaluation, Injury Surveillance Program, Weapon-Related Injury Surveillance System.

The MDPH Weapon-Related Injury Surveillance System collects data from hospital emergency departments via medical record reviews. The Department estimates that it obtains data on 70-80% of stabbing cases and 80-90% of gunshot cases. For this report, WRISS cases that were reported as assault-related and which were not known to have resulted in death are included. Some cases with an unknown disposition may be erroneously counted as nonfatal. (For more information, go to http://www.mass.gov/dph/bhsre/isp/isp.htm.)

Glossary

To help the reader compare the data presented for specific health indicators in this report to data from other sources, the definitions provided below include the codes used to classify causes of hospitalization or death. The hospitalization codes are from the Diagnostic Related Grouping (DRG), based on version 18 of the Federal Grouper. The cause-of-death codes are from the International Classification of Diseases, 10th Revision (ICD-10), a product of the World Health Organization (WHO).

AAR: See Age-Adjusted Mortality Rate.

Acquired Immune Deficiency Syndrome (AIDS): See HIV/AIDS.

African American: All persons self-identified as of African descent who do not also identify themselves as Latino.

Age-Adjusted Mortality Rate (AAR): Calculated by applying the age-specific mortality rates in a population to a standard population (typically, and in this report, the 2000 U.S. population). The age-adjusted rate of one group can be compared to the age-adjusted rate of another group with confidence that differences in the rates of the two areas or groups do not stem from differences in the age structure of their populations. AARs are extensively used in the national Healthy People 2010 goals.

Age-Specific Rate (ASR): The number of events such as deaths or diseases per year in a given age group per 100,000 people in that age group.

Age-Specific Birth Rate: The number of live births to women in an age group divided by the female population of that age group, expressed per 1,000 females in that age group.

Age-Specific Hospitalization or Emergency Department Visit Rate: The number of hospitalizations or emergency department visits per year in a given age group per 1,000 people in that age group.

Alcohol-Related Deaths: Death directly attributable to alcohol use/abuse, such as liver disease due to alcohol consumption, and accidental alcohol overdose. This category does not include deaths indirectly due to alcohol use, such as deaths due to injuries occurring while intoxicated or deaths caused by another person who was intoxicated. ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, R78.0, X45, X65, and Y15 are used to define alcohol-related deaths.

Alzheimer's Disease: A brain disorder that gradually destroys a person's memory and ability to learn, reason, make judgments, communicate, and carry out daily activities. It is the most common form of dementia among older people. Symptoms include memory loss, language deterioration, poor judgment, confusion, restlessness, and mood swings.

Amebiasis: Parasitic infection of the intestines, spread through ingestion of fecally contaminated food or water. Symptoms are often mild and include loose stools, stomach pain, and stomach cramping.

Asian: All persons self-identified as Asian or Pacific Islander (e.g., Chinese, Japanese, Hawaiians, Cambodians, Vietnamese, Asian Indians, Filipinos) who do not also identify themselves as Latino. The numbers from the 2000 Census used in the Demographics section use a different way of counting races and ethnicity and should not be compared with numbers drawn from earlier censuses.

Asthma and Bronchitis: Asthma is a chronic inflammatory condition defined by sudden periodic attacks of difficulty in breathing accompanied by wheezing caused by a spasm of the bronchial tubes. Bronchitis refers to inflammation of the mucous membrane of the bronchial tubes. DRG codes 96-98.

Birth Rate: The number of live births per year, per 1,000 women ages 15-44.

Birthweight: The weight of an infant at the time of delivery. It may be recorded in either grams or pounds/ounces. If recorded in pounds/ounces, it is converted to grams for use in this report based on the following formula: 1 pound = 453.6 grams; 1,000 grams = 2 pounds and 3 ounces.

Black: All persons self-identified as Black (e.g., African Americans, Haitians, West Indians) who do not also identify themselves as Latino.

Blood Lead Levels: The amount of lead in micrograms per deciliter, detected in the blood during finger-stick screening or venous-confirmation blood tests.

Campylobacteriosis: An infectious disease caused by the bacteria *Campylobacter*, which causes diarrhea, cramping, abdominal pain, and fever. Most cases are associated with handling raw poultry or eating raw or undercooked poultry.

Cancer: A group of diseases characterized by uncontrolled growth and spread of abnormal cells. ICD-10 codes C00-C97.

Census 2000: The count of the entire American population undertaken by the U.S. Census Bureau in 2000. Census 2000 should not be confused with the year 2000 standard population, which is a set of population weights used to calculate age-adjusted rates.

Chickenpox (varicella): An infectious disease primarily occurring in childhood that is caused by an easily transmissible virus. People with chickenpox get an itchy rash with tiny blisters that have a red base. Chickenpox is spread via respiratory droplets.

Chlamydia: A sexually transmitted disease caused by the bacterium *Chlamydia trachomatis*. About half of infected men, and three-quarters of infected women, have no symptoms. Chlamydia can permanently damage a woman's reproductive organs if not treated promptly.

Chronic Obstructive Pulmonary Disease (COPD): Diseases including bronchitis, asthma, emphysema, and allergies from inhaled organic dust particles, which decrease the ability of the lungs to oxygenate the blood. The leading cause of COPD is smoking. ICD-10 codes J40-J47. For hospitalization data, DRG code 88.

Death Rate: The number of deaths per year per 100,000 population.

Demographics: The statistical study of characteristics of human populations and of population distributions such as age, sex, and race/ethnicity.

Diabetes: A chronic metabolic disease characterized by inadequate insulin production by the pancreas. ICD-10 codes E10-E14.

Diagnostic Related Grouping (DRG) Codes: Codes used to group reasons for hospitalization.

Drug-Related Deaths: Deaths due to use of drugs other than alcohol and tobacco, including direct physiological causes as well as some accidental deaths in which drug use/abuse is involved. Does not include deaths indirectly due to drug use, such as death due to injuries occurring while under the influence of drugs or deaths caused by another person under the influence of drugs. ICD-10 codes 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-X64, X85, and Y10-Y14.

Escherichia coli 0157:H7: One of hundreds of strains of *E. coli* bacteria that live in the bowel of people and animals.

Gastroenteritis, Esophagitis, and Miscellaneous Digestive Disorders: Inflammation or infection of the mucous membranes of the stomach and intestine.

Giardiasis: A diarrheal illness caused by a microscopic parasite called *Giardia intestinalis* or *Giardia lamblia*. *Giardia* is found in soil, food, water, or surfaces that have been contaminated with the feces from infected humans or animals. It causes a variety of intestinal symptoms, including diarrhea, gas, greasy stools, stomach cramps, and upset stomach or nausea.

Gonorrhea: A sexually transmitted disease caused by the bacterium *Neisseria gonorrhoeae*. Symptoms in men can include a burning sensation when urinating, a white, yellow, or green discharge from the penis, or painful or swollen testicles. Symptoms in women can include a painful or burning sensation when urinating, increased vaginal discharge, or vaginal bleeding between periods. Many men and women have no symptoms.

Healthy People 2010 Goals and Objectives: Targets established by the U.S. Public Health Service, in conjunction with the Centers for Disease Control and Prevention and the National Center for Health Statistics, to assist communities with health promotion and disease prevention efforts and to establish health status goals to be met by the year 2010.

Heart Disease: A group of conditions, including valve and conductive disorders as well as hypertensive diseases. ICD-10 codes I00-I09, I11, I13, and I20-I51.

Heart Failure and Shock: Heart failure occurs when the heart is unable to pump blood efficiently. Shock occurs when the heart cannot pump sufficient blood to maintain the tissues and vital organs. DRG code 127.

Hepatitis: A contagious viral disease that can be transmitted via sexual contact, contact with blood and other bodily fluids, contaminated food or water, or blood-to-blood contact. There are many strains of hepatitis, including hepatitis A, hepatitis B, hepatitis non-A non-B, hepatitis B (unknown carrier), hepatitis B (unverified carrier), hepatitis C, hepatitis D, or hepatitis unspecified.

Hepatitis A: Liver disease caused by infection with the hepatitis A virus (HAV). HAV is transmitted person-to-person through the fecal-oral route, most commonly through contaminated food or water. Onset is abrupt, and symptoms include jaundice, fatigue, abdominal pain, nausea, diarrhea, and fever. Infection does not become chronic.

Hepatitis B: Liver disease caused by infection with the hepatitis B virus (HBV). HBV is transmitted person-to-person through contact with blood and other bodily fluids. Symptoms include jaundice, abdominal pain, fatigue, and joint pain. Acute infection resolves over time. Chronic infection occurs in

90% of infants born with HBV, 20-50% of children less than 5 years old, and 1-10% of persons infected as adults.

Hepatitis C: Liver disease caused by infection with the hepatitis C virus (HCV). HCV is transmitted through blood-to-blood contact, most often through injection drug use. About 80% of people infected with HCV will not develop any symptoms, which include jaundice, fatigue, dark urine, and abdominal pain. 75-85% of those infected with HCV will develop chronic liver disease.

Hispanic: See Latino.

HIV/AIDS: The human immunodeficiency virus (HIV) infection, which leads to Acquired Immune Deficiency Syndrome (AIDS) or other HIV-related infections. ICD-10 codes B20-B24.

HIV+ or HIV Infected: Having tested positive for the antibodies to human immunodeficiency virus (HIV), meaning that one is infected with the virus, with or without major related conditions. DRG codes 701-716.

Homeless: The federal government defines "homeless" to mean (1) an individual who lacks a fixed, regular, and adequate night-time residence; and (2) an individual who has a primary night-time residency that is (i) a supervised publicly or privately operated shelter designed to provide temporary living accommodations (including welfare hotels, congregate shelters, and transitional housing for the mentally ill); (ii) an institution that provides a temporary residence for individuals intended to be institutionalized; or (iii) a public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings. This term does not include any individual imprisoned or otherwise detained under an Act of Congress or a state law.

Homicide: A death intentionally caused by a person other than the deceased. ICD-10 codes X85-Y09 and Y87.1.

Hospitalization: A patient's continuous stay of one night or more in the hospital for observation, care, diagnosis, or treatment before being released by the hospital, or before death.

Human Immunodeficiency Virus (HIV): The virus that is responsible for causing AIDS.

ICD-10 Codes: Data from 1999 and later years are classified according to the International Classification of Diseases, 10th Revision (ICD-10), released by the World Health Organization in 2000 and adopted by the United States National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention. ICD-10 classification replaces ICD-9 classification. For more information on these codes and their use, see http://www.cdc.gov/nchs/icd9.htm#ICD-10-CM.

IMR: See Infant Mortality Rate.

Incidence: The number of new cases of a particular disease over a period of time (usually a year) and in relation to the population in which it occurs.

Infant Mortality Rate (IMR): The number of deaths under one year of age per 1,000 live births.

Injury: For hospitalization data in this report, injury is an aggregation of DRG codes 280-282 and Major Diagnostic Classification (MDC) codes 21, 22, and 24, which include, for example, surgical procedures performed due to injury, traumatic injury (open wounds, multiple fractures, limb reattachment),

poisoning and toxic effects of drugs, and burns. Injury deaths include five categories: homicides, suicides, motor vehicle-related injuries, (other) unintentional injuries, and "undetermined" injuries (for which it was not determined on the death certificate whether the injury was intentional). The latter two categories are frequently presented together in this report. The determinations of intent are for purposes of medical record-keeping only.

Latino: Includes people of any race (Asian, Black, White, or Other) self-identified as Hispanic or Latino (such as Puerto Rican, Mexican, Cuban, Spanish, or Dominican).

Lead Screening: The measurement of blood-lead levels in children to identify those who have been exposed to toxic levels of environmental lead. In Boston, annual screening of children between 6 and 48 months of age is mandatory.

Lyme Disease: An illness caused by bacteria that are spread to people and animals by tiny infected deer ticks.

Low Birthweight (LBW): Birthweight less than 2,500 grams (or 5.5 lbs).

Meningitis (Viral): An illness in which there is inflammation of the tissues that cover the brain and spinal cord. This type of meningitis is caused by viral infection. Symptoms include fever, severe headache, stiff neck, sensitivity to bright light, drowsiness or confusion, and nausea and vomiting.

Mortality: Death, or the relative frequency of death per unit of population in a specific time period.

n<5: A notation used to indicate that for this health indicator there were fewer than five occurrences (for example, births, deaths, new case of a disease) and therefore a rate could not be presented.

Neighborhood: One of 16 distinct geographical areas in Boston.

Nephritis/Nephrosis: Inflammation of the kidneys (nephritis), or kidney disease with severe protein loss and fluid retention or degenerative changes in the kidneys without inflammation (nephrosis). For data from 1999 and later years, ICD-10 codes N00-N07, N17-N19, and N25-N27.

Newborns/Neonates: Infants from the time of their birth through the first 27 days of age. DRG codes 602-640 and "Not Classified" Category.

Nutritional and Metabolic Disorders: Conditions that disrupt the biological process of breaking down food into a form useable by the body; includes nutritional disorders such as malnutrition and eating disorders such as anorexia nervosa or bulimia. Diabetes, congenital abnormalities of the metabolic system, or endocrine disorders are not included among these disorders.

Pneumonia/Influenza: Bacterial or viral infections of the lungs that primarily affect the aged and persons with compromised immune systems. ICD-10 codes J10-J18.

Pneumonia and Pleurisy: Bacteria or viral infection of the lungs and inflammation of the pleura, the membrane that covers the lungs. DRG codes 89-91

Pregnancy: The condition of carrying a developing embryo or fetus in the uterus. DRG codes 370-384.

Preterm Birth: Delivery at less than 37 completed weeks' gestation.

Psychoses: Acute mental disorders characterized by loss of contact with reality and personality disintegration. DRG code 430.

Salmonella: Germs (bacteria) that cause an infectious disease (called "salmonellosis") of the bowel in humans and animals.

Septicemia: A serious infection caused by bacteria in the blood, which is sometimes called blood poisoning. Symptoms include fevers and chills, rapid breathing and heart rate, changes in mental state (such as irritability, feeling very tired, or anxious), and feeling shock. Septicemia progresses rapidly, and can be fatal.

Sexually Transmitted Disease: Infection spread by transfer of organisms from person to person during sexual contact.

Shock: See Heart Failure and Shock.

Standard Population: An estimate of the U.S. population in which the age, race, and sex distributions are known, resulting in a set of population weights that can be used to calculate adjusted mortality rates. In this report, the year 2000 U.S. standard population is used to calculate age-adjusted mortality rates.

Stroke: A cerebrovascular accident. Stroke occurs when a blood vessel in the brain bursts or when the blood supply to part of the brain is blocked, depriving the brain of oxygen. ICD-10 codes I60-I69.

Substance Use and Abuse: Use or overuse of ingested substances both legal (such as alcohol) and illegal (such as cocaine); for alcohol-related data, ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, R78.0, X45, X65, and Y15; for drug-related data, ICD-10 codes 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-X64, X85, and Y10-Y14. Hospitalization substance abuse data include alcohol and/or drug abuse, dependence, and detoxification and rehabilitation therapy (MDC code 20).

Suicide: The intentional and voluntary taking of one's own life. For data from 1999 and later years, ICD-10 codes X60-X84 and Y87.0.

Syphilis: A sexually transmitted disease caused by the bacterium *Treponema pallidum*. The first stage of syphilis is usually a sore (chancre), followed by skin rashes and lesions of the mucous membrane, fever, swollen lymph glands, sore throat, patchy hair loss, headaches, weight loss, muscle aches, and fatigue. Although signs and symptoms of initial infection can subside without treatment, untreated syphilis can cause complications many years later, including paralysis, blindness, dementia, and death.

Tuberculosis (TB): A bacterial infection that primarily affects the lungs. TB is transmitted via airborne droplets through sneezing, coughing, or spitting. People who are infected with latent TB do not have symptoms and cannot transmit the bacteria to others. People with active TB experience symptoms including chronic cough, pain in the chest, coughing up blood or sputum, fatigue, weight loss, and fever.

µg/dL: Micrograms per deciliter. A measurement unit for level of lead in a measured quantity of blood: a billionth of a gram in a tenth of a liter. Children with blood lead levels of 10 µg/dL or higher are considered to have elevated blood lead levels.

Unintentional Injury: An accidental injury. ICD-10 codes V01.0, V01.1, V01.9, V05.0, V05.1, V05.9, V06.0, V06.1, V06.9, V09.1, V09.3, V09.9, V10.0, V10.1-V10.5, V10.9, V11.0-V11.5, V11.9, V15.0-V15.5, V15.9, V16.0-V16.5, V16.9, V17.0-V17.5, V17.9, V18.0-V18.5, V18.9, V19.3, V19.8, V19.9, V80.0-V80.2, V80.7-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9, V90-V95, V96.0-V96.2, V96.8-V96.9, V97.0-V97.3, V97.8-V97.9, V98-V99, W00-X59, Y85.0, Y85.9, and Y86. Codes used by *Healthy People 2010* are slightly different:

White: All persons self-identified as White who do not also identify themselves as Latino.

HEALTHY PEOPLE 2010 GOALS AND OBJECTIVES

Healthy People 2010

Category and Objective	Target
• **Infant Mortality Rates**	
Reduce deaths in infants **<**1 year old	4.5 per 1,000 live births
• **Low Birthweight**	
Reduce low birthweight rate	5.0% of births
• **Teen Birth Rates**	
Reduce adolescent births	46 births per 1,000
• **Childhood Lead Poisoning**	Zero
• **Childhood Asthma**	
Reduce hospitalizations for children <5	25 per 10,000
• **STD**	
Reduce by Type:	
Chlamydia	
Males ages 15-24 attending STD clinics	3.0%
Females ages 15-24 attending STD/family planning clinics	3.0%
Gonorrhea	19 new cases per 100,000
Primary and secondary syphilis	0.2 new cases per 100,000
• **AIDS**	
Reduce AIDS among adolescents and adults	1.0 new cases per 100,000
• **Cancer**	
Reduce the overall cancer death rate	158.7 deaths per 100,000
Reduce the lung cancer death rate	44.8 deaths per 100,000
Reduce the breast cancer death rate	22.2 deaths per 100,000 females
Reduce the uterine cervix cancer death rate	2.0 deaths per 100,000 females
Reduce the colorectal cancer death rate	13.9 deaths per 100,000
Reduce the oropharyngeal cancer death rate	2.6 deaths per 100,000
Reduce the prostate cancer death rate	28.7 deaths per 100,000 males
Reduce the melanoma cancer death rate	2.5 deaths per 100,000
Screening	
Increase percentage of females who receive a Pap test:	
Females 18 and over who have ever received one	97%
Females 18 and over who received one in preceding 3 years	90%
Increase percentage of females ages 40 and over who received a mammogram within the past 2 years	70 %
Increase percentage of adults with a colorectal cancer screening examination:	

Category and Objective:	Target
Adults over age 50 who have ever received a sigmoidoscopy	50%
Adults over age 50 who received a fecal occult blood test within the past 2 years	50%
• **Coronary Heart Disease (CHD)**	
Reduce CHD mortality rate	166 deaths per 100,000
Risk Factors:	
Reduce proportion of adults with high blood pressure	16%
Reduce percentage of adults with high blood cholesterol	21%
Reduce proportion of adults who are obese	15%
• **Stroke**	
Reduce stroke mortality rate	48 deaths per 100,000
• **Diabetes**	
Reduce diabetes mortality rate	45 deaths per 100,000
Reduce rate of lower extremity amputations among diabetics	5 lower extremity amputations per 1,000 per year
• **Substance Abuse**	
Reduce drug mortality rate	1 death per 100,000
Reduce cirrhosis mortality rate	3 deaths per 100,000
Reduce cigarette smoking by adults	12%
Reduce tobacco use by adolescents	21%
Reduce binge drinking among adults ages 18 and over	6%
Reduce binge drinking among adolescents ages 12-17	3%
• **Violence**	
Reduce homicide mortality rate	3.2 homicides per 100,000
Reduce suicide mortality rate	6.0 deaths per 100,000
Reduce rate of suicide attempts by adolescents	12 month average of 1%
• **Nutrition**	
Increase the proportion of persons age 2 and older:	
Who consume at least two daily servings of fruit	75%
Who consume at least three daily servings of vegetables (at least 1/3 being dark green or deep yellow)	50%
Who consume at least 6 daily servings of grain products	50%
• **Physical Activity**	
Reduce the percentage of adults who engage in no leisure time physical activity	20%
Increase the percentage of adults who engage in regular, moderate physical activity daily for at least 30 minutes	30%
Increase the percentage of adolescents who engage in moderate physical activity for at least 30 minutes on 5 or more of the previous days	30%

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