THE HEALTH OF BOSTON 2008

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prepared by
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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 2008* report is the twelfth in a series of annual reports in response to this legislation.

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THE HEALTH OF BOSTON 2008

INTRODUCTION

Welcome to *The Health of Boston 2008*. 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.

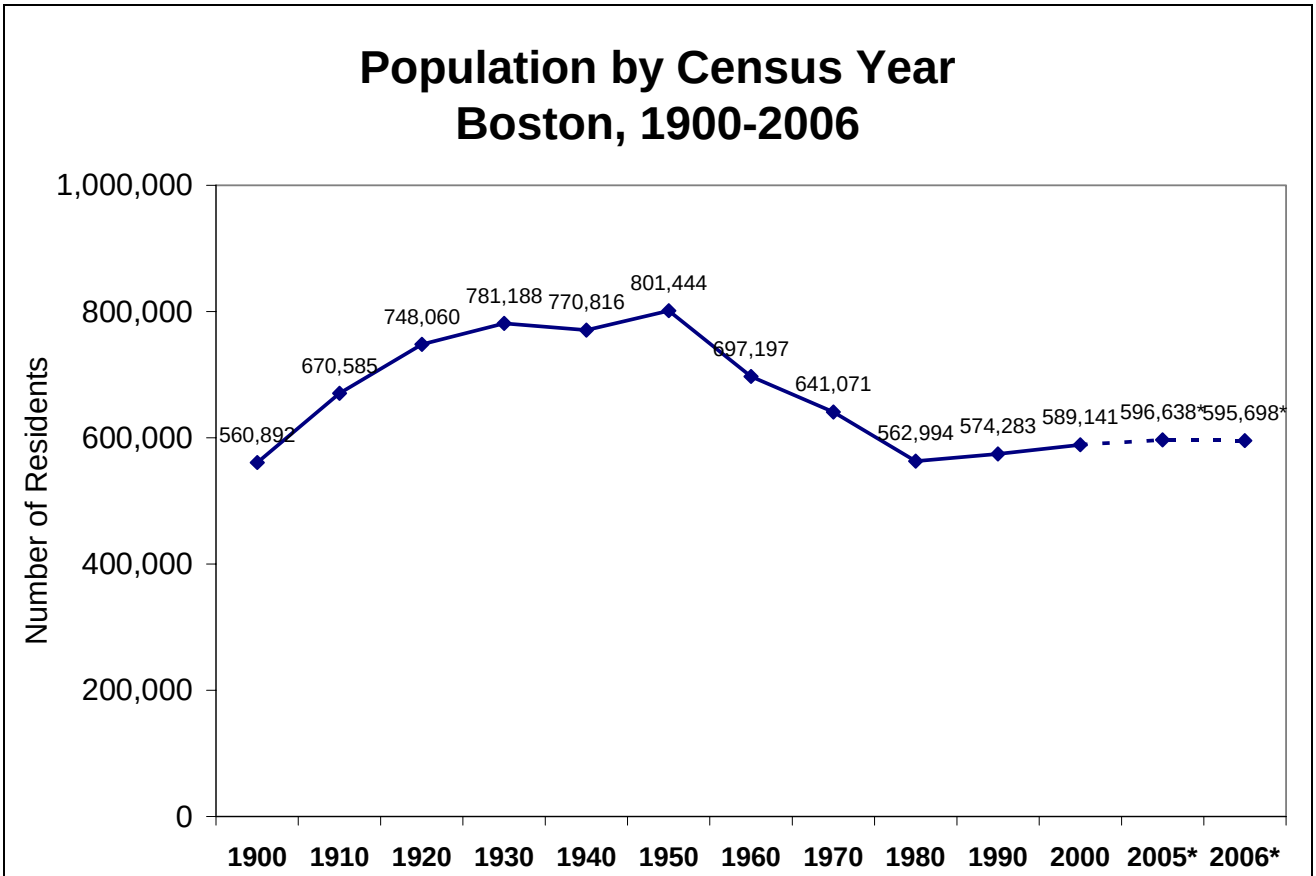
The data presented in this report are the most recent available to us at this time for publication. Background information about Boston's 16 neighborhoods has been included to provide readers with a context for understanding the health data presented in *The Health of Boston 2008*. Details about rate 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.

Disclaimer

The authors(s) is/are not affiliated with the Massachusetts Department of Public Health and the Department of Public Health is not responsible for the accuracy and validity of the results presented. The views stated are not necessarily those of the Department.

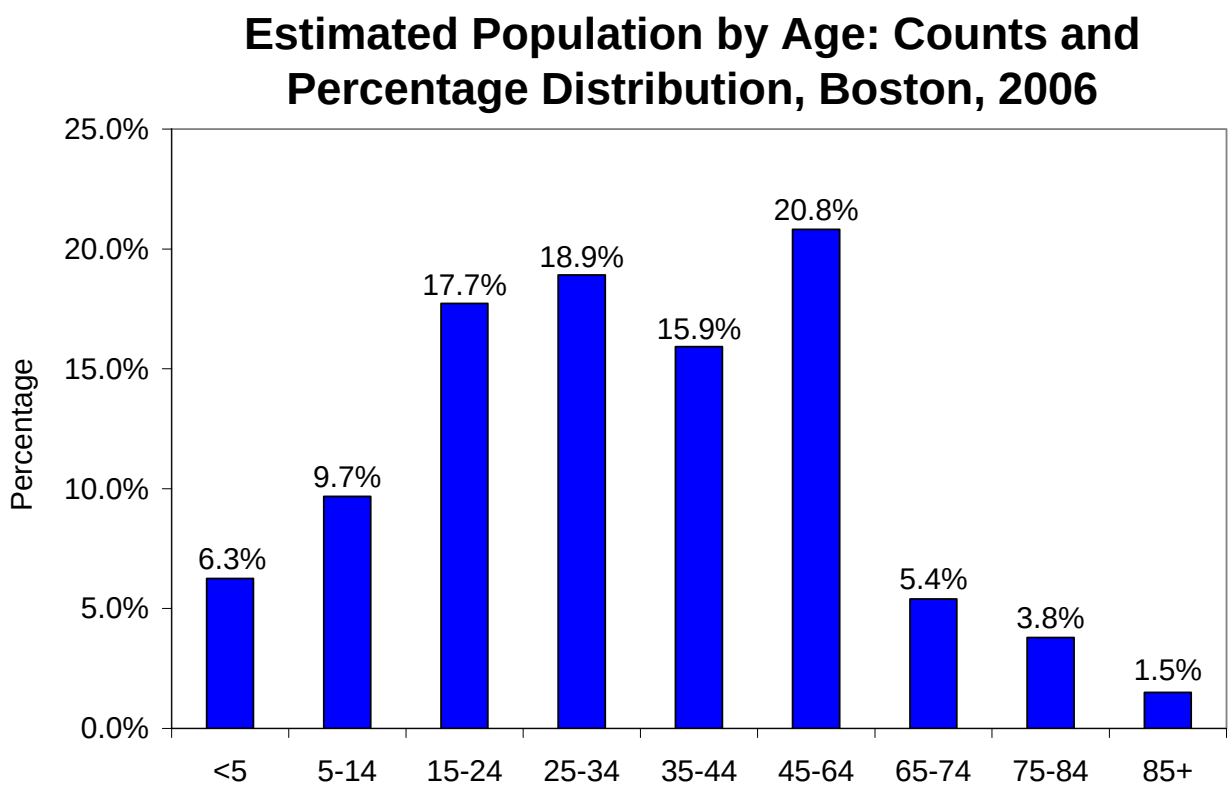
Population Characteristics



*Estimated
DATA SOURCES: 1990-2000, Population Estimates Program, Population Division, U.S. Bureau of the Census 2005 and 2006 estimates: Annual Estimates of the Population for Incorporated Places over 100,000, U.S. Bureau of the Census
DATA ANALYSIS: Boston Public Health Commission Research Office

- 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 2.6% 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 count in 2000 (589,141), represented a ten-year increase of 2.6%.
- The U.S. Bureau of the Census revised estimate for Boston's 2005 population,596,638 residents, represented an increase of 1.3% and the revised estimate of 595,698 for 2006, an increase of 1.1% from the 2000 population (see Technical Notes in the Appendix for more detail).

Population Characteristics



	<5	5-14	15-24	25-34	35-44	45-64	65-74	75-84	85+
Count	35,964	55,695	101,970	108,788	91,558	119,712	31,029	21,811	8,662

DATA SOURCE: US Department of Commerce, Bureau of the Census, American FactFinder, American Community Survey 2006
DATA ANALYSIS: Boston Public Health Commission Research Office

- Between official censual years, the U.S. Bureau of the Census provides population distribution by age, race/ethnicity, sex, and poverty level at the city level from survey data based on the estimated total population of the city. For 2006, the Boston population used as the basis for age distribution was 595,698.

- Boston residents ages 25-64 accounted for about 56.0% of the population in 2006. Children under age 5 were 6.3%, and adults ages 65 and over 10.7%.

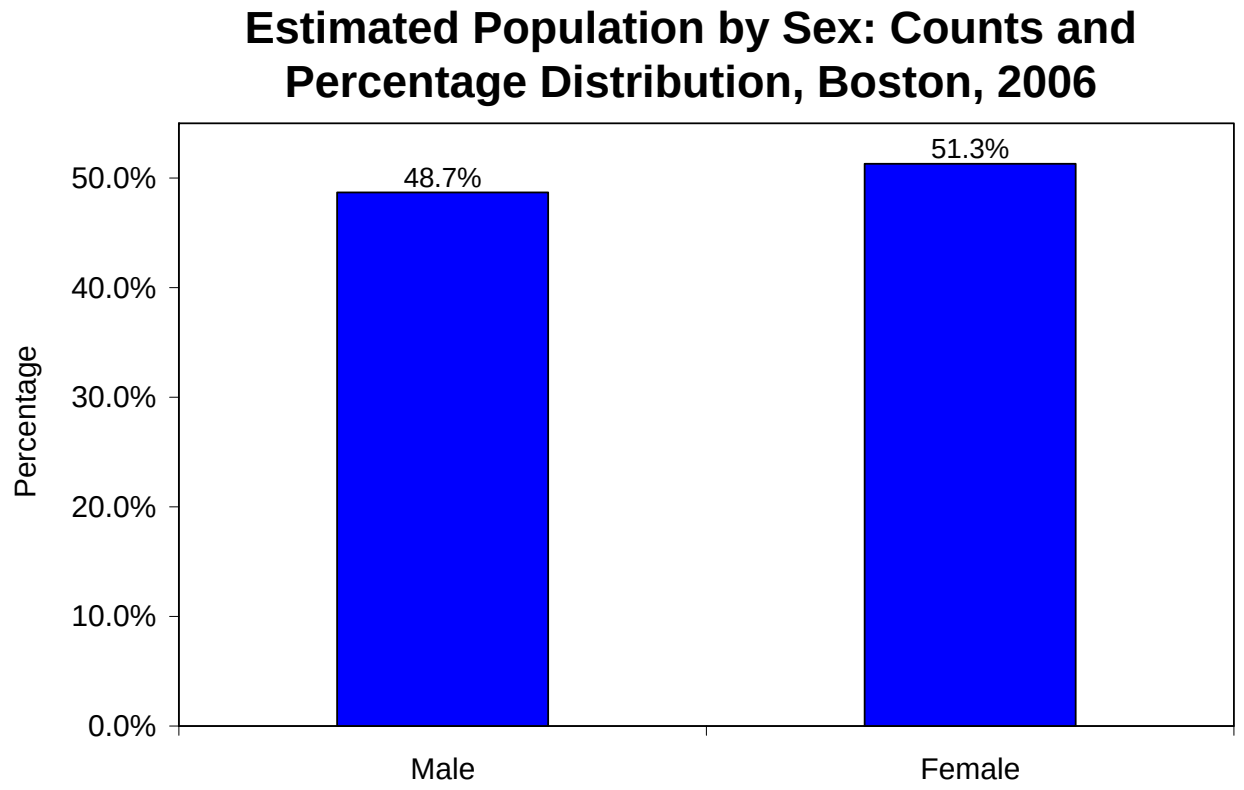
Population Characteristics

Population by Race/Ethnicity and Year: Counts and Percentage Distributions, Boston, 1900-2006								
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%*
2006*	*1,726*	*0.3%*	***2006****	*45,685*	*7.9%*	***2006****	*140,819*	*24.5%*
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%*
2006	*85,685*	*14.9%*	***2006****	*44,865*	*7.8%*	***2006****	*288,684*	*50.2%*

-- Data not collected in this census
* Non-Hispanic 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, 2005, and 2006 are estimates. In 2004, 2005, and 2006 an additional 6,741, 6,377, and 15,530 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	280,341	294,846

DATA SOURCE: US Department of Commerce, Bureau of the Census, American FactFinder, American Community Survey 2006
DATA ANALYSIS: Boston Public Health Commission Research Office

- Based on survey data, a slightly higher percentage of females than males made up Boston's population in 2006.

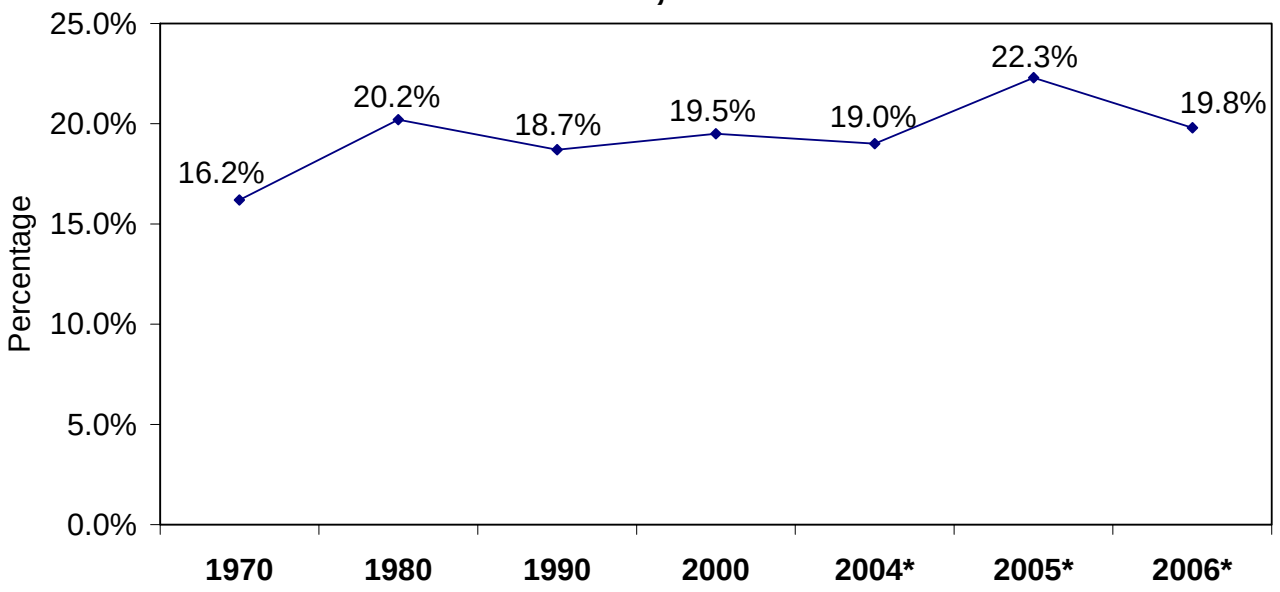
Population Characteristics

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*	2006*
Count	99,262	106,770	102,092	109,128	98,989*	116,110	108,617

*Estimated
DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American FactFinder, 2004, 2005, and 2006 American Community Surveys, U.S. Department of Commerce, Bureau of the Census, American FactFinder, 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 $20,614 in 2006. 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 2006, the U.S. Census Bureau estimated the percentage of Boston residents living in poverty to be similar to the percentage in 2000.

Population Characteristics

Population Living in Poverty by Age: Counts and Percentages of Population, Boston, 2006

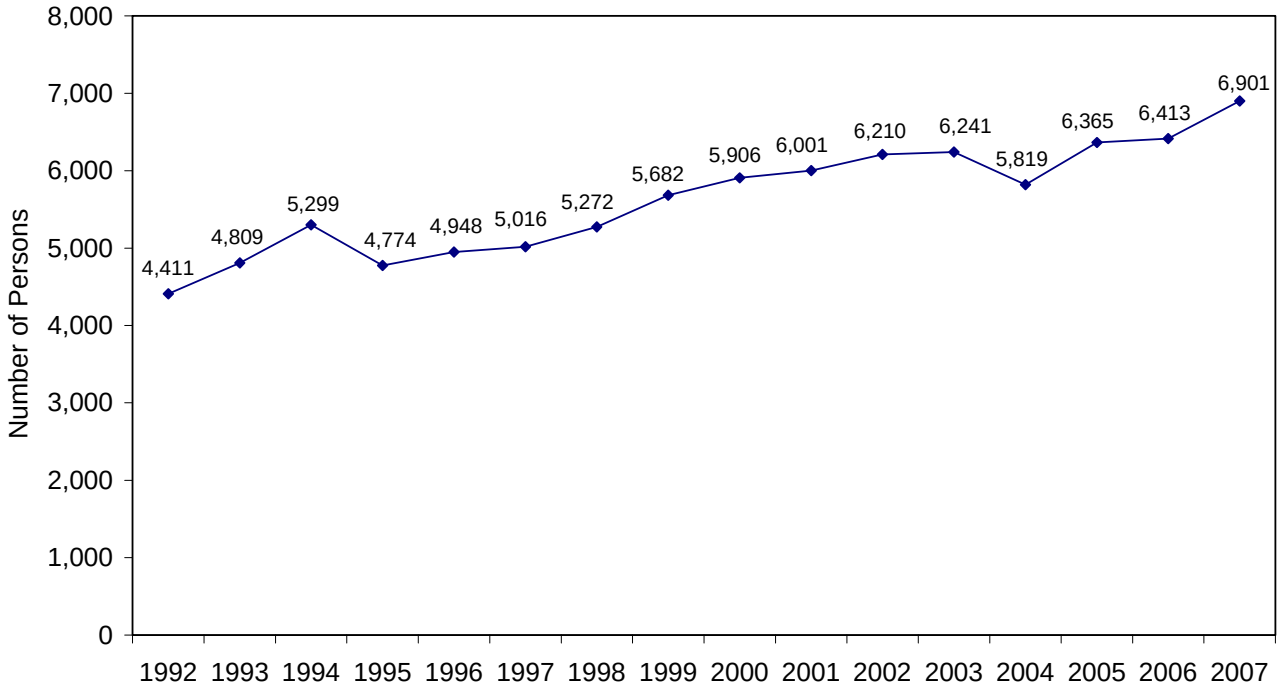
	Percentage
All ages	19.8%
Less than 18 years	27.3%
18-64 years	17.6%
65+ years	20.4%

	Count
All ages	108,617
Less than 18 years	29,638
18-64 years	67,223
65+ years	11,756

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American FactFinder, 2006 American Community Survey
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2006, about 20% of the Boston population was estimated to live in households with income below the federal poverty threshold.
- The estimated percentage of Boston children, under the age of 18, living in poverty was 16.8% lower than the 2005 estimate (data not shown).

Population Characteristics

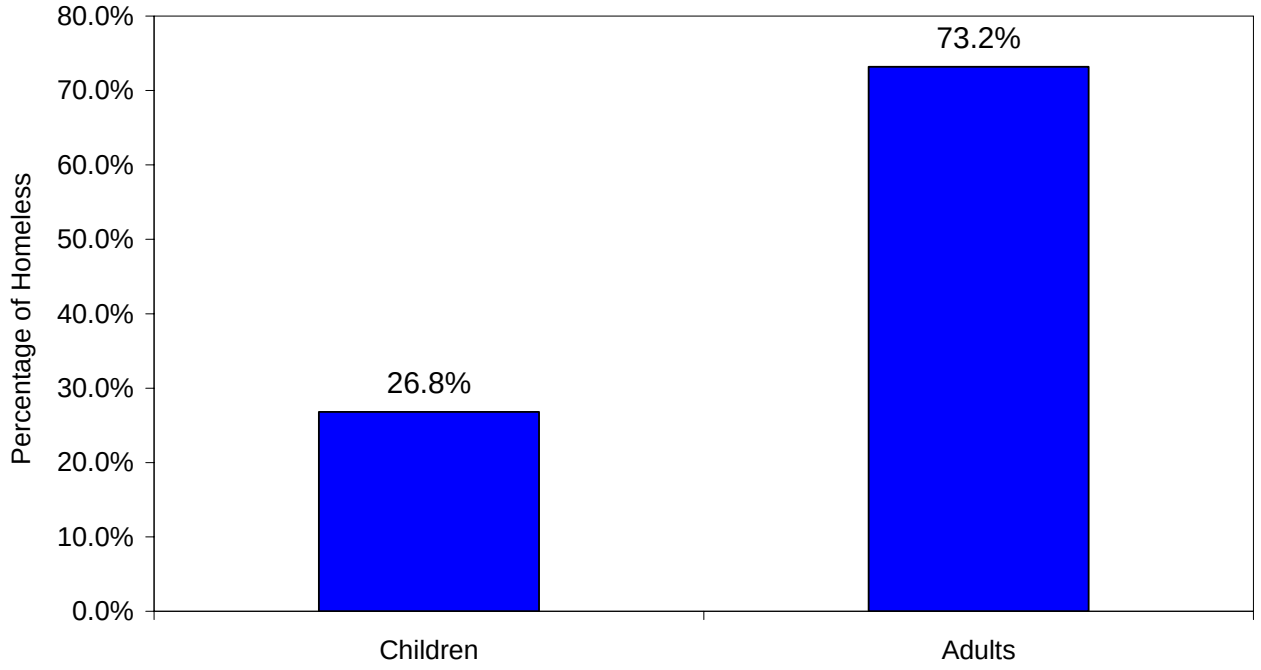


*2007 Data is Preliminary
NOTE: Starting in 1996, the homeless count began including homeless patients treated in hospital EDs or hospitalized as inpatients
DATA SOURCE: Homeless Counts, City of Boston Emergency Shelter
DATA ANALYSIS: Boston Public Health Commission Research Office

- Homelessness is defined here as residency on the streets, in a shelter, or temporarily in a medical facility, but without permanent housing.
- The 2007 homeless census suggests that there were almost 7,000 individuals who were homeless including women, men and children.
- Between 2006 and 2007, the homeless percentage has increased by 8%, from 6,413 to 6,901. This is the highest rate since 1992.

Population Characteristics

Homeless Residents by Age (Children and Adults): Counts and Percentage Distribution, 2007*

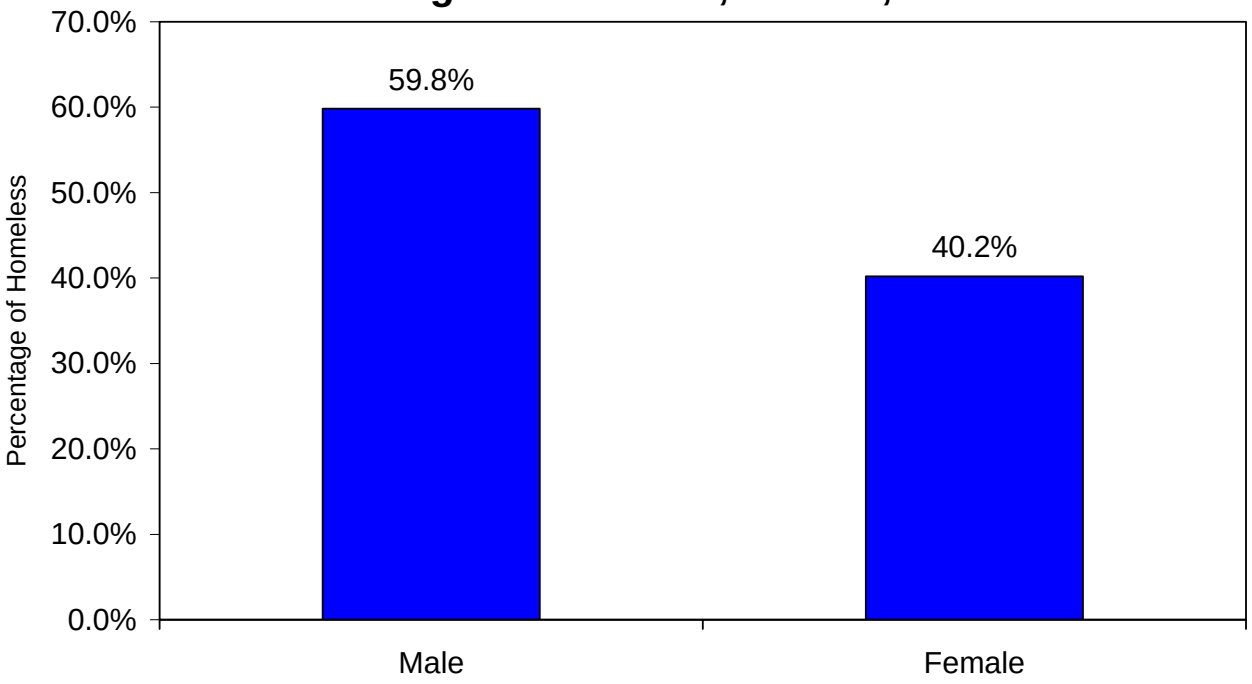


	Children	Adults
Count	1,849	5,052

*Preliminary data
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 2007, adults accounted for three quarters of homeless Boston residents.
- Between 2006 and 2007, the percentage of homeless children has increased from 23.7% to 26.8% while the percentage among adults has decreased from 76.3% to 73.2% (data not shown).

Population Characteristics



	Male	Female
Count	4,128	2,773

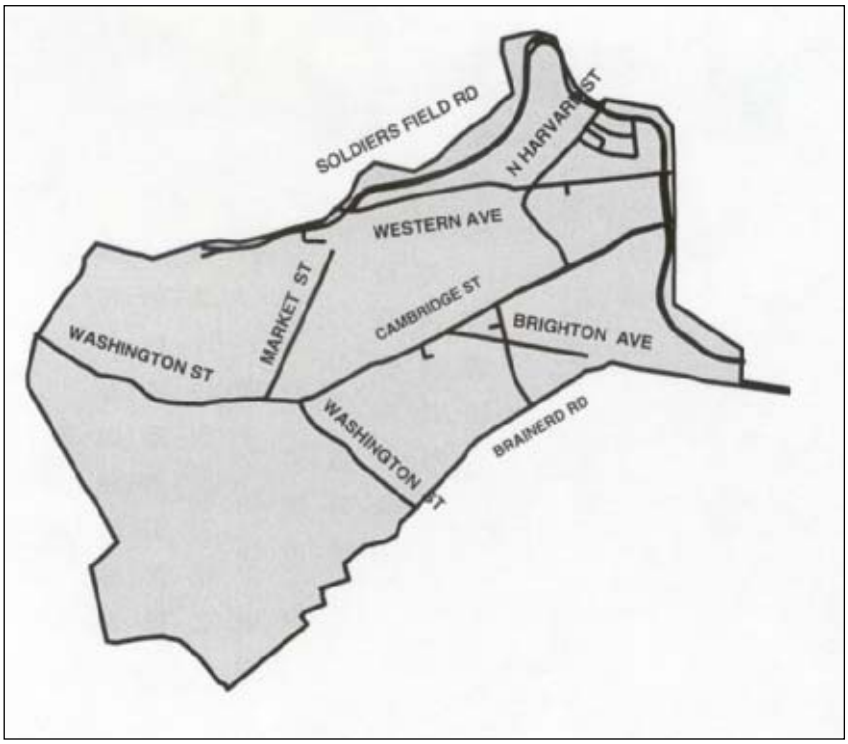
*Preliminary data
NOTE: These figures exclude homeless residents under the age of 18.
DATA SOURCE: Homeless Counts, City of Boston Emergency Shelter
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2007, there were one and a half times as many homeless men as homeless women among Boston residents. However, the number of homeless women in 2007 represents an increase of 72% over the number in 2006 (data not shown).

- Boston men continue to account for the greatest percentage of Boston's homeless residents, although less so than in 2006 (data not shown).

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.

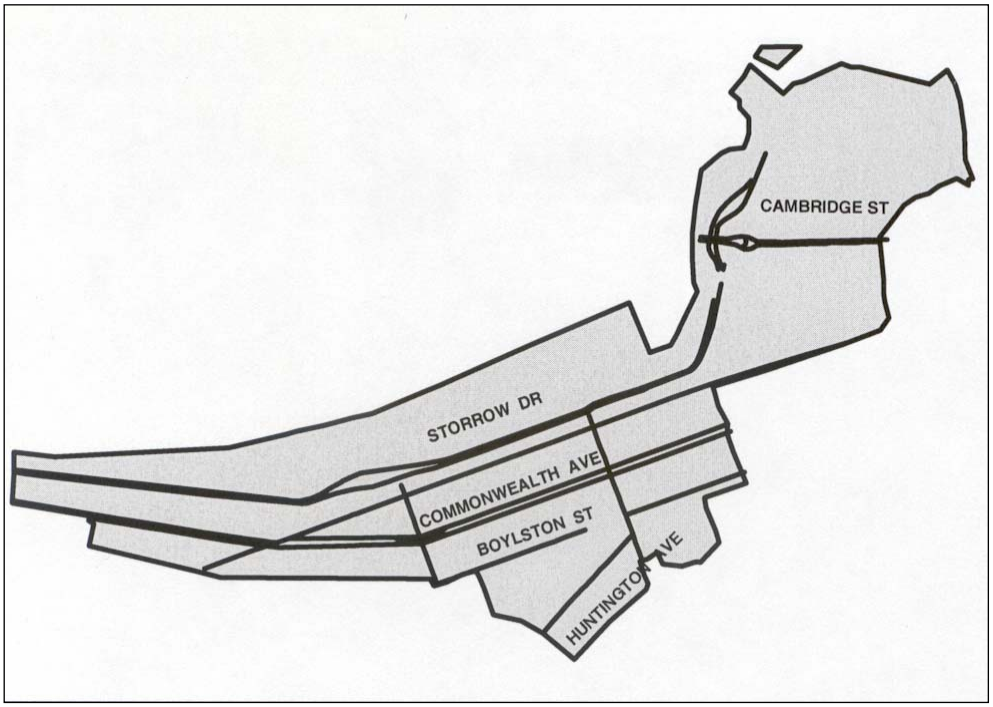
Just over one-third (36.3%) of Allston/Brighton residents speak a language other than English at home. Other than English, the primary languages spoken at home are Spanish (by 8.5% of the population), Chinese (7.6%), Russian (5.3%), and Portuguese/Portuguese Creole (3.1%).

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%).

[See Bibliography in the Appendix]

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.

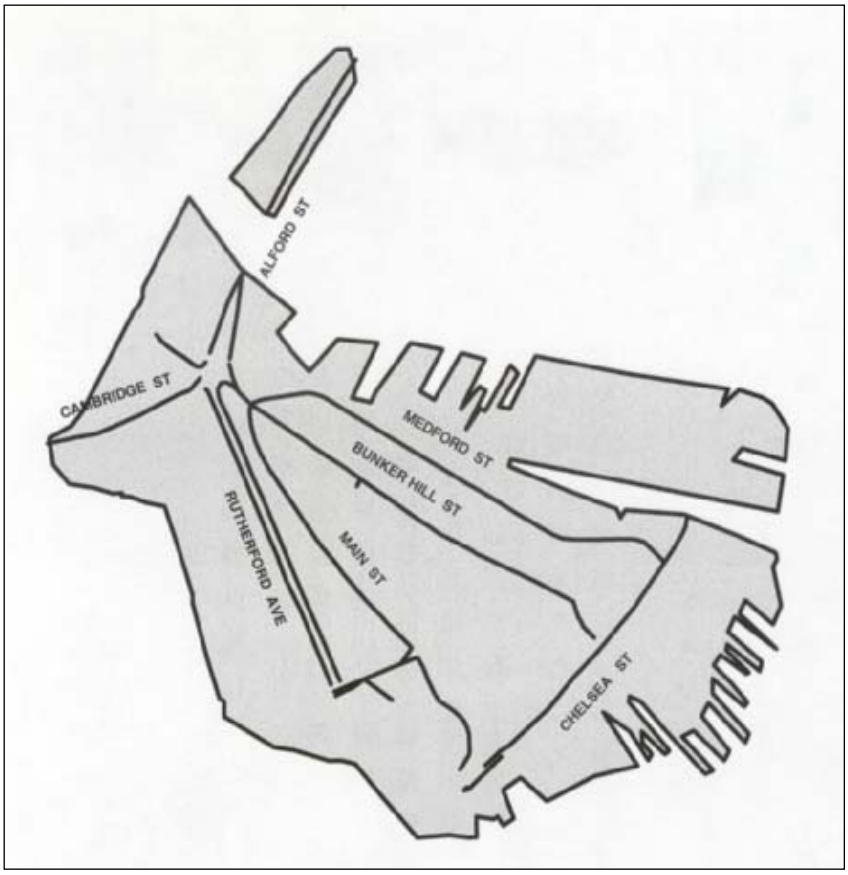
Most residents (83.4%) were born in the United States (including 0.4% who were born in Puerto Rico); 15.2% were born in another country, the largest numbers of these being from China (1.3%), The United Kingdom (1.0%), Japan (1.0%), and Korea (1.0%).

[See Bibliography in the Appendix]

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.

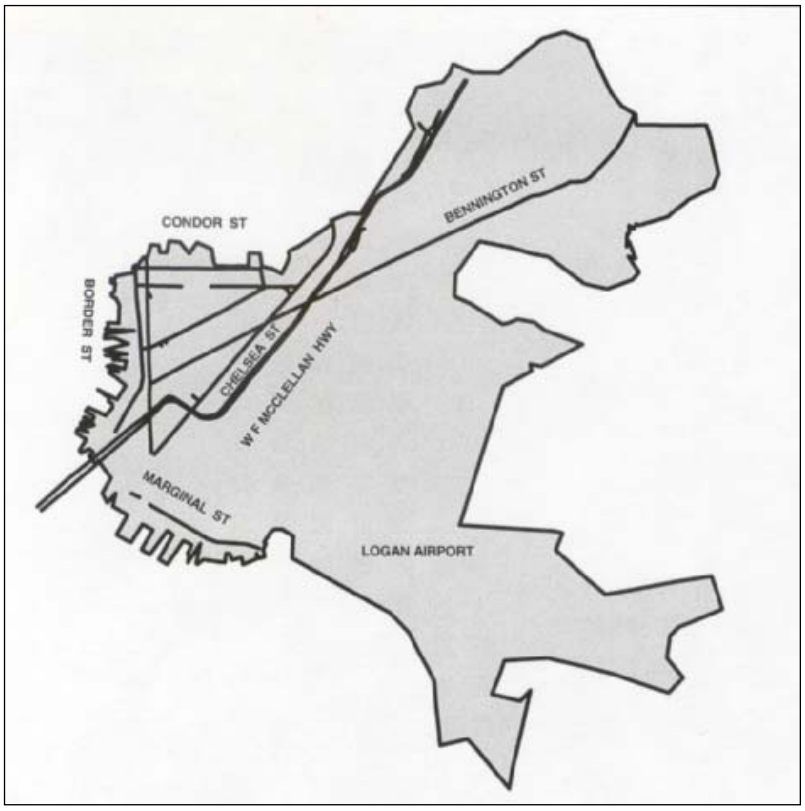
Most residents (84.7%) were born in the United States (including 1.4% who were born in Puerto Rico); 13.9% were born in another country, the largest numbers of these being from the Dominican Republic (4.2%) and China (2.4%).

[See Bibliography in the Appendix]

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.

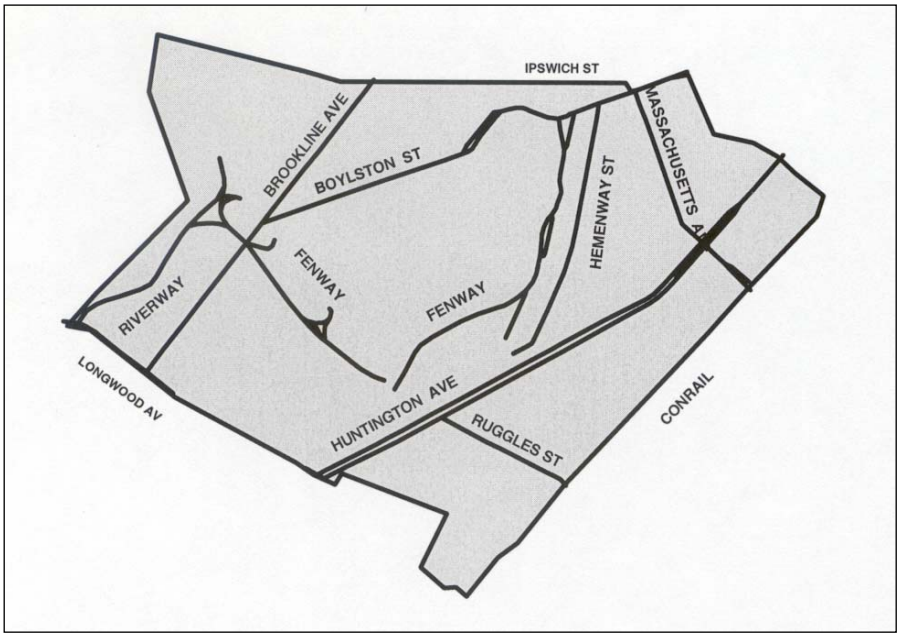
Over half (55.0%) of East Boston residents speak a language other than English at home. Spanish is the primary language spoken by 37.3% of residents, while 5.9% speak Italian, 4.6% speak Portuguese/Portuguese Creole, and 2.3% speak Vietnamese.

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%).

[See Bibliography in the Appendix]

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%.

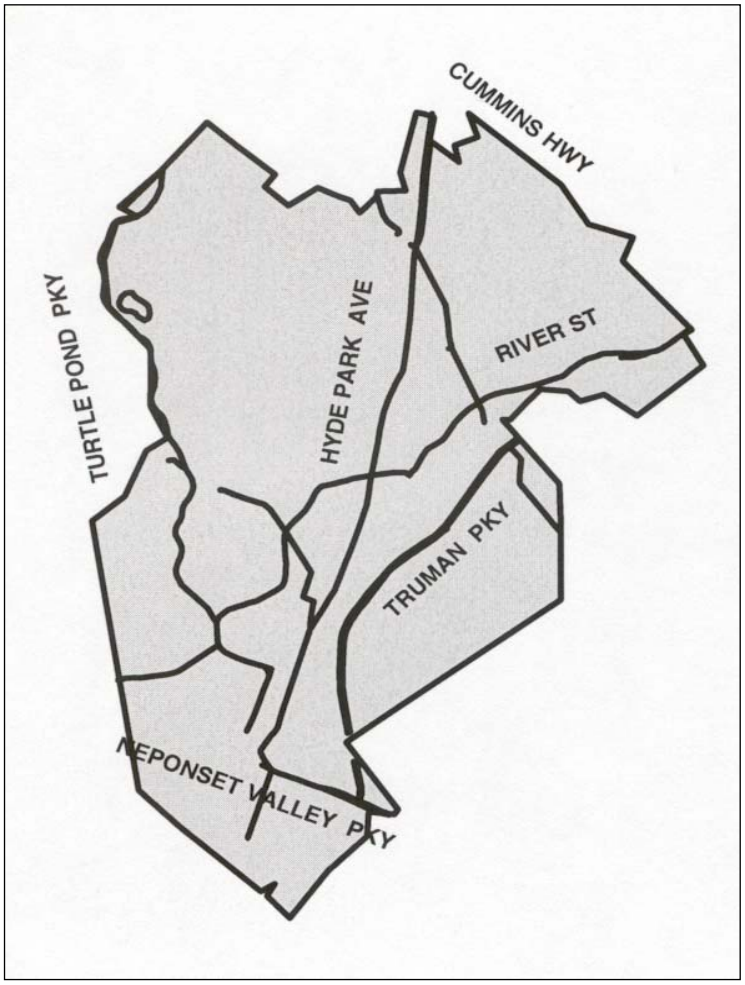
English is the language spoken at home by 72.2% of residents followed by Spanish (7.8%), Chinese (3.0%), and Russian (2.0%).

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%).

[See Bibliography in the Appendix]

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%.

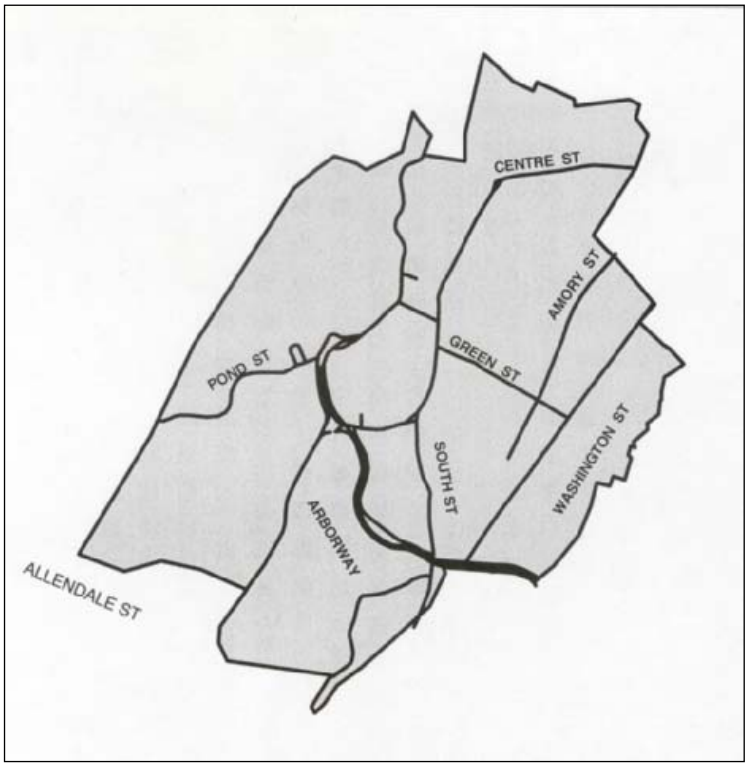
About two-thirds (65.4%) of residents speak English at home; 12.8% speak Spanish, 12.7% speak French Creole (including Haitian Creole), and 2.2% speak French.

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%).

[See Bibliography in the Appendix]

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).

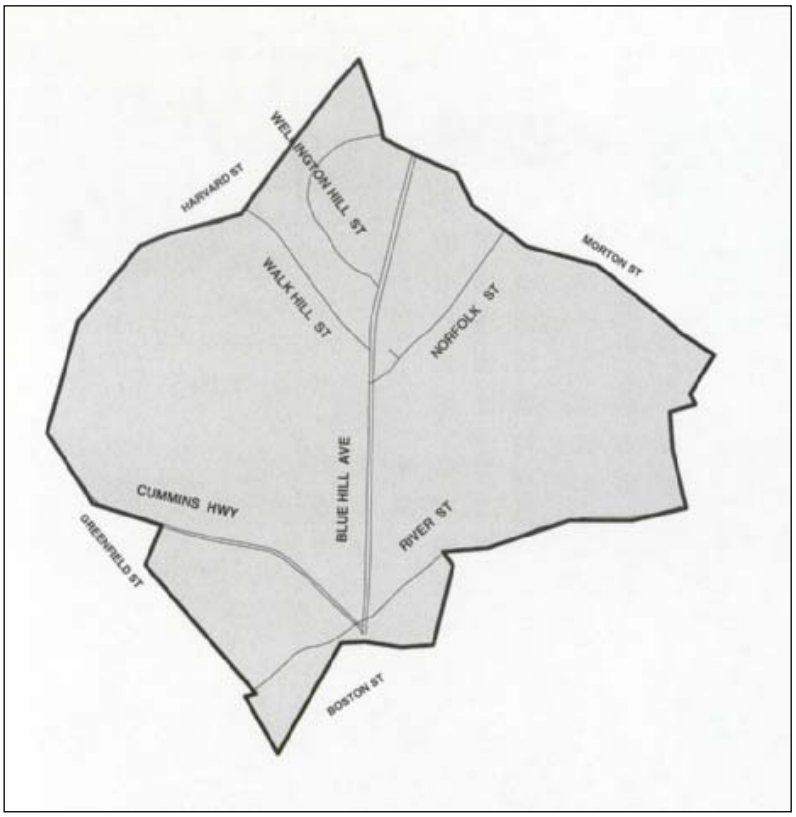
About three-fourths (74.4%) of Jamaica Plain residents were born in the United States, including 4.8% who were born in Puerto Rico. Other countries in which residents were born include the Dominican Republic (7.2%) and China (1.1%).

[See Bibliography in the Appendix]

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.

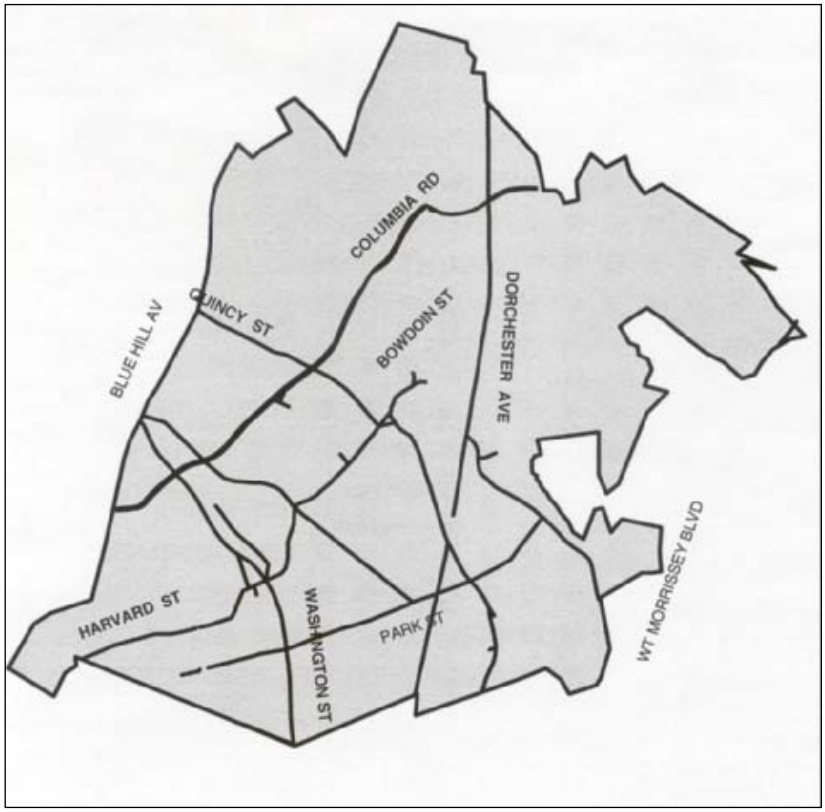
About two-thirds (65.2%) of Mattapan residents were born in the United States, including 0.9% who were born in Puerto Rico. Other countries in which Mattapan residents were born include Haiti (15.1%), Jamaica (6.8%), Barbados (1.8%), the Dominican Republic (1.8%), Trinidad (1.6%), and Sierra Leone (1.1%).

[See Bibliography in the Appendix]

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.

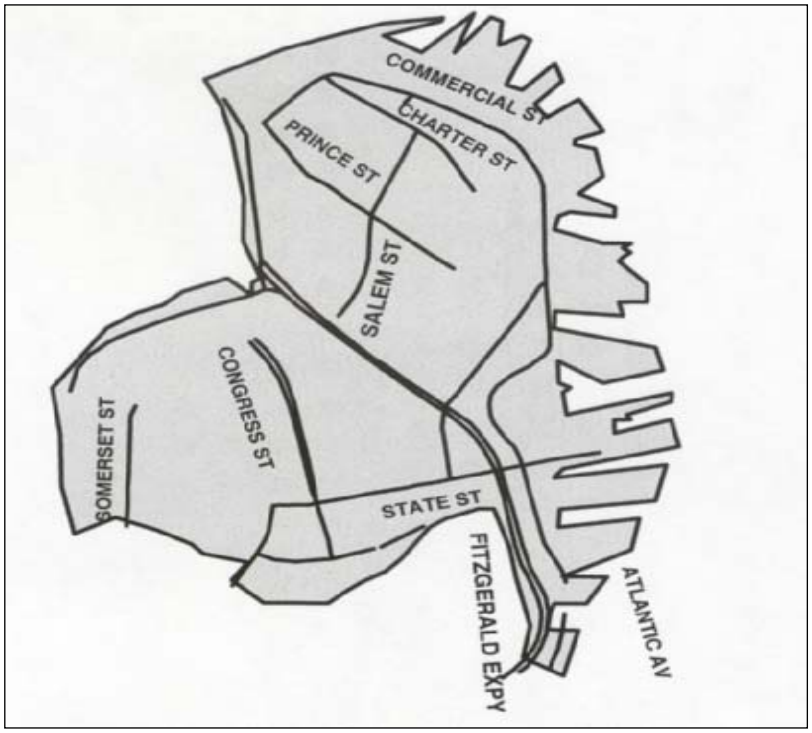
The total population in North Dorchester in 2000 was 83,212, a 7.6% increase when compared with 1990. A total of 36,026 Black residents lived in North Dorchester in 2000, nearly the same as in 1990. However, because the total neighborhood population increased, the Black population's percentage share 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%).

[See Bibliography in the Appendix]

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%.

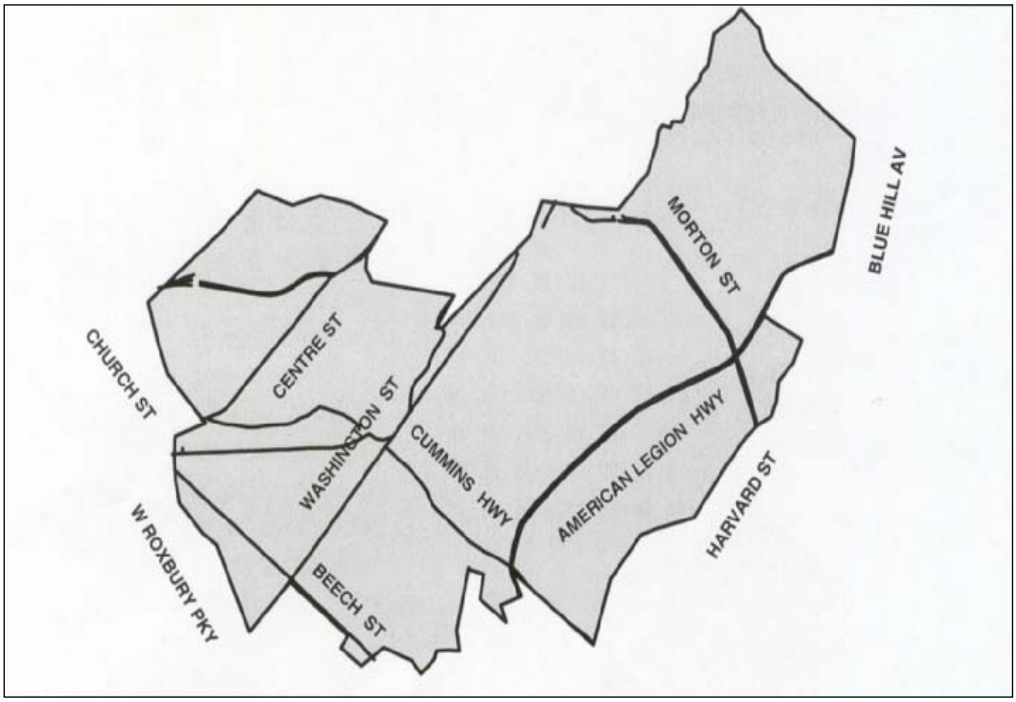
Most North End residents (81.5%) speak English as their primary language, followed by Italian (8.0%), and Spanish (3.1 %). Most residents (86.8%) were born in the United States, including 0.4% who were born in Puerto Rico; 3.2% of North End residents were born in Italy.

[See Bibliography in the Appendix]

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.

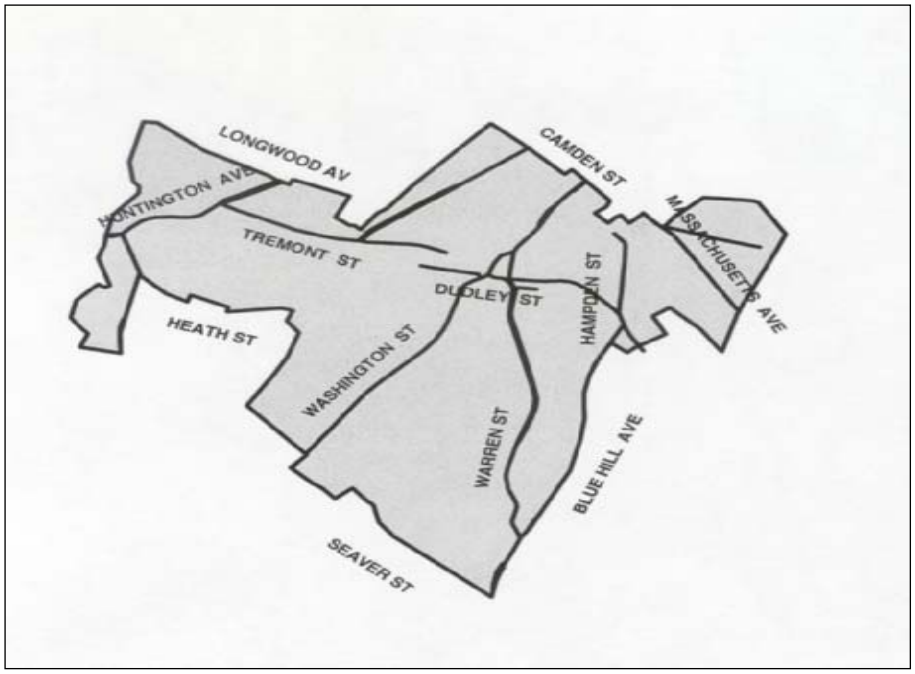
About three-fourths (73.3%) of Roslindale residents were born in the United States, including 2.5% who were born in Puerto Rico. Other countries in which residents were born include Haiti (3.5%), the Dominican Republic (2.5%), Greece (1.7%), and China (1.5%).

[See Bibliography in the Appendix]

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%.

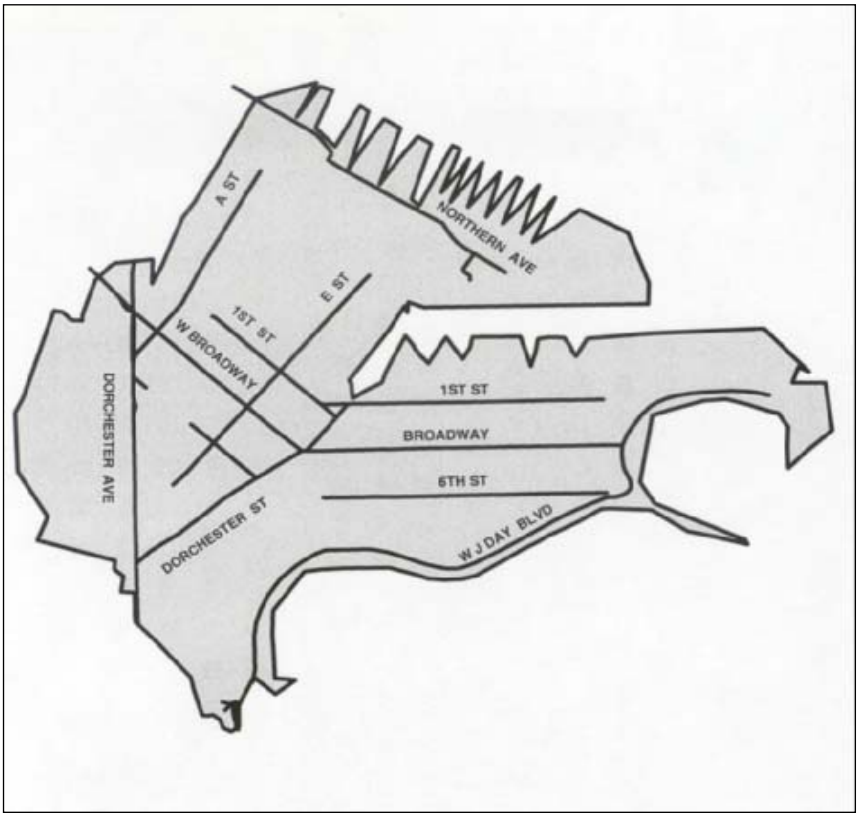
English is the language spoken at home by 64.8% of residents; 20.3% speak Spanish, 3.0% speak French Creole (which includes Haitian Creole), and 2.6% speak Chinese.

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%).

[See Bibliography in the Appendix]

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.

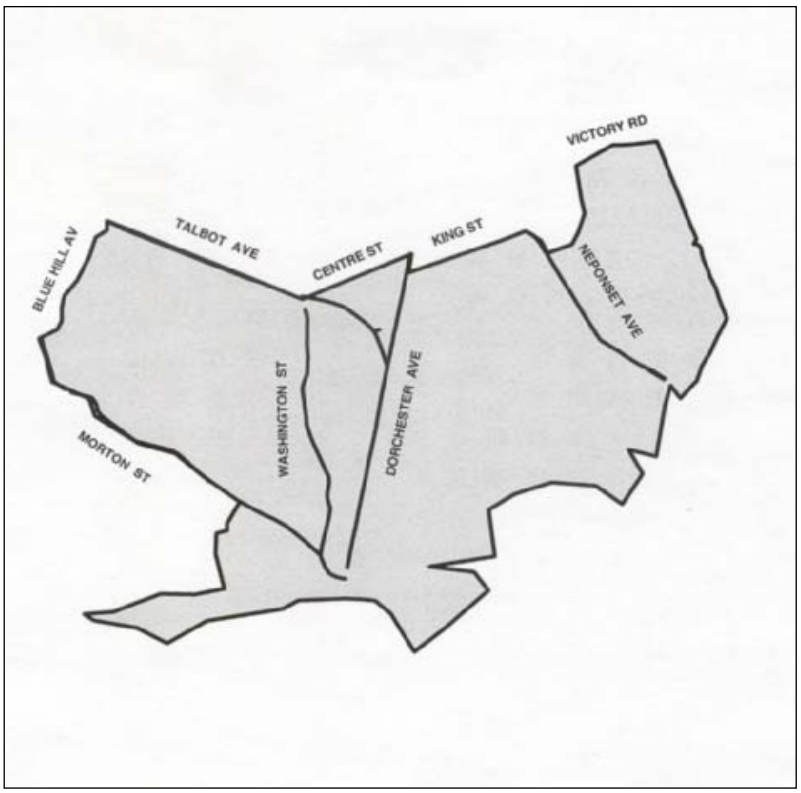
The total population in South Boston in 2000 was 29,938, an increase of only 1.7% from 1990. Although still a predominantly White neighborhood, the percentage of White residents in the neighborhood decreased from 95.5% in 1990 to 84.5% in 2000. A notable increase occurred within the Latino population, 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%).

[See Bibliography in the Appendix]

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.

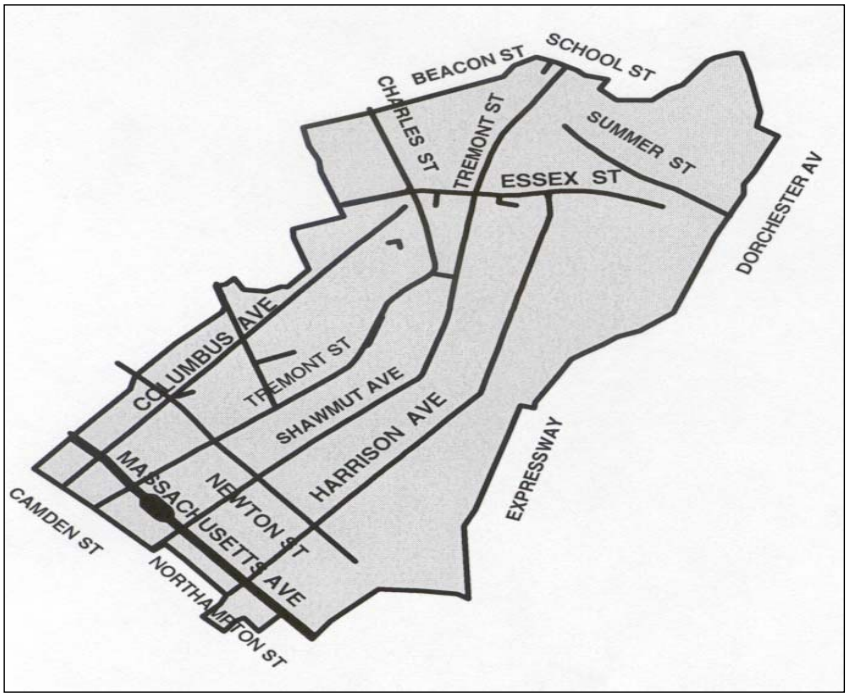
English is the primary language spoken by 73.8% of the population; 8.5% speak Spanish, 7.2% speak French Creole, and 4.3% speak Vietnamese.

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%).

[See Bibliography in the Appendix]

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.

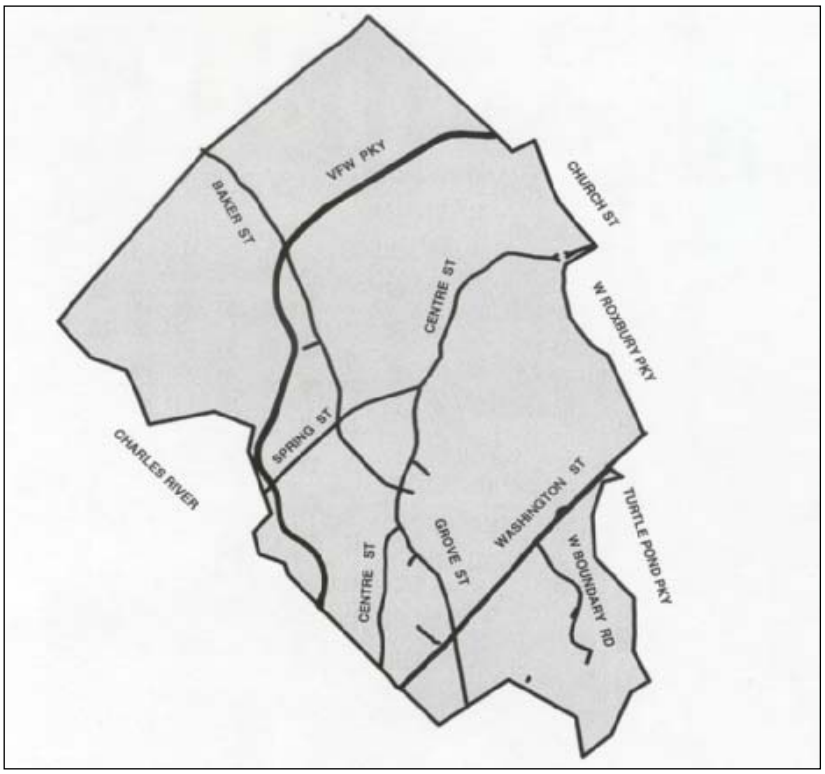
By 1900, large Jewish, Syrian, Greek, Italian, Portuguese, Chinese, West Indian, African-American, Native American, and Puerto Rican communities were established. In the 1960's, housing again shaped neighborhood demographics, as a renewed interest in urban life brought gentrification to the South End. 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%).
[See Bibliography in the Appendix]

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.

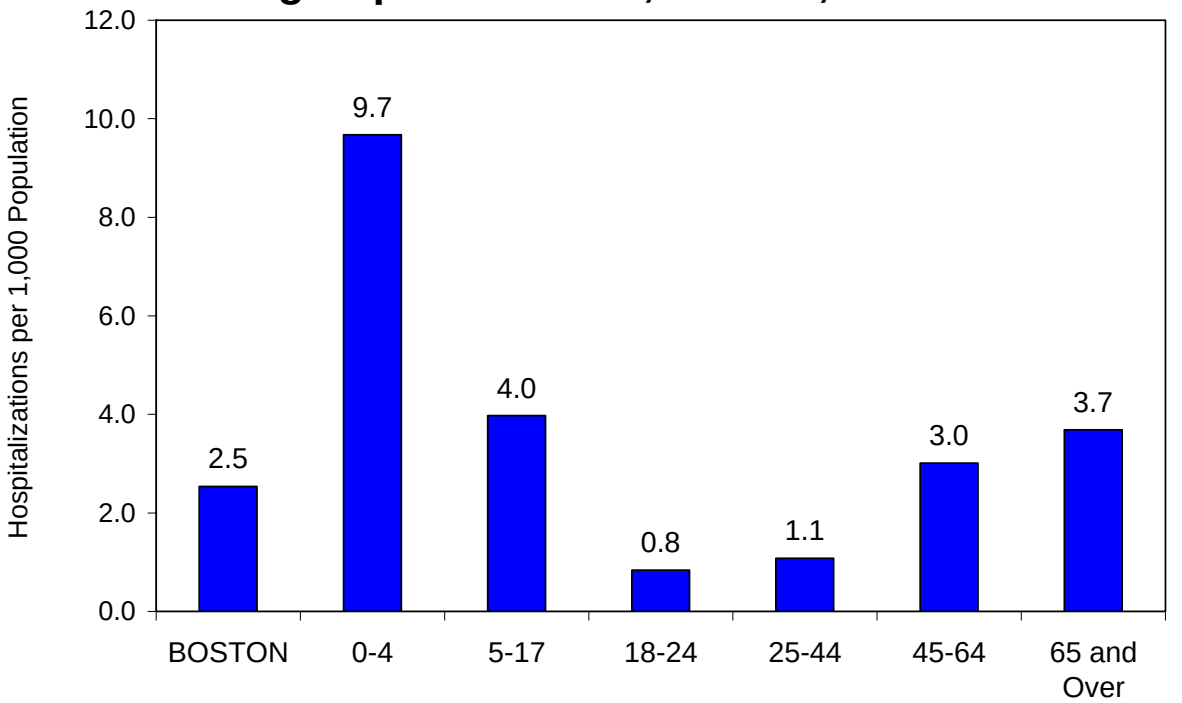
The total population in West Roxbury in 2000 was 26,108, a 4.2% decrease when compared with 1990. Although the White population in West Roxbury decreased by 4,251 (16.4%), the neighborhood remained a predominately White one. In 2000, 83.1% of the population was White compared with 95.2% in 1990. Moderate 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%).

[See Bibliography in the Appendix]

Asthma



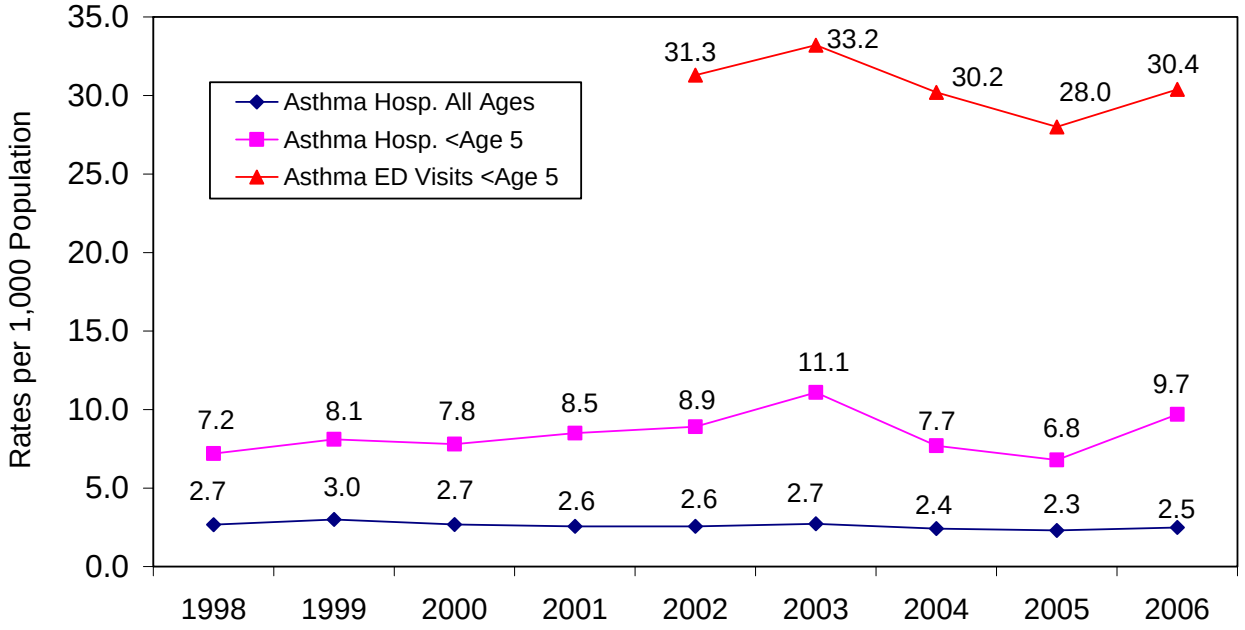
	BOSTON	0-4	5-17	18-24	25-44	45-64	65+
Count	1,495	310	336	80	228	315	226

NOTE: These data do not include persons whose age was not reported, except in the Boston overall count
DATA SOURCE: Acute 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 2006, asthma hospitalization rates for the youngest Boston children were about four times the rate for Boston overall.
- Adults between the ages of 18 and 44 had the city's lowest asthma hospitalization rates.

Asthma

Asthma Hospitalizations and ED Visits by Year: Counts and Rates, Boston, 1998-2006



Count	1998	1999	2000	2001	2002	2003	2004	2005	2006
Asthma Hosp. All Ages	1,482	1,666	1,579	1,512	1,509	1,607	1,428	1,347	1,495
Asthma Hosp. <Age 5	261	275	251	273	285	353	247	217	310
Asthma ED Visits <Age 5	N/A	N/A	N/A	N/A	1,002	1,064	967	897	974

NOTE: Hospital Emergency Department Visit Data Base first become available in 2002.
DATA SOURCE: 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

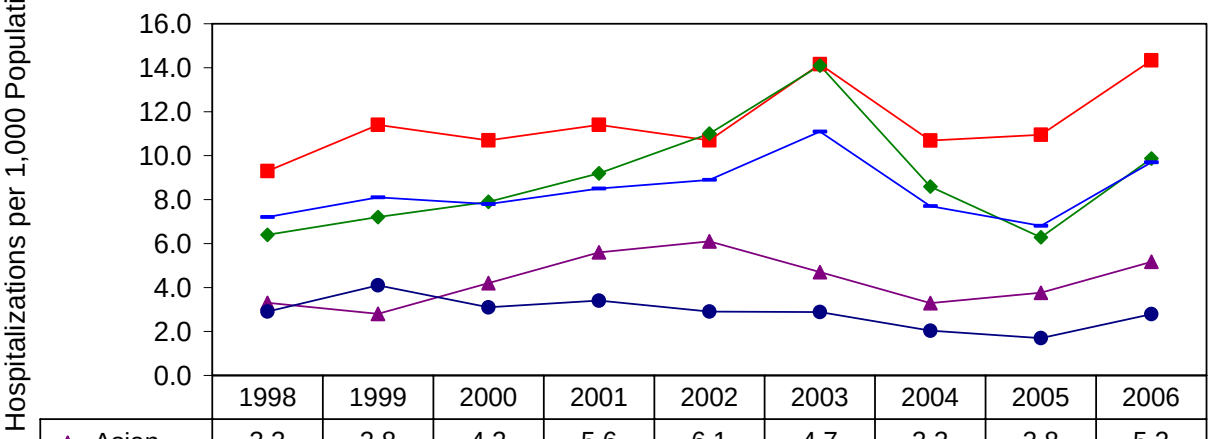
- Since 1998, the number and rate of asthma hospitalizations among children under age 5 has generally followed an upward trend, peaking in 2003 and then dropping the next two years. However, from 2005 to 2006, the count and rate increased 42.6%.

- Asthma hospitalization rates and asthma ED visit rates for Boston children under the age of five appeared to be on a downward trend beginning in 2004 and continuing in 2005. In 2006, the rate for asthma hospitalizations for Boston children was 26.0% higher than in 2004 while the rate for asthma ED visits returned to just about what it was in 2004.

- In 2006, for all ages, the asthma hospitalization rate was 17.0% lower than in 1999 but slightly higher than in 2005.

Asthma

Asthma Hospitalizations of Children Under Age 5 by Race/Ethnicity and Year: Counts and Rates, Boston, 1998-2006



	1998	1999	2000	2001	2002	2003	2004	2005	2006
Asian	3.3	2.8	4.2	5.6	6.1	4.7	3.3	3.8	5.2
Black	9.3	11.4	10.7	11.4	10.7	14.2	10.7	10.9	14.3
Latino	6.4	7.2	7.9	9.2	11.0	14.1	8.6	6.3	9.9
White	2.9	4.1	3.1	3.4	2.9	2.9	2.0	1.7	2.8
BOSTON	7.2	8.1	7.8	8.5	8.9	11.1	7.7	6.8	9.7

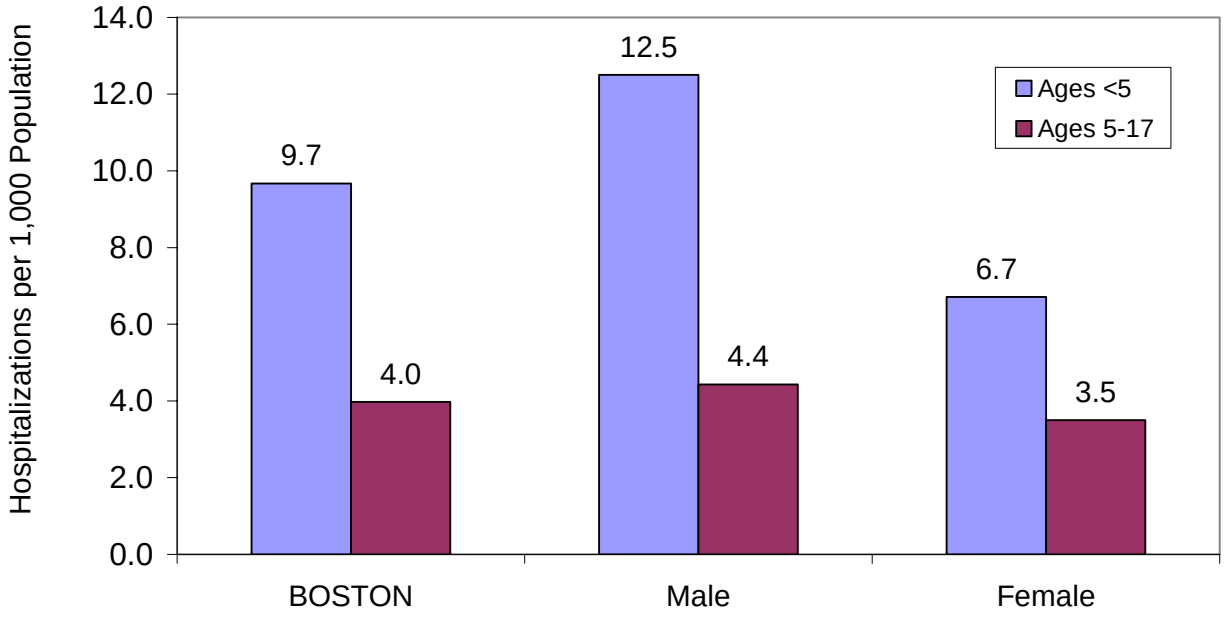
Count	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Asian	5	6	9	12	13	10	7	8	11
Black	107	131	123	131	123	163	123	126	165
Latino	50	56	62	72	86	110	67	49	77
White	34	48	37	40	34	34	24	20	33
BOSTON	261	275	251	273	285	353	247	217	310

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 2006, the asthma hospitalization rate for Boston Black children under the age of five was almost three times higher than for Asian children, almost one and a half times higher than for Latino children, and five times higher than for White children.
- Black children consistently had the highest asthma hospitalization rates from 1998 through 2006, 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 Blacks in 2006 and for 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 before increasing again in 2006. From 2005 to 2006, rates increased for all races/ethnicities.

Asthma

Asthma Hospitalizations of Children Under Age 5 and Children Ages 5-17 by Sex: Counts and Rates Boston, 2006



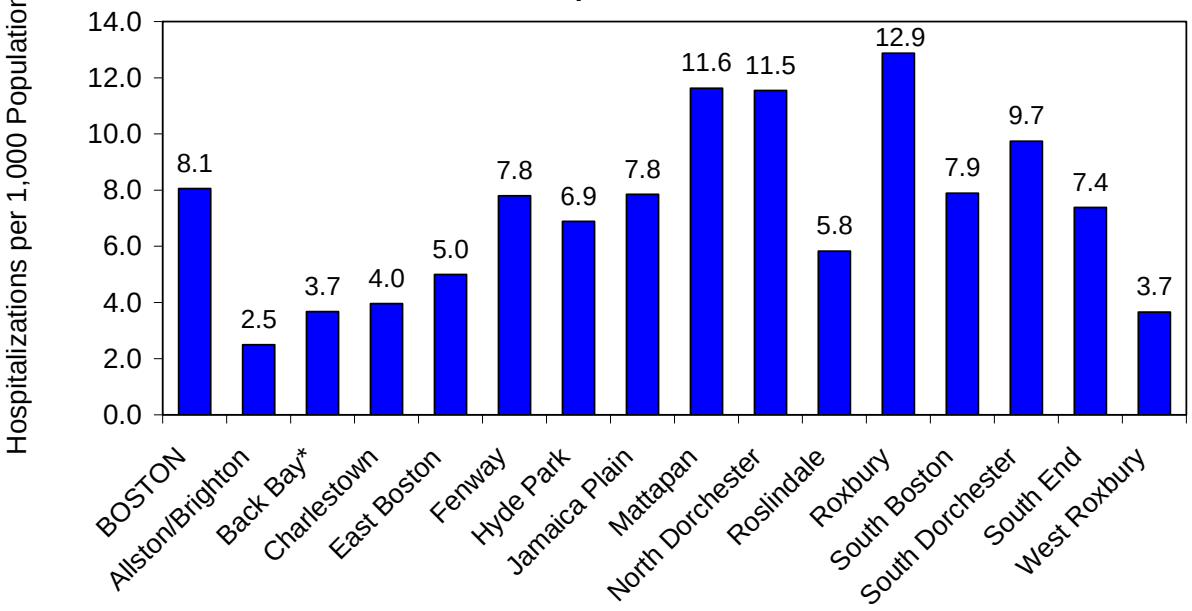
Count	**BOSTON**	**Male**	**Female**
Total	646	396	250
Ages <5	310	205	105
Ages 5-17	336	191	145

NOTE: These data do not include persons whose sex was not reported, except in the Boston overall count and 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 2006, Boston's boys under age five and those ages 5-17 had higher asthma hospitalization rates compared to girls of the same ages, a pattern that has continued over time.
- The largest disparity between boys and girls occurred for children under age five where the rate for boys was nearly two times higher than the rate for girls in that age group.

Asthma

Asthma Hospitalizations of Children Under Age 5 by Neighborhood: Counts and Rates Boston, 2004-2006



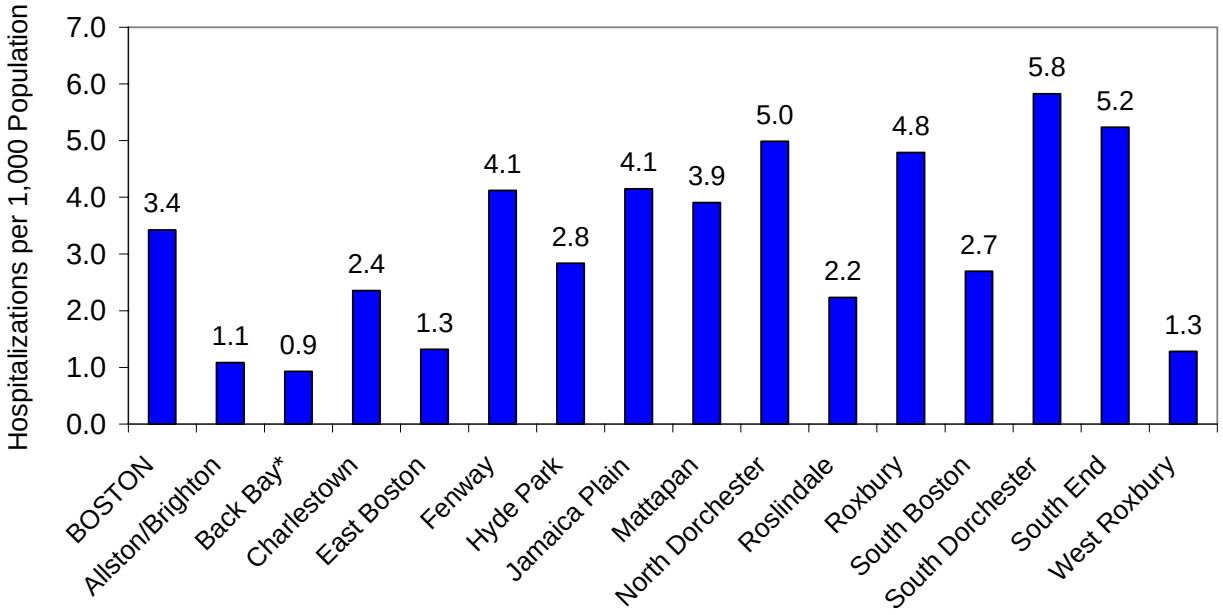
	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	774	16	13	10	41	12	43	61	72	154	39	94	36	163	22	16

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

- During 2004-2006, four 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 Mattapan, North Dorchester and South Dorchester.
- The rate for Roxbury was 59.3% higher than the overall Boston rate for children under age five.

Asthma

Asthma Hospitalizations of Children Ages 5-17 by Neighborhood: Counts and Rates Boston, 2004-2006



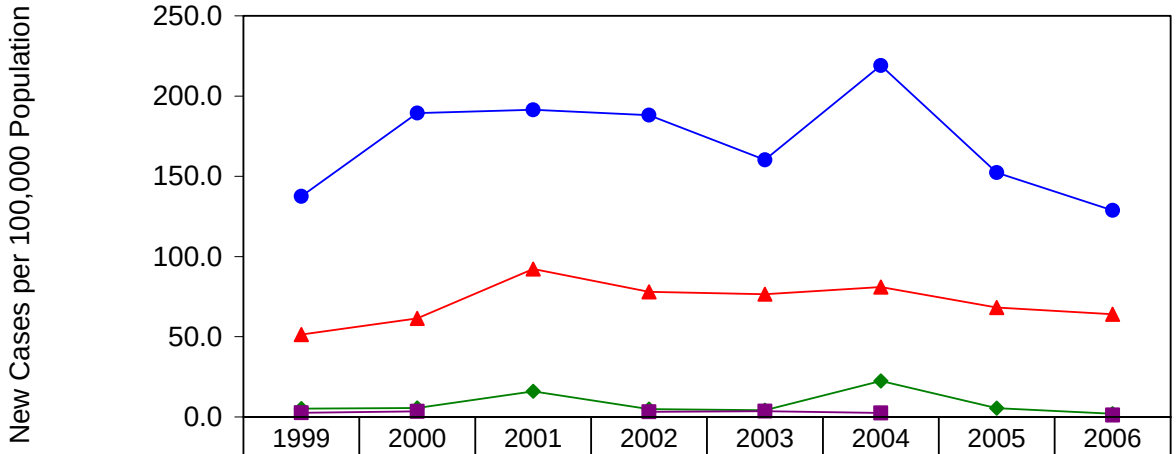
	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	867	14	5	14	25	15	46	59	74	203	39	104	32	187	39	11

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

- During 2004-2006, several Boston neighborhoods had asthma hospitalization rates for children ages 5-17 that were higher than the overall Boston rate for that age group. South Dorchester had the highest rate, followed by the South End, North Dorchester, and Roxbury.

Hepatitis

Hepatitis Types A, B, and C by Year: Counts and Incidence Rates, Boston, 1999-2006



	1999	2000	2001	2002	2003	2004	2005	2006
Hepatitis A	5.2	5.6	16.0	4.9	4.2	22.4	5.4	2.0
Acute Hepatitis B	2.6	3.4	--	3.2	3.6	2.5	--	1.2
Chronic Hepatitis B	51.3	61.4	92.2	77.9	76.5	81.0	68.2	64.0
Hepatitis C	137.5	189.4	191.5	188.1	160.2	219.1	152.3	128.8

Count	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Hepatitis A	30	33	94	29	25	132	32	12
Acute Hepatitis B	15	20	n<5	19	21	15	n<5	7
Chronic Hepatitis B	311	382	541	459	451	477	402	377
Hepatitis C	793	1,116	1,128	1,108	944	1,291	897	759

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 2006 the incidence rate of Hepatitis A infection in Boston declined compared to 2005. Hepatitis A incidence rates in Boston have remained relatively stable from 1999 to 2006, except for outbreaks in 2001 and 2004 which resulted in increases for those years.
- The incidence of reported hepatitis C infection decreased 15.4% from 2005 to 2006. The decrease was likely due to declining numbers of unreported cases of Hepatitis C infection.
- For further explanation of hepatitis types A, B and C, please refer to the glossary of this report.

Hepatitis

Hepatitis Types B and C Cases by Age: Counts and Incidence Rates, Boston, 2006		
Chronic Hepatitis B		
Age	Count	Rate
<10	6	9.1
10-19	12	15.7
20-29	101	73.1
30-39	95	91.8
40-49	69	93.9
50-59	63	120.0
60-69	19	55.6
>69	12	26.4
Hepatitis C		
Age	Count	Rate
<10	n<5	- -
10-19	12	15.7
20-29	142	102.8
30-39	128	123.8
40-49	241	328.0
50-59	168	320.1
60-69	46	134.7
>69	18	39.6

NOTES: Incidence rates are presented only for those age groups that had at least 5 occurrences of disease. Hepatitis A and acute hepatitis B are not shown because all age groups had less than 5 occurrences of those infections. 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 Research Office, Communicable Disease Control Division

- In 2006, the highest incidence rate of chronic hepatitis B infection was among Boston residents, ages 50-59, with a rate 1.9 times that of Boston overall (data not shown). Residents ages 40-49 had a rate 1.5 times that of the Boston rate.
- The highest incidence rates of hepatitis C infection were among Boston residents ages 40-49 and 50-59, with rates 2.5 times that of Boston overall for each group (data not shown).

Hepatitis

Hepatitis Types B and C Cases by Race/Ethnicity: Counts and Incidence Rates, Boston, 2006		
Chronic Hepatitis B		
	Count	Rate
Asian	176	397.5
Black	47	33.5
Latino	11	12.9
White	29	9.9
BOSTON	377	64.0
Hepatitis C		
	Count	Rate
Asian	25	56.5
Black	141	100.5
Latino	94	110.5
White	234	80.3
BOSTON	759	128.8

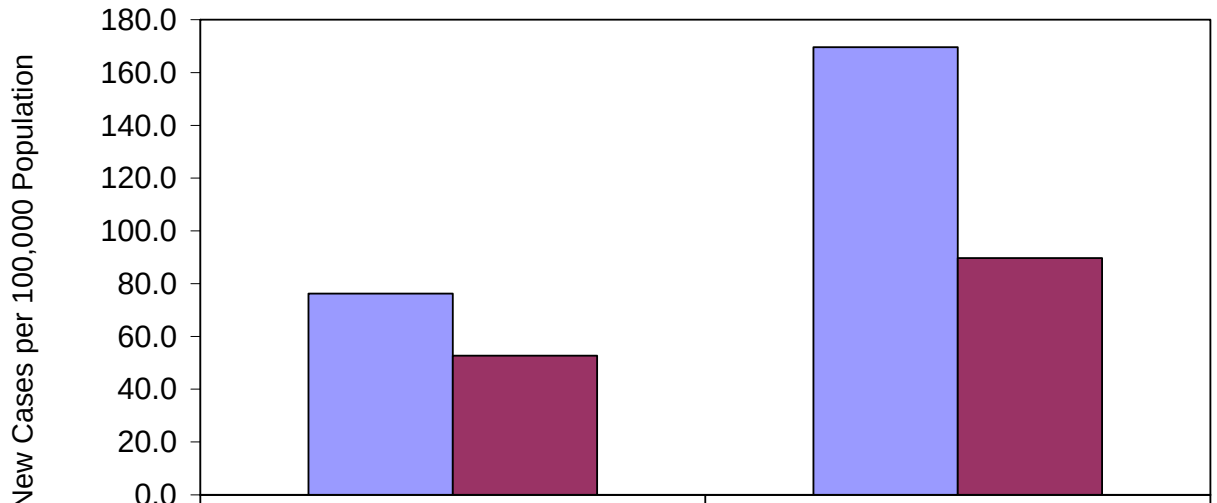
NOTES: Incidence rates are presented only for races/ethnicities that had at least 5 occurrences of disease. Hepatitis A and acute hepatitis B are not shown because all race/ethnicities had less than 5 occurrences of those infections. Boston totals include those for whom race/ethnicity was Other or for 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 Research Office, Communicable Disease Control Division

- Asian Boston residents had the highest incidence of chronic hepatitis B infection in 2006. That rate was 12 times higher than the rate for Black residents, 31 times higher than the rate for Latino residents and 40 times higher than the rate for White residents. However, caution should be exercised in interpreting the magnitude of disparity because information on race/ethnicity was unknown for 24.1% of all new cases.

- Latino Boston residents had the highest incidence rate of hepatitis C infection. Their rate was nearly double the rate for Asians and 1.4 times the rate for Whites. Again, caution should be exercised in interpreting the extent of disparity since information on race/ethnicity was unknown for 33% of all new cases.

Hepatitis

Hepatitis Types B, and C Cases by Sex: Counts and Incidence Rates, Boston, 2006



Count	Chronic Hepatitis B	Hepatitis C
Male	216	481
Female	161	274

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 Boston in 2006, the incidence rate of reported chronic hepatitis B infection was 1.4 times higher in males than females.
- The incidence rate of reported hepatitis C infection was 1.9 times higher in Boston males than Boston females in 2006.

Hepatitis

Hepatitis B and C Cases by Neighborhood: Counts and Incidence Rates, Boston, 2006				
	Chronic Hepatitis B		Hepatitis C	
	Count	Rate	Count	Rate
Allston/Brighton	38	57.2	57	85.7
Back Bay*	17	38.8	24	54.8
Charlestown	10	65.8	13	85.5
East Boston	12	31.2	46	119.7
Fenway	18	37.9	19	40.0
Hyde Park	11	38.7	18	59.9
Jamaica Plain	6	16.5	32	88.2
Mattapan	15	53.9	24	86.3
North Dorchester	42	71.6	76	129.5
Roslindale	13	40.0	22	67.6
Roxbury	21	60.6	50	144.2
South Boston	9	30.0	52	173.0
South Dorchester	68	90.3	78	103.5
South End	51	186.7	35	128.1
West Roxbury	9	97.4	10	68.9
BOSTON	377	64.0	759	128.8

*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, individuals whose neighborhood of residence was not reported, correctional facilities, or drug treatment programs. 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 Research Office, Communicable Disease Control Division

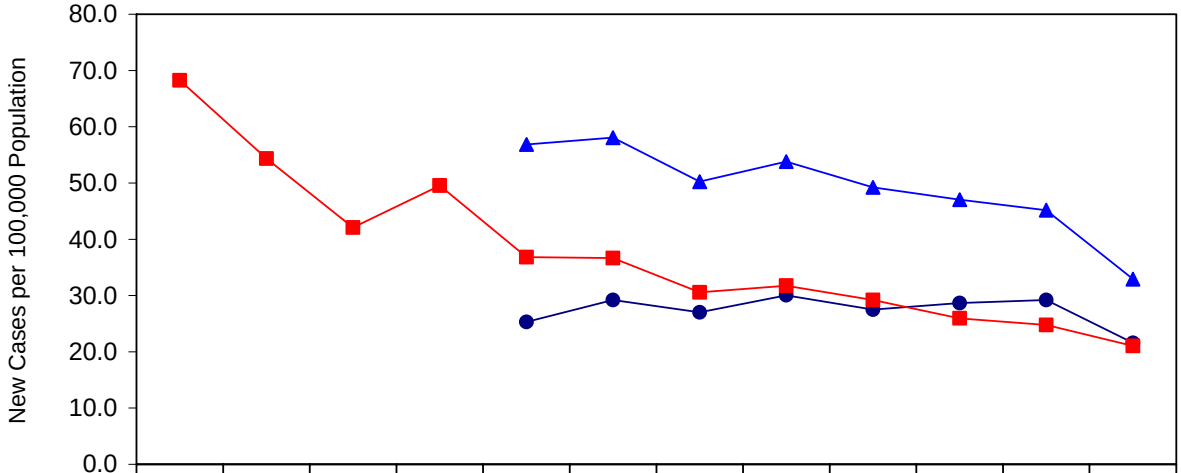
- The highest incidence rates of reported chronic hepatitis B infection among Boston neighborhoods in 2006 were in the South End and West Roxbury. In part, these rates may reflect differences in local screening practices. These two neighborhoods had reported chronic hepatitis B infection rates above the overall Boston rate. In 2006, the South End had the highest incidence rate of reported chronic hepatitis B infection, 2.9 times as high as the overall Boston rate.

- The highest incidence rates of hepatitis C infection among Boston residents in 2006 occurred in North Dorchester, Roxbury and South Boston. In part, these rates may reflect differences in local screening practices and improved reporting of communicable diseases.

- In 2006, South Boston had the highest incidence rate of reported hepatitis C infection, 1.3 times as high as the overall Boston rate.

HIV and AIDS

HIV, AIDS, and HIV/AIDS Cases by Year: Counts and Incidence Rates, Boston, 1995-2006



	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
HIV	N/A	N/A	N/A	N/A	25.3	29.2	27.0	30.0	27.5	28.7	29.2	21.6
AIDS	68.2	54.3	42.1	49.6	36.8	36.7	30.6	31.7	29.2	26.0	24.8	21.0
HIV/AIDS	N/A	N/A	N/A	N/A	56.9	58.1	50.2	53.8	49.2	47.0	45.2	32.9

Count	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
HIV	N/A	N/A	N/A	N/A	149	172	159	177	162	169	172	127
AIDS	402	320	248	292	217	216	180	187	172	153	146	124
HIV/AIDS	N/A	N/A	N/A	N/A	335	342	296	317	290	277	266	194

NOTES: 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 for 2006 should be considered preliminary.
DATA SOURCE: Massachusetts Department of Public Health HIV/AIDS Surveillance Program
DATA ANALYSIS: Boston Public Health Commission Research Office

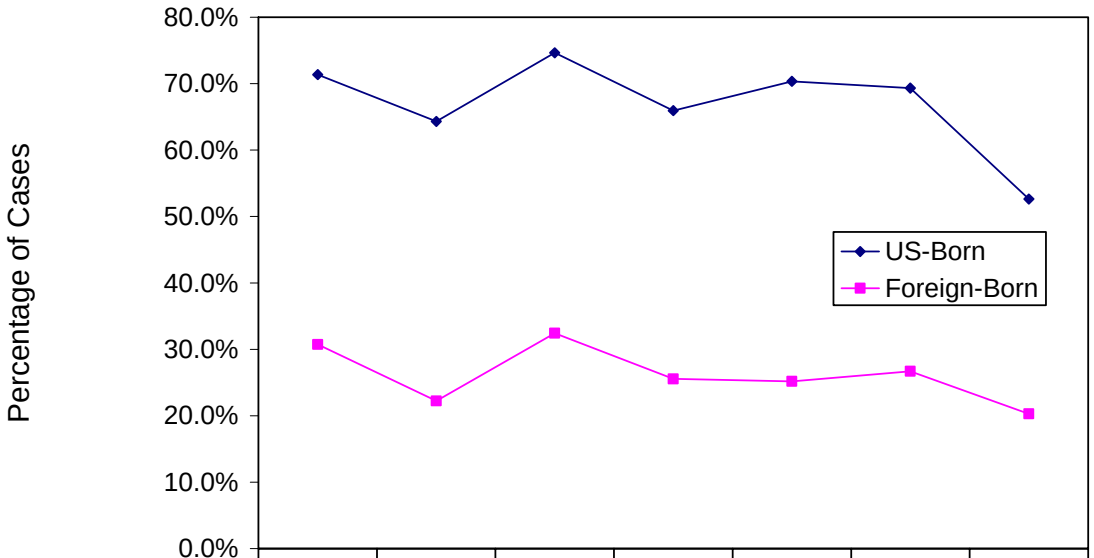
- Massachusetts began reporting HIV cases in January, 1999. After peaking in 2002, new HIV cases have been slowly declining. However, the trend for Boston HIV incidence rates has been essentially unchanged for several years, with the exception of a slight peak in 2002.

- AIDS cases have also been slowly declining since 2002, and based on preliminary data, the AIDS incidence rate for 2006 appears to be the lowest in a decade and 69.2% lower than the rate for 1995. The decline in AIDS incidence rates for Boston residents has been 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 2006 was 27.2% less than the 2005 HIV/AIDS incidence rate. HIV/AIDS incidence rates for Boston residents have been declining since 2002.

HIV and AIDS

HIV/AIDS Cases by Foreign-Born vs US-Born Status by Year: Counts and Percentages, Boston, 1999-2006



	2000	2001	2002	2003	2004	2005	2006
US-Born	71.3%	64.3%	74.7%	65.9%	70.3%	69.3%	52.6%
Foreign-Born	30.7%	22.2%	32.4%	25.6%	25.2%	26.7%	20.3%

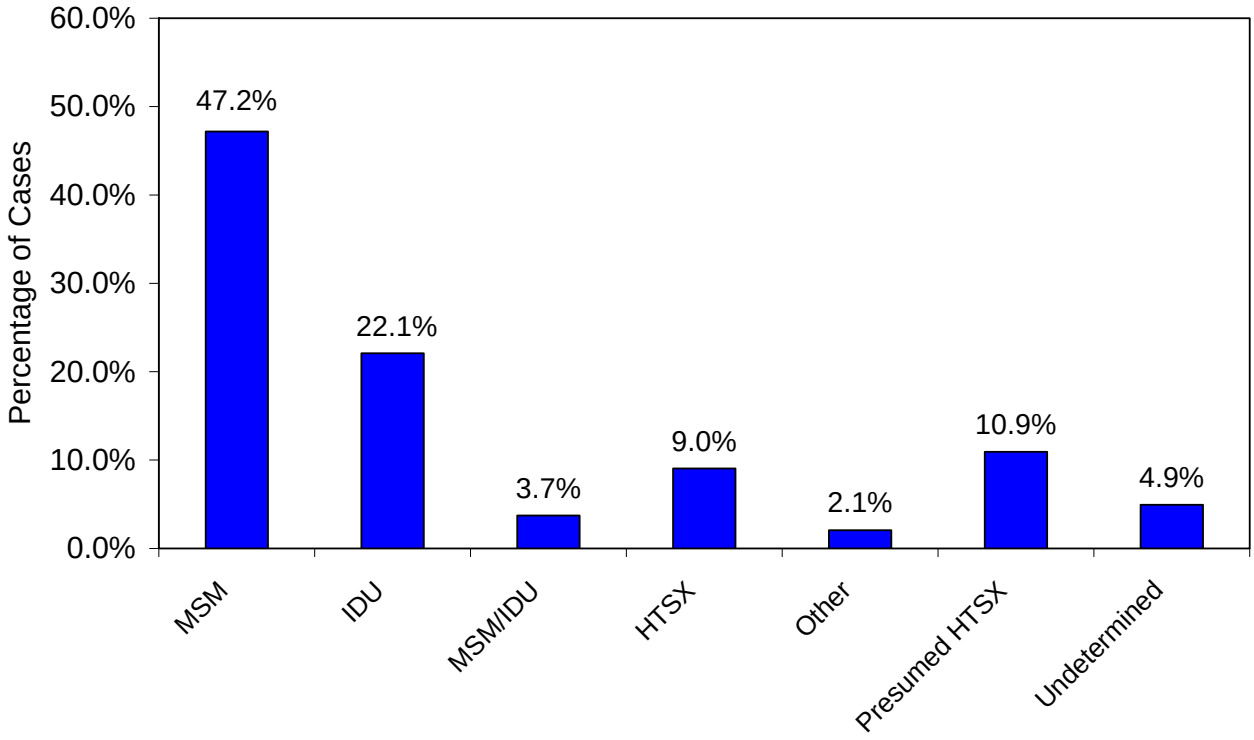
Count	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
US-Born	235	217	209	194	195	177	132
Foreign-Born	81	103	96	81	73	74	54

NOTES: US includes US territories, such as US Virgin Islands, Puerto Rico, and Guam. Data For 2006 should be considered preliminary.
DATA SOURCE: Massachusetts Department of Public Health HIV/AIDS Surveillance Program
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2006, preliminary data indicates that HIV/AIDS cases were two times higher for US-born Boston residents compared to foreign-born Boston residents.
- There were 33.3% less cases of HIV/AIDS among Boston residents with foreign-born status in 2006 compared to 2000. There were also 43.8% less cases of Boston residents with US-born status in 2006 compared to 2000.

HIV and AIDS

Cumulative HIV/AIDS Cases by Mode of Transmission: Counts and Percentages, Boston, As of January 1, 2008



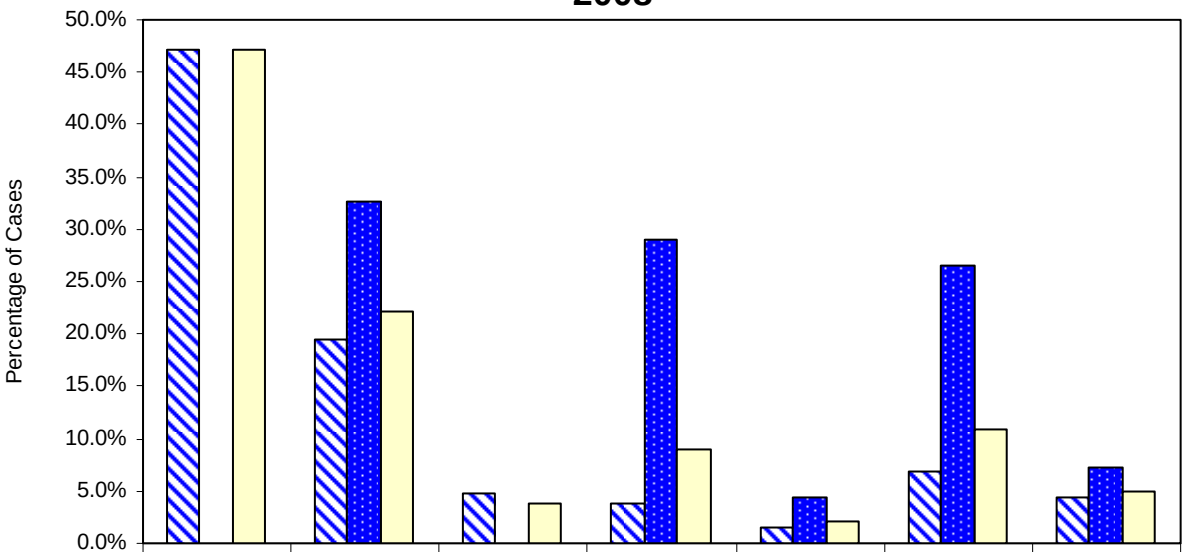
	MSM	IDU	MSM/IDU	HTSX	Other	Presumed HTSX	Undetermined
Count	4,187	1,960	331	802	184	970	439

ABBREVIATIONS KEY: MSM=Male-to-Male Sex, IDU=Injection Drug Use, MSM/IDU=Male-to-Male Sex and Injection Drug Use, HTSX=Heterosexual Sex, Presumed HTSX=Presumed Heterosexual sex with partner(s) with unknown risk and HIV status, Undetermined=Includes those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up. Data For 2006 should be considered preliminary.
DATA SOURCE: Massachusetts Department of Public Health HIV/AIDS Surveillance Program
DATA ANALYSIS: Boston Public Health Commission Research Office

- Male-to-male sex is the leading mode of transmission for HIV/AIDS cases among Boston residents, and accounts for more than double the number of cases of the second leading mode, injection drug use.
- Together, heterosexual sex and presumed heterosexual sex account for almost as many cases of HIV/AIDS as injection drug use.

HIV and AIDS

Cumulative HIV/AIDS Cases by Mode of Transmission by Sex: Counts and Percentages, Boston as of January 1, 2008



	MSM	IDU	MSM/IDU	HTSX	Other	Presumed HTSX	Undetermined
Male	47.2%	19.4%	4.7%	3.9%	1.5%	6.9%	4.3%
Female	N/	33%	N/	29%	4%	27%	7%
Boston	47.2%	22.1%	3.7%	9.0%	2.1%	10.9%	4.9%

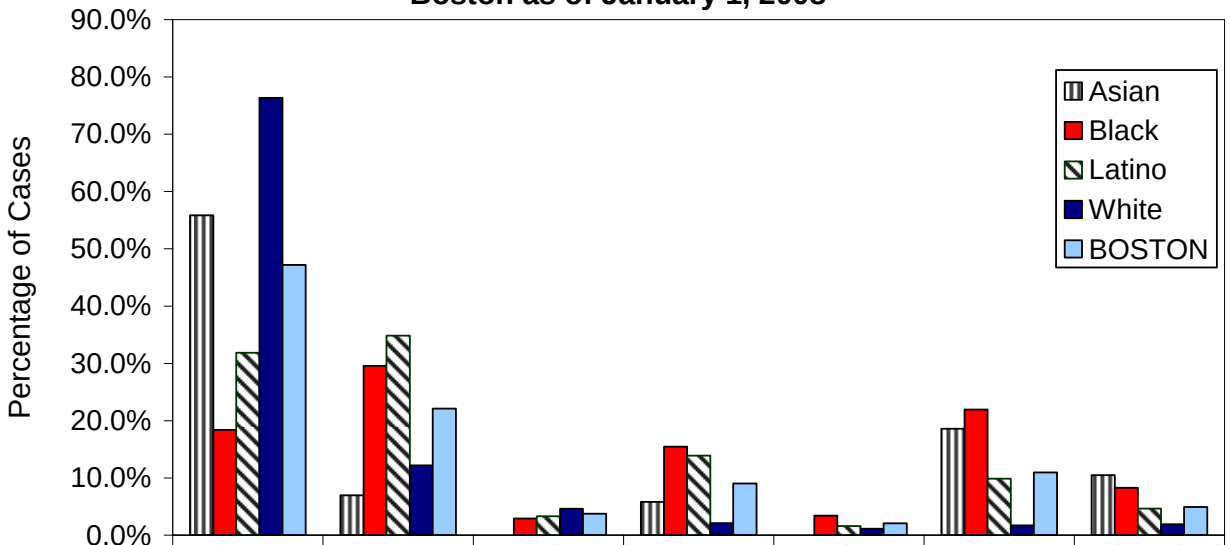
Count	MSM	IDU	MSM/IDU	HTSX	Other	Presumed HTSX	Undetermined
Male	4,187	1,368	331	276	104	489	306
Female	N/A	592	N/A	526	80	481	133
BOSTON	4,187	1,960	331	802	184	970	439

ABBREVIATIONS KEY: MSM=Male-to-Male Sex, IDU=Injection Drug Use, MSM/IDU=Male-to-Male Sex and Injection Drug Use, HTSX=Heterosexual Sex, Presumed HTSX=Presumed Heterosexual sex with partner(s) with unknown risk and HIV status, Undetermined=Includes those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up. Data For 2006 should be considered preliminary.
DATA SOURCE: Massachusetts Department of Public Health HIV/AIDS Surveillance Program
DATA ANALYSIS: Boston Public Health Commission Research Office

- The majority of HIV/AIDS cases in Boston are transmitted by residents having male-to-male sex.
- Among Boston females, injection drug use is the leading mode of transmission for HIV/AIDS. Yet, more than twice as many Boston males have contracted HIV/AIDS through injection drug use compared to females.
- Heterosexual sex as a mode of transmission for HIV/AIDS cases is seven times more common in females compared to males.

HIV and AIDS

Cumulative HIV/AIDS Cases by Mode of Transmission by Race/Ethnicity: Counts and Percentages Boston as of January 1, 2008



	MSM	IDU	MSM/IDU	HTSX	Other	Pres. HTSX	Undetermined
Asian	55.8%	7.0%	--	5.8%	--	18.6%	10.5%
Black	18.4%	29.6%	2.9%	15.5%	3.4%	22.0%	8.3%
Latino	31.9%	34.8%	3.3%	13.9%	1.6%	9.9%	4.7%
White	76.3%	12.2%	4.6%	2.1%	1.1%	1.7%	1.9%
BOSTON	47.2%	22.1%	3.7%	9.0%	2.1%	10.9%	4.9%

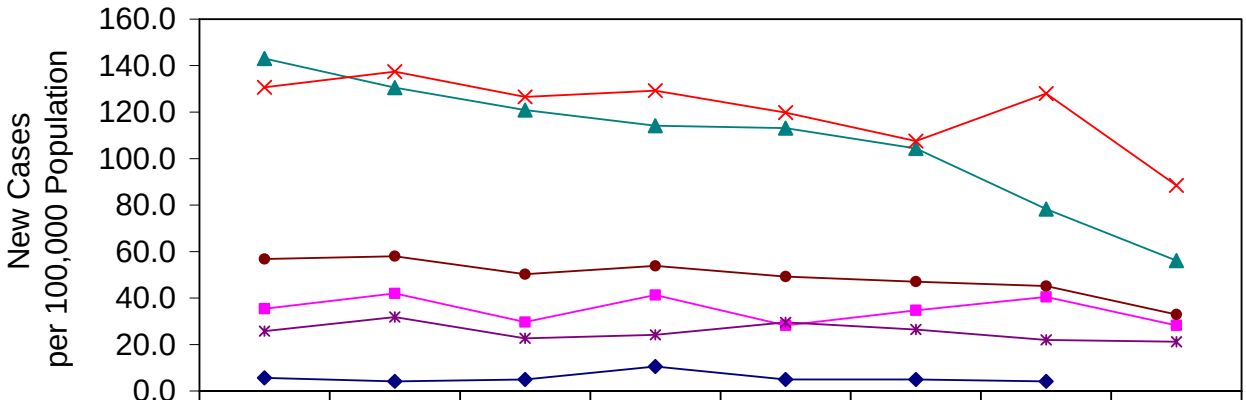
Count	**MSM**	**IDU**	**MSM/IDU**	**HTSX**	**Other**	**Presumed HTSX**	**Undetermined**
Asian	48	6	n<5	5	n<5	16	9
Black	635	1,021	101	534	118	758	286
Latino	397	434	41	173	20	123	58
White	3,094	494	188	85	45	70	77
BOSTON	4,187	1,960	331	802	184	970	439

ABBREVIATIONS KEY: MSM=Male-to-Male Sex, IDU=Injection Drug Use, MSM/IDU=Male-to-Male Sex and Injection Drug Use, HTSX=Heterosexual Sex, Presumed HTSX=Presumed Heterosexual sex with partner(s) with unknown risk and HIV status, Undetermined=Includes those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up. Data for 2006 should be considered preliminary.
DATA SOURCE: Massachusetts Department of Public Health HIV/AIDS Surveillance Program
DATA ANALYSIS: Boston Public Health Commission Research Office

- Among Boston residents, male-to-male sex is the leading mode of transmission for HIV/AIDS in Whites and Asians while injection drug use is the leading mode of transmission for HIV/AIDS in Blacks and Latinos. Almost three times more Latinos are infected with HIV/AIDS due to injection drug use compared to Whites.
- About four times as many Whites contract HIV/AIDS by male-to-male sex compared to Blacks.
- Heterosexual sex transmission is most prevalent among Blacks and least prevalent among Whites, with HIV/AIDS seven times more likely to be transmitted by heterosexual sex in Blacks compared to Whites.

HIV and AIDS

HIV/AIDS Cases by Age and Year: Counts and Incidence Rates, Boston, 1999-2006



	1999	2000	2001	2002	2003	2004	2005	2006
<20	5.6	4.2	4.9	10.6	4.9	4.9	4.2	--
20-29	35.5	42.0	29.7	41.2	28.2	34.7	40.5	28.2
30-39	143.1	130.5	120.9	114.1	113.1	104.4	78.3	56.1
40-49	130.7	137.5	126.6	129.3	119.8	107.5	127.9	88.5
50+	25.7	31.8	22.7	24.2	29.5	26.5	22.0	21.2
BOSTON	56.9	58.1	50.2	53.8	49.2	47.0	45.2	32.9

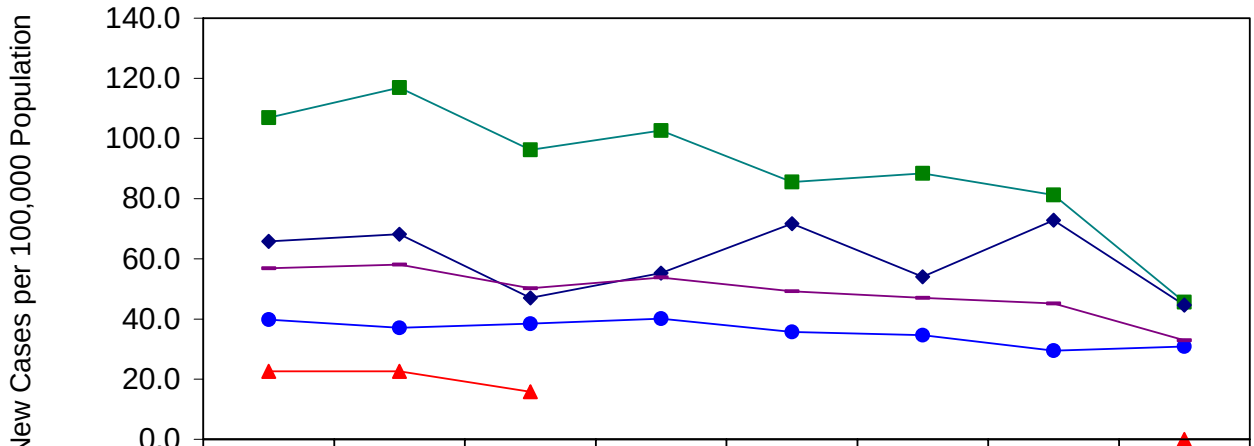
Count	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
<20	8	6	7	15	7	7	6	n<5
20-29	49	58	41	57	39	48	56	39
30-39	148	135	125	118	117	108	81	58
40-49	96	101	93	95	88	79	94	65
50+	34	42	30	32	39	35	29	28
BOSTON	335	342	296	317	290	277	266	194

NOTES: These data do not include inmates of correctional facilities. Data for 2006 should be considered preliminary.
DATA SOURCE: Massachusetts Department of Public Health HIV/AIDS Surveillance Program
DATA ANALYSIS: Boston Public Health Commission Research Office

- Preliminary data suggests that HIV/AIDS incidence rates for Boston residents of all age groups declined from 2005 to 2006 and from 1999 to 2006.
- The majority of new HIV/AIDS cases occur in residents ages 30-39 and 40-49. The 2006 incidence rate for residents ages 30-39 was 28.4% less than it was for this age group in 2005 and 60.8% less than it was in 1999. The incidence rate for residents ages 40-49 spiked in 2005 but declined in 2006 as indicated by preliminary data. The 2006 incidence rate for this age group was 30.1% less than the rate in 2005 and 32.3% less than it was in 1999.
- Incidence rates for HIV/AIDS decreased for Boston overall by 27.2% from 2005 to 2006 and by 42.2% from 1999 to 2006.

HIV and AIDS

HIV/AIDS Cases by Race/Ethnicity and Year: Counts and Incidence Rates, Boston, 1999-2006



	1999	2000	2001	2002	2003	2004	2005	2006
Asian	22.6	22.6	15.8	--	--	--	--	0.0
Black	106.9	116.9	96.2	102.6	85.5	88.4	81.3	45.6
Latino	65.8	68.2	47.0	55.2	71.7	54.1	72.9	44.7
White	39.8	37.0	38.4	40.1	35.7	34.6	29.5	30.9
BOSTON	56.9	58.1	50.2	53.8	49.2	47.0	45.2	32.9

Count	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Asian	10	10	7	n<5	n<5	n<5	n<5	0
Black	150	164	135	144	120	124	114	64
Latino	56	58	40	47	61	46	62	38
White	116	108	112	117	104	101	86	90
BOSTON	335	342	296	317	290	277	266	194

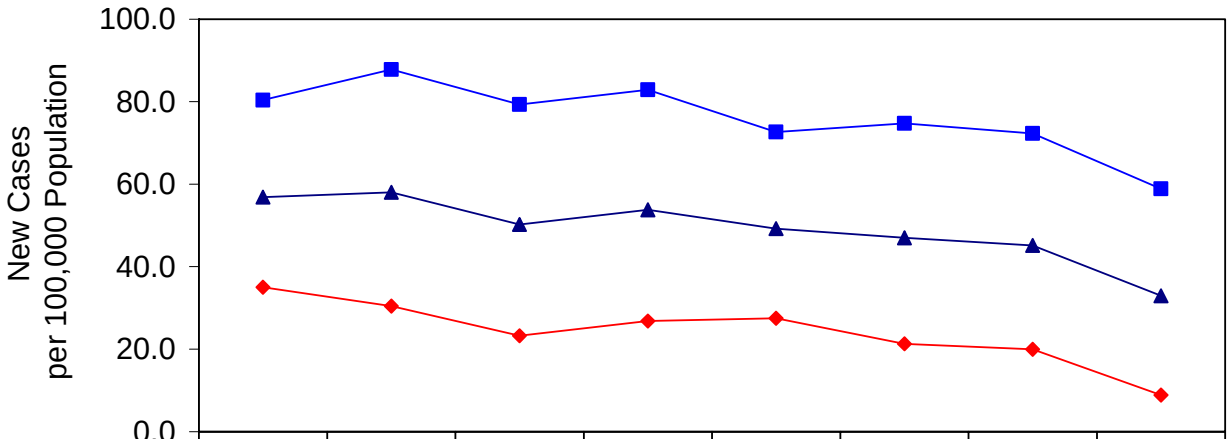
NOTES: These data do not include persons of other or unknown race/ethnicity or inmates of correctional facilities. There were too few new cases of HIV/AIDS among Asians from years 2002 through 2005 to permit the presentation of incidence rates. Data for 2006 should be considered preliminary.
DATA SOURCE: Massachusetts Department of Public Health HIV/AIDS Surveillance Program
DATA ANALYSIS: Boston Public Health Commission Research Office

- Incidence rates for HIV/AIDS continue to be highest for Blacks, followed by Latinos. According to 2006 preliminary HIV/AIDS data for Boston residents, the incidence rate for Boston's Black residents was 38.6% higher than the overall Boston rate. Excluding Asians, who had no new cases of HIV/AIDS reported in 2006, only the incidence rate for White residents was lower that the Boston rate.

- Between 1999 and 2006, HIV/AIDS incidence rates declined for all Boston's races/ethnicities.

HIV and AIDS

HIV/AIDS Cases by Sex and Year: Counts and Incidence Rates, Boston, 1999-2006



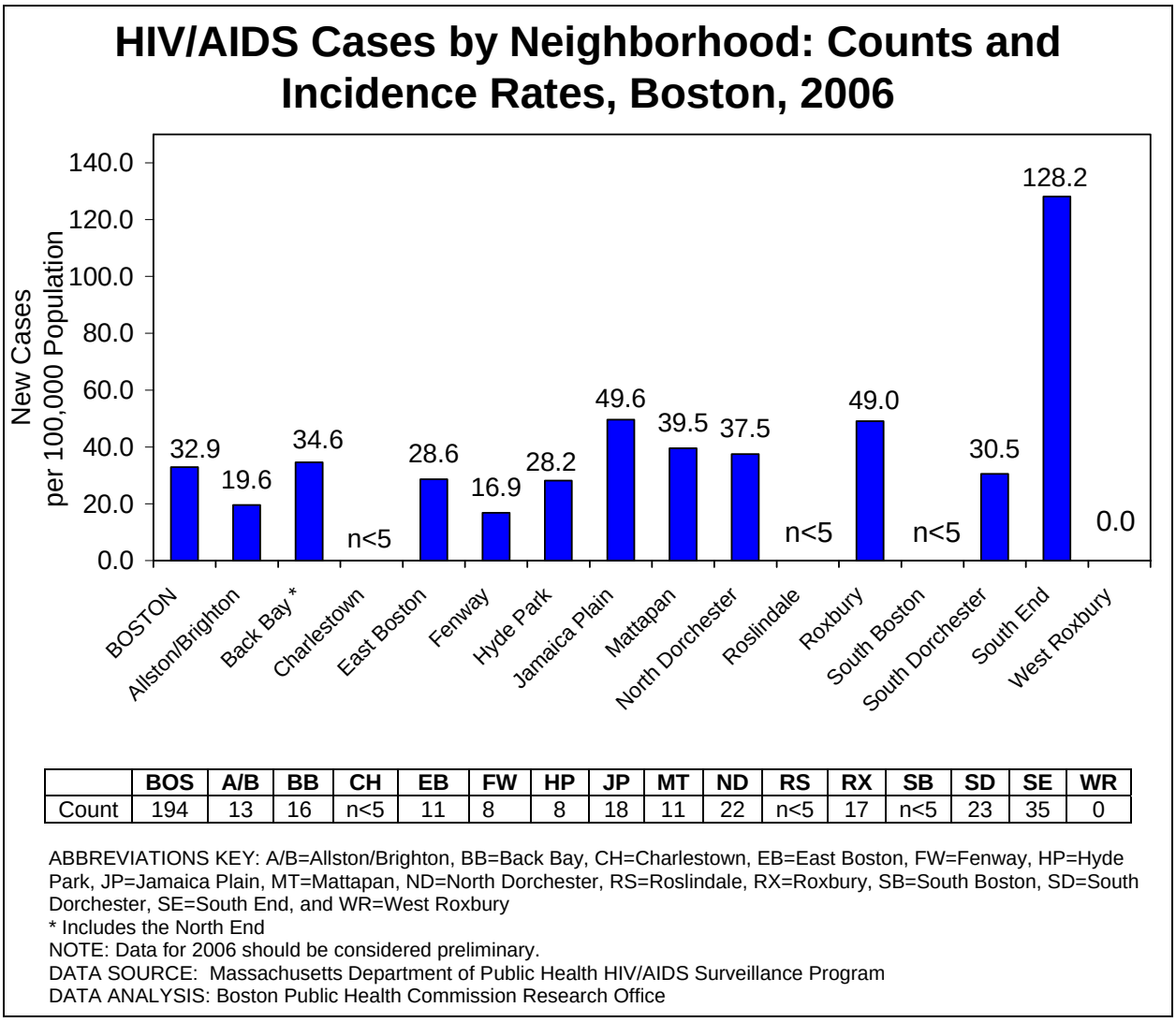
	1999	2000	2001	2002	2003	2004	2005	2006
Female	35.0	30.4	23.2	26.8	27.5	21.3	20.0	8.8
Male	80.4	87.8	79.3	82.9	72.6	74.8	72.3	58.9
BOSTON	56.9	58.1	50.2	53.8	49.2	47.0	45.2	32.9

Count	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Female	107	93	71	82	84	65	61	27
Male	228	249	225	235	206	212	205	167
BOSTON	335	342	296	317	290	277	266	194

NOTES: These data do not include inmates of correctional facilities. Data for 2006 should be considered preliminary.
DATA SOURCE: Massachusetts Department of Public Health HIV/AIDS Surveillance Program
DATA ANALYSIS: Boston Public Health Commission Research Office

- Boston Incidence rates for HIV/AIDS vary drastically by sex. Rates for males are almost seven times higher than rates for females.
- From 1999 to 2005, HIV/AIDS incidence rates gradually decreased with slight fluctuation for both males and females. However, based on preliminary data for 2006, rates for males decreased by 18.5% from 2005 to 2006 and by 56.0% for females.

HIV and AIDS



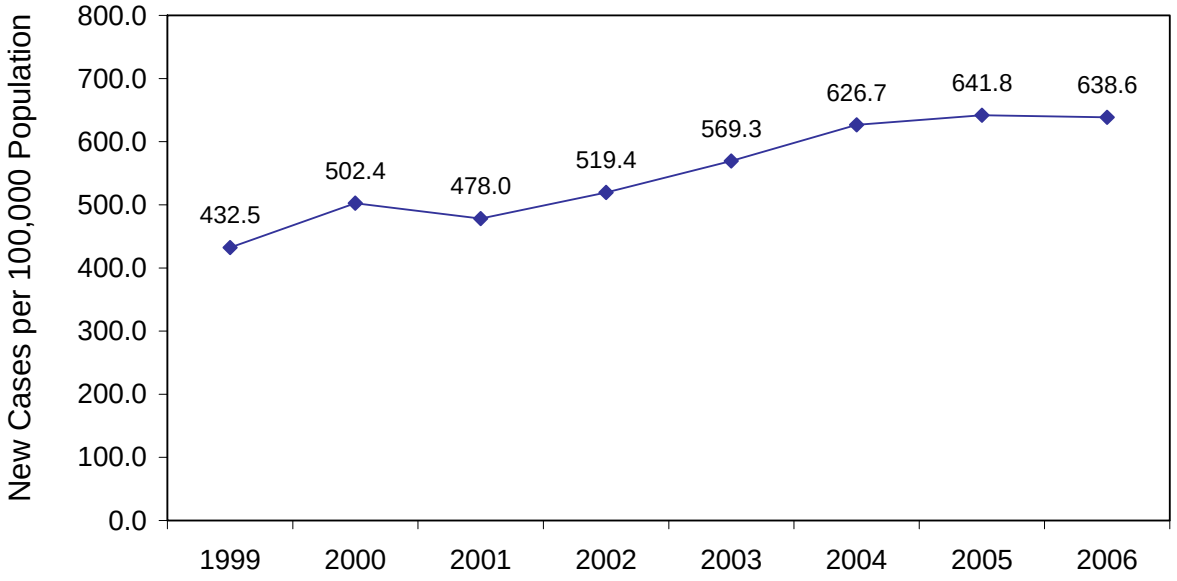
	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	194	13	16	n<5	11	8	8	18	11	22	n<5	17	n<5	23	35	0

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
NOTE: Data for 2006 should be considered preliminary.
DATA SOURCE: Massachusetts Department of Public Health HIV/AIDS Surveillance Program
DATA ANALYSIS: Boston Public Health Commission Research Office

- Preliminary data for 2006 suggests that six Boston neighborhoods have HIV/AIDS incidence rates that exceed the overall Boston rate. Those neighborhoods are Back bay, Jamaica Plain, Mattapan, North Dorchester, Roxbury, and the South End.
- The South End's HIV/AIDS incidence rate is almost four times higher than the Boston rate.

Sexually Transmitted Diseases

Chlamydia Cases by Year: Counts and Incidence Rates, Boston 1999-2006

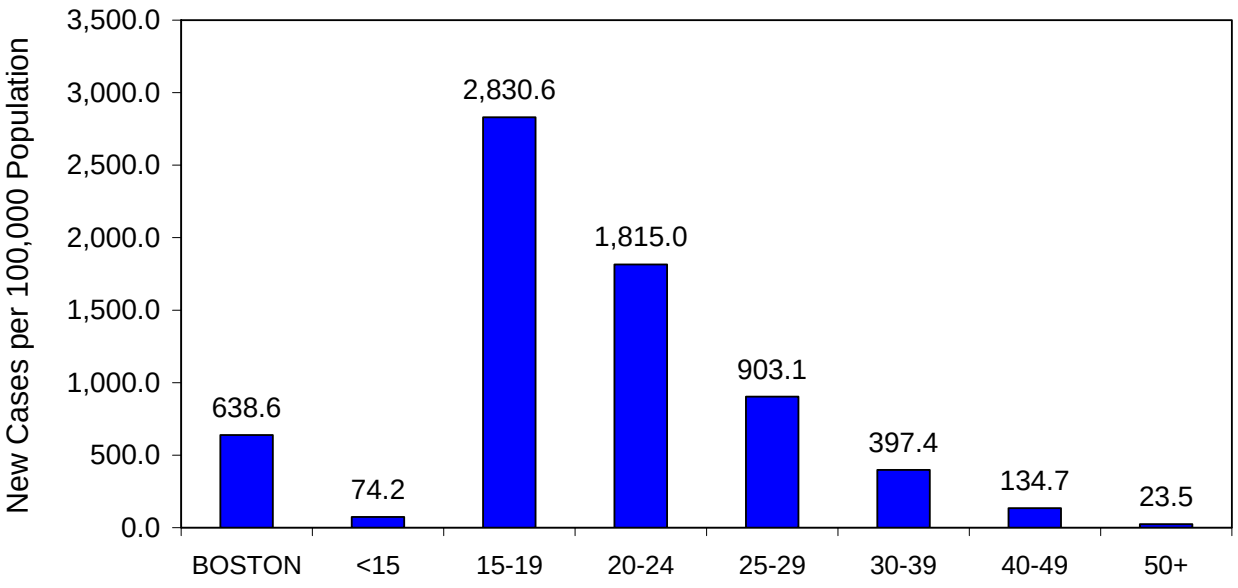


	1999	2000	2001	2002	2003	2004	2005	2006
Count	2,548	2,960	2,816	3,060	3,354	3,692	3,781	3,762

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 and Boston Public Health Commission, Communicable Disease Control 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 increased screening for the condition.
- The incidence rate of chlamydia among Boston residents in 2006 was 47.7% higher than in 1999.

Sexually Transmitted Diseases



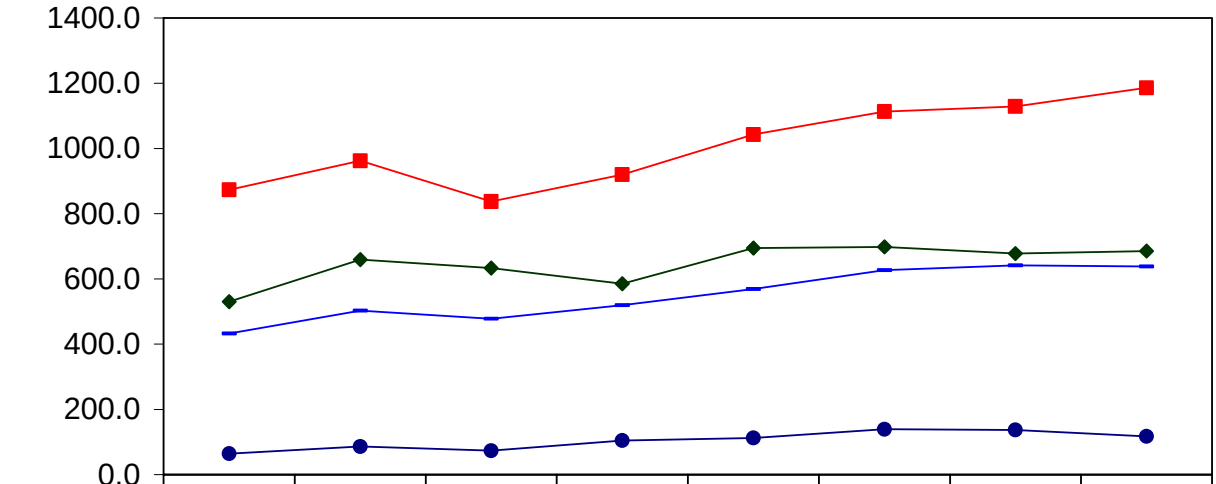
	BOSTON	<15	15-19	20-24	25-29	30-39	40-49	50+
Count	3,762	73	1,235	1,272	615	411	99	31

NOTES: These data do not include persons whose age 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

- Reported chlamydia infection is most common among young people and falls off steeply with increasing age. In 2006, the incidence rate for chlamydia was highest among people ages 15 to 19 for Boston residents.

Sexually Transmitted Diseases

Chlamydia Cases by Race/Ethnicity and Year: Counts and Incidence Rates, Boston, 1999-2006



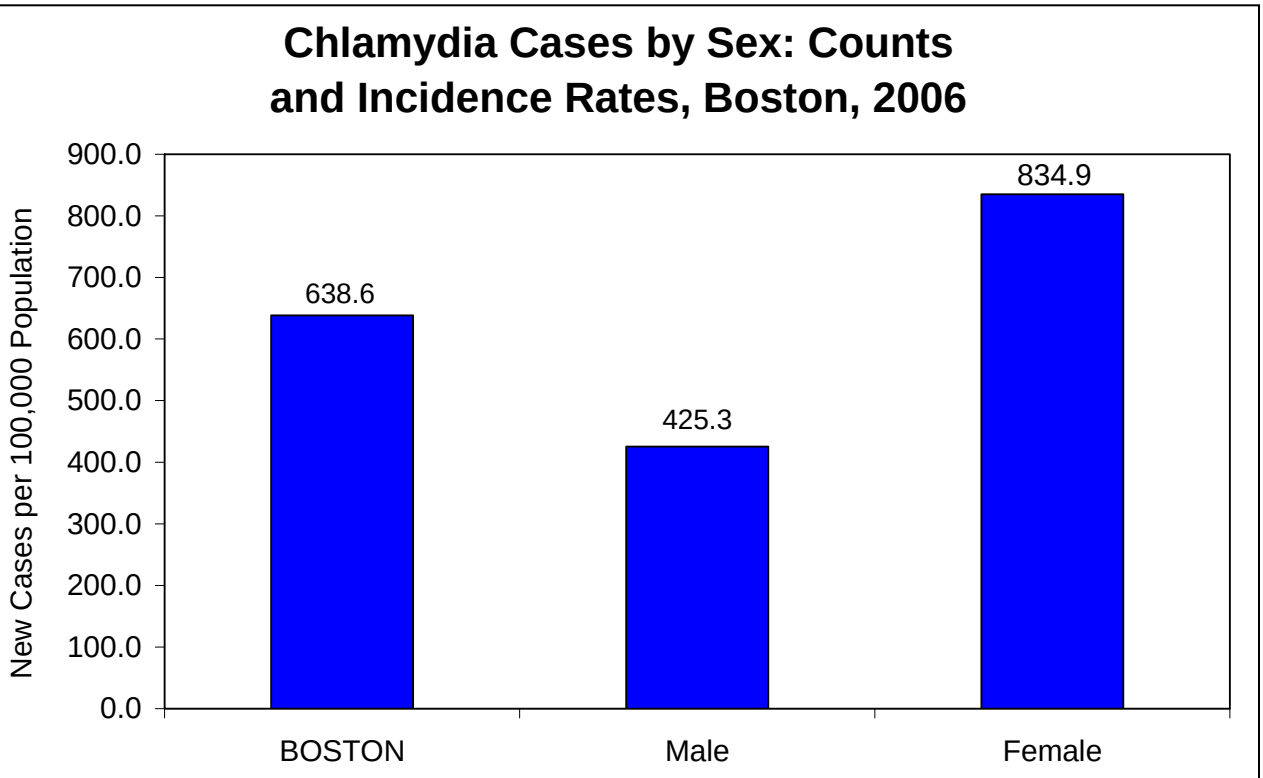
	1999	2000	2001	2002	2003	2004	2005	2006
Black	873.1	962.2	837.5	920.1	1042.7	1113.3	1129.0	1186.0
Latino	530.0	659.3	633.5	585.3	694.6	698.1	678.1	685.2
White	64.1	86.4	73.7	104.3	112.2	139.3	137.2	117.0
BOSTON	432.5	502.4	478.0	519.4	569.3	626.7	641.8	638.6

Count	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Black	1,225	1,350	1,175	1,291	1,463	1,562	1,584	1,664
Latino	451	561	539	498	591	594	577	583
White	187	252	215	304	327	406	400	341
BOSTON	2,548	2,960	2,816	3,060	3,354	3,692	3,781	3,762

NOTES: These data do not include persons of other or unknown race/ethnicity. 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 2006, 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 2006 was higher for all three of these race/ethnicity groups than it was in 1999. Among Blacks, the reported chlamydia rate was 35.8% higher in 2006 than in 1999, among Latinos, 29.3% higher and among Whites, 82.5% higher.

Sexually Transmitted Diseases



	BOSTON	Male	Female
Count	3,762	1,206	2,551

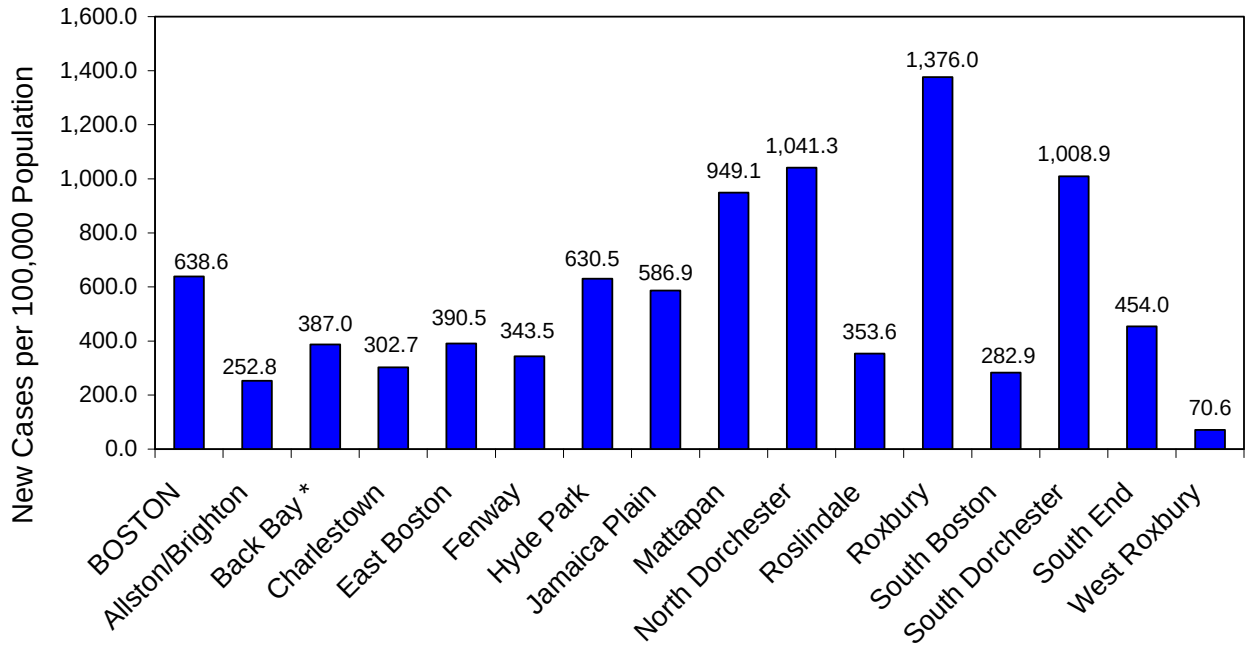
NOTE: These data do not include persons whose sex was not reported, except in the Boston overall count and rate.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2006, 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 females being screened for chlamydia compared to males.

Sexually Transmitted Diseases

Chlamydia Cases by Neighborhood: Counts and Incidence Rates, Boston, 2006



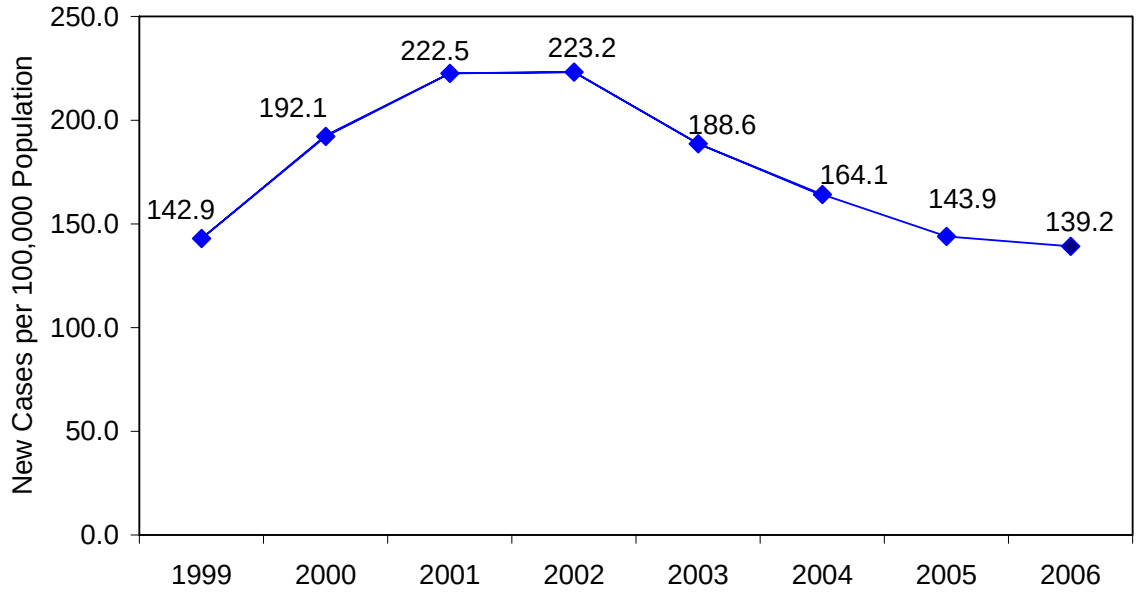
	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	3,762	168	179	46	150	163	179	213	264	611	115	477	85	760	124	17

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 counts and rates.
DATA SOURCE: Massachusetts Department of Public Health, STD Division
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2006, several Boston neighborhoods reported chlamydia incidence rates well above the city average. Roxbury, North Dorchester, and South Dorchester each had rates more than fifty percent higher than the rate for Boston overall.

Sexually Transmitted Diseases

Gonorrhea Cases by Year: Counts and Incidence Rates, Boston, 1999-2006



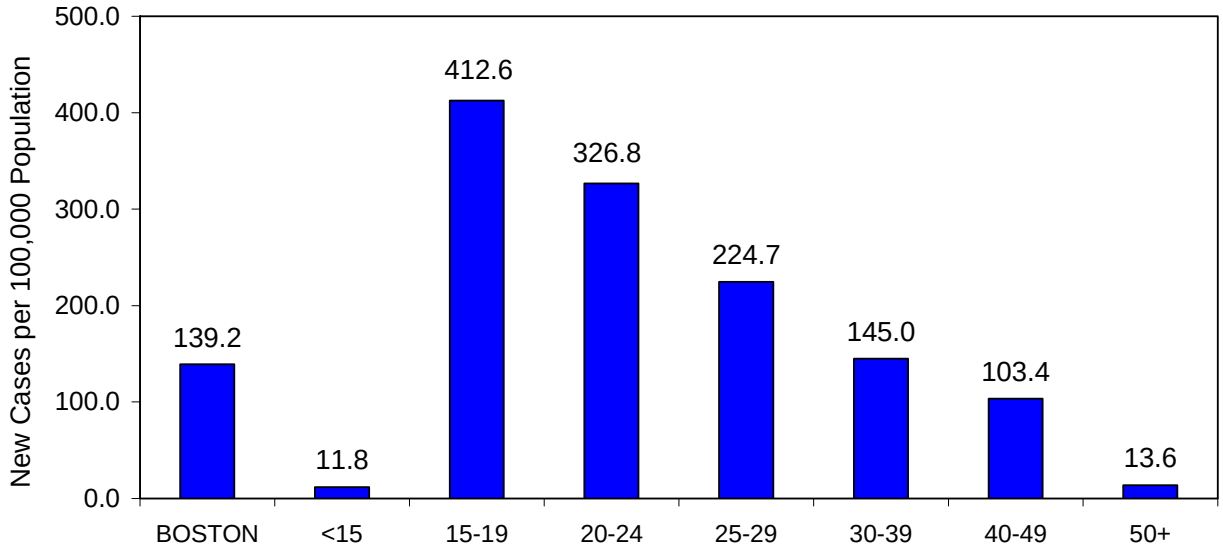
	1999	2000	2001	2002	2003	2004	2005	2006
Count	842	1,132	1,311	1,315	1,111	967	848	820

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 2002.
- After peaking in 2002 with an incidence rate of 223.2 cases per 100,000 population, the incidence rates of gonorrhea have continued to decline over the past four years. The 2006 incidence rate is 3.4% less than it was in 2005 and 37.6% less than it was in 2002.

Sexually Transmitted Diseases

Gonorrhea Cases by Age: Counts and Incidence Rates, Boston, 2006



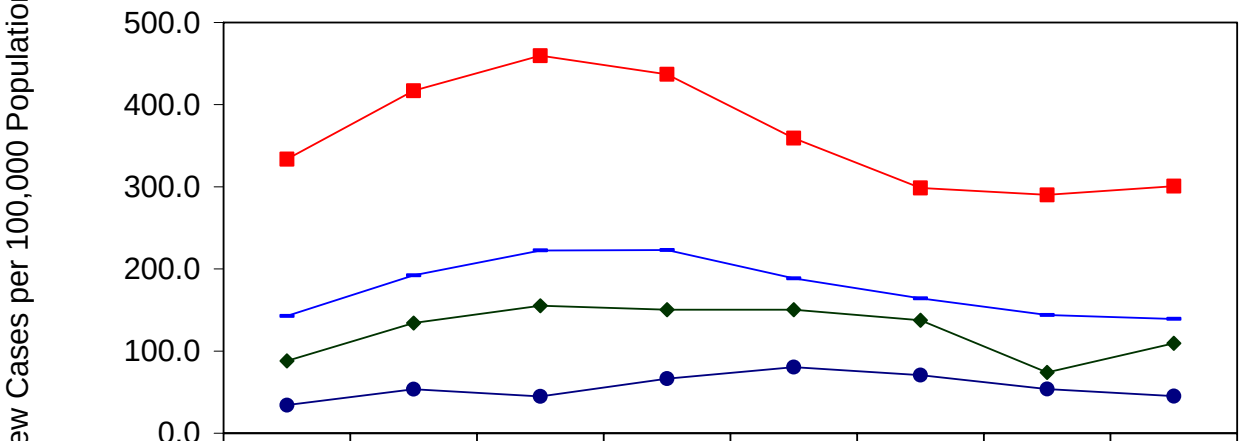
	BOSTON	<15	15-19	20-24	25-29	30-39	40-49	50+
Count	820	9	180	229	153	150	76	18

NOTES: These data do not include persons whose age was not reported, except in the Boston overall count and rate. Incidence rates are presented only for those age groups with at least 5 cases of Gonorrhea.
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 2006 occurred in people under age 25.
- The incidence rate for reported gonorrhea is highest among residents ages 15 to 19 and 20 to 24.

Sexually Transmitted Diseases

Gonorrhea Cases by Race/Ethnicity and Year: Counts and Incidence Rates, Boston, 1999-2006



	1999	2000	2001	2002	2003	2004	2005	2006
Black	333.6	416.9	459.7	436.9	359.2	298.6	290.1	300.8
Latino	88.1	134.0	155.1	150.4	150.4	137.5	74.0	109.3
White	34.3	53.5	44.9	66.5	80.6	70.7	53.8	45.3
BOSTON	142.9	192.1	222.5	223.2	188.6	164.1	143.9	139.2

Count	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Black	468	585	645	613	504	419	407	422
Latino	75	114	132	128	128	117	63	93
White	100	156	131	194	235	206	157	132
BOSTON	842	1,132	1,311	1,315	1,111	967	848	820

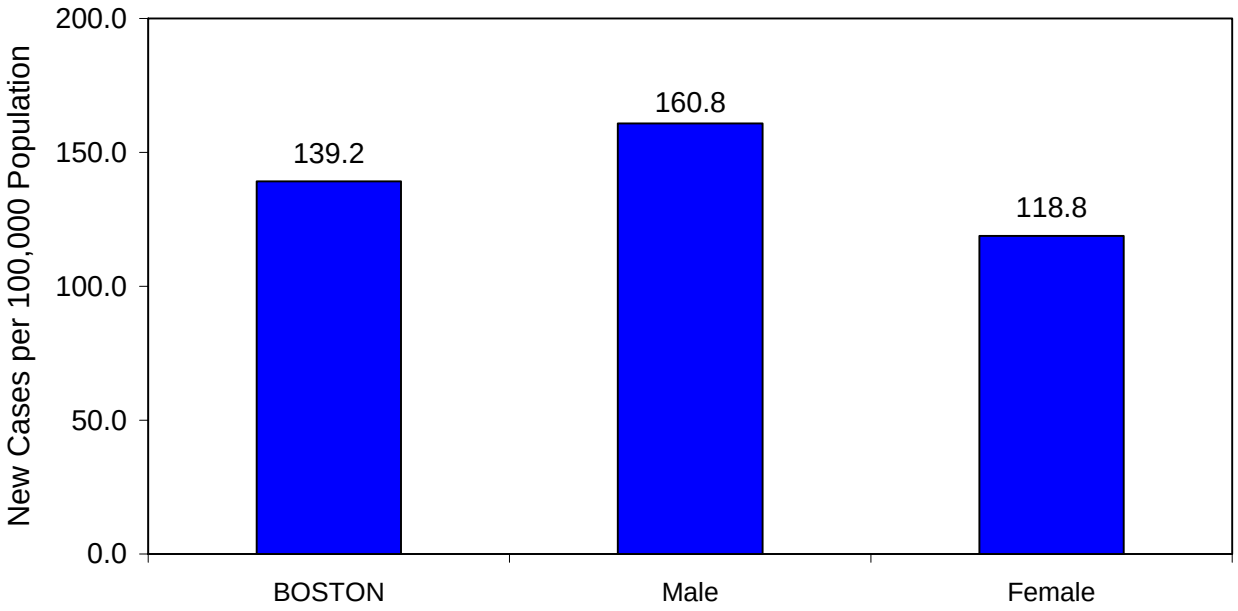
NOTES: These data do not include persons of other or unknown race/ethnicity. There were too few cases of gonorrhea among Asians to permit the presentation of an incidence rate. Rates for previous years may differ from those reported in previous publications due to file updates by the Massachusetts Department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

- From 1999 through 2006, the incidence of gonorrhea varied substantially by race, with the incidence rate for Black residents substantially higher than the incidence rates for Whites and Latinos.

- However, as of 2006, the incidence of gonorrhea in Boston's Black population was 9.8% lower than in 1999. Among Latino Bostonians, the 2006 rate was 24.1% higher than in 1999. The largest difference between 1999 and 2006 rates was that of White residents, whose incidence rate increased 32.1%.

Sexually Transmitted Diseases

Gonorrhea Cases by Sex: Counts and Incidence Rates, Boston, 2006



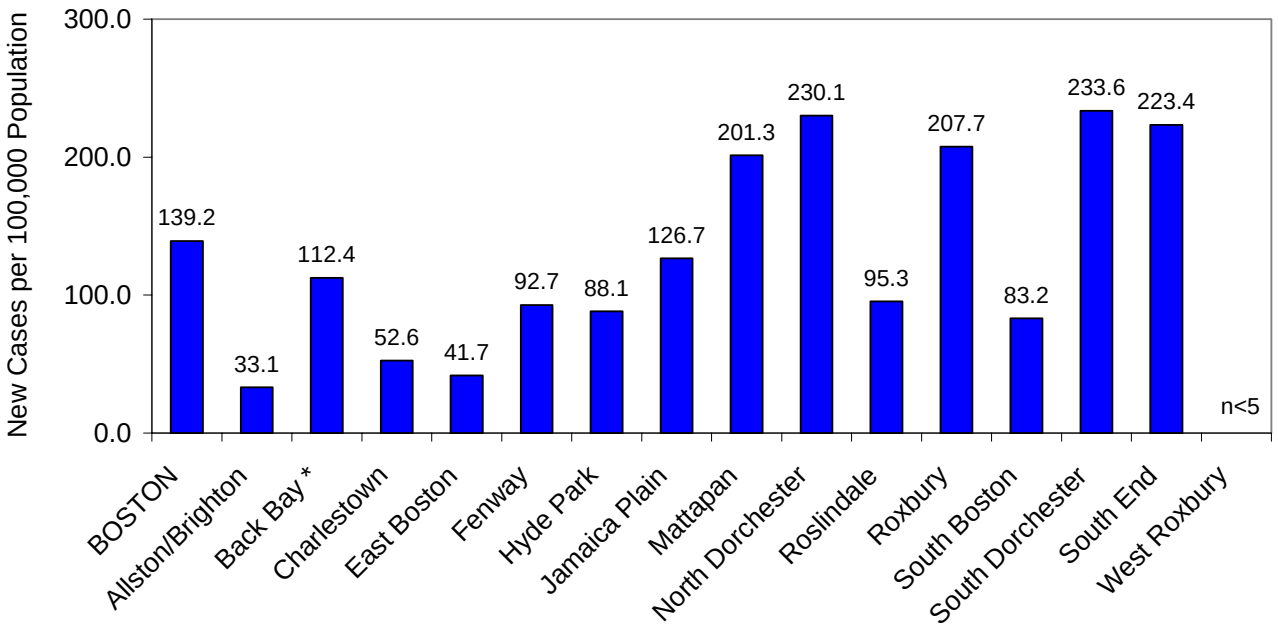
	BOSTON	Male	Female
Count	820	456	363

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

- There is a less pronounced difference by gender in the occurrence of gonorrhea than of chlamydia, with 456 new cases reported in Boston males in 2006 and 363 in Boston females.
- The reported incidence rate for males was 35.4% higher than that for females.

Sexually Transmitted Diseases

Gonorrhea Cases by Neighborhood: Counts and Incidence Rates, Boston, 2006



	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	820	22	52	8	16	44	25	46	56	135	31	72	25	176	61	n<5

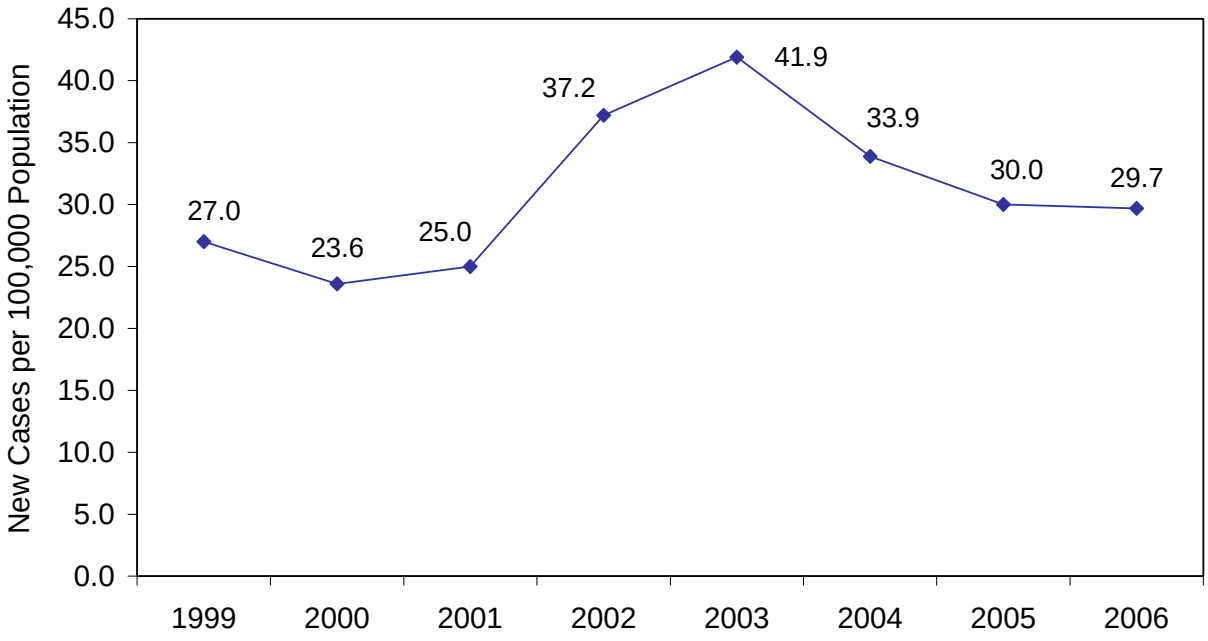
ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
*Includes the North End
NOTE: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

- North and South Dorchester had the city's highest numbers of new cases of gonorrhea in 2006. These numbers are disproportionate to the populations of these neighborhoods. Together, North and South Dorchester contribute 28.0% to Boston's population but they had 37.9% of the new cases of gonorrhea.

- The South End had Boston's third highest rate of gonorrhea in 2006.

Sexually Transmitted Diseases

Syphilis Cases by Year: Counts and Incidence Rates Boston, 1999-2006



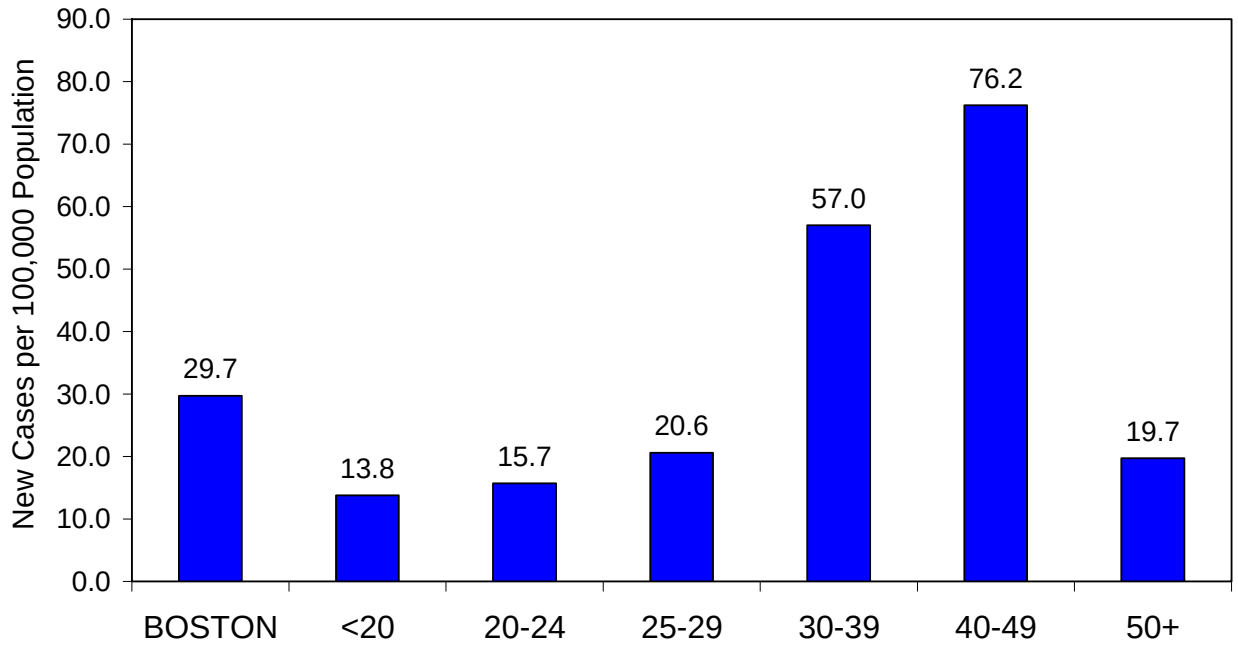
	1999	2000	2001	2002	2003	2004	2005	2006
Count	159	139	147	219	247	200	177	175

*Includes the North End
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 to decline for 2005 and 2006.
- Although between 1999 and 2006, the incidence rate of syphilis among Boston residents increased by 10.0%, the rate declined 29.1% in 2006 from the rate in 2003.
- The peak in syphilis incidence in 2003 was also observed at the state and national level. It is believed to be largely the result of an increase in the number of reported syphilis infections in men who have sex with men.

Sexually Transmitted Diseases

Syphilis Cases by Age: Counts and Incidence Rates, Boston, 2006



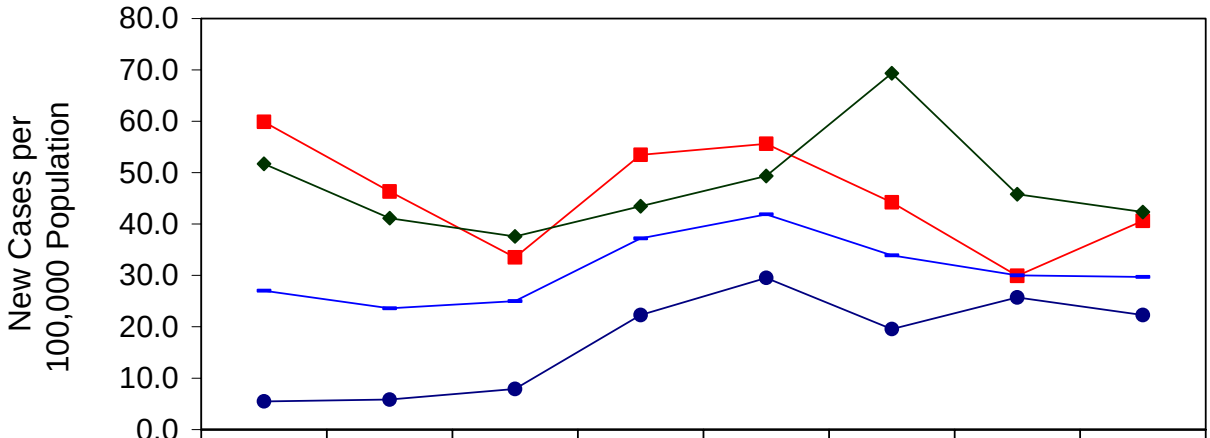
	BOSTON	<20	20-24	25-29	30-39	40-49	50+
Count	175	6	11	14	59	56	26

NOTE: 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

- 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, 1999-2006



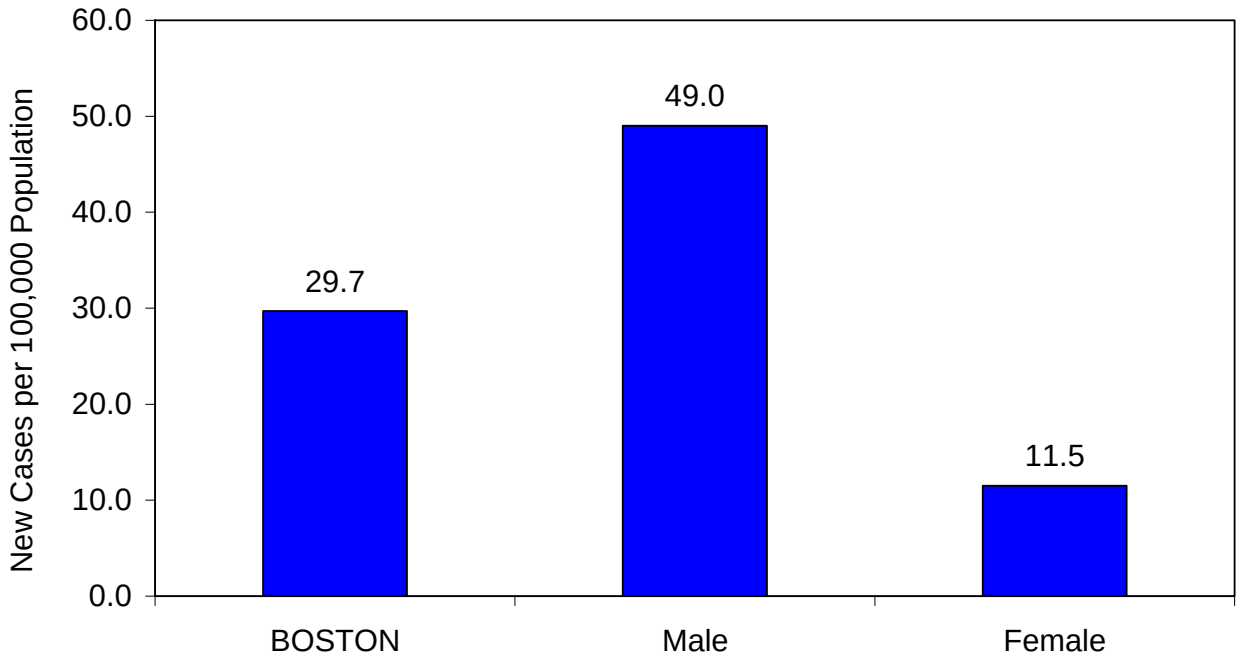
	1999	2000	2001	2002	2003	2004	2005	2006
Black	59.9	46.3	33.5	53.5	55.6	44.2	29.9	40.6
Latino	51.7	41.1	37.6	43.5	49.4	69.3	45.8	42.3
White	5.5	5.8	7.9	22.3	29.5	19.5	25.7	22.3
BOSTON	27.0	23.6	25.0	37.2	41.9	33.9	30.0	29.7

Count	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Black	84	65	47	75	78	62	42	57
Latino	44	35	32	37	42	59	39	36
White	16	17	23	65	86	57	75	65
BOSTON	159	139	147	219	247	200	177	175

NOTES: These data do not include persons of other or unknown race/ethnicity. 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 the incidence rate for Whites.
- The incidence rate for syphilis decreased between 1999 and 2006 for Blacks and Latinos, but increased for Whites.
- Among Black residents, the incidence rate of syphilis in 2006 was 32.3% lower than in 1999. Among Latinos, the syphilis incidence rate in 2006 was 18.2% lower than it was in 1999.
- The syphilis incidence rate for Whites increased approximately 305.5% from 1999 to 2006.

Sexually Transmitted Diseases



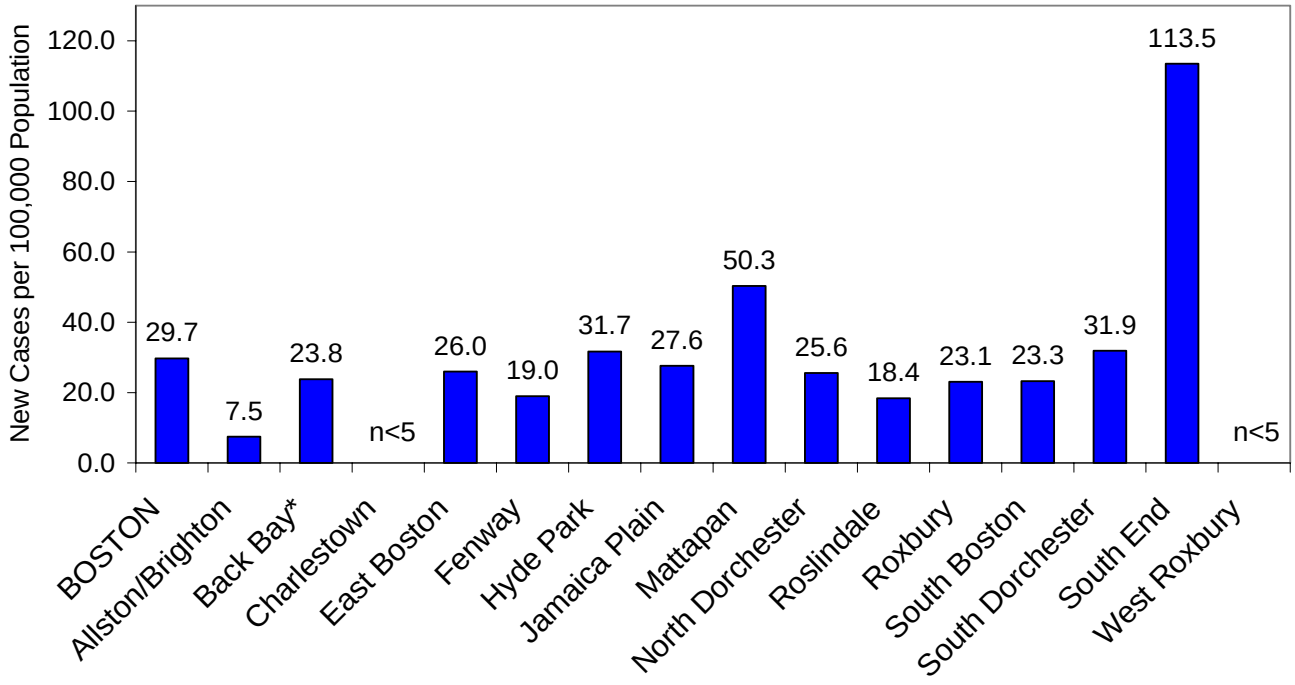
	BOSTON	Male	Female
Count	175	139	35

NOTES: These data do not include persons whose sex was not reported, except in the Boston overall count and rate. 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 2006, the rate of syphilis in males was over 4 times that of females.

Sexually Transmitted Diseases

Syphilis Cases by Neighborhood: Counts and Incidence Rates, Boston, 2006

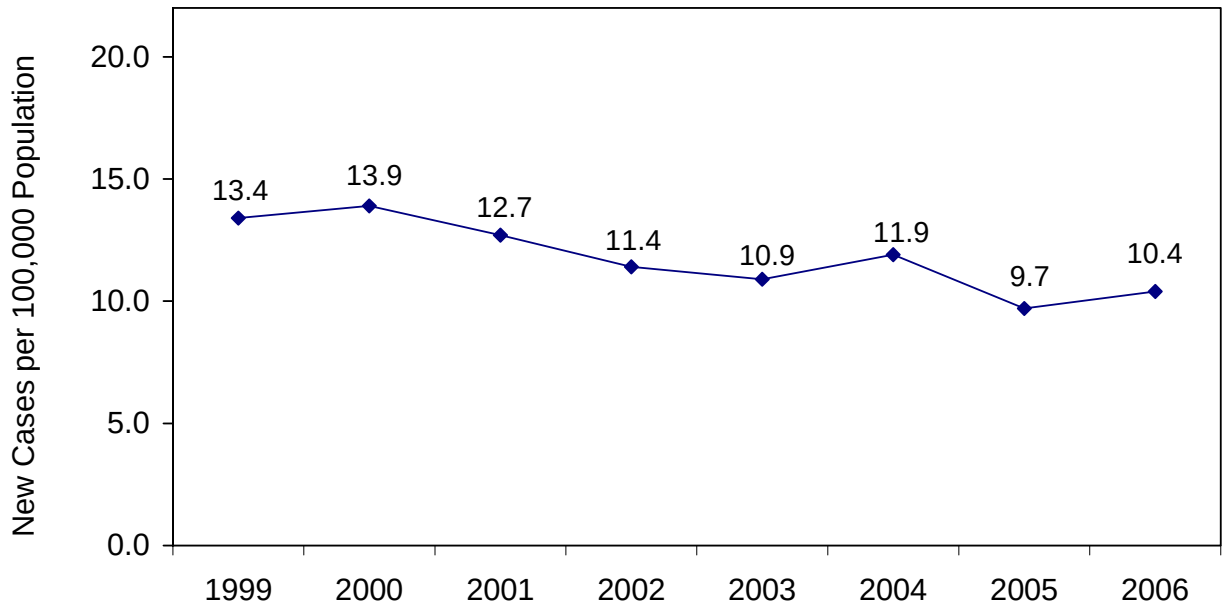


	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	175	5	11	n<5	10	9	9	10	14	15	6	8	7	24	31	n<5

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, inmates of correctional facilities, and clients of drug treatment programs, except in the Boston overall counts and rates. 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 2006, 3.8 times the overall city rate.
- Other neighborhoods with rates higher than Boston's in 2006 were Hyde Park, South Dorchester, and Mattapan.

Tuberculosis

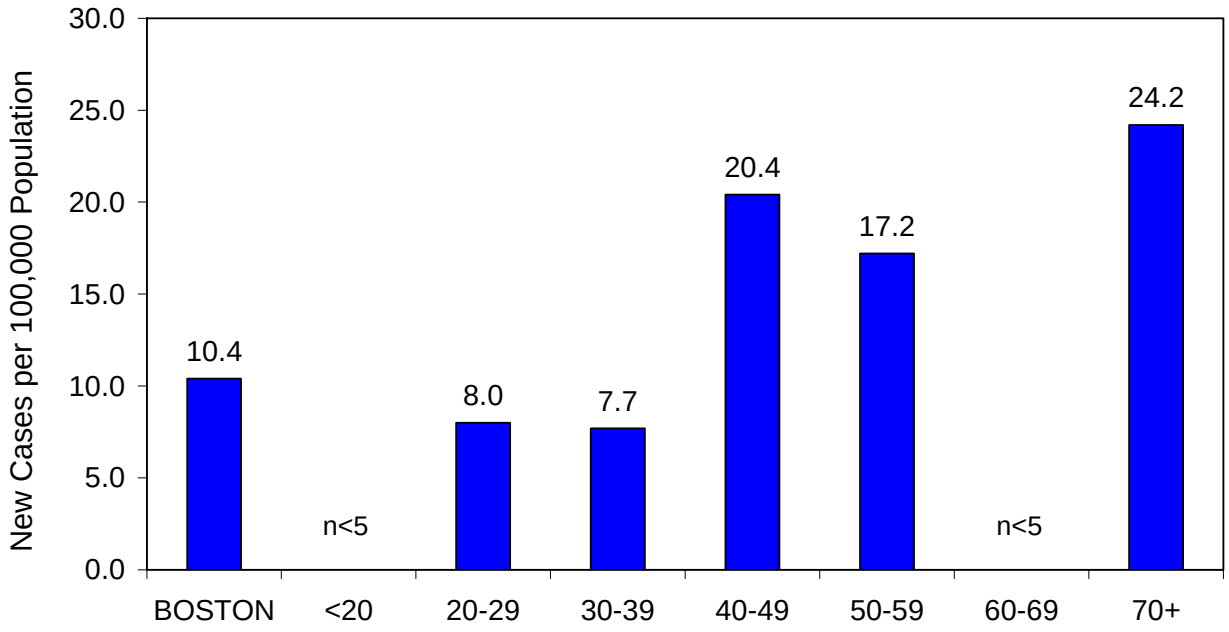


	1999	2000	2001	2002	2003	2004	2005	2006
Count	77	82	75	67	64	70	57	61

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 reported tuberculosis incidence rate for Boston residents increased 7.2% from 2005 to 2006. However, between 1999 and 2006, the rate declined 22.4%.

Tuberculosis

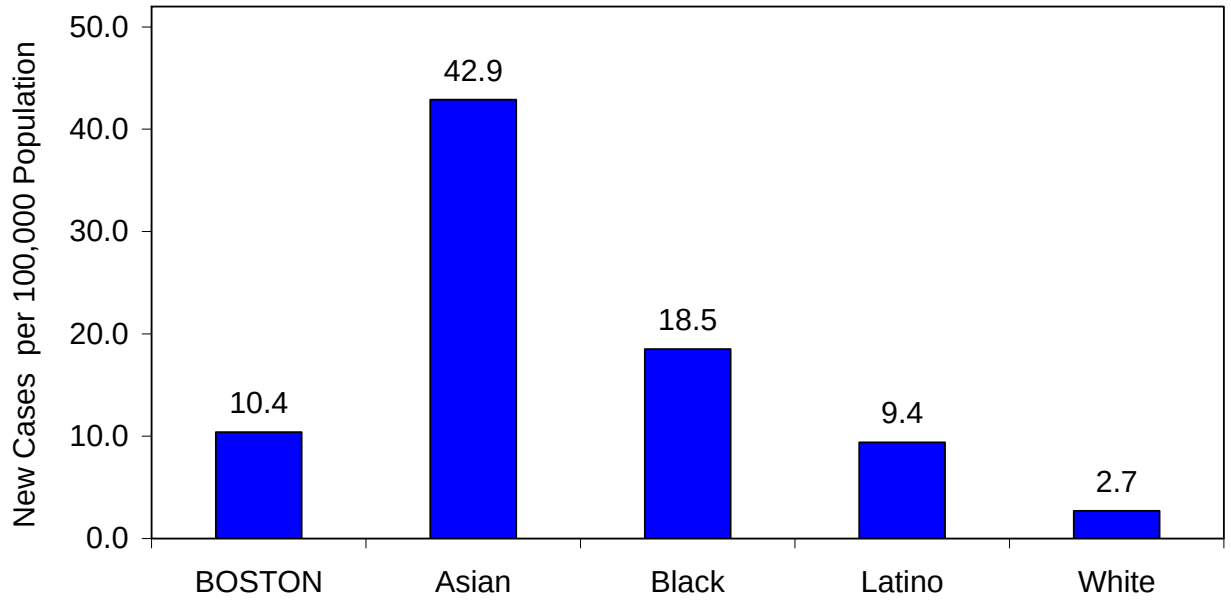


	BOSTON	<20	20-29	30-39	40-49	50-59	60-69	70+
Count	61	n<5	11	8	15	9	n<5	11

NOTE: Incidence rates are presented only for those age groups 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
GRAPHIC: Boston Public Health Commission Research Office

- In 2006, the highest incidence rate of reported tuberculosis was among Boston residents ages 70 and over, whose rate was 2.3 times that of Boston overall. However, the highest number of new cases continues to occur among people ages 40-49 years.

Tuberculosis

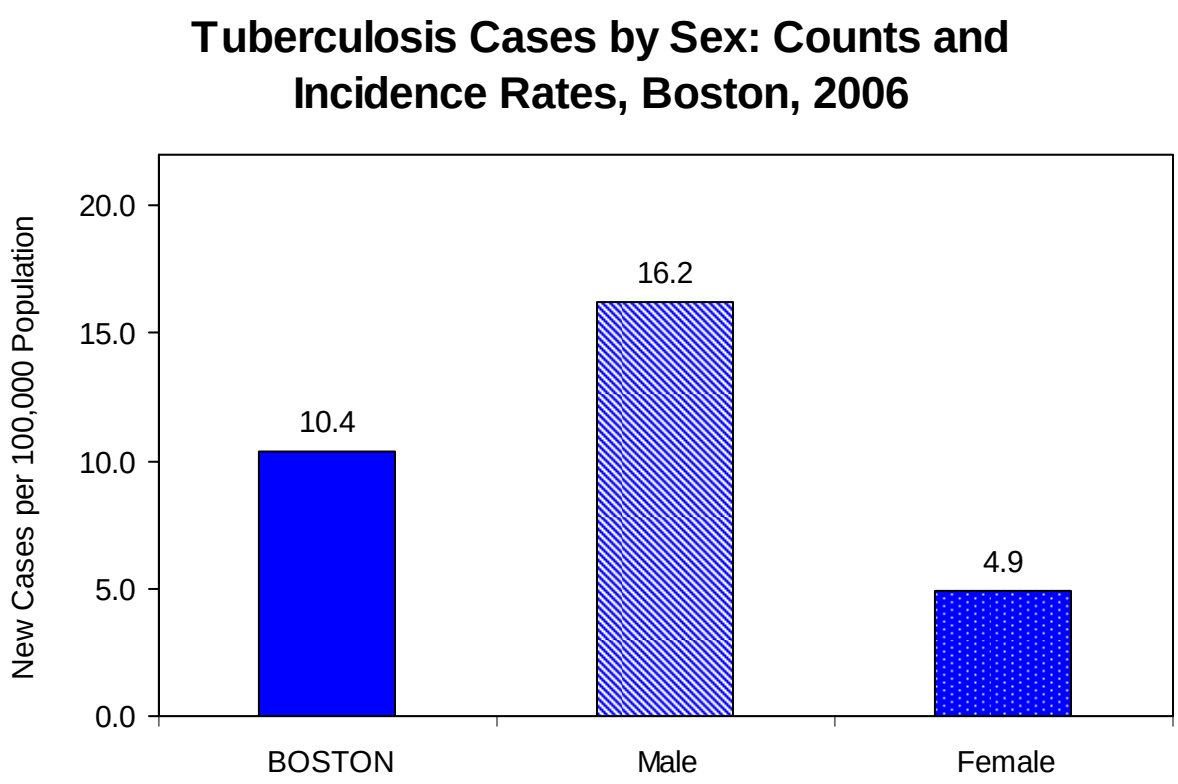


	BOSTON	Asian	Black	Latino	White
Count	61	19	26	8	8

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 2006, the highest incidence rate of reported tuberculosis was among Asian Boston residents whose rate was 4.1 times that of Boston overall. Black Bostonians had a rate 1.8 times that of the overall Boston rate and the highest number of new tuberculosis cases in 2006.
- Differences in rates across racial/ethnic groups may be related to immigration of individuals from countries with high rates of tuberculosis.

Tuberculosis

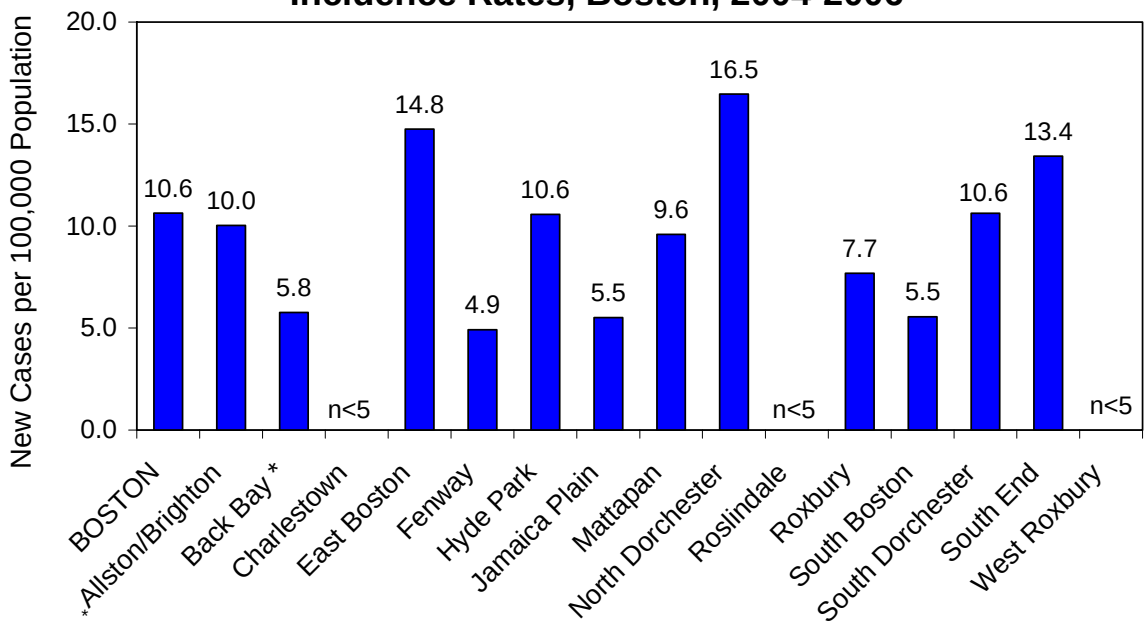


	BOSTON	Male	Female
Count	61	46	15

NOTE: These data do not include persons whose sex was not reported, except in the Boston overall count and rate.
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 of reported tuberculosis was 3.3 times higher for Boston males than Boston females in 2006.

Tuberculosis



	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	188	20	8	n<5	17	7	9	6	8	29	n<5	8	5	24	11	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 counts and rates.
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

- During 2004-2006, the highest incidence rates of reported tuberculosis among Boston neighborhoods were in East Boston, North Dorchester, and the South End. These rates may in part be related to immigration of individuals from countries with high rates of tuberculosis.

- North Dorchester had the highest tuberculosis incidence rate, 1.6 times as high as the overall Boston rate.

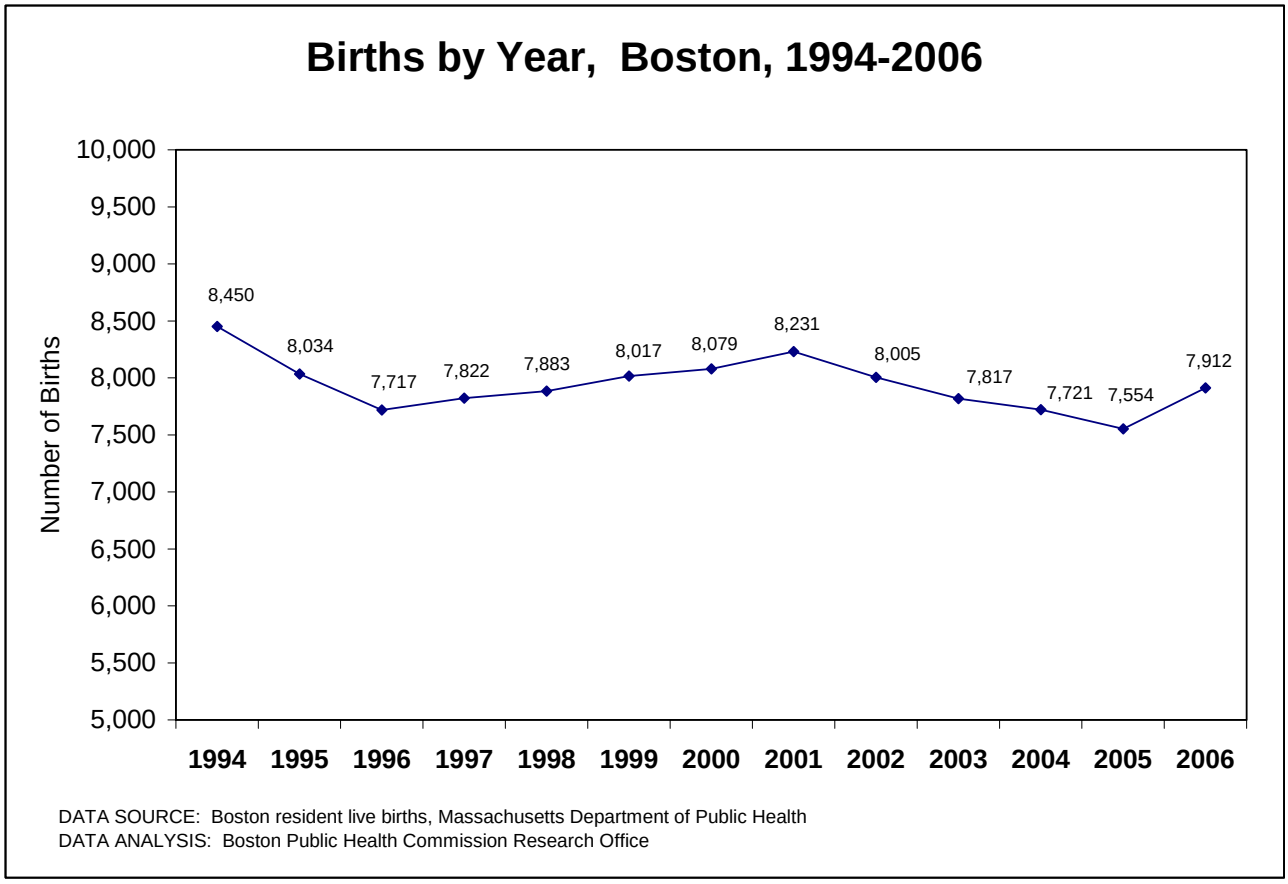
Other Communicable Diseases

Reportable Diseases: Counts, Boston, 2002-2006											
	2002	2003	2004	2005	2006		2002	2003	2004	2005	2006
AIDS	185	169	145	139	124	Lyme Disease	48	31	39	72	49
Amebiasis	52	34	25	21	19	Malaria	12	n<5	8	n<5	6
Animal Bites	n/a	513	468	463	425	Measles	0	0	0	0	5
Anthrax	0	0	0	0	0	Meningitis (Bacterial)	n<5	5	n<5	10	n<5
Babesiosis	n<5	n<5	n<5	n<5	n<5	Meningitis (Viral)	27	26	61	42	40
Botulism	0	0	0	0	0	Meningococcal Disease	6	n<5	7	5	n<5
Brucellosis	0	0	n<5	n<5	n<5	Monkeypox	0	0	0	0	0
Campylobacteriosis	151	162	118	130	111	Mumps	n<5	0	n<5	4	0
Chlamydia	3,061	3,363	3,693	3,780	3,762	Pertussis	26	97	114	88	109
Cholera	0	0	0	0	0	Plague	0	0	0	0	0
Cryptococcosis*	n<5	n<5	n<5	n<5	6	Polio	0	0	0	0	0
Cryptosporidium	12	9	14	n<5	11	Prion Disease (Human)	0	0	0	0	0
Cyclosporiasis	n<5	0	0	8	0	Psittacosis	0	0	n<5	0	0
Dengue fever	0	n<5	n<5	7	7	Q Fever	0	n<5	0	n<5	0
Diphtheria	0	0	0	0	0	Rabies in Humans	0	0	0	0	0
Ehrlichiosis	n<5	0	n<5	n<5	0	Reye Syndrome	0	0	0	0	0
Encephalitis (Any Cause)	n<5	5	n<5	5	n<5	Rheumatic Fever	0	0	0	0	0
Escherichia coli 0157:H7	9	10	8	10	5	Rickettsialpox	0	n<5	n<5	0	n<5
Food Poisoning or Toxicity**	n<5	n<5	n<5	n<5	n<5	Rocky Mountain Spotted Fever	0	0	n<5	n<5	0
Giardiasis	129	111	121	84	79	Rubella	0	0	0	0	0
Gonorrhea	1,315	1,112	964	847	820	Salmonella	161	165	129	144	131
Group A Streptococcus*	0	0	0	15	21	SARS	0	0	0	0	0
Group B Streptococcus*	5	12	27	18	28	Shigella	50	58	43	33	27
Guillain Barré Syndrome	0	0	n<5	0	n<5	Smallpox	0	0	0	0	0
Haemophilus Influenzae	n<5	5	5	n<5	5	Streptococcus Pneumoniae*	18	29	50	61	83
Hantavirus Infection	0	0	0	0	0	Syphilis***	220	248	194	176	175
Hemolytic Uremic Syndrome	0	n<5	0	n<5	n<5	Tetanus	0	0	0	0	0
Hepatitis A Infection	29	25	132	32	12	Toxic Shock Syndrome	0	0	n<5	0	0
Hepatitis B Infection (Acute)	16	20	15	n<5	7	Toxoplasmosis	n<5	0	n<5	n<5	n<5
Hepatitis B Infection (Chronic)	458	449	477	402	377	Trichinosis	0	0	0	0	0
Hepatitis C Infection	1,087	933	1,291	897	759	Tuberculosis	67	64	70	57	61
Hepatitis (Infectious, Other)	0	0	n<5	0	n<5	Tularemia	0	0	n<5	n<5	0
HIV Infection	184	156	166	177	127	Typhoid Fever	n<5	n<5	0	n<5	0
Influenza (Laboratory Confirmed)	0	298	290	408	363	Varicella (Chickenpox)	60	25	108	131	108
Legionellosis	5	6	6	11	13	Viral Hemorrhagic Fever	0	0	0	0	0
Leprosy	n<5	n<5	n<5	n<5	n<5	West Nile Virus Infection	5	n<5	0	n<5	0
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 and secondary ones
DATA SOURCE: Communicable Disease Database, 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 2002 and 2006 for each of these diseases is shown in the table on the previous page.
- The most commonly reported communicable diseases in Boston are the sexually transmitted infections chlamydia, gonorrhea, and hepatitis C, as well as and chronic hepatitis B infection.
- Apart from the sexually transmitted infections, the common hepatitis types, and HIV/AIDS, the most reported infections are influenza, salmonella, pertussis and varicella (chicken pox).
- More than half of the reportable diseases, however, are very rare in Boston and had fewer than five cases in 2006.

Natality



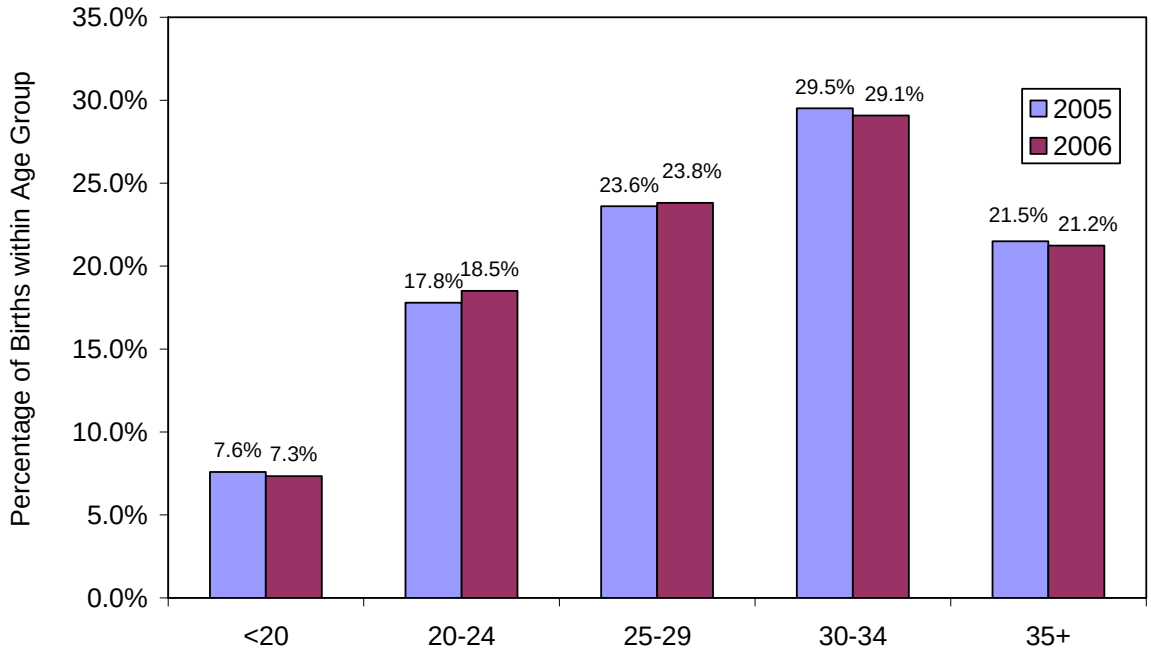
- The number of births to Boston residents showed an increase in 2006 for the first time in the most recent four years. The number of births in 2006 was a 4.7% increase from 2005.

- After a decline from 1994 to 1996, Boston births began climbing, returning in 2001 to almost the number of births in 1994. However, between 2001 and 2005, the number of Boston births fell 8.2%

- Overall, between 1994 and 2006, the number of Boston births fell 6.4%, despite an annual increase in births between 1996 and 2001 and between 2005-2006.

Natality

Births by Maternal Age: Counts and Percentage Distribution, Boston, 2005 and 2006



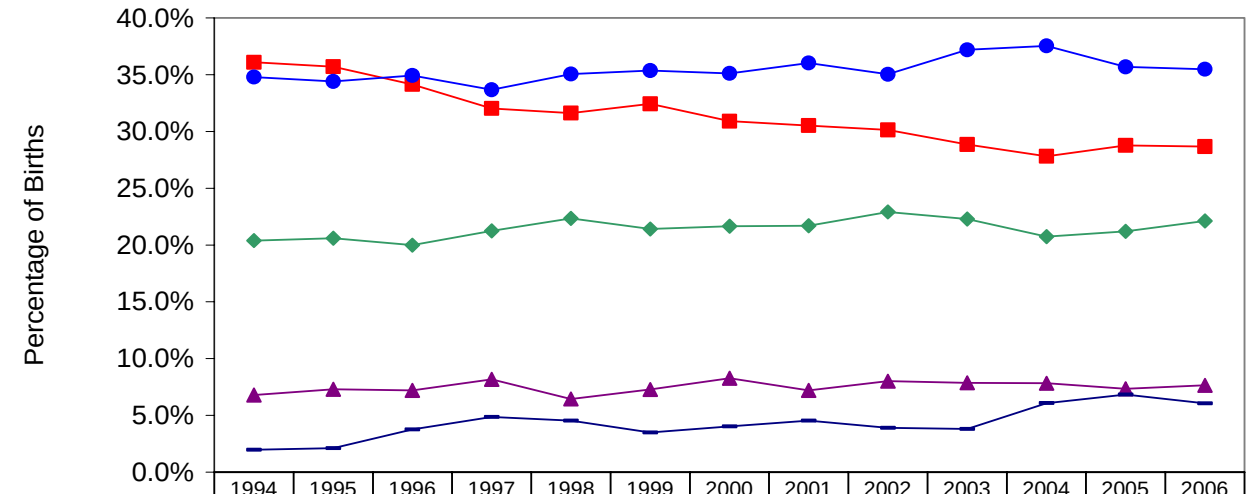
Count	<20	20-24	25-29	30-34	35+
2005	573	1,344	1,783	2,230	2,301
2006	581	1,465	1,884	2,301	1,681

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 Boston women who gave birth in 2005 and 2006, about half were women ages 30 and over. In 2005, one in every thirteen births was to a Boston female less than twenty years of age, decreasing to one in fourteen births in 2006.
- From 2005 to 2006, the percentage of births within age groups 20-24, and 25-29 increased.

Natality

Births by Race/Ethnicity and Year: Counts and Percentage Distribution, Boston 1994-2006



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Asian	6.8%	7.3%	7.2%	8.2%	6.4%	7.3%	8.3%	7.2%	8.0%	7.9%	7.8%	7.3%	7.6%
Black	36.1%	35.7%	34.1%	32.0%	31.6%	32.4%	30.9%	30.5%	30.1%	28.9%	27.8%	28.8%	28.7%
Latino	20.4%	20.6%	20.0%	21.2%	22.3%	21.4%	21.7%	21.7%	22.9%	22.3%	20.7%	21.2%	22.1%
White	34.8%	34.4%	34.9%	33.7%	35.1%	35.4%	35.1%	36.0%	35.0%	37.2%	37.5%	35.7%	35.5%
Other/Unknown	2.0%	2.1%	3.8%	4.9%	4.5%	3.5%	4.0%	4.5%	3.9%	3.8%	6.1%	6.8%	6.1%

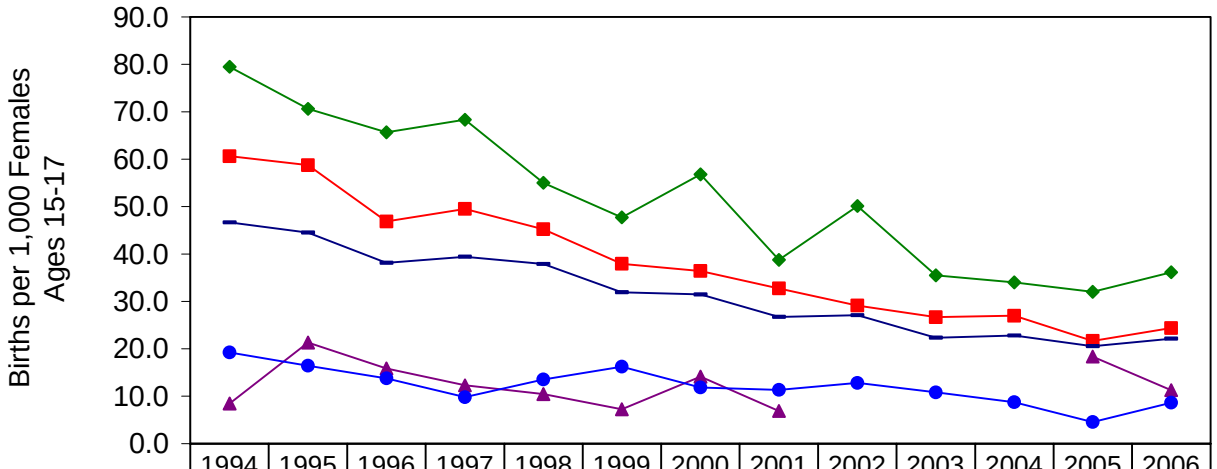
Count	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Asian	570	580	555	640	508	584	668	593	642	615	604	554	605
Black	3,035	2,850	2,635	2,506	2,493	2,601	2,498	2,512	2,412	2,256	2,148	2,173	2,269
Latino	1,715	1,646	1,542	1,662	1,761	1,716	1,750	1,786	1,834	1,742	1,601	1,602	1,750
White	2,925	2,746	2,696	2,634	2,764	2,835	2,837	2,966	2,804	2,907	2,898	2,696	2,807
Other/Unknown	166	170	290	380	357	281	326	374	313	297	470	516	480
BOSTON	8,450	8,034	7,717	7,822	7,883	8,017	8,079	8,231	8,005	7,817	7,721	7,554	7,912

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 2006, 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 2006 than in 1994 but lower for Black women.

Natality

Births Among Adolescents Ages 15-17 by Race/Ethnicity and Year: Counts and Rates, Boston, 1994-2006



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Asian	8.5	21.3	15.9	12.3	10.5	7.3	14.1	6.9	--	--	--	18.3	11.3
Black	60.7	58.8	46.9	49.5	45.2	37.9	36.4	32.7	29.1	26.7	27.0	21.7	24.4
Latino	79.5	70.6	65.7	68.3	55.0	47.7	56.8	38.8	50.1	35.5	34.0	32.0	36.2
White	19.2	16.4	13.8	9.8	13.5	16.2	11.8	11.3	12.8	10.8	8.7	4.5	8.6
BOSTON	46.6	44.5	38.1	39.4	37.9	31.9	31.5	26.7	27.1	22.3	22.8	20.5	22.1

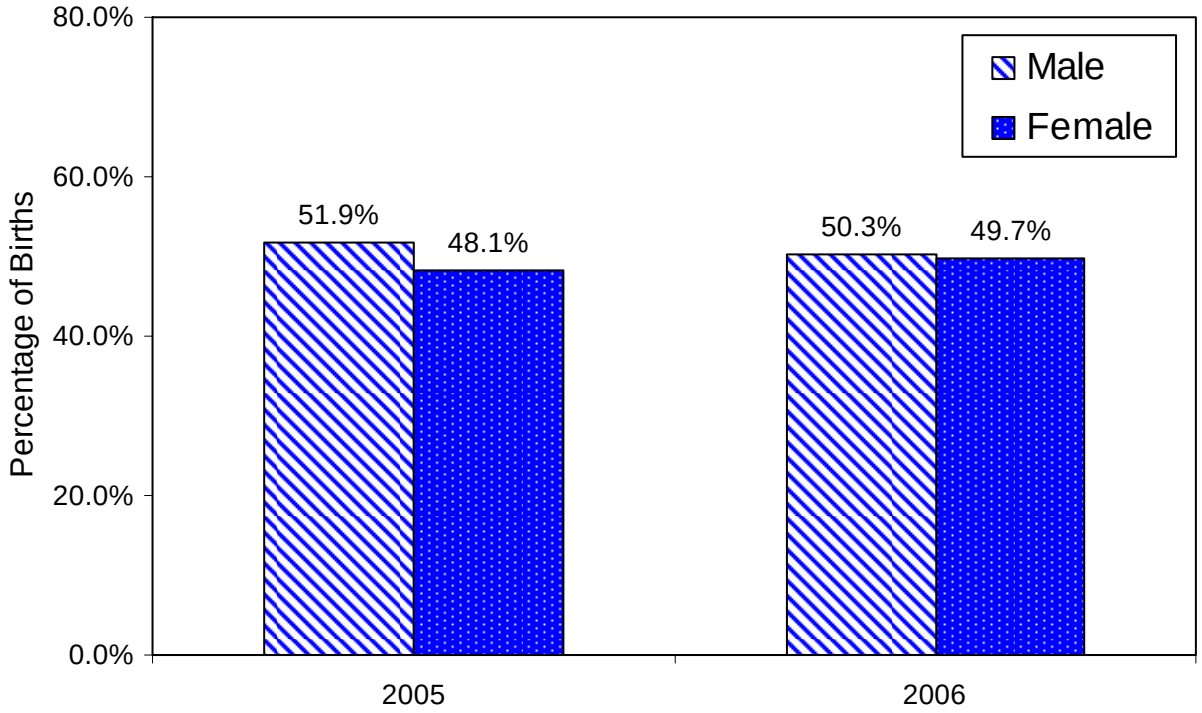
Count	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Asian	5	13	10	8	7	5	10	5	n<5	n<5	n<5	13	8
Black	200	194	155	164	150	126	121	109	97	89	90	72	81
Latino	130	119	114	122	101	90	110	77	102	74	71	62	70
White	52	43	35	24	32	37	26	24	26	21	17	10	19
BOSTON	390	373	320	331	319	269	279	237	241	199	203	182	196

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 2006 for adolescents ages 15-17 was similar to the national rate of 22 per 1,000 females for this age group.
- The Boston adolescent birth rate has steeply declined over the past 13 years, falling 52.6% from 1994 to 2006; however between 2005 and 2006 an increase in adolescent birth rates occurred for all race/ethnicities, except for Asians who experienced a decrease.
- Adolescent birth rates continue to be substantially higher for Latinas and Blacks than for Whites and Asians.

Natality

Births By Sex: Counts and Percentage Distribution, Boston, 2005 and 2006



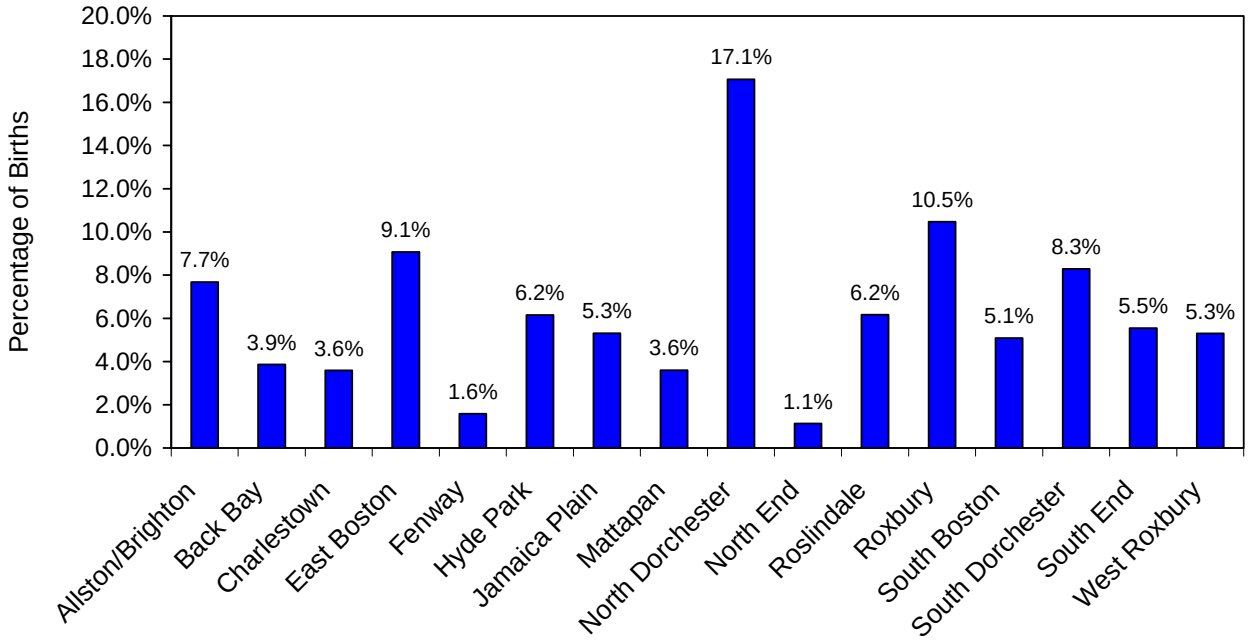
Count	Male	Female
2005	3,917	3,976
2006	3,637	3,936

NOTE: These data dot no 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 2006, although about half of Boston births in which the baby's sex was reported were male infants, this was slightly less than in 2005.
- From 2005 to 2006, female infant births increased slightly by 1.6%.

Natality

Births to Women Ages 15-44 by Neighborhood: Counts and Percentage Distribution, Boston, 2006



	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	607	306	284	718	125	487	420	285	1,350	89	488	829	403	656	439	419

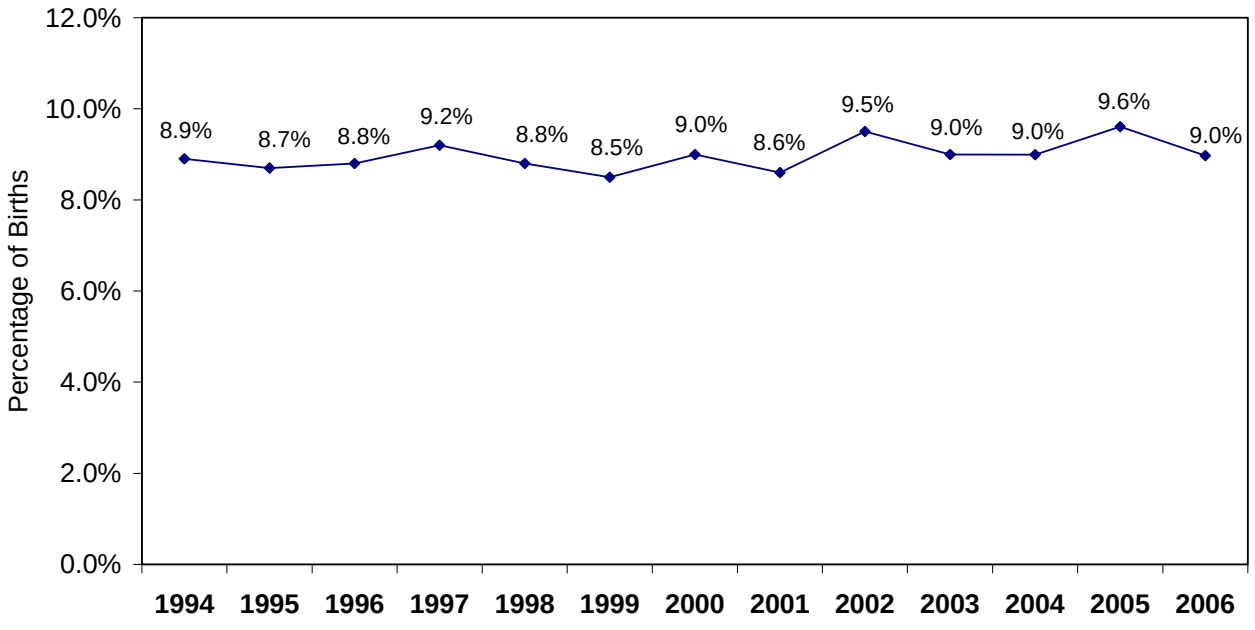
NOTES: Counts and percentage distributions include women between the ages of 15-44 only. These data do not include homeless persons or individuals whose neighborhood of residence was not reported.
ABBREVIATIONS KEY: A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde 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 17.1% of the city's births in 2006. Allston/Brighton, conversely, with 15.0% of the childbearing population, had 7.7% 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, 1994-2006



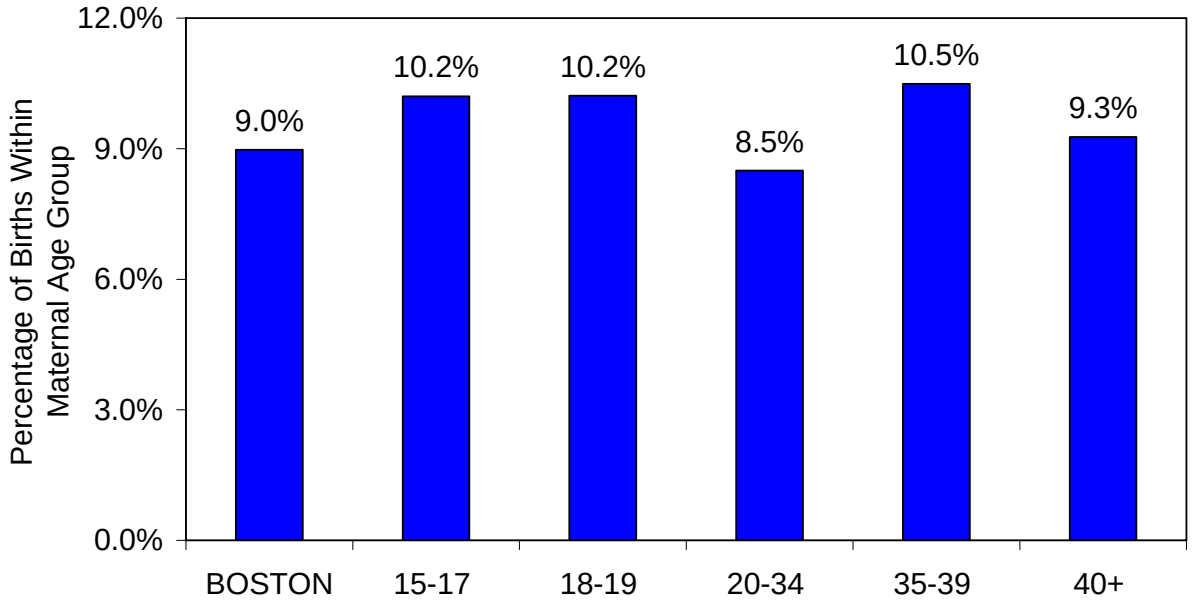
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Count	745	695	681	719	694	679	727	703	761	699	694	726	710

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 1994 and 2006, Boston's rate of low birthweight was relatively stable, fluctuating only between 8.5% and 9.6% of all births.
- In 2005, approximately one in ten births was low birthweight and in 2006 this decreased to one in eleven births.

Natality

Low Birthweight by Age of Mother: Counts and Percentages of Births, Boston, 2006



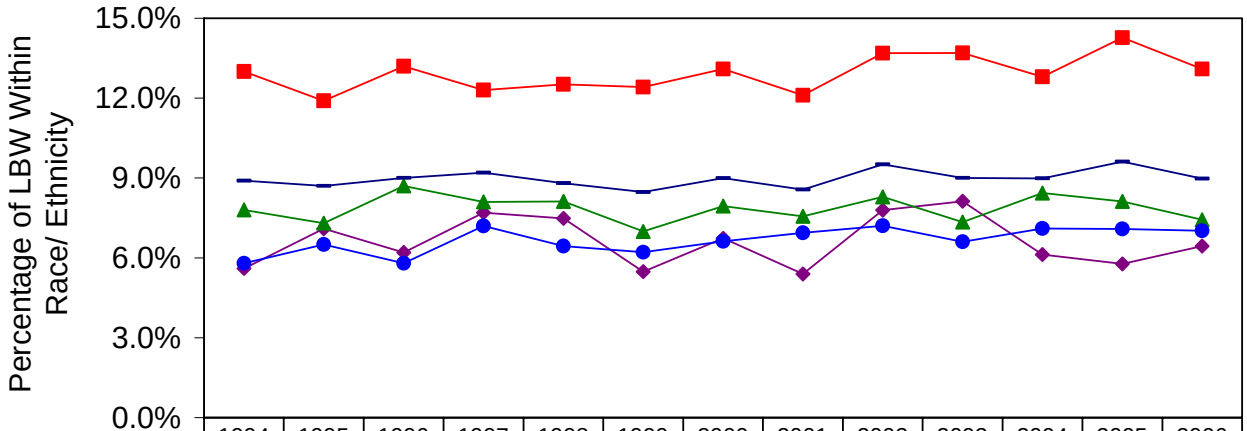
	BOSTON	15-17	18-19	20-34	35-39	40+
Count	710	20	38	480	139	33

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

- In Boston, in 2006, low birthweight was highest in births to women 35-39 years old and to women less than 20 years old.

Natality

Low Birthweight by Race/Ethnicity and Year: Counts And Percentages of Births, Boston, 1994-2006



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Asian	5.6%	7.1%	6.2%	7.7%	7.5%	5.5%	6.7%	5.4%	7.8%	8.1%	6.1%	5.8%	6.4%
Black	13.0%	11.9%	13.2%	12.3%	12.5%	12.4%	13.1%	12.1%	13.7%	13.7%	12.8%	14.3%	13.1%
Latino	7.8%	7.3%	8.7%	8.1%	8.1%	7.0%	7.9%	7.6%	8.3%	7.3%	8.4%	8.1%	7.4%
White	5.8%	6.5%	5.8%	7.2%	6.4%	6.2%	6.6%	6.9%	7.2%	6.6%	7.1%	7.1%	7.0%
BOSTON	8.9%	8.7%	9.0%	9.2%	8.8%	8.5%	9.0%	8.6%	9.5%	9.0%	9.0%	9.6%	9.0%

Count	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Asian	32	41	34	49	38	32	45	32	50	51	37	32	39
Black	395	338	346	308	312	323	327	304	330	309	275	310	297
Latino	134	120	133	135	143	120	139	135	152	128	135	130	130
White	170	178	154	188	178	176	188	206	202	192	206	191	197
BOSTON	745	695	681	719	692	679	726	703	761	699	694	726	710

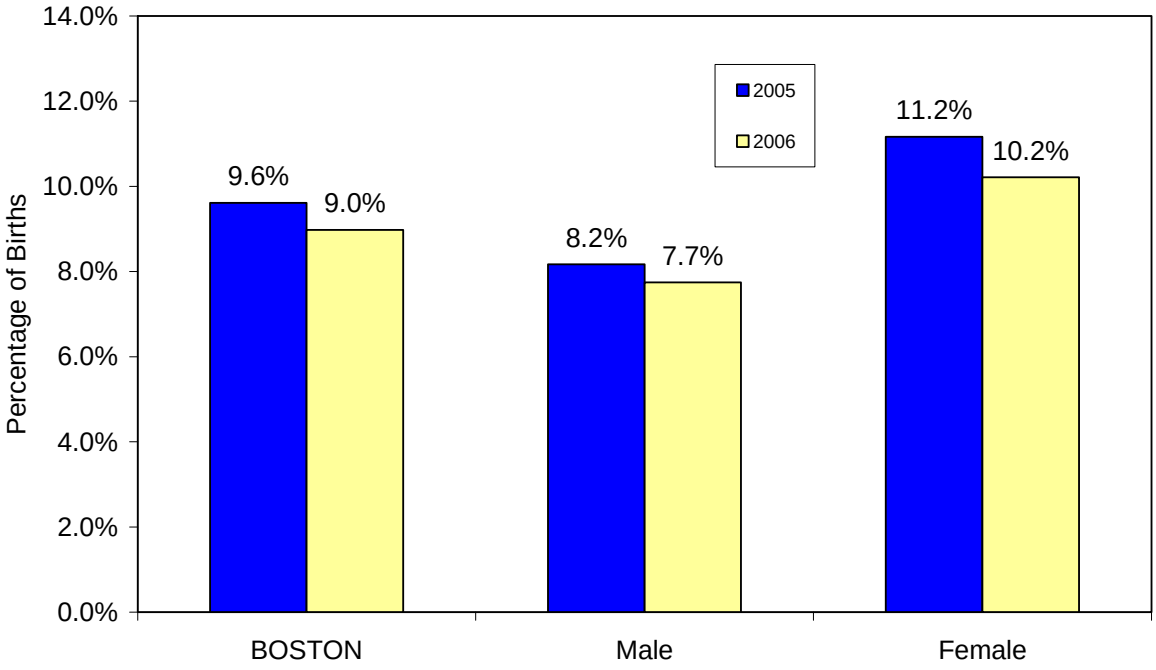
NOTE: These data do not include births whose race/ethnicity was not reported, except in the Boston counts and percentages.
DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- 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.

- For each year of 1994-2006, Black women had the highest LBW rate. The LBW rates for Latinas and for White women were very similar to each other. Asians had the lowest LBW rates.

Natality

Low Birthweight by Sex: Counts and Percentages of Births, Boston, 2005 and 2006



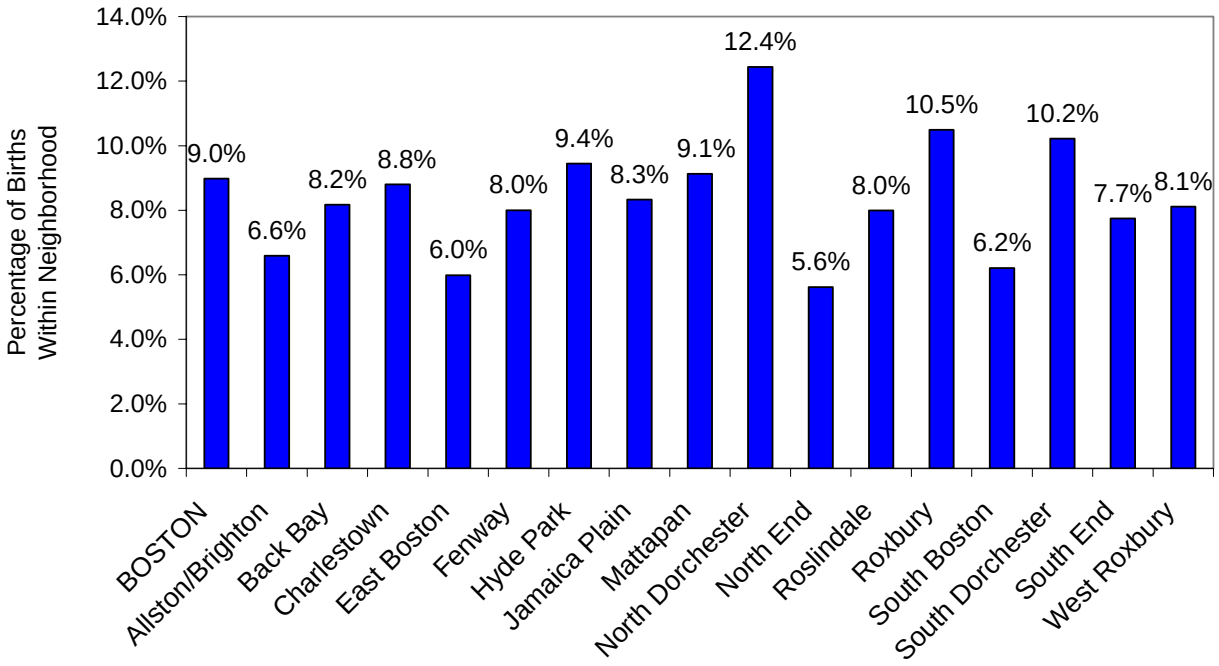
Count	BOSTON	Male	Female
2005	726	320	406
2006	710	308	402

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

- In 2005 and in 2006, low birthweight occurred less for Boston's male infants than female infants.

Natality

Low Birthweight by Neighborhood: Counts and Percentages of Births, Boston, 2006



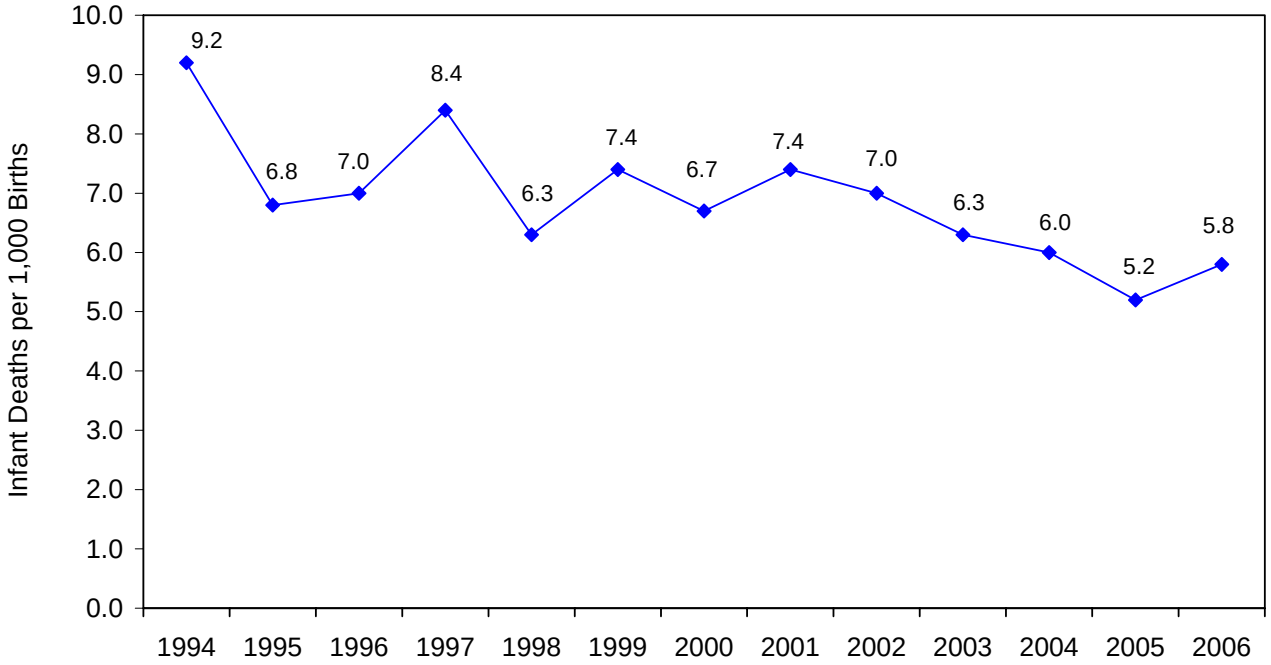
	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	710	40	25	25	43	10	46	35	26	168	5	39	87	25	67	34	34

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 births where neighborhood of residence was not reported, except in the Boston overall count and rates.
DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2006, low birthweight was most frequent in births to residents of North Dorchester, Roxbury, and South Dorchester.

Natality

Infant Mortality by Year: Counts and Rates, Boston, 1994-2006



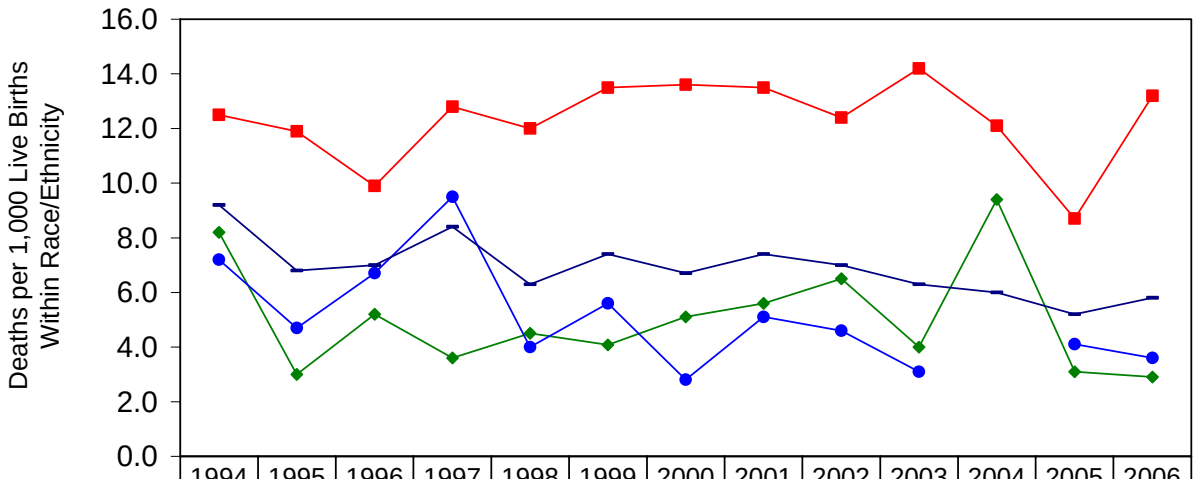
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Count	77	54	54	66	50	59	54	61	56	49	46	39	46

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 Boston infant deaths in 2006, resulting in an infant mortality rate (IMR) of 5.8 deaths per 1,000 live births.
- The Boston IMR fluctuated during the 1994-2006 period from its highest rate of the period in 1994 to its second lowest rate in 2006. The 2006 IMR was 37.0% lower than the rate in 1994.
- Although the Boston IMR increased from 2005 to 2006, the 2005 rate was unusually low compared to other years in the 1994-2006 period.

Natality

Infant Mortality by Race/Ethnicity and Year: Counts and Rates, Boston, 1994-2006



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Black	12.5	11.9	9.9	12.8	12.0	13.5	13.6	13.5	12.4	14.2	12.1	8.7	13.2
Latino	8.2	3.0	5.2	3.6	4.5	4.1	5.1	5.6	6.5	4.0	9.4	3.1	2.9
White	7.2	4.7	6.7	9.5	4.0	5.6	2.8	5.1	4.6	3.1	--	4.1	3.6
BOSTON	9.2	6.8	7.0	8.4	6.3	7.4	6.7	7.4	7.0	6.3	6.0	5.2	5.8

Count	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Black	38	34	26	32	30	35	34	34	30	32	26	19	30
Latino	14	5	8	6	8	7	9	7	12	7	15	5	5
White	21	13	18	25	11	16	8	16	13	9	n<5	11	10
BOSTON	77	54	54	66	50	59	54	61	56	49	46	39	46

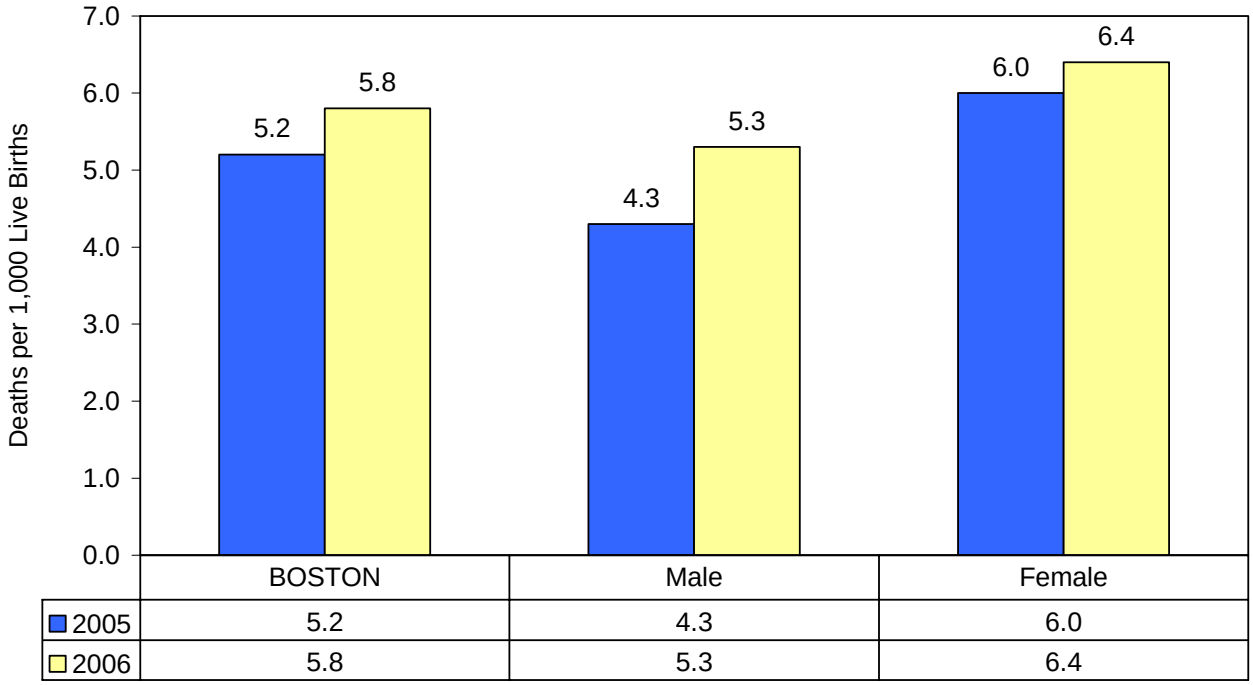
NOTE: There were too few infant deaths among Asians and 2004 Whites to permit the presentation of mortality rates.
DATA SOURCE: Boston resident deaths and live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Infant mortality rates (IMRs) in Boston have consistently been highest for Black infants. Black infants accounted for 28.7% of all Boston births in 2006, but 65.2% of all infant deaths. The IMR of another race/ethnicity group has never exceeded that of Black infants at any point in time.

- From 2005 to 2006, the IMR increased slightly for Boston overall but decreased for Latinos and for Whites; Blacks experienced an increase.

Natality

Infant Mortality by Sex: Counts and Rates, Boston, 2005 and 2006



	BOSTON	Male	Female
2005	5.2	4.3	6.0
2006	5.8	5.3	6.4

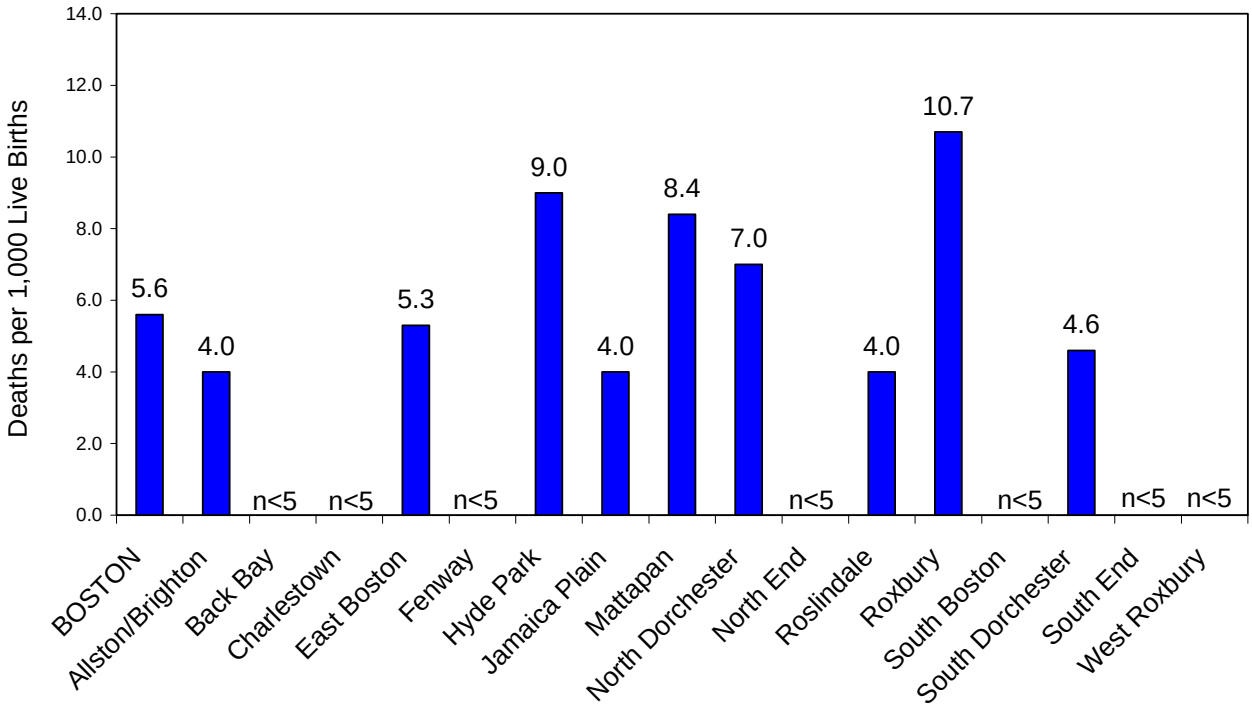
Count	**BOSTON**	**Male**	**Female**
2005	39	17	22
2006	46	21	25

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

- In 2005, the infant mortality for Boston female infants was 39.5% higher than for male infants, and in 2006, the infant mortality rate for Boston female infants decreased, but was still 20.8% higher than for male infants

Natality

Infant Mortality by Neighborhood: Counts and Rates, Boston, 2004-2006



	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	131	7	n<5	n<5	10	n<5	12	5	7	28	n<5	6	27	n<5	9	n<5	n<5

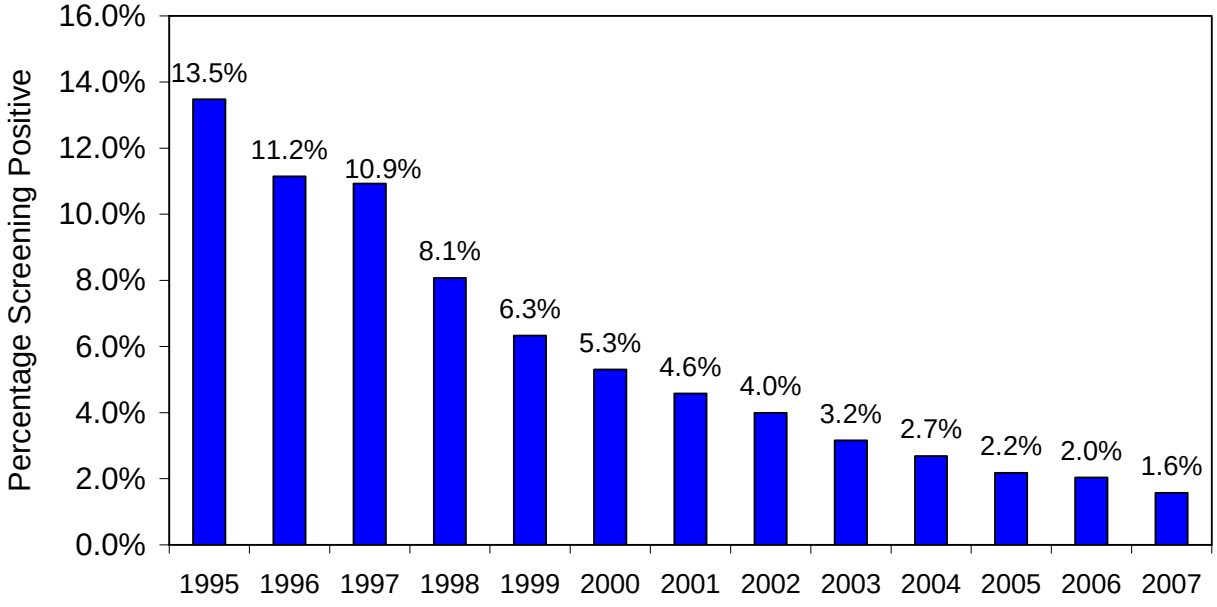
ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, NE=North End, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
DATA SOURCE: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

- During 2004-2006, Roxbury had the highest infant mortality rate (IMR) of Boston neighborhoods and almost double the Boston overall rate. Mattapan and Hyde Park had the next highest IMRs after Roxbury.

- Seven of Boston's 16 neighborhoods had too few infant deaths during 2004-2006 to permit the presentation of mortality rates. Some of the neighborhood's IMR's are based on counts of such small numbers that their rates are subject to substantial random fluctuation and should therefore be interpreted with caution.

Environmental Lead

Children With Elevated Blood Lead Levels by Year: Counts and Percentages of Screened Population Boston, 1995-2007



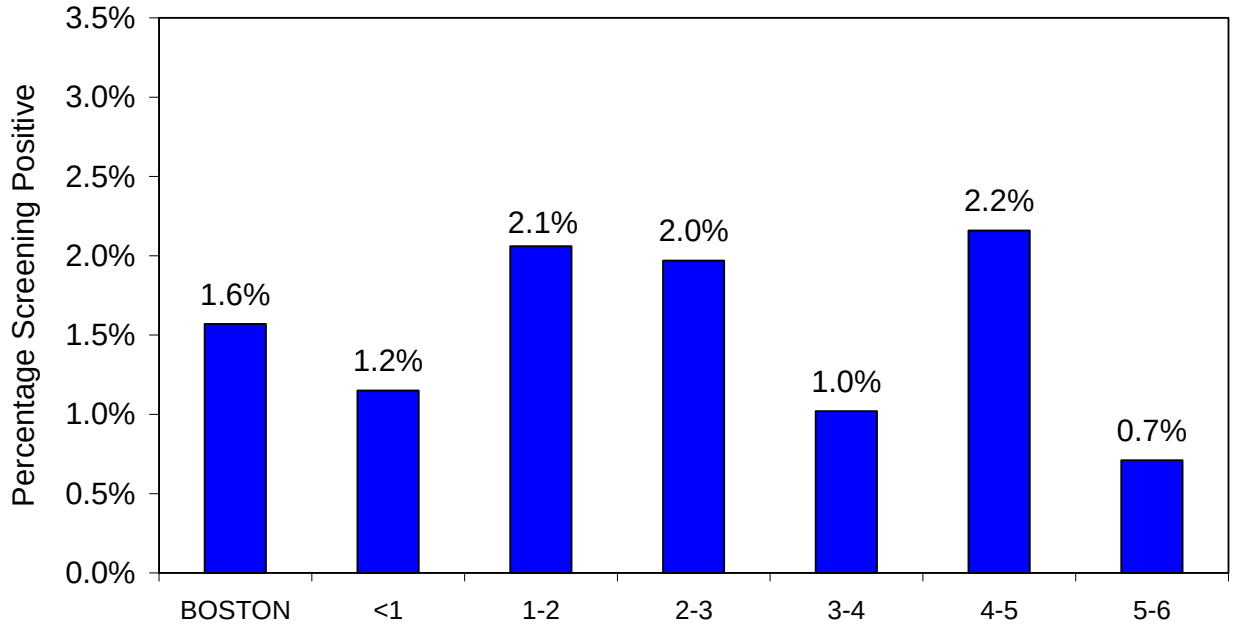
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Count	4,124	3,221	2,351	1,543	1,725	1,350	1,123	964	774	647	497	460	362

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

- In 2007, 22,968 Boston children were screened for elevated lead levels in their blood. Of the children screened, 1.6% had elevated blood lead levels, defined as 10 micrograms per deciliter (µg/dl) or higher. This represents a 20.0% decrease from 2006.
- Over the past 13 years the number of Boston children who have tested positive for elevated blood lead levels has dropped by 91.2%.

Environmental Lead

Children With Elevated Blood Lead Levels by Age: Counts and Percentages of Screened Population Boston, 2007



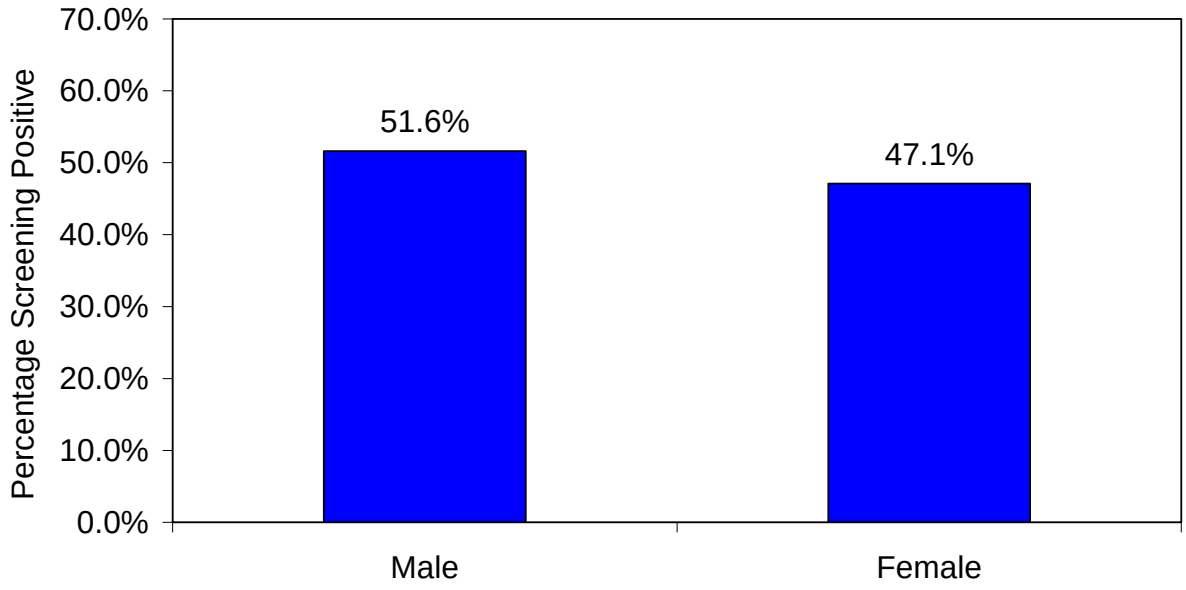
	BOSTON	<1	1-2	2-3	3-4	4-5	5-6
Count	362	82	109	89	35	43	4

NOTE: These data do not include persons whose age was not reported, except in the Boston overall count and rate.
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 2007, children ages 4-5 had the highest positive screening percentage (2.2%), meaning elevated blood lead levels of 10 micrograms per deciliter (µg/dl) or higher. This was 37.5% greater than the Boston overall positive screening percentage (1.6%).

Environmental Lead

Children With Elevated Blood Lead Levels by Sex: Counts and Percentages of Screened Population Boston, 2007



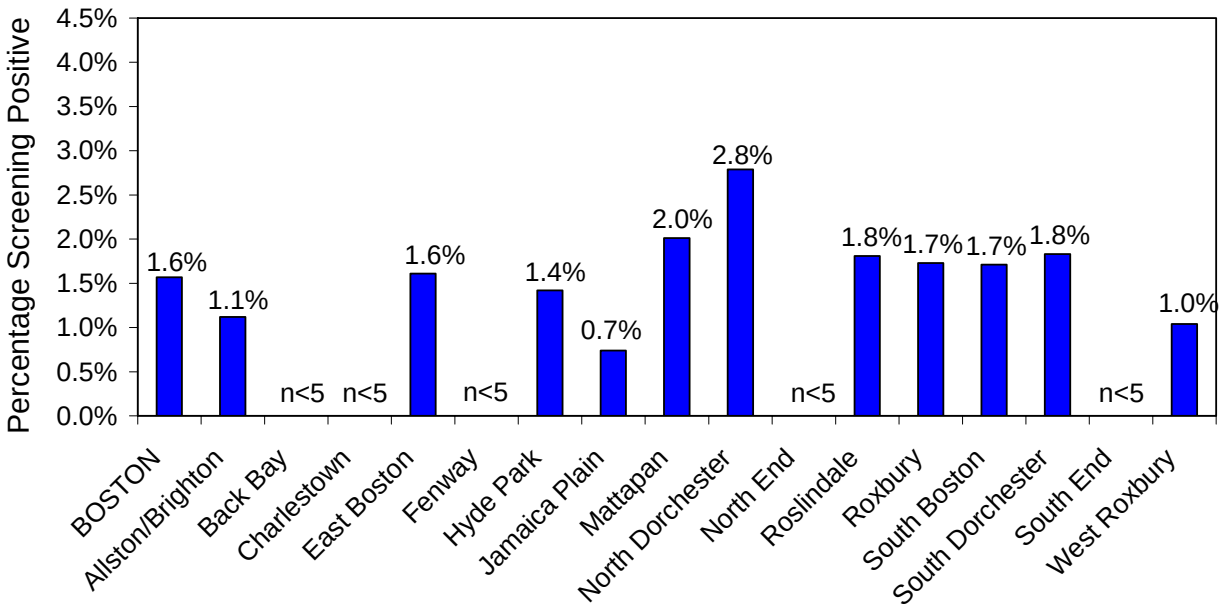
	Male	Female
Count	191	167

NOTES: These data do not include persons whose sex was not reported, except in the Boston overall count and rate.
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 2007 and found to have elevated blood lead levels, (10 micrograms per deciliter (µg/dl) or higher) 51.6% were males.

Environmental Lead

Children With Elevated Blood Lead Levels by Neighborhood: Counts and Percentages of Screened Population, Boston, 2007

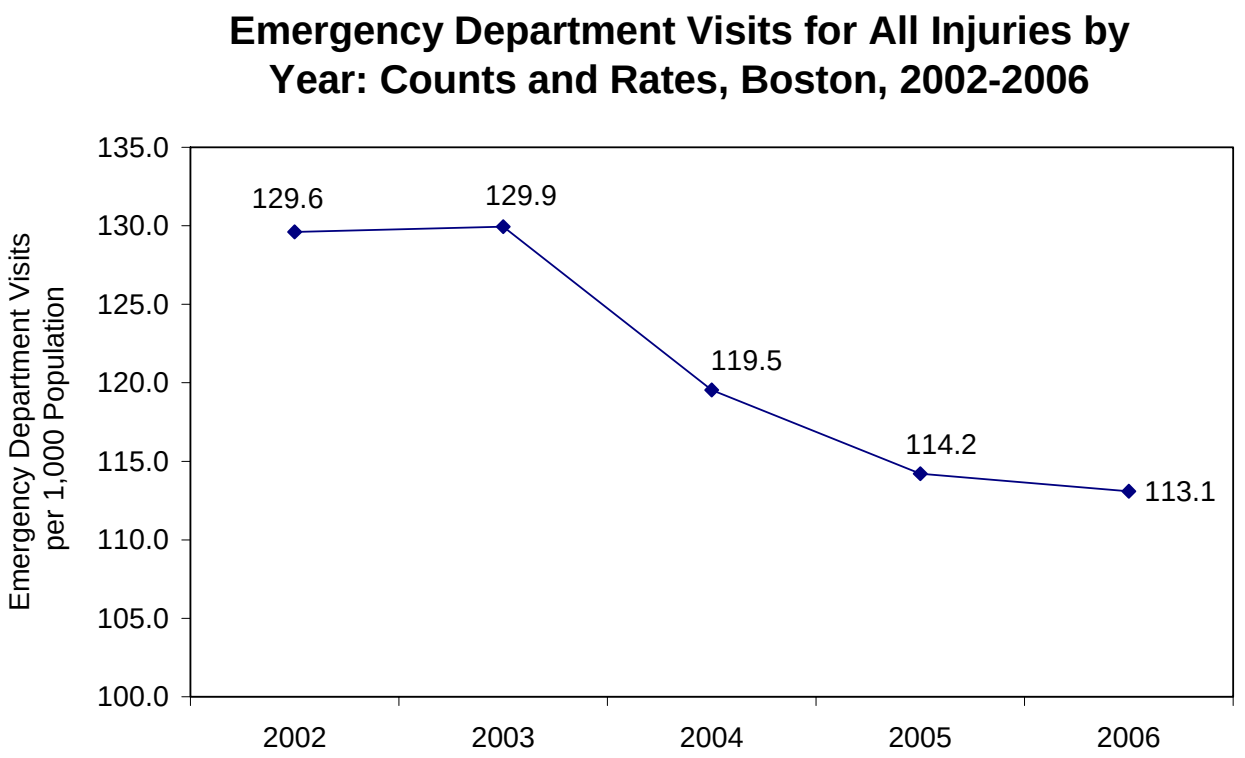


	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	362	13	n<5	n<5	43	n<5	19	10	25	88	n<5	28	30	18	63	n<5	11

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 2007, elevated blood lead levels (10 micrograms per deciliter (µg/dl) or higher) in Boston children were highest in North Dorchester and Mattapan.

Emergency Department Visits for Injury



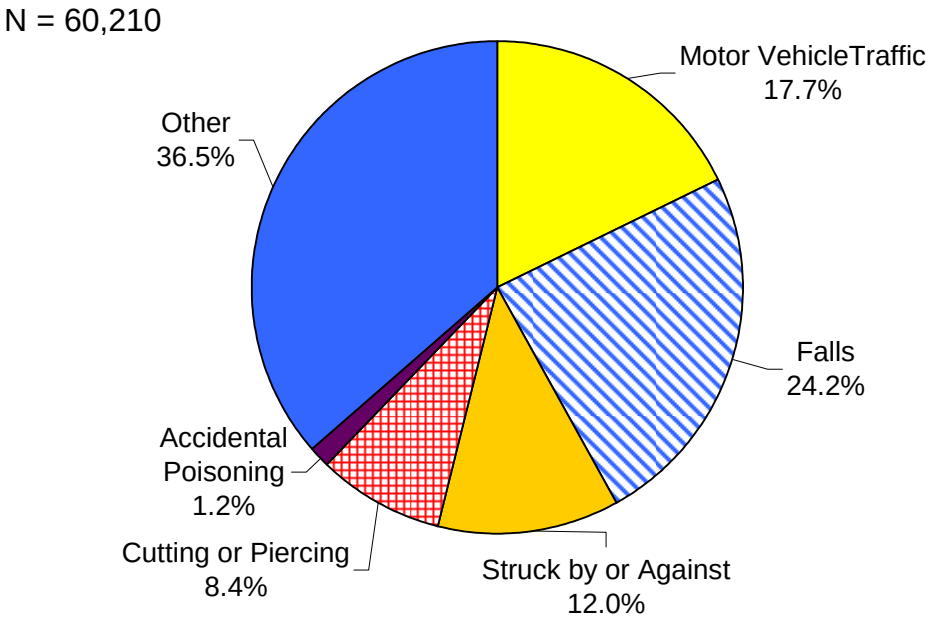
	2002	2003	2004	2005	2006
Count	76,357	76,554	70,425	67,286	66,267

DATA SOURCE: Emergency Department Visit Data Base, Massachusetts Division of Health Care Finance and Policy
DATA ANALYSIS: Boston Public Health Commission Research Office

- The hospital emergency department Visit Database first became available in 2002.
- During 2002-2006, the highest number of emergency department visits for injury made by Boston residents was in 2003. Starting in 2004 and through 2006, emergency department visits for injury by Boston residents have been declining.
- Boston's emergency department visit rate for injury in 2006 was 12.9% lower than in 2003.

Emergency Department Visits for Injury

Emergency Department Visits for Unintentional Injury by Type: Counts and Percentages, Boston, 2006

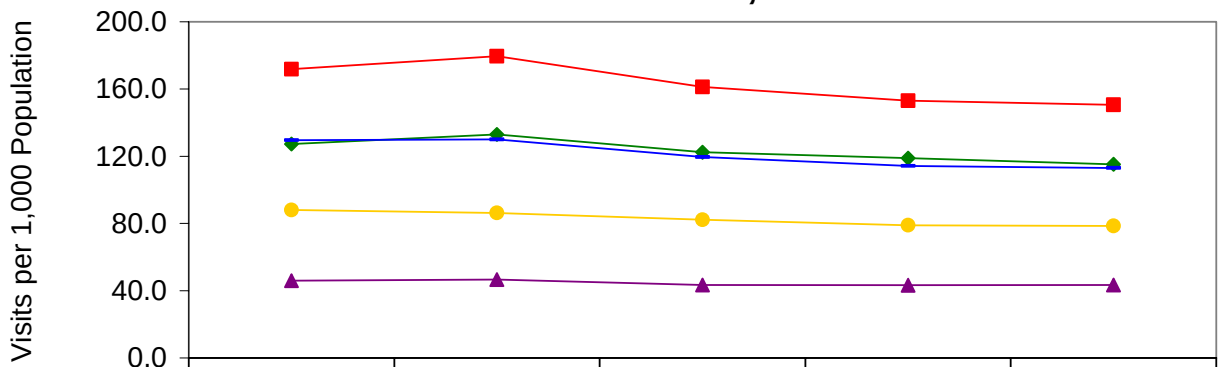


DATA SOURCE: Emergency Department Visit Data Base, Massachusetts Division of Health Care Finance and Policy
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2006, Boston residents made 60,210 visits to emergency departments (EDs) for treatment of injuries that were unintentional (the result of accidents). Those visits accounted for 90.4% of ED visits for all injuries.
- Collectively, motor vehicle accidents, falls, being hit by an object or person, or being cut was responsible for 62.3% of all emergency department visits for unintentional injuries that were made by Boston residents.
- Falls accounted for almost a quarter of emergency department visits for unintentional injuries and motor vehicle accidents almost a fifth.
- Examples of “Other unintentional” injuries include those relating to fire, machinery, boating, explosives, electrical current, medical and surgical care, and unspecified accidents.

Emergency Department Visits for Injury

Emergency Department Visits for Injury by Race/Ethnicity and Year: Counts and Rates, Boston 2002-2006



	2002	2003	2004	2005	2006
Asian	46.0	46.6	43.4	43.2	43.5
Black	171.7	179.5	161.2	153.1	150.6
Latino	127.3	133.0	122.4	118.9	115.2
White	88.0	86.3	82.2	78.9	78.6
BOSTON	129.6	129.9	119.5	114.2	113.1

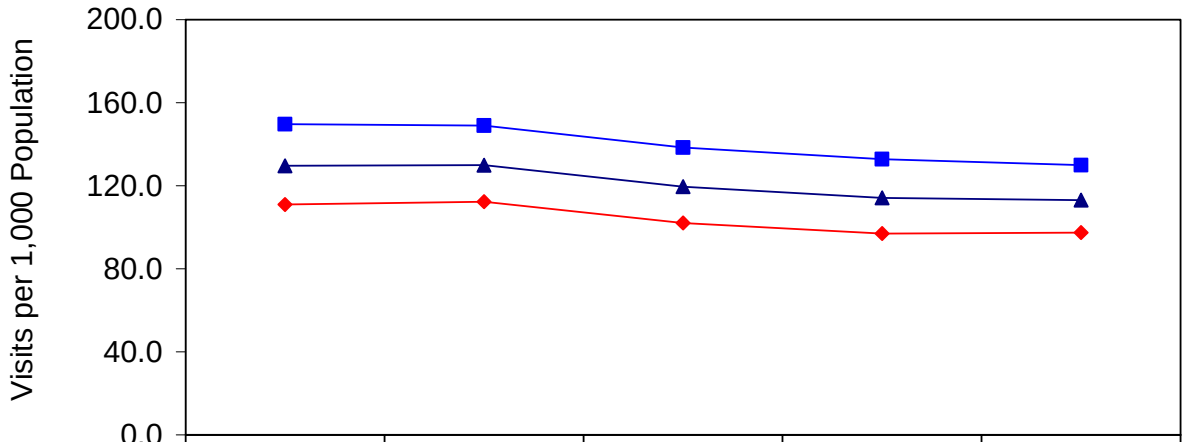
Count	**2002**	**2003**	**2004**	**2005**	**2006**
Asian	1,991	2,019	1,879	1,871	1,881
Black	25,672	26,841	24,106	22,884	22,509
Latino	1,0835	11,314	10,412	10,115	9,805
White	28,242	27,687	26,369	25,327	25,232
BOSTON	76,357	76,554	70,425	67,286	66,627

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 Native Americans, persons of other races/ethnicities, and persons whose race/ethnicity was not reported, except in the Boston overall rates and counts.
DATA SOURCE: Emergency Department Visit Data Base, Massachusetts Division of Health Care Finance and Policy
DATA ANALYSIS: Boston Public Health Commission Research Office

- During each year of 2002-2006, Black and Latino residents had Boston's highest emergency department visit rates for injury, and Asian residents the lowest. In 2006, the rate for Black residents was about two times that of Whites and the rate for Latino residents about one and a half times that of Whites.
- Emergency Department visit rates for injury were highest in 2003 for all race/ethnicity groups except Whites, whose highest rate was in 2002.
- From 2003 to 2006, rates declined slightly for all racial/ethnic groups.

Emergency Department Visits for Injury

Emergency Department Visits for All Injuries by Sex by Year: Counts and Rates, Boston, 2002-2006



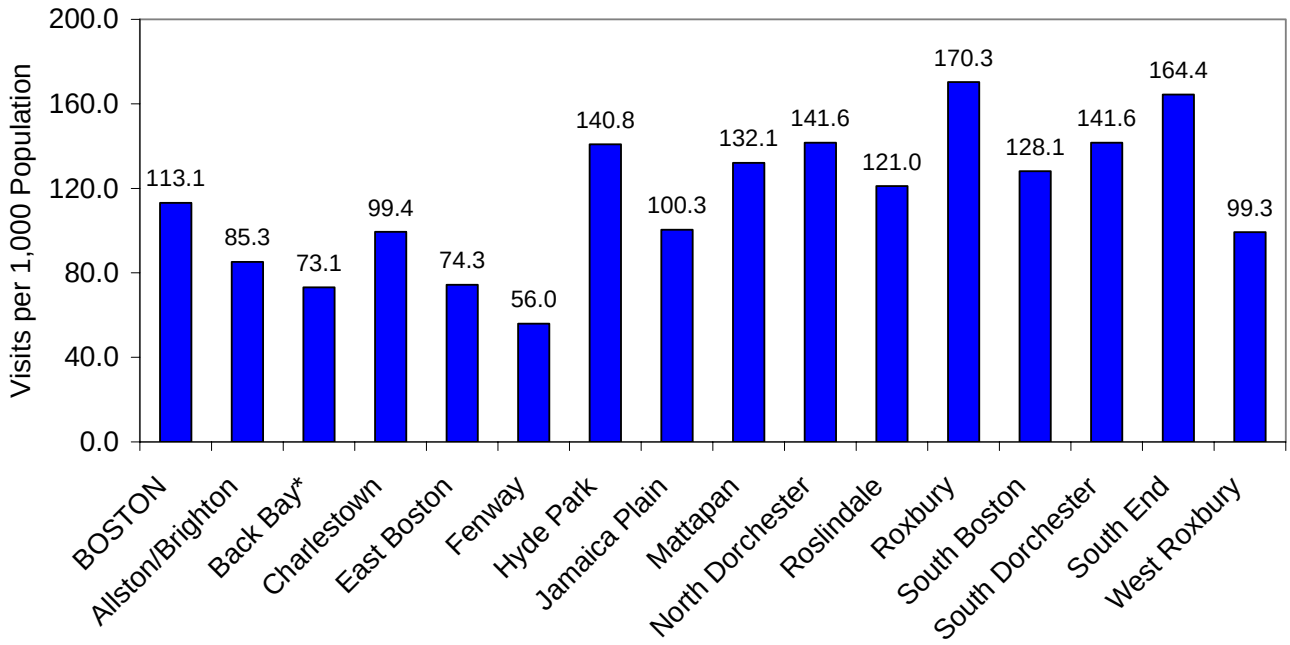
	2002	2003	2004	2005	2006
Male	149.7	149.0	138.4	132.8	129.9
Female	111.0	112.3	102.0	97.0	97.4
BOSTON	129.6	129.9	119.5	114.2	113.1

Count	**2002**	**2003**	**2004**	**2005**	**2006**
Male	42,452	42,246	39,246	37,654	36,850
Female	33,904	34,305	31,178	29,630	29,773
BOSTON	76,357	76,554	70,425	67,286	66,627

DATA SOURCE: Emergency Department Visit Data Base, Massachusetts Division of Health Care Finance and Policy
DATA ANALYSIS: Boston Public Health Commission Research Office

- For each year during 2002-2006, emergency department visit rates for injury were higher for Boston's male residents than for Boston's female residents.
- Rates have declined over time for both males and females. From 2002 to 2006, they declined 13.2% for males and 12.3% for females.

Emergency Department Visits for Injury

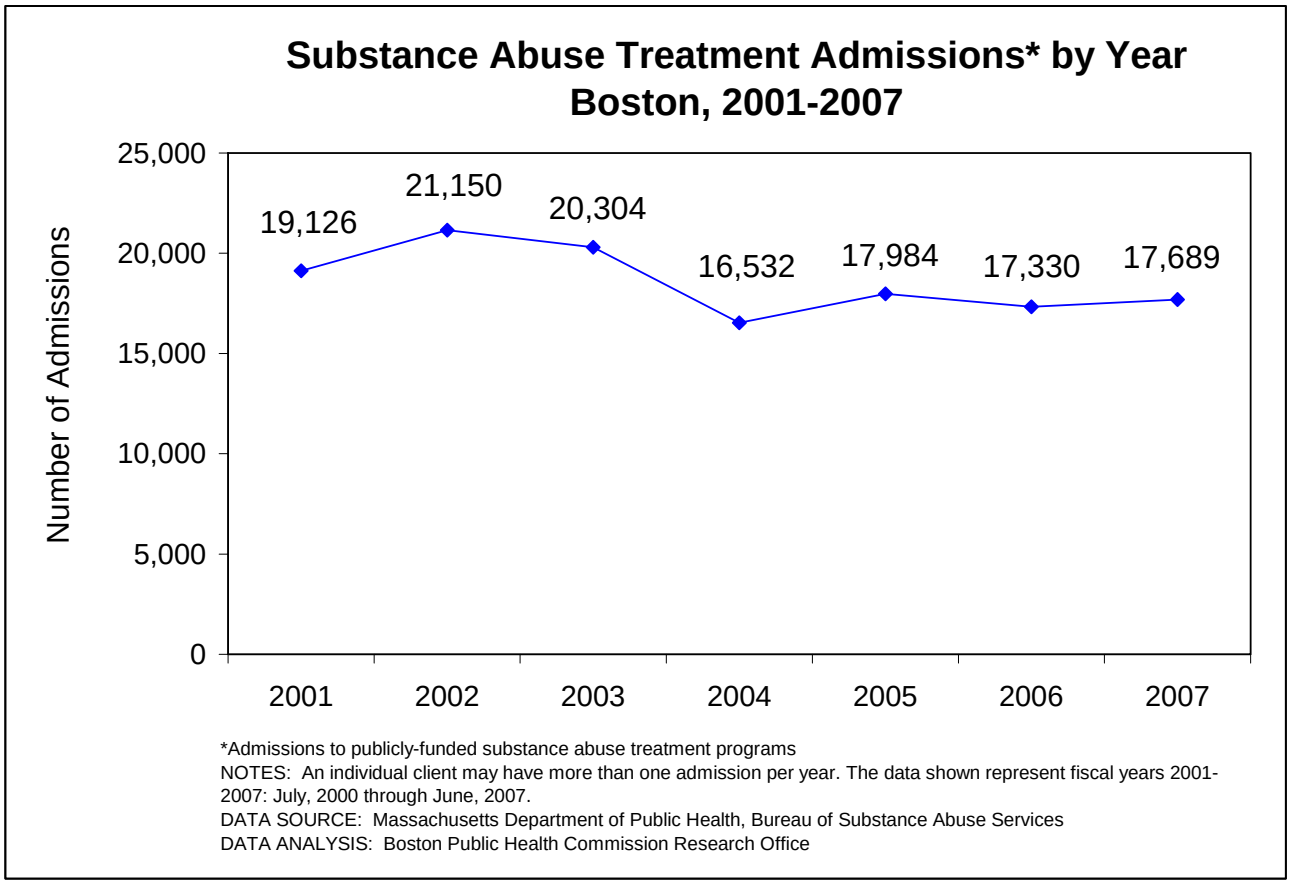


	BOS	A/B	BB	CH	EB	FW	HP	JP	MT
Count	66,627	5,667	3,383	1,510	2,854	2,656	3,998	3,642	3,674
	ND	**MT**	**ND**	**RS**	**RX**	**SB**	**SD**	**SE**	**WR**
Count	8,310	3,674	8,310	3,937	5,903	3,848	10,664	4,490	2,391

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
NOTE: These data do not include homeless persons or individuals whose neighborhood of residence was not reported
DATA SOURCE: Emergency Department Visit Data Base, Massachusetts Division of Health Care Finance and Policy
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2006, Roxbury and South End residents incurred the highest rates for emergency department visits for injury. The rate for Roxbury was 51% higher than the overall Boston rate and the rate for the South End, 45% higher.

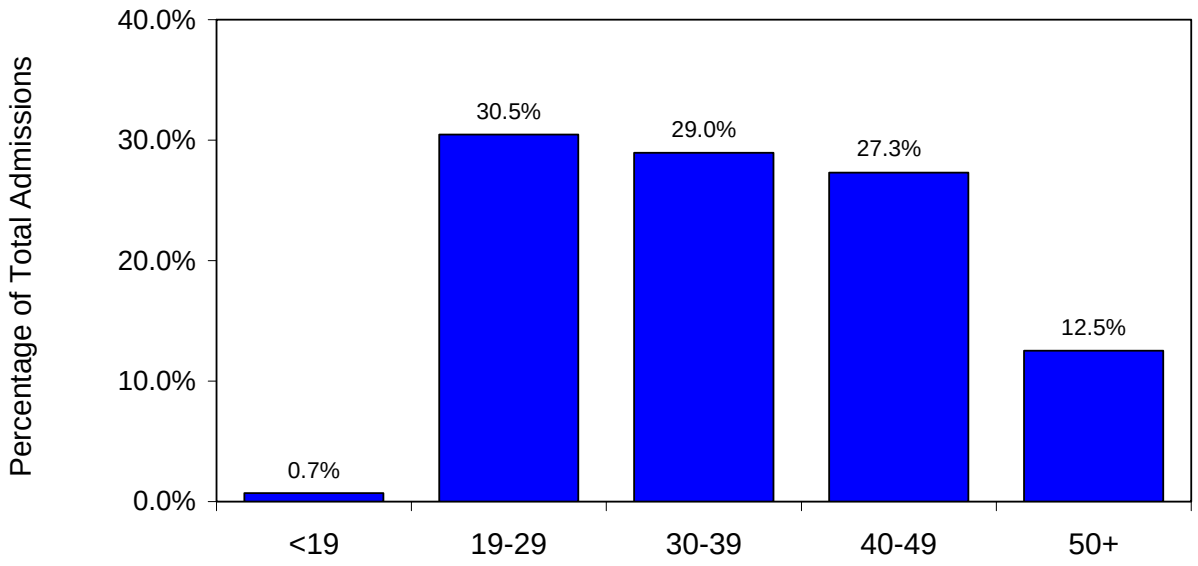
Substance Abuse



- The number of substance abuse treatment admissions was fairly stable from 2006 to 2007.
- The number of treatment admissions decreased 16.4% from 2002 to 2007.

Substance Abuse

Substance Abuse Treatment Admissions* by Age: Counts and Percentage Distribution, Boston, 2007



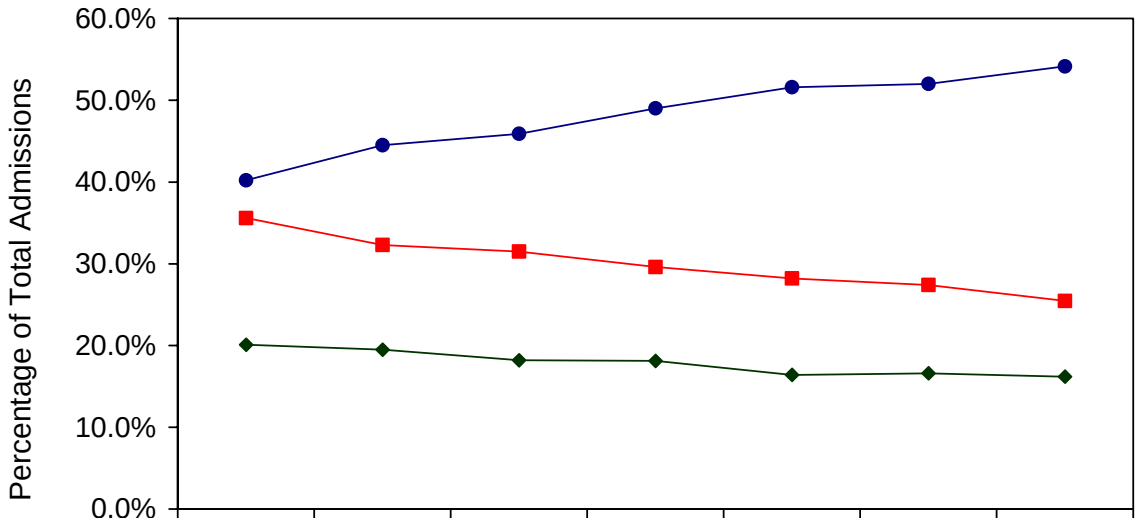
	<19	19-29	30-39	40-49	50+
Count	129	5,392	5,121	4,833	2,214

*Admissions to publicly-funded substance abuse treatment programs
NOTES: An individual client may have more than one admission per year. The data shown are for fiscal year 2007: July, 2006 through June, 2007. These data do not include persons whose age was not reported, except in the Boston overall count and rate.
DATA SOURCE: Massachusetts Department of Public Health, Bureau of Substance Abuse Services
DATA ANALYSIS: Boston Public Health Commission Research Office

- The 19-29 year old age group had the highest percentage of substance abuse treatment admissions in 2007.
- Individuals ages 19-49 accounted for 86.8% of treatment admissions.
- Thirty-one 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, 2001-2007



	2001	2002	2003	2004	2005	2006	2007
Black	35.6%	32.3%	31.5%	29.6%	28.2%	27.4%	25.4%
Latino	20.1%	19.5%	18.2%	18.1%	16.4%	16.6%	16.2%
White	40.2%	44.5%	45.9%	49.0%	51.6%	52.0%	54.1%

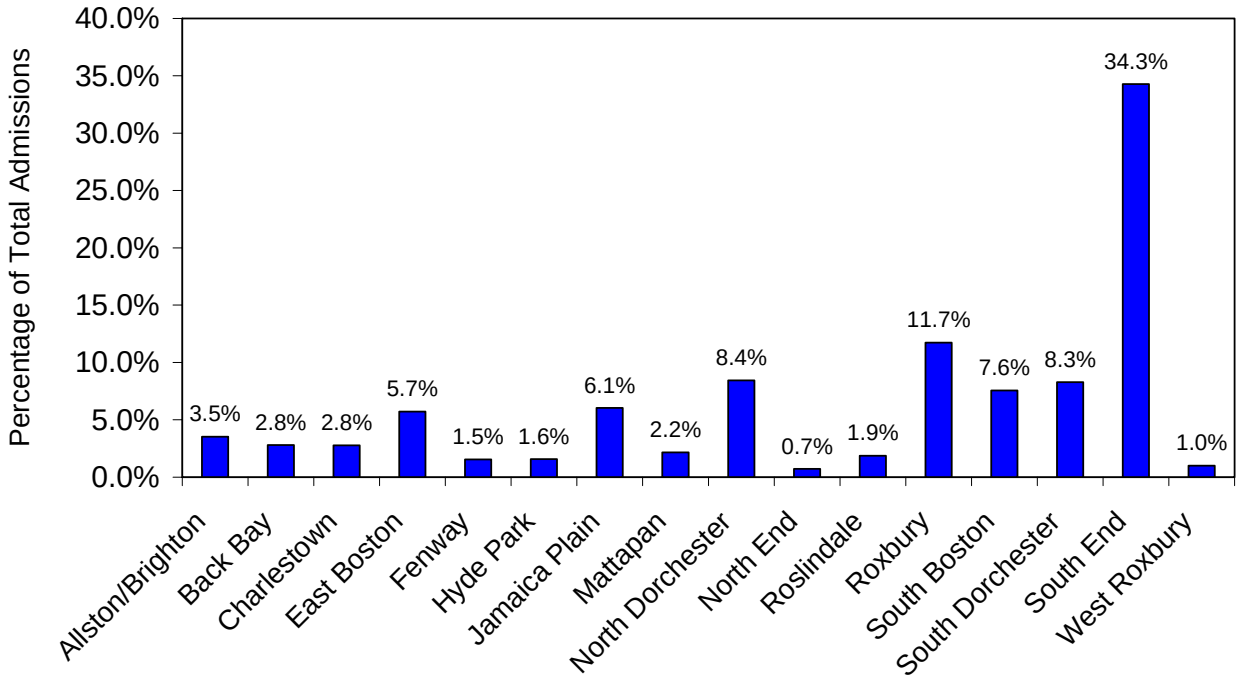
Count	2001	2002	2003	2004	2005	2006	2007
Black	6,799	6,840	6,398	4,891	5,063	4,752	4,500
Latino	3,851	4,075	3,690	2,997	2,949	2,872	2,864
White	7,679	9,406	9,318	8,100	9,288	9,011	9,577
BOSTON	19,126	21,150	20,304	16,532	17,984	17,330	17,689

*Admissions to publicly-funded substance abuse treatment programs
NOTES: An individual client may have more then one treatment admission per year. The data shown represent fiscal years 2001-2007: July, 2000 through June, 2007. 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.
DATA SOURCE: Massachusetts Department of Public Health, Bureau of Substance Abuse Services
DATA ANALYSIS: Boston Public Health Commission Research Office

- White clients accounted for more than half of all substance abuse treatment admissions in 2007.
- The percentage of White substance abuse treatment admissions increased 34.6% from 2001 to 2007.
- The percents of Black and Latino admissions decreased 28.7% and 19.4% respectively, from 2001 to 2007.

Substance Abuse

Substance Abuse Treatment Admissions* by Neighborhood: Counts and Percentage Distribution Boston, 2007



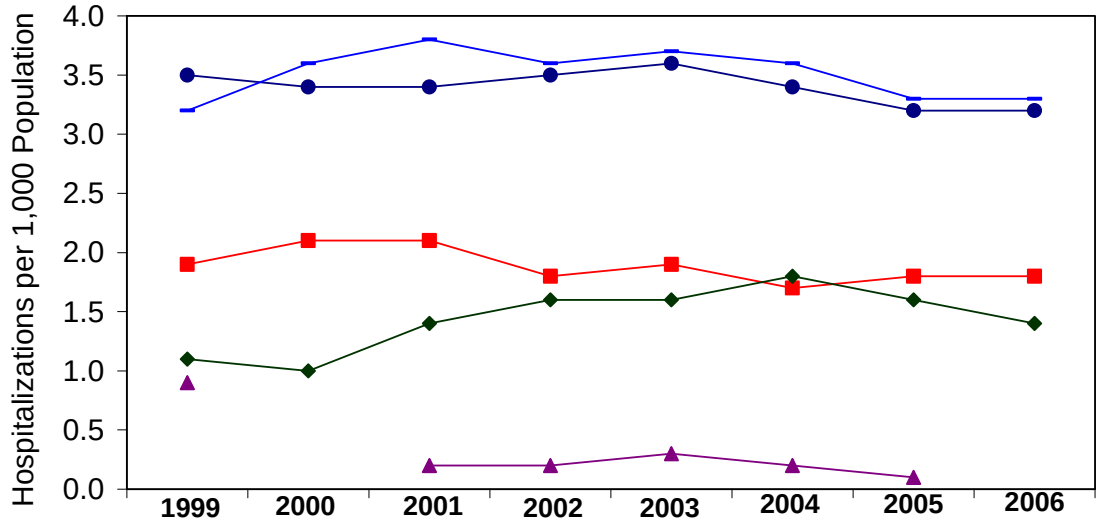
	BOS	A/B	BB	CH	EB	FW	HP	JP	MT
Count	17,689	624	497	489	1,009	272	278	1,071	380
	ND	**NE**	**RS**	**RX**	**SB**	**SD**	**SE**	**WR**	
Count	1,492	130	330	2,075	1,335	1,464	6,064	179	

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
*Admissions to publicly-funded substance abuse treatment programs
NOTES: An individual client may be admitted to more than one program or treatment session. The data shown are for Fiscal year 2007: July, 2006 through June, 2007. 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

- More than one third of all admissions to substance abuse treatment were individuals residing in the South End.
- More than eighty percent (82.1%) of all admissions to substance abuse treatment were individuals residing in 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, 1999-2006



	1999	2000	2001	2002	2003	2004	2005	2006
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	1.8
Latino	1.1	1.0	1.4	1.6	1.6	1.8	1.6	1.4
White	3.5	3.4	3.4	3.5	3.6	3.4	3.2	3.2
BOSTON	3.2	3.6	3.8	3.6	3.7	3.6	3.3	3.3

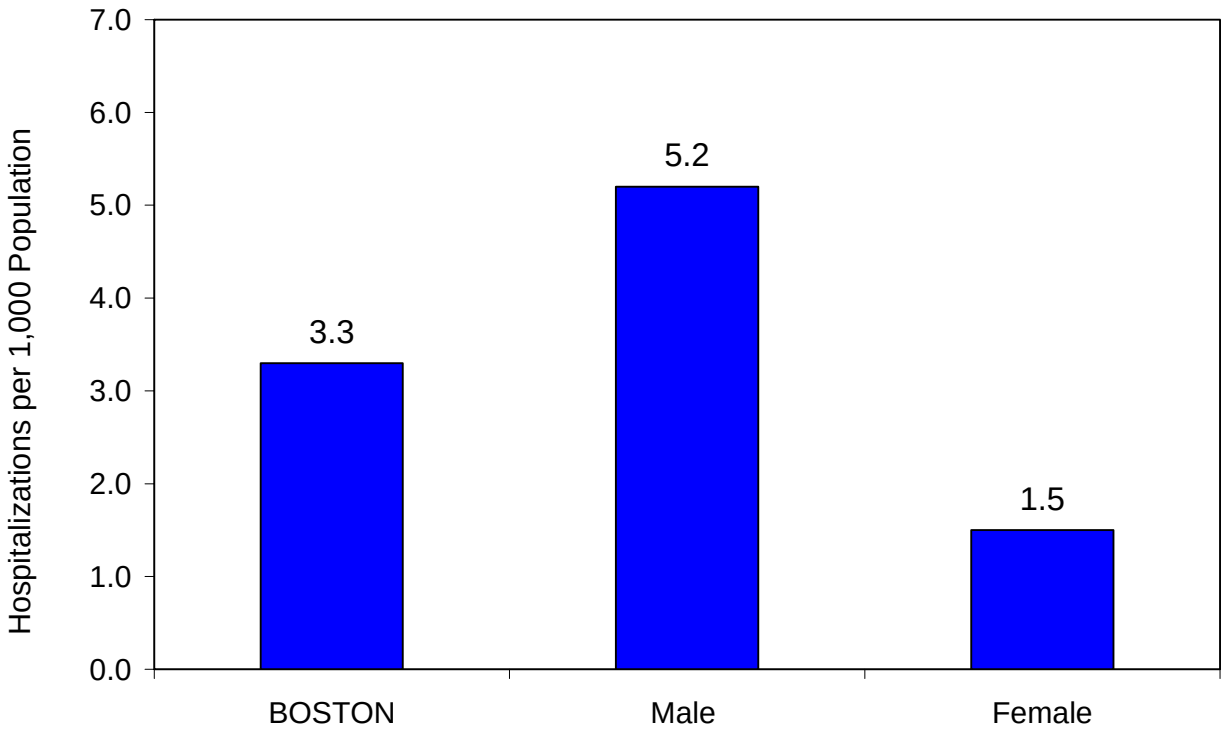
Count	1999	2000	2001	2002	2003	2004	2005	2006
Asian	39	n<5	9	11	17	8	6	n<5
Black	274	298	281	242	253	237	245	236
Latino	82	79	94	119	115	140	118	104
White	1,136	1,076	1,109	1,169	1,224	1,122	1,036	1,027
BOSTON	1,843	2,053	2,206	2,119	2,192	2,080	1,879	1,852

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 and 2006 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 1999-2006.
- The 2006 hospitalization rate for Whites was more than 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, 2006

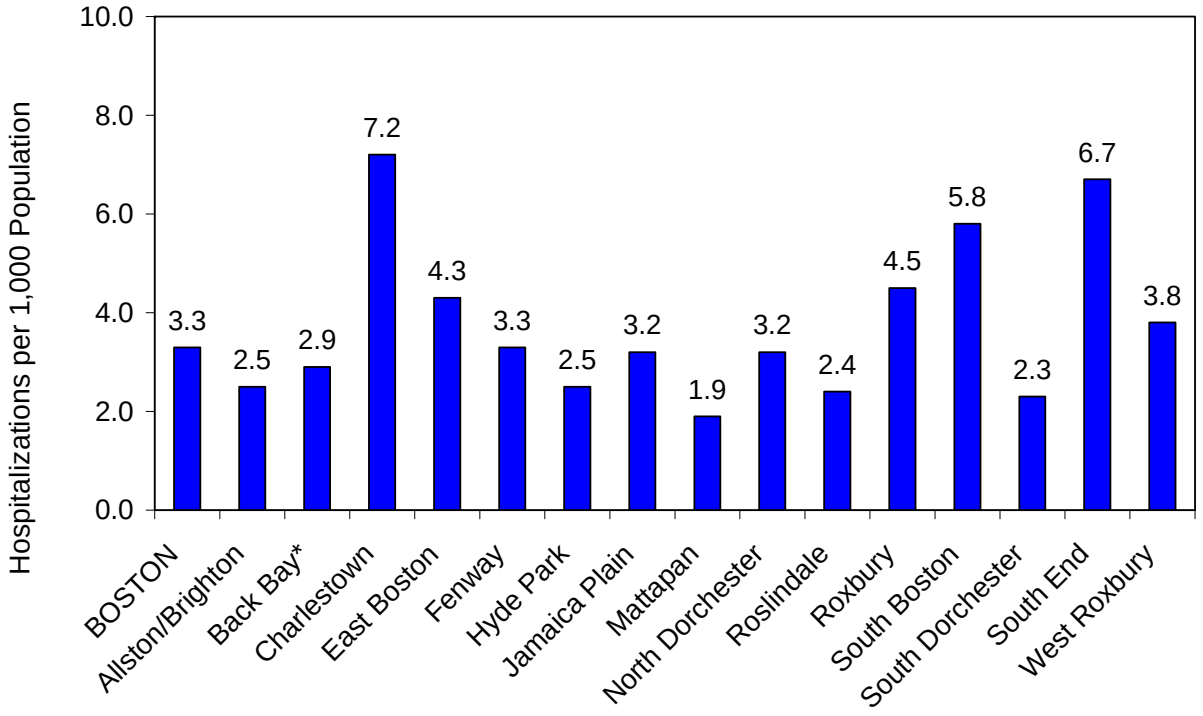


	BOSTON	Male	Female
Count	1,852	1,396	456

NOTES: Individuals may be hospitalized more than once. These data do not include persons whose sex was not reported, except in the Boston overall count and 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 male substance abuse hospitalization age-adjusted rate is more than three times the female rate in 2006.

Substance Abuse

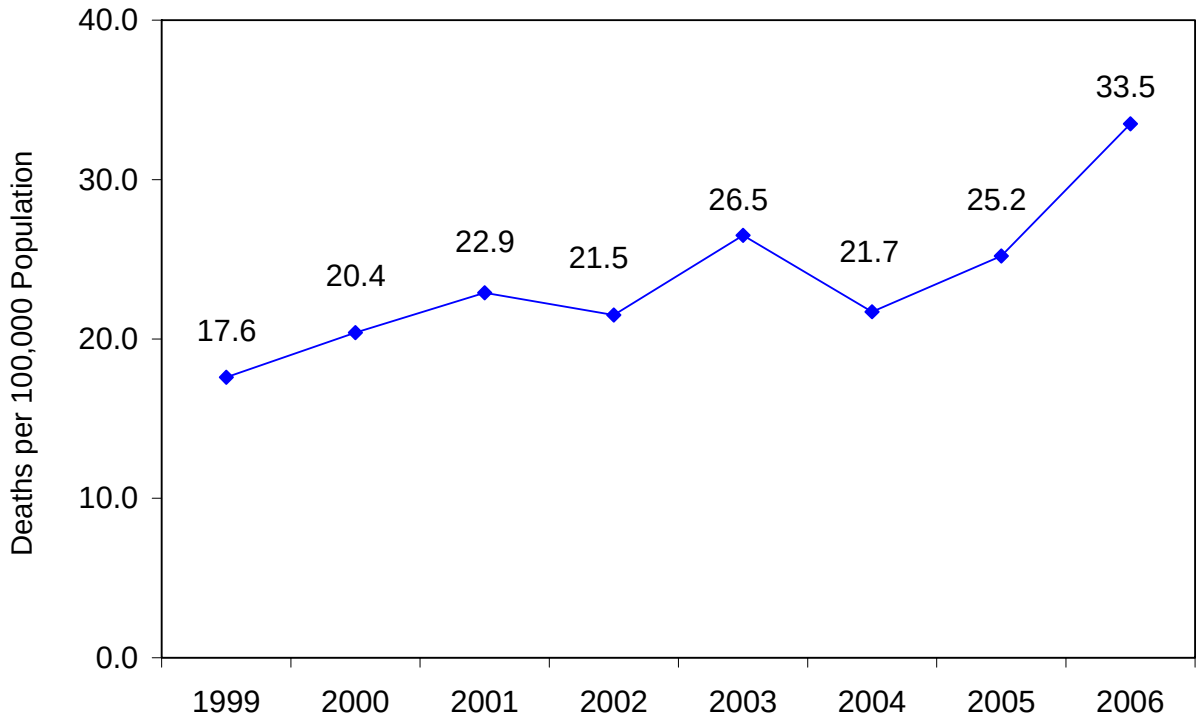


	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	1,852	133	141	109	167	68	69	114	51	174	80	134	174	164	188	86

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 substance abuse hospitalization rate (7.2 per 1,000 population) among the fifteen Boston neighborhoods in 2006.
- Mattapan had the lowest rate among Boston's neighborhoods.
- Six neighborhoods had rates higher than Boston's rate: Charlestown, East Boston, Roxbury, South Boston, the South End and West Roxbury.

Substance Abuse



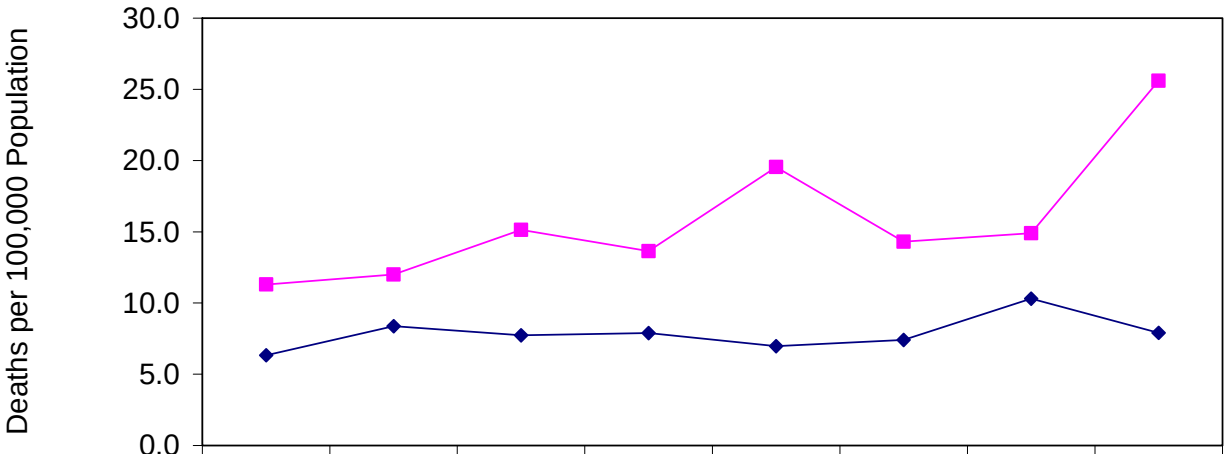
	1999	2000	2001	2002	2003	2004	2005	2006
Count	96	112	127	116	145	118	133	176

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 increased 54.4% from 2004 to 2006 and 90.3% from 1999 to 2006.

Substance Abuse

Substance Abuse Mortality by Type and Year: Counts and Age-Adjusted Rates, Boston, 1999-2006



	1999	2000	2001	2002	2003	2004	2005	2006
Alcohol	6.3	8.4	7.7	7.9	7.0	7.4	10.3	7.9
Drug	11.3	12.0	15.1	13.6	19.6	14.3	14.9	25.6

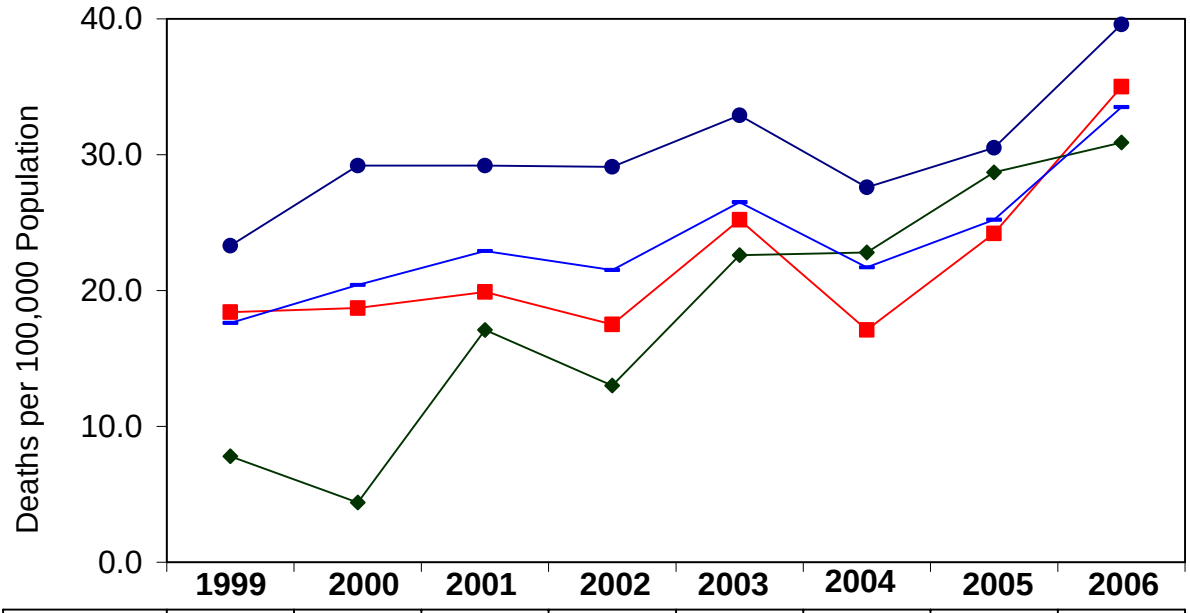
Count	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Alcohol	31	42	39	40	34	38	49	39
Drug	65	70	88	76	111	80	84	137

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

- The drug abuse mortality age-adjusted rate increased 71.8% from 2005 to 2006 while the alcohol abuse mortality age-adjusted rate decreased 23.3% from 2005 to 2006.
- The drug abuse mortality age-adjusted rate increase from 2005 to 2006 was observed primarily among decedents ages 35+ across both genders and white, black, and Latino racial ethnic groups (data not shown). These deaths tend to include cocaine, heroin, alcohol, and other drugs, often in multiple drug use/abuse combinations. The ICD10 codes used to identify cause of death do not permit uniform drug-specific identification for each death.

Substance Abuse

Substance Abuse Mortality by Race/Ethnicity and Year: Counts and Age-Adjusted Rates, Boston, 1999-2006



	1999	2000	2001	2002	2003	2004	2005	2006
Black	18.4	18.7	19.9	17.5	25.2	17.1	24.2	35.0
Latino	7.8	4.4	17.1	13.0	22.6	22.8	28.7	30.9
White	23.3	29.2	29.2	29.1	32.9	27.6	30.5	39.6
BOSTON	17.6	20.4	22.9	21.5	26.5	21.7	25.2	33.5

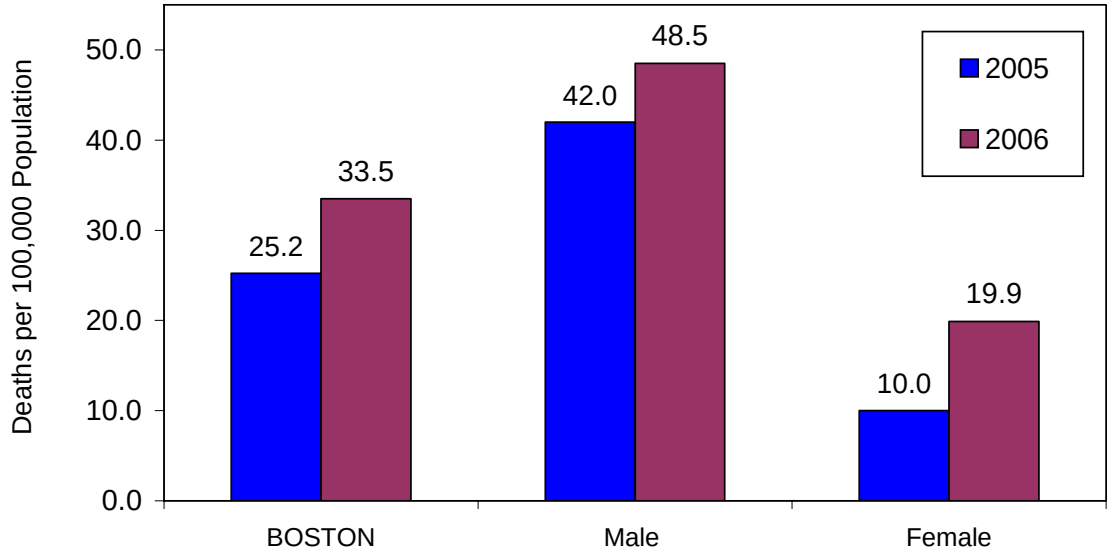
Count	1999	2000	2001	2002	2003	2004	2005	2006
Black	23	23	26	22	32	22	31	43
Latino	6	5	12	11	19	16	19	22
White	67	83	85	81	94	78	82	109
BOSTON	96	112	127	116	144	118	133	176

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 count and rate. There were too few substance abuse deaths among Asians during each year of 1999-2006 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

- Whites had the highest substance abuse mortality age-adjusted rate for each year of the 8-year period 1999-2006. In 2006, the rate for Whites was 18.2% higher than the overall Boston rate.
- The 2006 substance abuse mortality rate for Latinos was seven times the 2000 rate for Latinos.
- The 2006 substance abuse mortality rate for Blacks was more than double the 2004 rate and was the highest during the eight year period of 1999-2006.

Substance Abuse

Substance Abuse Mortality by Sex and Year: Counts and Age-Adjusted Rates Boston, 2005-2006



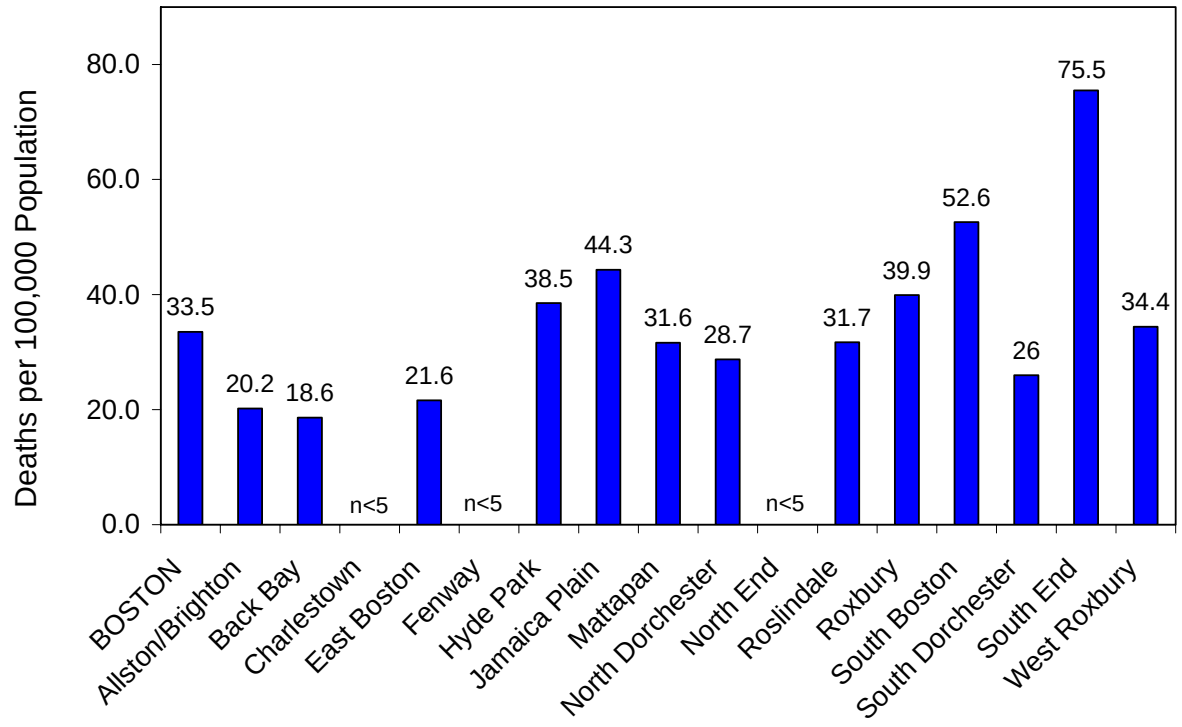
Count	BOSTON	Male	Female
2005	133	104	29
2006	176	122	54

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

- Both the male and female substance abuse mortality age-adjusted rates increased from 2005 to 2006.
- The 2006 substance abuse mortality age-adjusted rate for males was more than twice the female rate.

Substance Abuse

Substance Abuse Mortality by Neighborhood: Counts and Age-Adjusted Rates, Boston, 2006



	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	176	10	5	n<5	8	n<5	13	13	6	21	n<5	11	18	15	11	25	9

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

- The South End had the highest substance abuse mortality age-adjusted rate among all Boston neighborhoods in 2006.
- Six neighborhoods had rates higher than Boston's rate.

Violence

Exposure of High School Students to Violence at School by Sex: Counts and Percentages, Boston, 2006

	Witness to Violence*	Victim of Violence**
Male	31%	10%
Female	31%	5%

Count	Witness to Violence	Victim of Violence
Male	100	31
Female	153	27

*In the past 12 months, respondent saw someone punched, kicked, choked, beaten up, attacked with a weapon, shot or shot at.
** In the past 12 months, respondent was the victim of one of these acts.
DATA SOURCE: Boston Youth Survey, 2006; Harvard Youth Violence Prevention Center through a cooperative agreement with the Centers for Disease Control and Prevention
DATA ANALYSIS and GRAPHIC: Harvard Youth Violence Prevention Center

- While boys and girls were equally likely to witness violence at school, boys were twice as likely as girls to be assaulted themselves during the previous 12 months.

Violence

Exposure of High School Students to Violence at School by Race/Ethnicity: Counts and Percentages Boston, 2006

	Witness to Violence*	Victim of Violence**
Asian	15%	3%
Black	32%	8%
Latino	37%	7%
White	24%	5%
Bi/Multiracial, Other	34%	17%

Count	Witness to Violence	Victim of Violence
Asian	9	2
Black	114	28
Latino	88	16
White	30	6
Bi/Multracial, Other	12	6

*In the past 12 months, respondent saw someone punched, kicked, choked, beaten up, attacked with a weapon, shot or shot at.
** In the past 12 months, respondent was the victim of one of these acts.
DATA SOURCE: Boston Youth Survey, 2006; Harvard Youth Violence Prevention Center through a cooperative agreement with the Centers for Disease Control and Prevention
DATA ANALYSIS and GRAPHIC: Harvard Youth Violence Prevention Center

- While biracial and multiracial youth were no more likely than Blacks or Latinos to report witnessing violence at school, they were twice as likely as Blacks and Latinos to report being assaulted themselves at school in the previous 12 months.

Violence

Exposure of High School Students to Violence While Commuting to or From School, by Sex: Counts and Percentages, Boston, 2006

	Witness to Violence*	Victim of Violence**
Male	21%	8%
Female	22%	3%

Count	Witness to Violence	Victim of Violence
Male	68	25
Female	110	15

*In the past 12 months, respondent saw someone punched, kicked, choked, beaten up, attacked with a weapon, shot or shot at.
** In the past 12 months, respondent was the victim of one of these acts.
DATA SOURCE: Boston Youth Survey, 2006; Harvard Youth Violence Prevention Center through a cooperative agreement with the Centers for Disease Control and Prevention
DATA ANALYSIS and GRAPHIC: Harvard Youth Violence Prevention Center

- Although boys and girls were equally likely to witness violence on their way to or from school, boys were more likely than girls to be assaulted themselves on the way to or from school during the previous 12 months.

Violence

Exposure of High School Students to Violence While Commuting to or From School, by Race/Ethnicity: Counts and Percentages, Boston, 2006

	Witness to Violence*	Victim of Violence**
Asian	13%	6%
Black	26%	4%
Latino	22%	4%
White	14%	4%
Bi/Multiracial, Other	24%	14%

Count	Witness to Violence	Victim of Violence
Asian	8	4
Black	92	16
Latino	52	10
White	17	5
Bi/Multracial, Other	12	6

*In the past 12 months, respondent saw someone punched, kicked, choked, beaten up, attacked with a weapon, shot or shot at.
** In the past 12 months, respondent was the victim of one of these acts.
DATA SOURCE: Boston Youth Survey, 2006; Harvard Youth Violence Prevention Center through a cooperative agreement with the Centers for Disease Control and Prevention
DATA ANALYSIS and GRAPHIC: Harvard Youth Violence Prevention Center

- While biracial and multiracial youth were no more likely than Blacks or Latinos to report witnessing violence on their way to or from school, they were more than three times as likely as Blacks and Latinos to report being assaulted on their way to or from school in the previous 12 months.

Violence

High School Students Involvement with Weapons: Counts and Percentages, Boston, 2004 and 2006

	2004	2006
Attacked with Weapon (not gun in past year)	13%	9%
Shot/Shot at (past year)	11%	4%
Carried Gun (past year)	8%	6%

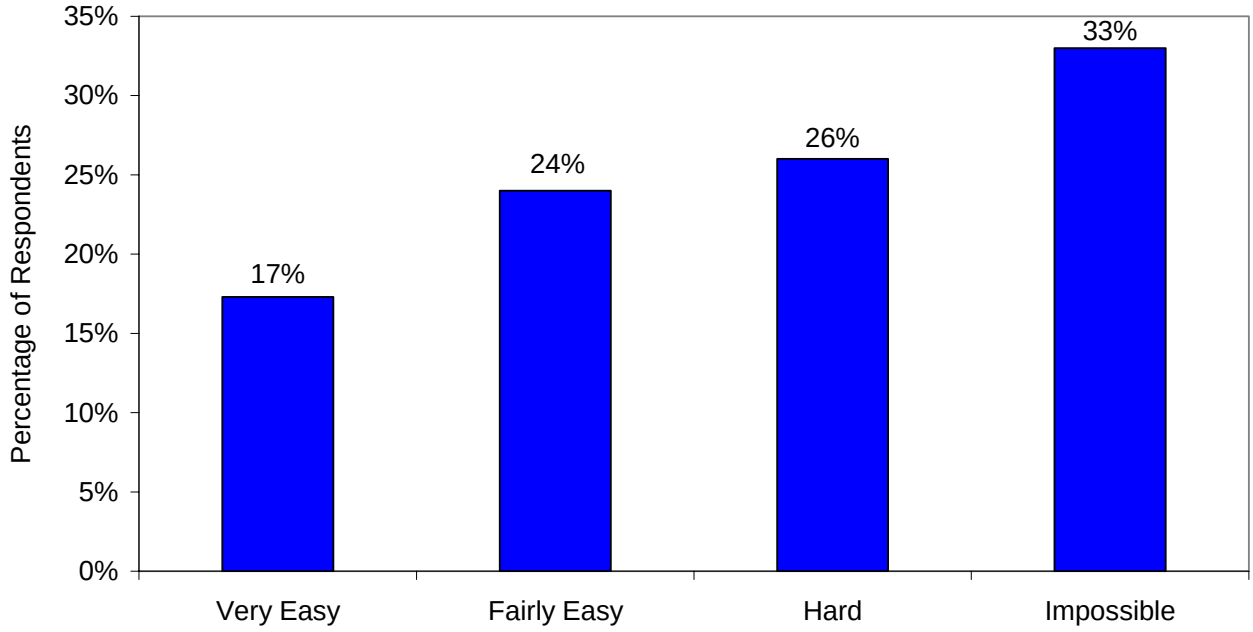
Count	2004	2006
Attacked with Weapon (not gun)	114	83
Shot/Shot at (past year)	96	40
Carried Gun (past year)	77	40

DATA SOURCE: Boston Youth Survey, 2004, 2006; Harvard Youth Violence Prevention Center through a cooperative agreement with the Centers for Disease Control and Prevention
DATA ANALYSIS and GRAPHIC: Harvard Youth Violence Prevention Center

- In 2006, 9% of survey respondents reported having been attacked with a weapon other than a gun in the past year, down from 13% in 2004.
- Four percent reported being shot or shot at in 2006, down from 11% in 2004.
- There was a slight decline in gun carrying among high school youth—from 8% in 2004 to 6% in 2006.

Violence

High School Students' Ease with Getting a Gun, Boston, 2006



	Very Easy	Fairly Easy	Hard	Impossible
Count	149	213	186	313

DATA SOURCE: Boston Youth Survey, 2006; Harvard Youth Violence Prevention Center through a cooperative Agreement with the Centers for Disease Control and Prevention
DATA ANALYSIS and GRAPHIC: Harvard Youth Violence Prevention Center

- When asked how easy they thought it would be for them to get a gun, 33% of the students who responded to the survey question said it would be impossible and 26% said it would be hard; however, 17% said it would be very easy and 24% said it would be fairly easy.

Violence

Reasons for Gun Carrying by High School Students*: Counts and Percentages, Boston, 2006

	N=72	N=41
	2004	**2006**
Felt unsafe in neighborhood	38%	37%
Someone had threatened me	29%	32%
Friends carried guns	14%	12%
Carried it for someone else**	14%	32%
Felt unsafe at school	13%	17%
Felt like it/gave me power**	10%	17%

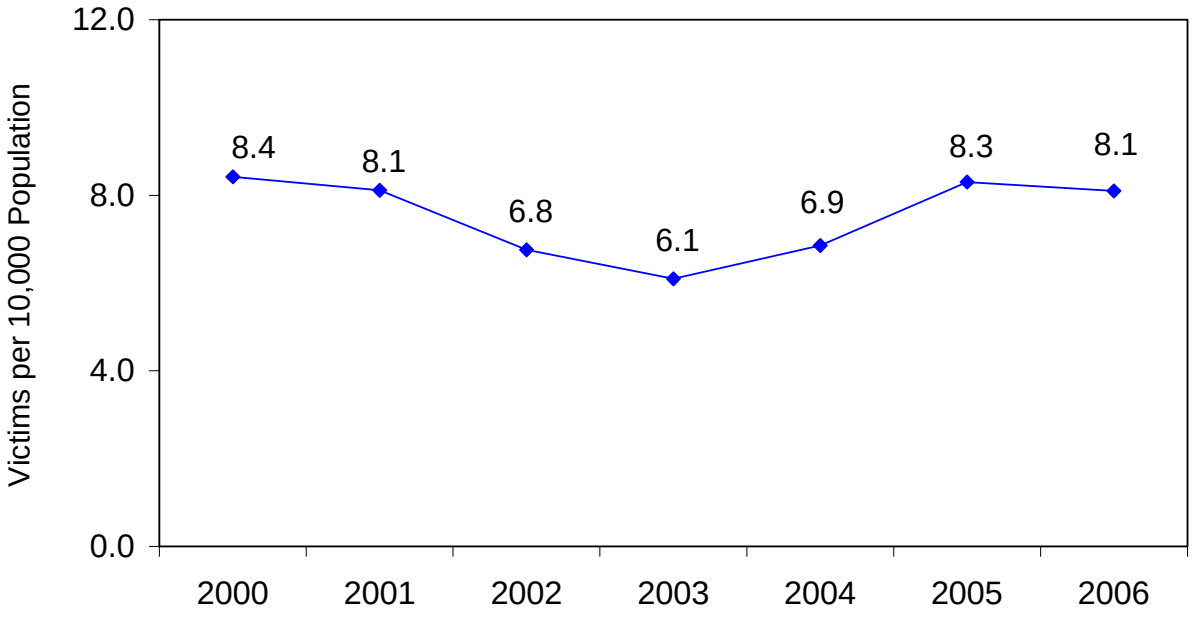
Count	2004	2006
Felt unsafe in neighborhood	27	15
Someone had threatened me	21	13
Friends carried guns	10	5
Carried for someone else	10	13
Felt Unsafe at school	9	7
Felt like it/gave me power	7	7

*In 2004, 72 of gun carriers (94%) provided a reason fro gun carrying; in 2006; 41 of gun carriers (84%) provided a reason.
**These reasons were originally written in by the respondent under "other reason".
DATA SOURCE: Boston Youth Survey, 2006; Harvard Youth Violence Prevention Center through a cooperative agreement with the Centers for Disease Control and Prevention
DATA ANALYSIS and GRAPHIC: Harvard Youth Violence Prevention Center

- The most common reason given for carrying a gun was feeling unsafe in his/her neighborhood. The second most common reason was being threatened.

Violence

Nonfatal Assault-Related Gunshot and Stabbing Victims by Year: Counts and Rates Boston, 2000-2006



	2000	2001	2002	2003	2004	2005	2006
Count	496	478	398	359	404	489	477

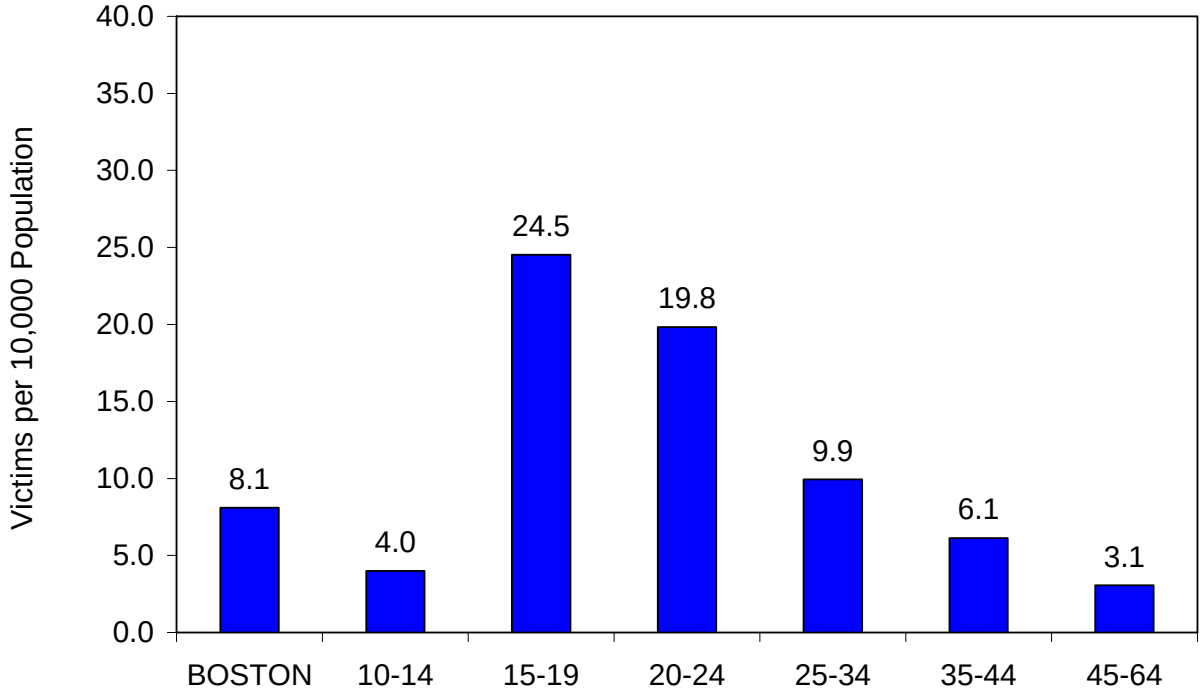
DATA SOURCE: Weapon-related injuries, Massachusetts Department of Public Health, Weapon-Related Injury Surveillance System
DATA ANALYSIS: Boston Public Health Commission Research Office

- In 2006, 477 Boston residents were treated in hospital emergency departments for nonfatal assault-related gunshot and stabbing injuries. Forty-two percent of these injuries were due to gunshots, and 58% were injuries inflicted with knives, razor blades, and other sharp instruments (data not shown).

- The highest rate of Boston victims with nonfatal assault-related gunshot and stabbing injuries during the seven-year period of 2000 to 2006 occurred in 2000. The rate declined 27.4% between 2000 and 2003 but then increased 32.8% from 2003 to 2006.

Violence

Nonfatal Assault-Related Gunshot and Stabbing Victims by Age: Counts and Rates, Boston, 2006



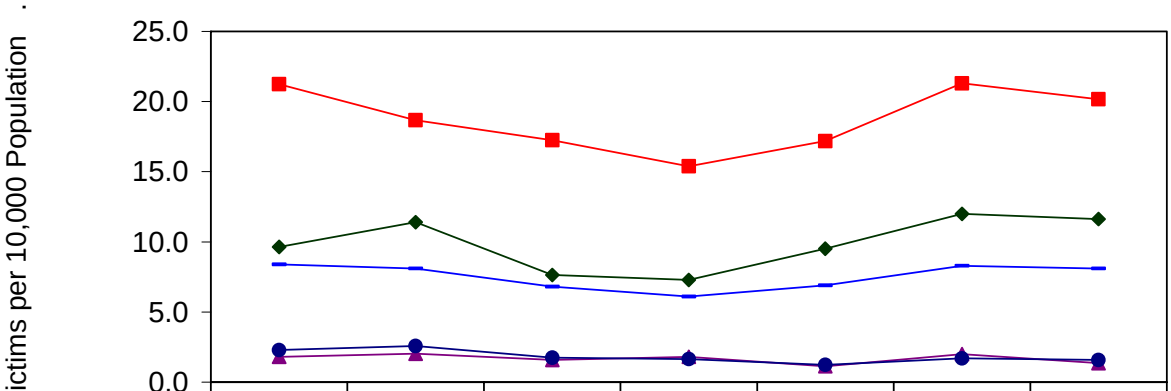
	BOSTON	10-14	15-19	20-24	25-34	35-44	45-64
Count	477	13	107	139	124	53	32

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

- In 2006, the highest rate of Boston victims with nonfatal assault-related gunshot and stabbing injuries occurred among ages 15-19.

Violence

Nonfatal Assault-Related Gunshot and Stabbing Victims By Race/Ethnicity and Year: Counts and Rates Boston, 2000-2006



	2000	2001	2002	2003	2004	2005	2006
Asian	1.8	2.0	1.6	1.8	1.1	2.0	1.4
Black	21.2	18.7	17.2	15.4	17.2	21.3	20.2
Latino	9.6	11.4	7.6	7.3	9.5	12.0	11.6
White	2.3	2.6	1.7	1.6	1.2	1.7	1.6
BOSTON	8.4	8.1	6.8	6.1	6.9	8.3	8.1

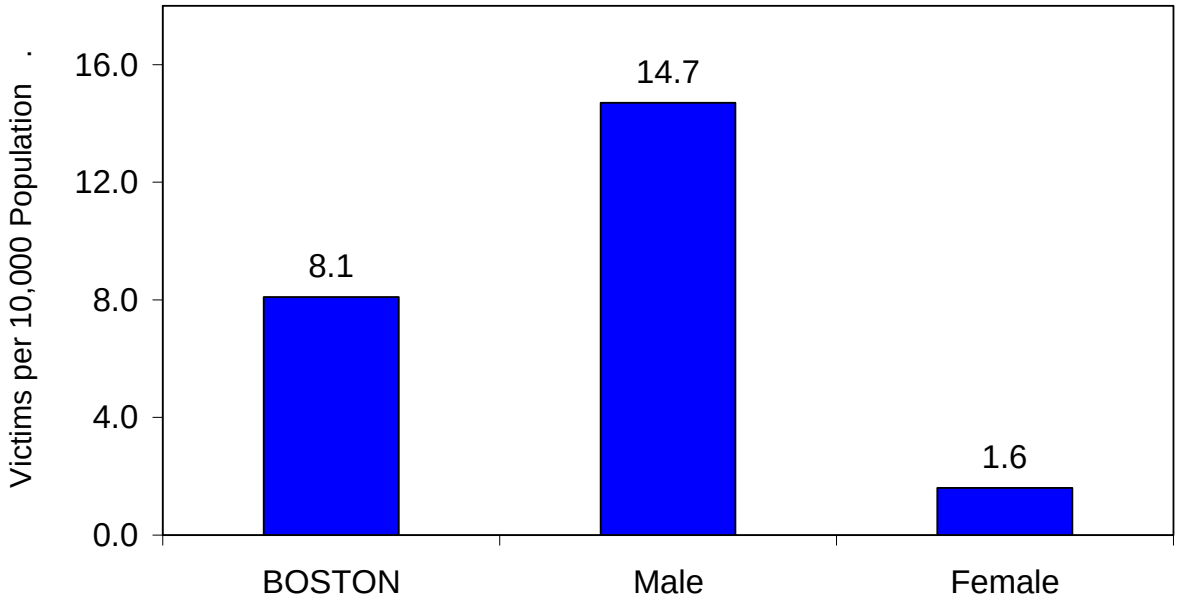
Count	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Asian	8	9	7	8	5	9	6
Black	298	262	242	216	241	299	283
Latino	82	97	65	62	81	102	99
White	67	75	51	48	36	51	46
BOSTON	496	478	398	359	404	489	477

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, the victim rate for nonfatal assault-related gunshot and stabbing injuries was highest for Black Boston residents, followed by Latino residents for each year shown.
- From 2000 to 2003, the rate fell 27.4% for Black residents before increasing 31.2% between 2003 and 2006.

Violence

Nonfatal Assault-Related Gunshot and Stabbing Victims by Sex: Counts and Rates Boston, 2006



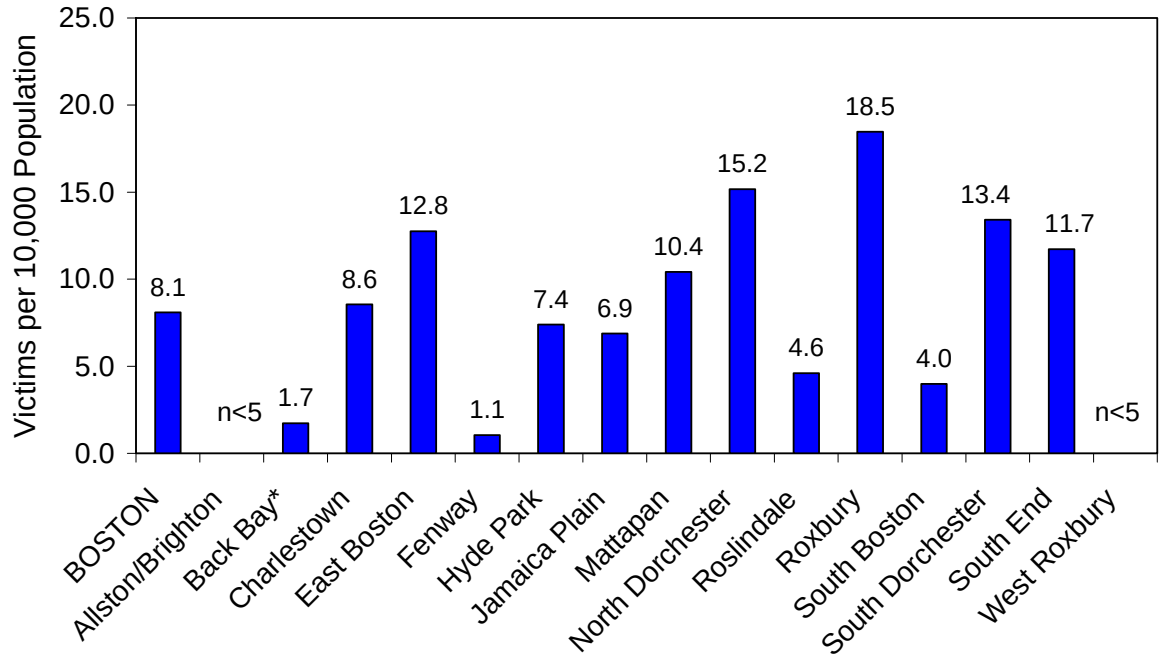
	BOSTON	Male	Female
Count	477	417	49

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

- The rate of Boston male victims of nonfatal assault-related gunshot and stabling injuries in 2006 was more than nine times the rate for Boston female victims.

Violence

Nonfatal Assault-Related Gunshot and Stabbing Victims By Neighborhood: Counts and Rates, Boston, 2006



	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	RS	RX	SB	SD	SE	WR
Count	477	n<5	8	13	49	5	21	25	29	89	15	64	12	101	32	n<5

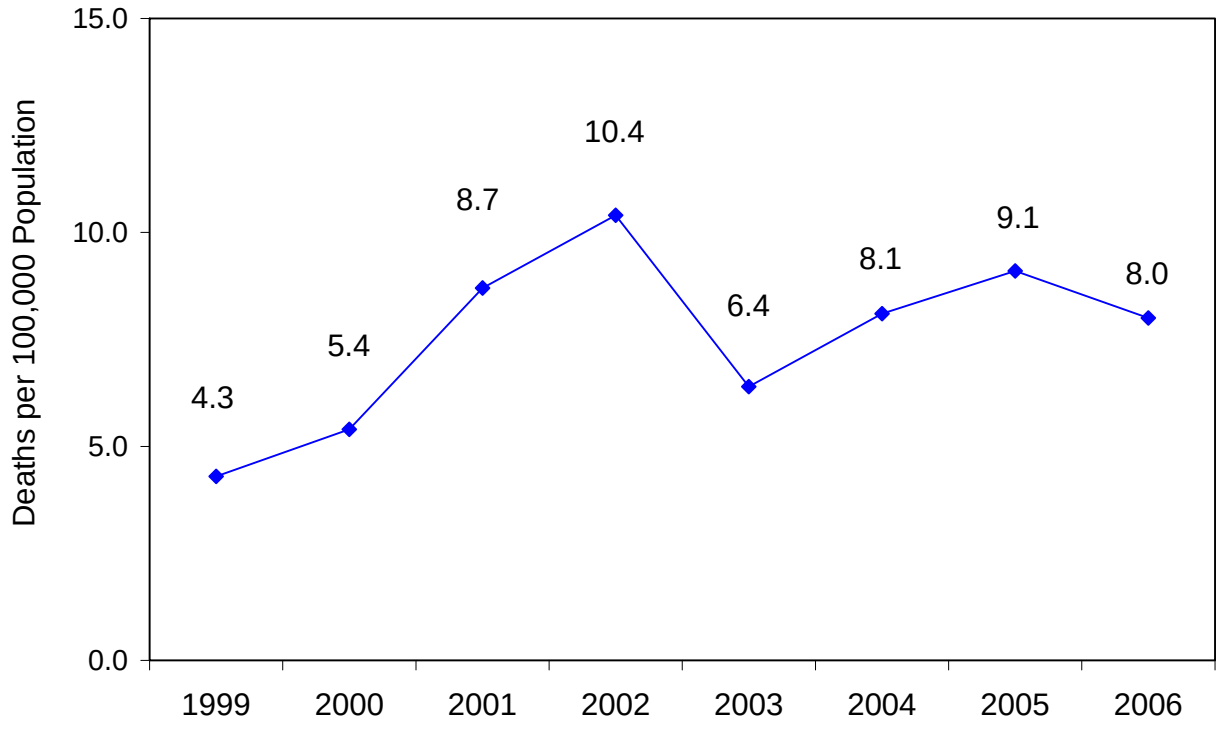
ABBREVIATIONS KEY: BOS=Boston, A/B=Allston/Brighton, BB=Back Bay, CH=Charlestown, EB=East Boston, FW=Fenway, HP=Hyde Park, JP=Jamaica Plain, MT=Mattapan, ND=North Dorchester, RS=Roslindale, RX=Roxbury, SB=South Boston, SD=South Dorchester, SE=South End, and WR=West Roxbury
*Includes the North End
NOTE: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

- Residents of Roxbury had the highest victim rate for nonfatal assault-related gunshot and stabbing injuries of all Boston neighborhoods in 2006. This rate was more than twice the rate for Boston overall.

- The rates for residents of seven other neighborhoods were also higher than the Boston overall rate: Charlestown, East Boston, Mattapan, North Dorchester, Roxbury, South Dorchester, and the South End.

Violence

Homicide by Year: Counts and Age-Adjusted Rates, Boston, 1999-2006



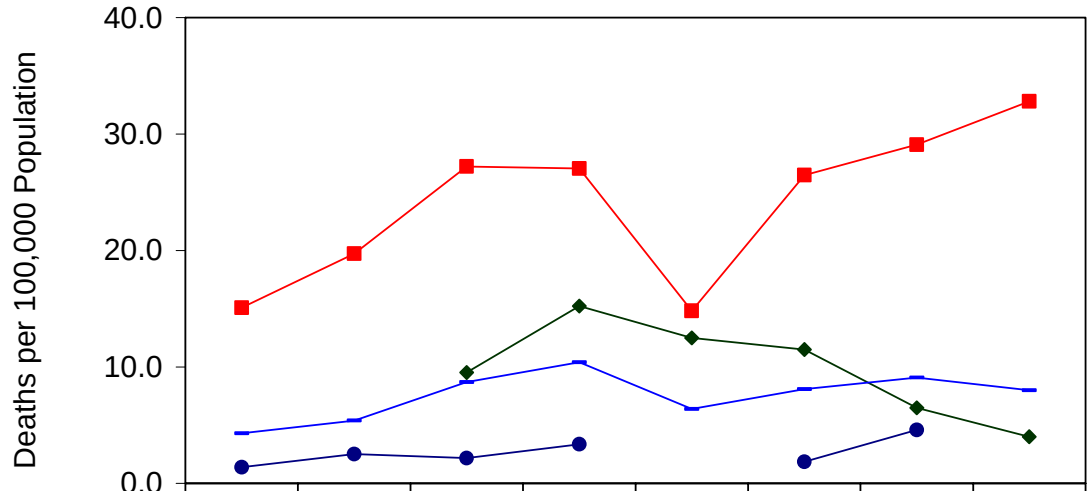
	1999	2000	2001	2002	2003	2004	2005	2006
Count	31	42	62	68	42	58	64	59

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

- From 1999 through 2006, 426 homicides occurred among Boston residents
- The number of homicides in 2006 is 10.7% above the eight-year average of 53.3 per year (data not shown).
- The age-adjusted homicide rate in 2006 was 12.1% less than in 2005.

Violence

Homicide by Race/Ethnicity and Year: Counts and Age-Adjusted Rates, Boston, 1999-2006



	1999	2000	2001	2002	2003	2004	2005	2006
Black	15.1	19.7	27.2	27.0	14.8	26.5	29.1	32.8
Latino	--	--	9.5	15.2	12.5	11.5	6.5	4.0
White	1.4	2.5	2.2	3.4	--	1.9	4.6	--
BOSTON	4.3	5.4	8.7	10.4	6.4	8.1	9.1	8.0

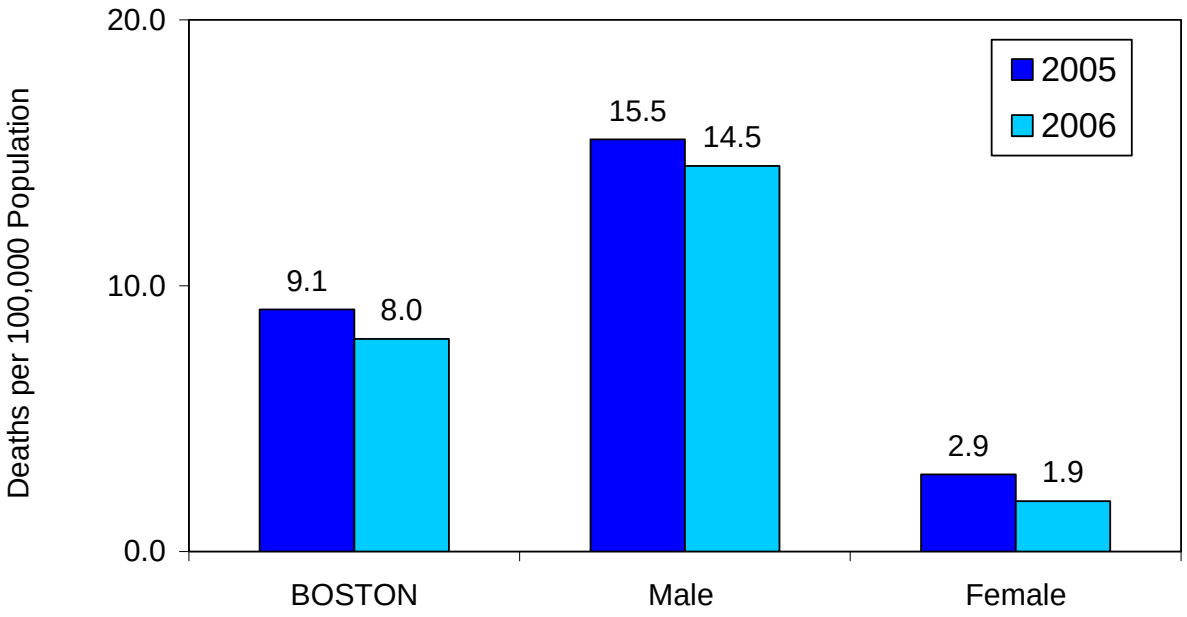
Count	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Black	23	31	41	41	23	41	44	49
Latino	n<5	n<5	10	15	10	10	7	5
White	5	7	7	10	n<5	5	11	n<5
BOSTON	31	42	62	68	42	58	64	59

NOTE: There were too few deaths from homicide among Latinos in 1999 and 2000, and among Whites in 2003 and 2006, 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

- The 2006 homicide rate for Black Boston residents was the highest recorded during the eight-year period 1999 to 2006. From 2003 to 2006, the homicide rate for Blacks increased 122%.
- Homicide rates for Black Boston residents exceeded those of other racial/ethnic groups for every year of the eight-year period. Between 1999 and 2006, more than two-thirds of Boston homicide victims were Black.
- The 2006 homicide for Black residents was more than eight times the rate for Latinos and more than four times the Boston overall rate.
- The homicide rate for Latino residents decreased 73.7% from 2002 to 2006.

Violence

Homicide by Sex and Year: Counts and Age-Adjusted Rates, Boston, 2005 and 2006



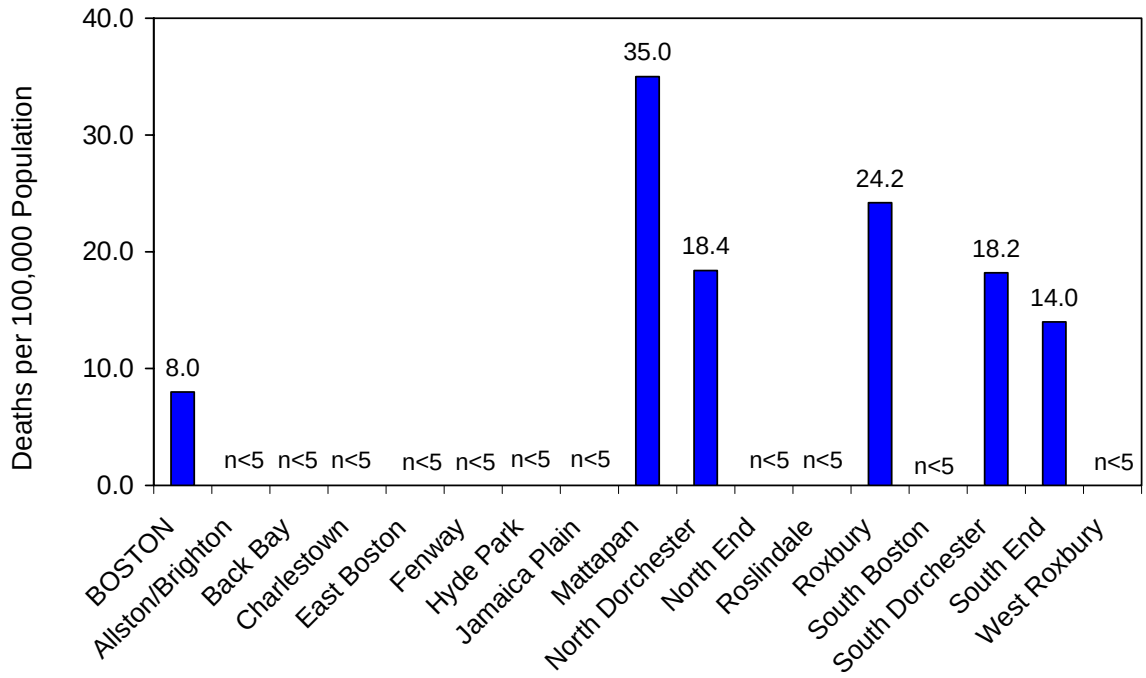
Count	BOSTON	Male	Female
2005	64	55	9
2006	59	53	6

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

- Homicide rates for Boston males and females decreased from 2005 to 2006.
- In 2006, 89.8% of Boston resident victims of homicide were males.
- The homicide rate for Boston males was more than seven times the rate for females in 2006.

Violence

Homicide by Neighborhood: Counts and Age-Adjusted Rates, Boston, 2006



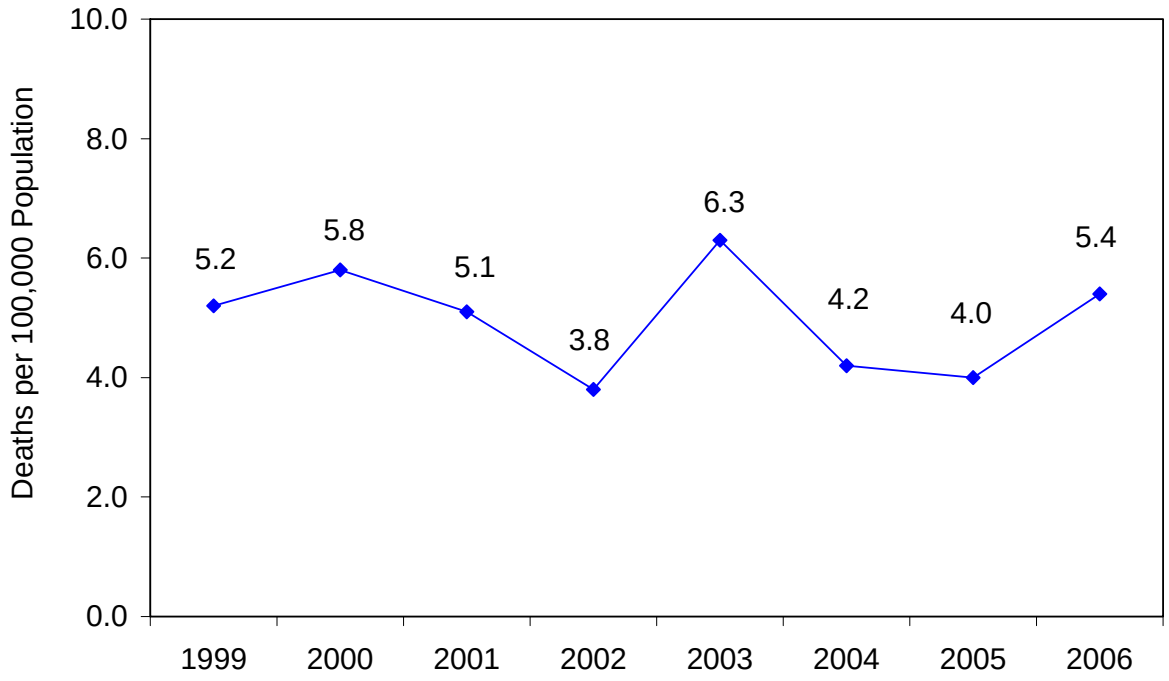
	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	59	n<5	n<5	n<5	n<5	n<5	n<5	n<5	7	18	n<5	n<5	15	N<5	8	5	n<5

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 2006, five neighborhoods had enough homicides to permit calculation of homicide rates: Mattapan, North Dorchester, Roxbury, South Dorchester, and the South End.
- Homicide rates for all five neighborhoods were substantially higher than the homicide rate for Boston overall.

Violence

Suicide by Year: Counts and Age-Adjusted Rates, Boston, 1999-2006



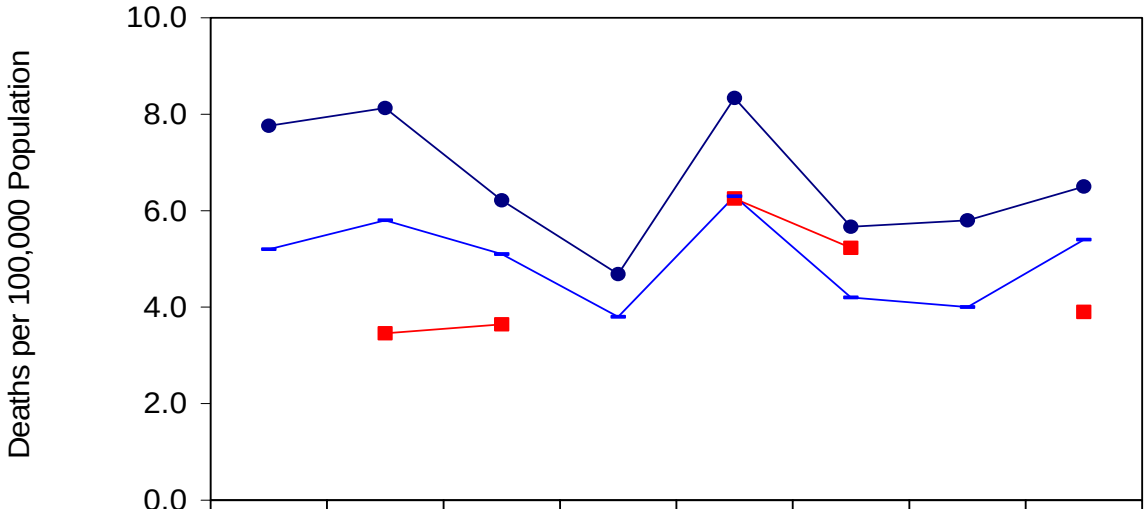
	1999	2000	2001	2002	2003	2004	2005	2006
Count	31	34	32	22	38	26	23	31

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

- Thirty-one Boston residents died by suicide in 2006 accounting for a 35.0% increase in the Boston suicide rate from 2005.

Violence

Suicide by Race/Ethnicity and Year: Counts and Age-Adjusted Rates, Boston, 1999-2006



	1999	2000	2001	2002	2003	2004	2005	2006
Black	--	3.5	3.6	--	6.3	5.2	--	3.9
White	7.8	8.1	6.2	4.7	8.3	5.7	5.8	6.5
BOSTON	5.2	5.8	5.1	3.8	6.3	4.2	4.0	5.4

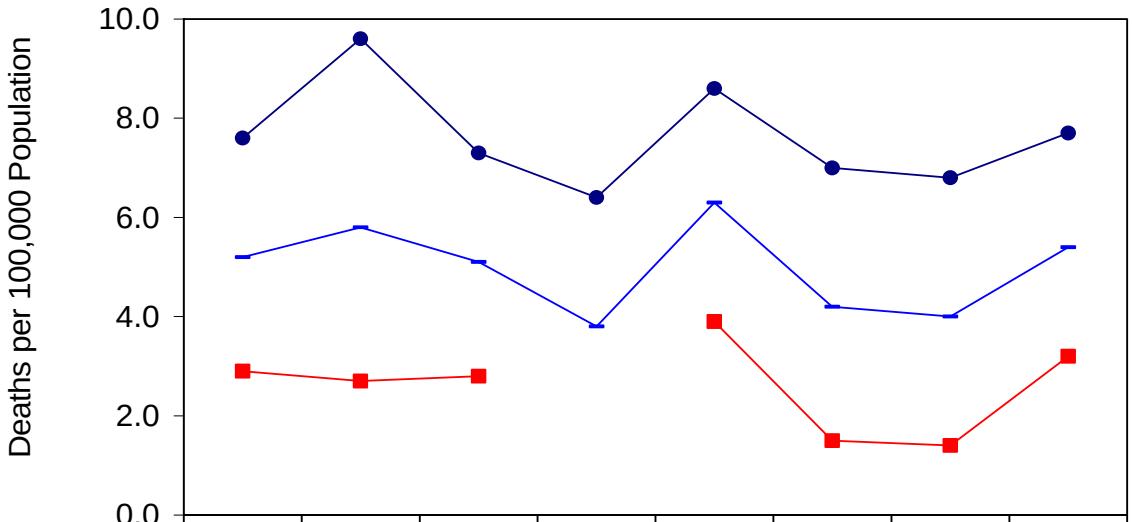
Count	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Black	n<5	5	5	n<5	9	7	n<5	5
White	23	25	20	15	26	16	17	19
BOSTON	31	34	32	22	38	26	23	31

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 67.9% of the city's suicides between 1999 and 2006, although they make up just under half of the population.
- The suicide rate for White Bostonians was higher than the rate for Black Bostonians in each of the eight years, 1999-2006.
- The rate for Whites increased 12.1% from 2005 to 2006.

Violence

Suicide by Sex and Year: Counts and Age-Adjusted Rates, Boston, 1999-2006



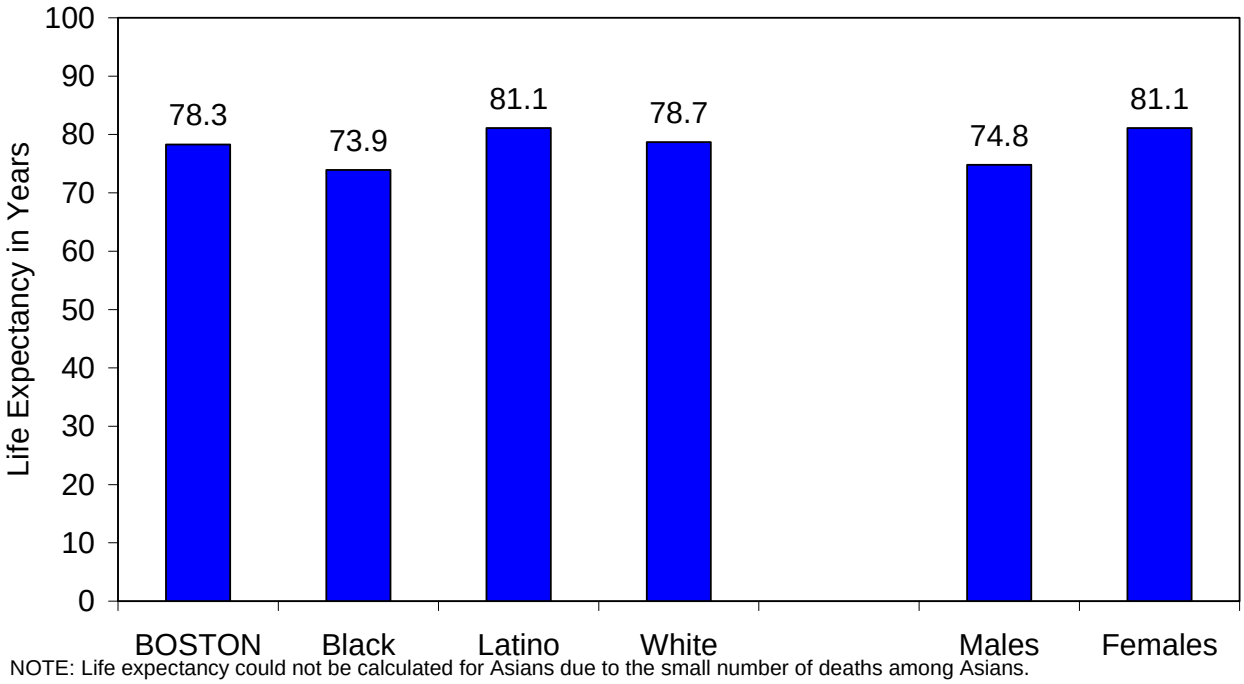
	1999	2000	2001	2002	2003	2004	2005	2006
Female	2.9	2.7	2.8	--	3.9	1.5	1.4	3.2
Male	7.6	9.6	7.3	6.4	8.6	7.0	6.8	7.7
BOSTON	5.2	5.8	5.1	3.8	6.3	4.2	4.0	5.4

Count	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Female	9	8	9	n<5	11	5	5	10
Male	22	26	23	18	27	21	18	21
BOSTON	31	34	32	22	38	26	23	31

NOTE: These data do not include persons whose sex was not reported, except in the Boston overall count and rate. Rates are not presented for females in 2002 due to the small number of suicides
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- From 2005 to 2006, suicide rates for males and females increased. During that time period, the female suicide rate more than doubled.
- From 1999 to 2006, the male suicide rate was consistently more than twice the female rate.

Mortality

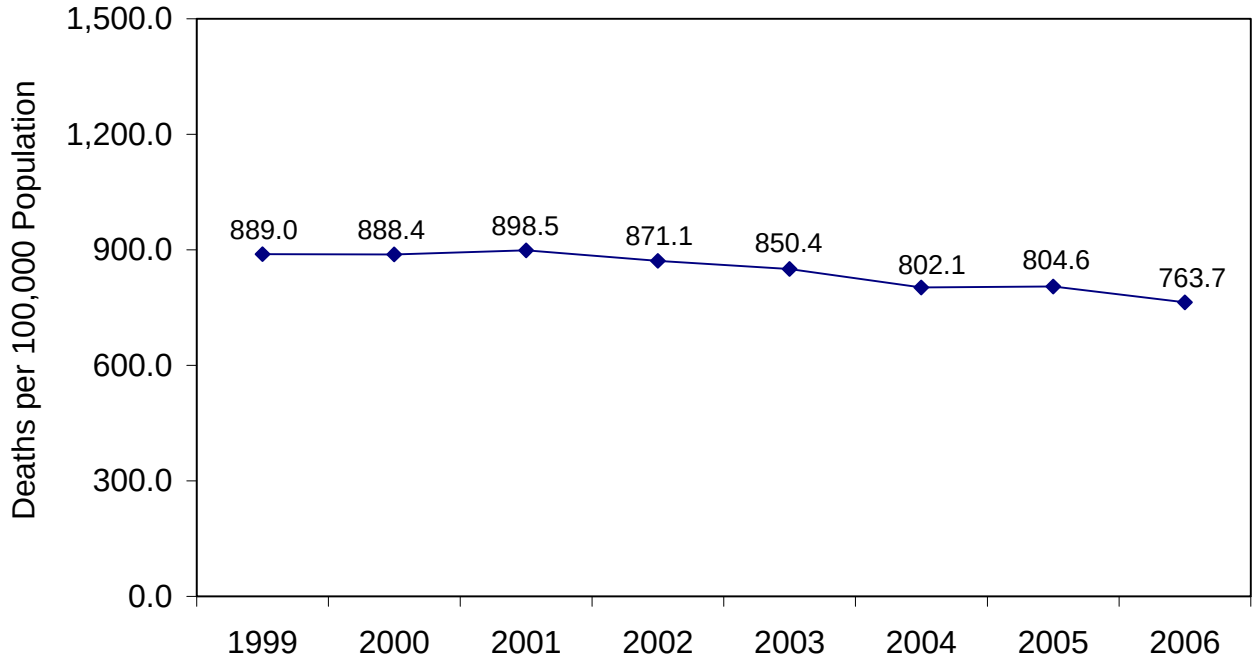


NOTE: Life expectancy could not be calculated for Asians due to the small number of deaths among Asians.
DATA SOURCE: Boston resident deaths and live births, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Life expectancy is approximately seventy-eight years for the Boston population.
- Boston females born in 2004 to 2006 could expect to live about six years longer than Boston males born during the same period.
- Estimated life expectancy for both Black and White Boston residents has increased by approximately one year in 2004-2006 compared 2002-2004.
- Estimated life expectancy is highest for Boston's Latino residents followed by Boston's White residents. Black Boston residents have a lower life expectancy than Boston residents overall.

Mortality

Mortality by Year: Counts and Age-Adjusted Rates, Boston, 1999-2006



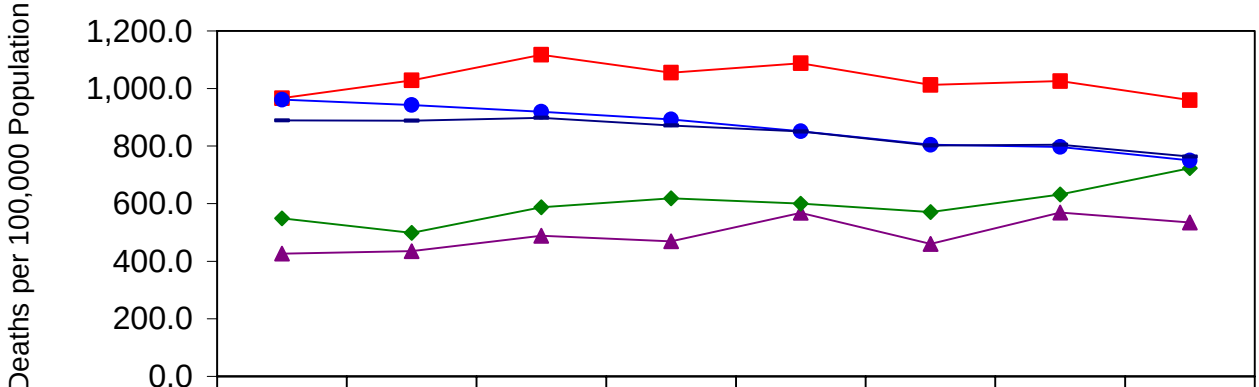
	1999	2000	2001	2002	2003	2004	2005	2006
Count	4,491	4,500	4,572	4,412	4,286	4,063	4,070	3,864

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

- In 2006, the age-adjusted overall mortality rate for Boston residents was 763.7 deaths per 100,000 population, a one-year change of 5.1%. The 2006 rate was 14.1% lower than the rate in 1999.

Mortality

Mortality by Race/Ethnicity and Year: Counts and Age-Adjusted Rates, Boston, 1999-2006



	1999	2000	2001	2002	2003	2004	2005	2006
Asian	426.7	434.7	488.5	469.0	568.0	460.3	569.0	534.3
Black	966.1	1,028.1	1,116.8	1,054.9	1,087.4	1,012.1	1,025.8	959.7
Latino	548.8	498.7	587.7	618.4	600.3	570.9	631.7	723.3
White	960.9	942.8	919.6	892.6	851.2	804.5	797.2	750.0
BOSTON	889.0	888.4	898.5	871.1	850.4	802.1	804.6	763.7

Count	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Asian	126	128	147	135	165	135	166	156
Black	953	1,015	1,103	1,041	1,058	991	990	938
Latino	171	172	197	216	205	200	212	233
White	3,232	3,177	3,115	3,005	2,845	2,717	2,683	2,513
BOSTON	4,491	4,500	4,575	4,412	4,287	4,063	4,070	3,864

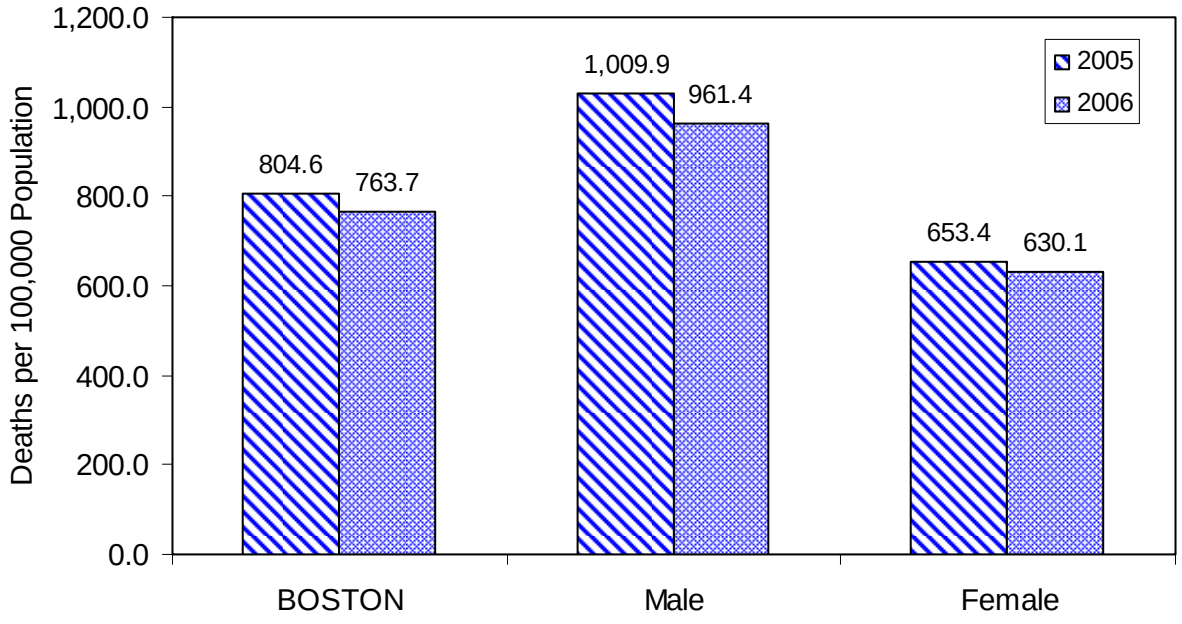
NOTE: Rates for 1999 have been recalculated based on U.S. Census 2000 population figures.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- In every year of the 1999-2006 period, the age-adjusted mortality rates were higher for Black residents than for other race/ethnicity groups. In 2006, the rate for Blacks was 79.6% higher than the rate for Asians, 32.7% higher than the rate for Latinos, and 28.0% higher than the rate for Whites.

- Boston mortality rates were higher in 2006 than in 1999 for Asians and Latinos, but lower for Blacks and Whites. The difference in rates was 25.2% for Asians, and 31.8% for Latinos. The Black mortality rate was 0.66% lower in 2006 than in 1999 and the White mortality rate was 21.9% lower in 2006 than in 1999.

Mortality

Mortality by Sex: Counts and Age-Adjusted Rates, Boston, 2005 and 2006



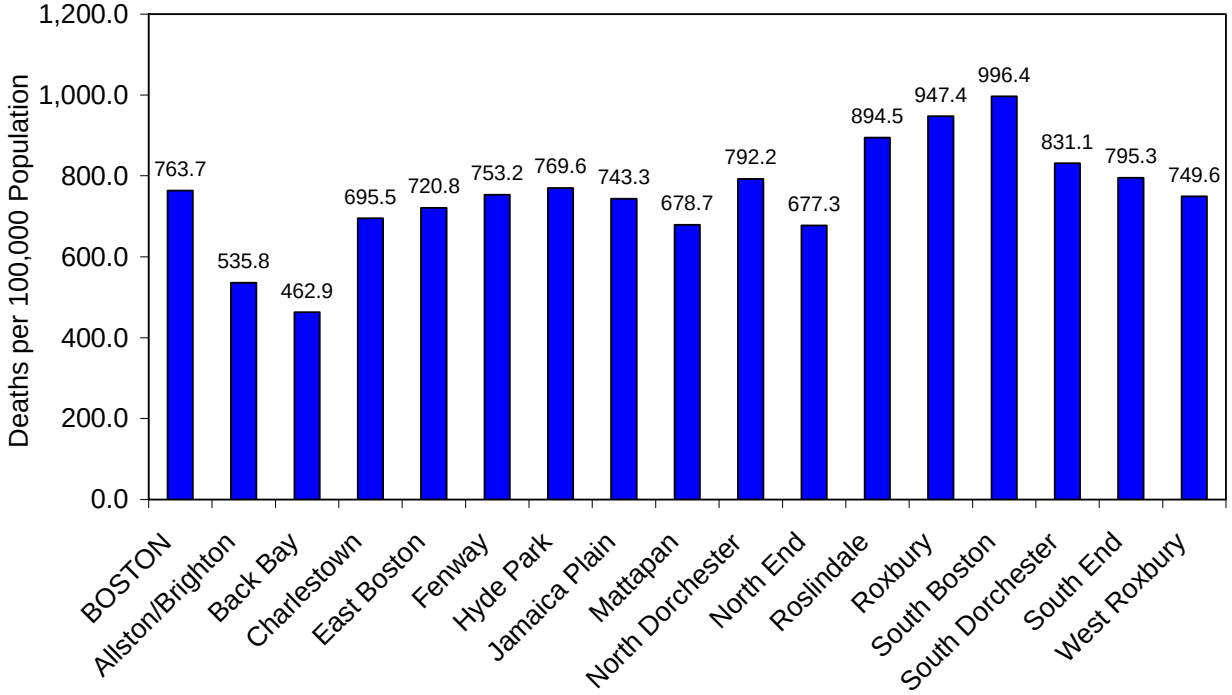
Count	BOSTON	Male	Female
2005	4,070	1,981	2,089
2006	3,864	1,864	2,000

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

- In 2005, the age-adjusted mortality rate for Boston males was 54.6% higher than the rate for females.
- In 2006, the age-adjusted mortality rate for Boston males was 52.6% higher than the rate for females.

Mortality

Mortality by Neighborhood: Counts and Age-Adjusted Rates, Boston, 2006



	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	3,864	285	116	87	267	82	269	170	92	426	102	393	391	306	320	249	293

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 2006, South Boston had the city's highest mortality rate followed by Roxbury.
- The lowest neighborhood mortality rate was for the Back Bay followed by the rate for Allston/Brighton.

Mortality

Leading Causes of Death by Year: Counts and Age-Adjusted Rates, Boston, 2002-2006

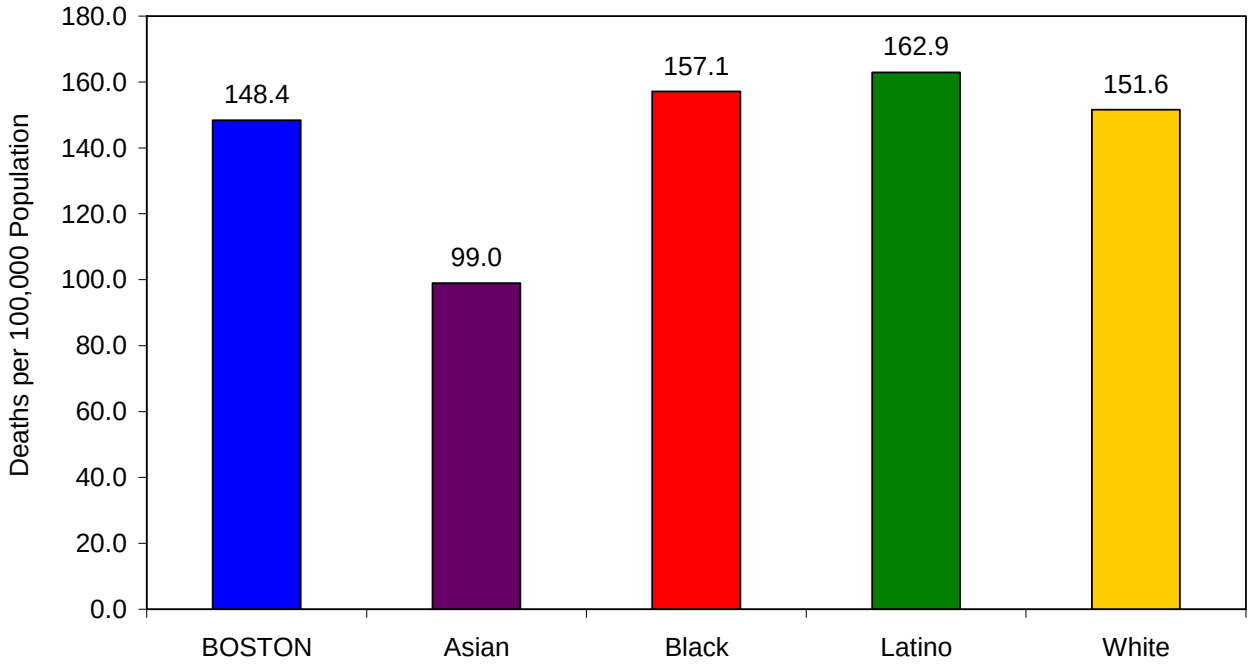
	Count	Rate
2002		
Cancer	1,072	218.4
Heart Disease	964	191.7
Injuries*	275	47.6
Stroke	227	44.6
Chronic Obstructive Pulmonary Disease	156	31.6
All causes	**4,412**	**871.1**
2003		
Cancer	1,036	212.3
Heart Disease	992	198.2
Injuries*	279	48.2
Stroke	222	43.3
Chronic Obstructive Pulmonary Disease	203	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**
2005		
Cancer	992	202.9
Heart Disease	828	164.0
Stroke	213	41.8
Injuries*	241	41.1
Chronic Obstructive Pulmonary Disease	179	35.8
All causes	**4,070**	**804.6**
2006		
Cancer	944	192.7
Heart Disease	751	148.4
Injuries*	316	55.3
Stroke	209	41.4
Substance Abuse	176	33.5
All causes	**3,864**	**763.7**

*homicides, suicides, motor-vehicle injuries, unintentional, and "undetermined" injuries
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 2002 and 2006, Boston's leading causes were similar from year to year, with cancer and heart disease always ranking first and second, respectively, stroke and injuries sharing the third and fourth ranks, and chronic obstructive pulmonary disease (COPD) always ranking fifth until 2006, when substance abuse became the fifth leading cause of death in Boston.
- Age-adjusted mortality rates were lower in 2006 than in 2002 for some leading causes, including cancer, heart disease, stroke, and all causes. The difference was greatest (22.6%) for heart disease mortality.
- From 2002 to 2006, mortality rates declined 11.8% for cancer, 7.2% for stroke, and by 12.3% for all causes of death.
- Higher mortality rates in 2006 than in 2002 were also seen. The age-adjusted mortality rate for injuries was 16.2% higher in 2006 compared to 2002.

Mortality

Heart Disease Mortality: Counts and Age-Adjusted Rates by Race/Ethnicity, Boston 2006



	BOSTON	Asian	Black	Latino	White
Count	751	28	141	38	540

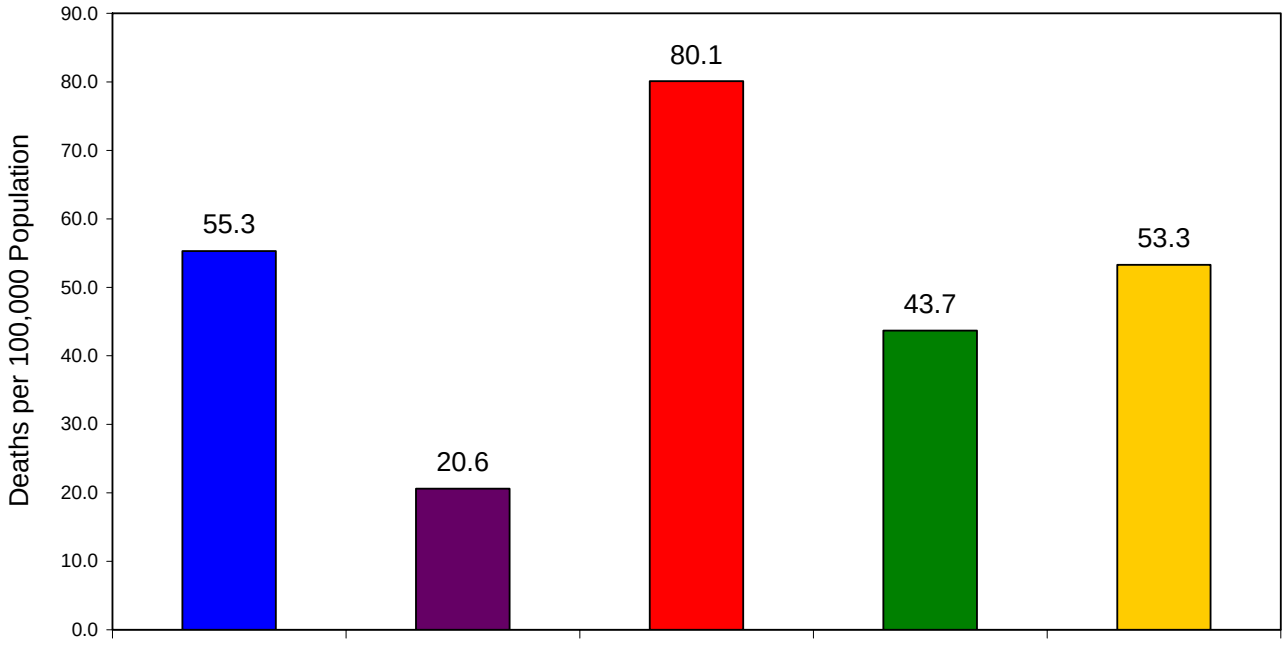
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Heart disease is one of the leading causes of death for most race/ethnicities in Boston. In 2006, age-adjusted heart disease mortality rates for all Boston race/ethnicities, except for Asians, were higher than the overall Boston age-adjusted heart disease mortality rate. The highest rate was for Latinos followed by Blacks.

- From 2005 to 2006 the age-adjusted mortality heart disease rate has decreased for Blacks and Whites; however it increased for Latinos and Asians.

Mortality

All Injury Mortality*: Counts and Age-Adjusted Rates by Race/Ethnicity, Boston 2006



	BOSTON	Asian	Black	Latino	White
Count	316	9	107	36	160

*homicides, suicides, motor-vehicle injuries, unintentional, and "undetermined" injuries
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Injury is one of the leading causes of death for most race/ethnicities in Boston. In 2006, age-adjusted injury mortality rates were highest for Blacks and Whites. From 2005 to 2006, the age-adjusted injury mortality rate increased 41.5% for Black Boston residents (data not shown).

- In 2006, the injury age-adjusted mortality rate for Blacks was 288.8% higher than the Asian injury age-adjusted mortality rate, 83.3% higher than the Latino rate, 50.3% higher than the White rate, and 44.8% higher than the overall Boston injury age-adjusted mortality rate.

Mortality

Leading Causes of Death by Race/Ethnicity and Year: Counts and Age-Adjusted Rates Boston, 2002-2006

Asian	Count	Rate
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**
2005		
Cancer	53	177.5
Heart Disease	22	79.2
Stroke	13	45.5
Chronic Obstructive Pulmonary Disease	7	26.0
Nephritis/Nephrosis	6	21.4
All causes	**166**	**569.0**
2006		
Cancer	41	135.9
Heart Disease	28	99.0
Stroke	15	51.5
Chronic Obstructive Pulmonary Disease	11	39.1
Alzheimer's Disease	7	26.0
All causes	**156**	**534.3**

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 have generally low mortality rates, as seen in their leading causes of death for 2002 through 2006.
- For every year during this period, cancer was the leading cause of death, followed by heart disease. From 2005 to 2006, the age-adjusted heart disease mortality rate increased 25% for Asians.
- From 2005 to 2006, age-adjusted mortality rates for each leading cause of death increased, except for cancer, which decreased by 23.4%. However, from 2002 to 2005, the cancer mortality rate for Asians increased 10.9%.
- Although most of the leading causes of mortality for Asians increased from 2005 to 2006, the rates for the causes shown were lower than for Boston's other racial/ethnic groups during 2006.

Mortality

Leading Causes of Death by Race/Ethnicity and Year: Counts and Age-Adjusted Rates Boston, 2002-2006 (Continued)

Black	Count	Rate
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**
2005		
Cancer	231	236.6
Heart Disease	198	221.7
Stroke	55	60.0
Injuries	77	56.6
Nephrites/Nephrosis	40	45.0
All causes	**990**	**1,025.8**
2006		
Cancer	246	250.2
Heart Disease	141	157.1
Injuries	107	80.1
Stroke	49	56.0
Diabetes	38	39.4
All causes	**938**	**959.7**

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, death rates for leading causes were higher than for other racial/ethnic groups, even though the leading causes themselves were similar.
- Cancer and heart disease were the leading causes of death among Black Boston residents between 2002 and 2006.
- Age-adjusted mortality rates for cancer were higher for Black residents than for Asian, Latino, and White residents. From 2005 to 2006, the age-adjusted cancer mortality rate increased 5.7% for Blacks.
- From 2002 to 2006, age-adjusted mortality rates for Black residents declined 2.8% for cancer, 11.3% for stroke, 18.4% for diabetes, and 28.9% for heart disease. However, the rate for injury increased 46.7%.
- Diabetes was a leading cause of death for Boston's Black residents each year during 2002-2006, with the exception of 2005. This was not the case for Boston's other racial/ethnic groups.

Mortality

Leading Causes of Death by Race/Ethnicity and Year: Counts and Age-Adjusted Rates Boston, 2002-2006 (Continued)

Latino	Count	Rate
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
Nephrites/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
Nephrites/Nephrosis	6	25.6
All causes	**200**	**570.9**
2005		
Cancer	46	141.4
Heart Disease	32	110.1
Injuries	28	39.5
Chronic Obstructive Pulmonary Disease	7	30.6
Substance Abuse	19	28.7
All causes	**212**	**631.7**
2006		
Cancer	47	168.6
Heart Disease	38	162.9
Injuries	36	43.7
Stroke	9	36.6
Substance Abuse	22	30.9
All causes	**233**	**723.3**

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

- Latino Bostonians had heart disease and cancer as their first and second leading causes of death for the years 2002 through 2006.
- Their age-adjusted rates of death from these two causes were lower than those of Black and White residents.
- Latino residents experienced a decrease in cancer mortality rates in 2004, followed by increases for 2005 and 2006. The Latino age-adjusted cancer mortality rate increased 33.2% between 2004 and 2006.
- Age-adjusted rates for the top three leading causes of mortality for Latinos increased from 2005 to 2006, cancer by 19.2%, heart disease by 48.0%, and injuries by 10.6%.

Mortality

Leading Causes of Death by Race/Ethnicity and Year: Counts and Age-Adjusted Rates Boston, 2002-2006 (Continued)

White	Count	Rate
2002		
Cancer	733	230.5
Heart Disease	708	205.4
Injuries	150	4904
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**
2005		
Cancer	656	208.4
Heart Disease	572	160.8
Injuries	129	42.8
Chronic Obstructive Pulmonary Disease	134	39.9
Stroke	139	37.6
All causes	**2,683**	**797.2**
2006		
Cancer	607	191.8
Heart Disease	540	151.6
Injuries	160	53.3
Substance Abuse	109	39.6
Stroke	135	37.8
All causes	**2,513**	**750.0**

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' first and second leading causes of death for the years 2002-2006 were cancer and heart disease, like the city's other major racial/ethnic groups.
- Age-adjusted heart disease mortality rates among White Bostonians were similar to those of the Black population while age-adjusted cancer mortality rates were lower.
- Between 2002 and 2006, age-adjusted mortality rates for White Boston residents declined 26.2% for heart disease, 16.8% for cancer, and 8.5% for stroke.

Mortality

Leading Causes of Death by Sex: Counts and Age-Adjusted Rates, Boston, 2005

BOSTON MALES				BOSTON FEMALES		
	Count	Rate			Count	Rate
Cancer	492	257.5		Cancer	500	171.0
Heart Disease	382	212.6		Heart Disease	446	133.5
Injuries	185	69.0		Stroke	99	31.5
Stroke	87	49.2		Chronic Obstructive Pulmonary Disease	99	31.5
Chronic Obstructive Pulmonary Disease	80	45.5		Pneumonia/Influenza	81	22.6
Pneumonia/Influenza	74	43.2		Nephritis/Nephrosis	64	19.7
Substance Abuse	104	42.0		Injuries	56	17.8
Nephritis/Nephrosis	63	35.5		Alzheimer's Disease	60	16.3
Septicemia	57	31.3		Diabetes	46	15.1
Diabetes	58	28.9		Septicemia	50	15.0
All causes	**1,981**	**1,031.5**		**All causes**	**2,089**	**653.4**

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

Leading Causes of Death by Sex: Counts and Age-Adjusted Rates, Boston, 2006

BOSTON MALES				BOSTON FEMALES		
	Count	Rate			Count	Rate
Cancer	454	235.8		Cancer	490	167.3
Heart Disease	359	201.4		Heart Disease	392	115.5
Injuries	218	78.7		Stroke	133	40.0
Substance Abuse	122	48.5		Injuries	98	32.3
Stroke	76	41.5		Chronic Obstructive Pulmonary Disease	74	24.2
Chronic Obstructive Pulmonary Disease	65	35.8		Substance Abuse	54	19.9
Diabetes	57	30.3		Nephritis/Nephrosis	60	19.2
Nephritis/Nephrosis	53	29.7		Pneumonia/Influenza	61	17.5
Pneumonia/Influenza	44	25.7		Septicemia	43	14.2
Septicemia	36	19.3		Diabetes	41	14.0
All causes	**1,864**	**961.4**		**All causes**	**2,000**	**630.1**

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

Mortality

- For both male and female Boston residents, cancer was the leading cause of death in 2005 and 2006, followed by heart disease.
- For each of the 10 leading causes shown, age-adjusted mortality rates were higher for males than for females.
- Marked differences in mortality existed for some causes. For example, the age-adjusted diabetes mortality rate for males in 2006 was more than double the rate for females. The rates for substance abuse and injury were also more than double that of females in 2006.
- From 2005 to 2006, age-adjusted mortality rates for many of the leading causes of death declined for males and females both.

Mortality

Cancer Mortality for Leading Types of Cancer by Year: Counts and Age-Adjusted Rates, Boston, 2004-2006		
Cancer	**Count**	**Rate**
2004		
Lung	255	52.5
Prostate	51	30.1
Female breast	71	25.2
Colorectal	83	16.7
Pancreas	57	11.7
Stomach	41	8.3
Ovary	24	8.3
Non-Hodgkin's lymphoma	40	8.0
Leukemia	37	7.5
Liver	32	6.6
All cancers	**977**	**199.3**
2005		
Lung	262	54.3
Prostate	48	28.4
Female breast	72	24.5
Colorectal	103	20.9
Pancreas	66	13.6
Ovary	30	10.4
Liver	43	9.0
Esophagus	30	6.3
Leukemia	30	6.1
Stomach	28	5.6
All cancers	**991**	**202.7**
2006		
Lung	255	52.9
Prostate	49	28.0
Female breast	78	27.9
Colorectal	97	19.5
Pancreas	53	10.9
Leukemia	40	8.1
Ovary	22	7.9
Liver	34	7.1
Non-Hodgkin's lymphoma	34	6.9
Stomach	23	4.6
All cancers	**944**	**192.7**

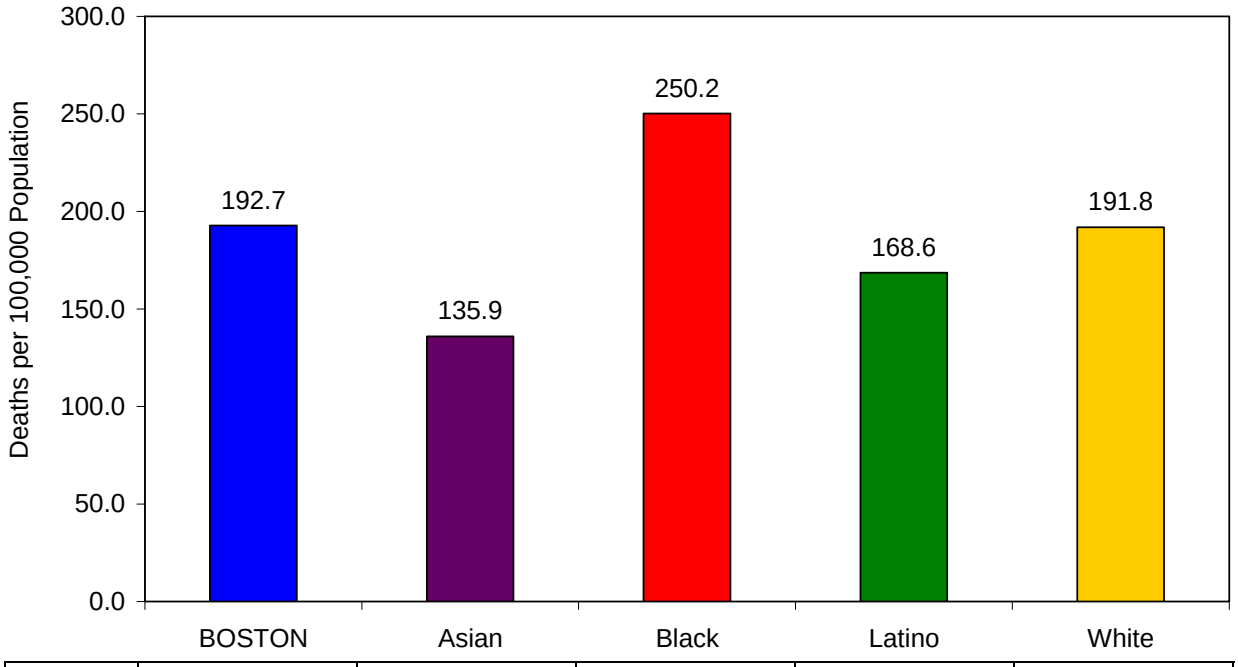
NOTE: The rates shown are deaths per 100,000 population.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- From 2004 through 2006, the ten leading causes of cancer deaths among Boston residents were similar from year to year The top four, lung, prostate, female breast, and colorectal cancer accounted for the greatest volume of all cancer deaths during each of the three years and the highest age-adjusted cancer mortality rates.

- Between 2004 and 2006, the age-adjusted mortality rates for the top four leading cancers changed very little. One of the ten leading cancers, stomach cancer, was the only one in 2004 whose age-adjusted mortality rate declined in each of the next two years.

Mortality

Cancer Mortality: Counts and Age Adjusted Rates by Race/Ethnicity, Boston 2006



	BOSTON	Asian	Black	Latino	White
Count	944	41	246	47	607

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

- Cancer is one of the leading causes of death for most race/ethnicities in Boston. In 2006, age-adjusted cancer mortality rates were highest for Blacks and Whites. From 2005 to 2006, the rate increased 5.7% for Black Boston residents (data not shown).

- In 2006, the age-adjusted cancer mortality rate for Blacks was 84.1% higher than the Asian age-adjusted cancer mortality rate, 48.3% higher than the Latino rate, 30.4% higher than the White rate, and 29.8% higher than the overall Boston age-adjusted cancer mortality rate.

Mortality

Cancer Mortality for Leading Types of Cancer by Year and Race/Ethnicity: Counts and Age-Adjusted Rates, Boston, 2004-2006			
Asian		**Count**	**Rate**
2004			
Lung		14	47.9
Leukemia		5	16.9
All cancer		**51**	**169.1**
2005			
Lung		11	37.5
Liver		10	32.9
Pancreas		6	20.7
All cancer		**53**	**177.5**
2006			
Lung		9	30.5
Liver		8	25.1
Colorectal		5	16.3
All cancer		**41**	**135.9**
Black		**Count**	**Rate**
2004			
Prostate		16	60.2
Lung		55	57.7
Female breast		19	29.0
Colorectal		21	20.1
Pancreas		12	11.8
All cancer		**227**	**230.2**
2005			
Lung		63	63.5
Prostate		15	59.4
Female breast		22	34.3
Colorectal		22	21.7
Pancreas		15	14.4
All cancer		**231**	**236.6**
2006			
Lung		56	57.2
Prostate		13	49.2
Female breast		28	43.2
Colorectal		29	32.0
Ovary		7	11.6
All cancer		**246**	**250.2**

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

Asian:

- Lung cancer has been the leading cause of cancer mortality among Boston's Asian residents every year during 2004 through 2006. Age-adjusted lung cancer mortality rates for this population decreased 21.7% from 2004 to 2005 and 18.7% from 2005 to 2006. Between 2004 and 2006, age-adjusted lung cancer mortality rates decreased 36.3% for Boston's Asian residents.

- In 2006, Boston's Asian residents had an age-adjusted cancer mortality rate that was 29.5% less than that of Boston overall (data not shown). From 2004 to 2006, it decreased 19.6%.

Black:

- From 2004 to 2006, prostate, lung, and breast cancers were the top three leading causes of cancer mortality among Boston's Black residents. Age-adjusted breast cancer mortality rates for Black residents increased nearly 50% between 2004 and 2006 and colorectal cancer mortality rates, 59.2%.

- Age-adjusted cancer mortality rates for Boston's Black population are higher than for other races/ethnicities. The rate increased 2.8% from 2004 to 2005 and 5.7% from 2005 to 2006. Between 2004 and 2006, the rate increased 8.7%.

Mortality

Cancer Mortality for Leading Types of Cancer by Year and Race/Ethnicity: Counts and Age-Adjusted Rates, Boston, 2004-2006			
Latino		**Count**	**Rate**
2004			
Colorectal		5	12.8
Lung		5	10.7
All cancer		**41**	**126.6**
2005			
Female breast		6	32.1
Lung		9	24.9
All cancer		**46**	**141.4**
2006			
Female breast		5	32.0
Pancreas		7	19.5
Lung		5	14.5
All cancer		**47**	**168.6**
White		**Count**	**Rate**
2004			
Lung		181	56.3
Female breast		47	26.9
Prostate		30	25.4
Colorectal		53	16.3
Pancreas		41	13.4
All cancer		**655**	**204.3**
2005			
Lung		177	56.7
Prostate		30	25.1
Colorectal		73	22.4
Female breast		43	22.0
Ovary		25	14.8
All cancer		**656**	**208.4**
2006			
Lung		185	60.7
Prostate		30	24.6
Female breast		43	24.3
Colorectal		60	18.4
Pancreas		34	10.9
All cancer		**607**	**191.8**

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:

- Breast cancer was the leading cause of cancer mortality among Boston Latino residents in 2005 and 2006, and lung cancer was the second or third leading cause from 2004 to 2006.

- In 2006, the Latino population was the only Boston race/ethnicity in Boston where lung cancer was not the leading cause of cancer mortality. Lung cancer mortality rates are considerable lower among Latinos compared to Asians, Blacks, Whites, and Boston overall.

- Overall, age-adjusted cancer mortality rates for the Latino Boston population increased by 11.7% from 2004 to 2005 and by 19.2% from 2005 to 2006. This is a much higher increase than other Boston race/ethnicities.

White:

- After Blacks, Boston's White residents had the highest age-adjusted cancer mortality rates in 2004, 2005, and 2006, with rates for each year very similar to the overall Boston age-adjusted cancer mortality rates.

- Lung, prostate, female breast, and colorectal were the top four leading causes of cancer mortality among Boston White residents during 2004-2006. Age-adjusted mortality rates for each cancer type decreased from 2005 to 2006 except for lung cancer rates which increased by 7.1%.

Mortality

Cancer Mortality for Leading Types of Cancer by Year and Sex: Counts and Age-Adjusted Rates, Boston, 2004-2006

BOSTON MALES				BOSTON FEMALES		
Cancer	**Count**	**Rate**		**Cancer**	**Count**	**Rate**
2004				**2004**		
Lung	139	74.2		Lung	116	39.5
Prostate	51	30.1		Breast	71	25.2
Colorectal	42	21.3		Colorectal	41	13.1
Pancreas	28	13.9		Pancreas	29	9.9
Stomach	23	12.4		Ovary	24	8.3
All cancers	**488**	**257.4**		**All cancers**	**489**	**165.8**
2005				**2005**		
Lung	145	75.7		Lung	117	40.9
Prostate	48	28.4		Breast	72	24.5
Colorectal	48	25.6		Colorectal	55	18.2
Liver	36	18.0		Pancreas	36	12.3
Pancreas	30	15.5		Ovary	30	10.4
All cancers	**492**	**257.5**		**All cancers**	**500**	**171.0**
2006				**2006**		
Lung	138	71.3		Lung	117	41.2
Prostate	49	28.6		Breast	78	27.9
Colorectal	42	21.5		Colorectal	55	17.9
Liver	27	12.9		Pancreas	33	11.2
Leukemia	22	10.9		Ovary	22	7.9
All cancers	**454**	**238.8**		**All cancers**	**490**	**167.3**

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

Mortality

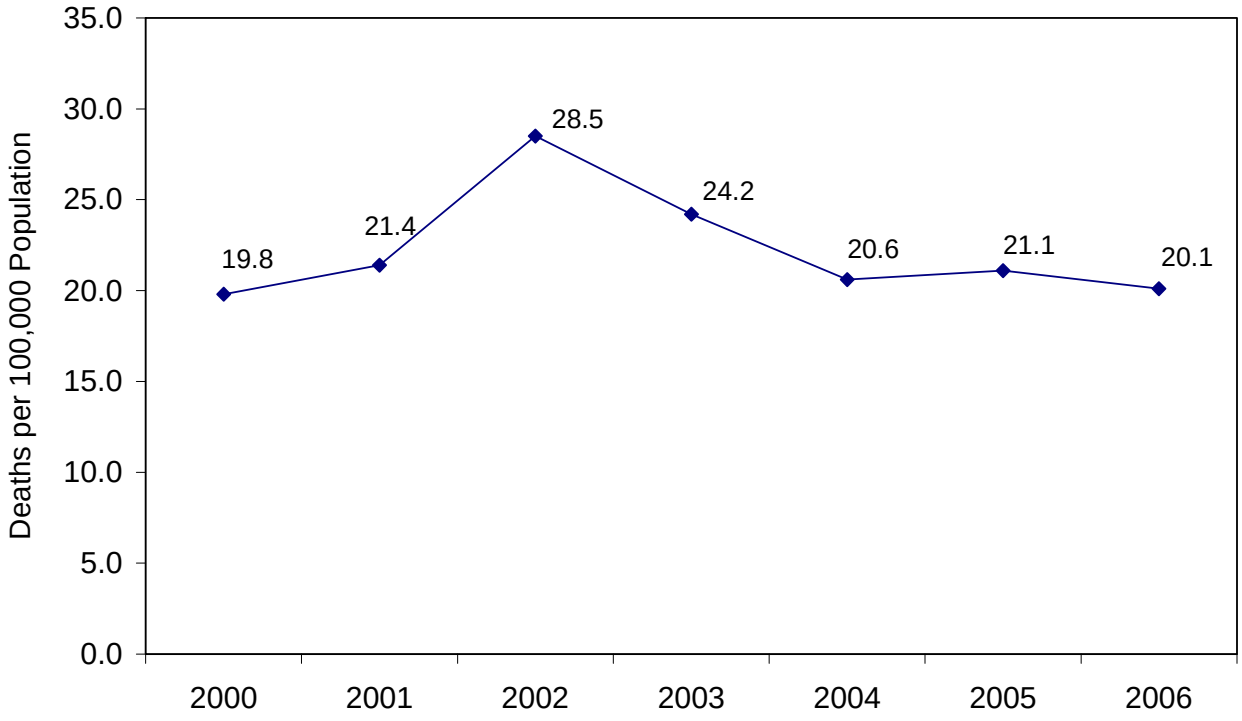
- For each of the leading causes of cancer mortality in 2004, 2005, and 2006 that Boston males and females had in common, age-adjusted mortality rate were higher for males than for females.

- Lung cancer was the leading cause of cancer mortality for Boston males and females for each year during 2004-2006. Age-adjusted lung cancer mortality rates increased for females from 2004 to 2006, but slightly decreased for males. Rates for Boston males were 87.8% higher than for Boston females in 2004, 85.1% higher in 2005, and 73.1% higher in 2006.

- Between 2004 and 2006, age-adjusted cancer mortality rates decreased 7.2% for Boston males and but stayed nearly unchanged for Boston females.

Mortality

Diabetes Mortality By Year: Counts and Age Adjusted Rates, Boston, 2000-2006



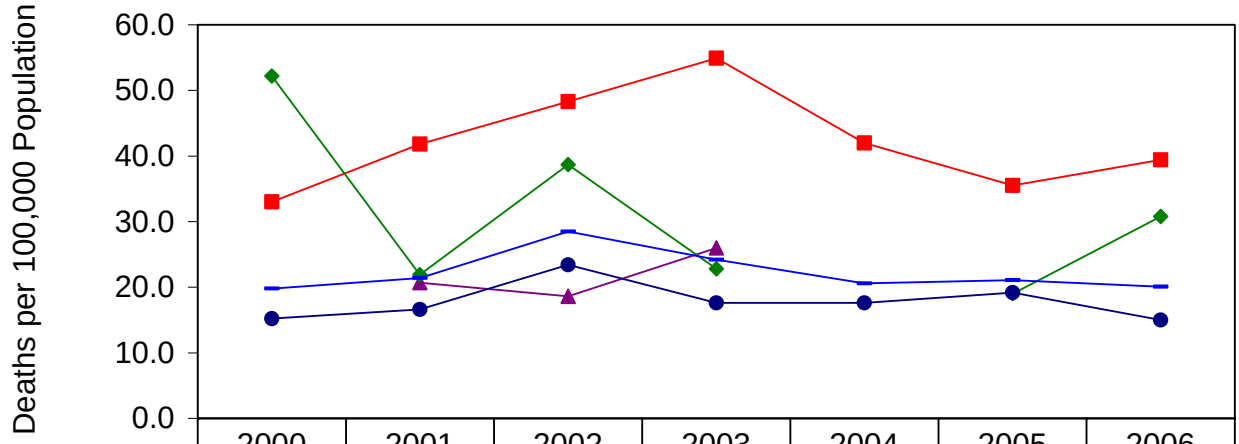
	2000	2001	2002	2003	2004	2005	2006
Count	98	107	140	120	101	104	98

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

- From 2000 through 2006, 768 Boston residents died from diabetes, an average of 110 each year.
- Between 2000 and 2006, the highest age-adjusted diabetes mortality rate for Boston residents occurred in 2002. However, in 2006, the rate was 29.5% lower than the 2002 rate.

Mortality

Diabetes Mortality by Race/Ethnicity and Year: Counts and Age-Adjusted Rates, Boston, 2000-2006



	2000	2001	2002	2003	2004	2005	2006
Asian	n<5	20.7	18.6	26.0	n<5	n<5	n<5
Black	33.0	41.8	48.3	54.9	42.0	35.5	39.4
Latino	52.2	21.9	38.7	22.8	n<5	19.0	30.8
White	15.2	16.6	23.4	17.6	17.6	19.2	15.0
BOSTON	19.8	21.4	28.5	24.2	20.6	21.1	20.1

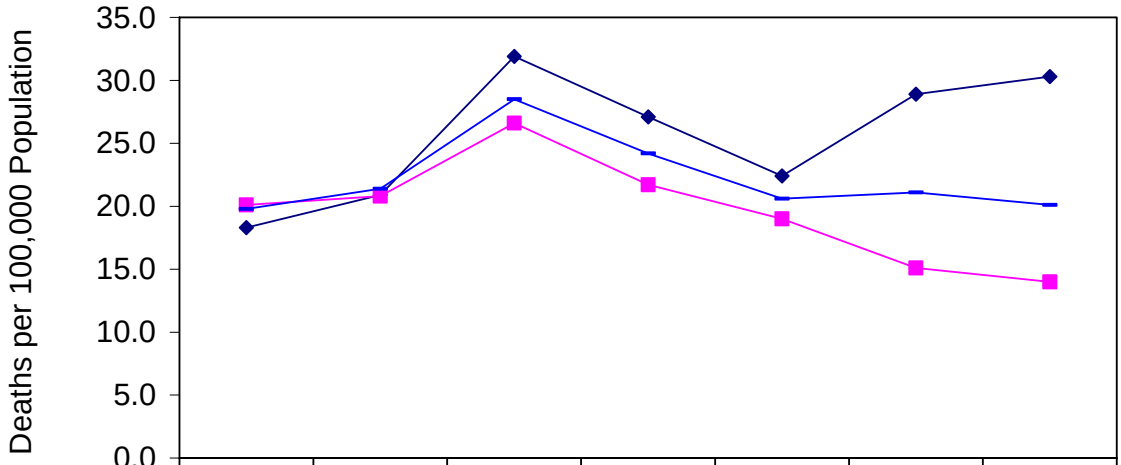
Count	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Asian	2	6	5	7	3	4	3
Black	31	40	47	50	40	33	38
Latino	14	5	11	6	3	6	8
White	51	56	76	57	55	60	48
BOSTON	98	107	140	120	101	104	98

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

- For six of the seven years during 2000-2006, Boston's Black residents had the highest age-adjusted diabetes rate of all racial/ethnic groups. Their highest rate, which occurred in 2003, was approximately twice as high as the rate for the city of Boston and three times as high as the rate for White residents.
- In general, Latino residents had the second highest age-adjusted diabetes mortality rates. During 2000 through 2006, the rate for Latinos was highest in 2000.
- Between 2000 and 2006, rates increased for 19.4% for Blacks, declined 41% for Latinos, and remained basically unchanged for Whites.

Mortality

Diabetes Mortality by Sex and Year: Counts and Age-Adjusted Rates, Boston, 2000-2006



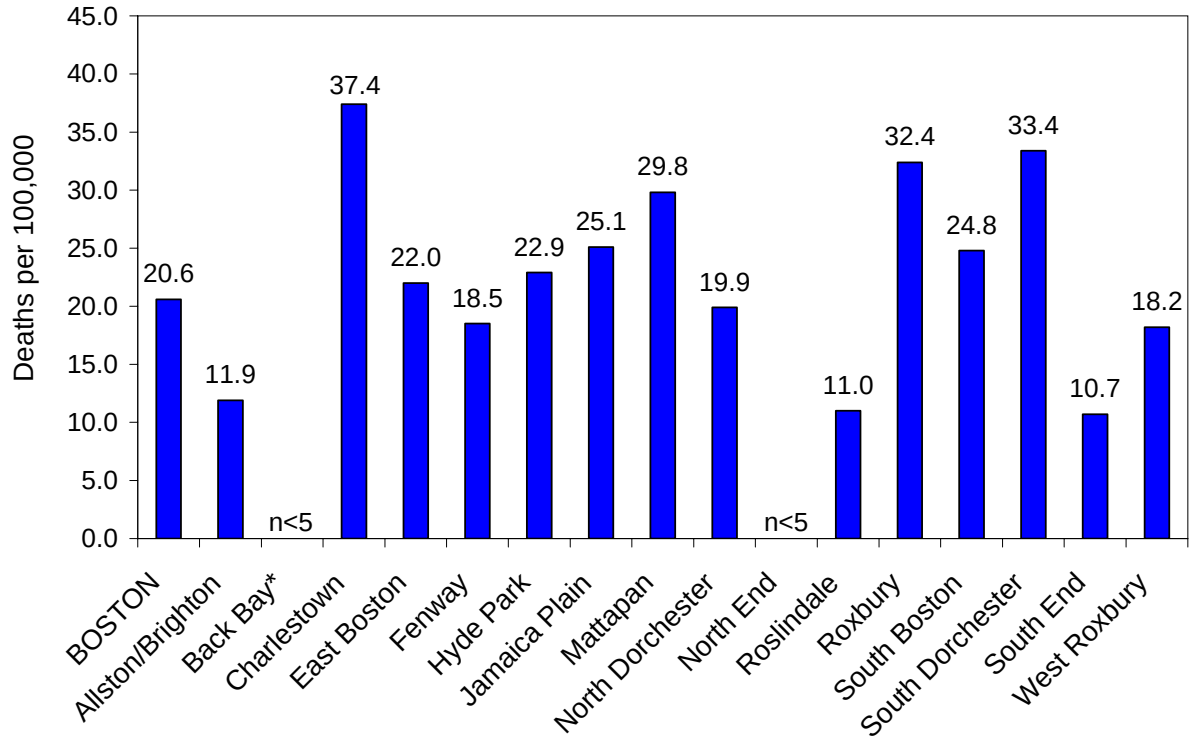
	2000	2001	2002	2003	2004	2005	2006
Males	18.3	20.9	31.9	27.1	22.4	28.9	30.3
Females	20.1	20.8	26.6	21.7	19.0	15.1	14.0
BOSTON	19.8	21.4	28.5	24.2	20.6	21.1	20.1

Count	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Males	36	41	61	53	44	58	57
Females	62	66	79	67	57	46	41
BOSTON	98	107	140	120	101	104	98

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

- In each year during 2000 through 2006, with the exception of 2000, age-adjusted diabetes mortality rates were higher for Boston's male residents than female residents. The greatest difference was in 2005 and 2006, when the rates for males were about twice those of females.
- From 2000 to 2006, the age-adjusted diabetes mortality rate increased 65.6% for males, declined 30.3% for females, and increased only slightly for Boston overall.

Mortality



	BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	303	17	N<5	14	24	6	24	16	14	33	n<5	14	39	22	38	10	20

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 Beacon Hill and West End
NOTE: North End did not have enough deaths to be permitted in calculations, thus, it is not included in the charts above.
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research Office

- Although several Boston neighborhoods had age-adjusted diabetes mortality rates that were higher than that of Boston overall for 2004-2006, the rates for Charlestown, South Dorchester and Roxbury were the highest. The Charlestown rate was 81.6% higher, the South Dorchester rate 62.1% higher, and the Roxbury rate 57.3% higher than the Boston rate.

APPENDICES

TECHNICAL NOTES

Rates
Population
Racial and Ethnic Designations
Age-Adjusted Mortality
Neighborhoods
Boston Youth Survey Methodology
HIV/AIDS Reporting

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. 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.

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. However, 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. In *The Health of Boston 2008*, estimates are used in the Population Characteristics Section.

To provide data on people of Latino ethnicity, who may be of any race, this report uses the 2000 U.S. Census. 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 and emergency department visits 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 and emergency department data by race/ethnicity with considerable caution.

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. In *The Health of Boston*, however, Latino ethnicity is presented as a separate category. Exceptions are the hospitalization and emergency department visits 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 from death certificates 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 2008 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, 2005, and 2006.

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.

Boston Youth Survey Methodology

The Violence Section of this year's report includes selected survey results from the 2006 Boston Youth Survey.

The *Boston Youth Survey (BYS),* is a biennial survey of high school students (9_{th}-12_{th} graders) in selected Boston Public Schools. The 2004 and 2006 surveys were conducted by the Harvard Youth Violence Prevention Center using a two-stage, stratified random sampling approach. The first sampling frame consisted of all 38 high schools in the Boston Public School system. Thirty schools were randomly selected for the survey, with a probability of selection proportional to each school's enrollment size. One school was not invited because it was comprised primarily of adult students. Eighteen schools agreed to participate. Headmasters' main reasons for not participating related primarily to scheduling, logistics, and coordinating end-of-year standardized academic testing. A comparison of the demographic composition between the student sample and that of the overall Boston Public Schools population showed no statistically significant differences.

Among the 18 participating schools, a numbered list of unique homeroom classrooms was generated within each school. First, classrooms comprised of students with severe physical or cognitive disabilities were excluded. Next, classrooms were stratified by grade, and then randomly selected for survey administration within each grade. Those classrooms that listed fewer than five students were skipped and the next randomly selected classroom was chosen. Selection continued until the total number of students to be surveyed ranged from 100-124 per school. In the two selected schools that had total enrollments close to 100, all students in the school were invited to participate.

The data collection instrument covered a range of topics (e.g., health behaviors, use of school and community resources, developmental assets, risk factors), and had a particular emphasis on violence and developmental assets. The paper-and-pencil survey was administered in classrooms by trained staff in the spring of 2006. Adults who were not affiliated with the schools administered the surveys so as to lessen the potential for social presentation bias. Survey administrators completed a brief training program prior to going into the schools. All personnel underwent training in the ethical treatment of human subjects at the Harvard School of Public Health.

Surveys were not marked with any information that could identify an individual. Passive consent was sought from students' parents prior to survey administration. Any student whose parents sent back a form denying permission for the student to participate in the survey was not given one; this was the case for less than 1% of students. Survey administrators read an introduction and the informed consent statement prior to distributing the survey. Seventy of the 1,323 invited students (5.3%) declined to participate. Survey administrators remained in the room and were available to answer questions throughout the 50 minutes allotted for the survey. The Human Subjects Committee at the Harvard School of Public Health approved all procedures for this research project.

Twelve hundred fifty-three surveys were collected in the 18 schools. The surveys of 20 students were excluded from data analysis. Of those, 17 were excluded because students were missing as much as 80% of the items, and three were excluded due to erratic and questionable answering patterns.

The survey was administered during homeroom, the first period of the school day. Students who were tardy began the survey late (and often did not complete it), or missed it altogether. Additionally, students who were absent from school on the day of administration did not take the survey. This may have impacted the sample in that those students who were late or absent are not represented. Reported results are based on the answers of those who answered a given question, **not** on the sample as a whole.

HIV/AIDS Reporting

The 2006 HIV/AIDS data included in this report, *The Health of Boston 2008*, should be considered preliminary. According to DPH HIV/AIDS Surveillance Program, a regulation change in reporting requirements set by the State required HIV to be reported by full name of the individual infected. As a result of processes that had to be implemented to comply with the change in regulation, a number of cases were not reported.

DATA SOURCES AND LIMITATIONS

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.

A 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, undocumented immigrants, avoid being recorded in the census for fear of contact with the government or for other reasons.

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.

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 over reporting of certain causes. Data are embargoed until after public release by the Massachusetts Department of Public Health, 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 HIV/AIDS.

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) Also see Technical Notes for change in reporting.

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. Another limitation is that reporting of blood lead screening results by race/ethnicity is not available.

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 (ACS) uses a sample of the population to provide information about demographic and housing characteristics of communities for the years between censuses. Previously, only people who lived in households were sampled; students and those in institutions or other group quarters were not included. (See http://www.census.gov/acs/www/index.html for more information.) The 2006 ACS includes for the first time, group quarters population, such as prisons, college dorms, nursing homes, and military bases in addition to household population.

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, 2005, and 2006 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 Massachusetts Department of Public Health 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 that 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.

Biracial: An Individual with ancestors from mostly two separate races.

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.

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.

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.

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: 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. ICD-10 codes are used for identifying the type of injury that resulted in death. The determination of intent are for purposes of medical record-keeping only. Visits to emergency departments, clinics, hospitals, physician offices, and other outpatient facilities for treatment of injuries are identified by type of injury using ICD-9-CM E codes.

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.

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

Multiracial: An Individual from two or more racial or ethnic groups.

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.

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.

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

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.

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.

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.

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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	43 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	158.6 deaths per 100,000
Reduce the lung cancer death rate	43.3 deaths per 100,000
Reduce the breast cancer death rate	21.3 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	13.7 deaths per 100,000
Reduce the oropharyngeal cancer death rate	2.4 deaths per 100,000
Reduce the prostate cancer death rate	28.2 deaths per 100,000 males
Reduce the melanoma cancer death rate	2.3 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	33%
• **Coronary Heart Disease (CHD)**	
Reduce CHD mortality rate	162 deaths per 100,000
Risk Factors:	
Reduce proportion of adults with high blood pressure	14%
Reduce proportion of adults with high blood cholesterol	17%
Reduce proportion of adults who are obese	15%
• **Stroke**	
Reduce stroke mortality rate	50 deaths per 100,000
• **Diabetes**	
Reduce diabetes mortality rate	46 deaths per 100,000
Reduce rate of lower extremity amputations among diabetics	2.9 lower extremity amputations per 1,000 per year
• **Substance Abuse**	
Reduce drug mortality rate	1.2 death per 100,000
Reduce cirrhosis mortality rate	3.2 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	2%
• **Violence**	
Reduce homicide mortality rate	2.8 homicides per 100,000
Reduce suicide mortality rate	4.8 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	50%
Increase the percentage of adolescents who engage in moderate physical activity for at least 30 minutes on 5 or more of the previous days	35%

DATA SOURCE: http://www.healthypeople.gov/data/midcourse/. Accessed **2/27/08**