

THE HEALTH OF BOSTON 2004 CHARTBOOK

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prepared by
THE BOSTON PUBLIC HEALTH COMMISSION
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PREFACE

In 1995, the Legislature passed and the Governor signed legislation establishing the Boston Public Health Commission and requiring it to submit annual reports on various matters related to public health in the city of Boston:

Sect. 8. (b) ... the commission shall prepare and file with the mayor, the president of the city council and the city clerk an annual assessment of the public health needs of the city. The annual public health assessment shall include an evaluation of existing local, state and federal programs and services to address the public health needs of the city and the adequacy of funding sources available for such programs and services, an assessment of programs, services and other activities provided by private public health providers to address the public health needs of the city, including identification of all vulnerable populations in the city, the performance of providers under contract with the commission in accordance with this act, and proposals by the commission to enlarge or enhance its response to the public health needs of the city including new, expanded or revised programs or services to be provided by the commission or by public health providers under contract with it for the ensuing fiscal year.

The Health of Boston 2004 Chartbook and its companion document, *The Health of Boston 2004 Data Tables* are the eighth in a series of annual reports in response to this legislation.

ACKNOWLEDGMENTS

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TABLE OF CONTENTS

PREFACE iii

ACKNOWLEDGMENTS v

INTRODUCTION 3

CITYWIDE BOSTON DATA 5

Demographics 5

Childbearing 9

Hospitalization 15

Emergency Department Visits 20

Asthma 24

Hepatitis 28

Tuberculosis 31

HIV/AIDS 33

Sexually Transmitted Diseases 37

Violence 39

Substance Abuse 42

Overall Mortality 52

Heart Disease 57

Cancer 61

Diabetes 68

Suicide 71

NEIGHBORHOOD DATA.....	73
Demographics	73
Childbearing	76
Hospitalization	79
Emergency Department Visits	80
Asthma	81
Childhood Lead Screening	82
Hepatitis	83
HIV/AIDS	84
Sexually Transmitted Diseases	85
Substance Abuse	86
Overall Mortality	88
Heart Disease	89
Cancer.....	93
Diabetes	95
Homicide	96
APPENDICES	
NUMBER OF DEATHS FOR SELECTED CAUSES	97
TECHNICAL NOTES.....	101
HEALTHY PEOPLE 2010 GOALS AND OBJECTIVES	117

THE HEALTH
OF
BOSTON
2004
CHARTBOOK

INTRODUCTION

Welcome to *The Health of Boston 2004 Chart Book*. This version of our annual report has been prepared for readers who want an extensive yet readily usable source of Boston health data and who prefer a graphical presentation of data that includes some explanatory text. We hope that readers will find the report useful for grant proposal preparation, community program development, monitoring of health trends, academic projects, and similar purposes. Additional neighborhood-level data have been included in response to user feedback about previous reports. Calculated measures such as rates and percentages are shown to make the graphs and tables as useful as possible.

The report is organized into two sections. The first contains citywide data, many of which are presented by race/ethnicity, age, and sex. Data over time are shown wherever possible. The second contains graphs and charts for each Boston neighborhood. Because of the confidentiality and statistical limitations imposed by small numbers, most of the neighborhood-level measures cannot be further divided into race/ethnicity, age, or sex subgroups. Nevertheless, these tables offer a very full picture of the health status of Boston residents, and they readily allow comparisons across neighborhoods. Help with data interpretation is provided through the bullets provided for each health measure.

Additional information about the rate calculations, data quality, and related issues pertaining to this report can be found in the Technical Notes section.

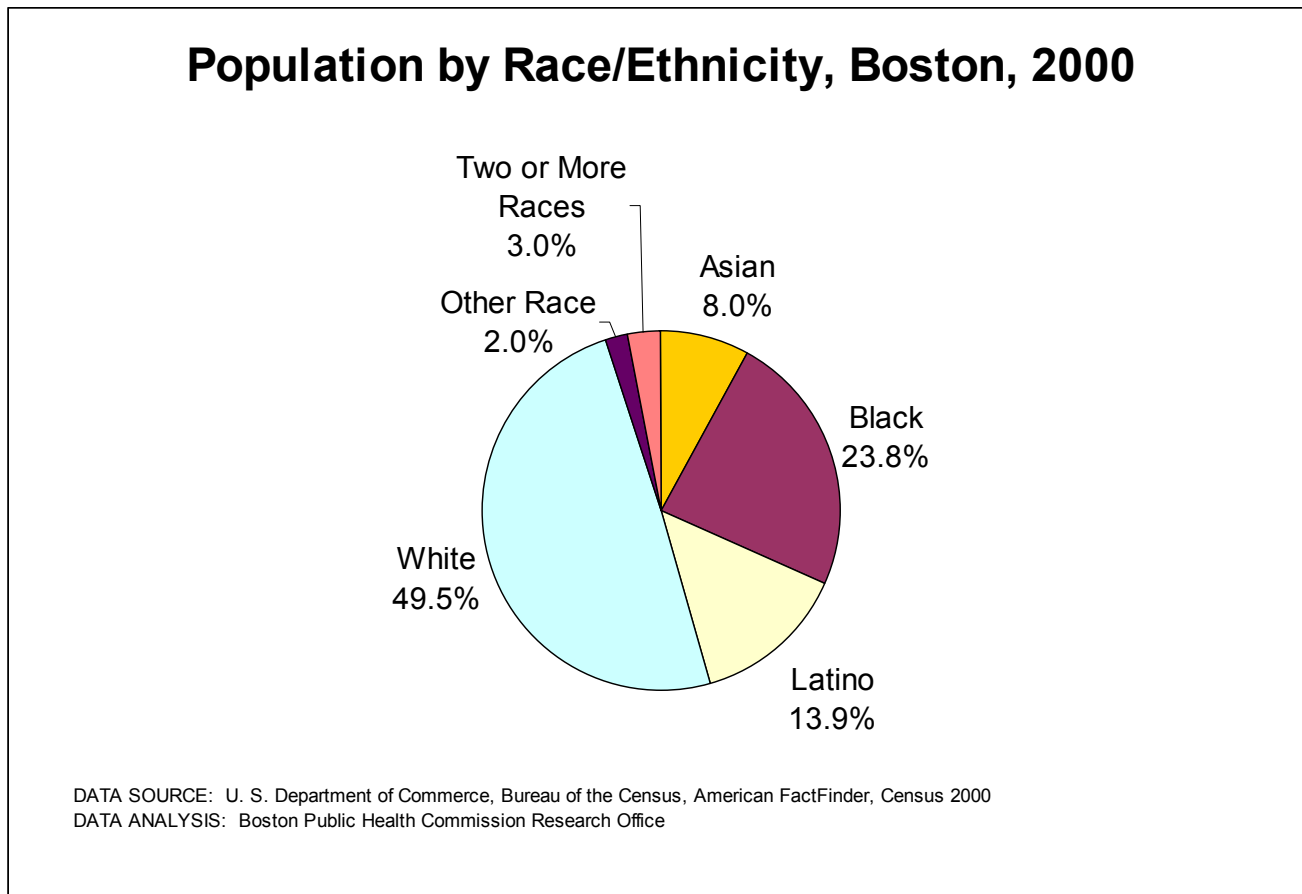
For readers who prefer to see data in nongraphical form, a companion document entitled, *The Health of Boston 2004 Data Tables*, is available.

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.

The Health of Boston 2004.....

CITYWIDE BOSTON DATA

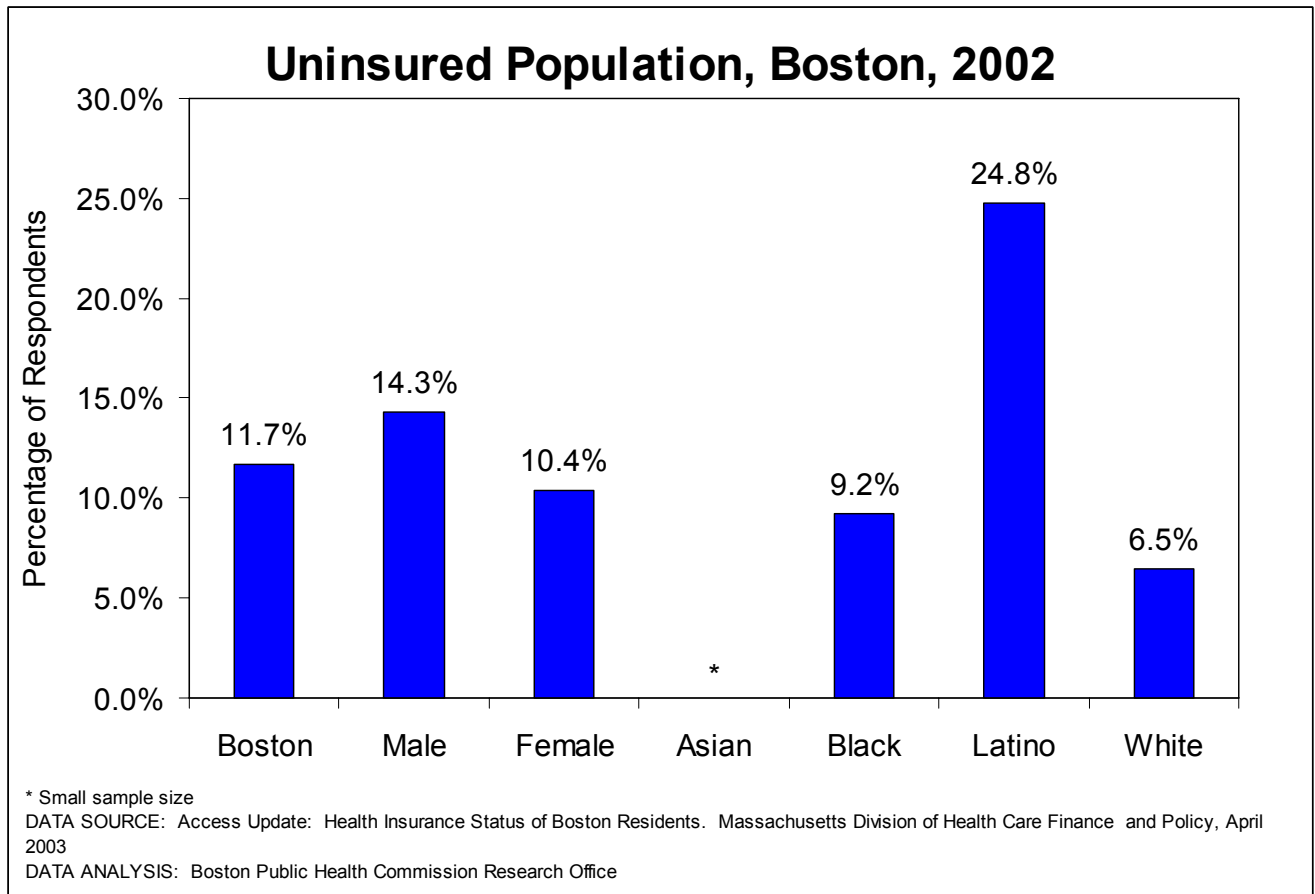
Demographics



- Of the 589,141 Boston residents in 2000, almost 24% were Black and 50% were White.
- Collectively, Asians, Blacks, and Latinos account for 46% of the Boston population.

Selected Ancestry Groups of Boston Residents, 2000			
	Number		Number
<u>Hispanic or Latino of Any Race</u>		<u>West Indian (excluding Latinos)</u>	37,287
Top Ancestries by Number	85,199	Top Ancestries by Number	
Puerto Rican	26,960	Haitian	18,979
Dominican	14,629	Jamaican	8,226
Salvadoran	5,890	Trinidadian and Tobagonian	3,309
Colombian	4,653	West Indian	3,101
Mexican	4,053	Barbadian	2,165
Guatemalan	2,779	British West Indian	1,353
Honduran	2,148		
Cuban	1,839		
Peruvian	870		
Venezuelan	674		
	Number		Number
<u>Subsaharan African</u>		<u>Asian</u>	44,345
Top Ancestries by Number	21,170	Top Ancestries by Number	
Cape Verdean	11,060	Chinese, except Taiwanese	19,420
African	5,962	Vietnamese	11,126
Nigerian	1,702	Asian Indian	4,051
Ethiopian	658	Korean	2,423
		Japanese	2,235
		Filipino	1,741
		Cambodian	626
		Taiwanese	465
DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American FactFinder, Census 2000 DATA ANALYSIS: Boston Public Health Commission Research Office			

- Boston’s population is comprised of residents from many different ancestry groups.
- Latino residents include Puerto Ricans, Dominicans, Salvadorans, Colombians, and members of other Latino ancestry groups. Asians include Chinese, Vietnamese, Asian Indians, and other Asians. West Indian includes Haitians, Jamaicans, Trinidadians, and Tobagonians, and other West Indians. Subsaharan Africans include Cape Verdeans, Nigerians, and those of other African ancestry groups.



- In 2002, twelve percent of Boston residents under the age of 65 were uninsured. A higher percentage of males (14.3%) than females (10.4%) had no insurance coverage.
- Among all age groups, the highest percentage of uninsured residents was among those ages 19 through 24 (28.1%) and the lowest percentage was among ages 18 and under (4.2%) (data not shown).
- The highest percentage of uninsured Boston residents by race/ethnicity was found among Latinos (24.8%).

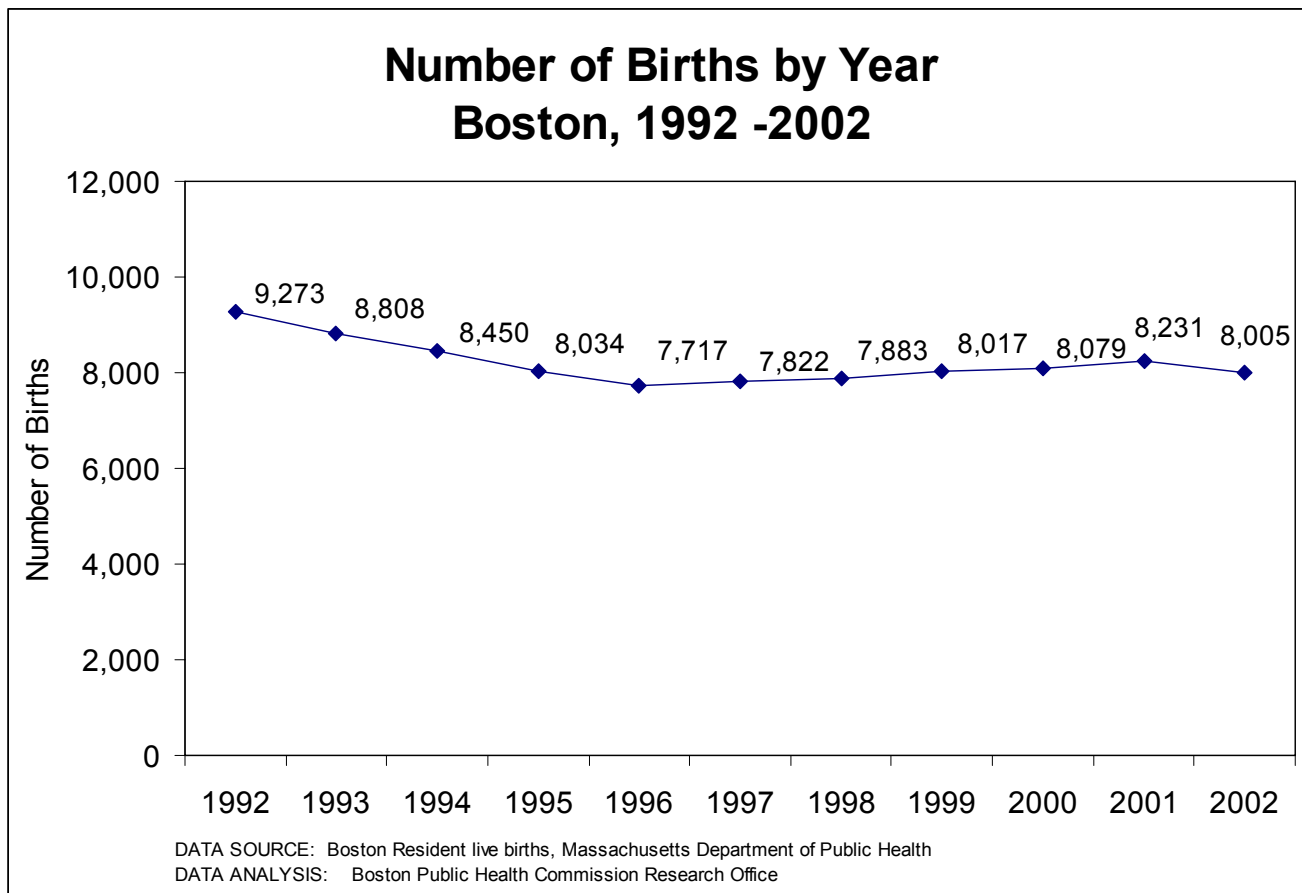
The Health of Boston 2004.....

Homeless people are often vulnerable to malnutrition, poor sanitation, overcrowding in shelters, exposure to the extremes of weather, the effects of habitual use of alcohol and drugs, and lack of privacy. The struggle to survive on the streets often leads to the neglect of health needs.

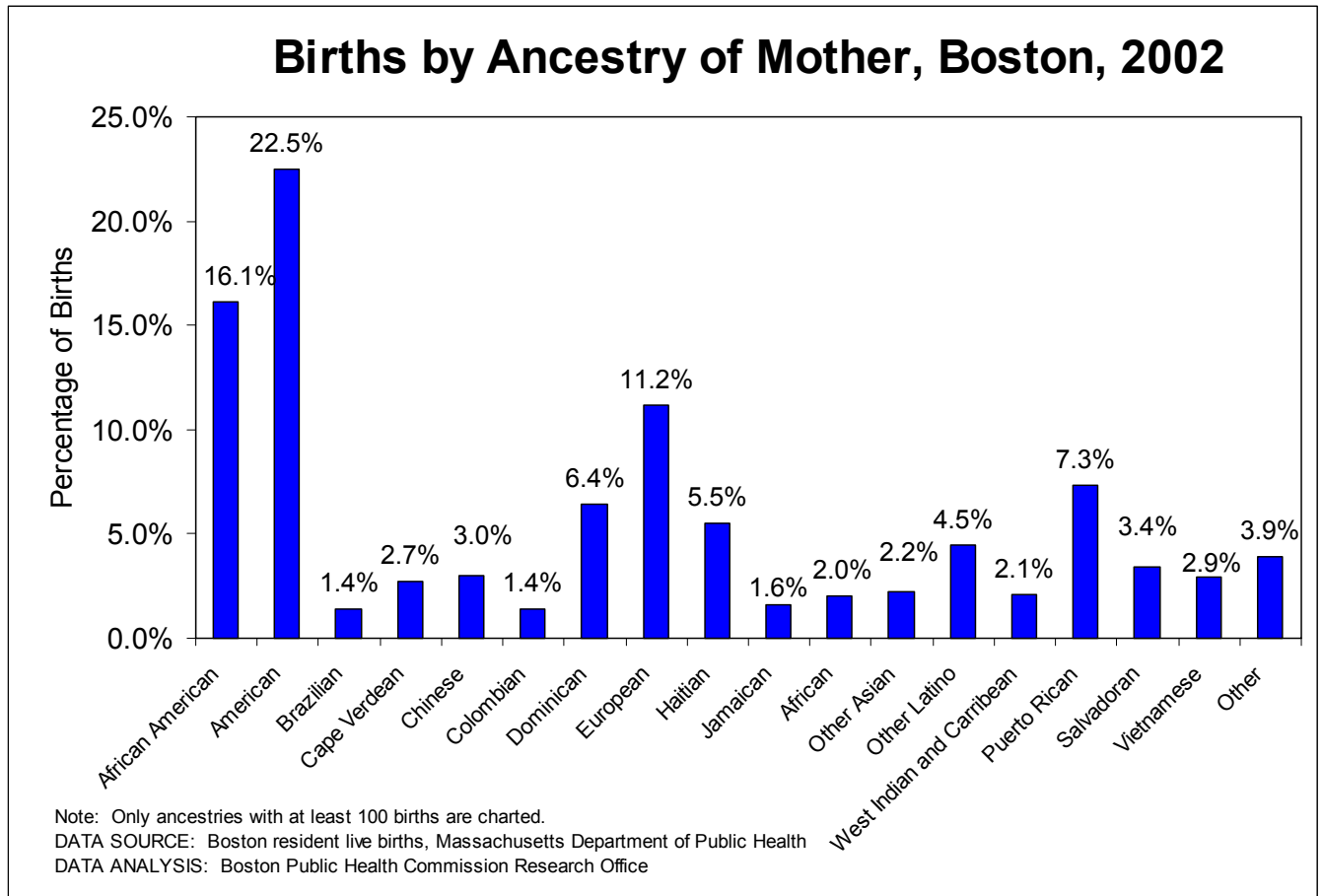


- The results of Boston’s annual census of homeless persons of all ages for the years 1992 through 2003 is shown in the above graph. Homelessness is defined as residency on the streets, in a shelter, or temporarily in a medical facility but without permanent housing.
- The 2003 Boston homeless census included 1,291 Boston residents under age 18 living without permanent shelter (21% of the total during that period) and 1,639 families.

Childbearing

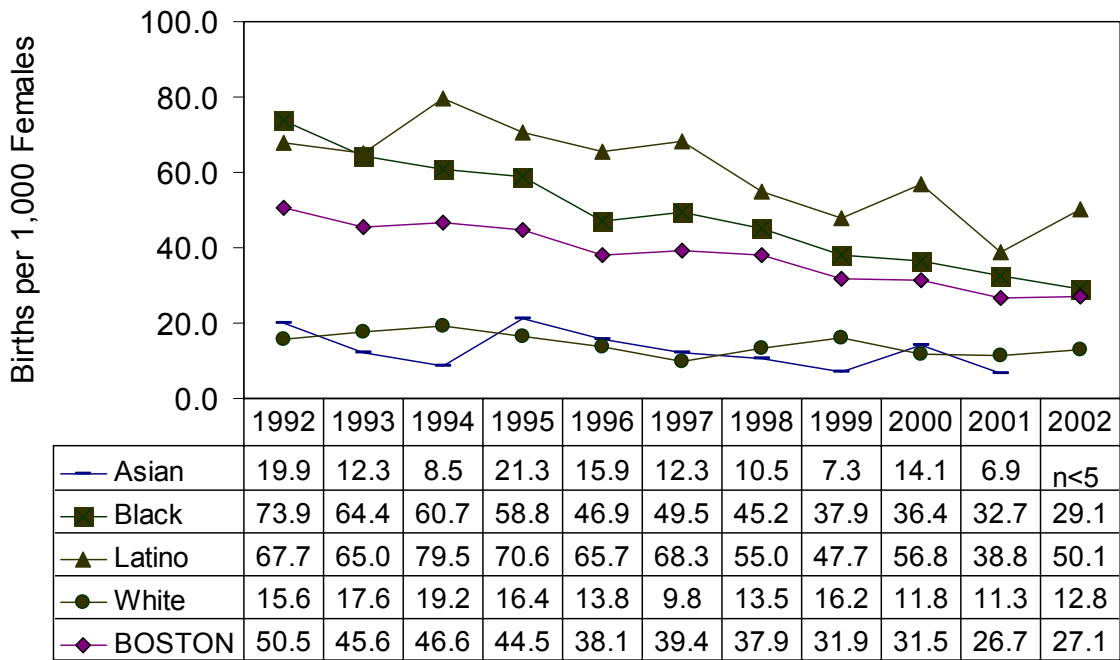


- The number of births to Boston residents fell in 2002 to 8,005, the first decline since 1996 and a 2.7% decline from 8,231 in 2001. However, much of this decline is attributable to a correction of the state's definition of Boston residency for Chestnut Hill residents.
- Between 1992 and 2002, the number of Boston births fell 13.7% despite the annual increase in births between 1996 and 2001.



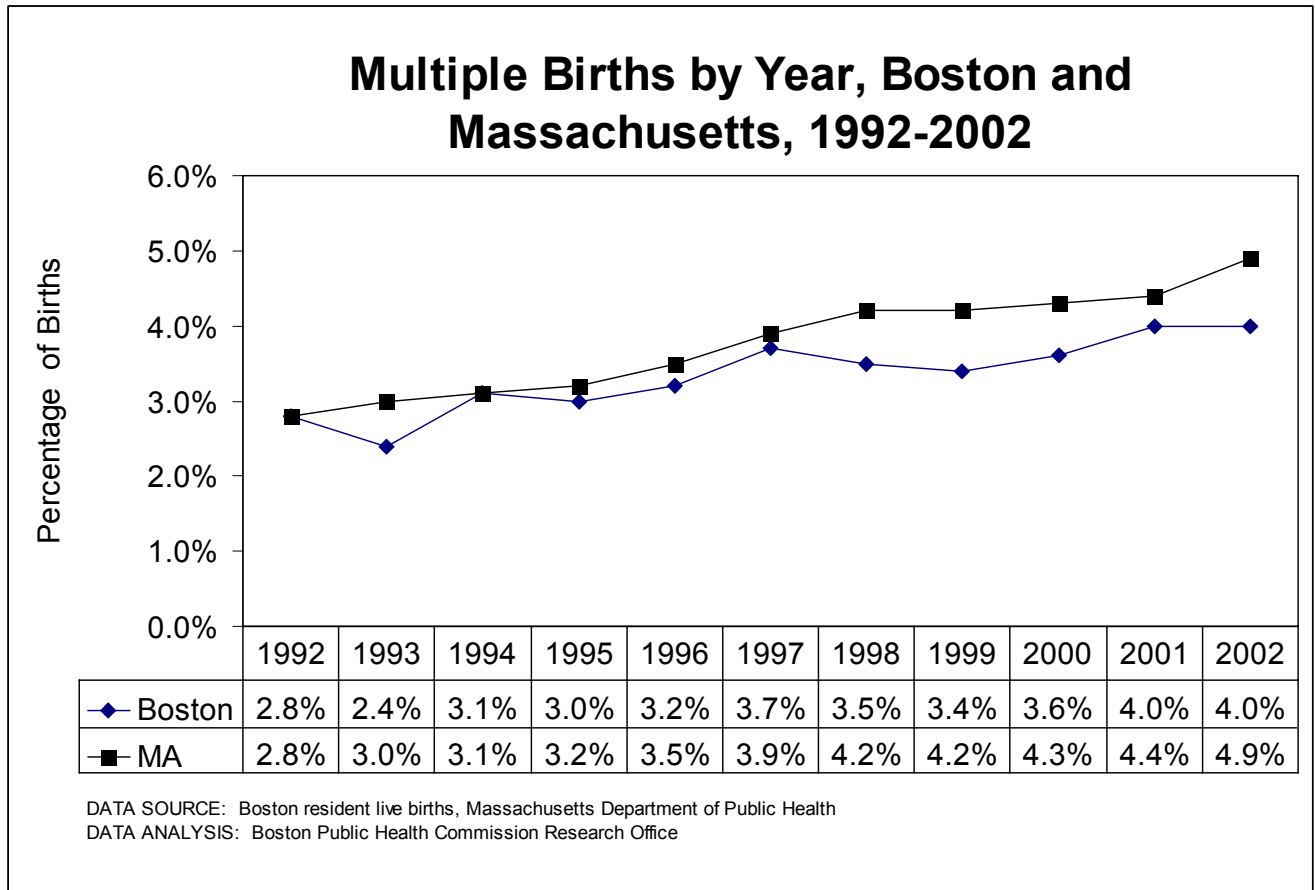
- Births are a source of great diversity for the city, with the changing profile of childbearing women and their infants reflecting immigration from around the world and migration within the United States.
- The racial/ethnic composition of the population of Boston women who gave birth in 2002 was as follows: White 35.0%; Black 30.1%, Latino 21.7%, Asian 8.0%, and Other or Unknown 3.9% (data not shown).
- However, the self-reported ancestry of these women demonstrates even greater diversity. In 2002, self-reported ancestry encompassed a wide range of backgrounds, including “American” (22.5% of births), African American (16.1%), European (11.2%), Puerto Rican (7.3%), Dominican (6.4%), Haitian (5.5%), and many smaller groups.

Adolescent Birth Rates by Race/Ethnicity Boston, 1992-2002



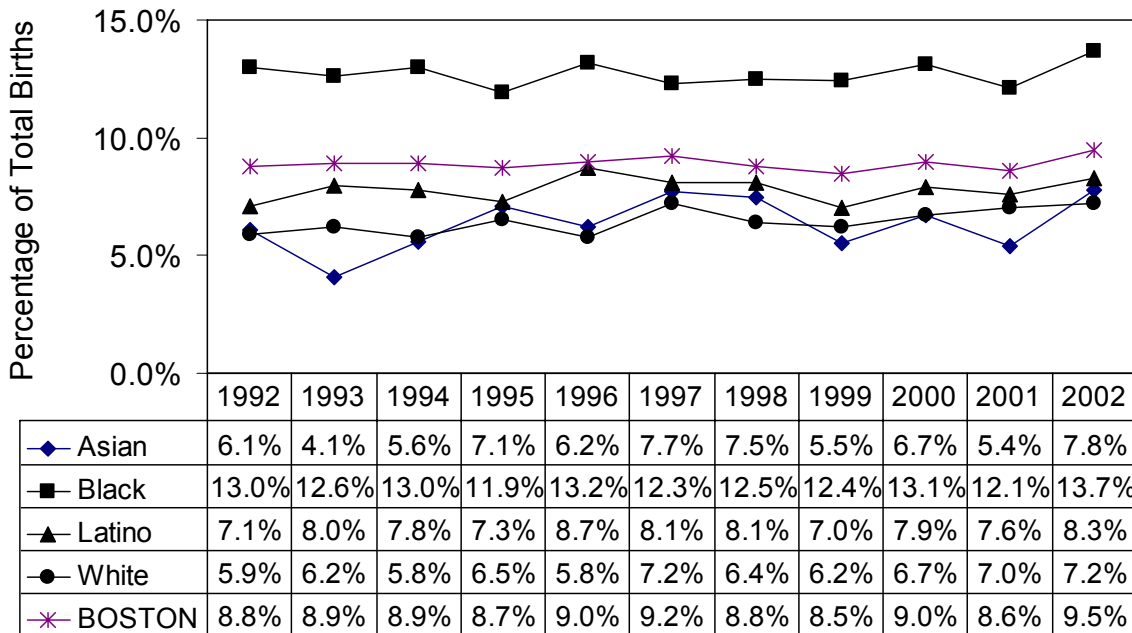
DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health
 DATA ANALYSIS: Boston Public Health Commission Research Office

- The adolescent birth rate is defined for this report as the number of births per thousand females ages 15-17.
- Boston’s birth rate in 2002 for adolescents was 27.1 births per 1,000 females ages 15-17, slightly above the national rate of 23.2 for this age group.
- Boston’s birth rate for 15-17 year-olds has followed a steeply downward trend for the past decade but stabilized between 2001 and 2002. The 2002 rate is 46.3% lower than the rate in 1992.
- Adolescent birth rates continue to be substantially higher for Latinas and Black adolescents than for White and Asian adolescents, but all groups have had declines in recent years. The adolescent birth rates in 2002 for Black and Latino adolescents were significantly higher than the rate for White adolescents. The adolescent birth rate for Latinas was also significantly higher than that for Blacks.



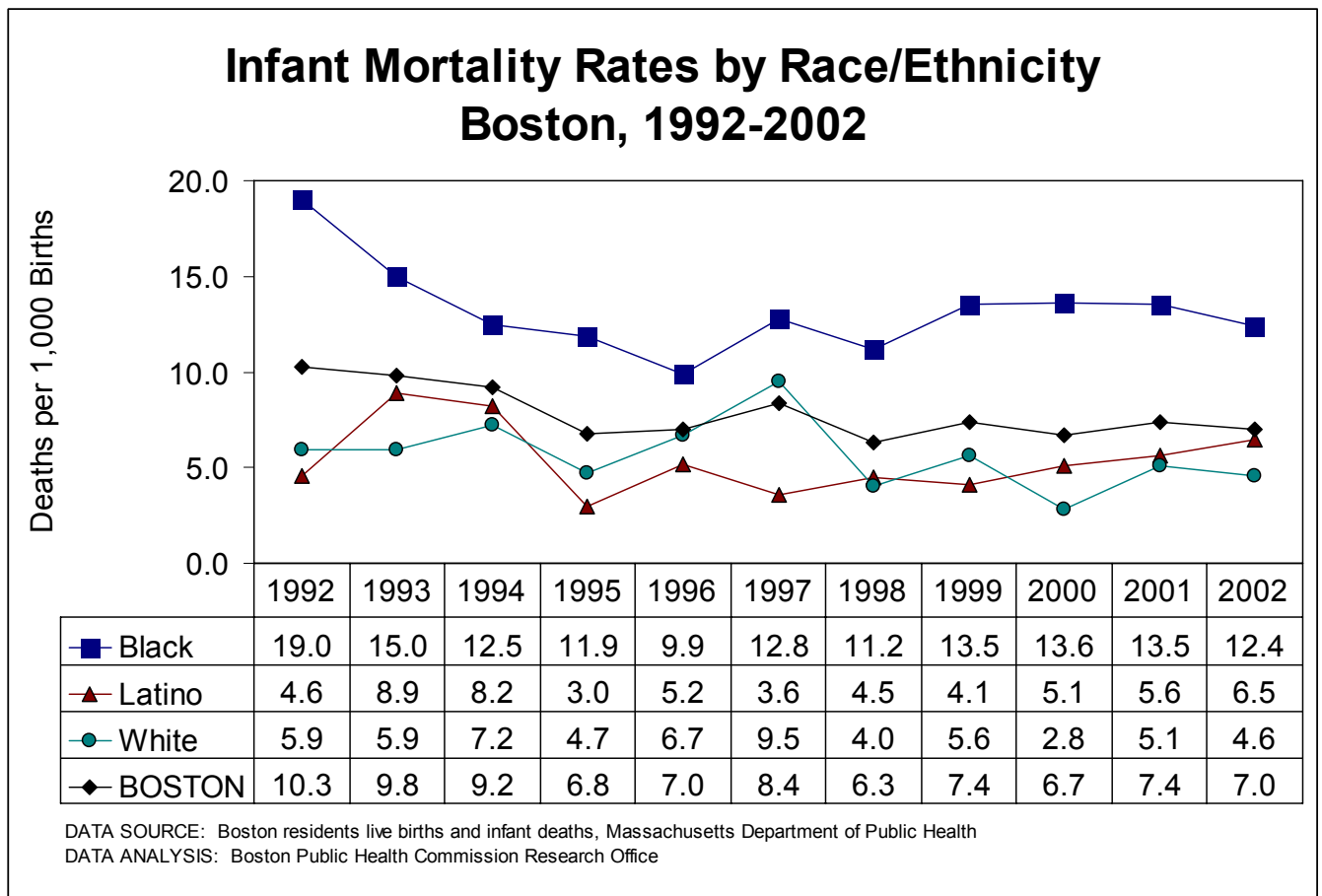
- Births that are twin, triplet, or more have risen from 2.8% of all Boston resident births in 1992 to 4.0% in 2002, and this difference is statistically significant.
- Massachusetts overall has had a steady increase in multiple birth rates over the past decade. However, the state's rates have been consistently higher than those for Boston.
- The overall Boston increase in multiple births over time is attributable to an increase in these births among Boston women 30 years of age or older.

Low Birthweight Births by Race/Ethnicity and Year, Boston, 1992-2002



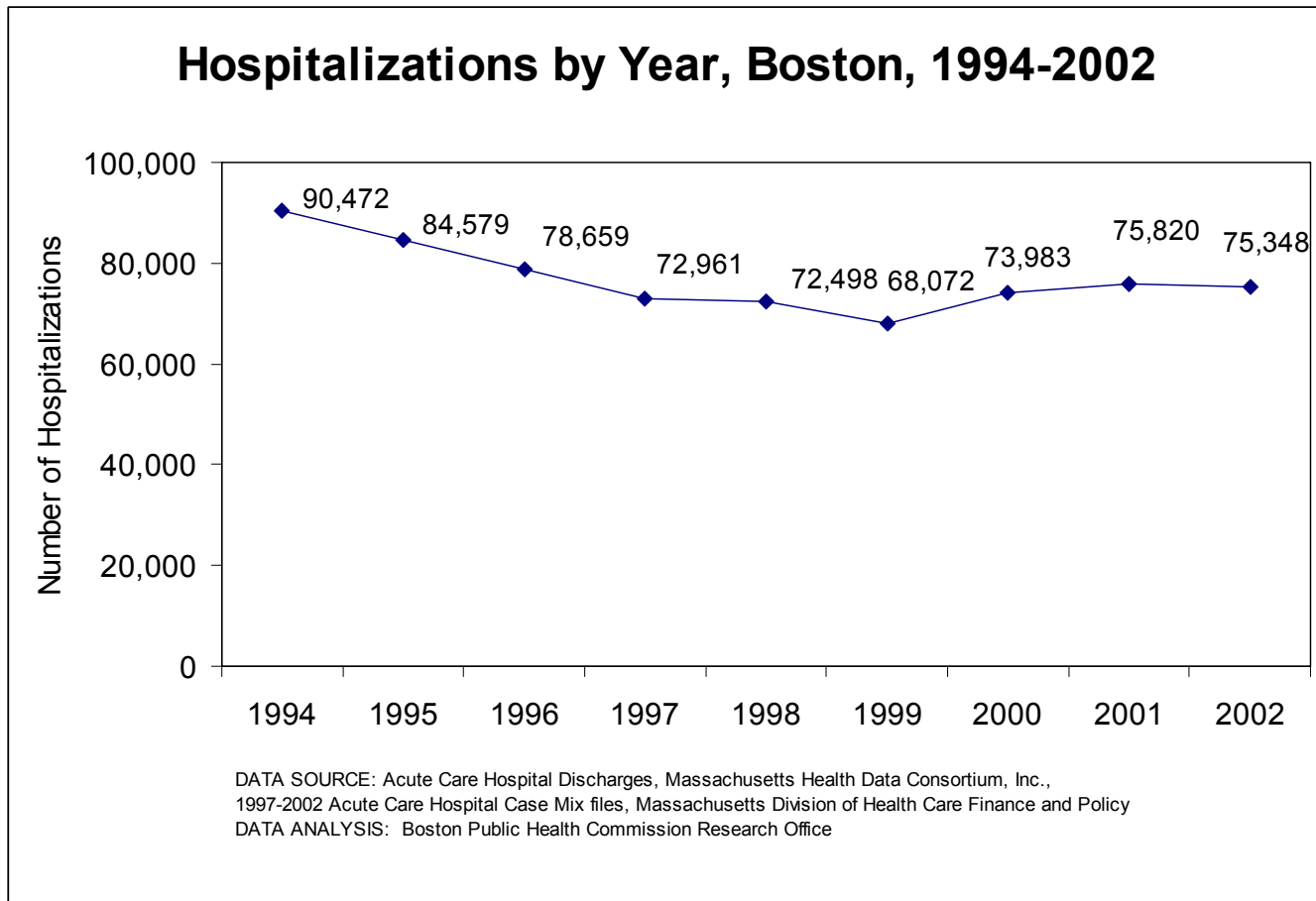
DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health
 DATA ANALYSIS: Boston Public Health Commission Research Office

- Boston’s persistently elevated LBW rate for Black infants is one of the earliest of a broad range of health disparities affecting Black Bostonians across the lifespan. It reflects adverse circumstances, many of which are poorly understood, affecting women’s capacity to maintain a healthy pregnancy long enough for a fetus to reach maturity.
- In 2002, about one in ten (9.5%) births to Boston residents was a low birthweight (LBW) birth, the highest LBW rate since 1992.
- LBW rates for Asians, Latinos, and Whites have been consistently lower than those for Blacks.

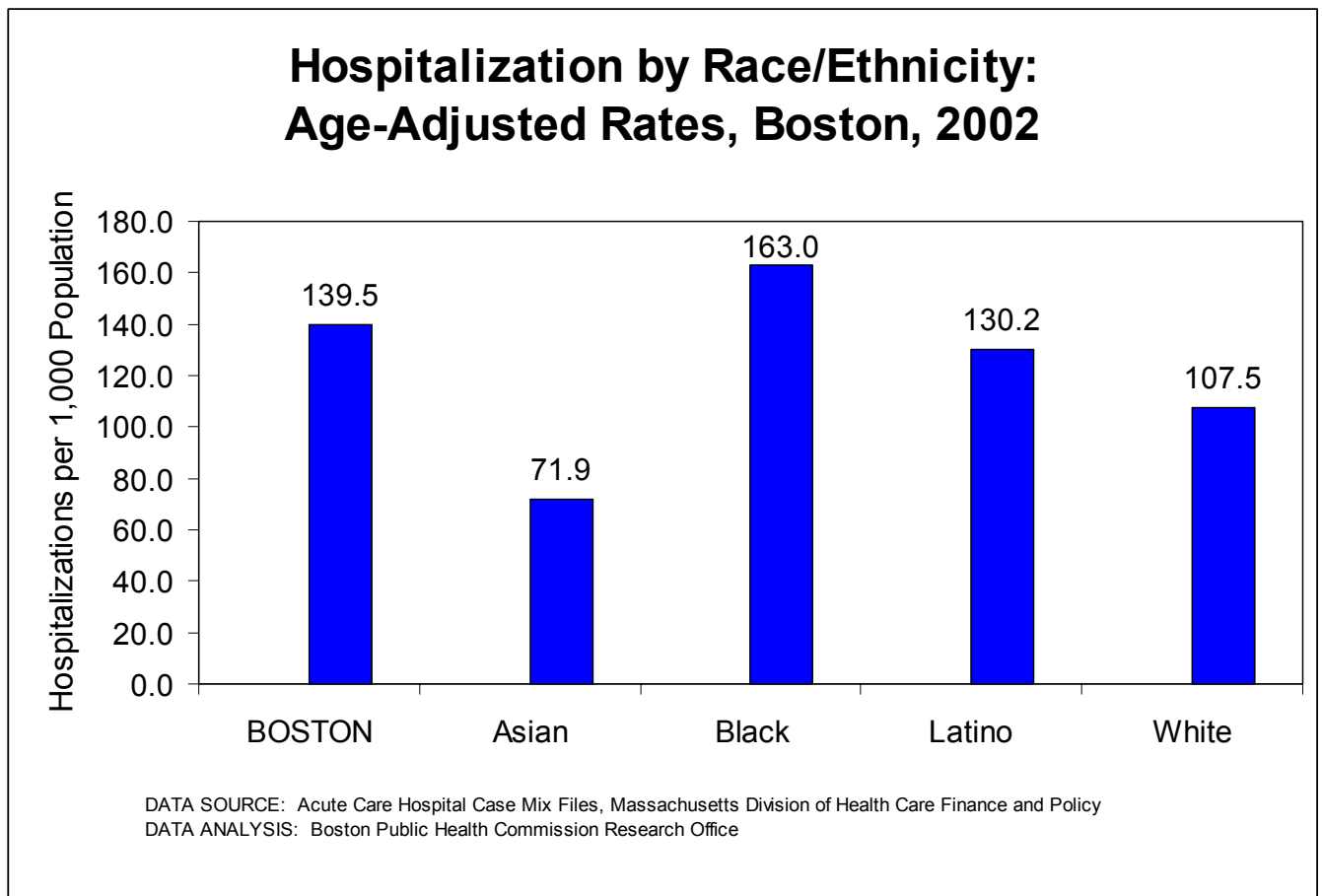


- In 2002, there were 56 deaths of Boston infants, yielding an infant mortality rate (IMR) of 7.0 per 1,000 live births. The one-year decrease from 7.4 per 1,000 in 2001 was not statistically significant. There has been an overall decline of 32% in the IMR from 1992.
- IMRs in Boston have consistently been highest for Black infants. Black infants accounted for 30.2% of all Boston births in 2002 but 53.6% of all infant deaths (data not shown). At no point over time has the IMR of other race/ethnicity groups exceeded that of Black infants.
- From 2001 to 2002, the IMR fell for all races/ethnicities, except Latinos, and for Boston overall.

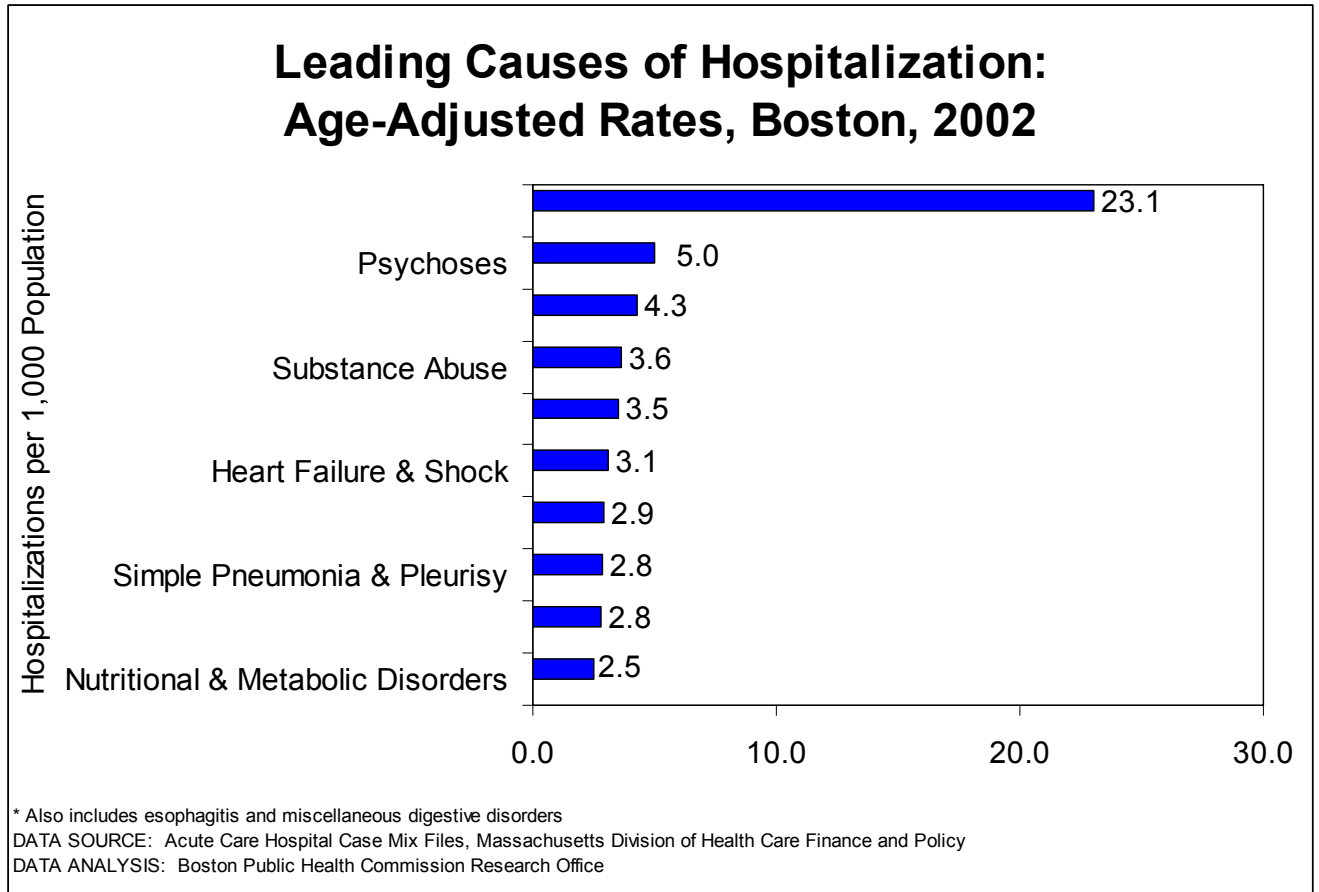
Hospitalization



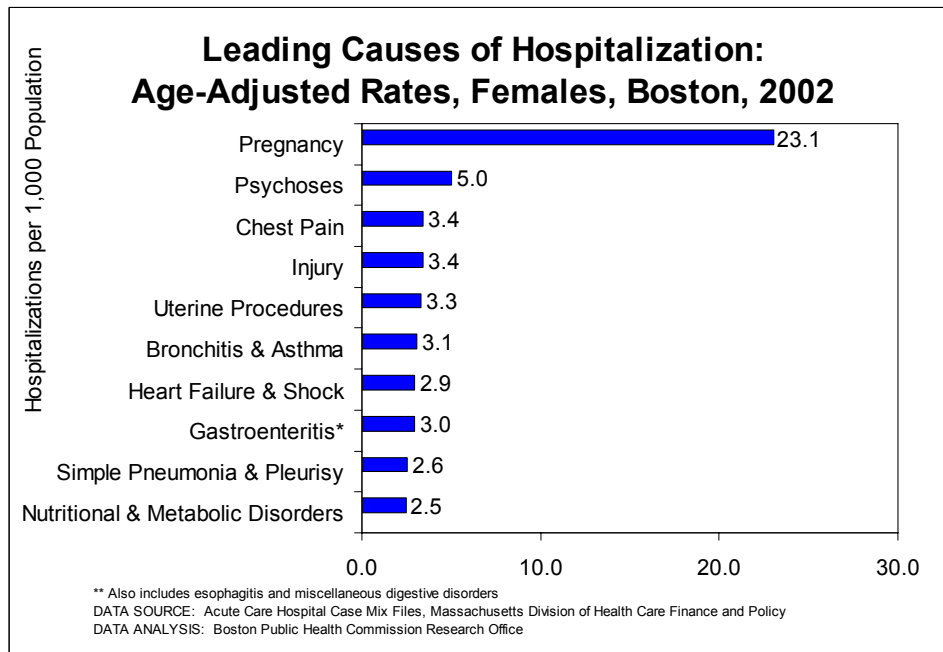
- In 2002, the number of hospitalizations of Boston residents declined slightly to 75,348 from 75,820 in 2001.
- From 1994 through 2002, the number of hospitalizations among Boston residents declined 16.7%.



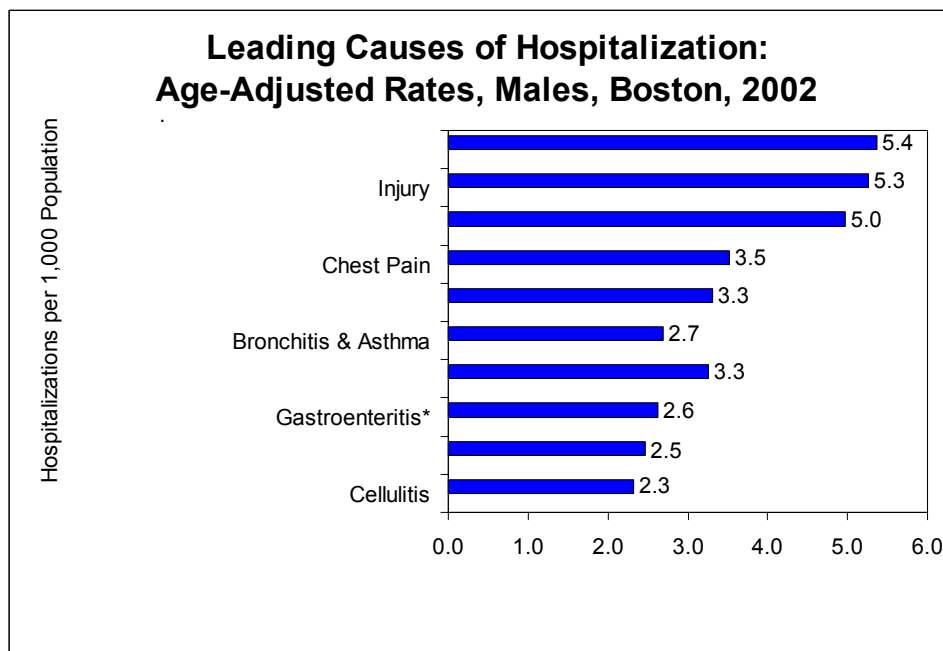
- NOTE: Race/ethnicity information in hospital discharge data should be interpreted with caution because it is not collected consistently by Massachusetts hospitals. Latinos may be reported in any of the above race categories, or as a separate group, and data may be self-reported or estimated by hospital staff depending on the individual hospital's reporting practices.
- Disparities in hospitalization rates continue to exist among Boston's racial/ethnic groups.
- In 2002, Black residents had the city's highest hospitalization rate and Asians the lowest.
- The hospitalization rate for Blacks was 51.6% higher than the rate for Whites, 25.2% higher than the rate for Latinos, and 126.7% higher than the rate for Asians. It was also 16.8% higher than the hospitalization rate for Boston overall.



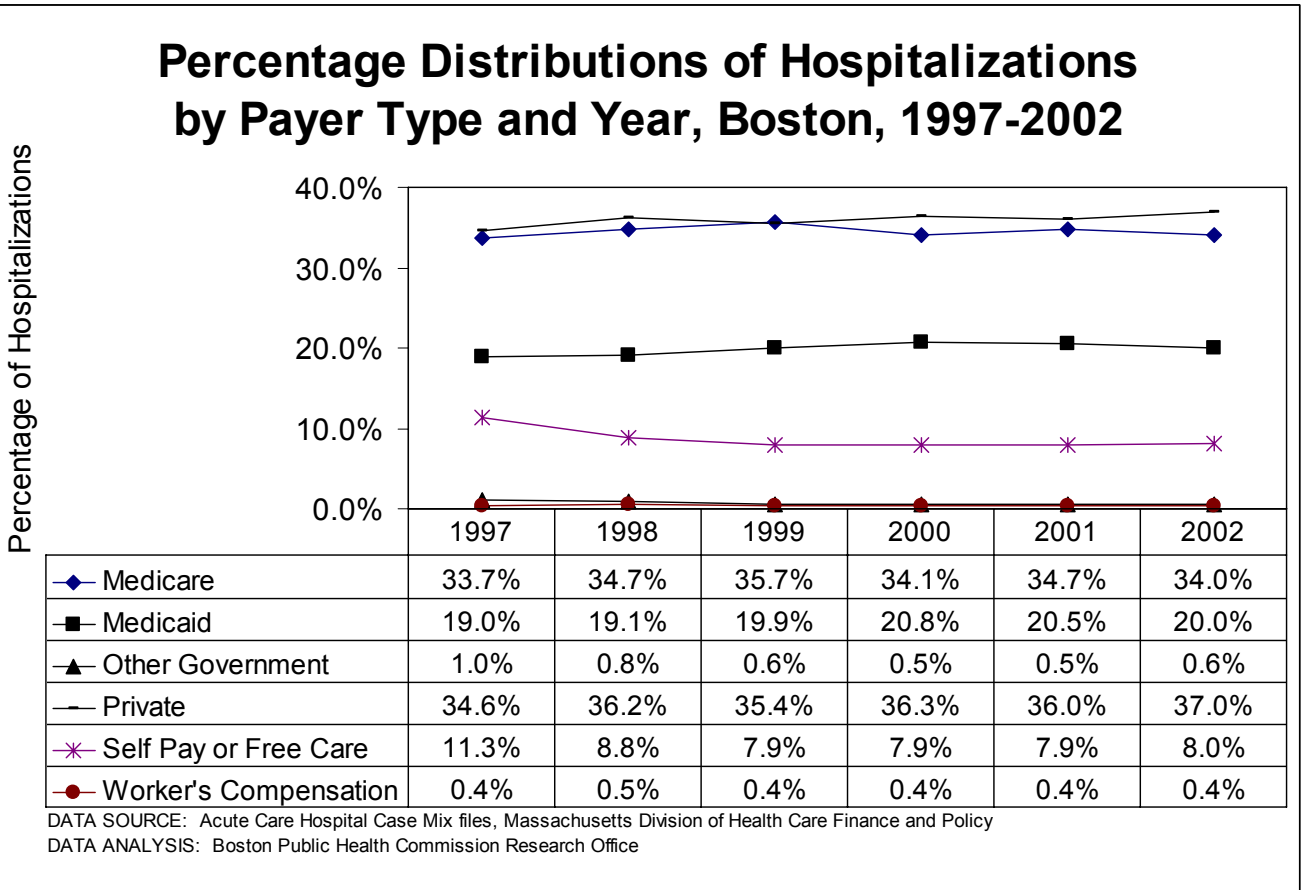
- Ten leading causes accounted for 25,333 hospitalizations, 33.6% of all hospitalizations of Boston residents in 2002, which was the same percentage as in 2001. Pregnancy and pregnancy-related conditions were the leading reason for hospitalization, and psychoses and injuries the second and third most common reasons.
- Other leading causes among Boston residents were substance abuse, chest pain, heart failure and shock, bronchitis and asthma, gastroenteritis, simple pneumonia and pleurisy, and nutritional and metabolic disorders.



- Leading reasons for hospitalization among Boston females were similar to those for Boston overall. The first, second, and third leading causes were pregnancy, psychoses, and injury; the rate for injury (3.4 hospitalizations per 1,000 population) was lower than the injury rate for Boston overall (4.3 hospitalizations per 1,000).



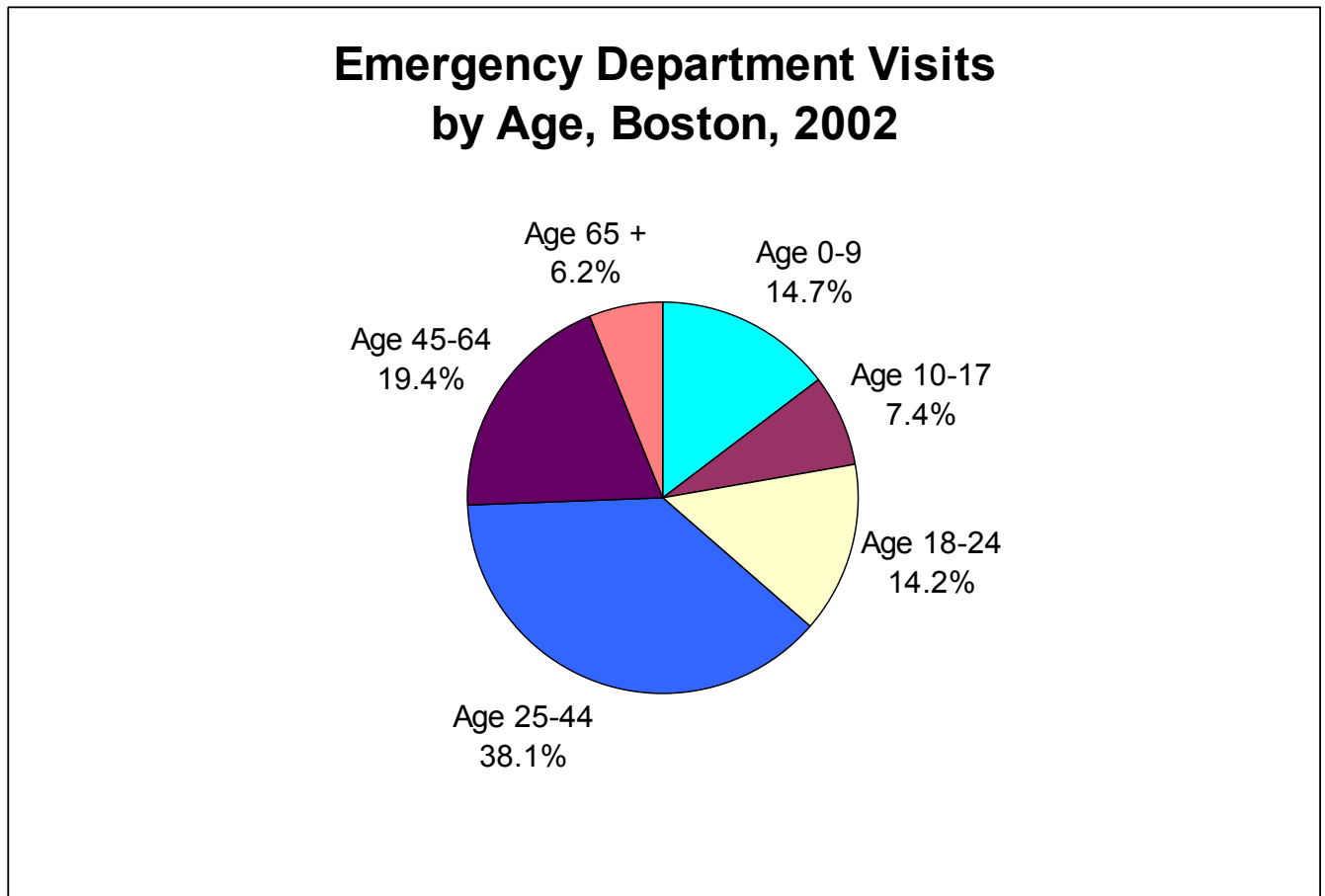
- Leading reasons for hospitalization among Boston males were nearly the same as for Boston overall, with the exception of cellulitis and pregnancy.
- Two of the hospitalization rates for leading causes for males were higher than those for Boston overall: substance abuse (5.4 hospitalizations per 1,000 population) and injury (5.3).



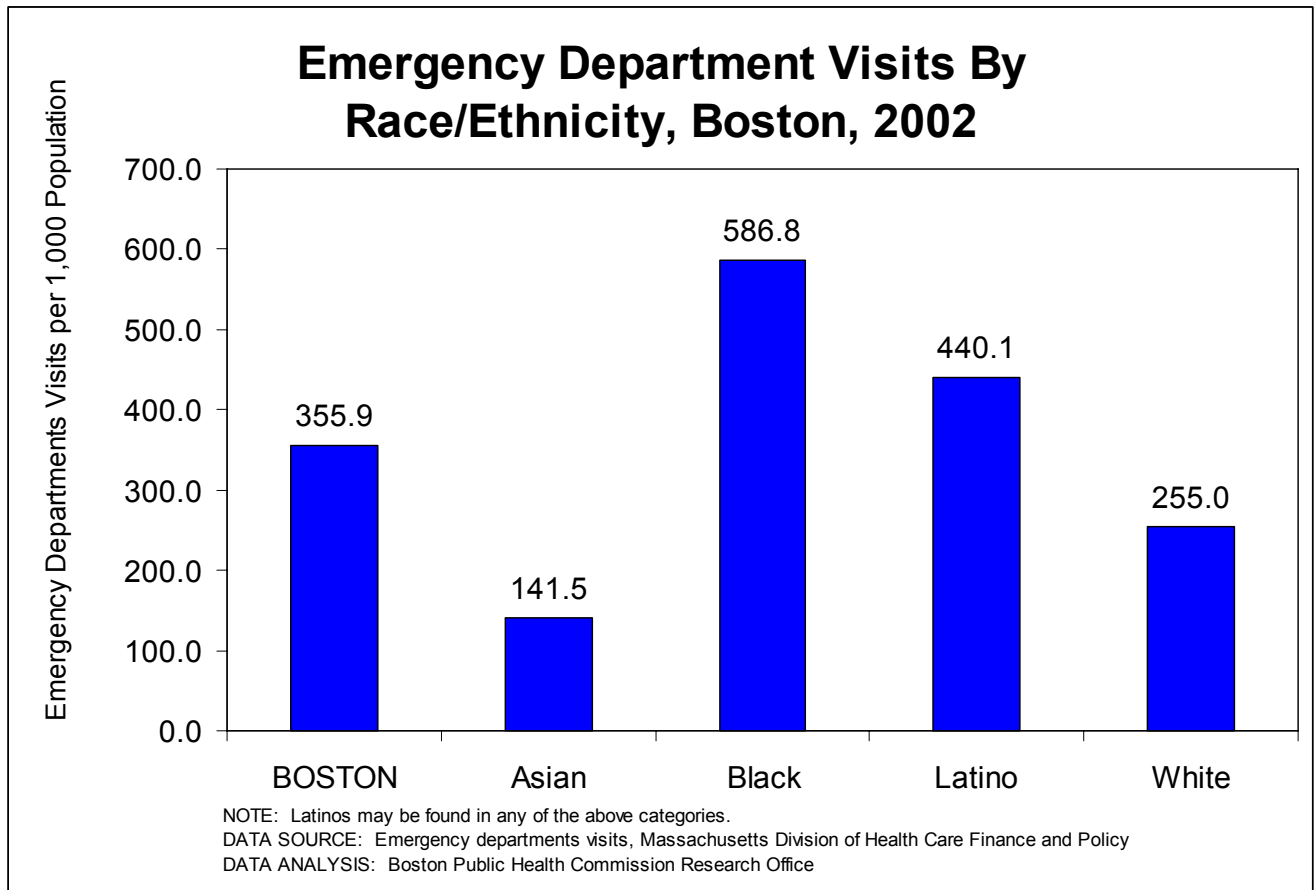
- With the exception of the self-pay or free care category, the proportion of hospitalizations covered by each payer type did not change greatly from 1997 to 2002.
- Slightly more than one third of hospitalizations continue to be paid for by private insurance and about one third by Medicare. Medicaid is the payer for one fifth of hospitalizations. Other payers include worker's compensation and self-pay or free care.
- The proportion of hospitalizations paid by the patient or the patient's family or by the Free Care Pool declined from 11.3% in 1997 to 8.0% in 2002.

Emergency Department Visits

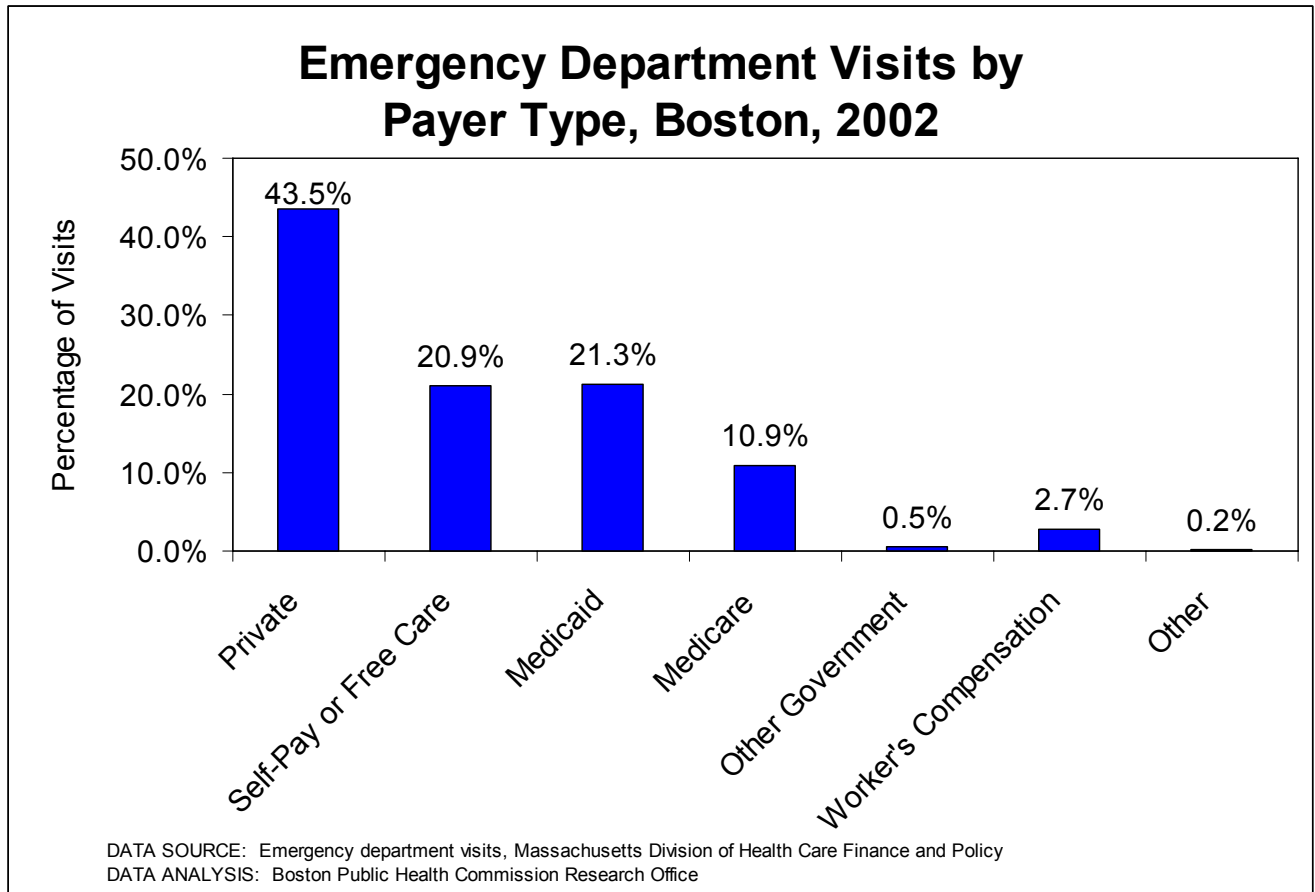
Hospital emergency department visits may be for urgent, life-threatening injuries and illnesses or for preventive and routine health care. According to the latest data from CDC, during 2001, about 107 million visits were made to hospital emergency departments in the US. Leading causes included abdominal pain, chest pain, fever, headache, injury, and acute respiratory infection. Emergency department utilization was higher for Black than for White patients. Among all patients, private insurance accounted for 40.2% of all emergency department visits, Medicaid/State children's Health Insurance Program 17.5%, Medicare, 14.8%, and self-pay (not including copays and deductibles), 14.7%.



- Of the 240,928 emergency department (ED) visits made by Boston residents in 2002, about half were made by males and half by females (data not shown).
- Boston residents ages 25-44 comprised the largest number of ED visits (38%). Residents from age groups 10-17 and 65 and over had the lowest frequency of ED visits, 7% and 6% of all visits, respectively.



- Black and Latino residents had the highest ED visit rates among all Boston race/ethnicity groups. The rate was 586.8 ED visits per 1,000 population for Blacks and 440.1 ED visits per 1,000 for Latinos. Asian residents had the lowest ED visit rate (141.5 per 1,000).
- The ED visit rate for Black residents was 130% higher than the rate for White residents and 65% higher than the overall Boston rate. The rate for Latino residents was 73% higher than the rate for White residents and 24% higher than the overall Boston rate.



- Forty-four percent of emergency visits made by Boston residents during 2002 were paid for by private insurance. Medicaid and self-pay or free care each paid for about twenty-one percent of all ED visits. The remaining visits were paid for Medicare (11%), Worker's Compensation (3%), and other sources (0.7%)

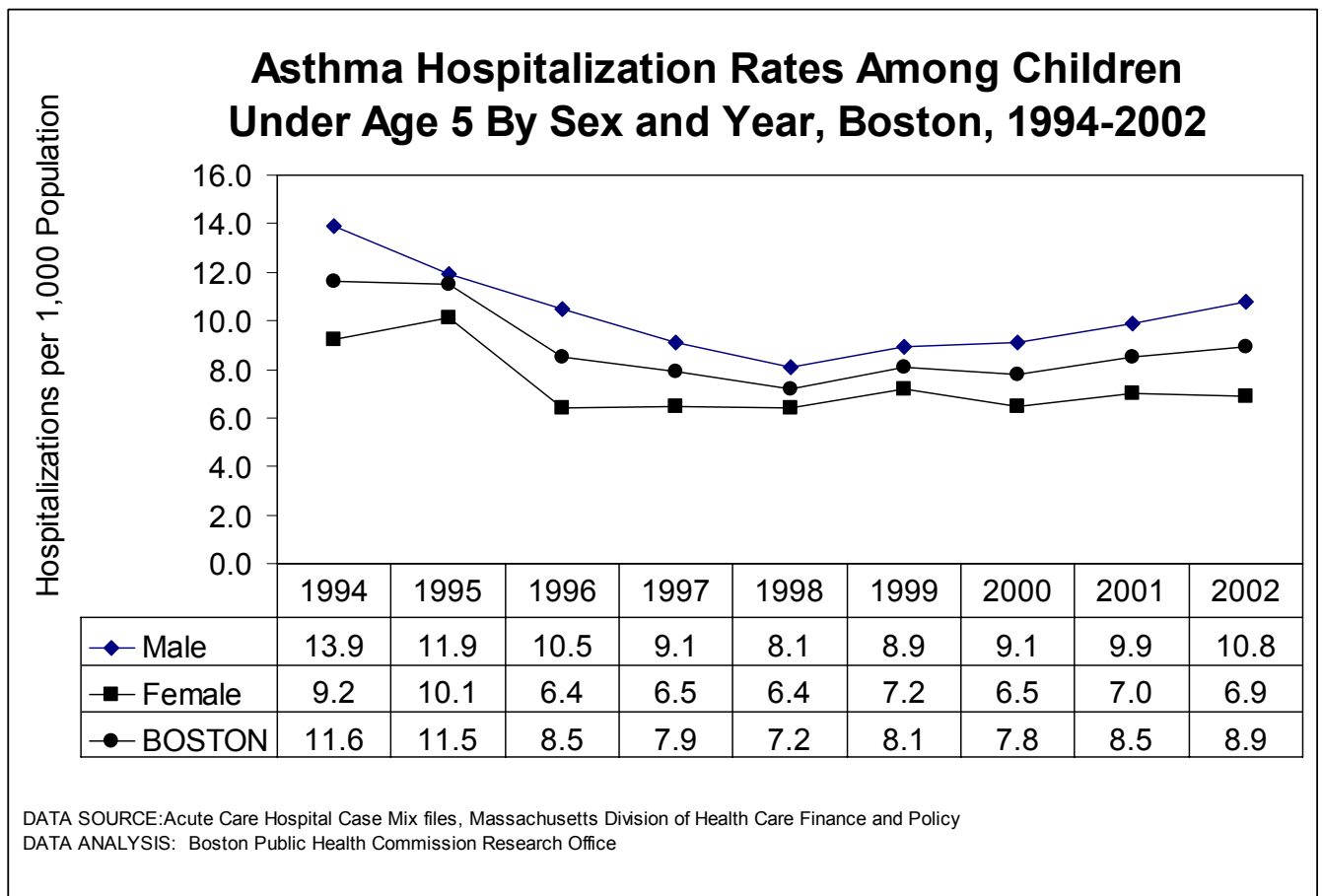
Leading Reasons for Emergency Department Visits, Boston, 2002		
	Number of Visits	Percentage of All Visits
Injury	70,538	29.2%
Respiratory Diseases and Disorders	27,612	11.5%
Miscellaneous Diseases and Disorders	22,918	9.5%
Digestive System Diseases and Disorders	13,738	5.7%
Mental Diseases and Disorders	12,248	5.1%
Nervous System Diseases and Disorders	10,536	4.4%
Ear, Nose, Mouth and Throat Diseases and Disorders	9,255	3.8%
Infectious Diseases	8,894	3.7%
Musculoskeletal System and Connective Tissue Disorders	8,698	3.6%
Skin and Subcutaneous Tissue Diseases and Disorders	8,253	3.4%
Kidney and Urinary Tract Diseases and Disorders	6,789	2.9%
Other Specified Conditions	41,449	17.2%
TOTAL	240,928	100.0%

DATA SOURCE: Emergency department visits, Massachusetts Division of Health Care Finance and Policy.
 DATA ANALYSIS: Boston Public Health Commission Research Office

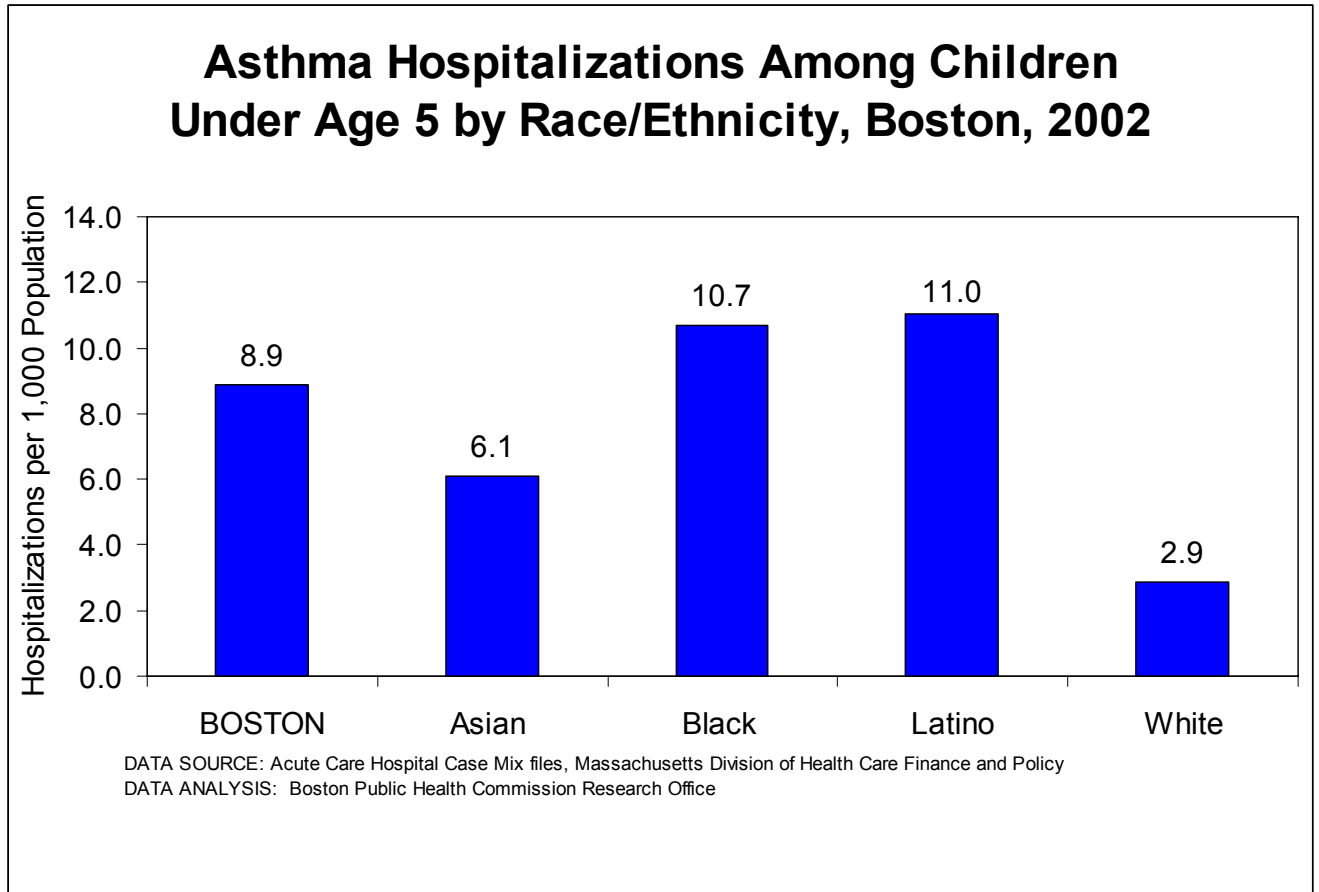
- Injury was the number one reason Boston residents went to emergency departments during 2002. Of the 240,928 ED visits by Boston residents, 70,538 or 29% were for injuries.
- Boston residents also made 27,612 ED visits (11.5% of all visits) for respiratory conditions and disorders, the second leading reason for ED visits. Mental diseases and disorders, infectious diseases, and digestive system diseases and disorders were other leading causes.

Asthma

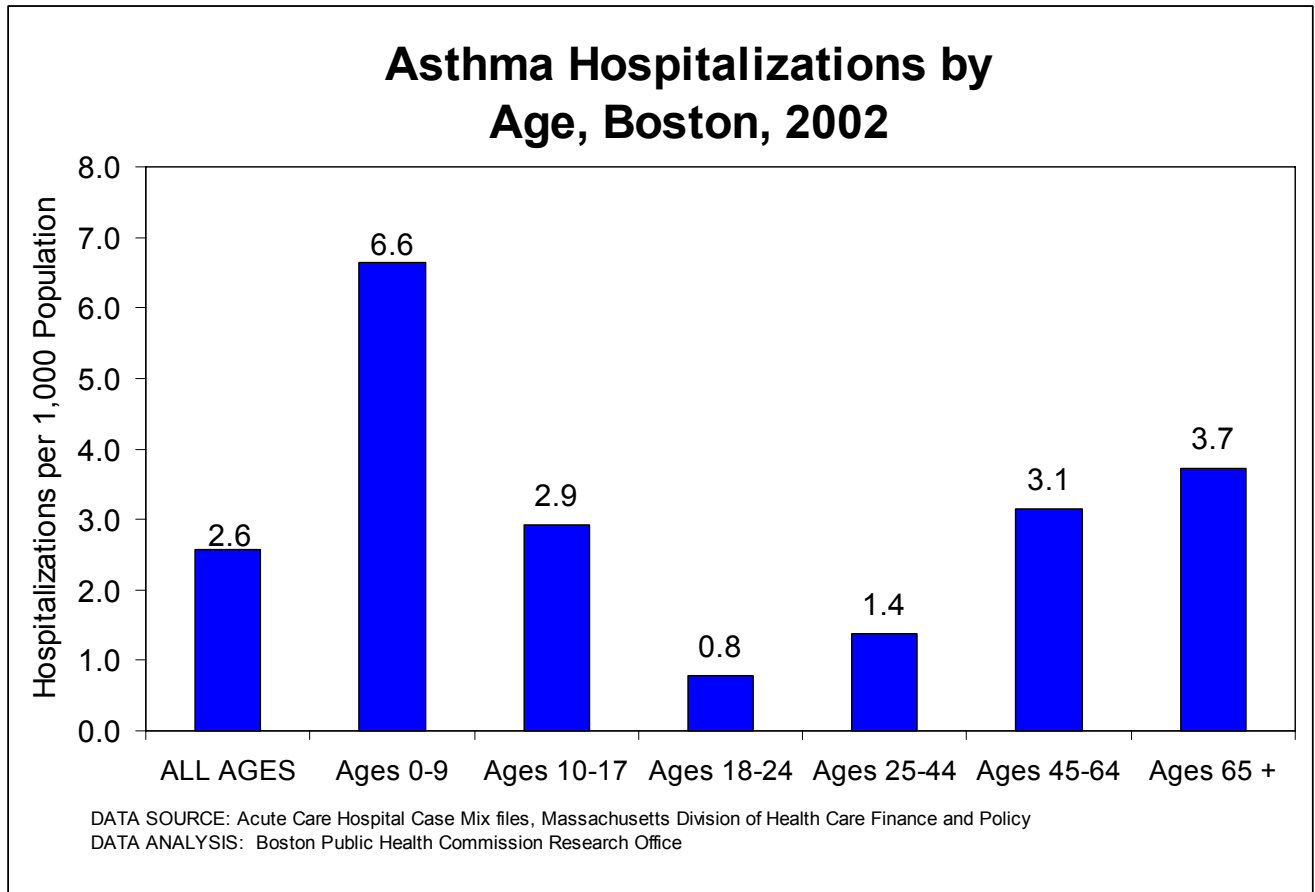
Asthma is a condition in which the tiny vessels bringing air to the lungs constrict and become inflamed. During asthma attacks, which may be triggered by factors such as allergens, exercise, and cold temperatures, breathing becomes difficult for the asthma sufferer. Inhaled and oral medications are used to manage asthma. Hospitalizations and emergency department visits for this condition are an indicator of the amount of asthma in a community, the severity of the condition in that population, and the adequacy of outpatient management of asthma. The American Lung Association reports that most asthma cases in the US are among children under the age of 18 and that Black children have the highest rates of asthma.



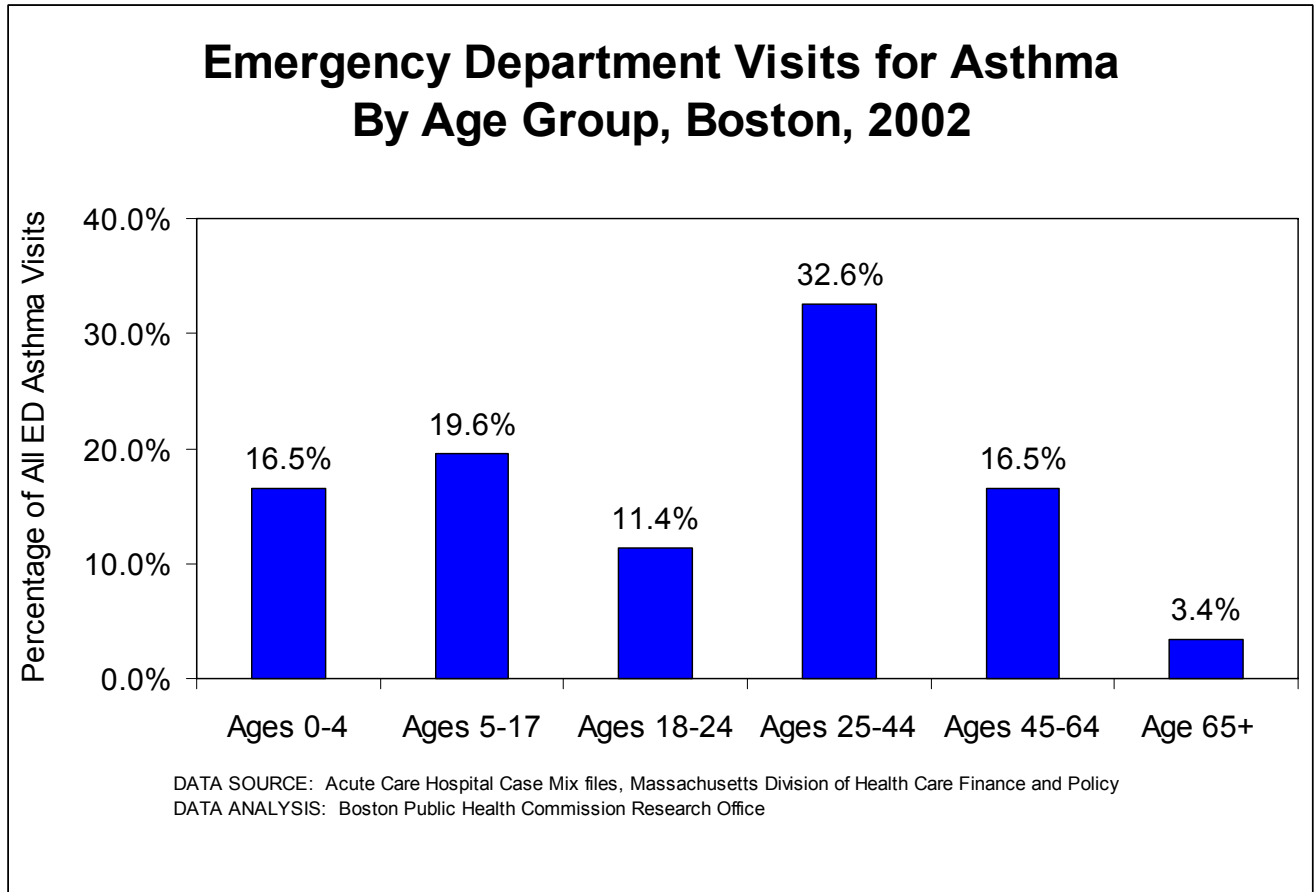
- Between 1994 and 2002, the asthma hospitalization rate for Boston children under age 5 declined 23.3%. However, in 2002, the rate rose 4.7% compared with the 2001 rate, from 8.5 asthma hospitalizations per 1,000 population to 8.9 per 1,000.
- For the years shown, hospitalization rates for male children under age 5 have been consistently higher than the rates for female children the same age. The rate for boys in 2002 (10.8 asthma hospitalizations per 1,000) was 56.5% higher than the rate for girls (6.9 asthma hospitalizations per 1,000).



- During 2002, asthma hospitalization rates for Boston’s Black and Latino children were substantially higher than for Asian and White children. This trend has persisted since 1997 (data not shown).
- The 2002 rate for Latinos (11.0 asthma hospitalizations per 1,000 population) was the highest of all race/ethnicity groups, and the rate for Blacks (10.7 asthma hospitalizations per 1,000), the second highest. The rates for Latino and Black children were close to four times the rate for Whites and nearly twice the rate for Asians.



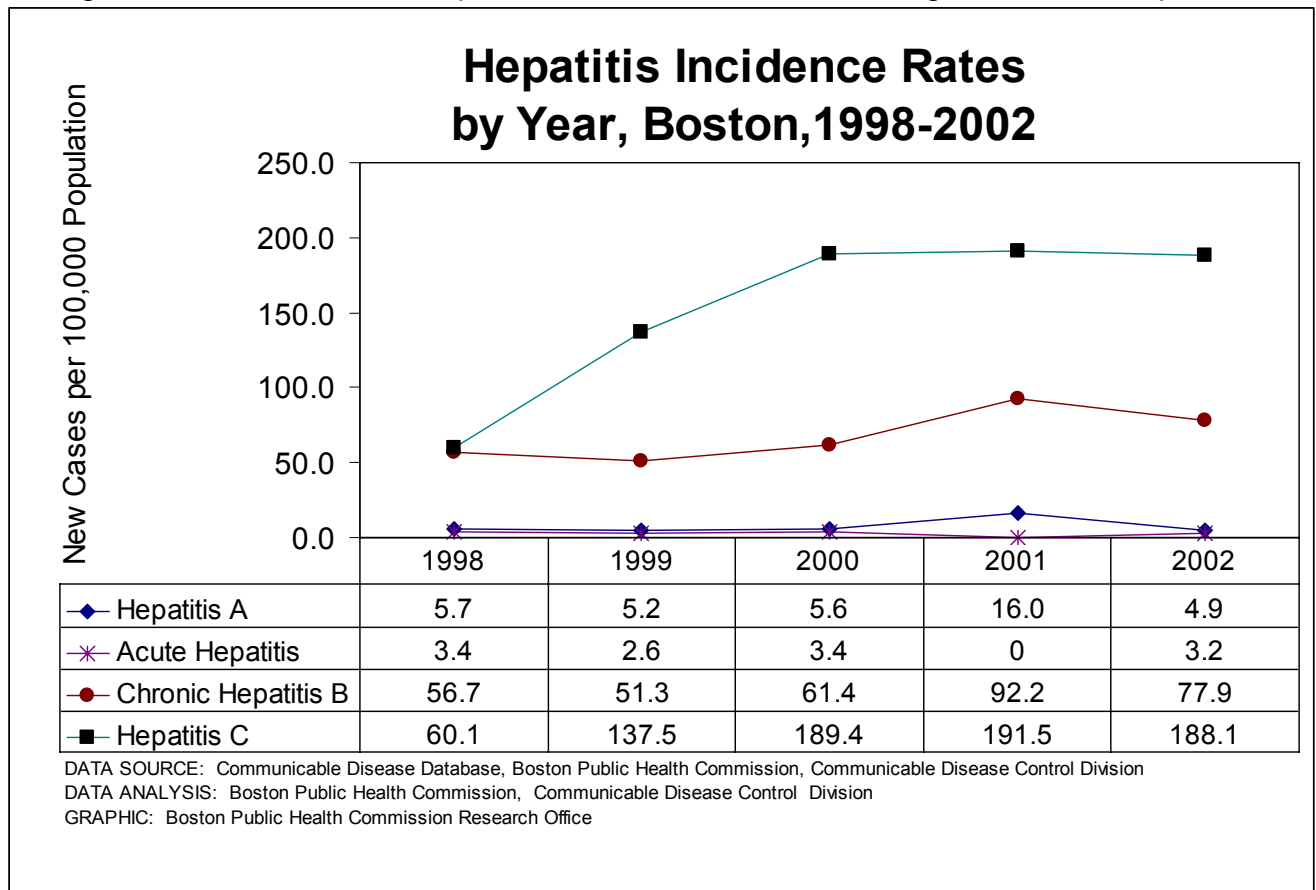
- The majority of the asthma hospitalization burden is borne by children. In 2002, Boston children under the age of 10 had 6.6 hospitalizations per 1,000 population. Young adults ages 18-24 had the city's lowest asthma hospitalization rate, 0.8 per 1,000.



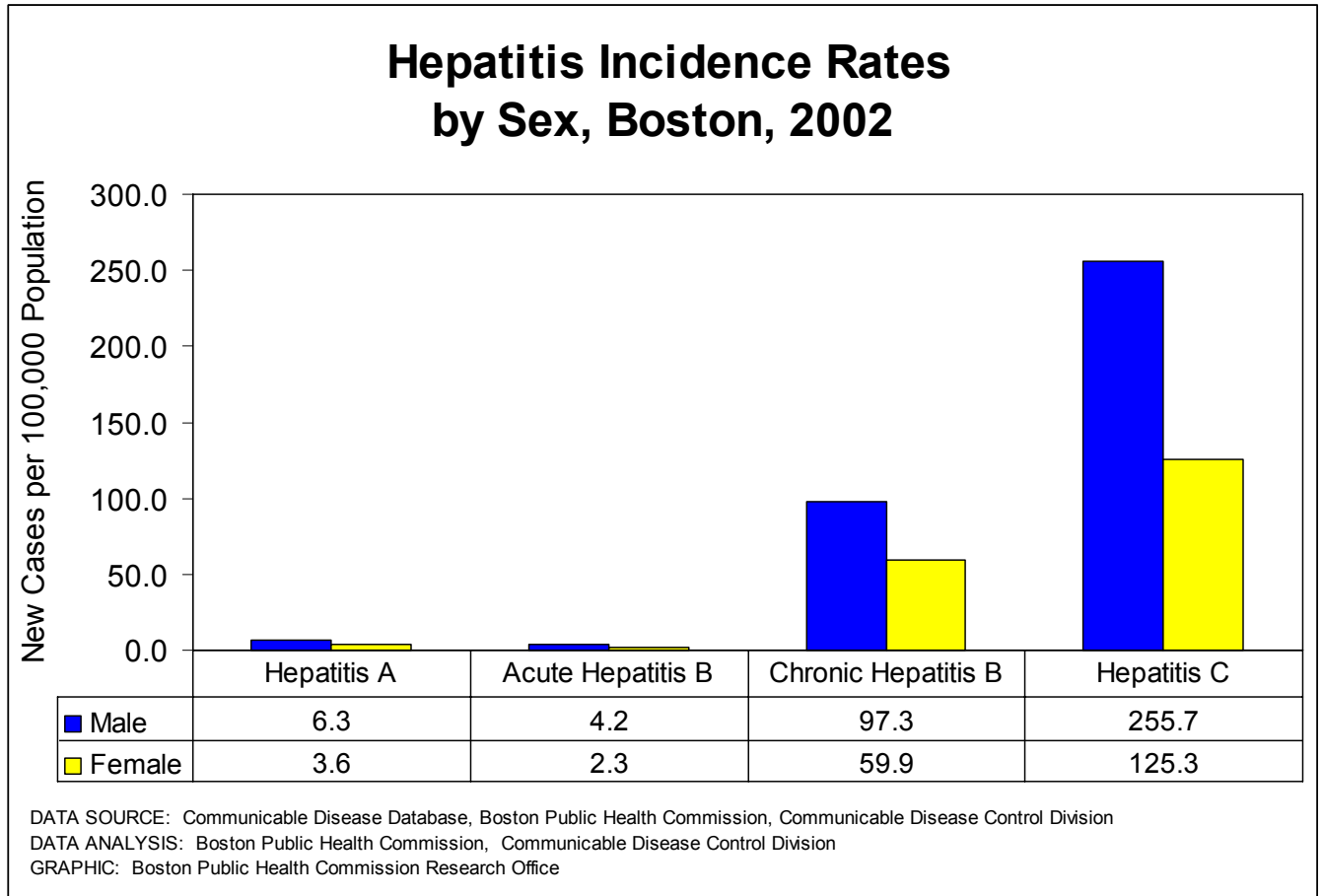
- In 2002, adults ages 25-45 accounted for about a third of the emergency department (ED) visits for asthma made by Boston residents, this highest of all age groups. Children ages 5-17 accounted for the second highest percentage of ED visits for asthma (19.6%).
- Boston residents ages 65 and over had only 3.4% of all ED visits for asthma.

Hepatitis

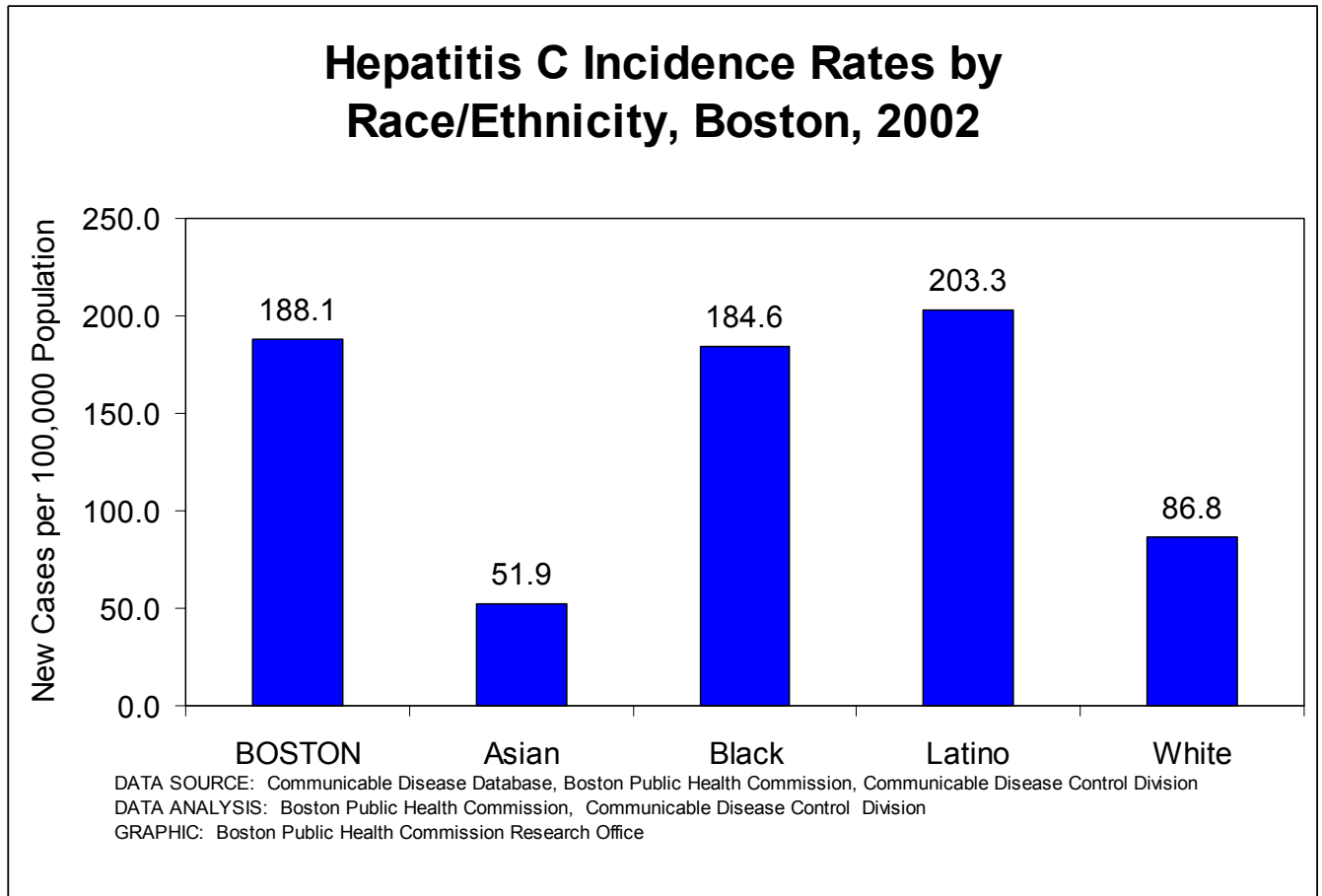
Hepatitis is a type of liver disease that can be mild or severe, acute (short-term) or chronic. Some cases of hepatitis can result in liver failure and death. People can get hepatitis in a number of ways such as eating food or drinking water infected by hepatitis, having unprotected sex with someone who has hepatitis, sharing needles for injection drug use with someone infected with hepatitis (or being accidentally stuck by an infected needle), getting a blood transfusion with blood infected by the virus, or from an infected mother to her baby during birth. Three major types of hepatitis are Hepatitis A, Hepatitis B, and Hepatitis C. Hepatitis A is caused by the hepatitis A virus (HAV) and results in acute (short-term) infection. Hepatitis B virus (HBV) causes both acute and chronic infection. Hepatitis C is caused by the hepatitis C virus (HCV) and is the most commonly reported blood-borne infection in Boston. Vaccines are available for hepatitis A and hepatitis B; however, there is no vaccine to prevent hepatitis C infection. According to the American Liver Foundation, Non-Hispanic African Americans have the highest incidence rate for hepatitis C while Asians have the highest rate for hepatitis B.



- In 2002, the incidence of hepatitis A infection dropped about 69.4%, from 16.0 new cases per 100,000 population in 2001 to 4.9 new cases per 100,000.
- The hepatitis C infection rate tripled between 1998 and 2002 (60.1 new cases to 188.1 new cases per 100,000 population). However, this rate has leveled off in the last three years.
- The incidence rate of chronic hepatitis B infection fell 15.5%, from 92.2 new cases per 100,000 population in 2001 to 77.9 new cases per 100,000 population in 2002.

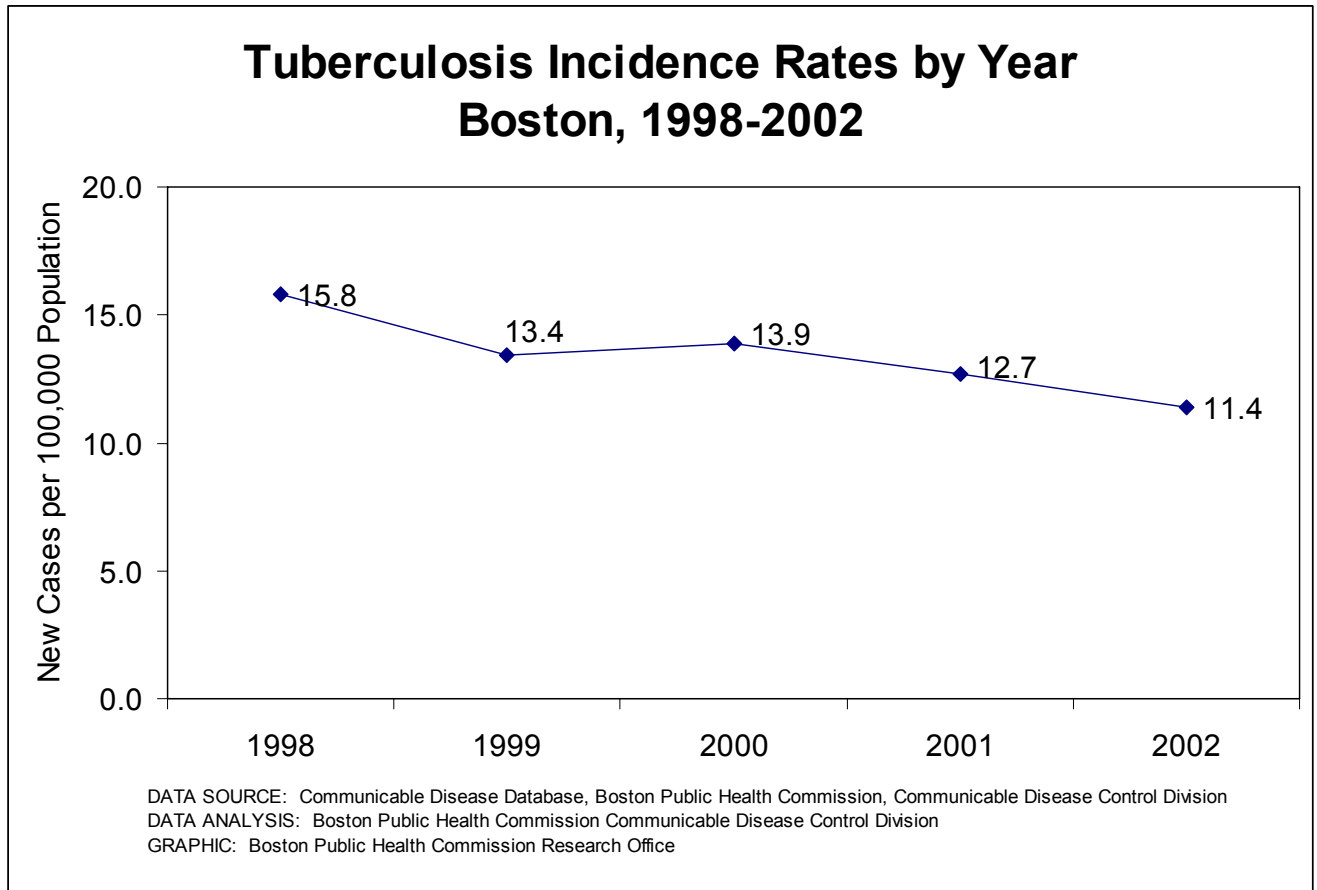


- In 2002, the incidence rate of reported hepatitis A, B, and C infections in Boston was approximately two times as high in males as in females.

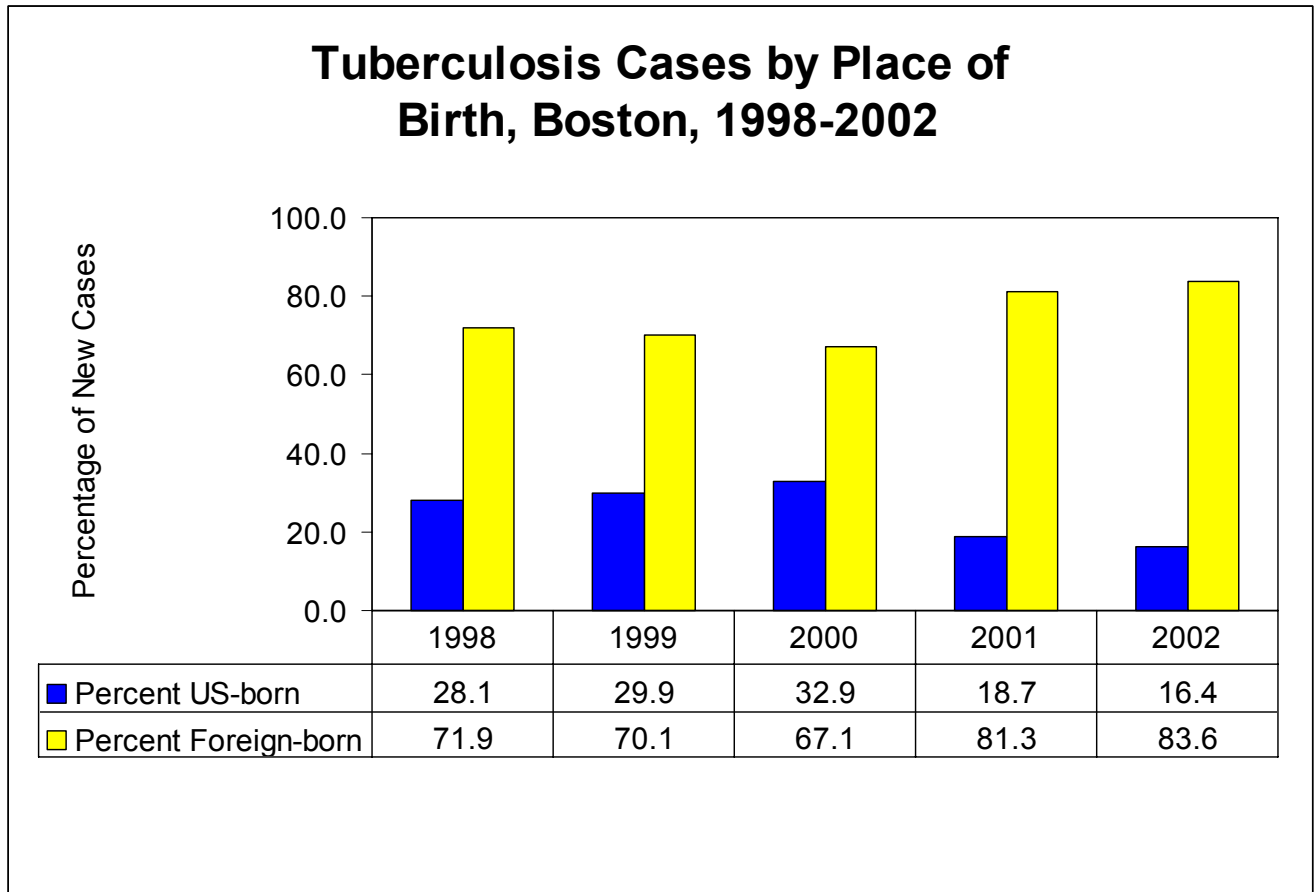


- In 2002, the incidence rate of reported hepatitis C infection in Boston was 188.1 new cases per 100,000 population.
- Latinos and Blacks had the highest rates of hepatitis C: for Blacks, the incidence rate in 2002 was 184.6 new cases per 100,000 population and for Latinos, it was 203.3 new cases per 100,000 population.
- The incidence rate of reported hepatitis C among Latinos was 2.3 times the rate for Whites and about four times the rate for Asians.

Tuberculosis



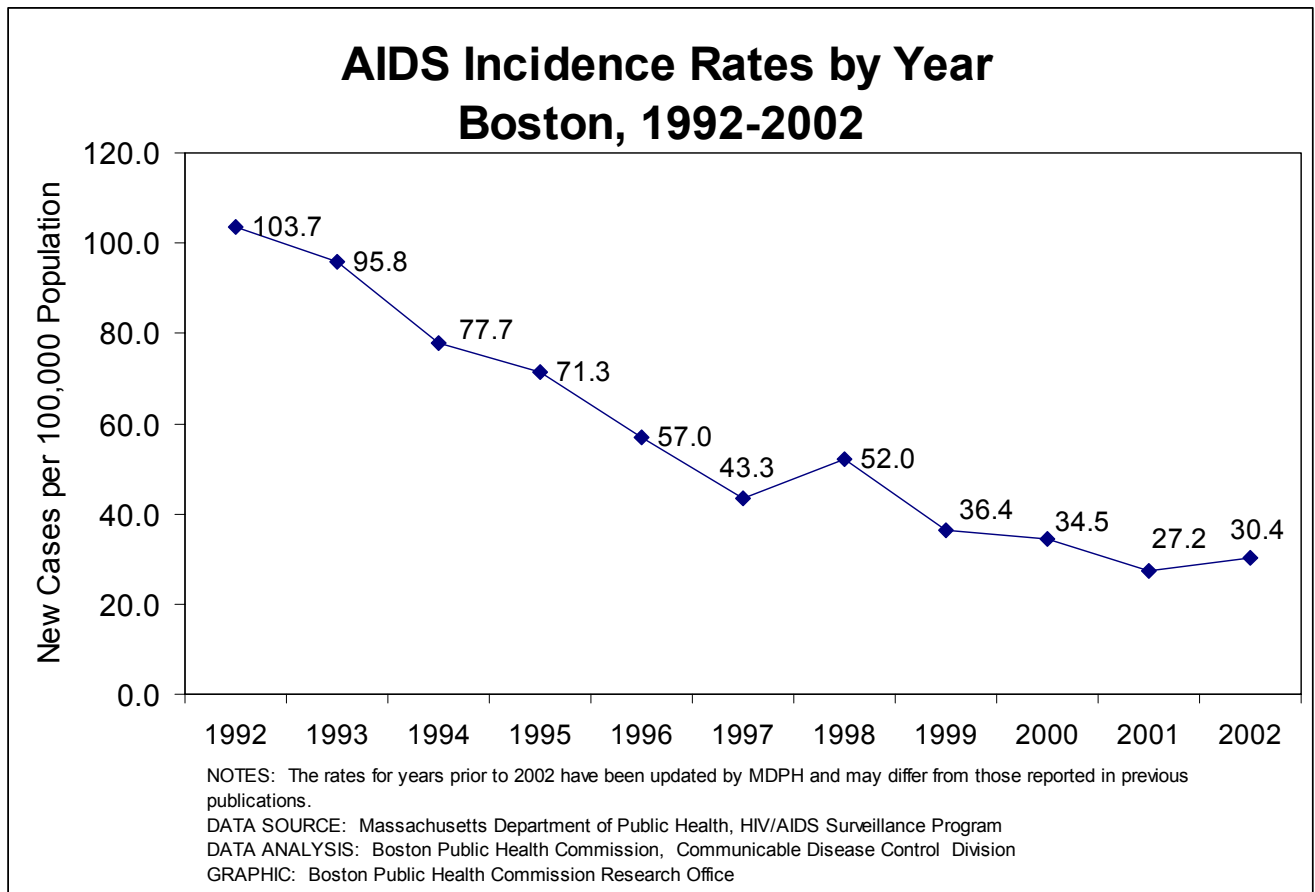
- A total of 390 new tuberculosis (TB) cases were reported among Boston residents during 1998-2002. Between 1998 and 2002, the TB incidence rate for Boston declined 28%, from 15.8 new cases per 100,000 population in 1998 to 11.4 new cases per 100,000 in 2002.



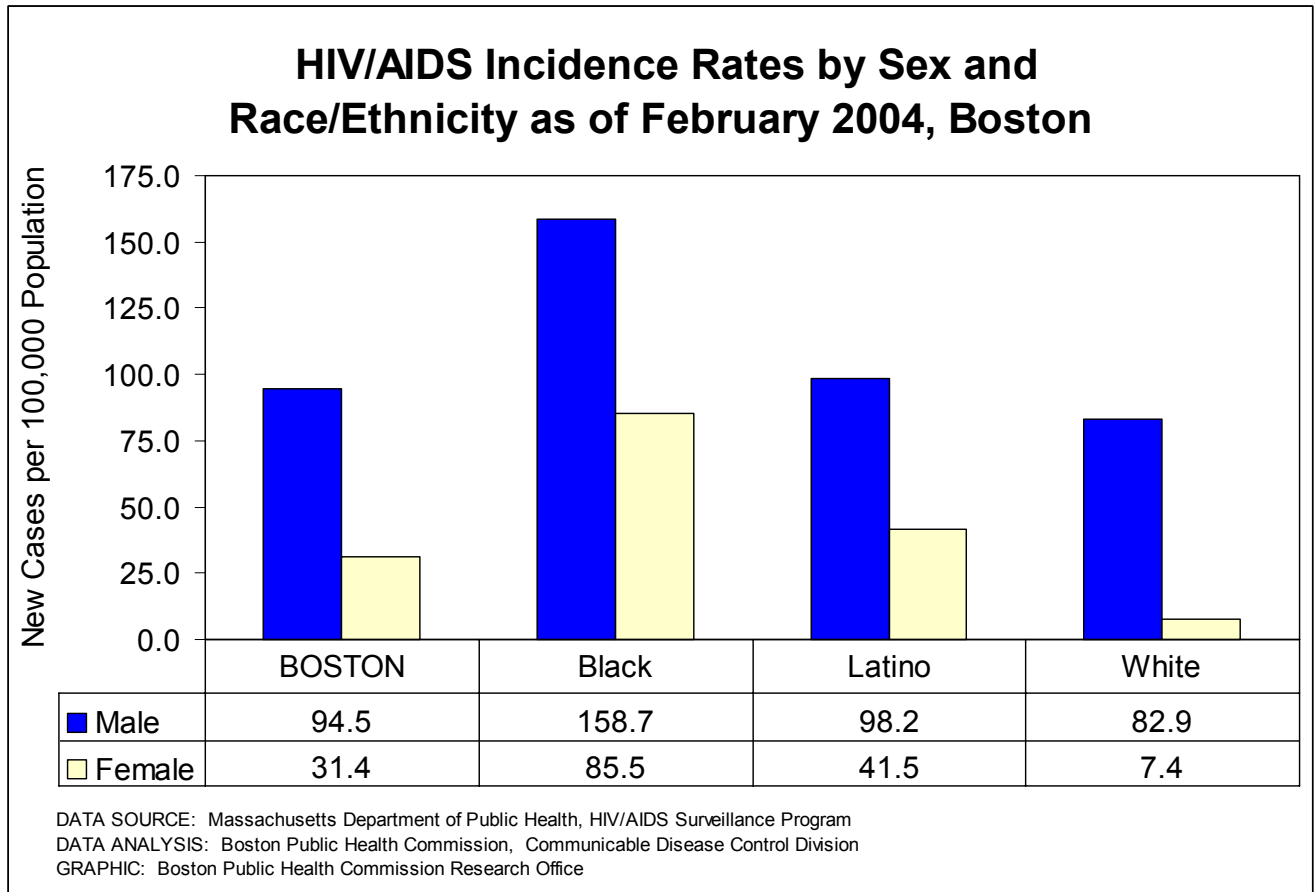
- In 2002, 83.6% of new TB cases reported for Boston residents were among those born outside the US.
- Between 1998 and 2002, the percentage of all new TB cases among Boston residents not born in the US increased 16.3%, while the percentage for those born in the US declined 41.6%.

HIV/AIDS

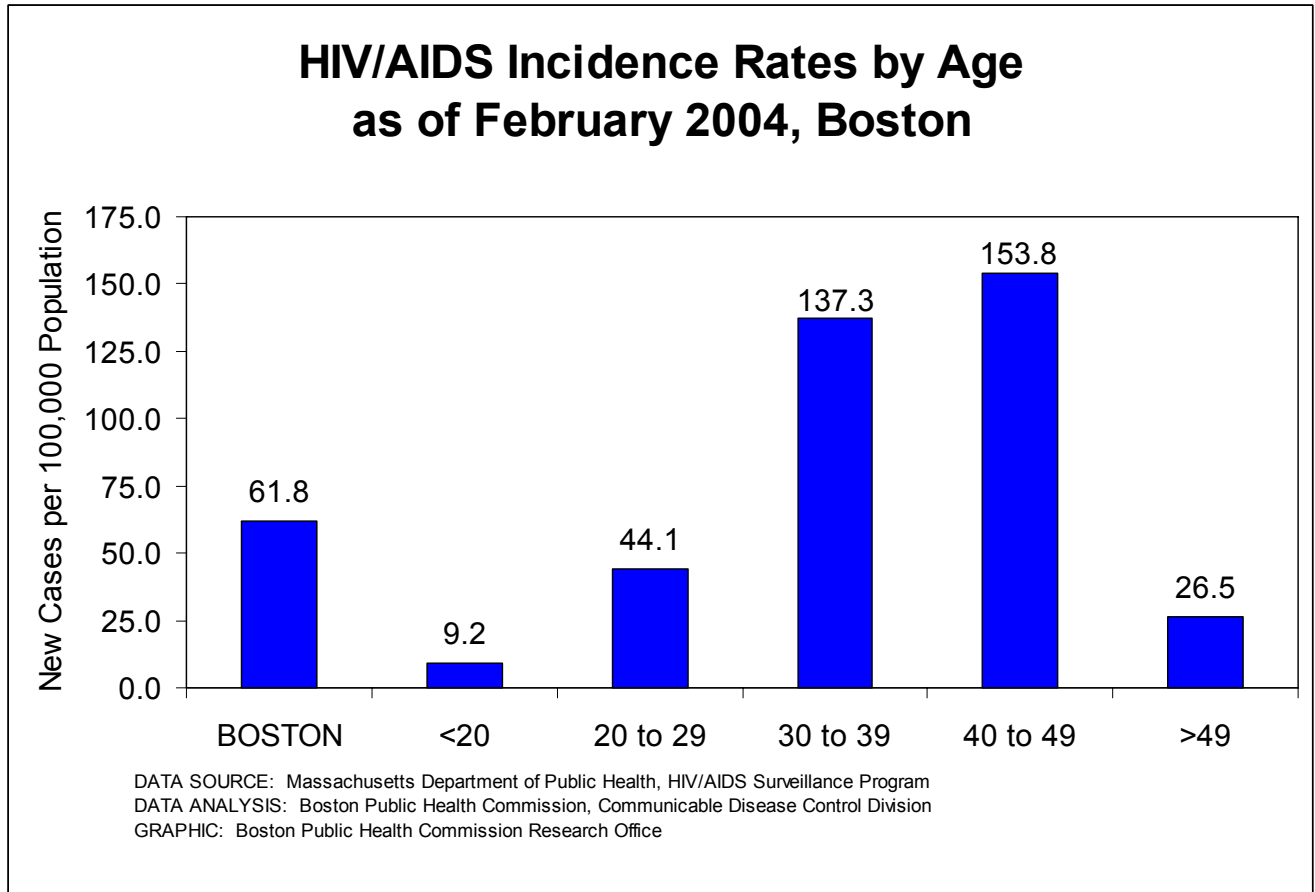
Human Immunodeficiency Virus (HIV) is the organism that causes Acquired Immune Deficiency Syndrome (AIDS). People become infected with HIV through sexual contact, contact with infected blood, or at birth, when infection can be transmitted from mother to baby. The virus can also be transmitted to infants through breast feeding. Over a period of years, most people who are infected with HIV develop AIDS as the virus damages the immune system. People are classified as having AIDS when their immune system shows significant damage by HIV, based upon blood tests (T-cell or CD4 counts) or when they develop certain infections or tumors related to the presence of HIV. The Centers of Disease Control reports that nationally, in 2002, men accounted for 71%, people ages 25-34, 28%, and Blacks, 54% of all new diagnosed cases of HIV/AIDS. Male-to-male sexual contact (44%) and individuals exposed through heterosexual contact (35%) accounted for the majority of newly diagnosed cases of HIV/AIDS.



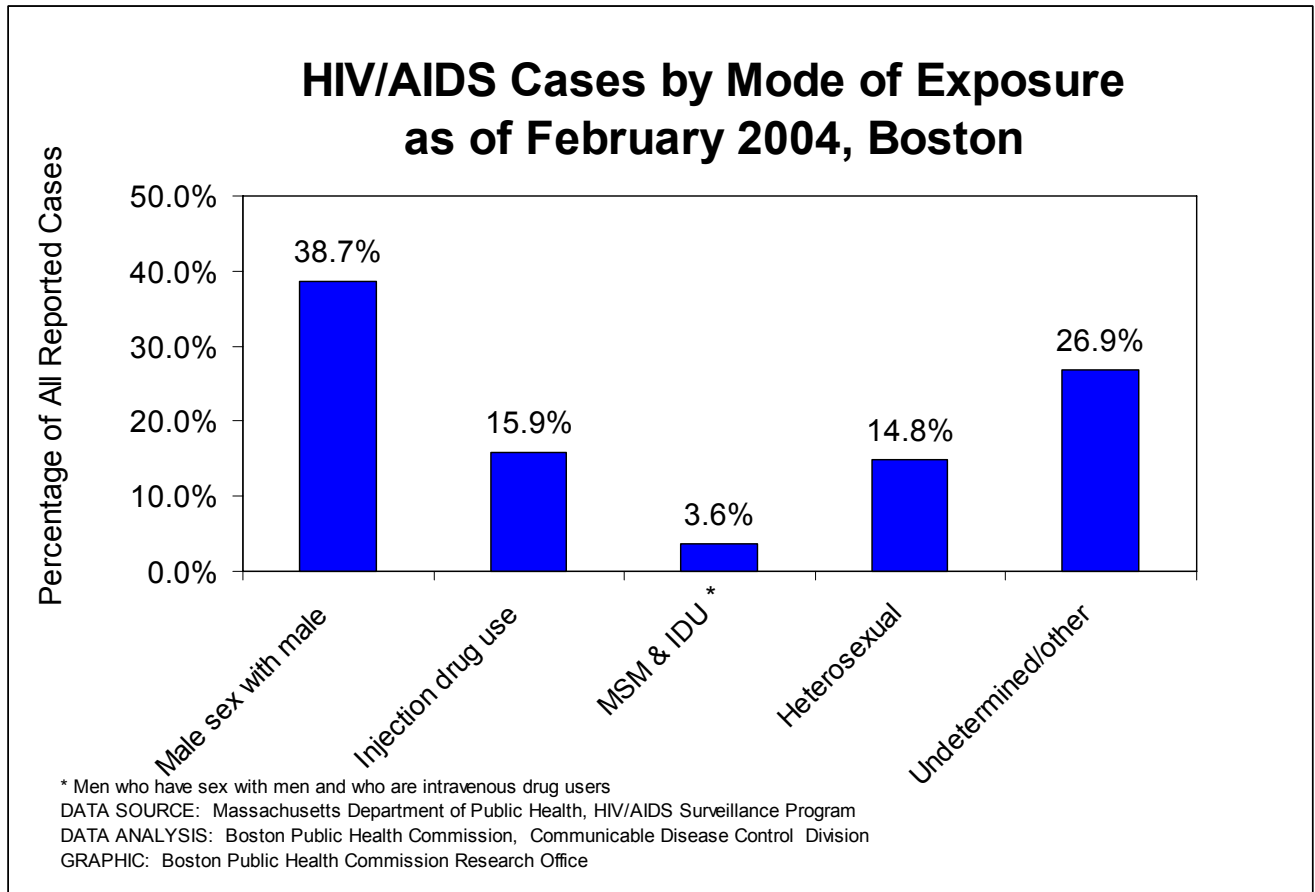
- The HIV/AIDS incidence rate in 2002 for Boston residents was 30.4 new cases per 100,000 population.
- These rates have dropped 70.7% from the decade high rate of 103.7 new cases per 100,000 population in 1992; however, the 2002 rate represents an 11.8% increase from the rate in 2001.



- As of February 2004, the overall HIV/AIDS incidence rate for Boston residents was 61.8 new cases per 100,000 population (rate not shown). The rate for males (94.5 new cases per 100,000 population) was three times the rate for females (31.4 new cases per 100,000).
- Black Boston residents had the highest HIV/AIDS incidence rates for both sexes among all race/ethnicity groups, (158.7 new cases per 100,000 population for males and 85.5 new cases per 100,000 for females). These rates were 67.9% higher than those for Boston males and 172.3% higher than those for females overall.
- Latinos had the second highest HIV/AIDS incidence rates among all Boston race/ethnicity groups for both males and females, while Whites had the lowest.



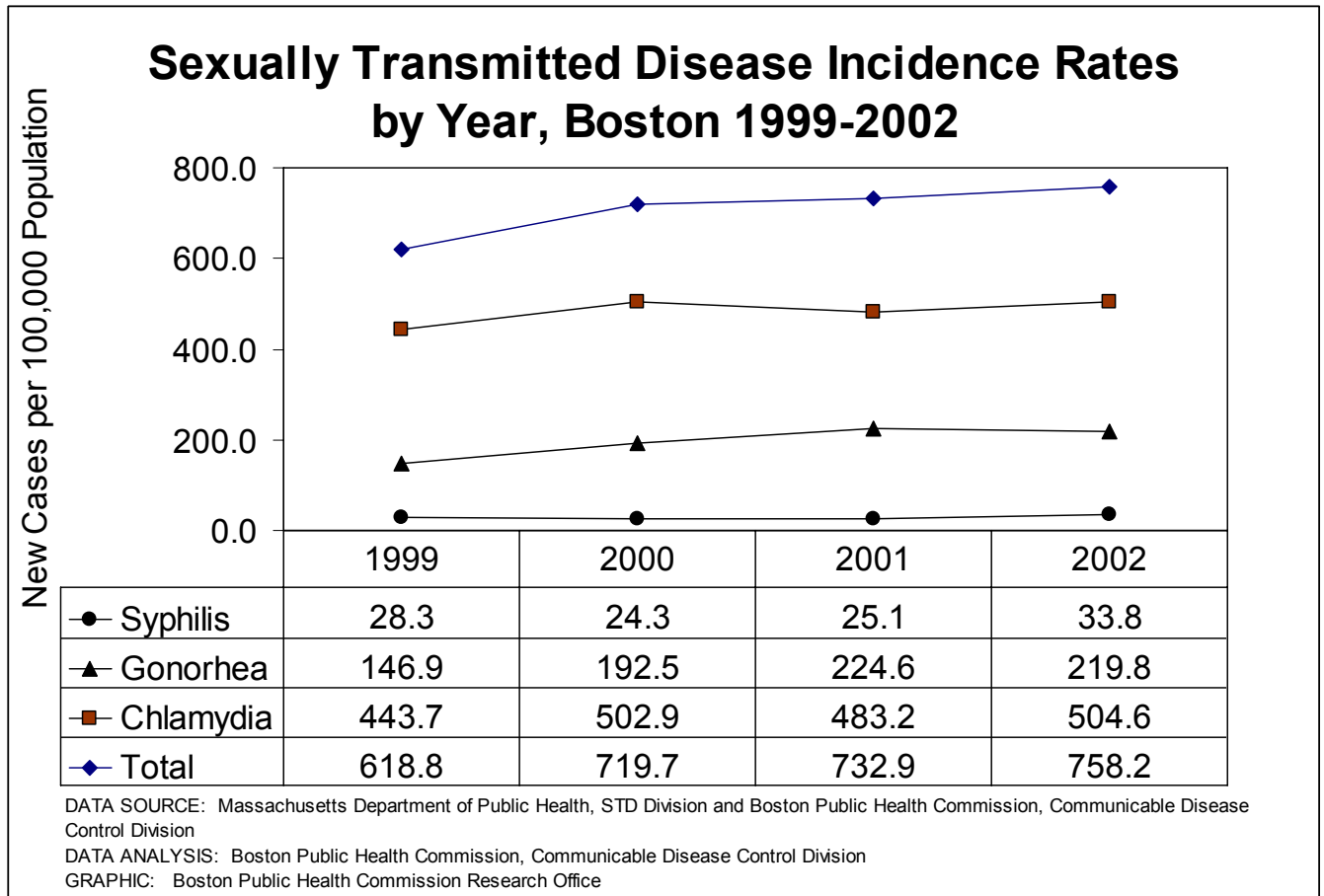
- The 40-49 year-old age group had the city’s highest HIV/AIDS incidence rate as of February 2004 (153.8 new cases per 100,000 population). Residents in the 30-39 year-old age group were second, with 137.3 new cases per 100,000 population.
- The lowest HIV/AIDS incidence rates were for residents less than 20 years of age (9.2 new cases per 100,000) and those ages 50 and over (26.5 per 100,000).



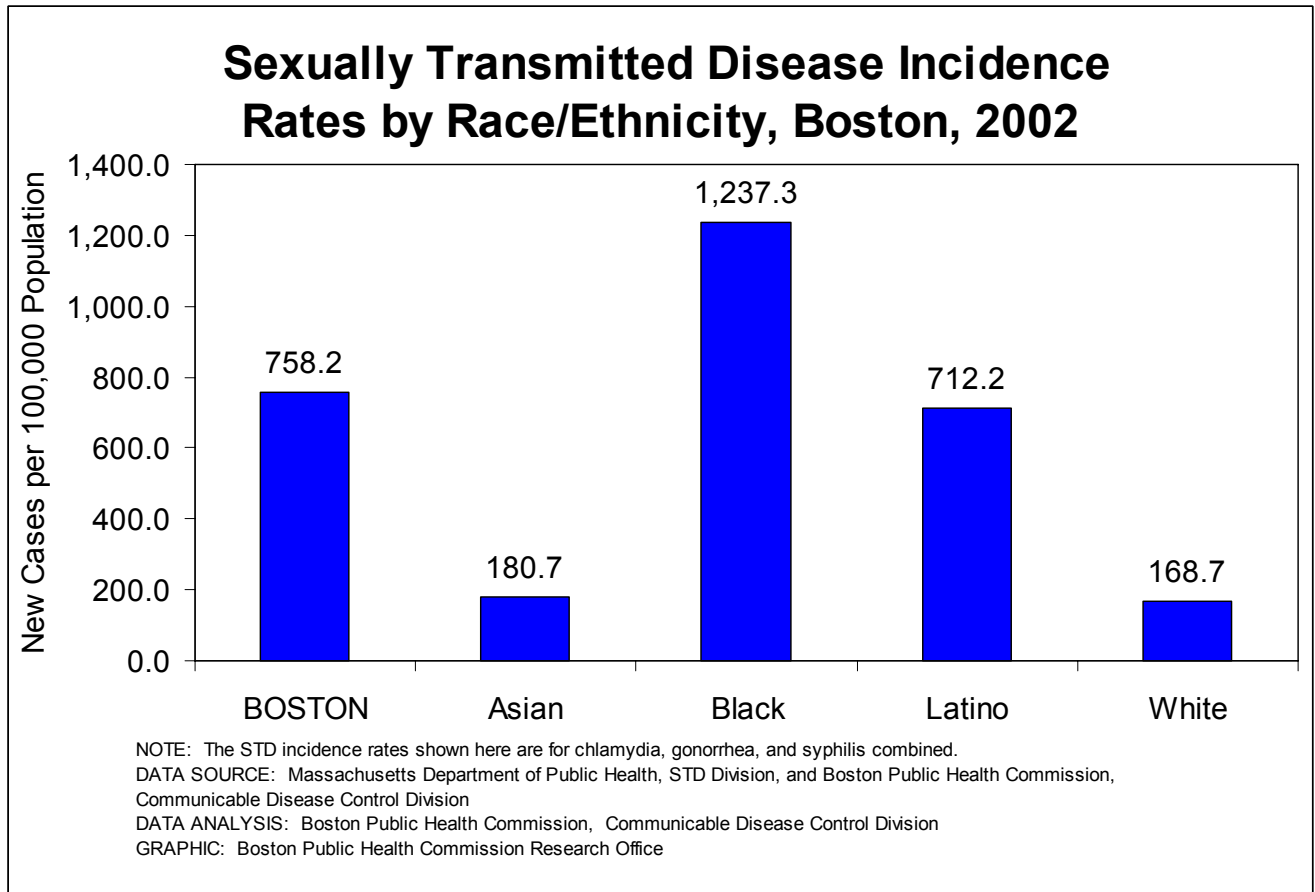
- As of February 2004, sex between men was the mode of exposure for 38.7% of all reported Boston HIV/AIDS cases, injection drug use, 15.9%, heterosexual sex, 14.8%, and the combination of sex between men and injection drug use, 3.6% of all cases. Mode of exposure was undetermined or by routes other than those shown for about 27% of Boston's HIV/AIDS cases.

Sexually Transmitted Diseases

In the United States chlamydia, gonorrhea, and syphilis are the most common sexually transmitted diseases (STDs), with 1.2 million cases reported nationally in 2002 by the Centers for Disease Control, Division of Sexually Transmitted Diseases. Of these, about a third are among adolescents. Reported STD rates are generally higher among Blacks and Latinos than Whites.



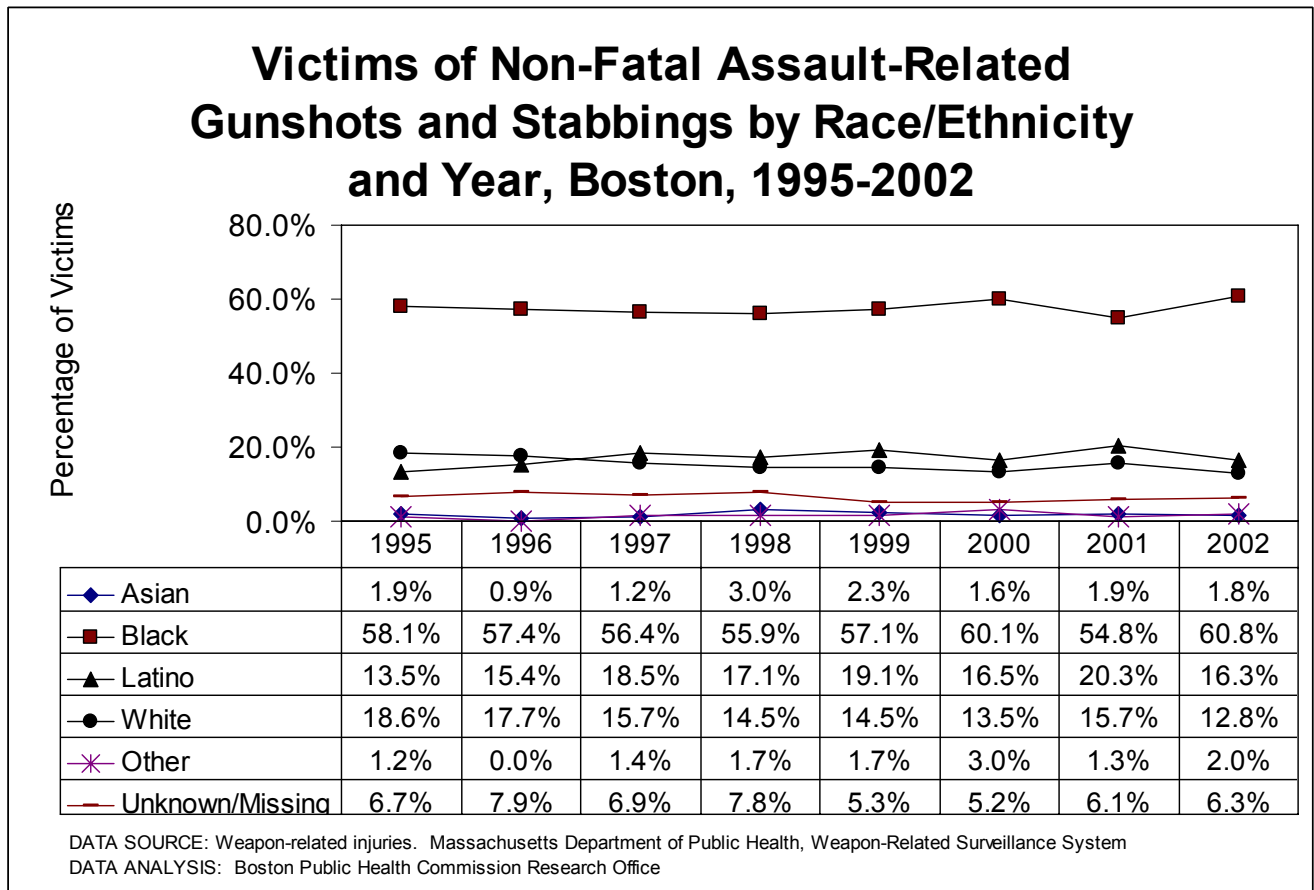
- The overall Boston incidence rate for sexually transmitted diseases (STDs), including syphilis, gonorrhea, and chlamydia was 758.2 new cases per 100,000 population in 2002, an increase of 22.5 % compared with 1999.
- From 1998 to 2002, the gonorrhea incidence rate increased 49.6%, from 146.9 new cases per 100,000 in 1998 to 219.8 new cases per 100,000 in 2002, while the chlamydia incidence rate increased 13.7%, from 443.7 new cases per 100,000 in 1998 to 504.6 new cases per 100,000 in 2002.
- Syphilis and chlamydia incidence rates rose between 2001 and 2002. The increase was 34.7% for syphilis and 4.4% for chlamydia. The incidence rate for gonorrhea fell 2.1%.



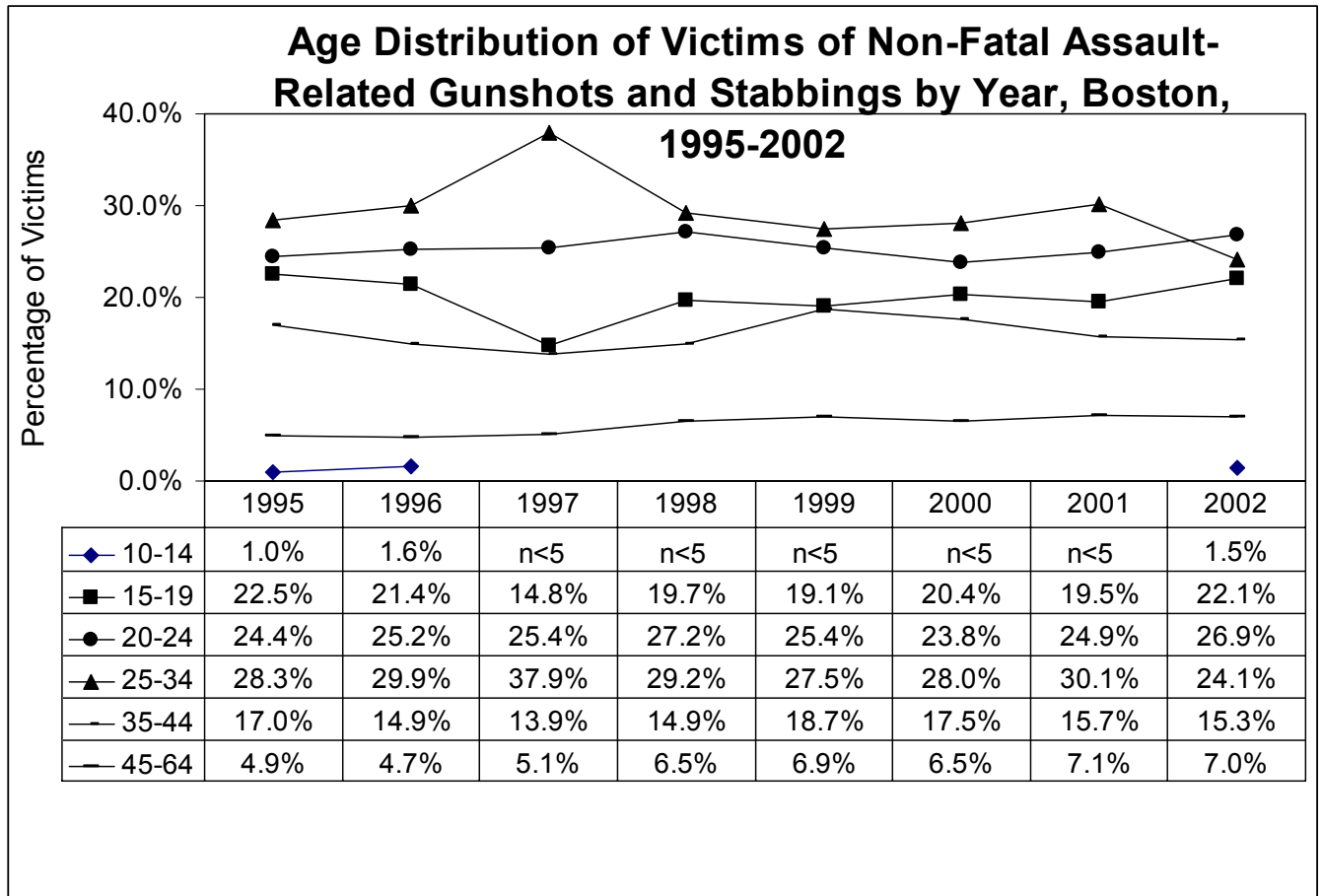
- In 2002, Blacks and Latinos had the highest sexually transmitted disease (STD) incidence rates of all Boston residents.
- The rate for Blacks (1,237.3 new cases per 100,000 population), was 63.2% greater than the overall Boston while the rate for Latinos (712.2 new cases per 100,000) was 6.1% lower.
- The rate for Blacks was also about seven times higher than the rates for Whites and Asians, while the rate for Latinos was about four times higher than the rates for Whites and Asians.

Violence

Violence takes many forms – armed or unarmed assault, physical abuse within intimate relationships, workplace violence, and sexual assault and rape. Violence-related injuries in this report primarily focus on non-fatal armed assaults. They do not include accidental injuries.

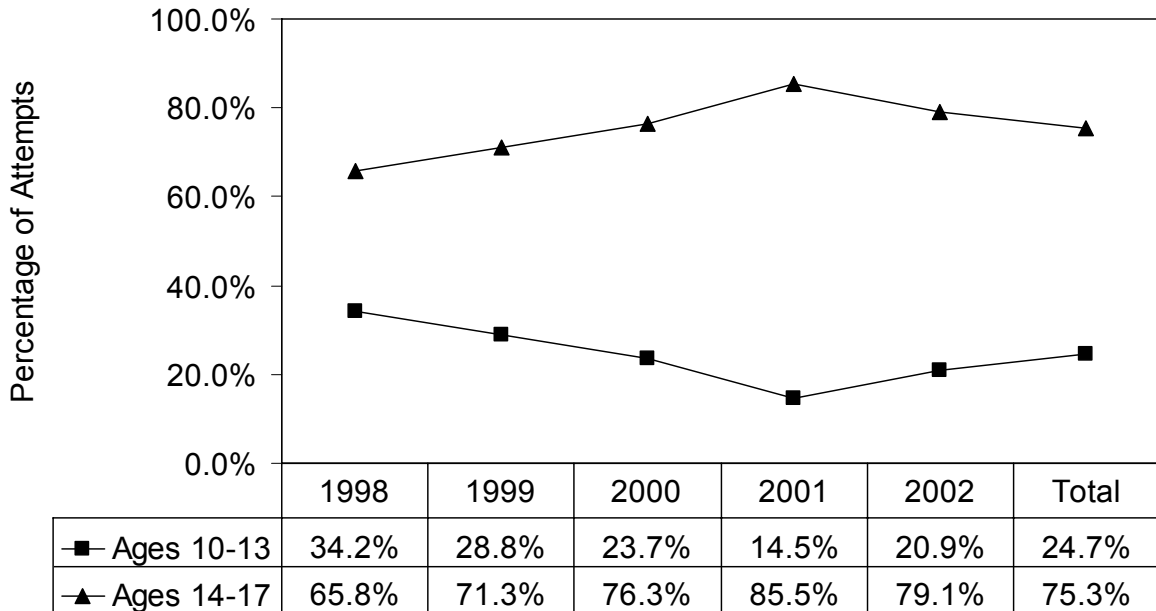


- In 2002, 399 Boston residents were victims of non-fatal assault-related gunshots and stabbings.
- The race/ethnicity distribution of cases of non-fatal assault-related gunshots and stabbings has remained fairly stable during eight years of reporting.
- Blacks have accounted for the highest percent of victims (60.8 percent in 2002) during each of those eight years.



- In 2002, victims of non-fatal assault-related gunshots and stabbings in the 20-24 age group accounted for the highest percentage of injuries (26.9) among all age groups.
- From 1995 through 2001, victims in the 25-34 age group accounted for the highest percentage among all age groups.

Age Distribution of Suicide Attempts Among Youth 10-17 Years Old by Year, Boston, 1998-2002



NOTE: Data are unavailable for adults age 18 and over.

DATA SOURCE: Boston Emergency Department Surveillance System, Boston Public Health Commission.

DATA ANALYSIS: Boston Public Health Commission Research Office

- During 2002, 67 suicide attempts occurred among Boston youth under the age of 18.
- In 2002, Boston youths ages 14-17 accounted for three times as many suicide attempts as did youths ages 10-13.

Substance Abuse

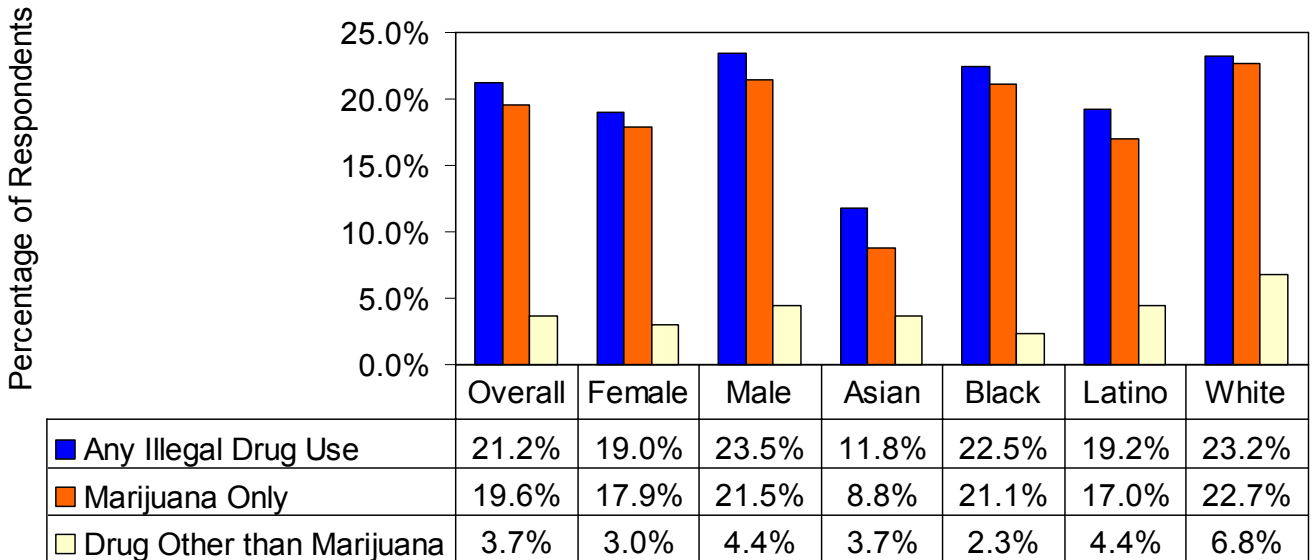
According to the CDC, in 2001, 2.5 million hospital emergency department visits (2.3%) in the US were related to alcohol use. During 2001, there were 19,817 alcohol-induced deaths in the US (6.9 deaths per 100,000 population) and 21,683 drug-induced deaths (7.6 deaths per 100,000 population) according to the National Center for Health Statistics.

Any Lifetime Use of Illegal Drugs by High School Students, Boston, 2003			
Asian		Black	
	Percentage of Respondents		Percentage of Respondents
Any Illegal Drug Use	25.6%	Any Illegal Drug Use	41.1%
Marijuana	19.1%	Marijuana	39.4%
Cocaine	5.2%	Cocaine	3.1%
MDMA (Ecstasy)	11.7%	MDMA (Ecstasy)	3.5%
Heroin	2.8%	Heroin	2.0%
Methamphetamine	3.8%	Methamphetamine	2.7%
Steroids	3.5%	Steroids	1.6%
Others	2.1%	Other	2.1%
Injection	2.0%	Injection	2.2%
Glue Sniff	3.5%	Glue Sniff	4.9%
Latino		White	
	Percentage of Respondents		Percentage of Respondents
Any Illegal Drug Use	36.4%	Any Illegal Drug Use	40.1%
Marijuana	33.5%	Marijuana	40.7%
Cocaine	2.0%	Cocaine	4.2%
MDMA (Ecstasy)	6.8%	MDMA (Ecstasy)	10.4%
Heroin	2.5%	Heroin	0.7%
Methamphetamine	2.6%	Methamphetamine	6.8%
Steroids	3.0%	Steroids	4.1%
Others	1.8%	Others	13.6%
Injection	2.5%	Injection	1.9%
Glue Sniff	3.6%	Glue Sniff	5.0%
Female		Male	
	Percentage of Respondents		Percentage of Respondents
Any Illegal Drug Use	39.1%	Any Illegal Drug Use	38.5%
Marijuana	37.8%	Marijuana	36.0%
Cocaine	1.4%	Cocaine	5.1%
MDMA (Ecstasy)	5.5%	MDMA (Ecstasy)	6.5%
Heroin	0.7%	Heroin	3.2%
Methamphetamine	2.1%	Methamphetamine	4.9%
Steroids	1.8%	Steroids	3.5%
Others	2.9%	Others	5.3%
Injection	0.6%	Injection	4.0%
Glue Sniff	4.0%	Glue Sniff	5.7%

DATA SOURCE: Youth Risk Behavior Survey, Massachusetts Department of Education and Boston Public Schools
 DATA ANALYSIS: Boston Public Health Commission Research Office

- Black and White high school students reported higher percentages of lifetime illegal drug use (41.1% and 40.1%, respectively) compared with students of other races/ethnicities.
- Female and male high school students reported similar percentages of lifetime illegal drug use (39.1% and 38.5%, respectively).

Any Past-Month Use of Drugs by High School Students, Boston, 2003

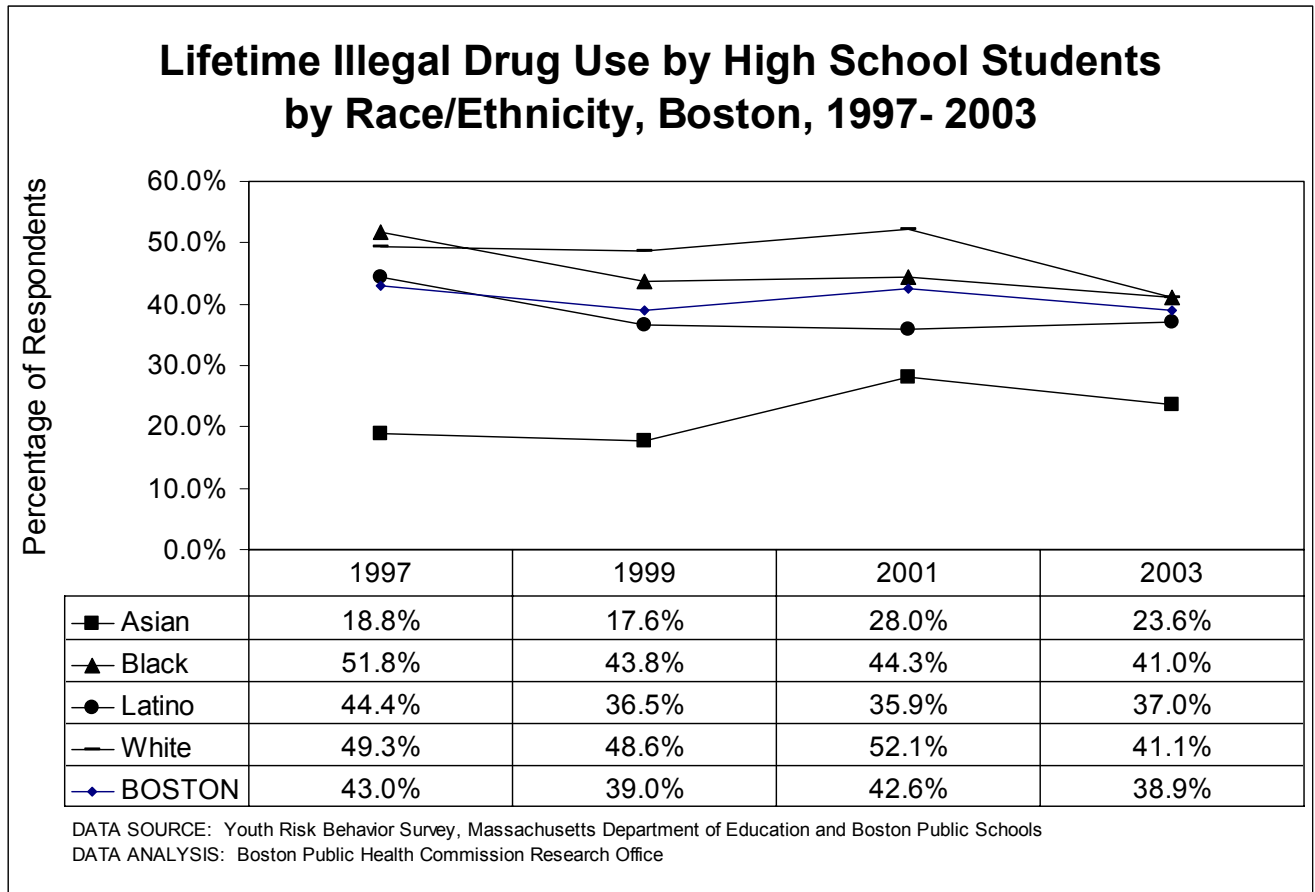


NOTE: "Drug Other than Marijuana" category includes respondents who reported using only some other drug and respondents who reported using both marijuana and some other drug.

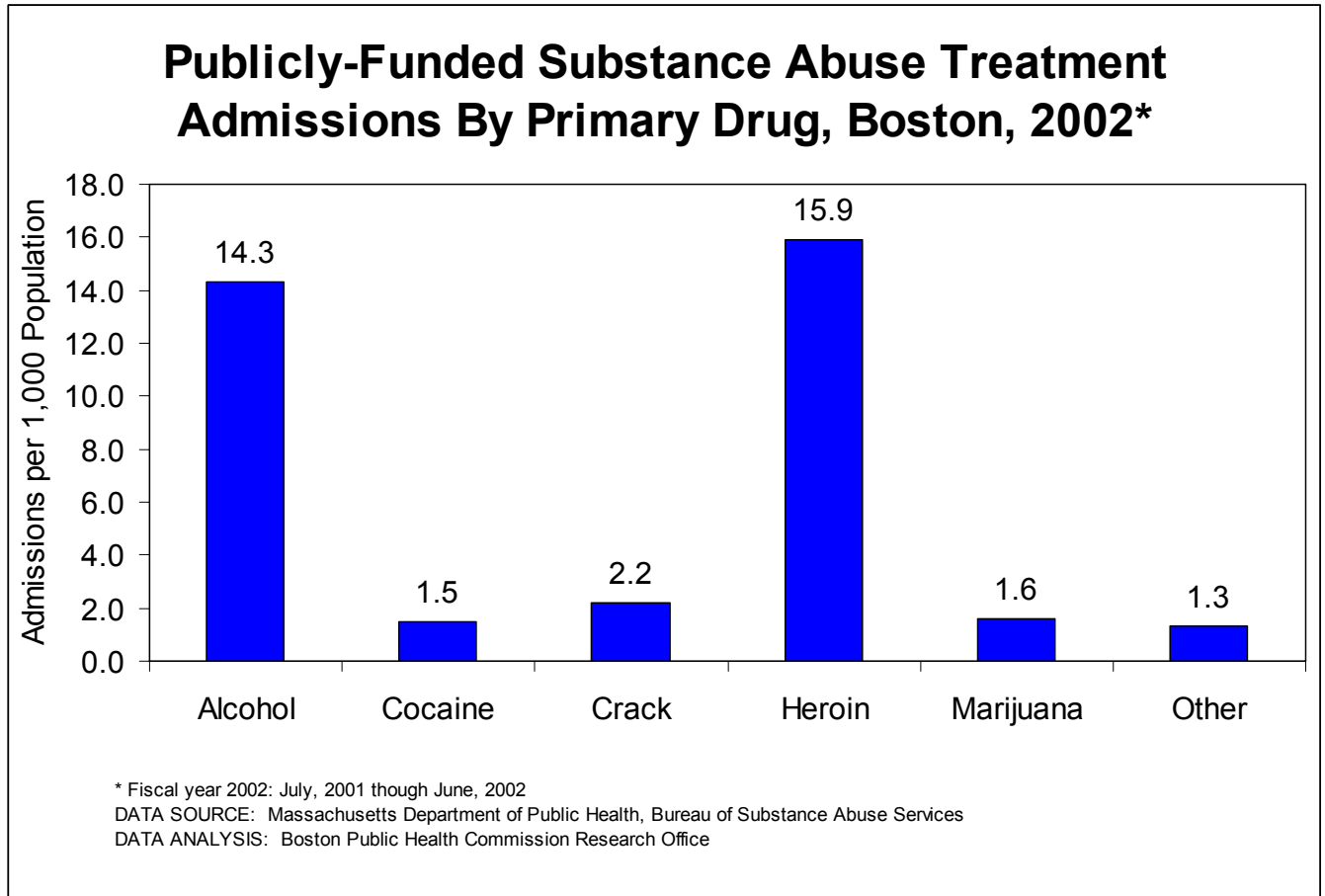
DATA SOURCE: Youth Risk Behavior Survey, Massachusetts Department of Education and Boston Public Schools

DATA ANALYSIS: Boston Public Health Commission Research Office

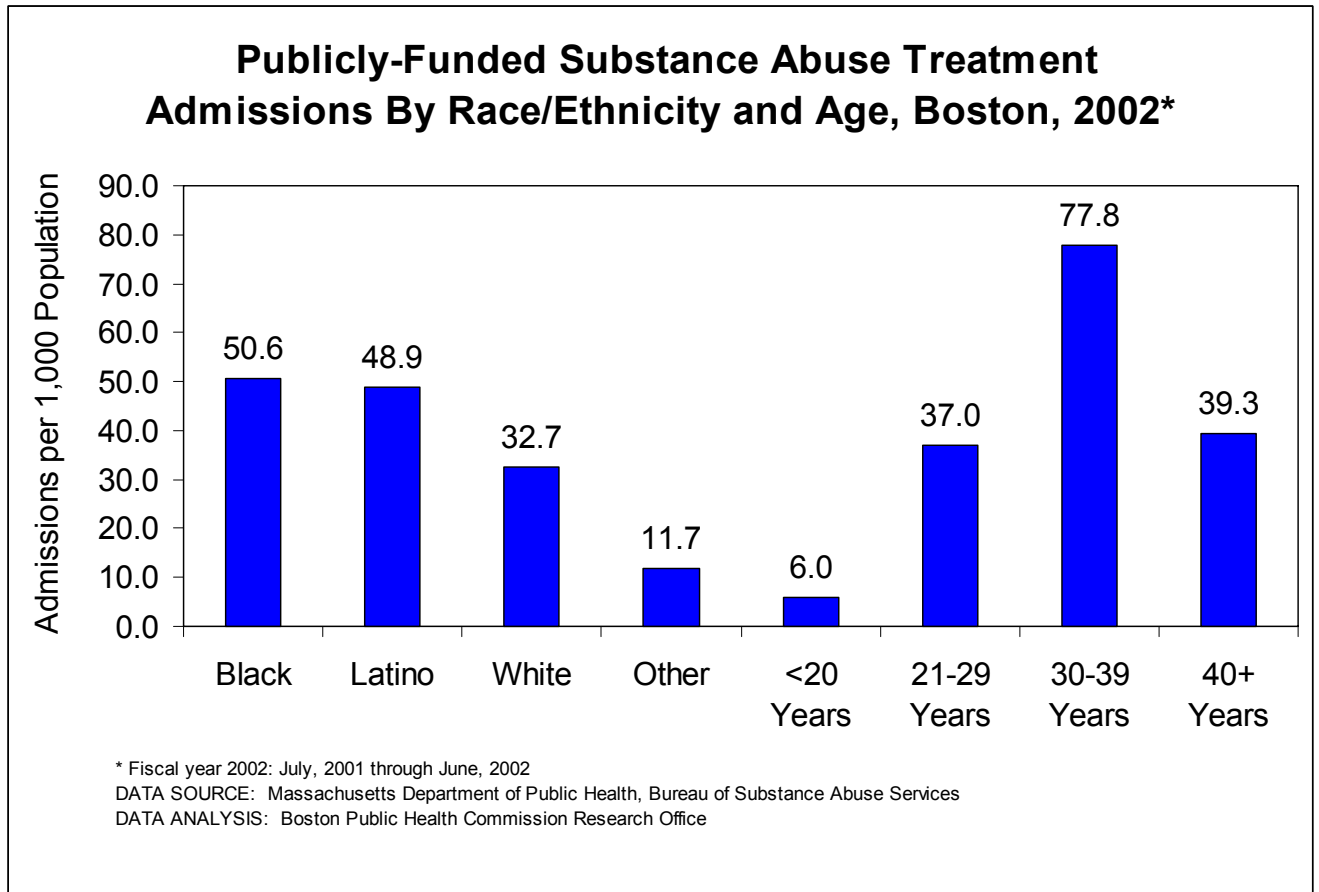
- White high school students had the highest levels of past-month drug use in all three categories (any illegal drug, marijuana, and drugs other than marijuana) in 2003, compared with students belonging to other race/ethnicity groups.
- Male high school students reported more frequently past-month drug use in all three categories than did females 2003.



- White and Black high school students reported more lifetime illegal drug use than did members of other race/ethnicity groups for the period 1997 through 2003.
- Asian high school students consistently reported the lowest levels of lifetime illegal drug use from 1997 through 2003.

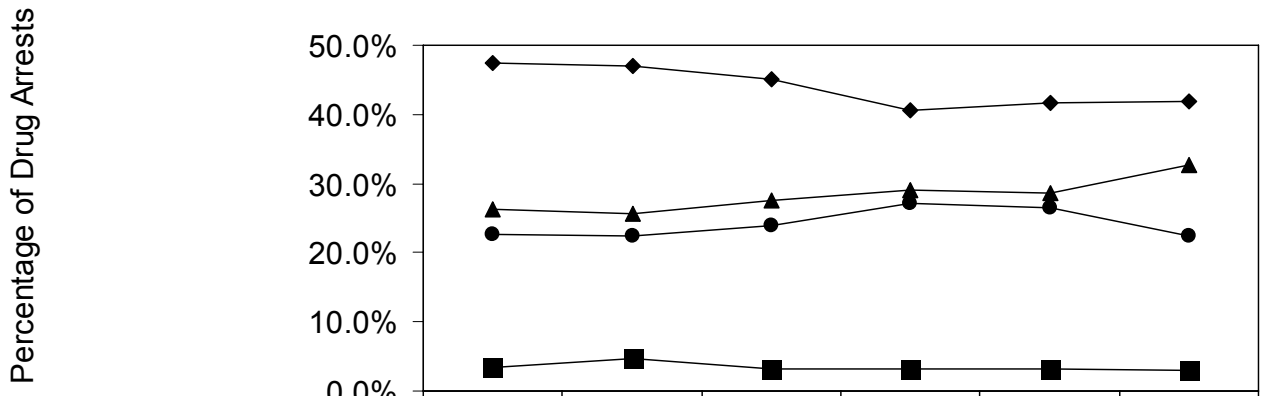


- Boston's heroin treatment admissions rate was more than seven times the rate for any other illicit drug.
- Admissions for the treatment of alcohol abuse, however, were also comparatively high, at 14.3 per 1,000 population.



- Among all races, Blacks had the highest rate of admissions (50.6 per 1,000) to publicly-funded treatment in fiscal year 2002.
- Among all age groups, those ages 30-39 had the highest rate of admissions (77.8) to publicly-funded treatment.

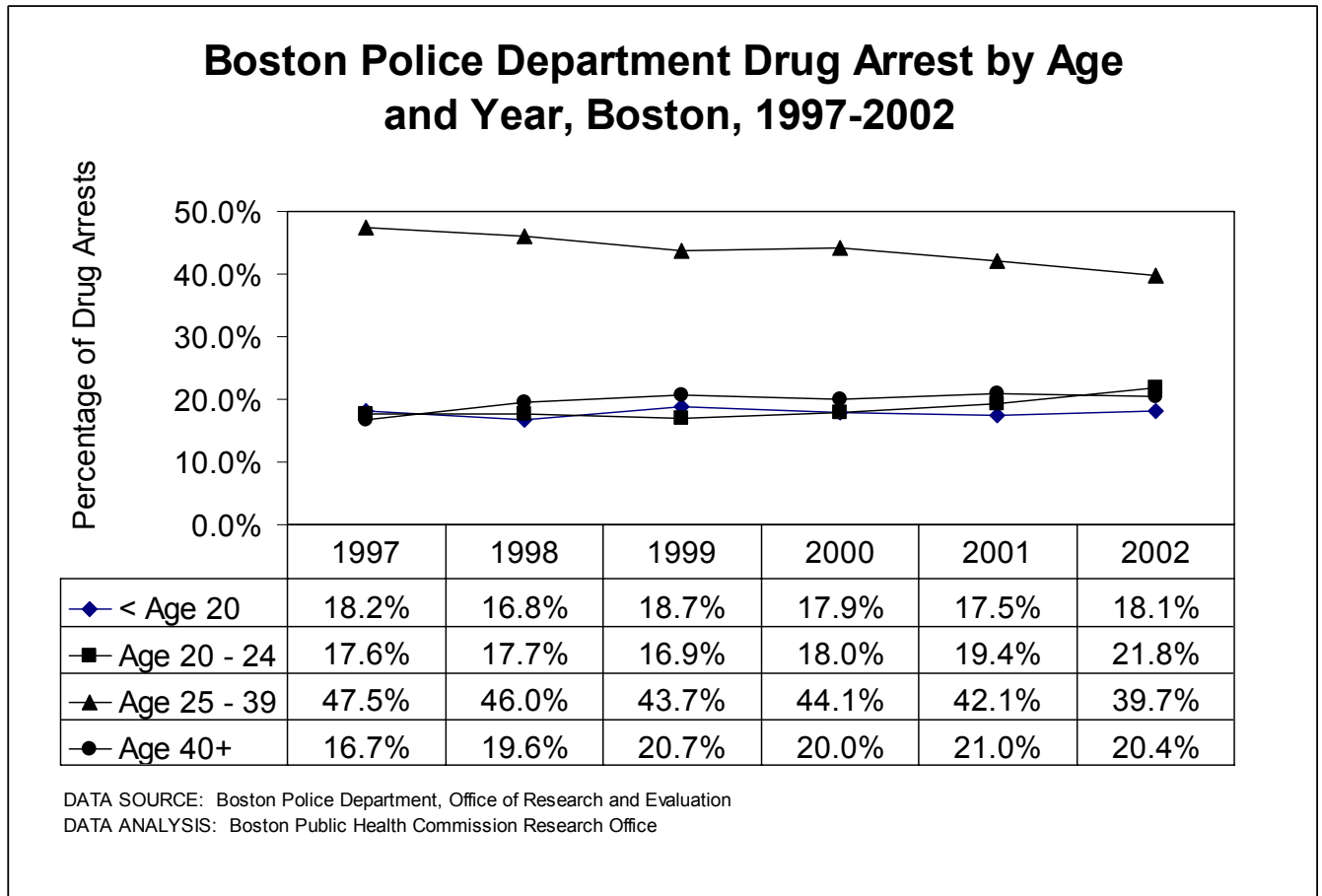
Boston Police Department Drug Arrests by Drug Class and Year, Boston, 1997-2002



	1997	1998	1999	2000	2001	2002
● Class A: mainly Heroin	22.7%	22.5%	24.0%	27.1%	26.4%	22.5%
◆ Class B: mainly Cocaine/Crack	47.5%	47.1%	45.1%	40.6%	41.7%	41.9%
▲ Class D: mainly Marijuana	26.3%	25.6%	27.7%	29.0%	28.7%	32.7%
■ Other	3.5%	4.8%	3.2%	3.3%	3.2%	3.0%

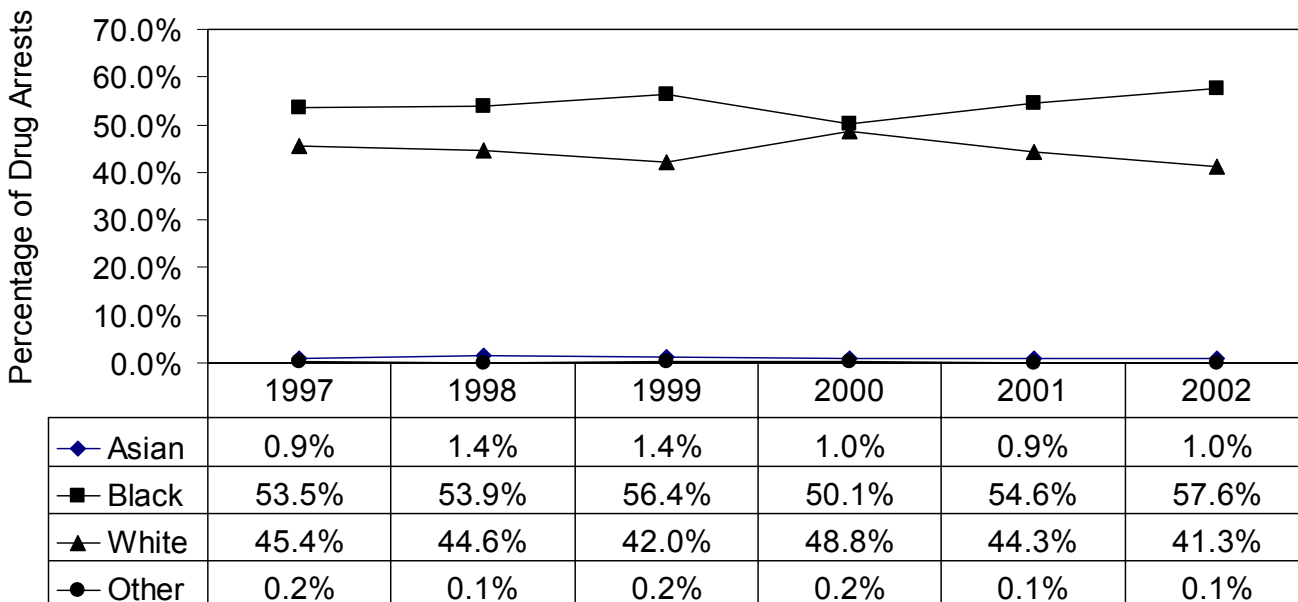
DATA SOURCE: Boston Police Department, Office of Research and Evaluation
 DATA ANALYSIS: Boston Public Health Commission Research Office

- There were 4,209 drug arrests in Boston in 2002.
- Class B drug arrests (mainly cocaine/crack) accounted for the highest percentage of drug arrests every year from 1997 through 2002.
- Class D drug arrests (mainly marijuana) increased 24.3% from 1997 to 2002.



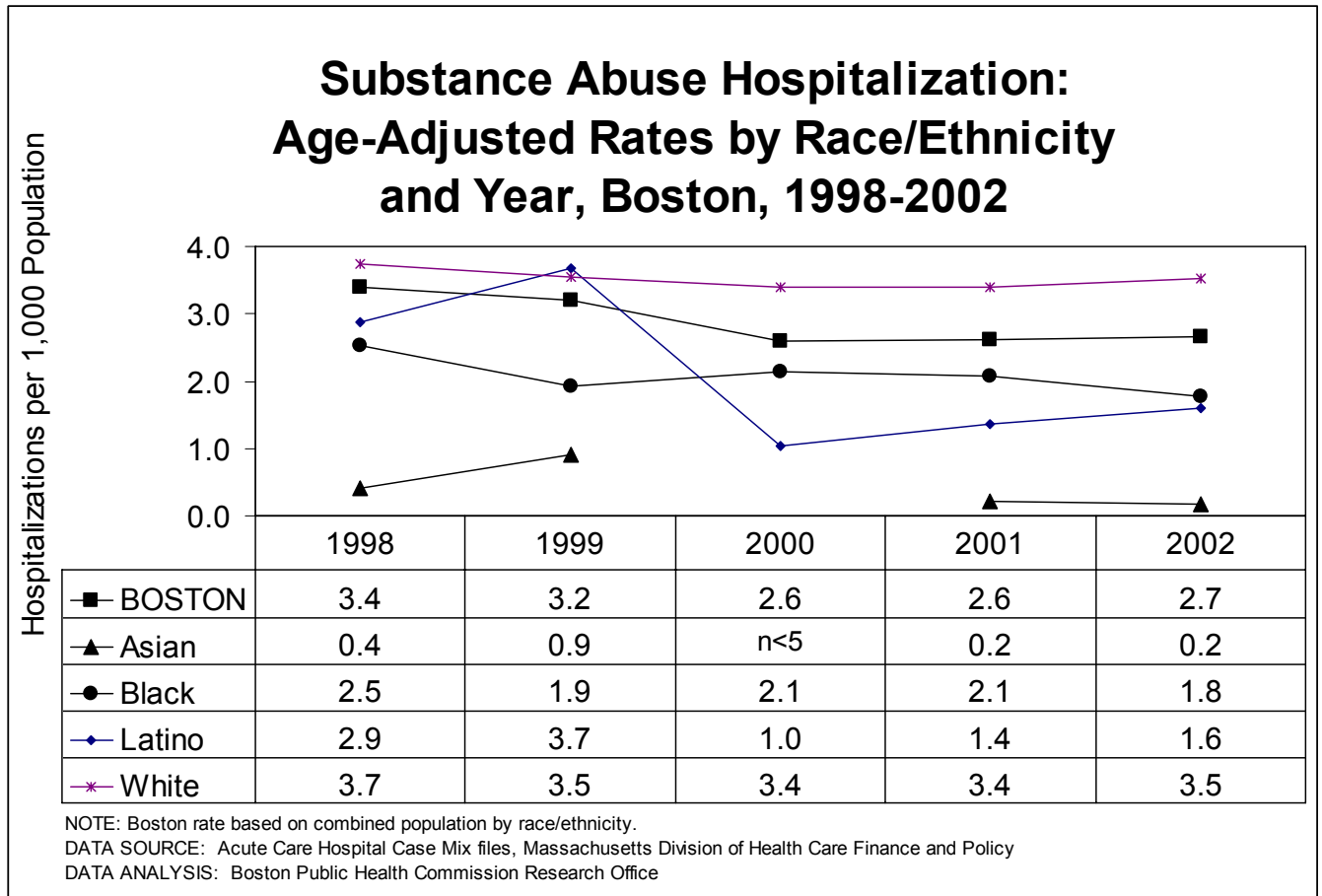
- Individuals between ages 25 and 39 account for the largest proportion of Boston’s drug arrestees (39.7% in 2002). However, this proportion fell 16.4% from 1997 to 2002.
- At the same time, the proportion of Boston drug arrests accounted for by individuals ages 20-24 rose 23.9% during the same period.

Boston Police Department Drug Arrests by Race/Ethnicity and Year, Boston, 1997-2002

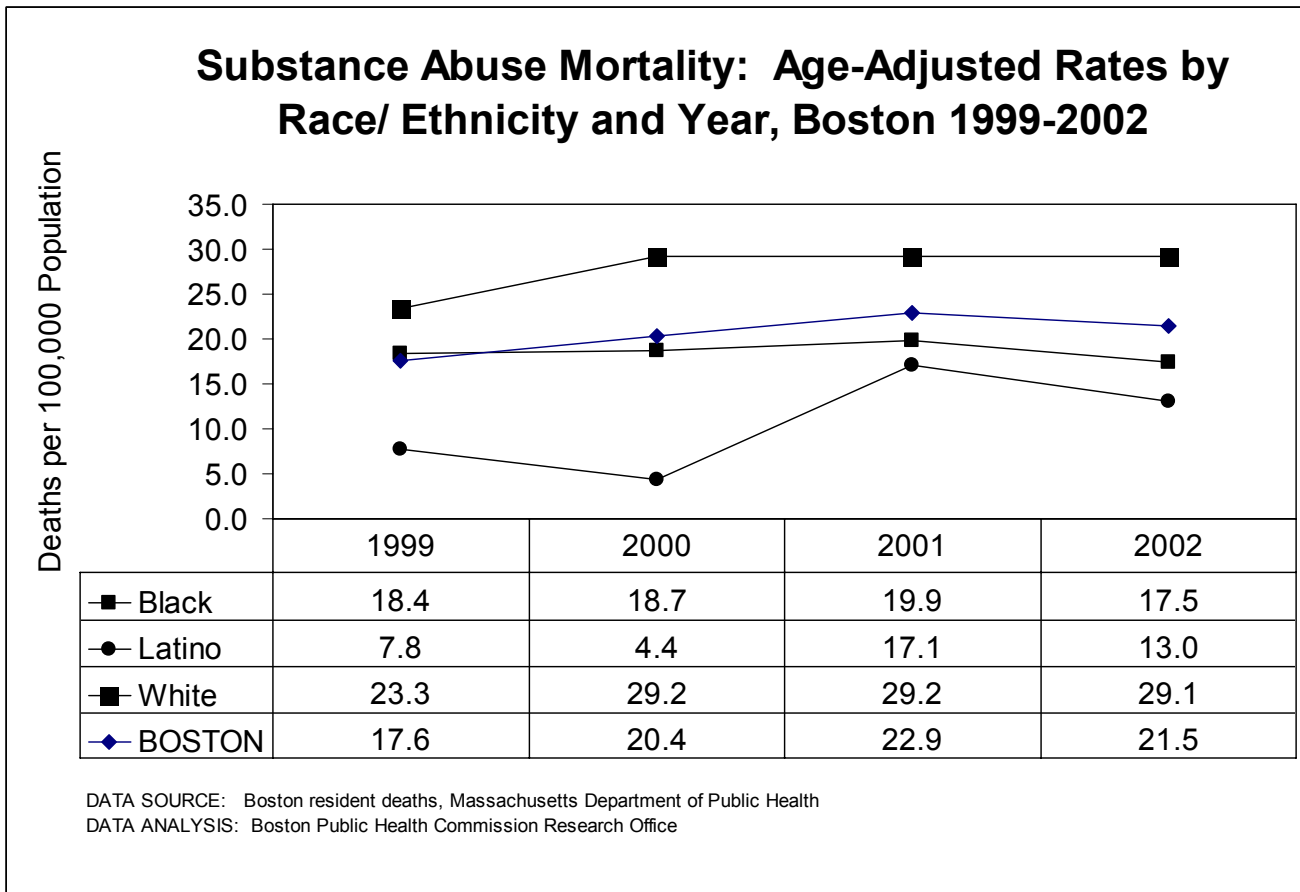


DATA SOURCE: Boston Police Department, Office of Research and Evaluation
 DATA ANALYSIS: Boston Public Health Commission Research Office

- Drug arrests of White residents as a percentage of all Boston drug arrests fell 9.0% from 1997 to 2002, while those of Black Boston residents rose 7.7%.

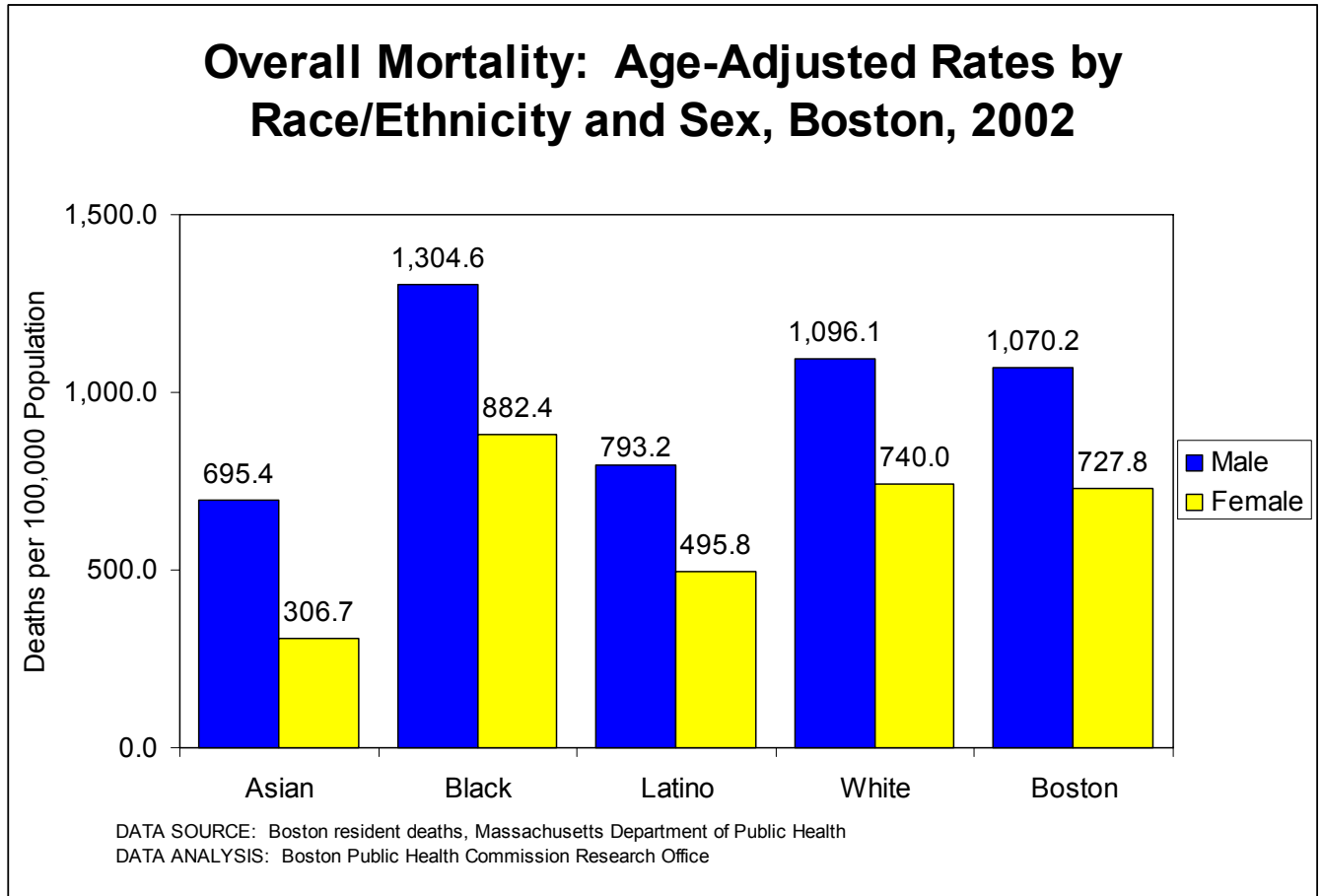


- Whites had Boston’s highest substance abuse hospitalization age-adjusted rate (3.5) in 2002, as they had for every year except 1999.
- The 2002 rate of 1.8 per 1,000 population was the lowest rate for Black Boston residents in five years of reporting.

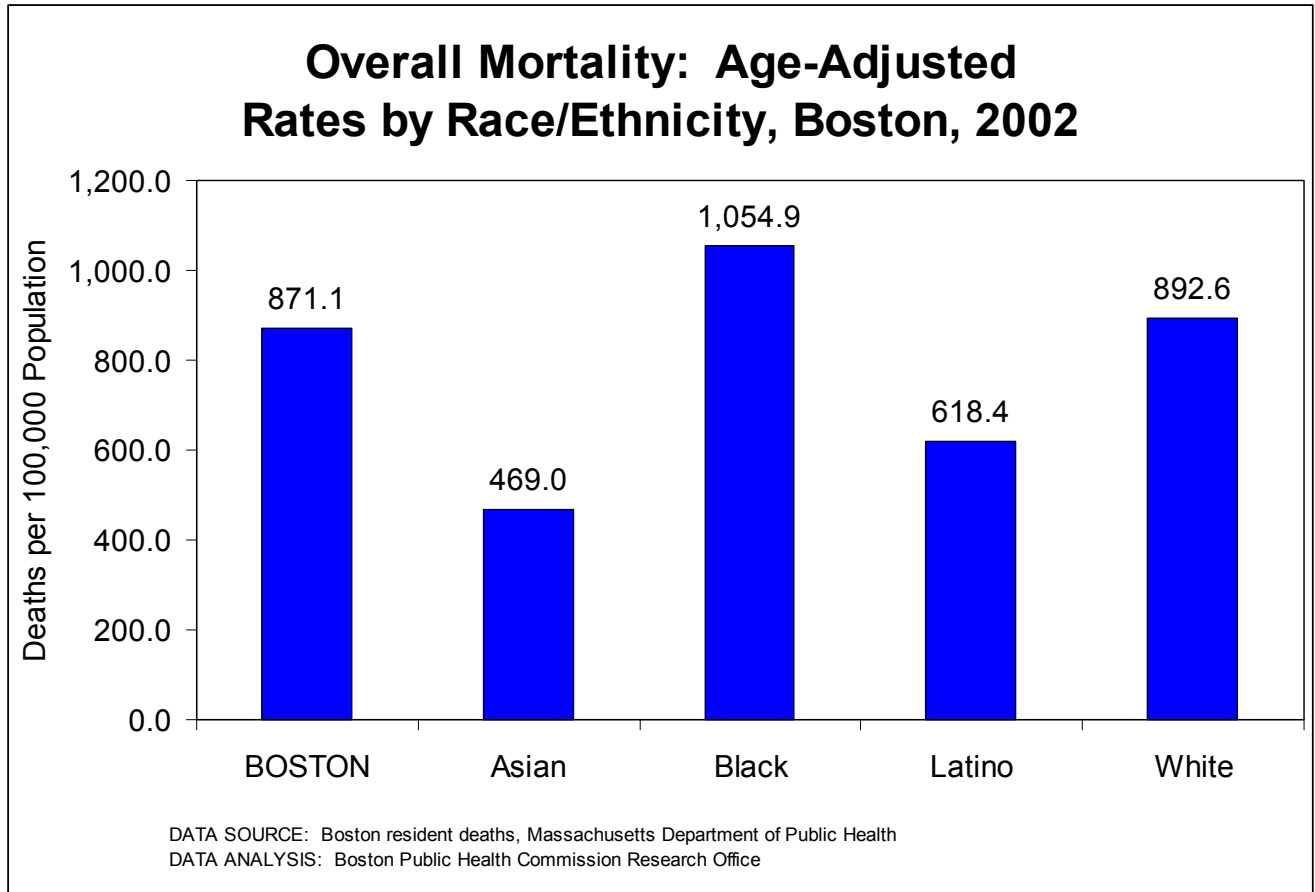


- Whites had the highest substance abuse mortality age-adjusted rate for each year of the 4-year period 1999-2002. In 2002, the rate for Whites (29.1 deaths per 100,000 population) was 35.3% higher than the overall Boston rate of 21.5 per 100,000.
- Although the substance abuse mortality rate for Whites remained stable from 2000 to 2002, the rate for 2002 represents a 24.9% increase compared with the rate in 1999.

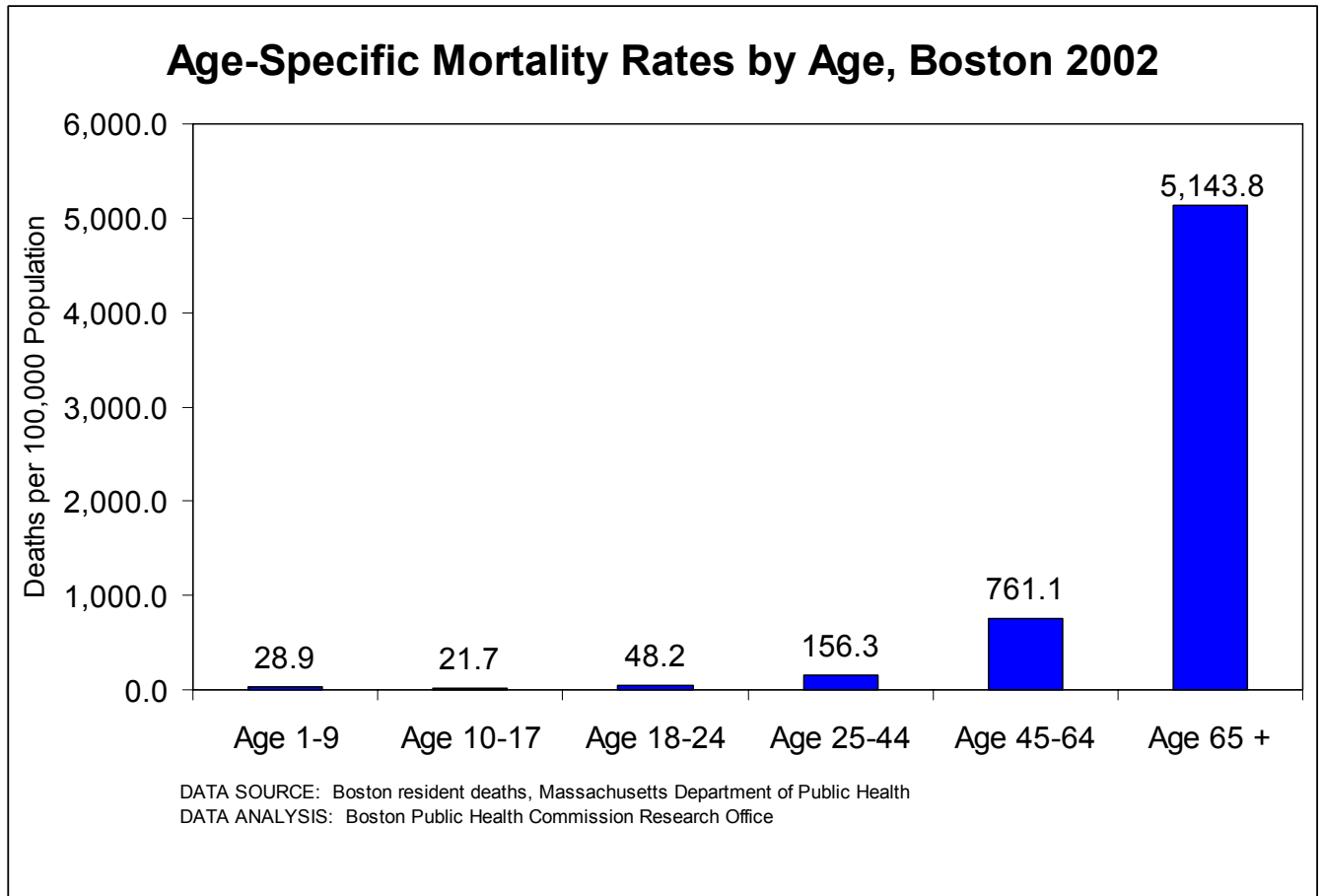
Overall Mortality



- For all race/ethnicity groups, overall mortality age-adjusted rates were significantly higher for males than for females. However, the rate for Black males (1,304.6 deaths per 100,000 population) was significantly higher than the rates for other males.
- The overall mortality rate for Black females (882.4 deaths per 100,000) was also significantly higher than the rates for other females.



- In 2002, there were 4,413 deaths among Boston residents. The overall mortality age-adjusted rate of 871.1 deaths per 100,000 population was slightly lower than the rate in 2001 (898.5 deaths per 100,000).
- The rate for Black residents (1,054.9 deaths per 100,000 population) was significantly higher than the rates for all other race/ethnicity groups.
- White residents had the second highest overall mortality age-adjusted rate (892.6 deaths per 100,000), and it was significantly higher than the rates for Latinos (618.4 deaths per 100,000) and Asians (469.0 deaths per 100,000).



- In 2002, age-specific mortality rates for Boston were lowest for young residents ages 1-9 (28.9 deaths per 100,000 population) and ages 10-17 (21.7 deaths per 100,000).
- Age-specific mortality rates increase with age. The rate for Boston residents ages 45-64 (761.1 deaths per 100,000) was nearly five times the rate for residents ages 25-44, and 35 times the rate for residents ages 10-17. As expected, the highest age-specific mortality rate was for those Boston residents ages 65 and over (5,143.8 deaths per 100,000).

Leading Causes of Death: Age-Adjusted Rates by Sex, Boston, 2002			
Cause of Death	BOSTON	Boston Males	Boston Females
Cancer (All)	218.4	269.3	188.3
Heart Disease	191.7	244.6	153.2
Cerebrovascular	44.6	51.5	39.7
Diabetes	28.5	31.9	26.6
Substance Abuse	21.5	31.6	9.6
All Injuries Combined	47.6	70.9	27.0
Homicide	10.4	17.1	4.0
Suicide	3.6	6.4	---
HIV/AIDS	14.4	21.3	8.1
COPD	31.6	41.4	24.8
Pneumonia/Influenza	30.8	32.5	29.3
TOTAL (All Deaths)	871.1	1070.2	727.8
NOTE: Rates are per 100,000 population. DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health DATA ANALYSIS: Boston Public Health Commission Research Office			

- The eleven leading causes of death among Boston residents in 2002 accounted for 77.1% of deaths. Cancer, with an age-adjusted mortality rate of 218.4 deaths per 100,000 population, was the leading cause of death, and heart disease (191.7 deaths per 100,000), the second leading cause.
- The leading causes of death for Boston males and females were the same but varied in ranking. Nevertheless, for males and females, cancer was the leading cause of death and heart disease the second leading cause.
- For each of the leading causes, age-adjusted mortality rates were higher for males than for females. For example, the age-adjusted mortality rate for cancer for males (269.3 deaths per 100,000 population) was 43% higher than the rate for females (188.3 deaths per 100,000).
- Although HIV/AIDS was the 11th leading cause for both males and females, the rate for males (21.3 deaths per 100,000) was more than double the rate for females (8.1 deaths per 100,000).

The Health of Boston 2004.....

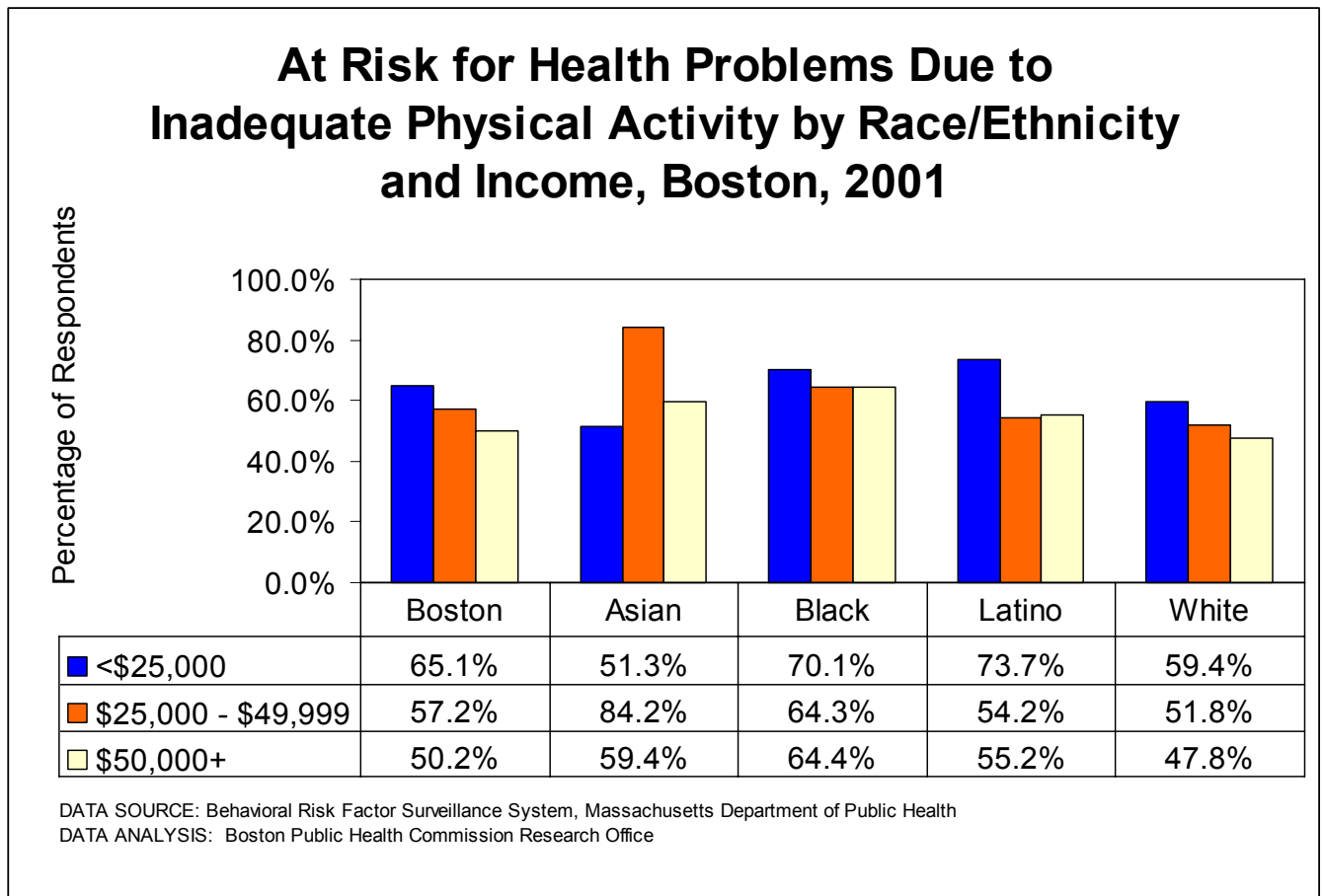
Leading Causes of Death: Age-Specific Rates, Boston 2001-2002			
Ages 1 - 17		Ages 18 - 24	
Cause of Death	Deaths per 100,000 Population	Cause of Death	Deaths per 100,000 Population
Homicide	5.0	Homicide	22.5
"All Other Causes"	15.1	"All Other Causes"	6.3
Accidents	4.6	Substance Abuse	5.2
		Motor Vehicular	4.7
		All Cancer	3.1
TOTAL (all deaths)	24.6	TOTAL (all deaths)	44.0
Ages 25 - 44		Ages 45 - 64	
Cause of Death	Deaths per 100,000 Population	Cause of Death	Deaths per 100,000 Population
Substance Abuse	28.6	Cancer (All)	249.6
Undetermined Injuries	23.2	Heart Disease	140.6
Cancer (All)	21.8	All Injuries Combined	53.1
Heart Disease	16.8	Substance Abuse	47.3
HIV/AIDS	14.9	HIV/AIDS	31.6
Homicide	13.5	Diabetes	27.7
Suicide	7.3	Stroke	26.8
Motor Vehicular	6.4	Chronic Liver Disease	21.5
Other Accidents	5.0	COPD**	20.6
Chronic Liver	4.0	Septicemia	20.6
TOTAL (all deaths)	164.3	TOTAL (all deaths)	750.6
Ages 65 and over			
Cause of Death	Deaths per 100,000 Population		
Heart Disease	1,378.5		
Cancer (All)	1,205.7		
Stroke	335.0		
Pneumonia/Influenza	244.6		
COPD	230.7		
Nephritis/Nephrosis	149.2		
Septicemia	146.7		
Diabetes	145.1		
Alzheimer's Disease	144.3		
All Injuries Combined	106.8		
TOTAL (all deaths)	5,270.2		

* Deaths per 100,000 population ** Chronic Obstructive Pulmonary Disease
 DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
 DATA ANALYSIS: Boston Public Health Commission Research Office

- The nature of the leading causes of death changes over the lifespan. During 2001-2002, death among younger Boston residents was commonly due to homicides, injuries, accidents, or substance abuse, while among residents ages 45 and older, chronic disease (such as cancer and heart disease) were predominant.
- Cancer was the leading cause of death for residents ages 45-64 (249.6 deaths per 100,000 population) and heart disease (140.6 deaths per 100,000) the second leading cause. For residents ages 65 and over, heart disease was the leading cause of death (1,378.5 deaths per 100,000) and cancer the second leading cause (1,205.7 deaths per 100,000).

Heart Disease

Heart disease – also known as cardiovascular disease – is a group of disorders that affect the heart and blood vessels, and is a leading cause of death. Two major independent risk factors for coronary heart disease are hypertension (high blood pressure) and high cholesterol. (1) There are a variety of other risk factors as well, including physical inactivity. (1,2)

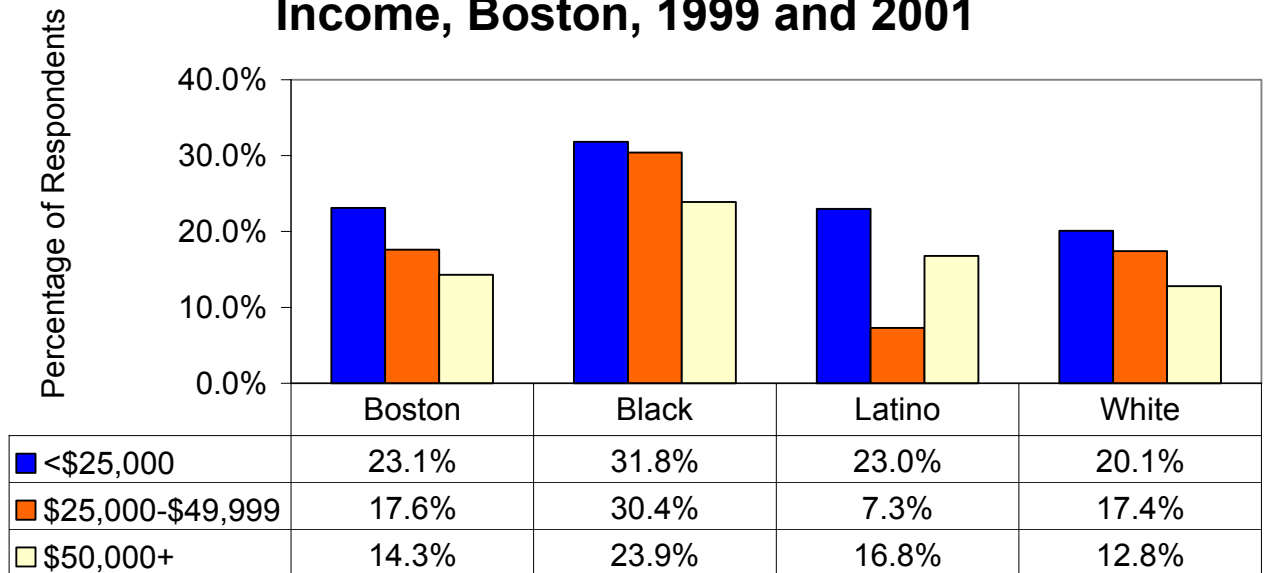


- For Boston overall and for all race/ethnicity groups except Asians, people with household incomes of less than \$25,000 more often reported inadequate physical activity than those with higher incomes.
- Among Asians, people with household incomes of at least \$25,000 but less than \$50,000 had the highest prevalence of inadequate physical activity, and those with household incomes of less than \$25,000 had the lowest prevalence.

References:

1. Centers for Disease Control and Prevention, Preventing Heart Disease and Stroke: Addressing the Nation's Leading Killers, 2003.
2. American heart Association. Heart Disease and Stroke Statistics-2003 Update.

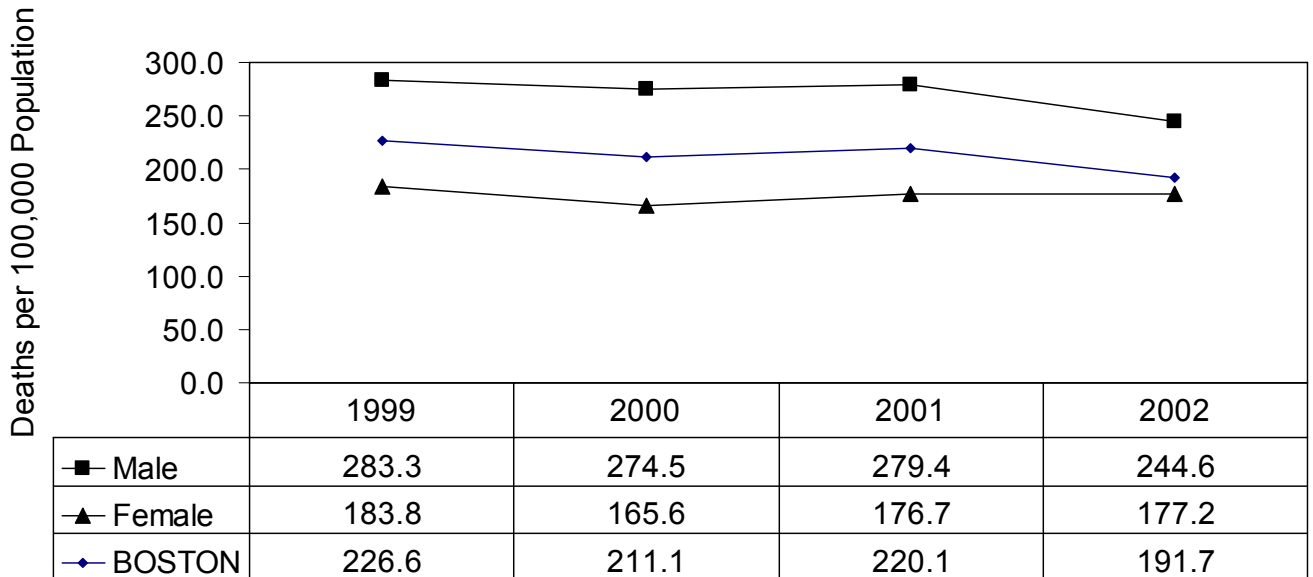
Health Provider-Diagnosed High Blood Pressure Among Adults by Race/Ethnicity and Income, Boston, 1999 and 2001



NOTE: The sample size for Asians was too small to permit reporting
 DATA SOURCE: Behavioral Risk Factor Surveillance System, Massachusetts Department of Public Health
 DATA ANALYSIS: Boston Public Health Commission Research Office

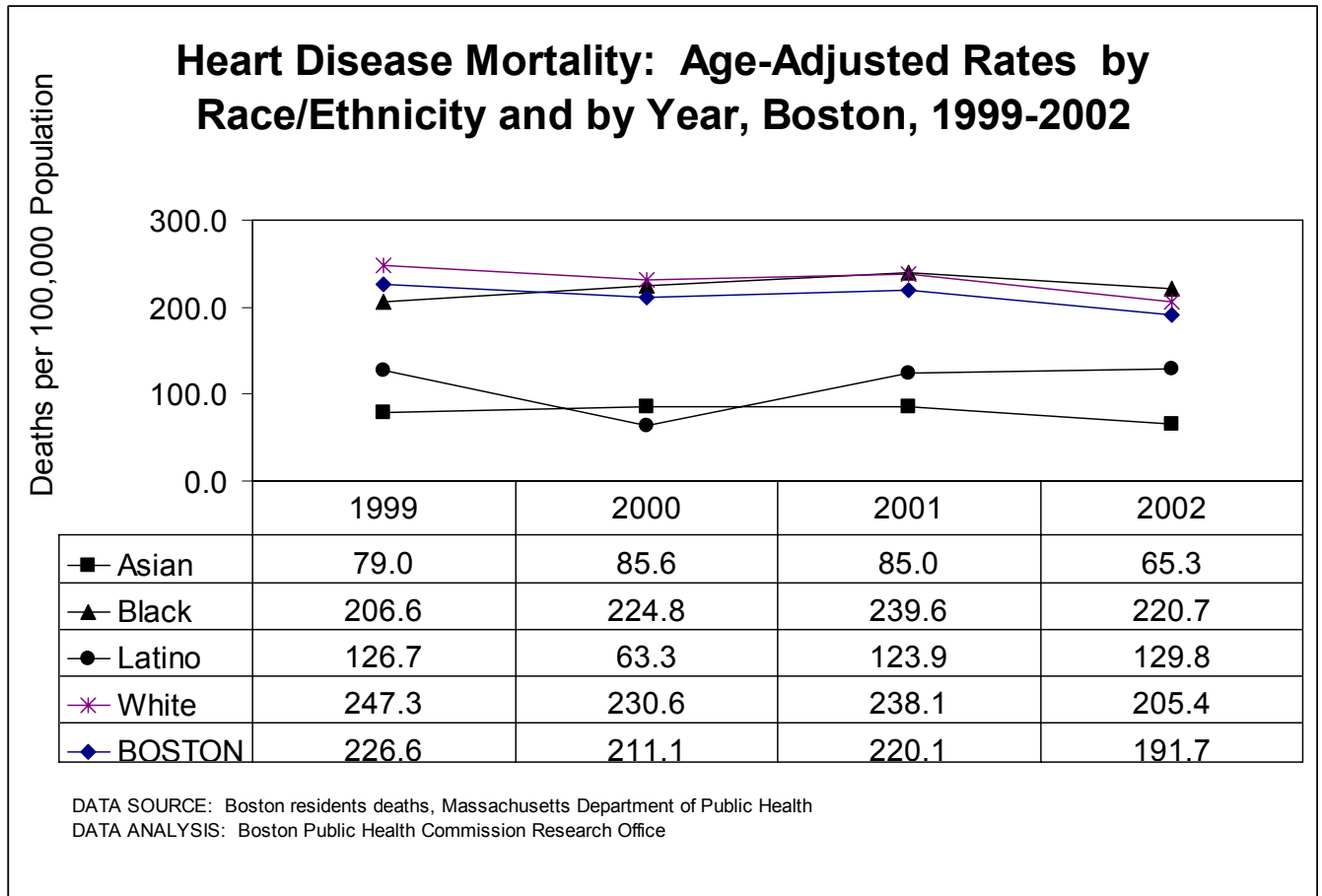
- For Boston overall and for all race/ethnicity groups, people with household incomes under \$25,000 were diagnosed with high blood pressure more often than were people with higher household incomes.
- Among Black Boston residents, the percentages of people diagnosed with high blood pressure were similar for those with household incomes under \$25,000 and those with household incomes of at least \$25,000 but less than \$50,000. Blacks with household incomes of at least \$50,000 were less often diagnosed with high blood pressure compared with people with lower household incomes.
- Among Latinos, the percentages of people diagnosed with high blood pressure varied widely between low and middle income groups. Latino residents with household incomes of at least \$25,000 but less than \$50,000 were less often diagnosed with high blood pressure than were lower and higher income people.
- Across all income levels, Black Boston residents were more often diagnosed with high blood pressure than other Boston residents.

Heart Disease Mortality: Age-Adjusted Rates by Sex and Year, Boston, 1999-2002



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

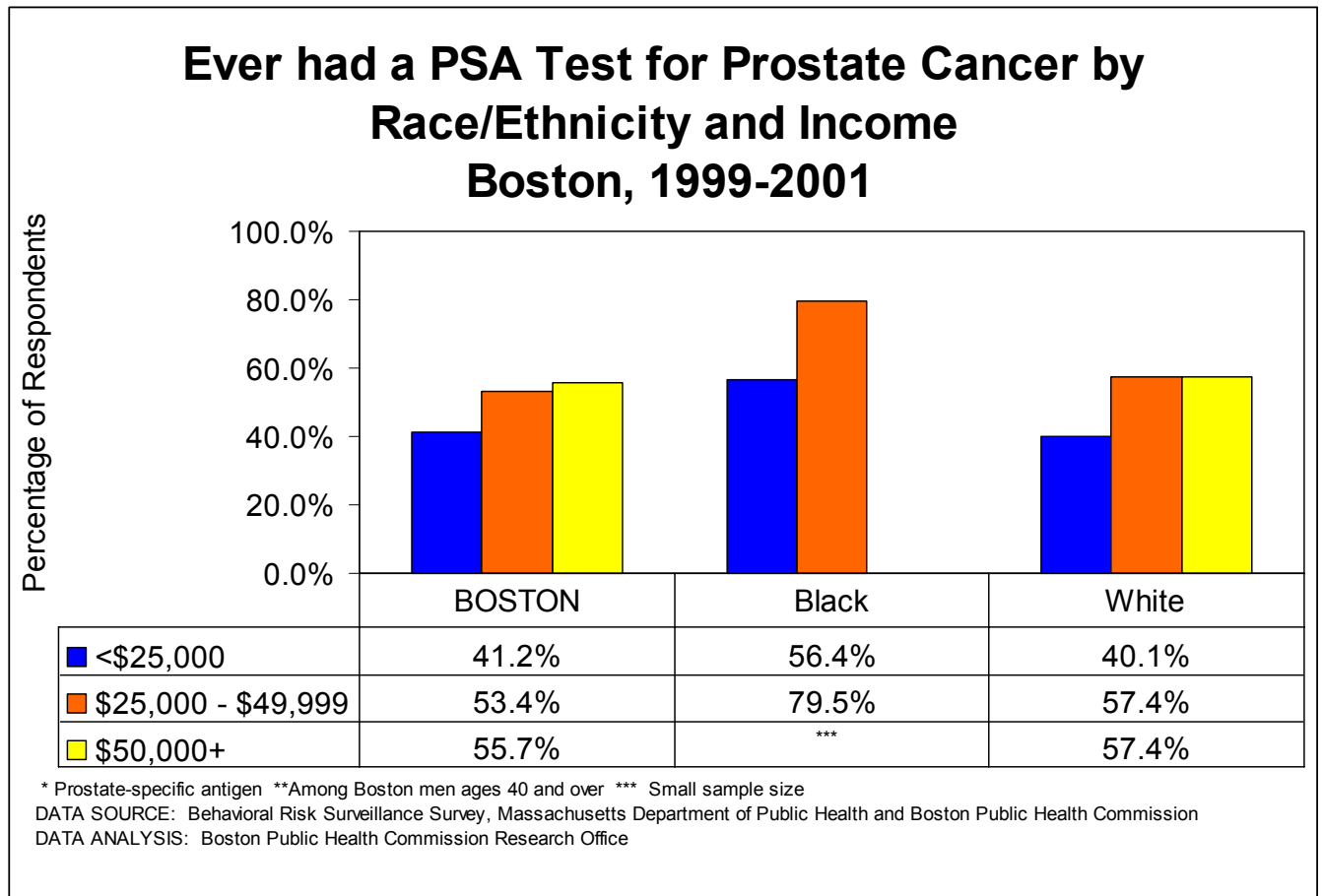
- In 2002, 964 Boston residents died from heart disease. This number included 456 males and 508 females.
- Between 2001 and 2002, Boston's age-adjusted heart disease mortality rate fell 12.9%, a statistically significant change. During the same time period, the age-adjusted heart disease mortality rate declined 12.5% among males but increased 0.3% among females. The latter changes were not statistically significant.
- Across all years shown, females' age-adjusted heart disease mortality rates were significantly lower than those of males.



- In 2002, Asians' age-adjusted heart disease mortality rate (65.3 per 100,000 population) was significantly lower than those of Whites (205.4 per 100,000 population) and Blacks (220.7 per 100,000 population). No other differences by race/ethnicity were statistically significant. Blacks had the highest age-adjusted heart disease mortality rate of all race/ethnicity groups.
- Between 2001 and 2002, the age-adjusted heart disease mortality rate among Whites dropped significantly, by 13.7%. The heart disease mortality rate declined 7.9% among Blacks and 23.2% among Asians, and increased 4.8% among Latinos, but these changes were not statistically significant.
- Between 1999 and 2002, age-adjusted heart disease mortality rates declined 17.3% among Asians and 16.9% among Whites, but increased 6.8% among Blacks and 2.4% among Latinos.

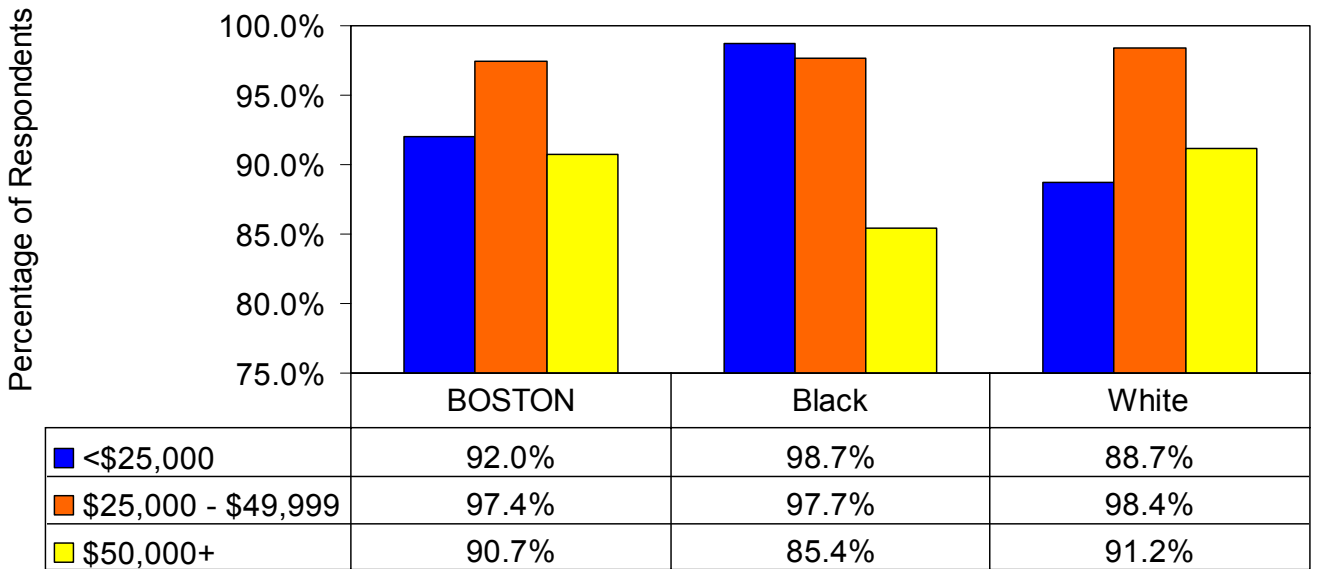
Cancer

The American Cancer Society estimates that 1.3 million people in the US were diagnosed with cancer in 2003. African Americans and other minority racial/ethnic groups are disproportionately affected. In 2002, cancer was the second leading cause of death in the US.



- During 1999-2001, a higher percentage of high-income men (55.7%) reported having had a PSA test, compared with men with household incomes of less than \$25,000.
- Among Black and White men, the highest percentage of men reporting that they had ever had a PSA test was with household incomes of at least \$25,000. Smaller percentages of Black men and White men from the lowest income category reported having had a PSA test. Sample sizes for Asians and for Latinos were too small to report results.

Ever had a Mammogram* by Race/Ethnicity and Income, Boston, 1999-2001



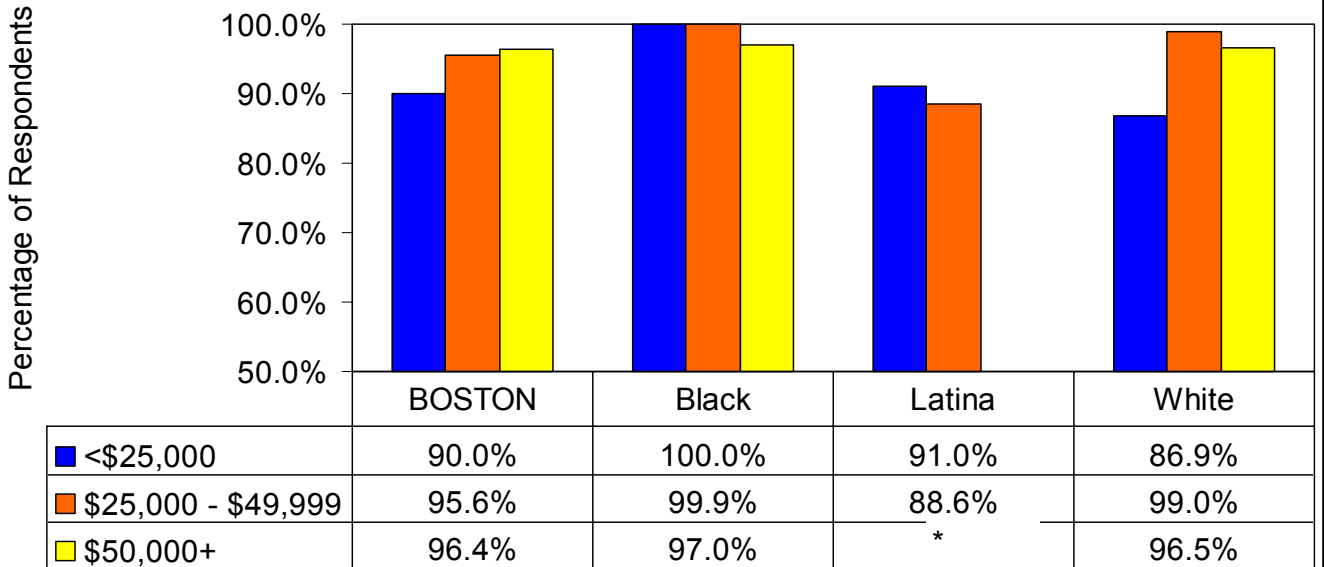
* Women ages 40 and over

DATA SOURCE: Behavioral Risk Surveillance Survey, Massachusetts Department of Public Health and Boston Public Health Commission

DATA ANALYSIS: Boston Public Health Commission Research Office

- Most Boston women ages 40 and over reported having had at least one mammogram in their lives. That finding ranged from a low of 85.4% of higher income (\$50,000 or more a year) Black women to a high of 98.7% of low-income (less than \$25,000 a year) Black women. For White women, the range was 88.7% of those with a low income to 98.4% of those with an annual income of \$25,000-\$49,999.
- Sample sizes for Asians and Latinas were too small to report reliable results.

Ever had a Pap Test by Race/Ethnicity and Income, Boston, 1999-2001

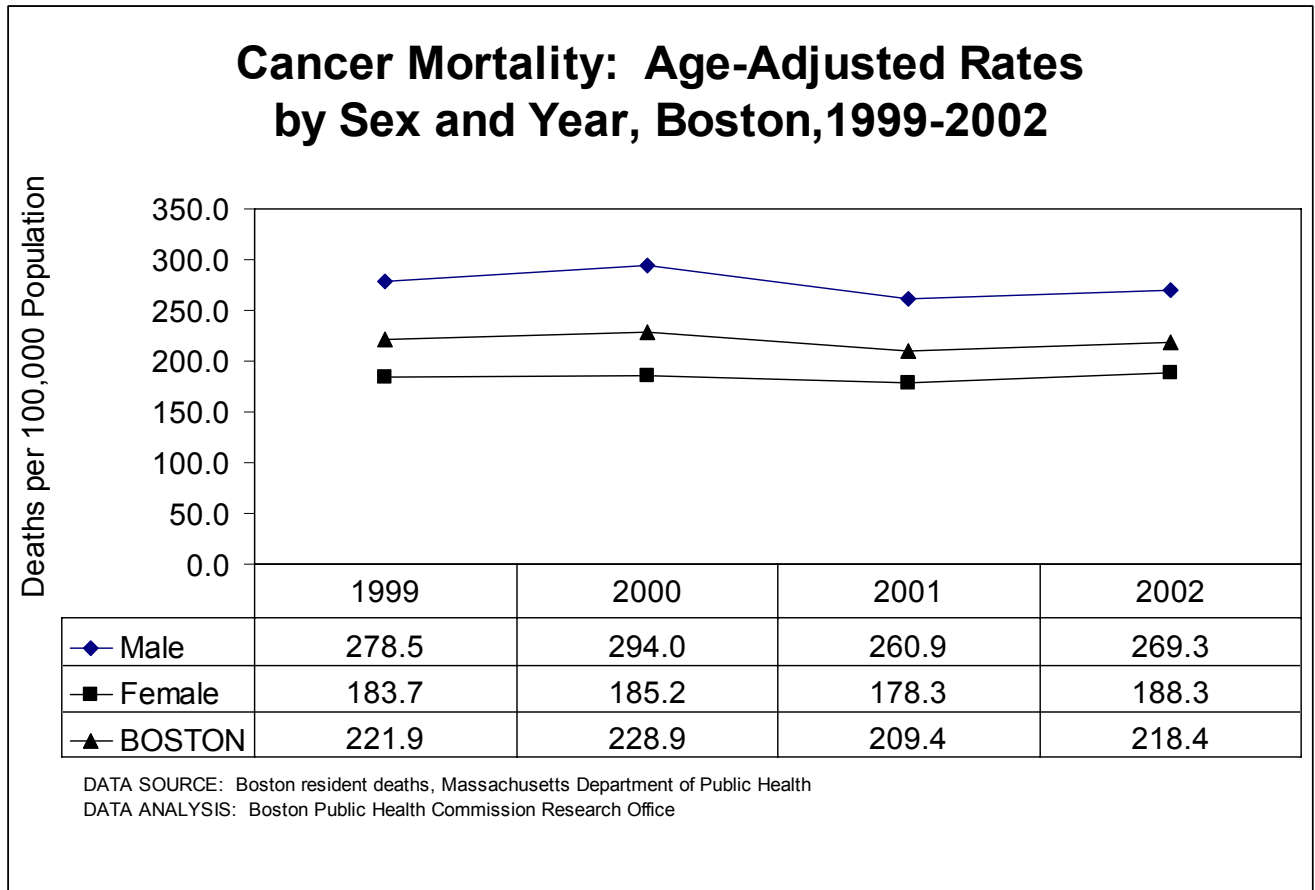


* Small sample size

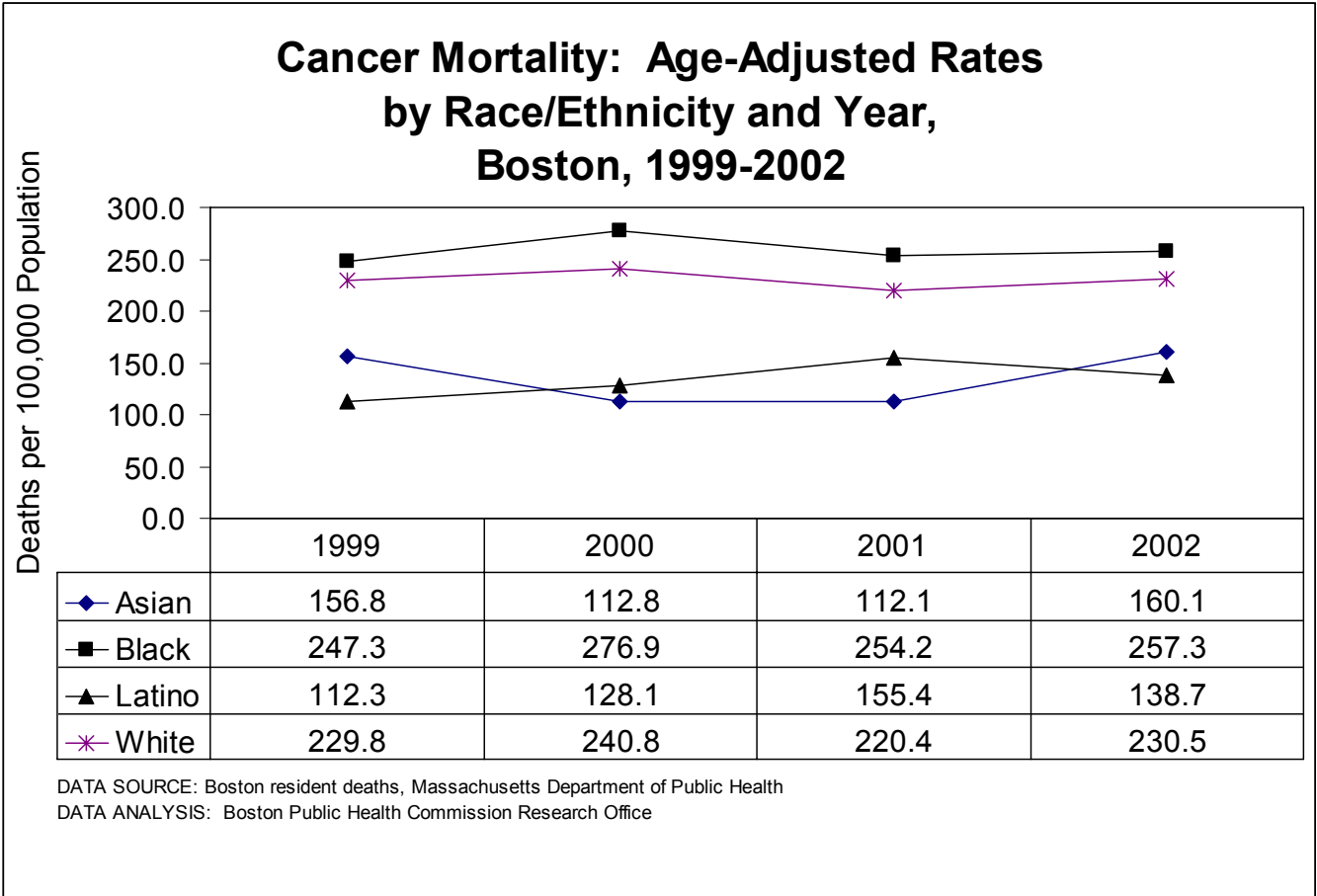
DATA SOURCE: Behavioral Risk Surveillance Survey, Massachusetts Department of Public Health and Boston Public Health Commission

DATA ANALYSIS: Boston Public Health Commission Research Office

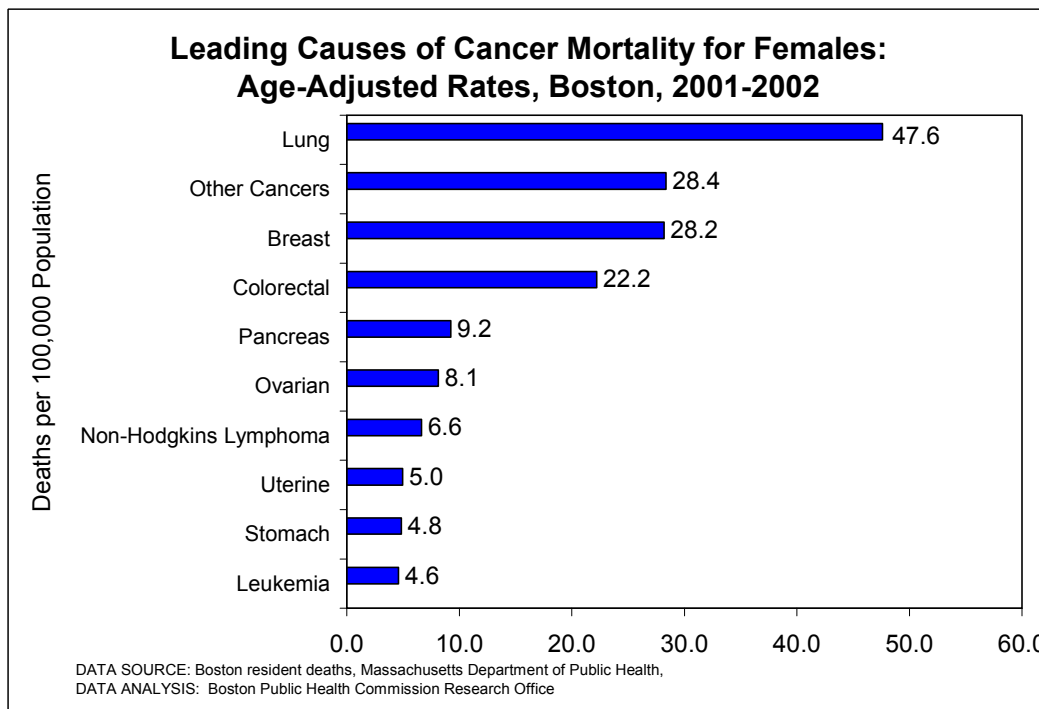
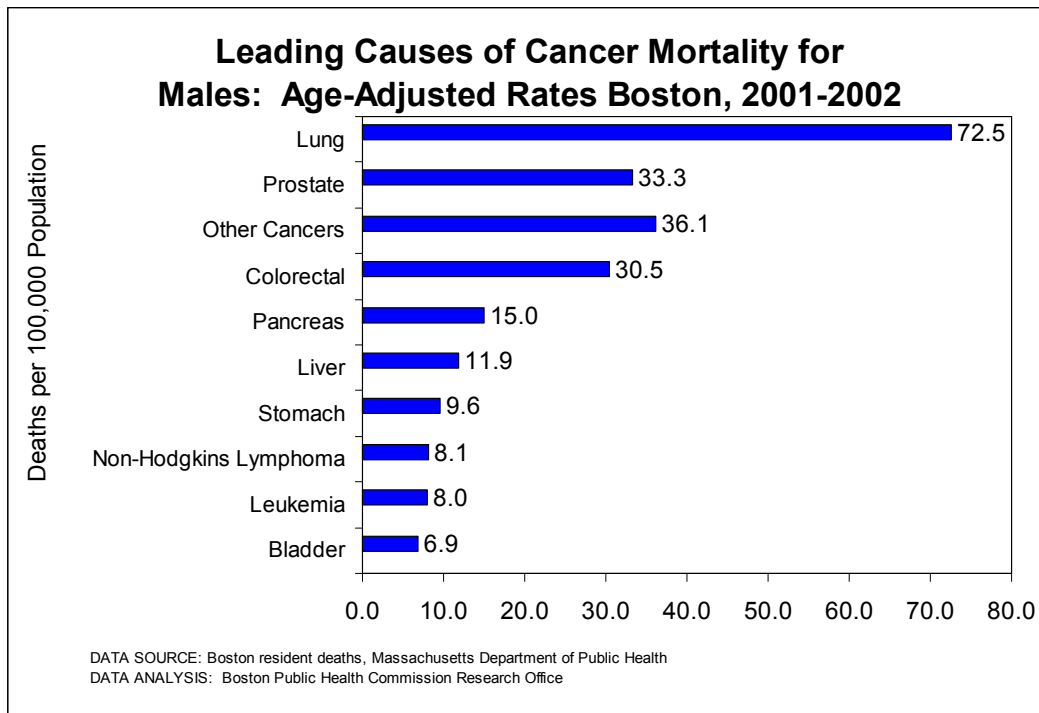
- High percentages of Boston women ages 18 and over reported ever having had a Pap test. This was the case regardless of race/ethnicity. The highest percentages were reported by Black women across all income categories.
- The lowest percentages of women who reported having ever having a Pap test were Latinas. Sample sizes for Asians were too small to report reliable results.



- During the four-year period 1999-2002, the number of cancer deaths among Boston residents averaged 1,067 per year.
- Boston’s age-adjusted cancer mortality rate between 1999 (221.9 deaths per 100,000 population) and 2002 (218.4 deaths per 100,000) declined slightly, but the decline was not statistically significant.
- For each year between 1999 and 2001, the age-adjusted cancer mortality rate for males was about fifty percent higher than the rate for females. In 2002, the rate for males was significantly higher than for females. Between 1999 and 2002, the rate for males declined three percent while the rate for females increased three percent, nonsignificant statistical changes.



- For each year shown, cancer mortality rates were highest for Blacks and Whites. In 2002, the age-adjusted cancer mortality rates for Asians and Latinos were significantly lower than the rates for Blacks and Whites.
- From 1999 to 2002, age-adjusted cancer mortality rates rose for all races/ethnicities. The increase was 4.0% for Blacks, 23.5% for Latinos, 2.1% for Asians and less than 1.0% for Whites. However, none of these changes were statistically significant.



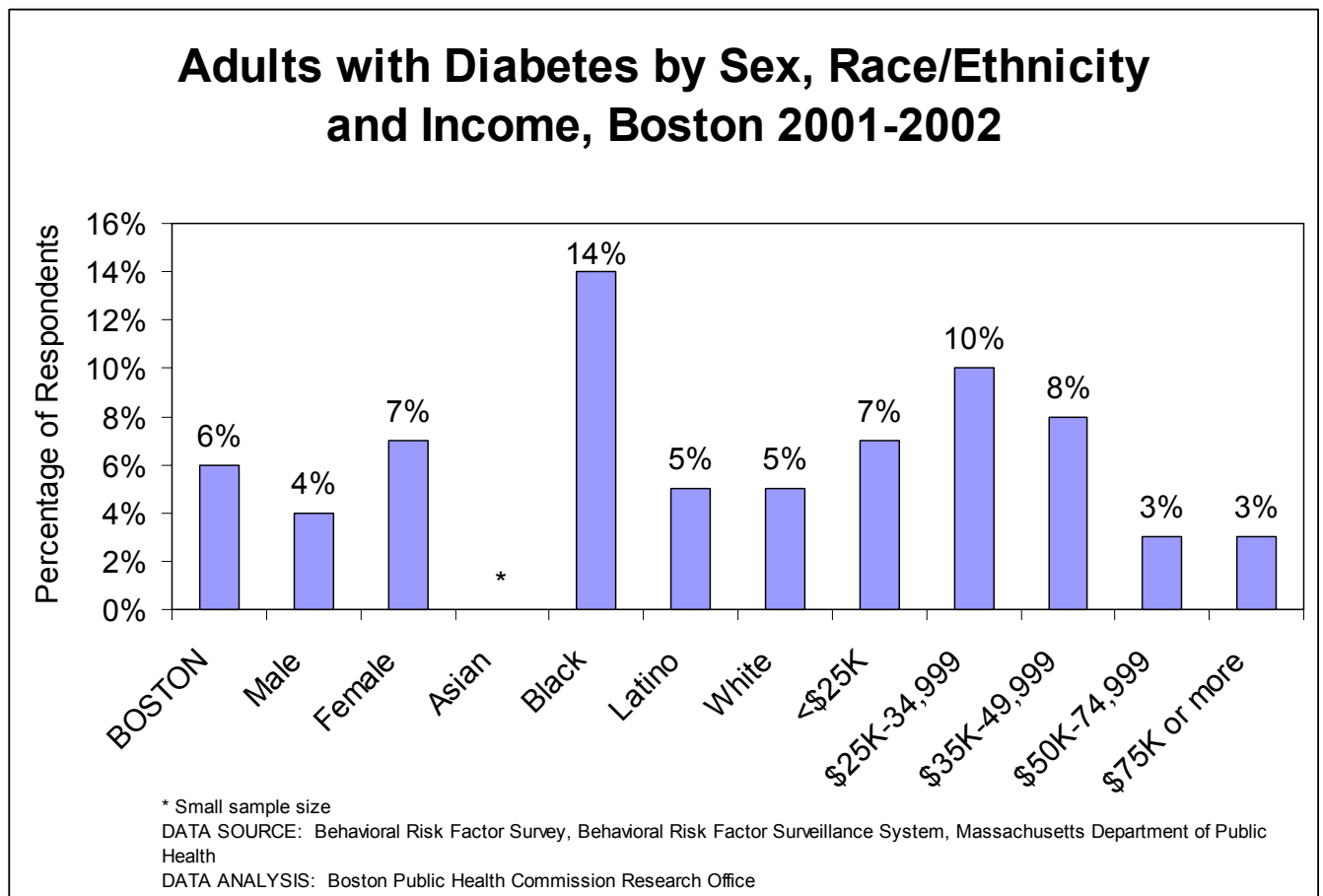
- For 2001-2002, cancers responsible for the most deaths among Boston residents were similar for both males and females. Lung, colorectal, and pancreatic cancers were among the leading types for males and females. Age-adjusted mortality rates for these cancers were higher for males than for females; however, only the lung cancer rate for males (72.5 deaths per 100,000 population) was significantly higher than the rate for females.

Leading Causes of Cancer Death: Age-Adjusted Rates by Race/Ethnicity, Boston, 2001-2002			
Asian		Black	
	Deaths per 100,000 Population		Deaths per 100,000 Population
Lung	36.2	Lung	60.1
Colorectal	13.3	Colorectal	28.6
Stomach	6.2	Prostate	68.7
Breast	20.4	Breast	33.6
Pancreas	12.4	Pancreas	15.5
Latino		White	
	Deaths per 100,000 Population		Deaths per 100,000 Population
Lung	22.0	Lung	66.4
Colorectal	14.5	Colorectal	26.4
Prostate	28.6	Prostate	30.0
Liver	14.3	Breast	29.6
Breast	9.6	Pancreas	11.1
DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health			
DATA ANALYSIS: Boston Public Health Commission Research Office			

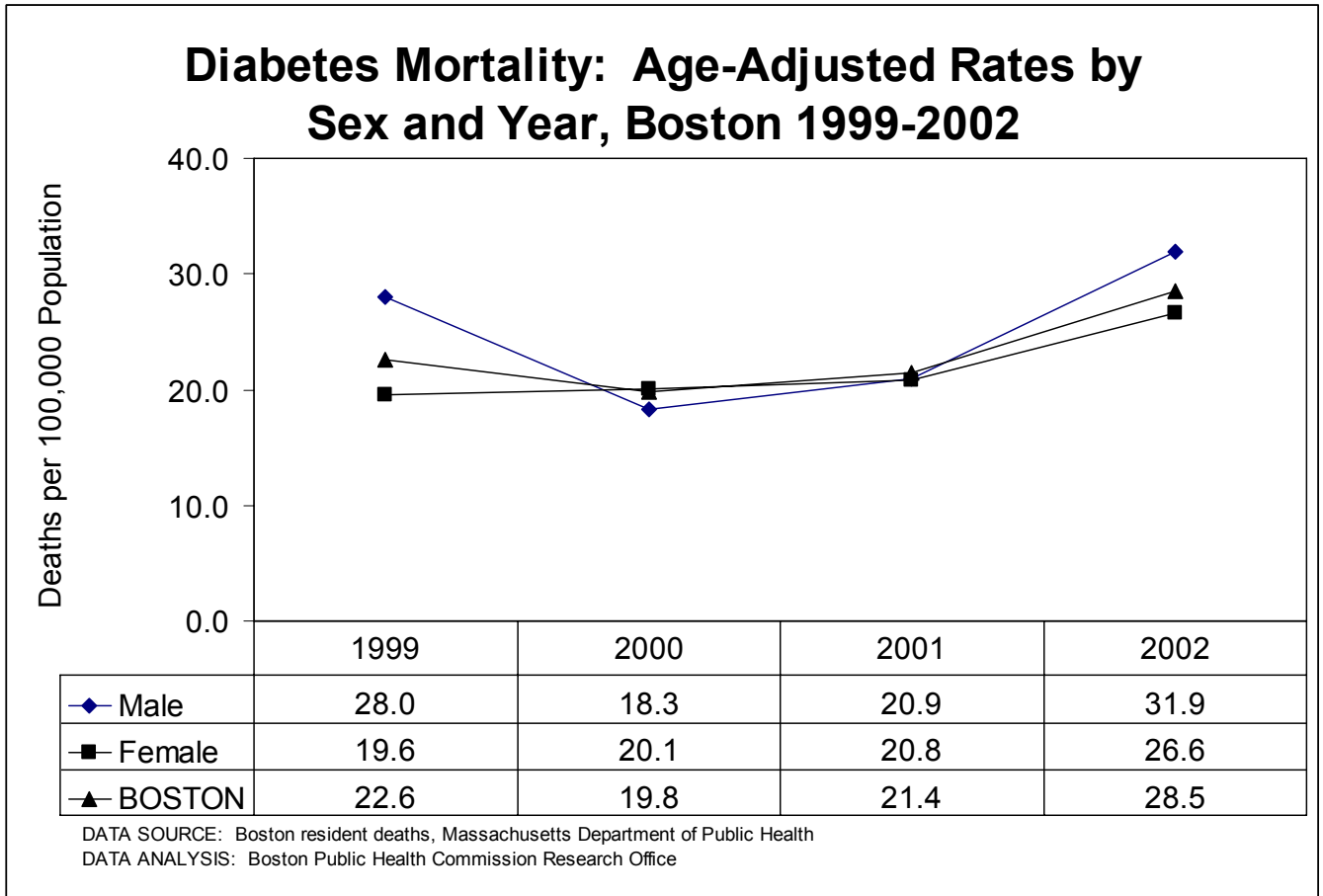
- Lung, breast, and colorectal cancer were the leading causes of cancer deaths for all Boston race/ethnicity groups during 2001-2002. Prostate cancer was among the leading causes of cancer deaths for all race/ethnicity groups except Asians.
- Lung cancer was the leading cause of cancer death for Whites and Asians and the second leading cause for Blacks and Latinos. However, age-adjusted mortality rates for lung cancer were significantly lower for Asians and Latinos than for Blacks and Whites.
- Age-adjusted mortality rates for the leading cancers were generally highest for Blacks and Whites. Blacks had the highest rates for prostate cancer (68.7 deaths per 100,000 population), breast cancer (33.6 deaths per 100,000), colorectal cancer (28.6 deaths per 100,000), and pancreatic cancer (15.5 deaths per 100,000).

Diabetes

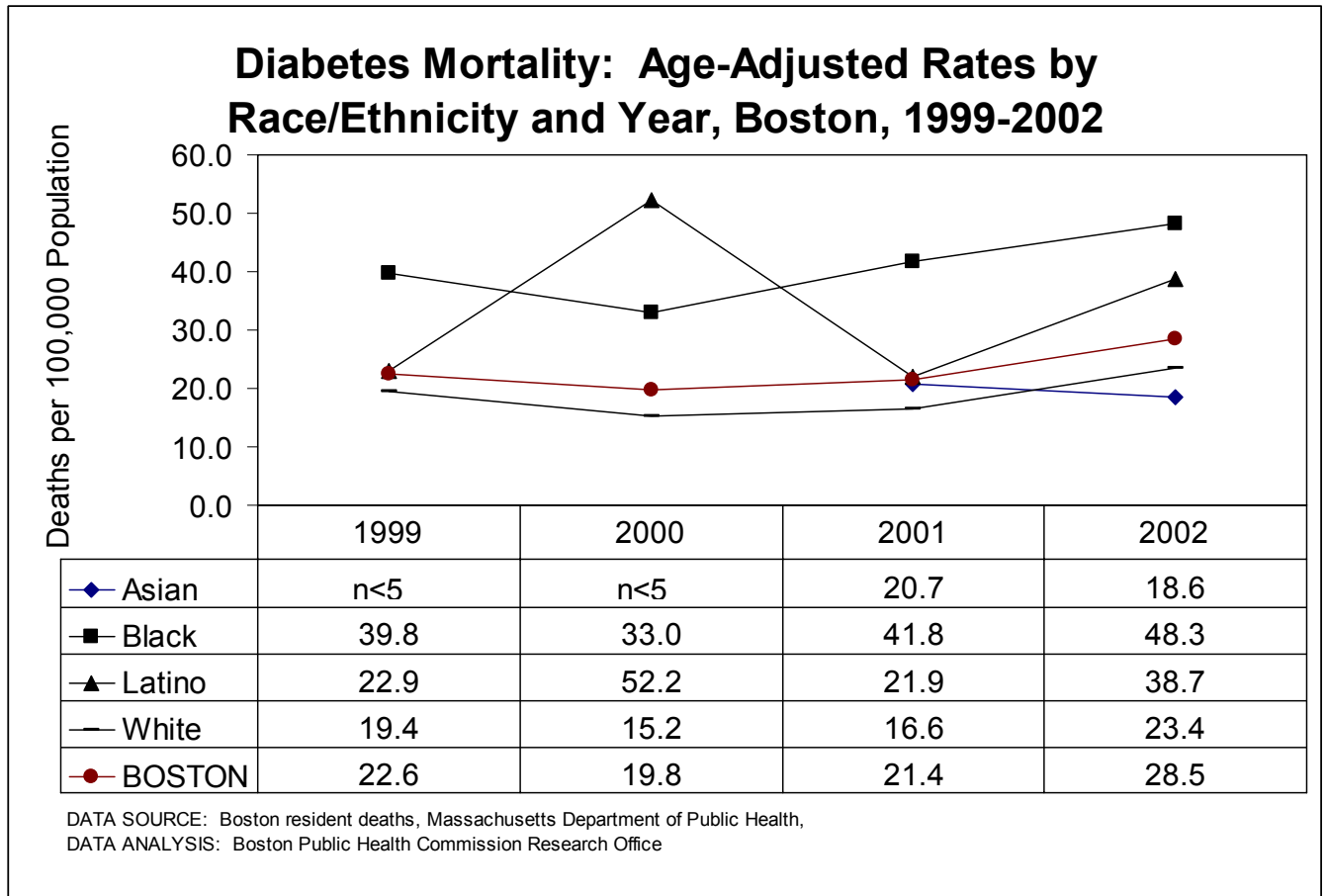
Diabetes is a chronic disease in which the body does not produce adequate insulin or does not properly use insulin, a hormone necessary for converting food into energy. Complications of diabetes include heart disease, stroke, high blood pressure, kidney disease, limb loss, blindness, and complications of pregnancy. According to the American Diabetes Association, as of 2002, 6.3% of the US population was estimated to have diabetes. The number of diabetes cases is about evenly distributed between men and women. The occurrence of diabetes increases with age and is higher among non-Latino Blacks, American Indians, and Alaska Natives. In 2002, diabetes was the sixth leading cause of death in the US.



- Women and Blacks had higher self-reported rates of diagnosed diabetes than did the Boston population overall.
- Residents with household incomes of at least \$50,000 less often reported having been diagnosed with diabetes than did residents with household incomes under \$50,000.

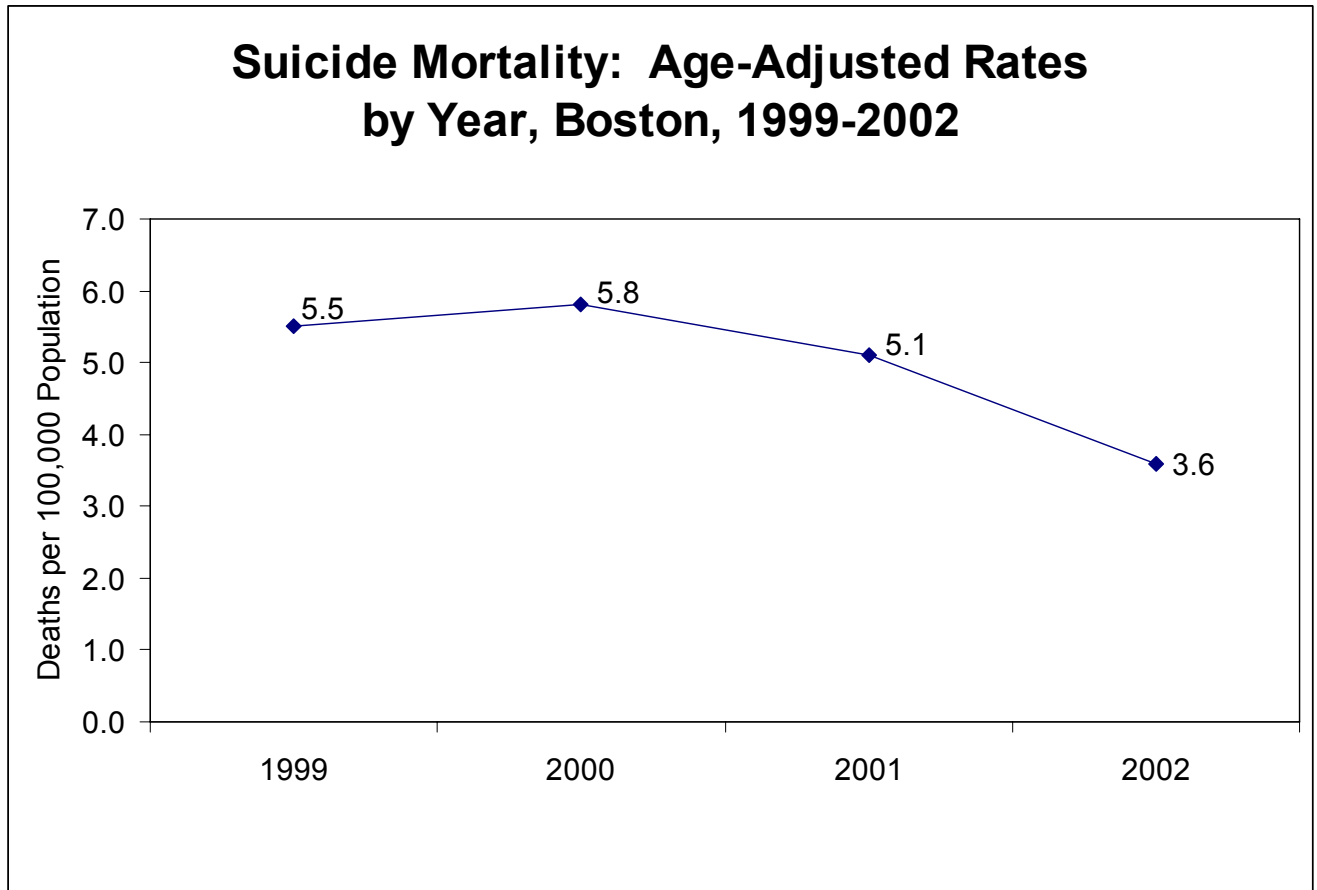


- In 2002, 140 Boston resident deaths were due to diabetes. This number included 61 males and 79 females.
- Between 1999 and 2002, the diabetes mortality rate increased 26.1% for Boston overall, but this change was not statistically significant.
- For all years except 2000, although females experienced more deaths due to diabetes than did males, the age-adjusted diabetes mortality rates for females were lower than those for males. (These differences by sex, however, were not statistically significant).



- Among Blacks, Latinos, and Whites, diabetes mortality rates in 2002 were higher than those in previous years. These differences over time, however, were not statistically significant.
- For all years except 2000, Blacks had Boston’s highest age-adjusted diabetes mortality rates. In 2001 and 2002, the rates among Blacks (41.8 per 100,000 population in 2001 and 48.3 per 100,000 population in 2002) were significantly higher than those among Whites (16.6 in 2001 and 23.4 in 2002). No other differences by race/ethnicity were significant.
- Compared with 1999, the 2002 age-adjusted diabetes mortality rates were 69.0% higher among Latinos, 21.4% higher among Blacks, and 20.6% higher among Whites, but these differences were not statistically significant.

Suicide



- During the four-year period 1999-2002, there were 119 suicides by Boston residents.
- In 2002, the suicide rate for Boston residents was 3.6 deaths per 100,000 population, a decrease of 29.4% from the rate in 2001. Between 1999 and 2002, the suicide rate declined 34.5%. Neither decrease was statistically significant.

The Health of Boston 2004.....

NEIGHBORHOOD DATA

Demographics

Population by Neighborhood by Race/Ethnicity, Boston, 2000

	Allston/ Brighton	Back Bay	Charlestown	East Boston	Fenway	Hyde Park	Jamaica Plain	Mattapan
Total Population	69,648	36,235	15,195	38,413	29,823	34,420	29,482	19,724
Asian	9,567	3,119	753	1,542	3,567	538	890	134
Black	3,110	1,253	539	1,177	2,511	13,487	4,142	16,480
Latino	6,336	1,691	1,764	14,990	2,631	4,634	8,466	1,456
Other Race*	977	161	54	522	252	259	190	141
White	47,835	29,351	11,946	19,078	20,091	14,442	15,082	513
Two or More Races	1,823	660	139	1,104	771	1,060	712	1,000

	Allston/ Brighton	Back Bay	Charlestown	East Boston	Fenway	Hyde Park	Jamaica Plain	Mattapan
Asian	14%	9%	5%	4%	12%	2%	3%	1%
Black	4%	4%	4%	3%	8%	39%	14%	84%
Latino	9%	5%	12%	39%	9%	13%	29%	7%
Other Race*	1%	< 1%	0.4%	1%	< 1%	1%	1%	1%
White	69%	81%	79%	50%	67%	42%	51%	3%
Two or More Races	3%	2%	1%	3%	3%	3%	2%	5%

	North Dorchester	North End	Roslindale	Roxbury	South Boston	South Dorchester	South End	West Roxbury
Total Population	83,212	12,114	35,057	50,349	29,938	45,291	33,502	26,108
Asian	7,385	324	1,368	2,332	1,154	2,702	7,650	980
Black	36,914	203	4,851	26,421	741	21,523	5,033	1,676
Latino	13,942	351	6,456	10,988	2,235	3,827	3,947	1,255
Other Race*	5,119	25	229	959	125	640	238	126
White	15,329	11,082	21,015	7,760	25,316	14,876	15,947	21,638
Two or More Races	4,523	129	1,138	1,889	367	1,723	687	433

	North Dorchester	North End	Roslindale	Roxbury	South Boston	South Dorchester	South End	West Roxbury
Asian	9%	3%	4%	5%	4%	6%	23%	4%
Black	44%	2%	14%	52%	2%	48%	15%	6%
Latino	17%	3%	18%	22%	7%	8%	12%	5%
Other Race*	6%	< 1%	1%	2%	1%	1%	< 1%	1%
White	18%	92%	60%	15%	85%	33%	48%	83%
Two or More Races	5%	1%	3%	4%	1%	4%	2%	2%

*Includes Native Hawaiians/Other Pacific Islanders, Alaska Native/American Indians, and Other Races

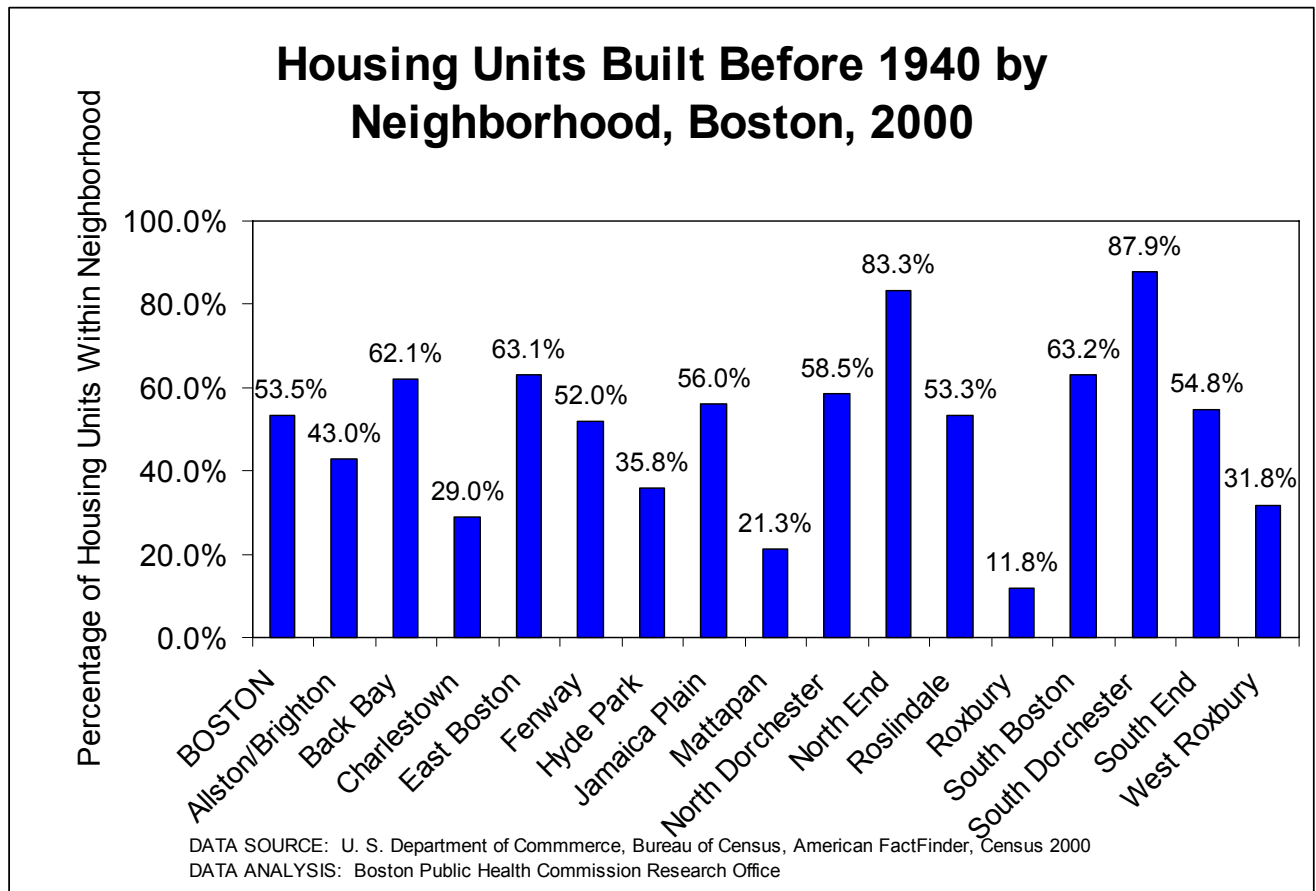
DATA SOURCE: U.S. Department of Commerce, Bureau of Census, American FactFinder

DATA ANALYSIS: Boston Public Health Commission Research Office

- Residents who are White account for fifty percent or more of the population of 11 Boston neighborhoods, ranging from a high of 92% in the North End to a low of 3% in Mattapan.
- The distribution of Black residents by neighborhood ranges from a high of 84% in Mattapan to a low of 2% in the North End and South Boston, while the highest percentages of Latino residents are found in East Boston (39%), Jamaica Plain (29%), and Roxbury (22%). The highest percentages of Asian residents are in the South End and Allston/Brighton.

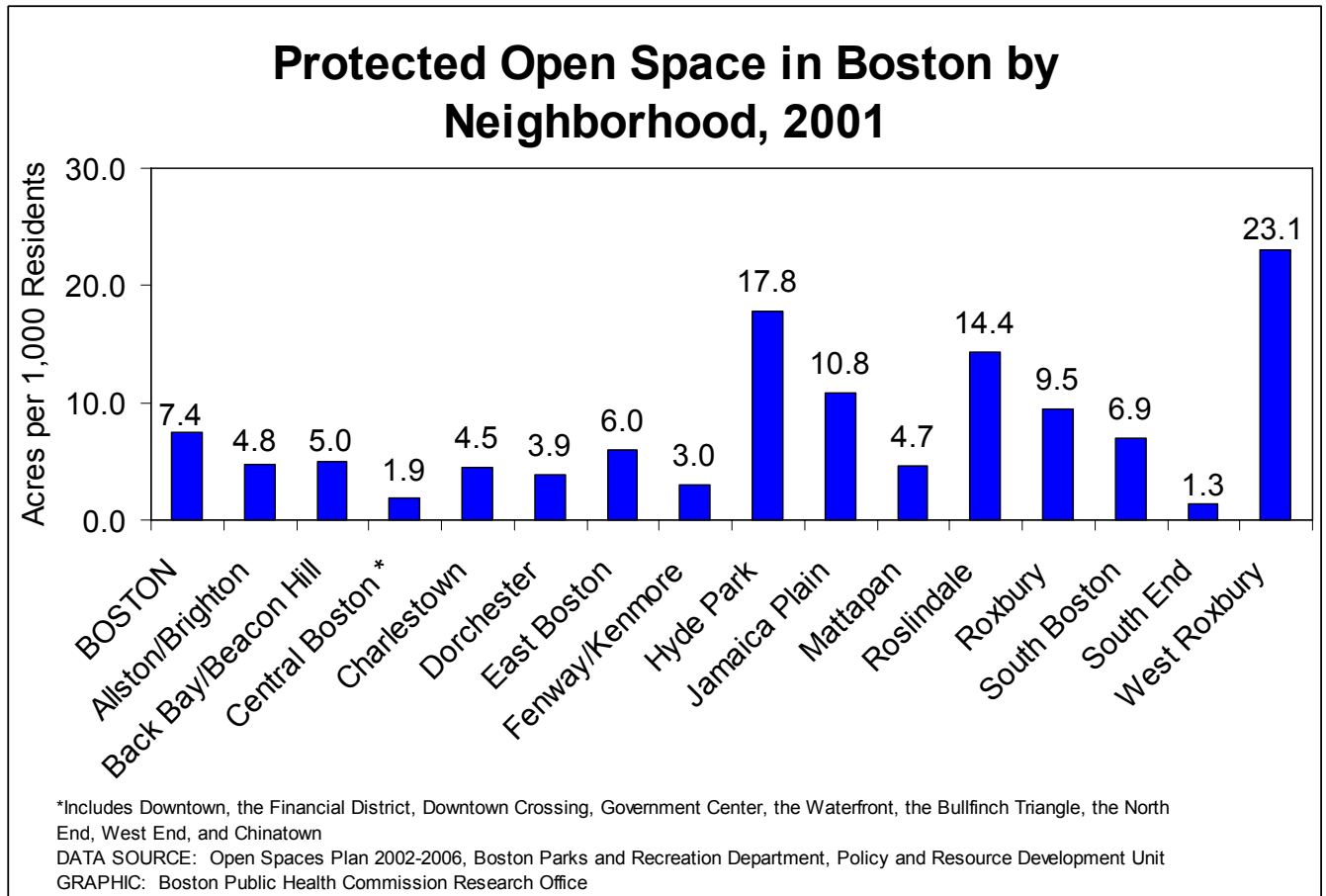
The Health of Boston 2004.....

Housing characteristics of a community can provide insight into its history, economy, changing needs, and value of its properties. The age of houses or apartment buildings is often used to help understand the condition of available housing in a community. Housing built before 1940 is one age threshold used by the Bureau of the Census to indicate potential deficiencies in the property such as deterioration, nonconformance to current building standards, or lack of modern plumbing facilities.



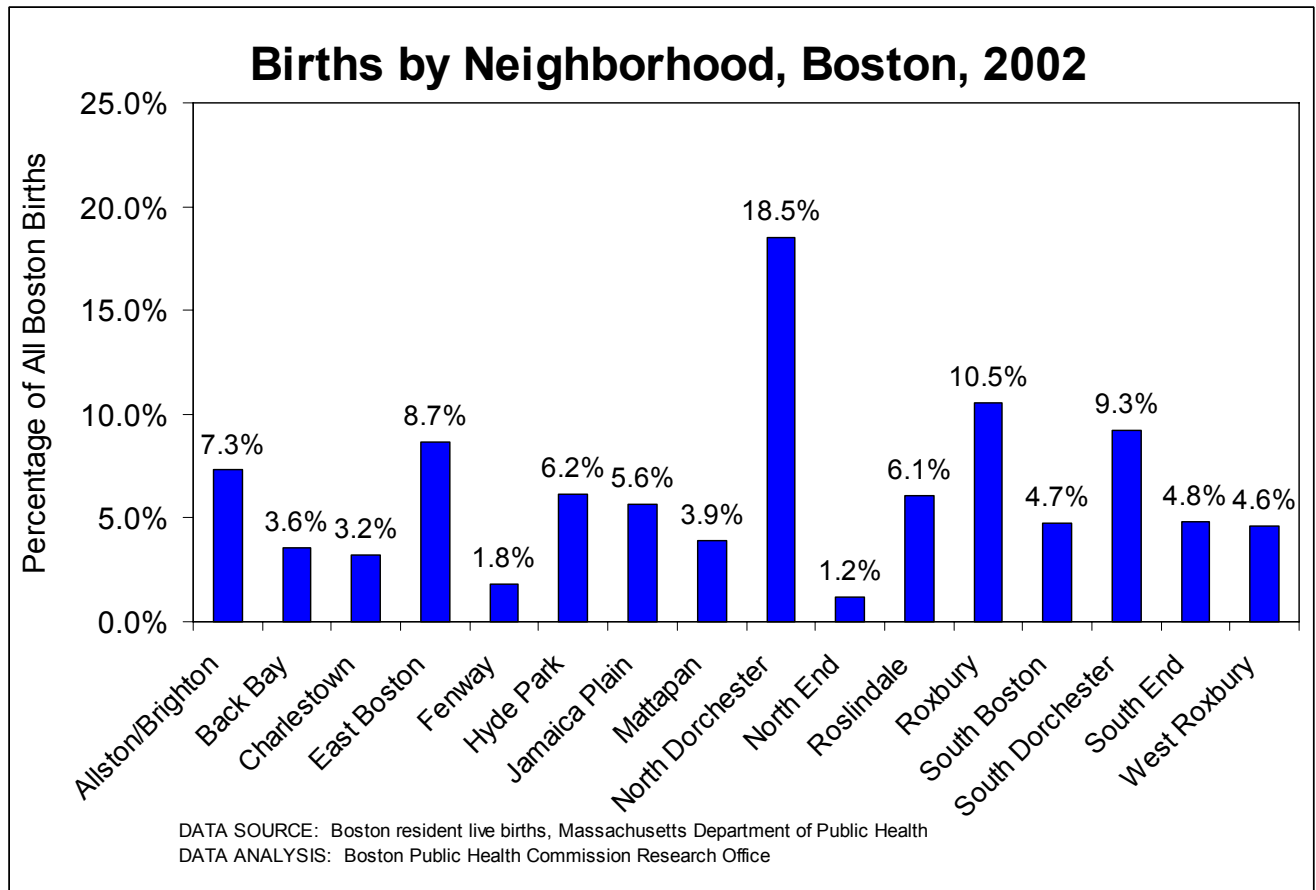
- Fifty-four percent of Boston's 134,707 housing units were built before 1940.
- Overall, the percentage of housing units built before 1940 ranges from 11.8% in Roxbury to 87.9% in South Dorchester.

The availability of protected open space in urban areas adds to the quality of life and health of a population. Protected open space such as parks, paths, bikeways, beaches, and playgrounds provide relief from highly developed, dense areas and offer opportunities for relaxation and physical activity.

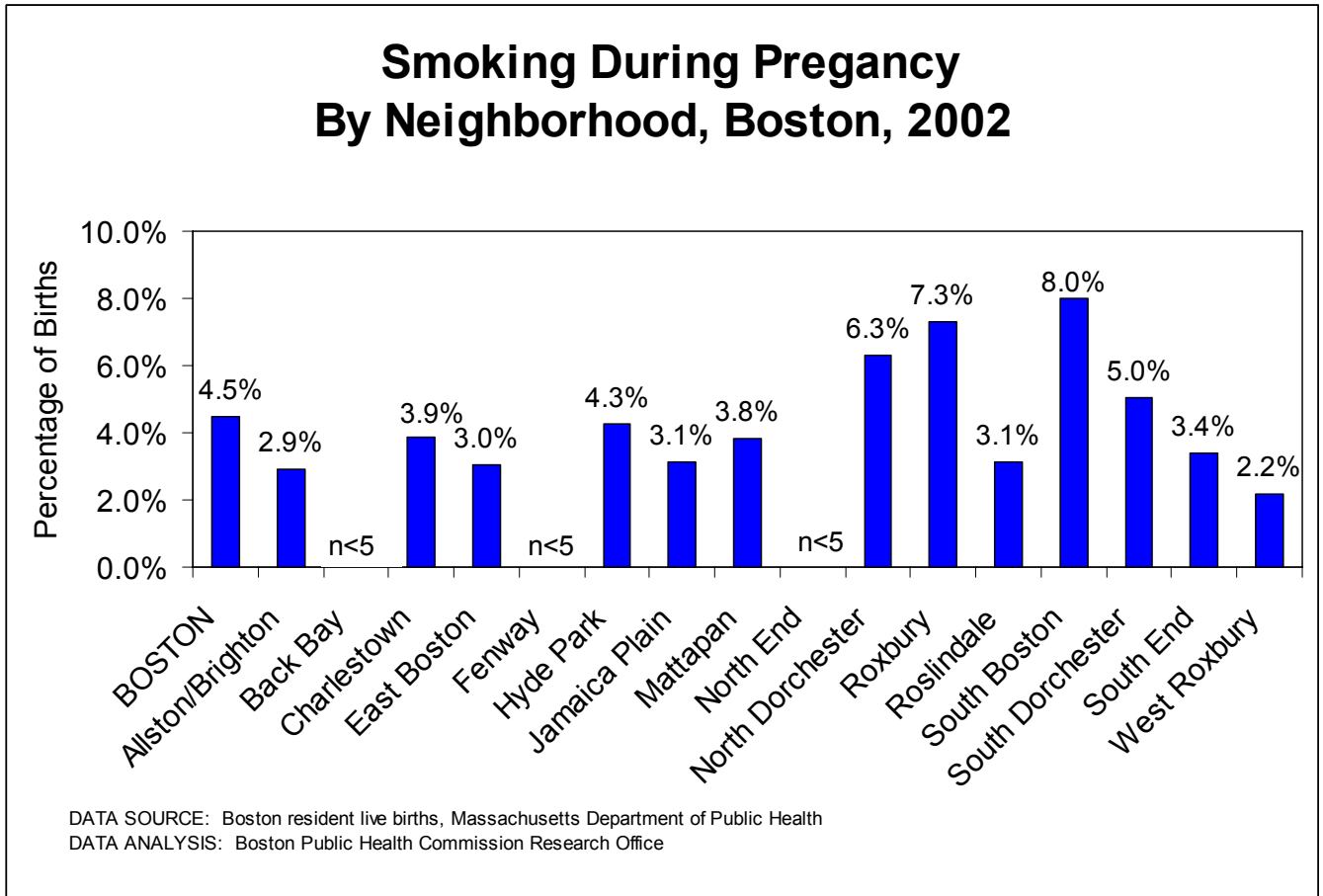


- As of 2001, Boston had 4,360 acres of protected open space, or 7.43 acres per 1,000 Boston residents. Protected open space is property that cannot be converted to other uses. It includes all publicly-owned lands under the jurisdiction of the National Park Service, Metropolitan District Commission, Department of Environmental Management, Boston Parks and Recreation, the Boston Conservation Commission, and other properties held by government agencies for conservation use.
- The amount of protected open space varies considerably by Boston neighborhood, ranging from 1.3 acres per 1,000 residents in the South End to 23.1 acres per 1,000 residents in West Roxbury.

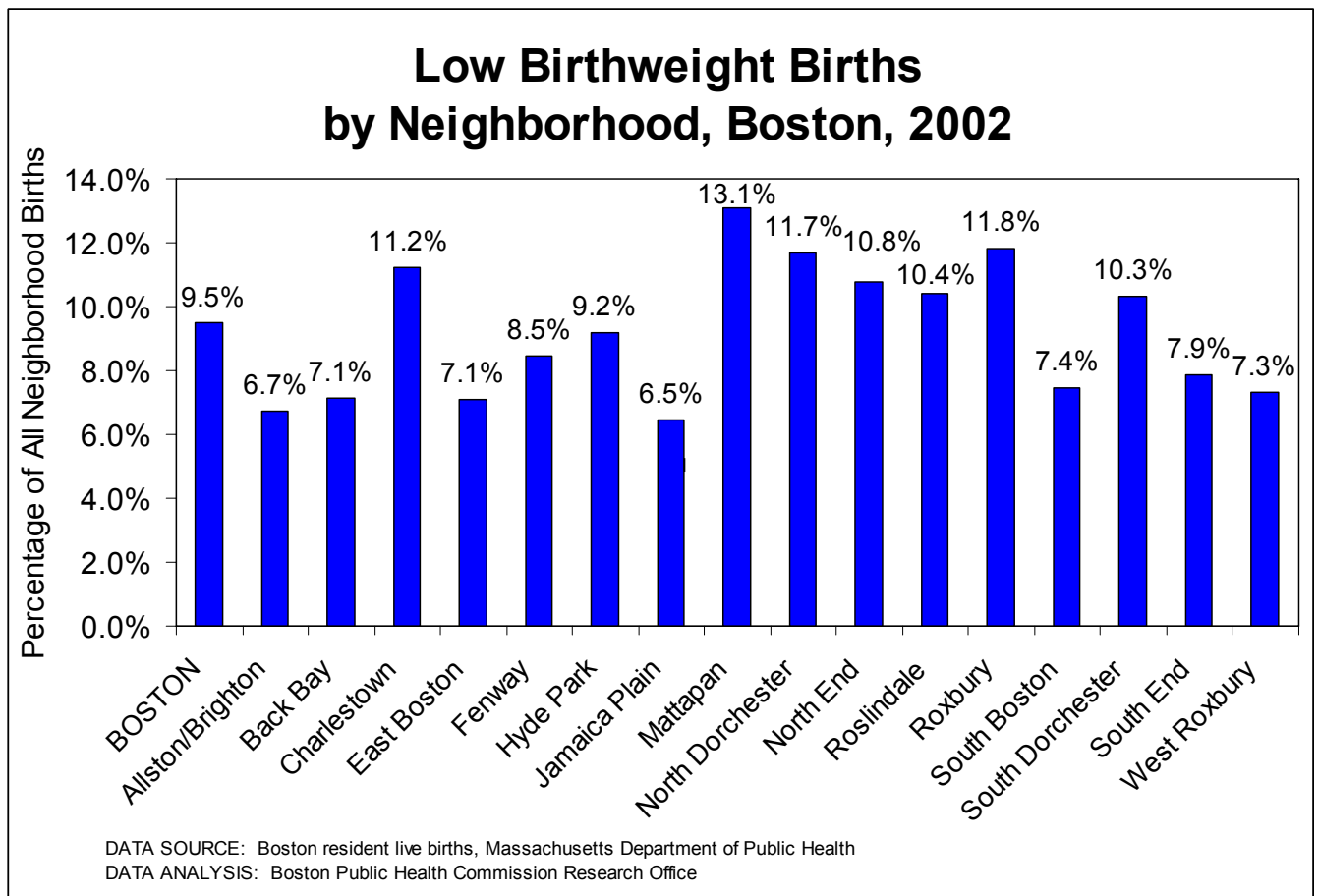
Childbearing



- Collectively, North Dorchester, Roxbury, South Dorchester and East Boston constituted about half of the city's 8,005 births in 2002.
- The highest percentage of births occurred to North Dorchester women, who had 18.5% of the city's births.
- The North End, Fenway, Charlestown, and Back Bay accounted for the smallest proportions of all Boston births.

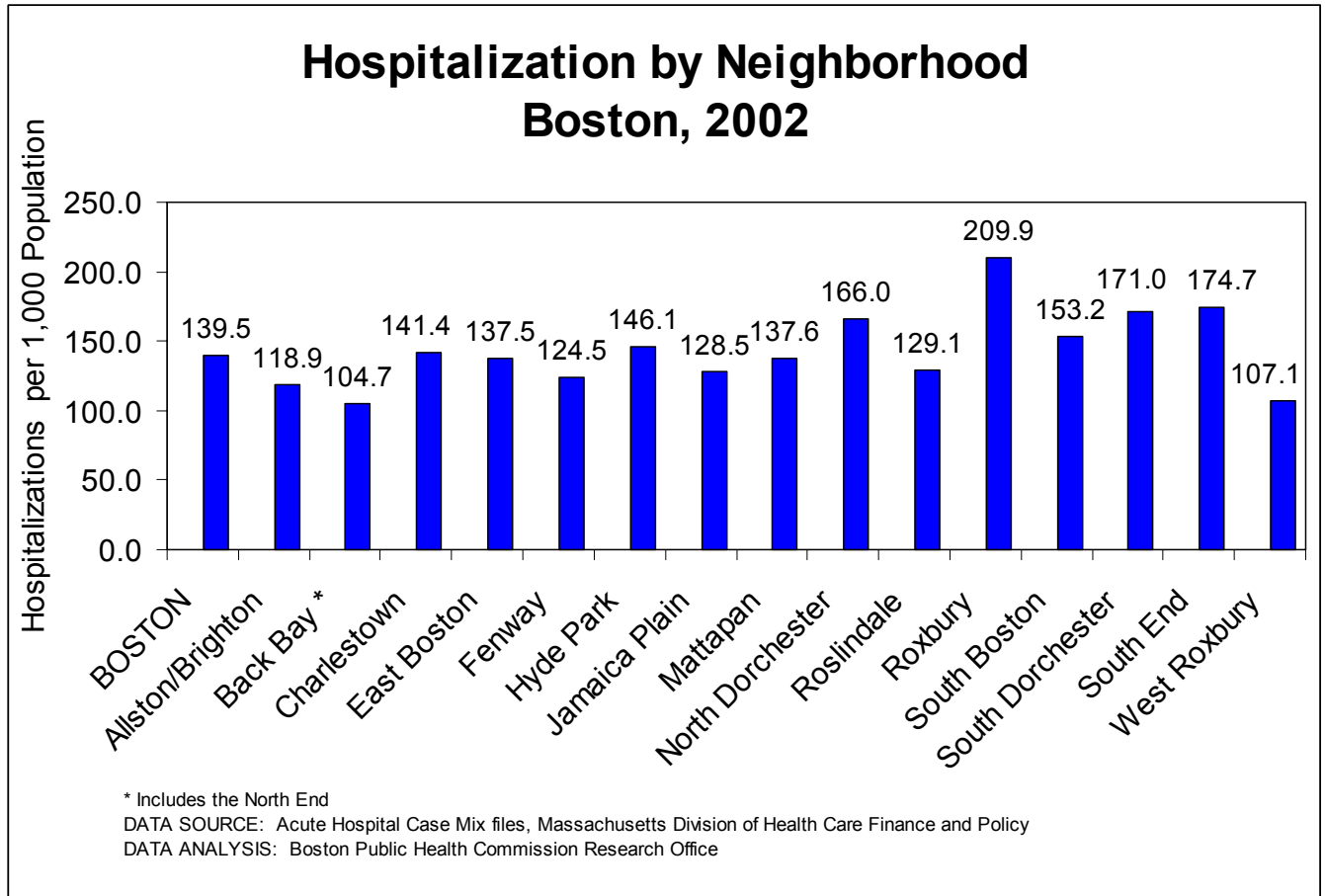


- In 2002, 358 Boston births (4.5%) were to women who reported smoking during pregnancy.
- Eight percent of South Boston births and 7.3% of Roxbury births were to women who reported smoking during pregnancy.
- The lowest percentages of reported smoking during pregnancy were among West Roxbury, Allston/Brighton and East Boston residents.



- In 2002, 9.5% of Boston births were low birthweight (LBW). Mattapan had the highest percentage of LBW births (13.1%), and this was 36.9% higher than the overall Boston rate. Roxbury, North Dorchester, Charlestown, North End, Roslindale and South Dorchester also had rates higher than the Boston overall rate.
- Back Bay, East Boston, Allston/Brighton, and Jamaica Plain had the lowest LBW rates of all Boston neighborhoods.

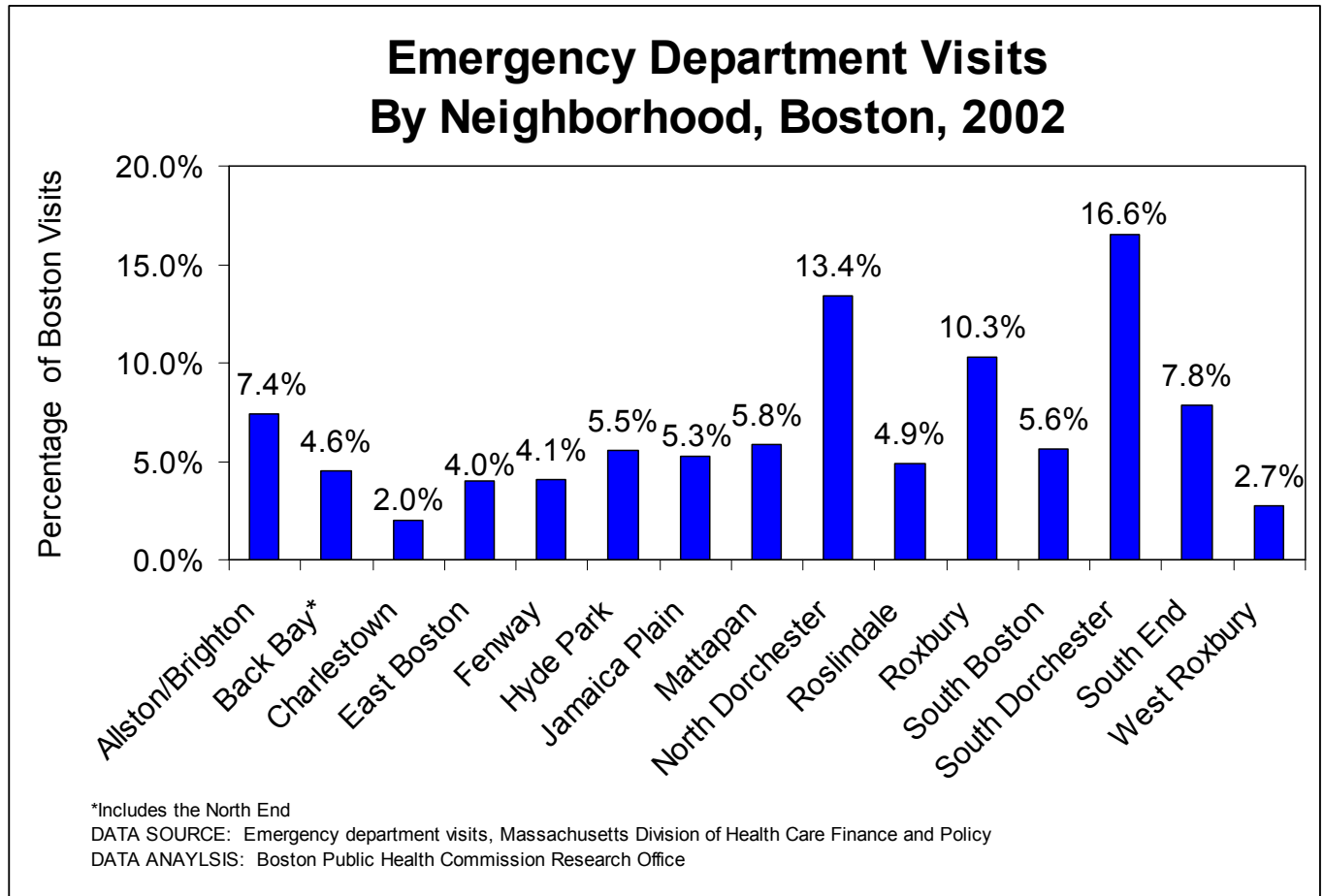
Hospitalization



- In 2002, Boston’s highest hospitalization rate by neighborhood was for residents of Roxbury (209.9 hospitalizations per 1,000 population). That rate was 50.4 % higher than the overall Boston rate (139.5 hospitalizations per 1,000). Residents of the South End and South Dorchester had the second and third highest rates (174.7 per 1,000 and 171.0 per 1,000 respectively).
- Residents of the Back Bay and West Roxbury had the lowest hospitalization rates of all Boston neighborhoods (104.7 per 1,000 and 107.1 per 1,000). Their rates were 24.9% and 23.2 % respectively lower than the overall Boston rate.

Emergency Department Visits

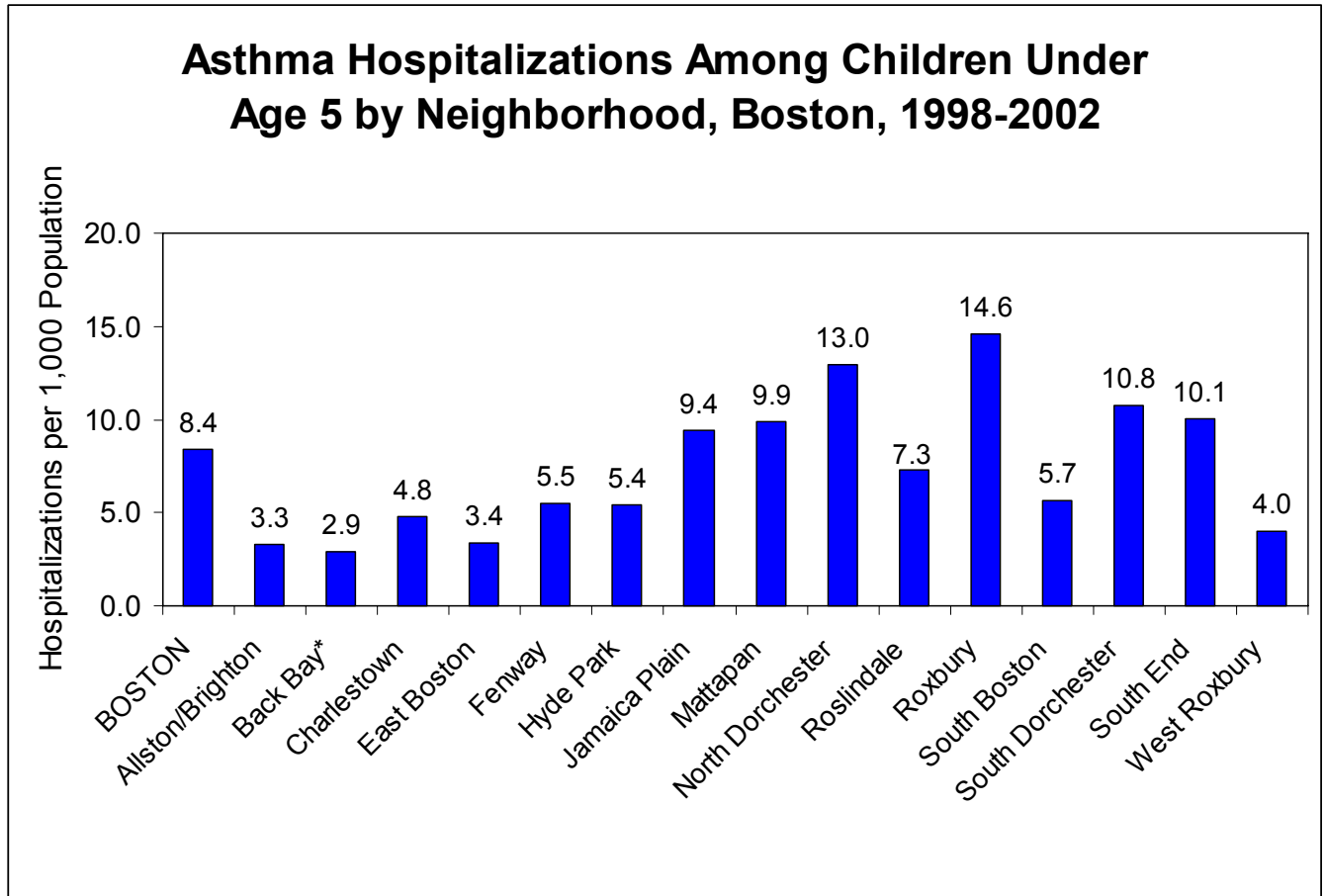
Hospital emergency departments are intended to treat life-threatening acute illnesses and injuries. However, over time, hospital emergency departments have also become an important source of routine health care for people with lack of access to other sources.



- Residents of South Dorchester (16.6%), North Dorchester (13.4%), and Roxbury (10.3%) accounted for the greatest numbers of ED visits made by Boston residents in 2002.
- Charlestown and West Roxbury residents accounted for the smallest percentages of ED visits by Boston residents, 2.0% and 2.7% of the total, respectively.

Asthma

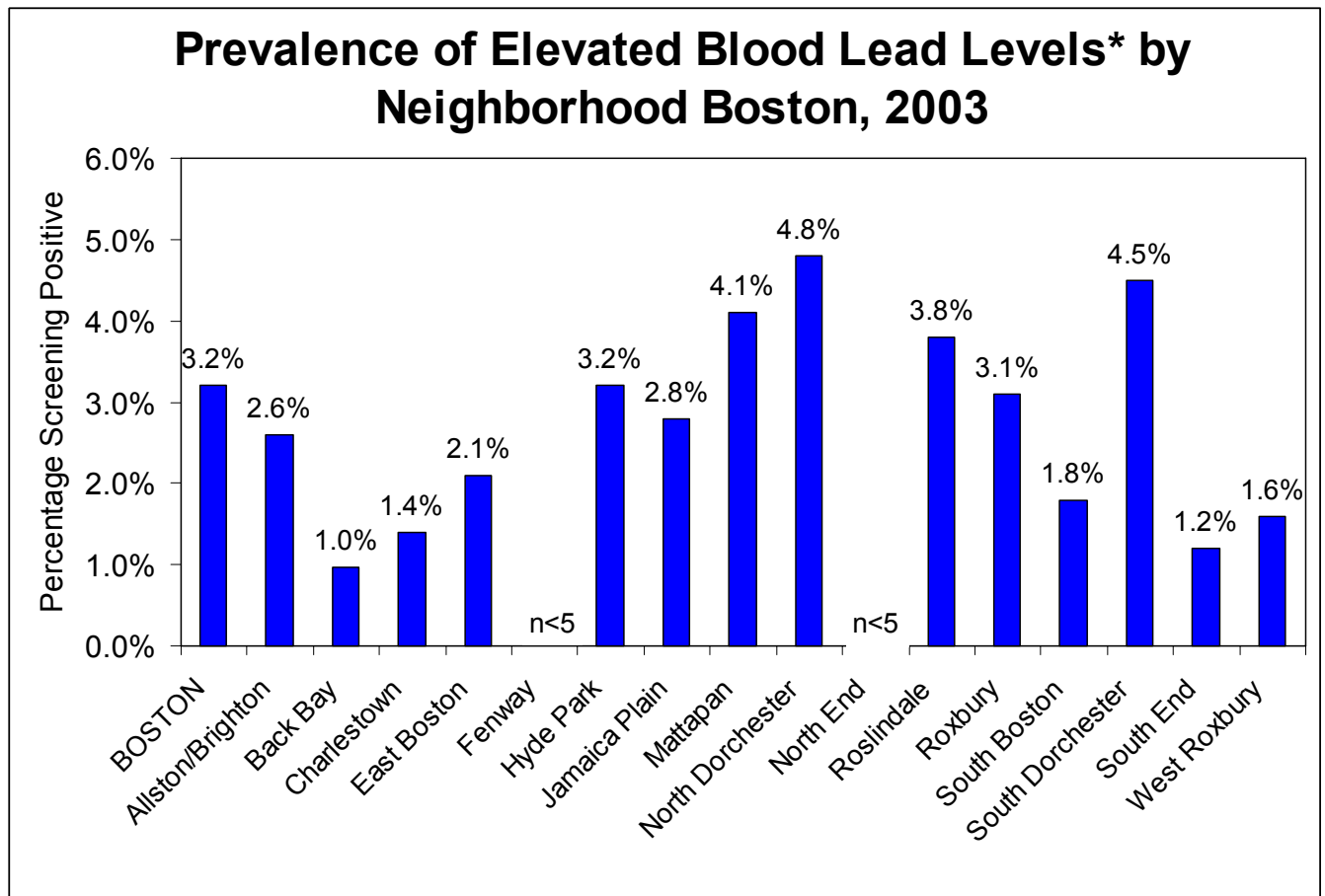
Asthma is a condition in which the tiny vessels bringing air to the lungs constrict and become inflamed. During asthma attacks, which may be triggered by factors such as allergens, exercise, and cold temperatures, breathing becomes difficult. Hospitalizations for asthma are an indicator of the amount of asthma in a community, the severity of the condition in that population, and the adequacy of outpatient management of asthma.



- During 1998-2002, Roxbury was one of several Boston neighborhoods with asthma hospitalization rates for children under age 5 higher than the Boston overall rate. The rate for Roxbury (14.6 asthma hospitalizations per 1,000 population) was 64% higher than the Boston rate (8.9 asthma hospitalizations per 1,000 population), and was the highest rate of all Boston neighborhoods.
- Other neighborhoods with rates higher than Boston's were North Dorchester (13.0 asthma hospitalizations per 1,000), South Dorchester (10.8 per 1,000), the South End (10.1 per 1,000), Mattapan (9.9 per 1,000), and Jamaica Plain (9.4 per 1,000).

Childhood Lead Screening

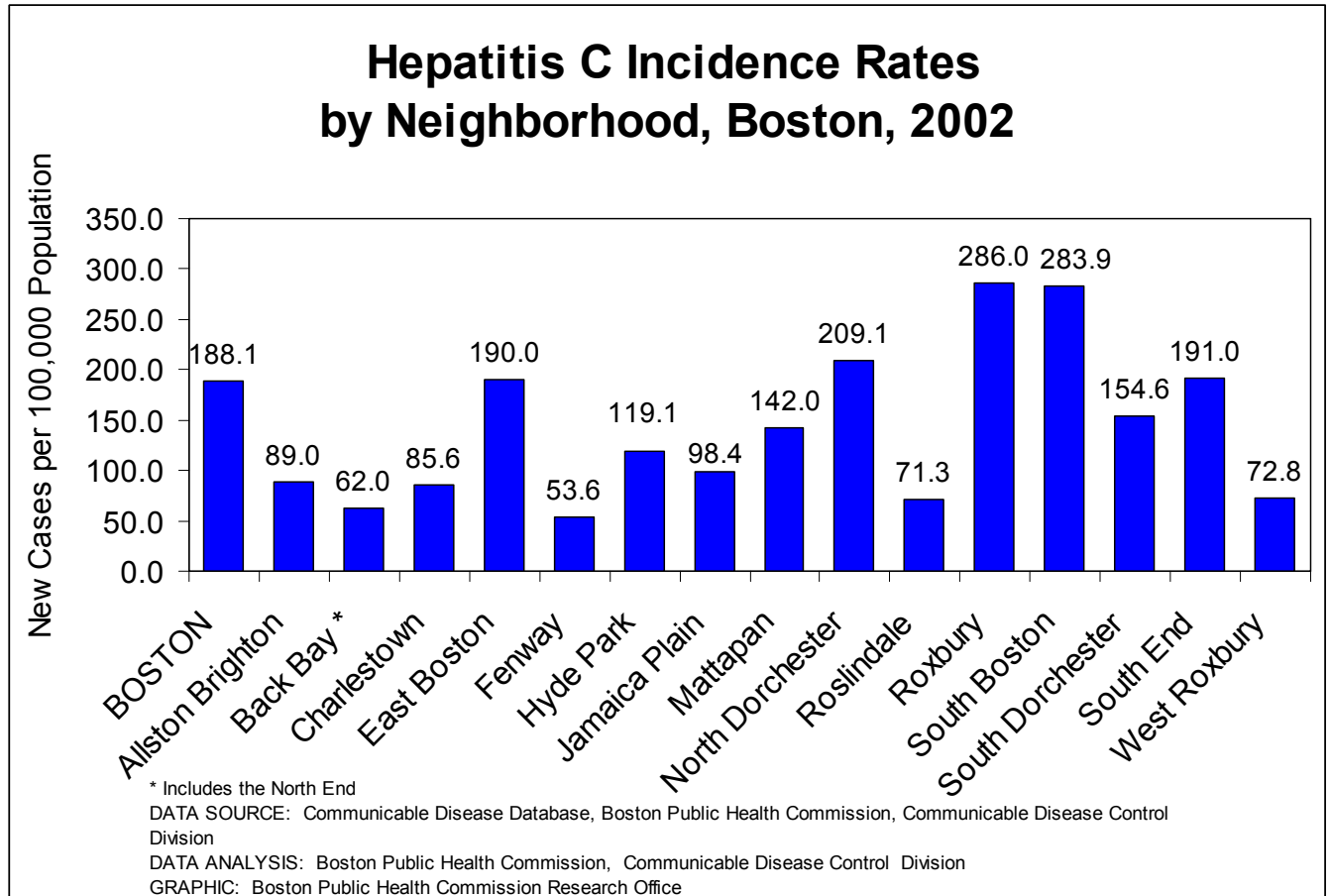
Childhood lead poisoning is a preventable environmental health problem that can cause serious neurological damage in children, including mental retardation. Children under the age of 6 are at risk of lead poisoning because they tend to put their hands and other objects in their mouths. Lead-based paint and lead-contaminated dust from old, deteriorating buildings are the major sources of lead poisoning among US children.



- In 2003, 24,482 Boston children under age 6 were screened for lead in their blood. Of the children screened, 774 (3.2%) had blood levels of 10 micrograms per deciliter ($\mu\text{g}/\text{dL}$) or higher.
- The number of Boston children with elevated blood lead levels has been declining since 1993, when 18.6% of children had levels at least that high. Between 2002 and 2003, the percentage of children with blood lead levels of $10\mu\text{g}/\text{dL}$ or higher declined 20.0%. The Healthy People 2010 goal is to have no elevated blood lead levels among children.
- In 2003, the prevalence of elevated blood lead levels in children was highest in North Dorchester (4.8%), South Dorchester (4.5%), and Mattapan (4.1%).

Hepatitis

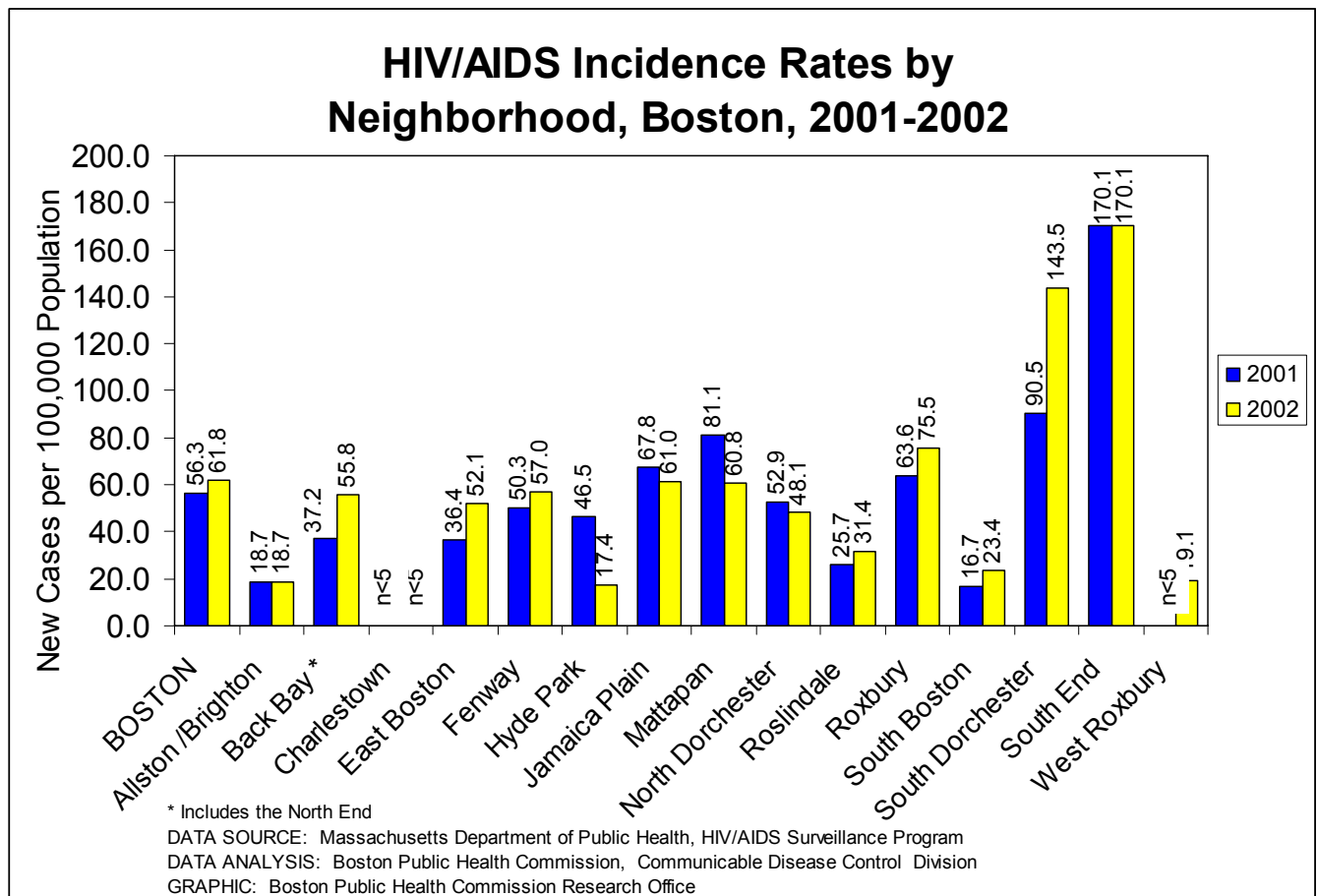
Three major types of this disease of the liver are hepatitis A, B, and C. Each is caused by a virus. Hepatitis C is the most commonly reported blood-borne infection in Boston. Vaccines are available to prevent hepatitis A and hepatitis B infection; however, there is no vaccine for hepatitis C.



- The highest incidence rate of hepatitis C in 2002 was among Roxbury residents (286 new cases per 100,000 population). This was 52% higher than the overall Boston rate (188.1 new cases per 100,000 population).
- South Boston, North Dorchester, South End and East Boston also had hepatitis incidence rates which were higher than the overall Boston rate.
- The lowest hepatitis C incidence rates were among residents of Fenway, Back Bay/North End, Roslindale, and West Roxbury.

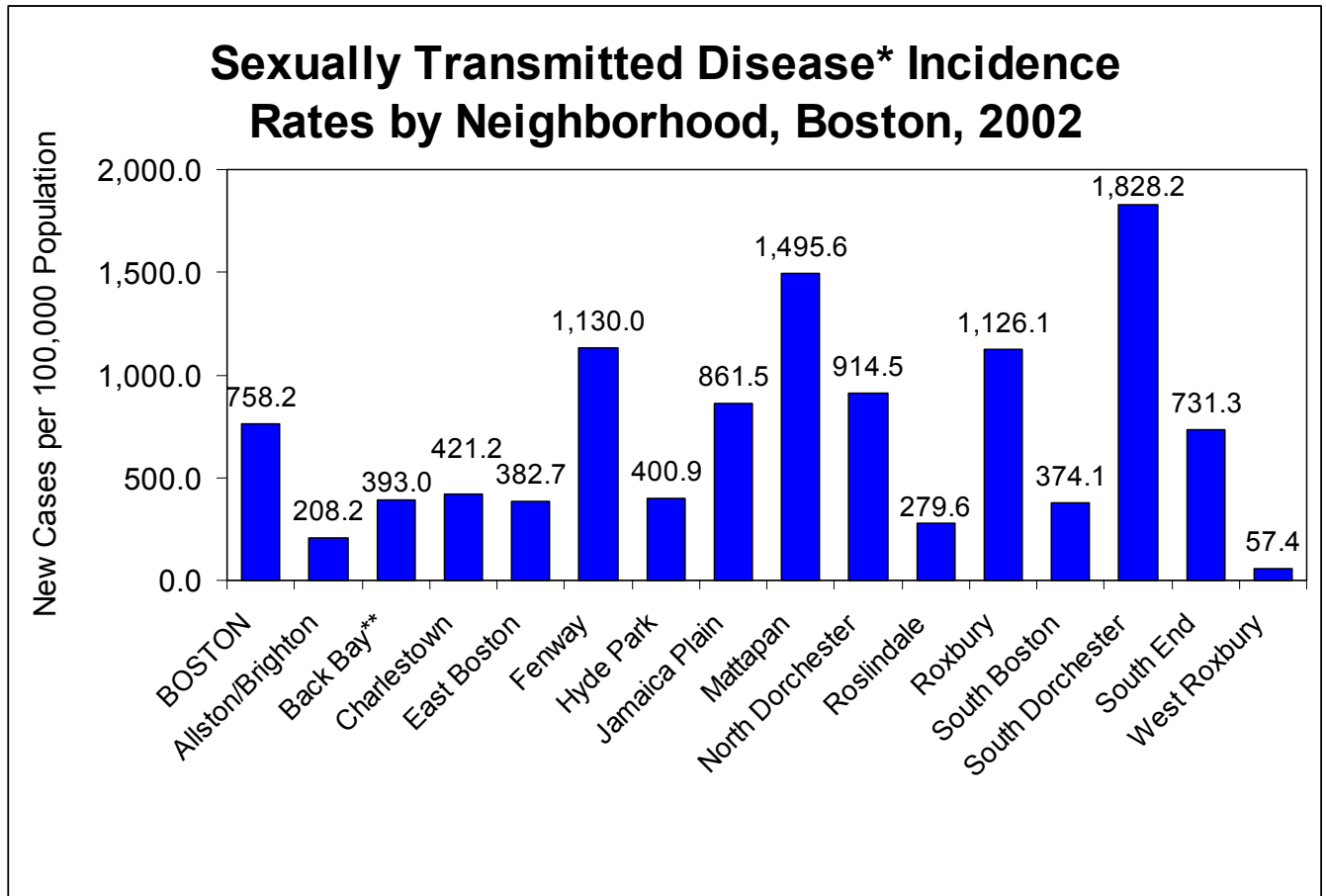
HIV/AIDS

Human Immunodeficiency Virus (HIV) is the organism that causes AIDS. People become infected with HIV through sexual contact, contact with infected blood, at birth (when infection can be transmitted from mother to baby), or through breastfeeding. Over a period of years, most people who are infected with HIV eventually develop AIDS as the virus damages the immune system.



- For Boston overall, HIV/AIDS incidence rates rose 9.8%, from 56.3 new cases per 100,000 population in 2001 to 61.8 per 100,000 in 2002.
- In 2001 and 2002, the South End had the highest HIV/AIDS incidence rate among Boston neighborhoods, and this figure was constant at 170.1 new cases per 100,000 population. The South End rate was 202.1% and 175.2% higher than the overall Boston rates for 2001 and 2002 respectively.
- Hyde Park, Allston/Brighton, West Roxbury, and South Boston had the lowest HIV/AIDS incidence rates in Boston in 2002.

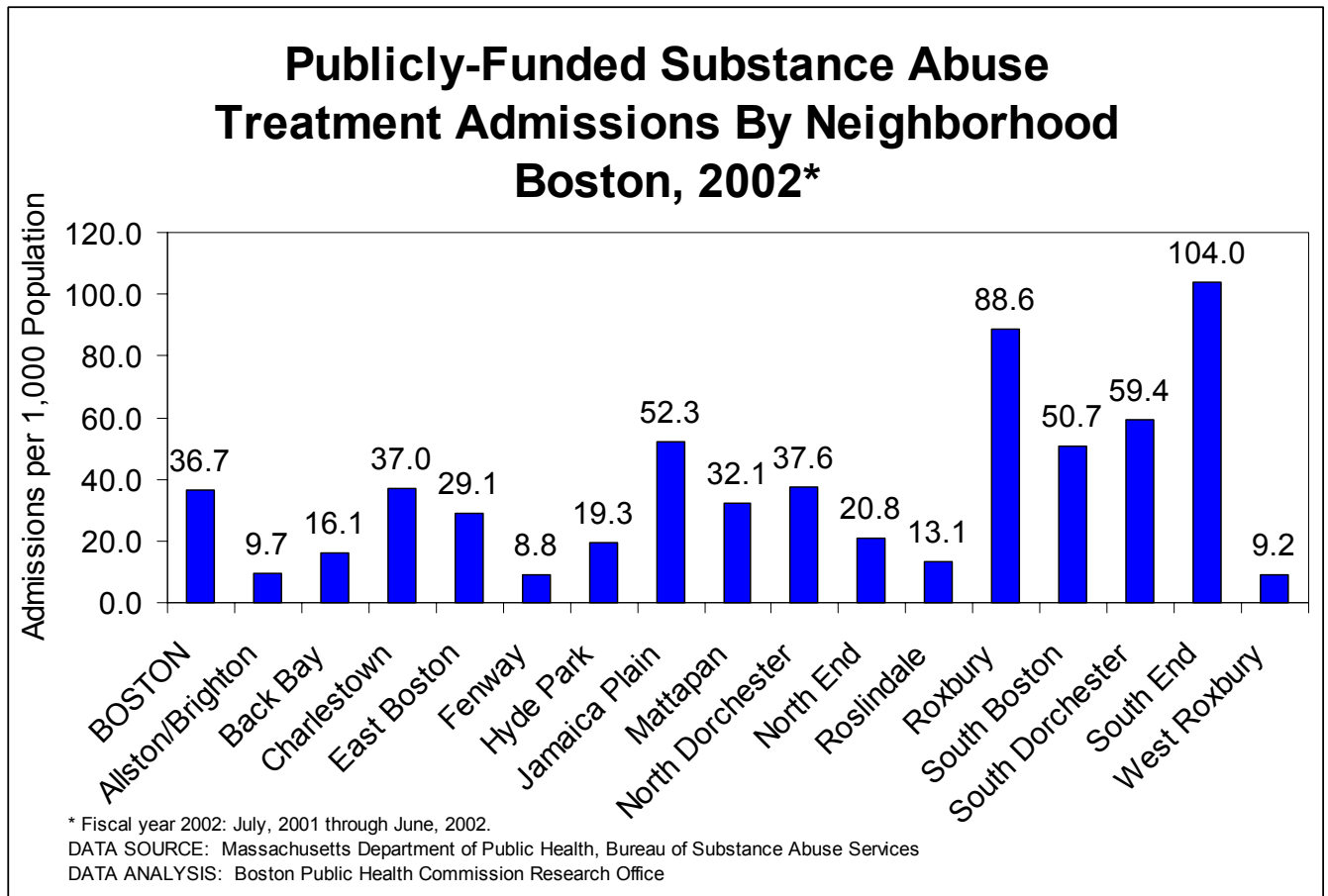
Sexually Transmitted Diseases



- In 2002, South Dorchester had Boston's highest incidence rate of reported sexually transmitted diseases (STDs) (1,828.2 new cases per 100,000 population), 2.4 times higher than the overall rate.
- Mattapan, the Fenway, and Roxbury had the city's second, third, and fourth highest STD incidence rates. In part, these higher rates may reflect local differences in STD screening and reporting practices.

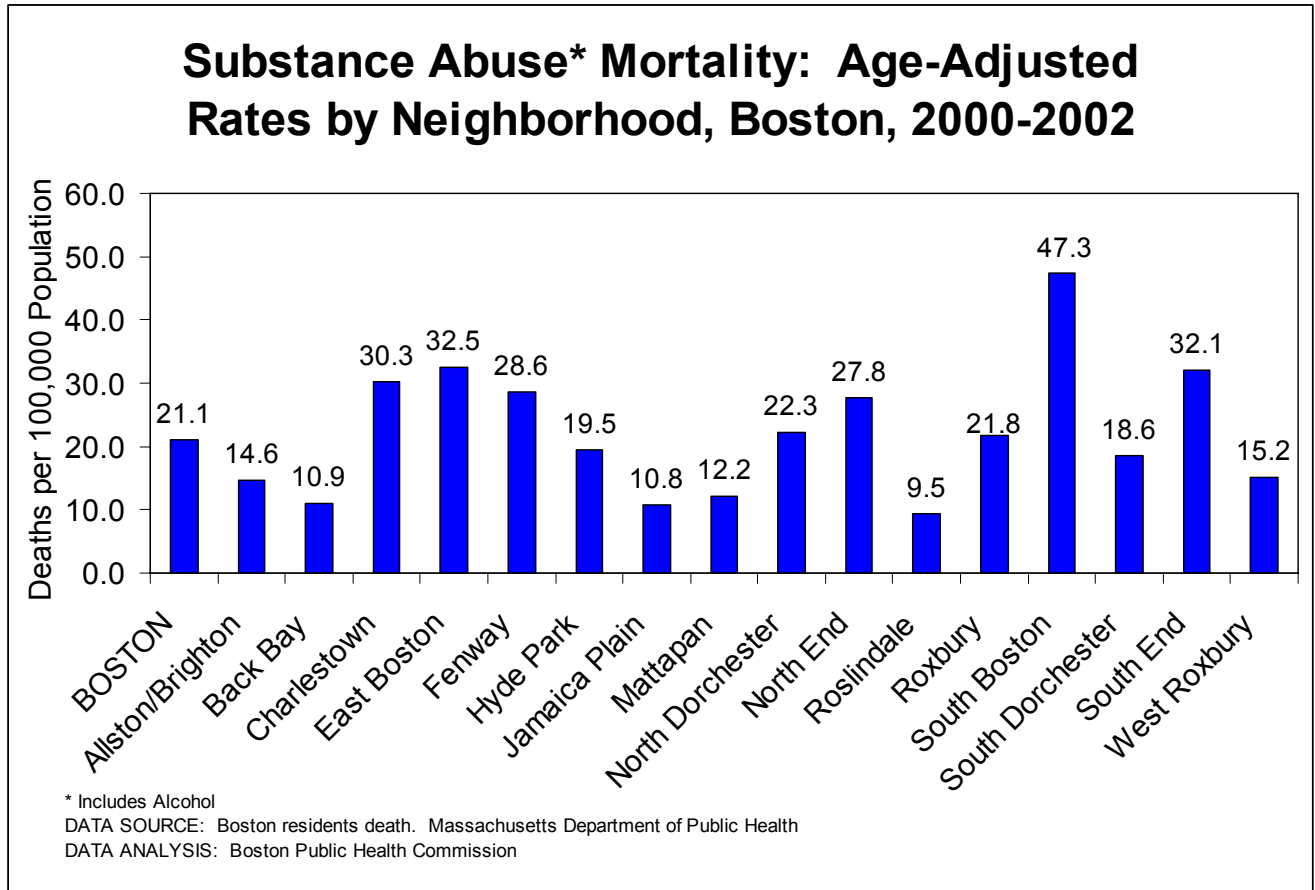
Substance Abuse

Treatment for substance abuse (alcohol and drug dependence or addiction) may include detoxification services, counseling, and other medical treatments. Treatment can be provided in a number of public and private settings.



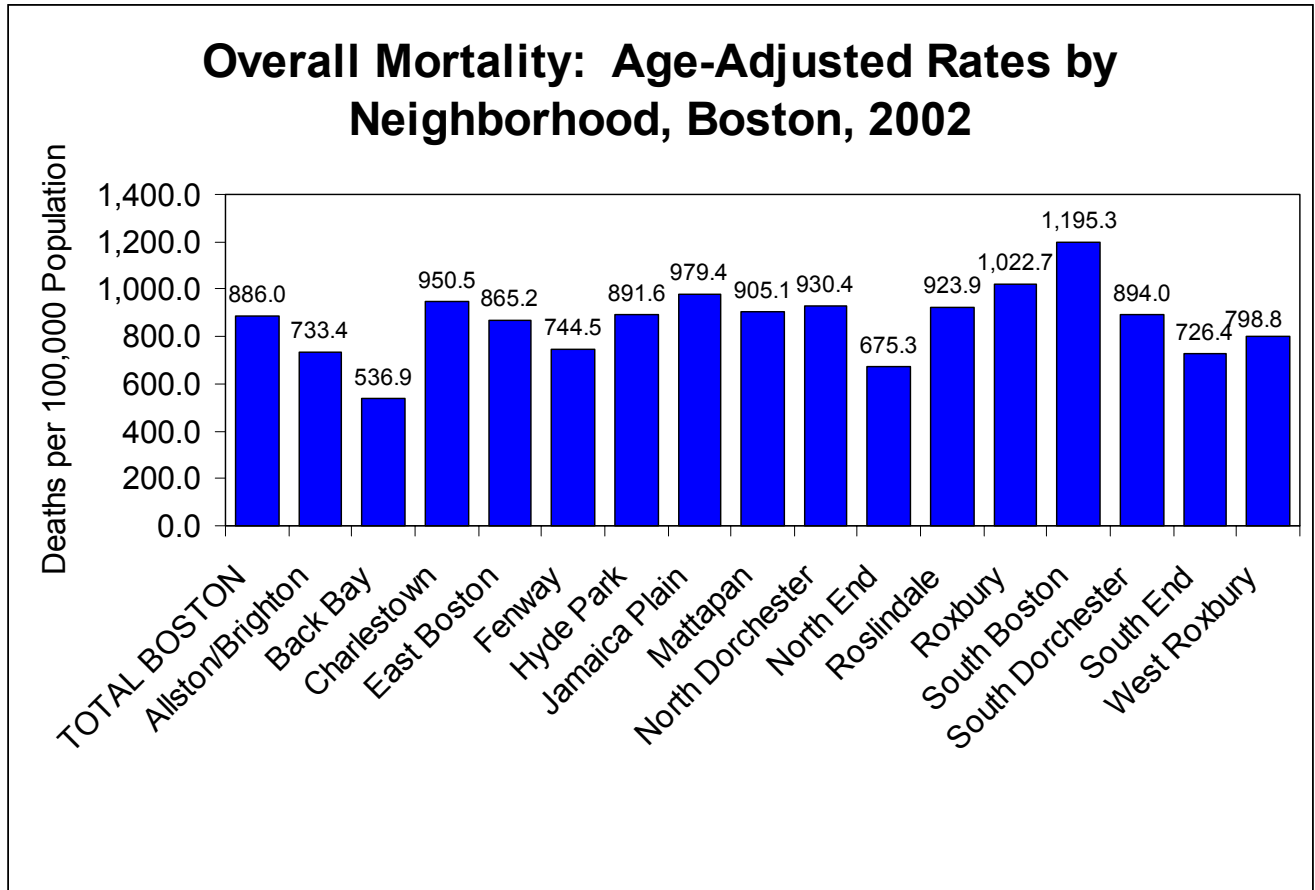
- Both the South End and Roxbury had substance abuse treatment admissions rates that were more than twice the overall Boston rate.
- The city's lowest admissions rates were for the Fenway, West Roxbury, and Allston/Brighton.

Substance abuse is a major cause of premature death among several segments of the population, especially males ages 25-44. It is also a leading cause of death at the state and national levels.



- South Boston had the highest substance abuse mortality rate of all Boston neighborhoods, at 47.3 per 100,000 population for the period 2000 through 2002. South Boston’s rate was more than twice the overall Boston rate of 21.1.
- Roslindale had the city’s lowest rate for 2000-2002, 9.5 deaths per 100,000 population.

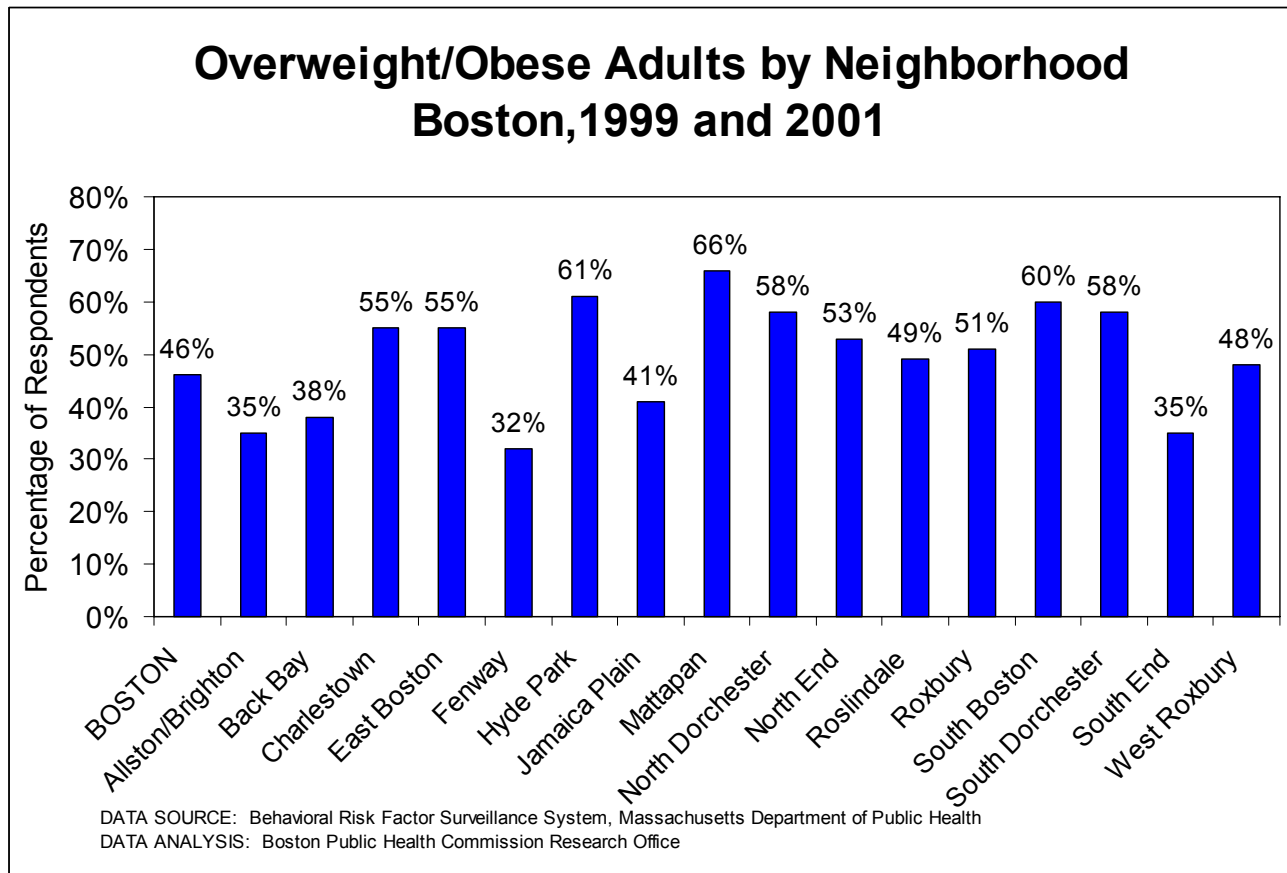
Overall Mortality



- During 2000-2002, overall mortality age-adjusted rates ranged from 536.9 deaths per 100,000 population in the Back Bay to 1,195.3 deaths per 100,000 in South Boston. The rate for South Boston was 34.9% higher than the rate for Boston (886.0 deaths per 100,000).
- Like South Boston, Roxbury residents also experienced a mortality rate that exceeded one thousand deaths per 100,000 population. For Roxbury, the rate was 1,022.7 deaths per 100,000.

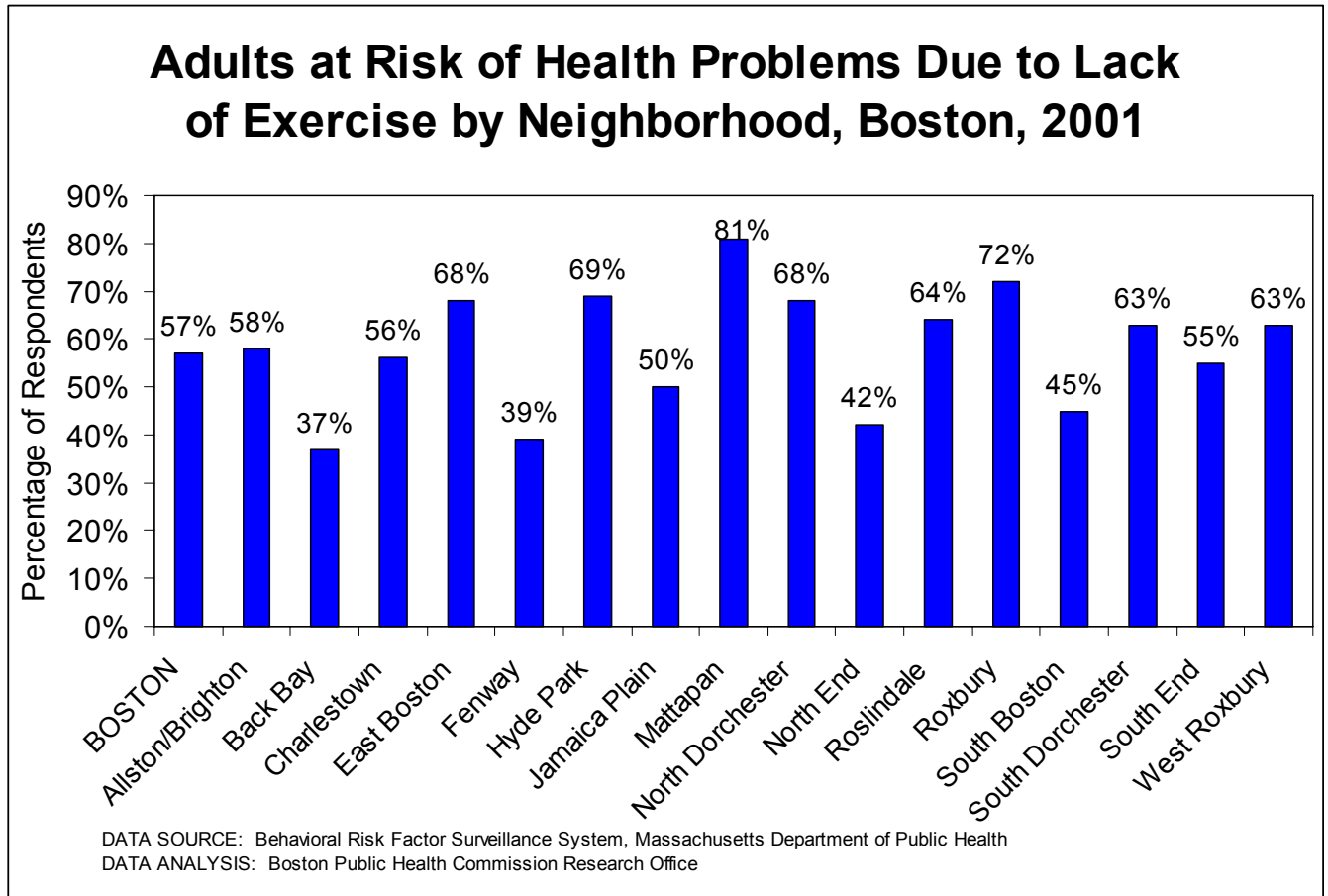
Heart Disease

Overweight and obesity have increased tremendously in the past 20 years at the national level. In 2000, 37% of the US adult population was estimated to be overweight, and an additional 20% was obese, as indicated by body mass index. In addition, the percentage of overweight children and teens has more than doubled in the past 20 years. The health consequences of being overweight or obese include diabetes, high blood pressure, heart disease, and certain cancers, among others.



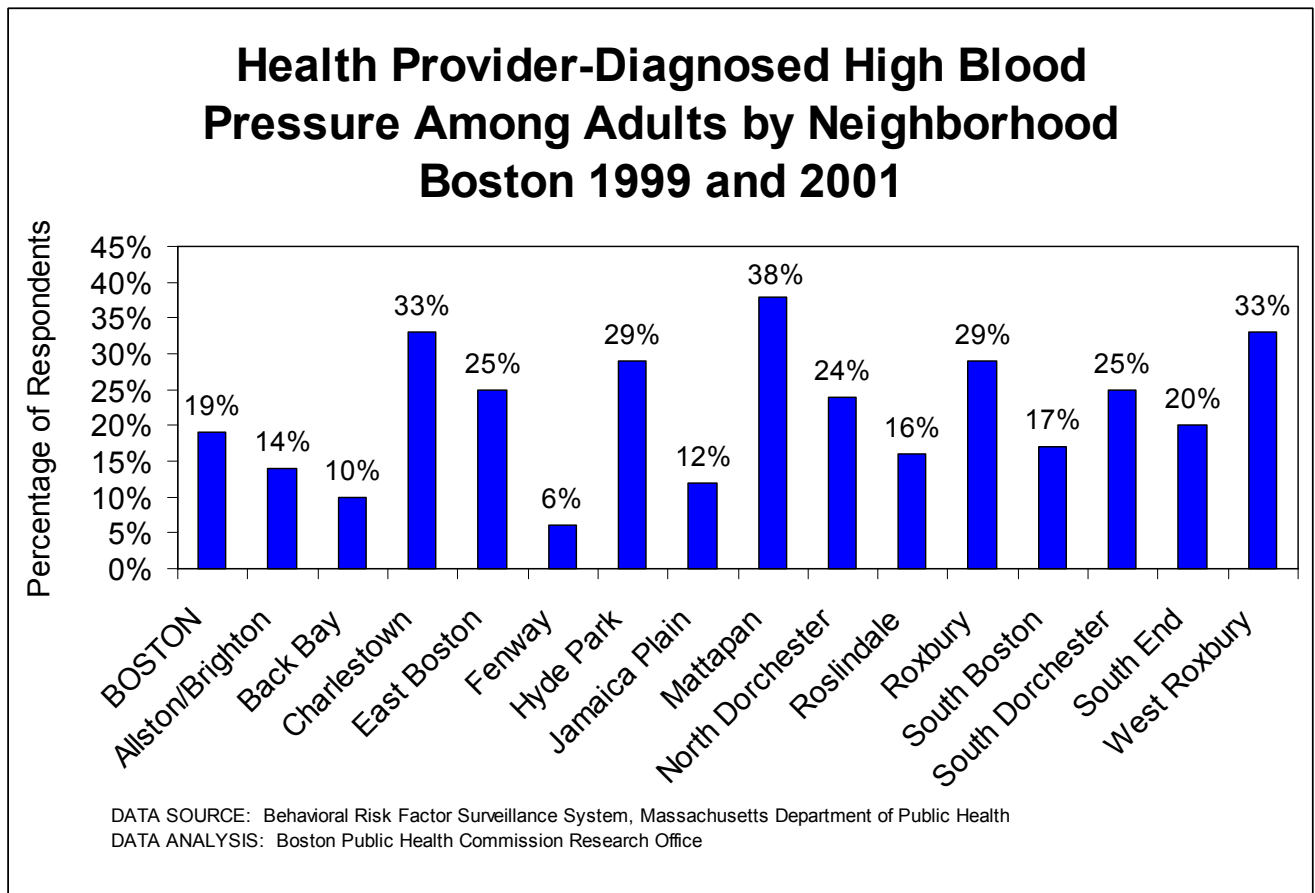
- Almost half (47%) of Boston residents in 1999 and 2001 were considered either overweight/or obese, as defined by the body mass index (BMI) ratio of weight-to-height. Adults are considered to be overweight if they have a BMI of 25.0-29.9 and obese if they have a BMI of 30.0 or more.
- The percentage of the population considered overweight varied considerably across Boston's sixteen neighborhoods. The highest percentage was in Mattapan, where 66% of the adult population was overweight or obese. The lowest percentage was in the Fenway area, where 32% of the adult population was overweight or obese.

Limited physical activity can contribute to overweight and obesity, arthritis, high blood pressure, heart disease, osteoporosis, diabetes, and certain cancers.



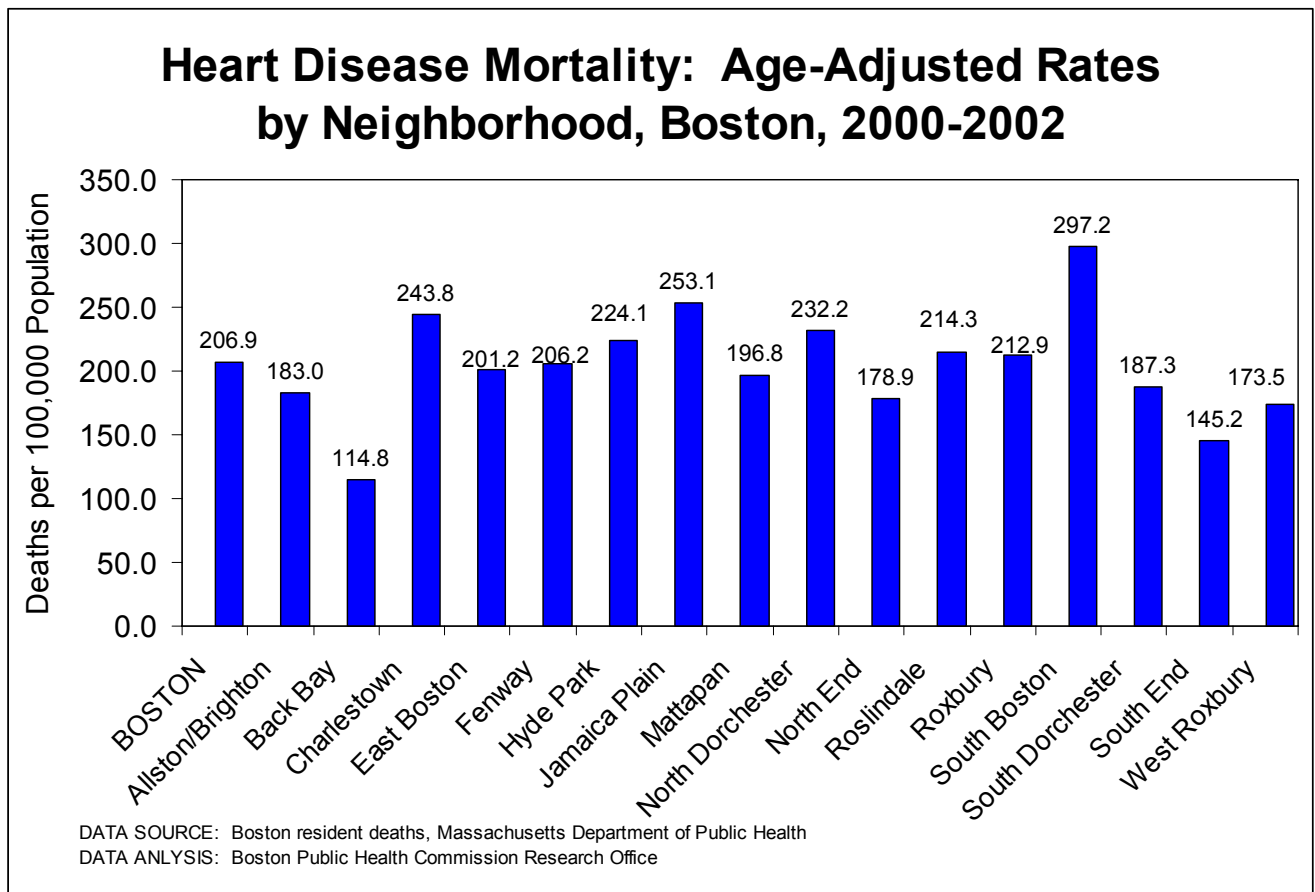
- In 2001, over half (57%) of Boston's adult population was at risk of health problems because of inadequate physical activity.
- The highest percentage of inadequate physical activity was in Mattapan, where 81% of the adult population had less physical activity than necessary to maintain good health. The lowest percentage was in the Back Bay area, where 37% of the adult population had inadequate physical activity.

Blood pressure describes the force that blood exerts against the walls of arteries. It rises and falls during the course of the day but when it stays up, it is called high blood pressure or hypertension. High blood pressure is a risk factor for heart disease, stroke, kidney disease, and blindness. The National Institutes of Health estimates that 1 of every 4 adults in the US has high blood pressure. Although people tend to develop high blood pressure as they get older, those who are overweight or have a family history of high blood pressure are at higher risk for developing it. African Americans are especially at risk.



- Almost a fifth (19%) of Boston's adult population reported having been diagnosed with high blood pressure.
- The highest prevalence of high blood pressure was among Mattapan residents, where 38% of the adult population said they had been diagnosed with hypertension. The lowest percent was in the Fenway, where only 6% of the adult population reported having been diagnosed with high blood pressure.

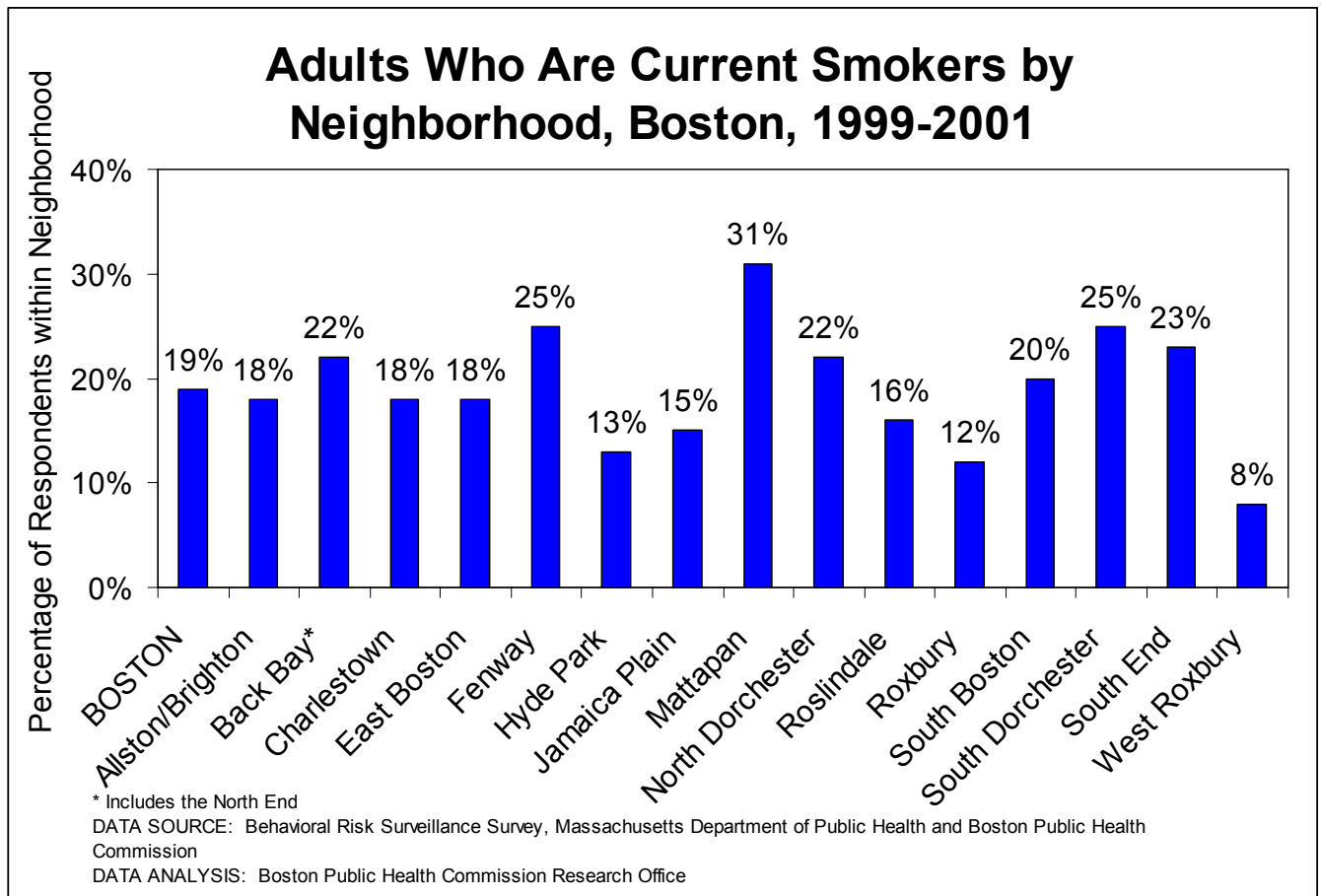
Heart (cardiovascular) disease is a group of disorders that affect the heart and blood vessels. Major risk factors are high blood pressure and high blood cholesterol. However, age, gender, race and ethnicity, exposure to tobacco smoke, poor nutrition, limited physical activity, overweight/obesity, and diabetes are associated with cardiovascular disease risk. Nationally, cardiovascular disease has been the leading cause of death for the US population for almost every year since 1900.



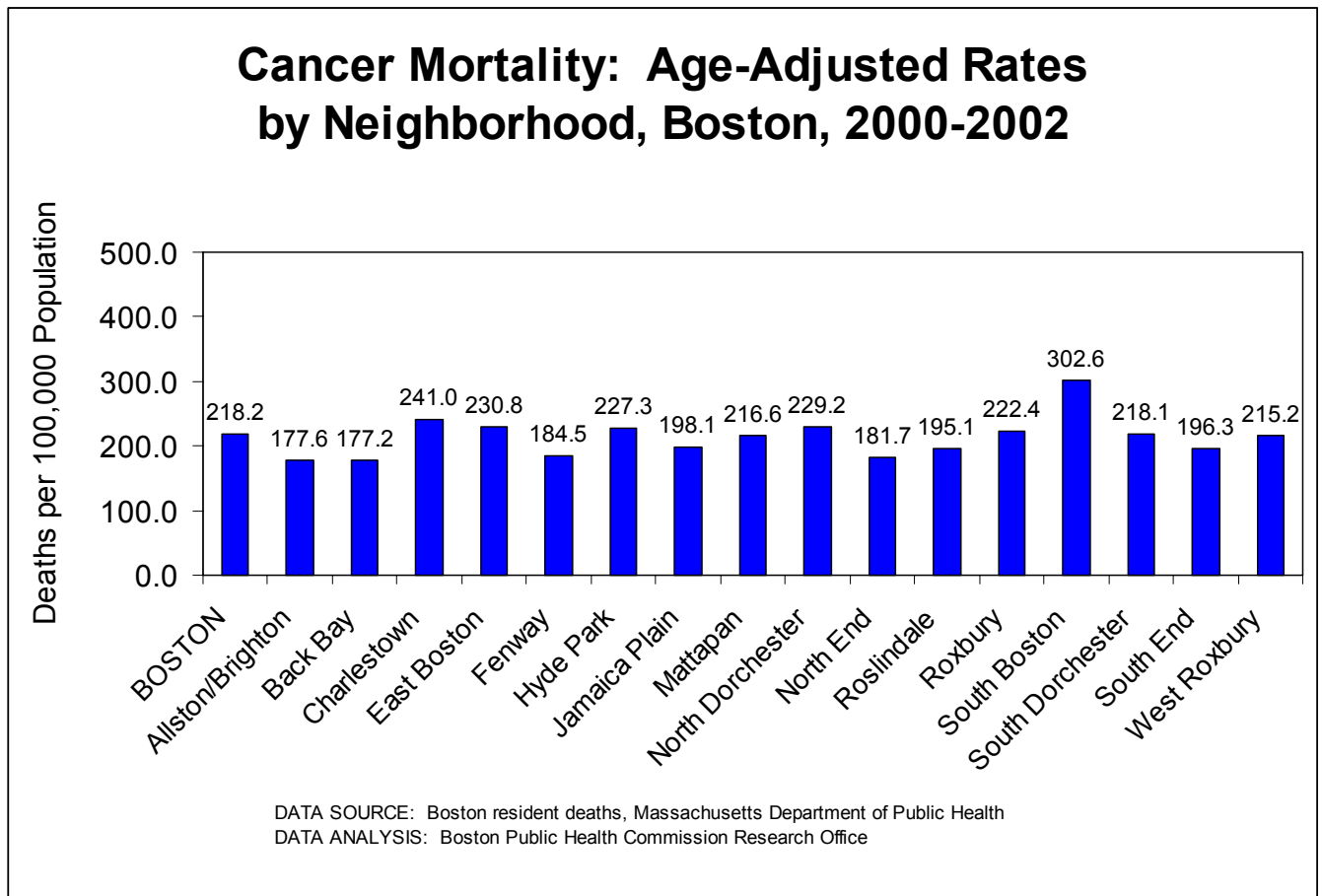
- Age-adjusted heart disease mortality rates vary considerably across Boston's sixteen neighborhoods.
- For 2000-2002, heart disease mortality was highest in South Boston, where the age-adjusted rate of 297.2 deaths per 100,000 population was 43.6% higher than the rate for Boston overall. Heart disease mortality was lowest in the Back Bay, where the age-adjusted rate of 114.8 deaths per 100,000 population was 44.5% lower than the rate for Boston overall.

Cancer

Cancer is a chronic disease involving uncontrollable growth and spread of abnormal cells. Lung cancer is the leading cause of cancer death in the US. Among the many risk factors for cancer are tobacco use, exposure to chemicals, radiation, infectious organisms, sunlight, heredity, hormones, immune conditions, metabolic mutations, and age. Many cancer deaths are preventable. According to the American Cancer Society, about a third of the cancer deaths expected for 2003 will be related to nutrition, physical inactivity, overweight or obesity, and other lifestyle factors.



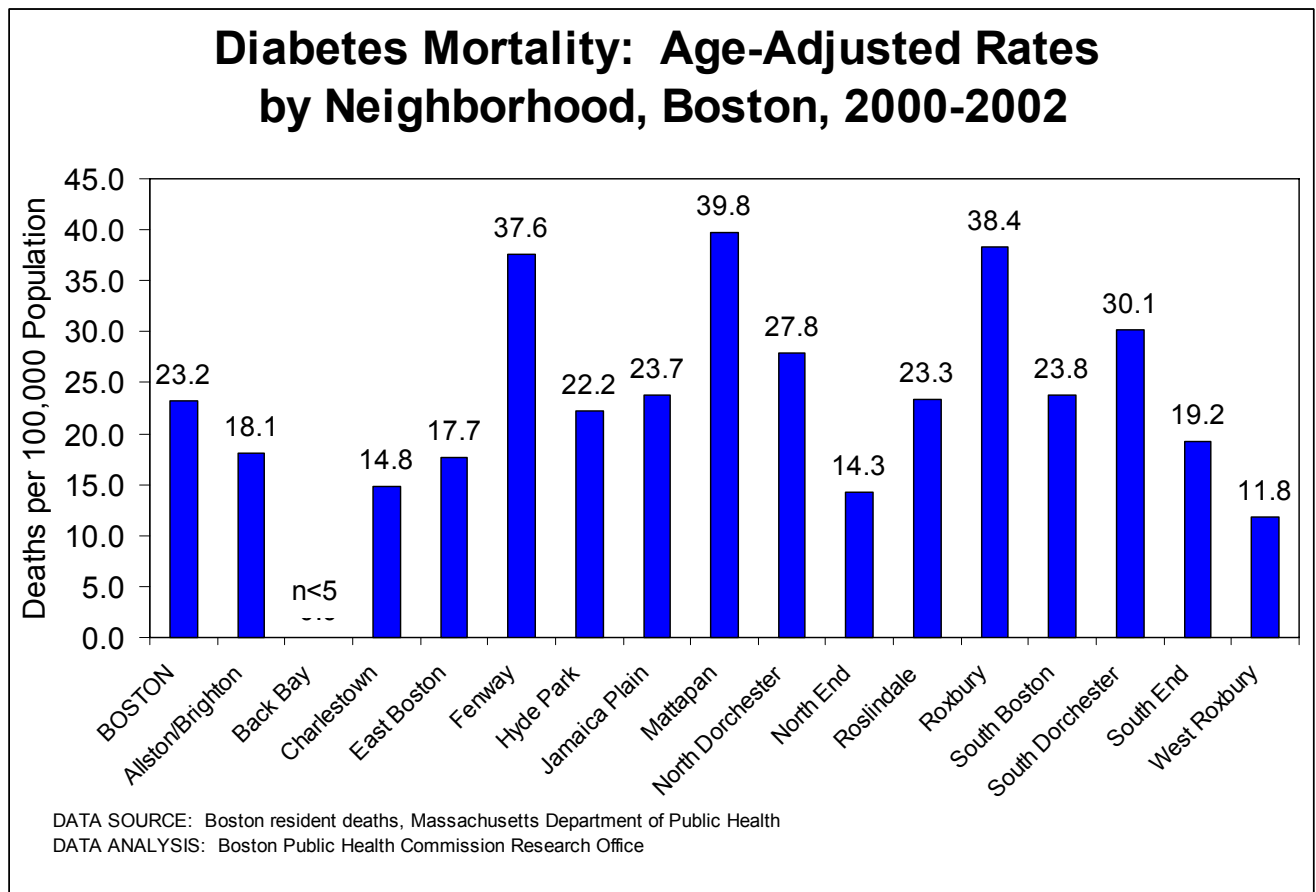
- Smoking is a potent risk factor for many serious health problems, among them cancer. The overall rate of current smoking among Boston adults is 19%. The rates for several Boston neighborhood, including Mattapan, South Dorchester, the South End, and the Fenway, are substantially higher than that for Boston overall.
- Mattapan residents had the highest smoking rate of all Boston neighborhoods (31%) and West Roxbury residents had the lowest (6%).



- During 2000-2002, age-adjusted cancer mortality rates for Boston neighborhoods ranged from 177.2 deaths per 100,000 population in Back Bay to 302.6 deaths per 100,000 population in South Boston.
- Cancer mortality rates for 6 of Boston's 16 neighborhoods exceeded the overall Boston rate of 218.2 deaths per 100,000 population. For example, rates for South Boston and Charlestown (302.6 and 241.0 deaths per 100,000) were 38.7% and 10.4% higher, respectively, than the Boston rate.
- Allston/Brighton, Back Bay, and the North End had the lowest cancer mortality rates of all Boston neighborhoods.

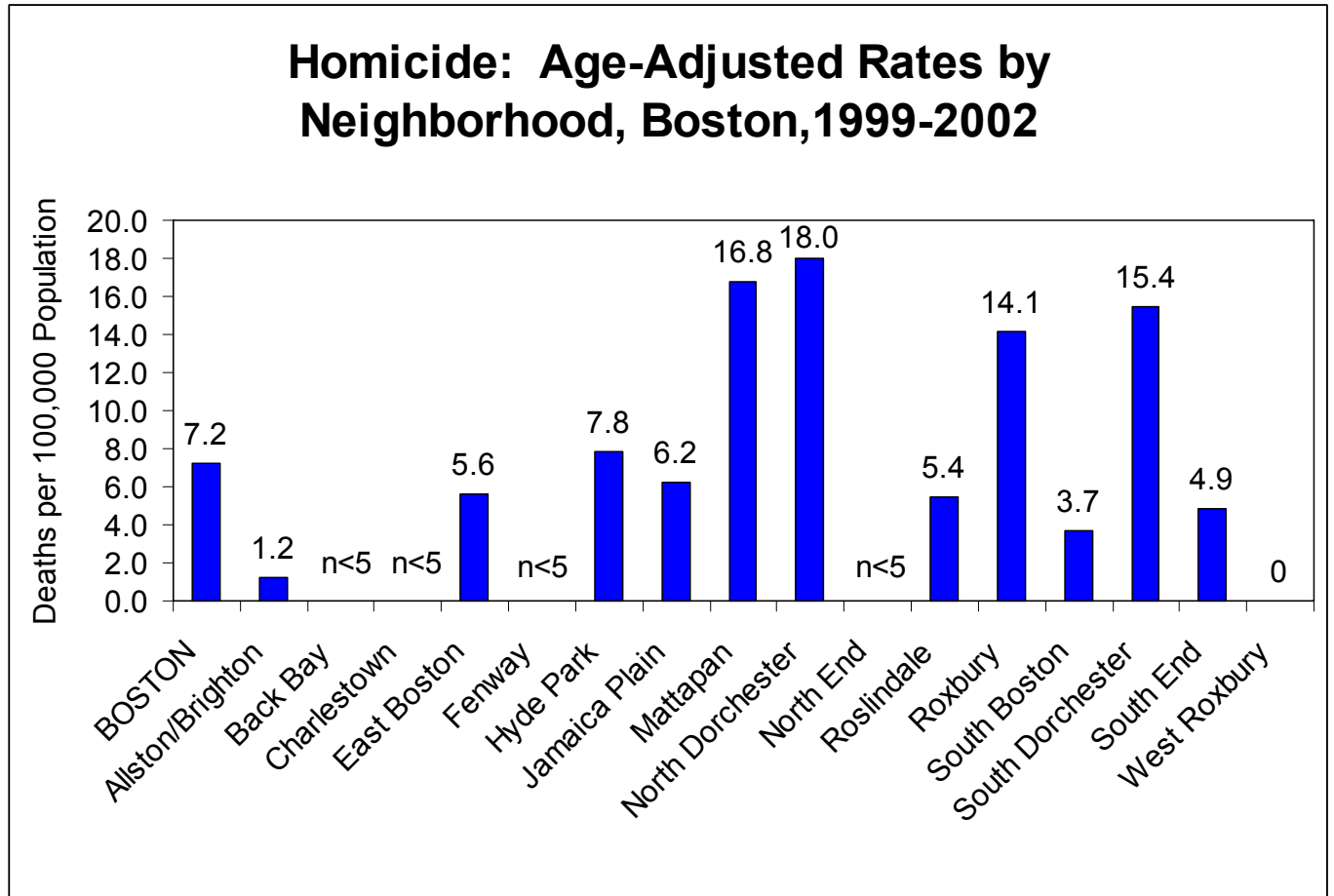
Diabetes

Diabetes is a chronic disease in which the body does not produce adequate insulin or does not properly use insulin. Insulin is a hormone in the body that is necessary for converting sugar, starches and other food. There are two major types of diabetes: Type 1 and Type 2. Type 1 diabetes occurs when the body does not produce insulin. Type 2 diabetes, the more common of the two types, occurs when the body does not properly use insulin. In 2002, diabetes was the sixth leading cause of death in the US.



- For this time period, diabetes mortality was highest in Mattapan, where the age-adjusted diabetes mortality rate of 39.8 deaths per 100,000 population was 71.6% higher than the rate for Boston overall. Diabetes mortality was lowest in West Roxbury, where the age-adjusted diabetes mortality rate of 11.8 deaths per 100,000 population was 49.1% lower than the rate for Boston overall.

Homicide



- During the period 1999-2002, there were 203 homicides of Boston residents, yielding an age-adjusted mortality rate of 7.2 per 100,000 population.
- The highest homicide mortality rates were for North Dorchester (18.0 deaths per 100,000), Mattapan (16.8 deaths per 100,000), South Dorchester (15.4 deaths per 100,000), and Roxbury (14.1 deaths per 100,000). These rates were more than double the overall Boston rate.
- The number of homicides was too low to provide rates for several Boston neighborhoods.

APPENDIX 1

NUMBER OF DEATHS FOR SELECTED CAUSES

Number of deaths for selected causes by race/ethnicity and sex, Boston, 1999-2002

Cause of Death	1999	2000	2001	2002
Heart Disease	1,138	1,067	1,112	964
Asian	21	25	24	18
Black	190	216	221	205
Latino	39	20	32	30
White	888	802	834	709
Male	516	511	518	456
Female	622	556	594	508
Cancer (all sites combined)	1,057	1,109	1,030	1,072
Asian	42	33	35	47
Black	238	273	254	251
Latino	37	39	42	40
White	740	764	698	733
Male	523	563	504	516
Female	534	546	526	556
Diabetes	108	98	107	140
Asian	N<5	N<5	6	5
Black	36	31	40	47
Latino	7	14	5	11
White	63	51	56	76
Male	52	36	41	61
Female	56	62	66	79
Stroke	239	270	251	227
Male	91	97	100	92
Female	148	173	151	135
All Injuries Combined	225	226	295	275
Male	150	161	215	194
Female	75	65	80	81
Chronic Obstruction Pulmonary Disease	212	172	182	156
Male	95	65	85	78
Female	104	107	97	78

Cause of Death	1999	2000	2001	2002
Pneumonia/Influenza	173	163	167	160
Male	64	72	68	56
Female	109	91	99	104
Nephritis/Nephrosis	119	125	117	107
Male	55	66	48	55
Female	64	59	69	52
Septicemia	104	118	119	112
Male	42	51	46	44
Female	62	67	73	68
Substance Abuse	90	108	127	116
Male	65	82	95	82
Female	25	26	32	27
HIV/AIDS	58	59	64	72
Male	43	42	49	51
Female	15	17	15	21
Total Deaths	4,491	4,500	4,575	4,412
Asian	126	128	147	135
Black	959	1,015	1,103	1,041
Latino	171	172	197	216
White	3,232	3,177	3,115	3,005
Male	2,070	2,110	2,141	2,092
Female	2,421	2,390	2,434	2,320

APPENDIX 2

TECHNICAL NOTES

TECHNICAL NOTES

Rates
Statistical Significance
Confidence Intervals
Population
Racial and Ethnic Designations
Age-Adjusted Mortality
Neighborhoods
Data Sources
Glossary

Rates

Four types of rates are presented in this report: crude rates, age-specific rates (ASR), age-adjusted rates (AARs), and incidence rates. A rate is a measure of some event, disease, or condition in relation to a unit of population, per year.

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.

Unless otherwise indicated, the age-specific rates provided in *The Health of Boston* are average annual rates. Average annual rates are calculated by dividing the age-specific rates by the number of years in the time period the data represent.

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 US standard population). AARs are used for Boston mortality data for overall Boston, for overall Boston mortality data by sex, by race/ethnicity, by neighborhood, and for hospitalization data.

Incidence rates are used to present data relating to reported new cases of disease during a specified time period and are usually calculated on the basis of every 100,000 people. Incidence rates may or may not be age-specific.

Statistical Significance

An array of statistical tools is available to determine whether findings, typically differences observed between groups or within a group over a period of time, are large enough that they are not likely to have been due to chance. Essentially, statistical significance testing provides an assessment of how reasonable it would be to conclude that an observed difference is real. It is not capable of overcoming other issues such as noncomparable samples or too few cases in a sample, but is a valuable guide to the interpretation of rates, proportions, and similar measures.

Statistical significance is only one measure of significance. There may be findings that have other relevance clinically or for public health programs, regardless of statistical significance. An absence of statistical significance should not be used to imply an absence of other significance. For most purposes, 95% confidence intervals are used to determine the statistical significance of findings.

Confidence Intervals

A confidence interval is a range of values used to describe uncertainty around a data point such as an age-adjusted mortality rate. Confidence intervals are a measure of variability in the data.

A confidence interval is calculated based on a stated probability (usually 95%) that the confidence interval includes the “real” value that would be identified if samples did not vary due to chance. In an example using an age-adjusted mortality rate, a 95% confidence interval would be described as having a 95% probability of including the “real” age-adjusted mortality rate. Generally, if confidence intervals overlap, the rates would be considered not significantly different. If the confidence intervals do not overlap, then the rates would be considered significantly different and the finding would be called statistically significant.

Confidence intervals provide a way of reporting the reliability of, for example, a rate or proportion. They also account for the difference between a sample from a population and the population itself.

C. Population

Health status reports often use population statistics for analyzing health data. These population statistics may be drawn from two sources. The first is the census of the population taken every ten years by the federal government, a literal count of all people living in the United States. The second is estimates of the population made by the US Census Bureau or some other source in the intervening years.

The census provides the best available actual count of the population. It also presents data to the level of small areas called census tracts, each of which has only a few thousand residents. Census tracts can be combined to produce neighborhood-level analyses.

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

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

Population estimates from the Massachusetts Institute for Social and Economic Research (MISER) and the Massachusetts Department of Public Health were used to calculate crude, age-adjusted, and age-specific rates for years between 1990 and 2000 U.S. Census.

Racial and Ethnic Designations

The classification of race/ethnicity depends upon the data source. In this report, all racial and ethnic designations except those used on the death certificate are self-reported. Several cautions should also be kept in mind when using data reported by race/ethnicity.

Race and ethnicity are social constructions, not biological facts. There is typically 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/Pacific Islander."

Since Latinos can be of any race, the federal sources often report data for Blacks and Whites, including Latinos in those categories. However, in *The Health of Boston*, Latino ethnicity is presented as a separate category. Exceptions to this are the hospitalization and asthma hospitalization data by race/ethnicity, for which race/ethnicity reporting practices vary by hospital. The US 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 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. The year 2000 standard US population is used in this report.

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

Mortality data are coded using ICD-10. The change from ICD-9 to ICD-10 means that causes of death classified according to the ICD-10 are not precisely comparable to causes of death classified according to ICD-9. Mortality charts in this report present data for 1999 and on separately from data for earlier years.

Boston Neighborhoods

Census tracts are so small that there are often not a sufficient number of health-related events—such as deaths—to calculate reliable rates. For *The Health of Boston* and other reports, census tracts are aggregated into Boston neighborhoods for the presentation of the mortality data. Zip codes are combined into neighborhoods for the presentation of hospitalization data by neighborhood.

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.

Data Sources

AIDS Reporting System (ARS). Massachusetts Department of Public Health, Bureau of Communicable Disease Control, HIV/AIDS Surveillance Program.

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

Acute Care Hospital Discharges. Massachusetts Health Data Consortium, Inc.

Age of Housing: Boston. Census 2000, US Department of Commerce, Bureau of the Census, American FactFinder.

Behavioral Risk Factor Survey. Behavioral Risk Factor Surveillance System. Boston: Massachusetts Department of Public Health and Boston Public Health Commission.

Boston resident births. Massachusetts Department of Public Health, Center for Health Information, Statistics, Research, and Evaluation, Registry of Vital Records and Statistics.

Boston resident deaths. Massachusetts Department of Public Health, Center for Health Information, Statistics, Research, and Evaluation, Registry of Vital Records and Statistics.

Communicable diseases. Boston Public Health Commission, Communicable Disease Control Division.

Census 2000, US Department of Commerce, Bureau of the Census, American Fact Finder.

Drug arrests. Boston Police Department, Office of Research and Evaluation.

Emergency department visits. Division of Health Care Finance and Policy.

Health insurance coverage. Health Insurance Status of Massachusetts Residents Survey. Boston: Division of Health Care Finance and Policy, Massachusetts Department of Public Health.

Homeless counts. City of Boston Emergency Shelter Commission.

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

Open Space Plan 2002-2006. Boston Parks and Recreation Department. Policy and Resource Development Unit.

Population estimates. Massachusetts Institute for Social and Economic Research, University of Massachusetts, Amherst.

Sexually transmitted diseases. Massachusetts Department of Public Health, STD Division, and the Boston Public Health Commission Communicable Disease Control Division.

Substance abuse treatment. Massachusetts Department of Public Health, Bureau of Substance Abuse Services.

Youth Risk Behavior Survey. Boston School Department, Unified Student Services.

Weapon-related injuries. Massachusetts Department of Public Health, Weapon-Related Injury Surveillance System.

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 8 of the Federal Groupers. The cause-of-death codes are from the International Classification of Diseases, 9th Revision, (ICD-9), and International Classification of Diseases: 10th Revision (ICD-10), products of the US Department of Health and Human Services.

AAR: See Age-Adjusted Mortality Rate.

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

Adolescent Births: Births to adolescents 15 to 17 years of age.

African American: All persons self-identified as being born in the US and of African descent. 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.

Age-Adjusted Mortality Rate (AAR): The age-adjusted mortality rate is calculated by applying the age-specific mortality rates in a population to a standard population (typically, and in this report, the 2000 US population). The age-adjusted rate of one area or group can be compared to the age-adjusted rate of another area or 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 Healthy People 2010 goals.

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

Age-Specific Birth Rate: The number of live births in a population divided by the total female population for a specific age group and expressed per 1,000 persons.

Alcohol-Related Deaths: Causes of death directly related to alcohol use/abuse, such as liver disease attributed to alcohol consumption, accidental alcohol overdose, etc. 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. For pre-1999 data in this report, ICD-9 codes 291, 303, 305.0, 357.5, 425.5, 535.3, 571.0-571.3, 790.3, E860; for data from 1999 and later years ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, R78.0, X45, X65, Y15.

Amebiasis: Parasitic infection of the intestine, spread through ingestion of fecally contaminated food or water. Transmission may occur sexually by fecal-oral contact. Symptoms are often mild and can 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 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 96-98.

Behavioral Risk Factor Surveillance System (BRFSS): A random telephone survey of Massachusetts adults ages 18 years and older. The survey is sponsored by the Centers for Disease Control and Prevention (CDC) and is conducted annually in all 50 states. The BRFSS collects information regarding various health-related issues, such as behavior, attitudes, knowledge, access to health care, and opinions on health policy issues. The responses to the survey provide important information regarding the prevalence of risk factors that are responsible for causing premature death, illness, and disability among Massachusetts residents.

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 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.

Blood Cholesterol: Cholesterol is a soft, waxy substance found among the lipids (fats) in the blood stream and cells. It is an important steroid because it comprises cell membranes, hormones, and tissues. However, levels of cholesterol in the blood that are too high are a major risk factor for coronary heart disease, which leads to a heart attack.

Blood Lead Levels: The amount of lead detected in the blood during the finger-stick screening or venous-confirmation blood tests. (“Venous” means “in or of the bloodstream or veins.”)

Body Mass Index (BMI): Calculated by dividing a person’s weight in kilograms by his or her height in meters squared (kg/m^2); a measure of the appropriateness of weight in relation to height. This calculation is used to screen and monitor populations in order to detect risks of health or nutritional disorders.

BMI is used differently with children than with adults and is plotted according to age and sex-specific charts. The 1995 BMI cutpoints for adults are as follows:

Overweight	BMI of 25.0 to 29.9
Obese	BMI of 30.0 or more

The Centers for Disease Control and Prevention states that a BMI of 30 is equivalent to one being approximately 30 pounds overweight.

In 1995 the World Health Organization released new guidelines adopted by Healthy People 2010 for categorizing adult males and females as overweight.

Campylobacter: Infectious bacterial disease transmitted by the ingestion of undercooked poultry or pork, or contaminated milk or water. Transmission may also occur through contact with infected pets and farm animals. Illness typically lasts one week, and symptoms include diarrhea, cramping, abdominal pain, and fever within 2 to 5 days after exposure to the organism.

Cancer: A group of diseases characterized by uncontrolled growth and spread of abnormal cells. For pre-1999 data in this report, ICD-9 codes 140-208; for 1999 data and later years, ICD-10 C00-C97.

Breast Cancer (Female): For pre-1999 data in this report, ICD-9 code 174; for data from 1999 and later years, ICD-10 code C50.

Colorectal Cancer: For pre-1999 data in this report, ICD codes 153-154; for data from 1999 and later years, ICD-10 codes C18-C21.

Lung Cancer: For pre-1999 data in this report, ICD-9 code 162; for data from 1999 and later years, ICD-10 codes C33-C34.

Prostate Cancer: For pre-1999 data in this report, ICD-9 code 185; for data from 1999 and later years ICD-10 codes C61.

Cardiovascular Disease (CVD): A group of diseases that affect the heart, including high blood pressure, coronary heart disease, stroke, congestive heart failure, and congenital heart defects. For pre-1999 data in this report, ICD-9 codes 390-398, 402, 404, 410-429, 430-434, 436-438, 440; for data from 1999 and later years, ICD-10 codes I00-I09, I11, I13, I20-I51, I60-I69, I70.

Cellulitis: An infection of skin or connective tissues (an infection in or close to the skin) is usually controlled by body defense mechanisms. DRG 277-279.

Census 2000: The count of the population undertaken by the Census Bureau in 2000. At the time of publication of this report, national, state, and local numbers have been released. The 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.

Cerebrovascular Disease: A set of diseases of the vascular system (which conveys blood throughout the body) that affect the supply of oxygen to the brain, thereby damaging brain cells. This category includes strokes. For pre-1999 data, ICD-9 codes 430-434, 436-438; for data from 1999 and later years, ICD-10 codes I60-I69. DRG 14 for hospitalization data.

Chlamydia: A sexually transmitted disease caused by any member of the genus Chlamydia.

Chronic Obstructive Pulmonary Disease (COPD): Diseases including bronchitis, asthma, emphysema, and allergies from inhaled organic dust particles that decrease the ability of the lungs to perform their function (oxygenating the blood system). For pre-1999 COPD data in this report, ICD-9 codes 490-494, 496; for 1999 data, ICD-10 codes J40-J47. For hospitalization data, the DRG code is 88.

Colon and Rectum: The two parts of the large intestine. The colon comprises the upper five or six feet of the large intestine, while the rectum comprises the remaining five to six inches. Together, they are the location of colorectal cancers.

Coronary Heart Disease: A disease of the heart caused by narrowing or blockage of the arteries supplying the heart muscle. For pre-1999 data in this report, ICD-9 codes 402, 410-417, 429.2; for data from 1999 and later years, ICD-10 codes I11, I20-I25, I26-I28, I51.6.

Colonoscopy: A visual screening examination, for colorectal cancer, of the full lining of the colon and rectum, parts of the large intestine.

Confidence Interval: The range within which lies the true value of a variable, based on a chosen probability. For example, given the probability 95%, one can be ninety-five percent certain that the true value lies between numbers X and Y. The range between X and Y is the confidence interval.

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-9-CM codes 250.0-250.9; for data from 1999 and later years, ICD-10 codes E10-E14.

Diagnostic Related Grouping (DRG) Codes: Codes used to group causes of hospitalization.

Drug-Related Deaths: Causes of death related to the 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. For pre-1999 data in this report, ICD-9 codes 292, 304, 305.2-305.9, E850-E858, E950.0-E950.5, E962.0, E980.0-E980.5; for data from 1999 and later years, 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, Y10-Y14.

E-Codes: "E-codes" refer to the supplementary classification within ICD-9-CM of the external causes of injury and poisoning, such as environmental events, circumstances, and conditions. This is particularly helpful in planning intervention. E-codes are intended to be used as an addition to the main ICD code, which classifies the injury or poisoning by the biological system affected.

Gastroenteritis, Esophagitis, and Miscellaneous Digestive Disorders: Infection of the mucous membranes of the stomach and intestine.

Giardiasis: A parasitic infection that is transmitted person-to-person through hand-to-mouth contact with infected feces. Transmission may also occur through ingestion of fecal matter in recreational and drinking water. Symptoms include diarrhea, loose or watery stool, stomach cramps, and upset stomach.

Gonorrhea: A contagious catarrhal inflammation of the genital mucous membrane, transmitted chiefly by sexual intercourse and due to *Neisseria gonorrhoeae*; may involve the lower or upper genital tract, especially the urethra, endocervix, and Fallopian tubes, or spread to the peritoneum and rarely to the heart, joints, or other structures by way of the bloodstream.

Healthy People 2010 Goals and Objectives: Targets established by the US 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 diseases affecting the heart, including valve and conductive disorders as well as hypertensive diseases. For pre-1999 data in this report ICD-9 codes 390-398, 402, 404, 410-429; for data from 1999 and later years, ICD-10 codes I00-I09, I11, I13, I20-I51.

Heart Failure and Shock: Heart failure occurs when the heart is unable to pump blood in an efficient manner. Shock results when the heart cannot pump blood adequately to the tissues and vital organs. DRG 127.

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

Hepatitis A: Liver disease caused by infection of 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. 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 infections. For pre-1999 data in this report ICD-9 codes 042-044; for data from 1999 and later years, 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 700-702, 704-708, 710-714.

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. For pre-1999 data in this report, ICD-9 codes E960-E969; for data from 1999 and later years, ICD-10 codes X85-Y09, 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-9 Codes: Codes designed for the classification of morbidity and mortality information for statistical purposes and for the indexing of hospital records by disease and operations for data storage and retrieval. International Classification of Disease Codes, 9th Revision, Clinical Modification (ICD-9-CM) is based on the official version of the World Health Organization's 9th Revision, International Classification of Diseases (ICD-9). ICD-9 codes were used to classify mortality data from 1979 to 1998. ICD-9 classification has been replaced by ICD-10 classification. ICD-9CM codes are still used to classify mortality data.

ICD-10 Codes: Data from 1999 and later years is classified according to the International Classification of Disease Codes, 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 reported new cases of a particular disease over a period of time and in relation to the population in which it occurs.

Incident: A term used by Emergency Medical Services (EMS) to refer to an event leading to the dispatch of one or more Boston EMS units.

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. The determinations of intent are for purposes of medical record-keeping only. Each chart that includes data on injury deaths specifies exactly which types of injuries are included. For hospitalization-related charts and text in this report, injury is an aggregation of DRGs 280-282, Major Diagnostic Classification (MDC) 21, 22, and 24 which include for, example, surgical procedures performed due to injury, traumatic injury (open wounds, multiple fractures, limb reattachment), poisoning and toxic effects of drugs, and burns.

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.

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

Malignant Tumor: A tumor which has the ability to invade the surrounding tissues and to spread to other tissue and organ sites. Only malignant tumors are classified as cancers.

Mammogram: A radiographic examination of the breast to screen for malignancies.

Median: Median is the middle value in a distribution. The median divides the total frequency into two parts. One half the cases fall below the median and one half fall above the median. This should not be confused with mean, which is the arithmetic average of a set of values.

Metabolic Disorders: A condition that disrupts the biological process of breaking down food into a form useable by the body.

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.

Moderate Physical Activity: Defined here as physical activity for 30 minutes that does not cause sweating or hard breathing, on five or more of the seven previous days.

Morbidity: Illness, disease, and/or injury. May be presented as a rate in a specific population in a geographical locality within a particular time period.

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

N<5: A notation used on charts in *The Health of Boston* to indicate that for this health indicator there were fewer than five occurrences (for example, births, deaths, new case of a disease) and that a rate could not be calculated.

Neighborhood: One of 16 distinct geographical areas in Boston.

Neisseria Meningitidis: Acute bacterial infection transmitted through direct contact, including respiratory droplets from nose to throat of infected people. Symptoms include sudden onset of fever, intense headache, nausea, vomiting, and stiff neck. Clinical syndromes include meningoenzephalitis, myocarditis, disseminated intravascular coagulation, and septic shock.

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

Pap Smear: A screening test to detect cancerous or precancerous conditions of the cervix.

Pertussis: Also known as "whooping cough," acute bacterial disease involving the respiratory tract, transmitted by direct contact with airborne droplets from mucous membranes. Symptoms include repeated coughing and expelling of mucous.

Pneumonia/Influenza: Bacterial or viral infections of the lungs that primarily affect the aged and persons with compromised immune systems. For pre-1999 data in this report ICD-9 codes 480-487; for 1999 data ICD-10 codes J10-J18.

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

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

Risk Factor: A characteristic or agent whose presence increases the probability of occurrence of a particular disease, injury, cause of death, or birth outcome.

Salmonellosis: Bacterial infection transmitted by ingestion of contaminated food including raw and undercooked eggs, meat, poultry, raw milk, and water. Symptoms include diarrhea, fever, and abdominal cramps.

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

Shigellosis: Acute bacterial disease of the large and small intestine transmitted by direct or indirect fecal-oral contact. Symptoms include diarrhea accompanied by fever, nausea, vomiting, and abdominal pain.

Shock: See Heart Failure and Shock.

Sigmoidoscopy: A screening test for colorectal cancer to examine the rectum and lower colon, parts of the large intestine.

Simple Pneumonia/Pleurisy: Bacterial or viral infection of the lungs and inflammation of the pleura, the membrane that covers both lungs. DRG 89-91.

Socioeconomics: The statistical study of the social and economic characteristics of a population, such as education and poverty levels.

Statistical Significance: A certain group of statistical tests determines whether findings accurately describe the population of interest or whether they can be explained by chance. If these tests identify the findings to be outside of the range of chance, they are considered to have achieved statistical significance.

Standard Population: An estimate of the US 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 US 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. For pre-1999 data in this report, ICD-9 codes 430-434, 436-438; for 1999 data, 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 pre-1999 alcohol related data in this report, ICD-9 codes 291, 303, 305.0, 357.5, 425.5, 535.3, 571.0-571.3, 790.3, E860; for 1999 data, ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, R78.0, X45, X65, Y15. For pre-1999 drug-related data in this report, ICD-9 codes 292, 304, 305.2-305.9, E850-E858, E950.0-E950.5, E962.0, E980.0-E980.5; for 1999 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, Y10-Y14. Hospitalization substance abuse data include alcohol and/or drug abuse, dependence, and detoxification and rehabilitation therapy (MDC code 20).

Suicide: The intentional and voluntary taking of one's own life. ICD-9-CM codes E950.0-E959.9. For data from 1999 and later years, ICD-10 codes X60-X84, Y87.0.

Syphilis: An acute and chronic infectious disease caused by *Treponema pallidum* and transmitted by direct contact, usually through sexual intercourse. After an incubation period of 12 to 30 days, the first symptom is a chancre, followed by slight fever and other constitutional symptoms.

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

Unintentional Injury: An accidental injury. ICD-9-CM codes E800.0-E809.9, E830.0-E949.9, E980.0-E989.9. The ICD-9-CM codes used by the Healthy People 2010 are slightly different: E800.0-E949.9. For the data from 1999 and later years, 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, Y86.

Uterine Procedures: For hospitalization-related charts and text in this report, uterine procedures are an aggregation of DRGs 354-359, codes for surgical procedures involving the uterus, ovaries, and/or fallopian tubes.

Varicella: Also known as chicken pox, a highly contagious viral infection transmitted by direct contact or through airborne droplets from coughing or sneezing. Symptoms include a skin rash of blister-like lesions, usually on the face, scalp, or trunk.

Vigorous Physical Activity: Defined here as physical activity that causes sweating and hard breathing and promotes cardiorespiratory fitness, for at least three days per week for 20 minutes or more per occasion.

Viral Meningitis: Viral infection resulting in inflammation of the tissues that cover the brain and spinal cord. The virus is transmitted through direct contact with respiratory secretions from an infected person. Symptoms include fever, severe headache, stiff neck, drowsiness or confusion, nausea, and vomiting. Also called aseptic meningitis.

Weighted Percentage: A value determined by assigning weights to individual measurements. Each value is assigned a nonnegative coefficient (weight).

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

Youth Risk Behavior Surveillance System (YRBSS): A surveillance system developed by the Centers for Disease Control and Prevention (CDC) to monitor the prevalence of youth behaviors that influence health. The survey consists of representative samples of ninth-through twelfth-graders in the United States.

HEALTHY PEOPLE 2010 GOALS AND OBJECTIVES

Healthy People 2010

Category and Objective:	Target
◆ Infant Mortality Rates Reduce deaths in infants <1 year old	4.5 per 1,000 live births
◆ Low Birthweight Reduce low birthweight rate	5.0 % of births
◆ Teen Birth Rates Reduce adolescent births	46 births per 1,000
◆ Childhood Lead Poisoning	0
◆ Childhood Asthma Reduce hospitalizations for children <5	25 per 10,000
◆ STD Reduce by Type: Chlamydia Males ages 15-24 attending STD clinics Females ages 15-24 attending STD/family planning clinics Gonorrhea Primary and secondary syphilis	 3.0% 3.0% 19 new cases per 100,000 0.2 new cases per 100,000
◆ AIDS Reduce AIDS among adolescents and adults	1.0 new cases per 100,000
◆ Cancer Reduce overall cancer death rate Reduce the lung cancer death rate Reduce breast cancer death rates Reduce cancer uterine cervix cancer death rates Reduce colorectal cancer death rates Reduce oropharyngeal cancer death rates Reduce prostate cancer death rates Reduce melanoma cancer death rates	 158.7 deaths per 100,000 44.8 deaths per 100,000 22.2 deaths per 100,000 females 2.0 deaths per 100,000 females 13.9 deaths per 100,000 2.6 deaths per 100,000 28.7 deaths per 100,000 males 2.5 deaths per 100,000
Screening Increase percentage of females who receive a Pap test: Females 18 and over who have ever received one Females 18 and over who received one in preceding 3 years	 97% 90 %
Increase percentage of females ages 40 and over who received a mammogram within past 2 years	70 %
Increase percentage of adults with colorectal cancer screening examination: Adults over age 50 who have ever received a sigmoidoscopy Adults over age 50 who received a fecal occult blood test within past 2 years	 50 % 50%

Category and Objective:	Target
<ul style="list-style-type: none"> • Coronary Heart Disease (CHD) Reduce CHD mortality rate Risk Factors: Reduce proportion of adults with high blood pressure Reduce percentage of adults with high blood cholesterol Reduce proportion of adults who are obese 	166 deaths per 100,000 16 % 21% 15%
<ul style="list-style-type: none"> ◆ Stroke Reduce stroke mortality rate 	48 deaths per 100,000
<ul style="list-style-type: none"> ◆ Diabetes Reduce diabetes mortality rate Reduce rate of lower extremity amputations among diabetics 	45 deaths per 100,000 5 deaths per 1,000 per year
<ul style="list-style-type: none"> ◆ Substance Abuse Reduce drug mortality rate Reduce cirrhosis mortality rate Reduce cigarette smoking by adults Reduce tobacco use by adolescents Reduce binge drinking among adults ages 18 and over Reduce binge drinking among adolescents ages 12-17 	1 death per 100,000 3 deaths per 100,000 12 % 21 % 6% 3%
<ul style="list-style-type: none"> ◆ Violence Reduce homicide mortality rate Reduce suicide mortality rate Reduce rate of suicide attempts by adolescents 	3.2 homicides per 100,000 6.0 deaths per 100,000 12 month average of 1%
<ul style="list-style-type: none"> ◆ Nutrition Increase the proportion of persons age 2 and older: Who consume at least two daily servings of fruit Who consume at least three daily servings of vegetables (at least 1/3 being dark green or deep yellow) Who consume at least 6 daily servings of grain products 	75% 50% 50%
<ul style="list-style-type: none"> ◆ Physical Activity Reduce the percentage of adults who engage in no leisure time physical activity Increase the percentage of adults who engage in regular, moderate physical activity daily for at least 30 minutes Increase the percentage of adolescents who engage in moderate physical activity for at least 30 minutes on 5 or more of previous days 	20% 30% 30%