

Introduction: Substance Abuse

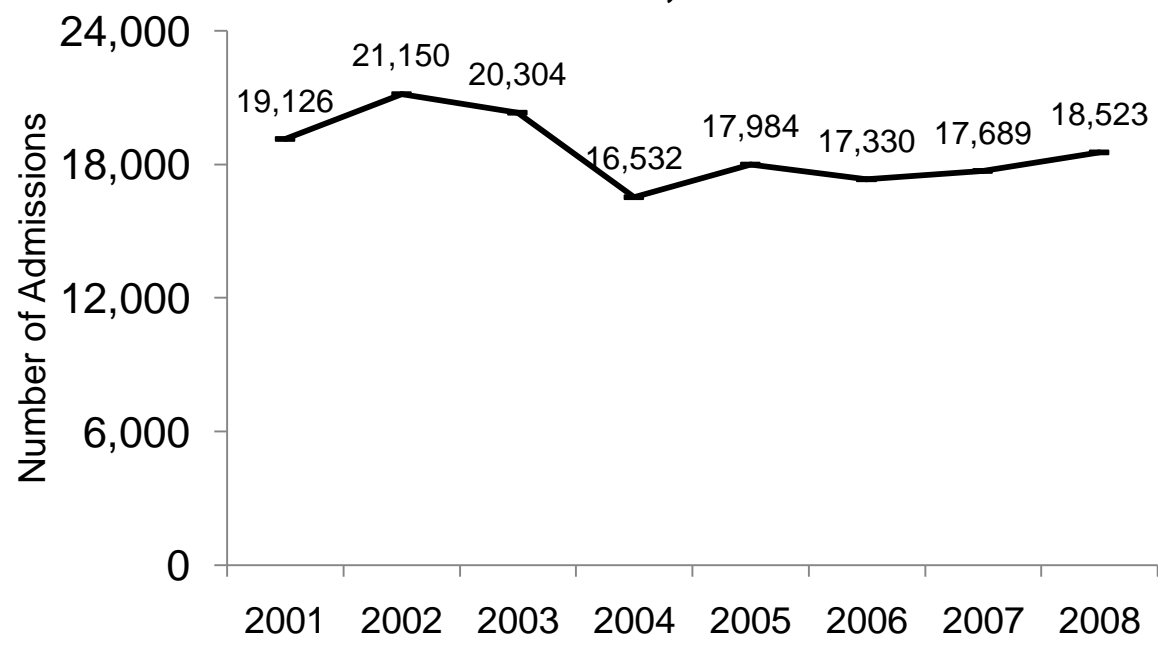
Substance abuse involves the excessive use of alcohol or use of drugs in a non-prescribed manner to achieve an altered physiological state. People who choose to use drugs or alcohol in this way do so to experience physical and mental sensations that are considered pleasurable when compared to their normal 'unaltered' state. But because alcohol and drugs directly affect the central nervous system of the body, they can cause severe immediate consequences including cardiac arrest and the loss of life. In addition, misuse of alcohol or other drugs over time can lead to physical and/or psychological dependence on these substances whereby the user continues to use the substance in order to satisfy intense cravings for the substance.

When dependence occurs, an individual often feels agitated in their unaltered state and uses the substance to relieve the agitation. An individual is said to have an addiction to a substance when the nature and intensity of the cravings for the substance contribute to a pattern of unhealthy or self-destructive decisions in order to satisfy the perceived need for the substance. As a result, people with addictions may sacrifice their physical health, personal relationships, jobs, personal morals and values in efforts to maintain access to the substance.

Fortunately, effective treatment for drug and alcohol dependence exists. Treatment providers offer a wide array of services and medications that aim to help the individual break his or her dependence on the substance.

This section considers three types of indicators of substance abuse: admissions to publicly funded substance abuse treatment programs, hospitalizations due to substance misuse or abuse, and substance abuse mortality (deaths in which alcohol or drugs are believed to play a causal role).

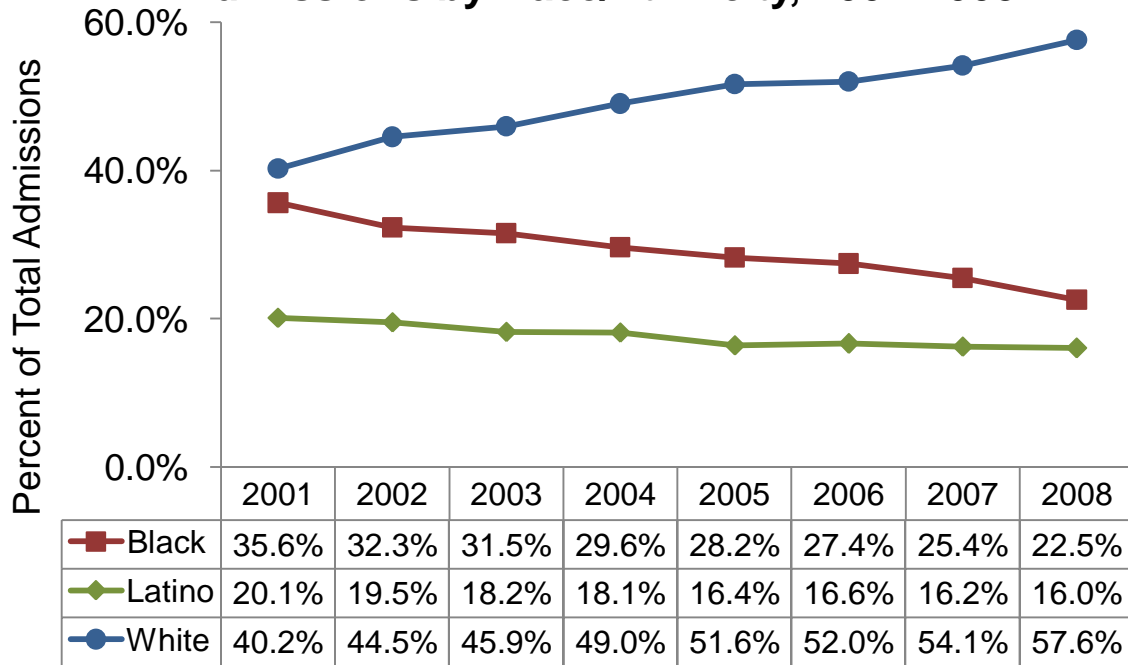
Figure 12.1 Substance Abuse Treatment Admissions, 2001-2008



NOTE: An individual client may have more than one admission per year. The data shown are for fiscal years July 2000 - June 2008.
DATA SOURCE: Massachusetts Department of Public Health, Bureau of Substance Abuse Services
DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- The number of substance abuse treatment admissions increased 4.7% from 2007 to 2008.

Figure 12.2 Substance Abuse Treatment Admissions by Race/Ethnicity, 2001-2008



Count	2001	2002	2003	2004	2005	2006	2007	2008
Black	6,799	6,840	6,398	4,891	5,063	4,752	4,500	4,162
Latino	3,851	4,075	3,690	2,997	2,949	2,872	2,864	2,963
White	7,679	9,406	9,318	8,100	9,288	9,011	9,577	10,678
BOSTON	19,126	21,150	20,304	16,532	17,984	17,330	17,689	18,523

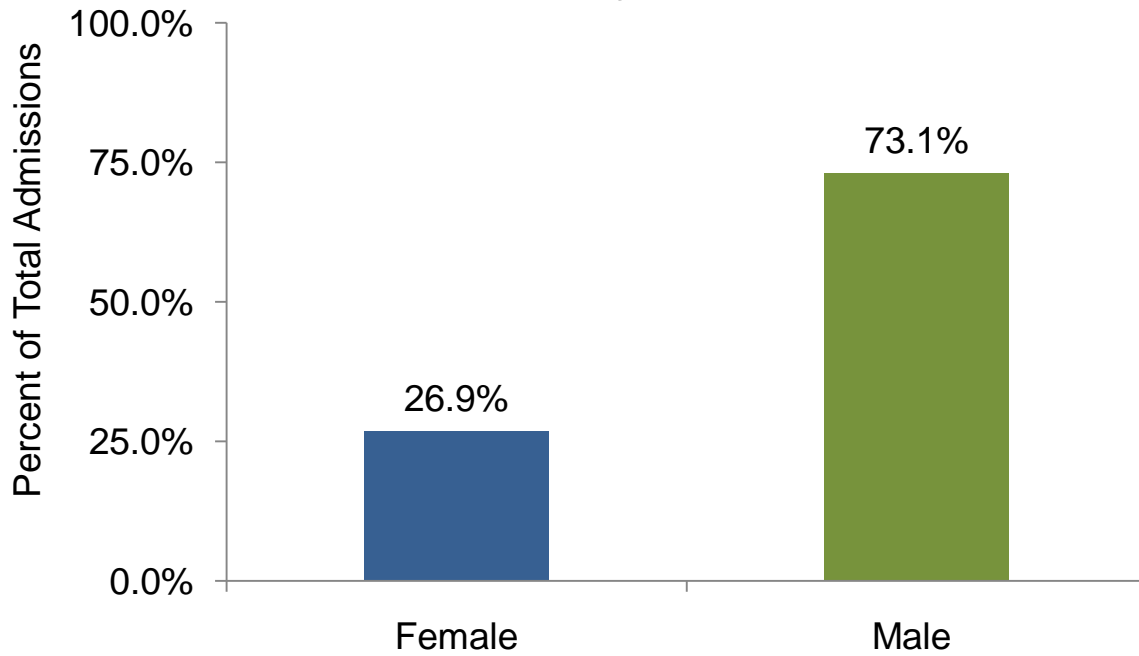
NOTE: Data for Asians was unavailable. An individual client may have more than one admission per year. The data shown are for fiscal years July 2000 - June 2008.

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

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- The percentage of treatment admissions for White residents increased 43.3% from 2001 to 2008.
- The percentage of Black treatment admissions decreased 36.8% from 2001 to 2008.

Figure 12.3 Substance Abuse Treatment Admissions by Gender, 2008



	BOSTON	Female	Male
Count	18,523	4,978	13,538

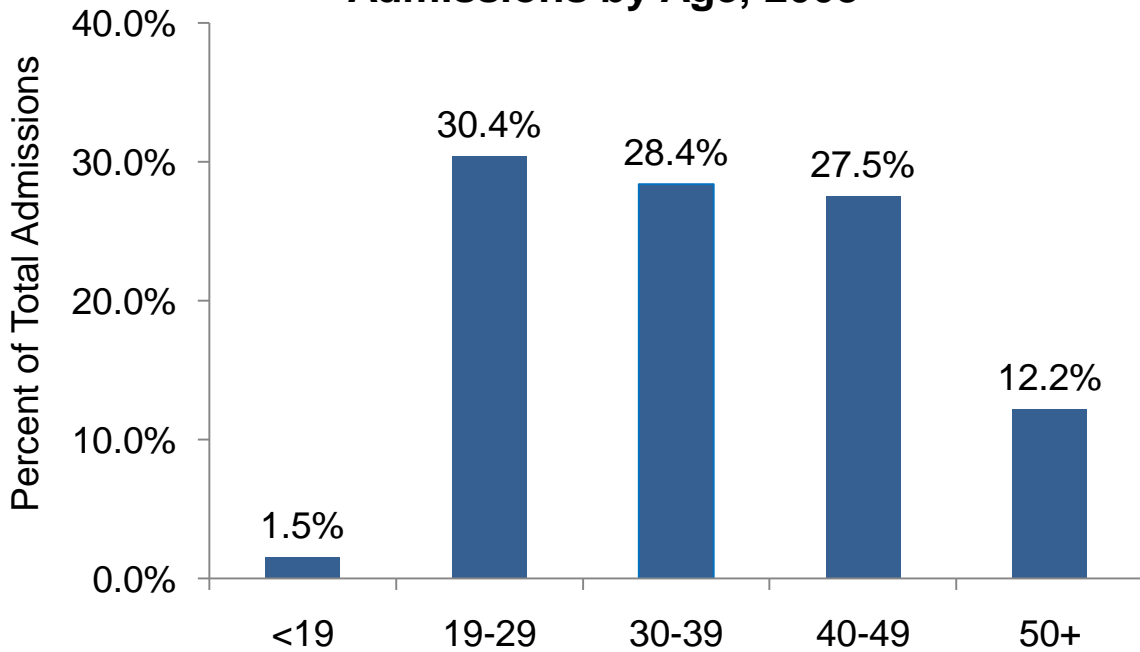
NOTE: An individual client may have more than one admission per year. The data shown are for fiscal year 2008: July, 2007-June, 2008.

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

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In 2008, about three fourths of all treatment admissions were male and one fourth were female.

Figure 12.4 Substance Abuse Treatment Admissions by Age, 2008



	BOSTON	<19	19-29	30-39	40-49	50+
Count	18,523	272	5,632	5,268	5,090	2,261

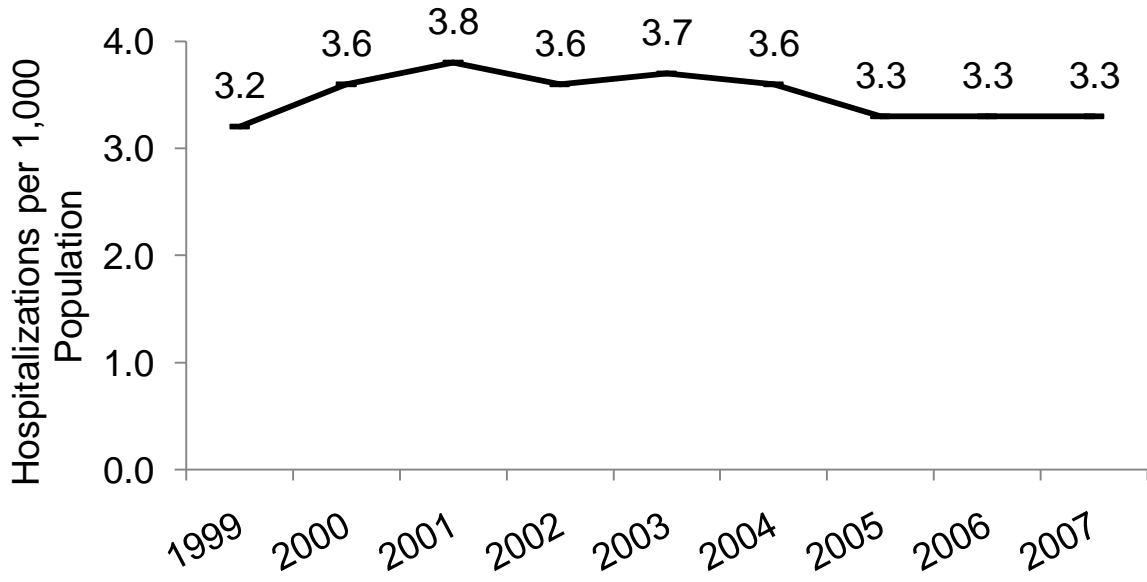
NOTE: An individual client may have more than one admission per year. The data shown are for fiscal year 2008: July, 2007-June, 2008.

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

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- Eighty-six percent of all substance abuse treatment admissions were spread relatively evenly across three age groups: 19-29, 30-39, and 40-49.

Figure 12.5 Substance Abuse Hospitalizations, 1999-2007



Count	1999	2000	2001	2002	2003	2004	2005	2006	2007
BOSTON	1,843	2,053	2,206	2,119	2,192	2,080	1,879	1,852	1,829

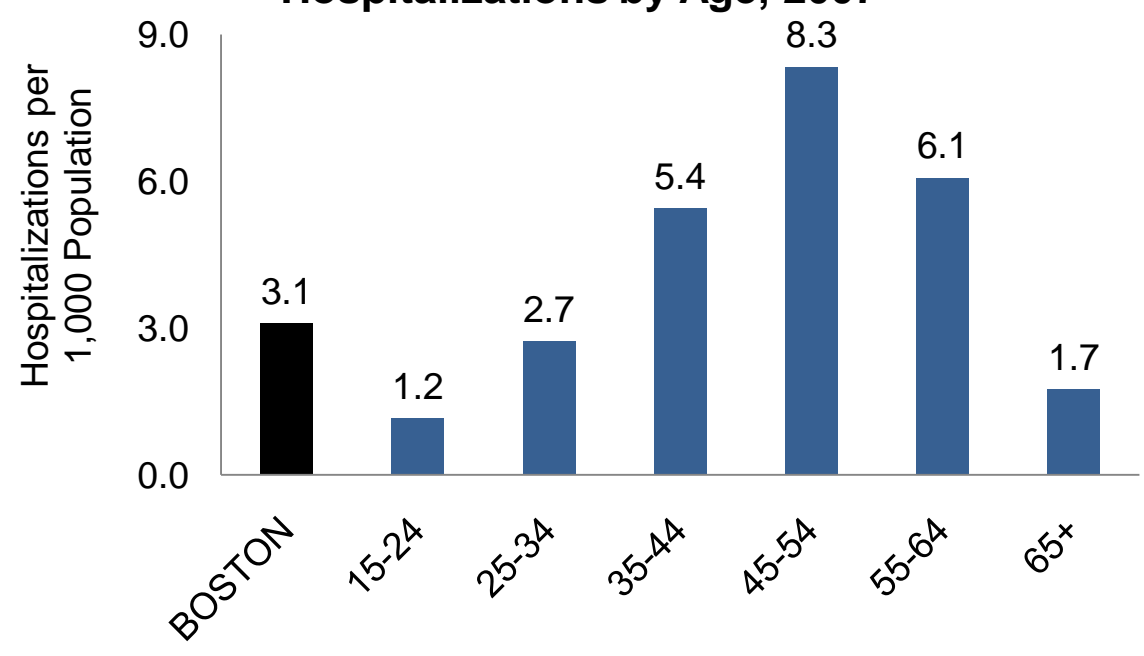
NOTE: Data are presented as age-adjusted rates.

DATA SOURCE: Acute Care Hospital Case Mix Files, Massachusetts Division of Health Care Finance and Policy

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- The substance abuse hospitalization age-adjusted rate was similar from 1999-2007 among Boston residents.

Figure 12.6 Substance Abuse Hospitalizations by Age, 2007

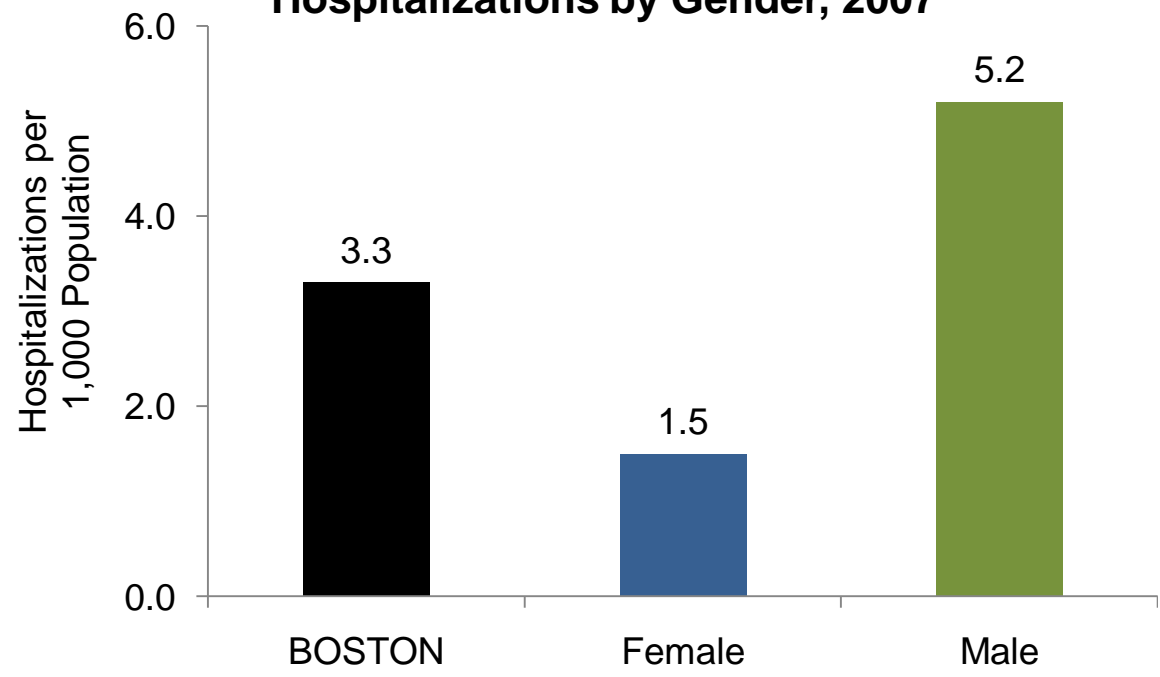


	BOSTON	15-24	25-34	35-44	45-54	55-64	65+
Count	1,829	131	340	470	530	249	107

NOTE: Data are presented as age-specific rates.
 DATA SOURCE: Acute Care Hospital Case Mix Files, Massachusetts Division of Health Care Finance and Policy
 DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In 2007, the substance abuse hospitalization rate was highest for Boston residents ages 35-44, 45-54, and 55-64. Teens and young adults ages 15-24 had the lowest rate, along with residents ages 65 and over.

Figure 12.7 Substance Abuse Hospitalizations by Gender, 2007

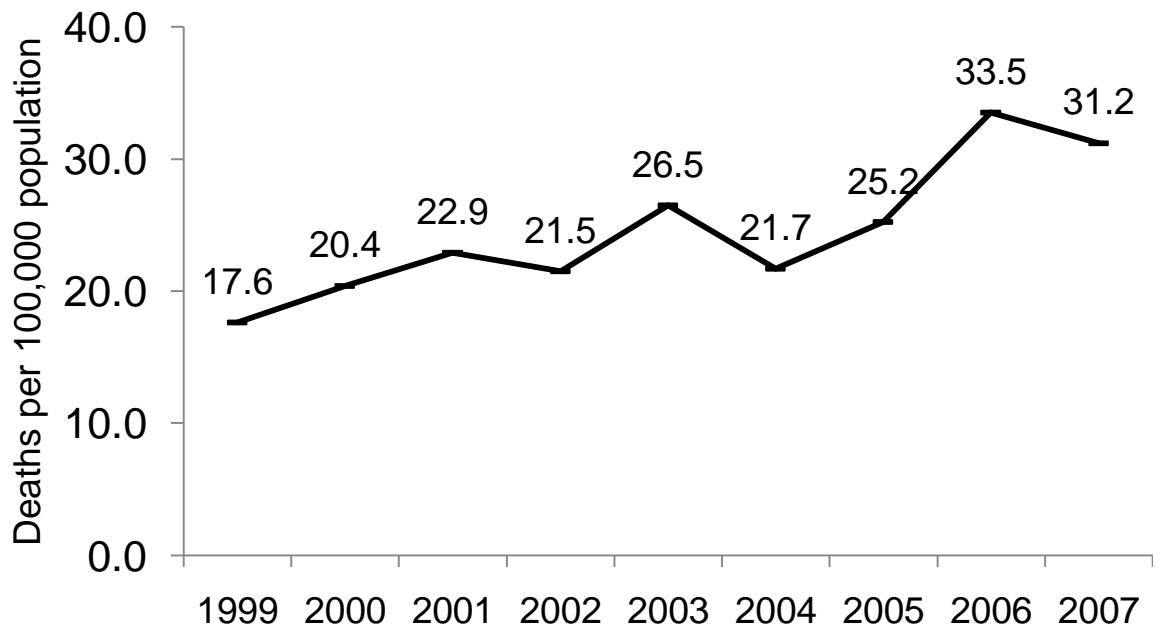


	BOSTON	Female	Male
Count	1829	462	1367

NOTE: Data are presented as age-adjusted rates.
 DATA SOURCE: Acute Care Hospital Case Mix Files, Massachusetts Division of Health Care, Finance and Policy
 DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- The substance abuse hospitalization age-adjusted rate for Boston males was 3.5 times the rate for females in 2007.

Figure 12.8 Substance Abuse Mortality, 1999-2007



	1999	2000	2001	2002	2003	2004	2005	2006	2007
Count	96	112	127	116	145	118	133	176	165

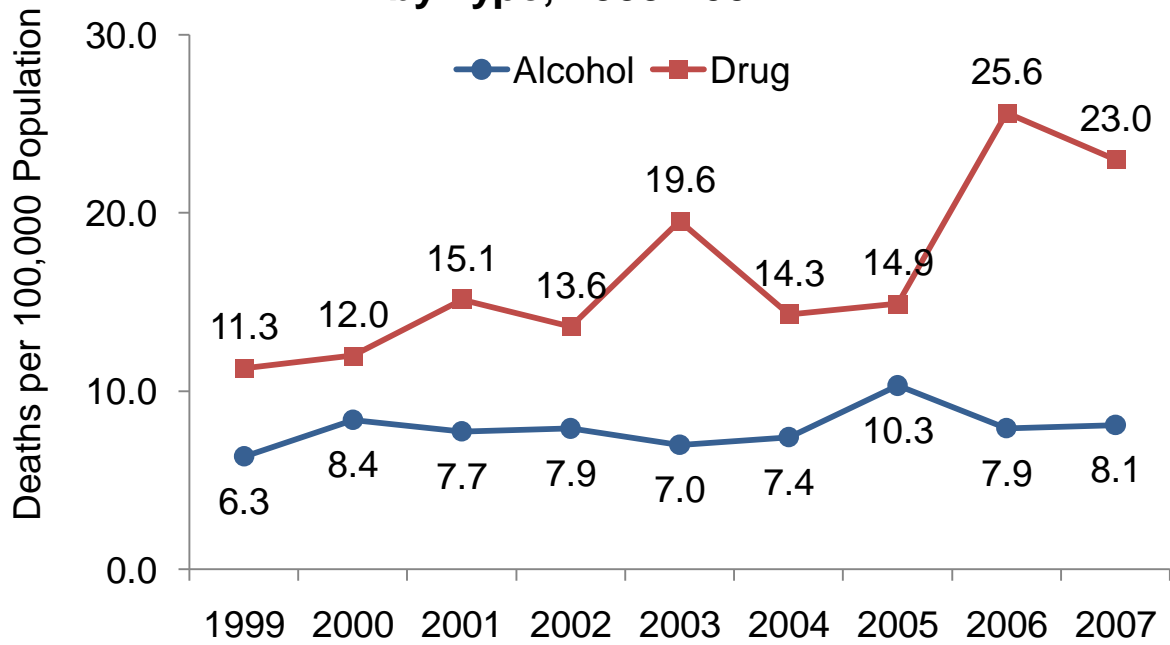
NOTE: Data are presented as age-adjusted rates

DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- The substance abuse mortality age-adjusted rate decreased 6.9% from 2006 to 2007.
- The 2007 rate of 31.2 per 100,000 population is 77.3% higher than the 1999 rate of 17.6.

Figure 12.9 Substance Abuse Mortality by Type, 1999-2007



Count	1999	2000	2001	2002	2003	2004	2005	2006	2007
Alcohol	31	42	39	40	34	38	49	39	39
Drug	65	70	88	76	111	80	84	137	126

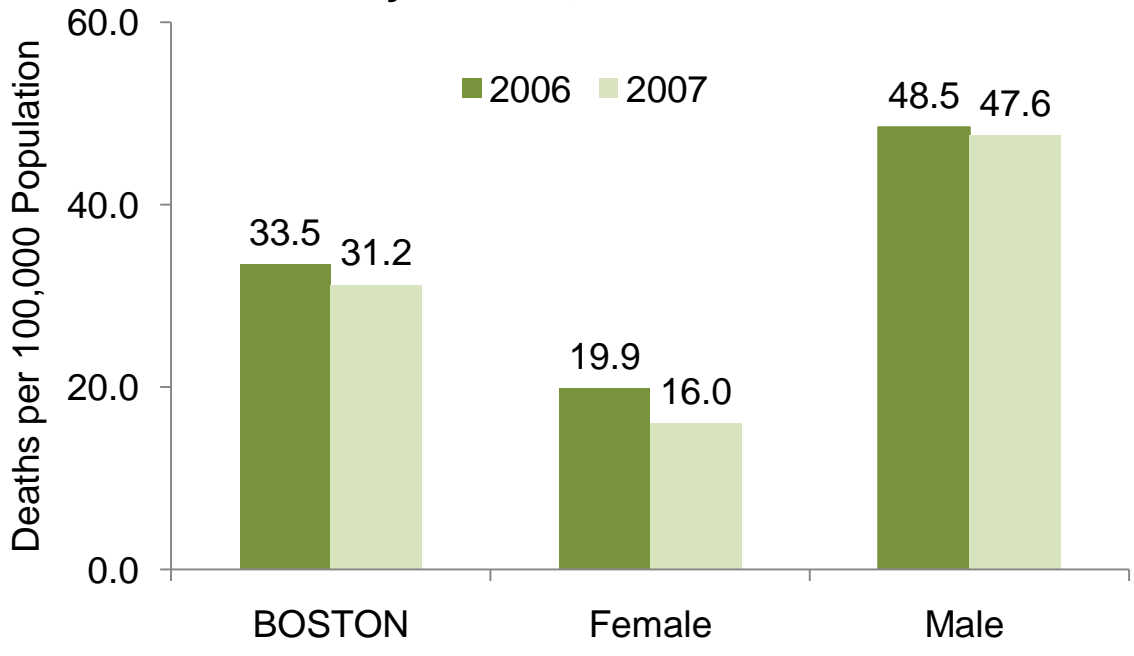
NOTE: Data are presented as age-adjusted rates

DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- Though the alcohol-related mortality rate has remained fairly stable from 1999 to 2007, the drug related mortality rate has more than doubled during the same period.

Figure 12.10 Substance Abuse Mortality by Gender, 2006-2007

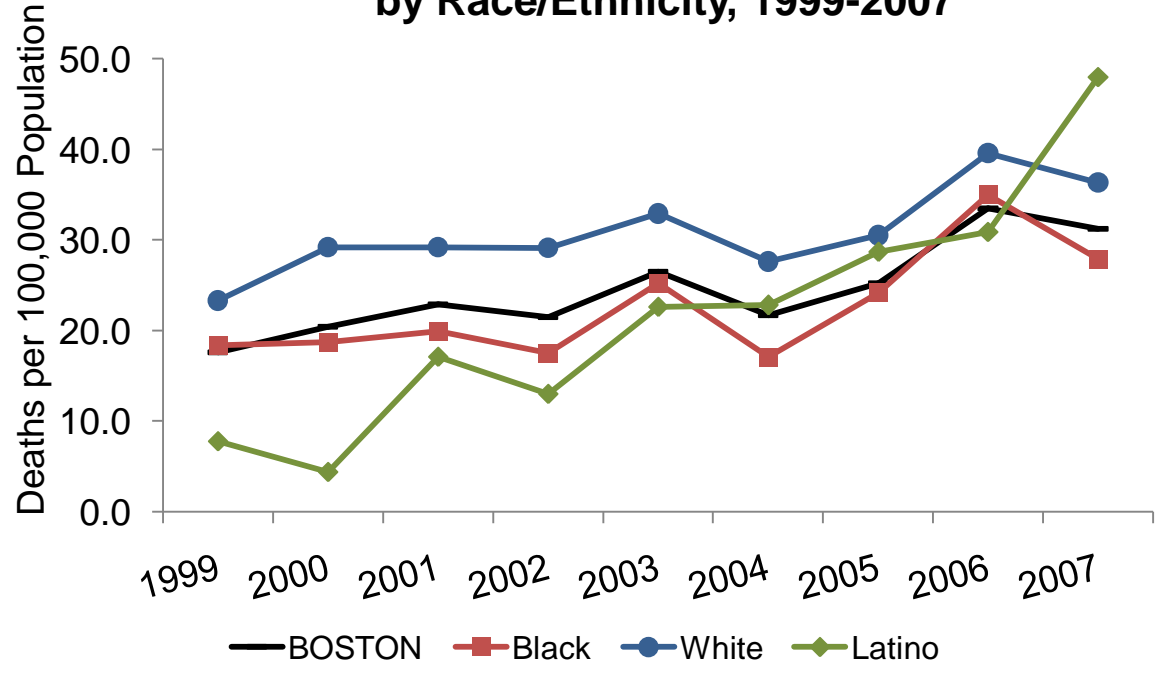


Count	BOSTON	Female	Male
2006	176	54	122
2007	165	44	121

NOTE: Data are presented as age-adjusted rates.
 DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
 DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In 2007, the male substance abuse mortality rate was approximately three times the female rate.

Figure 12.11 Substance Abuse Mortality by Race/Ethnicity, 1999-2007



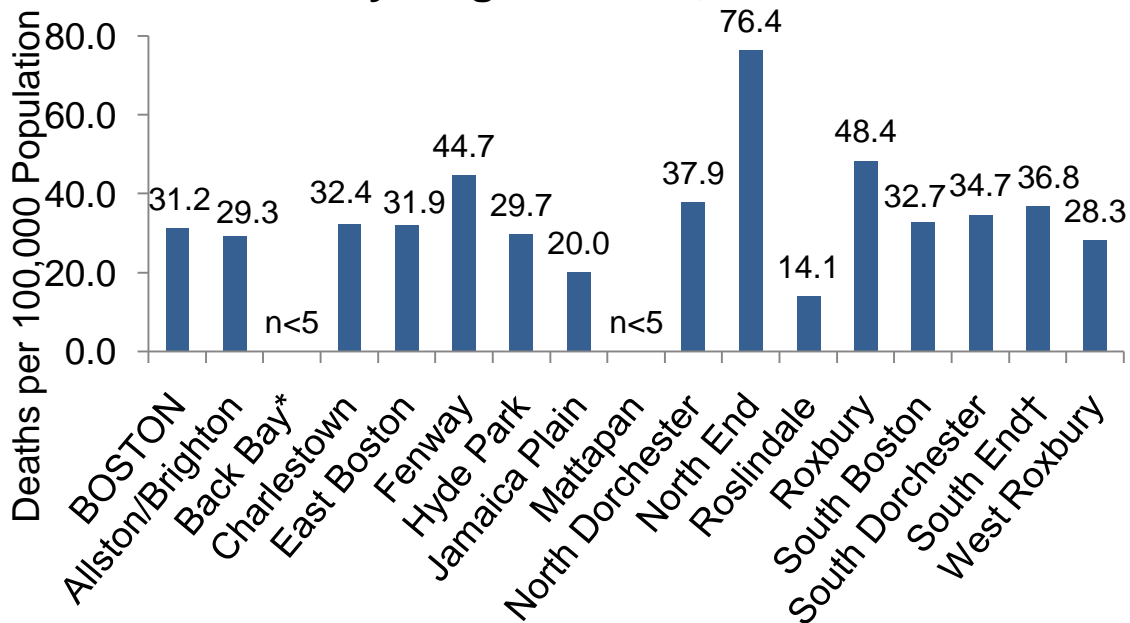
Rate	1999	2000	2001	2002	2003	2004	2005	2006	2007
Black	18.4	18.7	19.9	17.5	25.2	17.1	24.2	35.0	27.9
Latino	7.8	4.4	17.1	13.0	22.6	22.8	28.7	30.9	48.0
White	23.3	29.2	29.2	29.1	32.9	27.6	30.5	39.6	36.3
BOSTON	17.6	20.4	22.9	21.5	26.5	21.7	25.2	33.5	31.2

Count	1999	2000	2001	2002	2003	2004	2005	2006	2007
Black	23	23	26	22	32	22	31	43	36
Latino	6	5	12	11	19	16	19	22	27
White	67	83	85	81	94	78	82	109	101
BOSTON	96	112	127	116	145	118	133	176	165

NOTE: Data are presented as age-adjusted rates. There were too few substance abuse deaths among Asians to permit the presentation of rates.
 DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health
 DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In 2007, Latino's had the highest substance abuse mortality rate among all the racial/ethnic groups. From 1999 to 2007, the Latino rate increased more than 500%.
- The rate for Blacks and Whites decreased 20.3% and 8.3%, respectively, from 2006 to 2007, but remains well above their 1999 levels.

Figure 12.12 Substance Abuse Mortality by Neighborhood, 2007



	Bos	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
Count	165	11	n<5	5	11	5	10	6	n<5	28	8	5	22	11	15	13	7

*Includes Beacon Hill, Downtown, North End and the West End

† Includes Chinatown

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

NOTE: Data are presented as age-adjusted rates. Rates are not presented for Back Bay and Mattapan due to the small number of substance abuse deaths.

DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In 2007, the North End experienced the highest substance abuse mortality rate among Boston neighborhoods.

Summary: Substance Abuse

From 2006 to 2007 there was little change in the overall substance abuse treatment, hospitalization and mortality rates. Though the mortality rate decreased 6.9% from 2006 to 2007, the rate remained well above levels for earlier years (e.g., 77.3% higher than the 1999 rate).

Because of its social consequences, substance abuse continues to adversely impact residents of all ages, all racial/ethnic groups and genders. However, the data presented here show differences among various demographic groups within substance abuse indicators. Overall, Boston males accessed the treatment system, were hospitalized due to substance misuse, and died as a consequence of substance misuse at rates approximately three times those for females.

In general, White residents experienced higher substance abuse rates. The percentage of treatment admissions who were White increased steadily from 40% in 2001 to 58% in 2008. From 1999 to 2006, Whites consistently had the highest substance abuse death rate among Boston's racial/ethnic groups.

In 2007, Latinos experienced the highest substance abuse mortality rate (48.0 per 100,000 population) among the racial/ethnic groups. The Latino rate in 2007 was more than ten times the 2000 rate. No similar increase was observed in the treatment admissions data.

Among Boston neighborhoods, Fenway, the North End and Roxbury had the highest substance abuse mortality rates. The North End rate was more than twice the overall Boston substance abuse mortality rate.

The 2007 data summarized in this section demonstrate persistent disparities in substance abuse treatment admissions, hospitalization rates and mortality among racial/ethnic groups, gender groups and neighborhoods.