

Introduction: Mental Health

According to the World Health Organization, mental health is “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.” By such definition mental health encompasses much more than the absence of mental illness or mental disorders (1). Mental health embodies an individual’s psychological capacity to make healthy decisions that promote her or his overall quality of life.

People living with poor mental health can often experience mental and/or emotional pain as well as a diminished ability to make healthy decisions. Sometimes the pain is so severe that individuals may try to hurt themselves or others. In the most severe instances, individuals may end their own lives by committing suicide. When this occurs, families and other loved ones experience deep emotional pain as a result of their loss.

Mental illnesses are chronic medical conditions that are often identified by a set of specific symptoms. According to the National Alliance on Mental Illness (NAMI) mental illness “can disrupt a person’s thinking, feelings, moods, ability to relate to others, and overall daily functioning” (2). Some forms of mental illness include depression, bipolar disorder, schizophrenia, obsessive compulsive disorder (OCD), panic disorder, post traumatic stress disorder (PTSD), and borderline personality disorder.

Mental health is considered closely related to physical health. The connection between the mind and body is perhaps most keenly observed by the symbiotic relationship mental and physical health share within the individual whereby the status of one is often thought to influence the status of the other. For example, behaviors that promote good physical health (e.g., maintaining a healthy diet, getting adequate physical exercise and adequate sleep) have been observed to promote good mental health as well. Conversely, factors that contribute to poor mental health (e.g., stress, anxiety) negatively affect physical health.

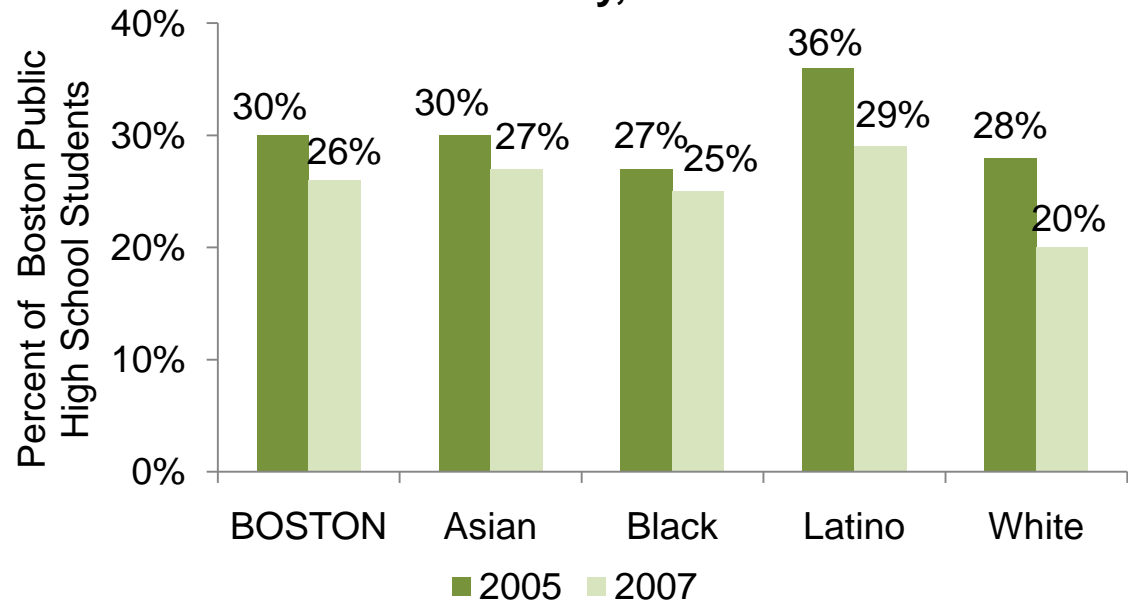
By accessing appropriate care, people with mental health problems or mental illness can often improve their mental health and restore their ability to cope with the every-day stresses of life. Care may involve receiving therapy or counseling that provides emotional support or assistance in developing problem solving skills. Care may also involve hospitalization and/or receiving appropriate medications that address the symptoms of the mental health problems or illness.

This section presents measures related to mental health among Boston residents. These measures are self-reported assessments of stress, anxiety, depression and other markers for mental well-being and overall quality of life. In addition this section presents data on suicides among Boston residents.

Healthy People 2010 Target (3):

Reduce the suicide rate to 4.8 suicides per 100,000 population, age-adjusted.

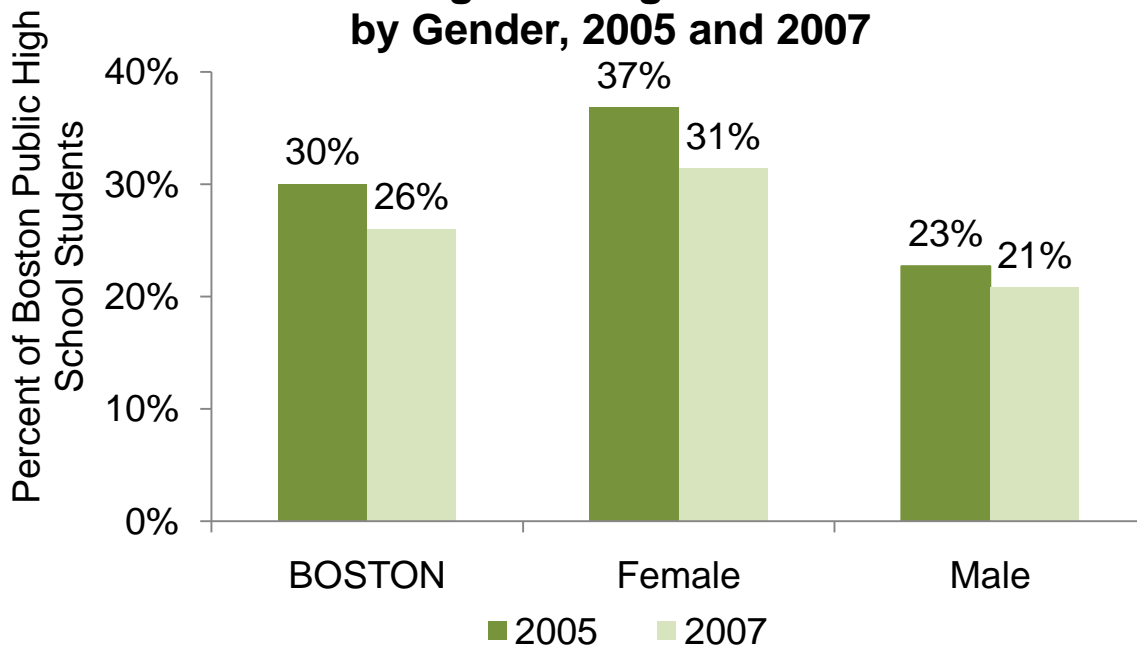
Figure 11.1 Sad or Hopeless for Two Weeks Straight During Past Year by Race/Ethnicity, 2005 and 2007



NOTE: Survey question reads, “During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?”
 DATA SOURCE: Youth Risk Behavior Survey 2005 and 2007, Youth Risk Behavior Surveillance System (YRBSS), Centers for Disease Control and Prevention (CDC)
 DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- More than one in four Boston public high school students reported feeling sad or hopeless for two weeks straight during the past year.
- In 2005 and 2007, the percentage of students reporting these symptoms was similar among racial/ethnic groups.

Figure 11.2 Sad or Hopeless for Two Weeks Straight During Past Year by Gender, 2005 and 2007



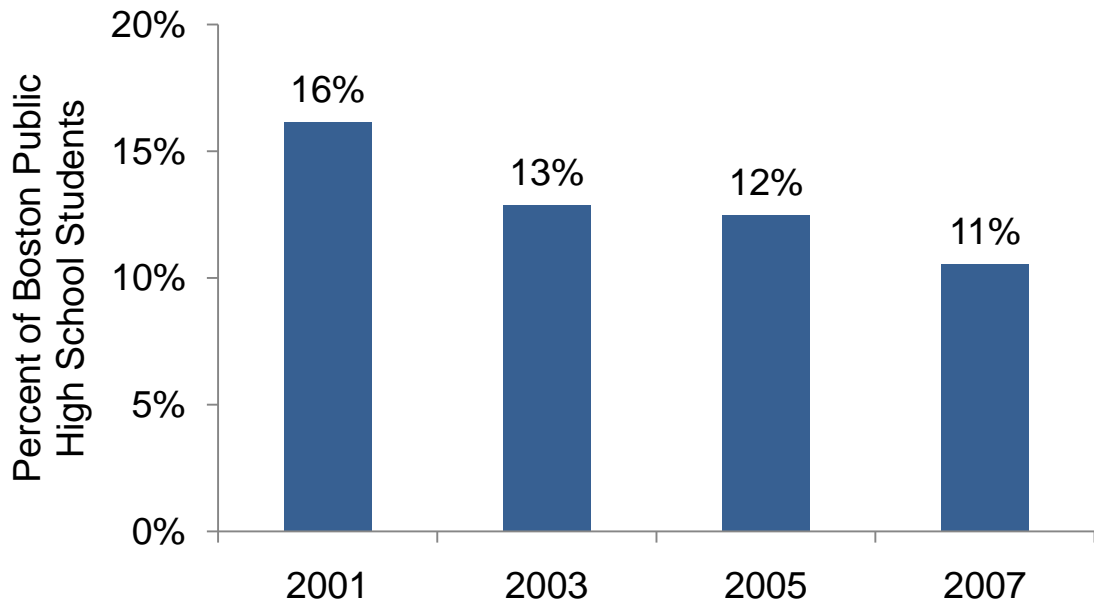
NOTE: Survey question reads, “During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?”

DATA SOURCE: Youth Risk Behavior Survey 2005 and 2007, Youth Risk Behavior Surveillance System (YRBSS), Centers for Disease Control and Prevention (CDC)

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In 2005 and 2007, a higher percentage of female high school students reported feeling sad or hopeless for two weeks straight during the past year compared to male high school students.

Figure 11.3 Seriously Considered Attempting Suicide, 2001, 2003, 2005 and 2007



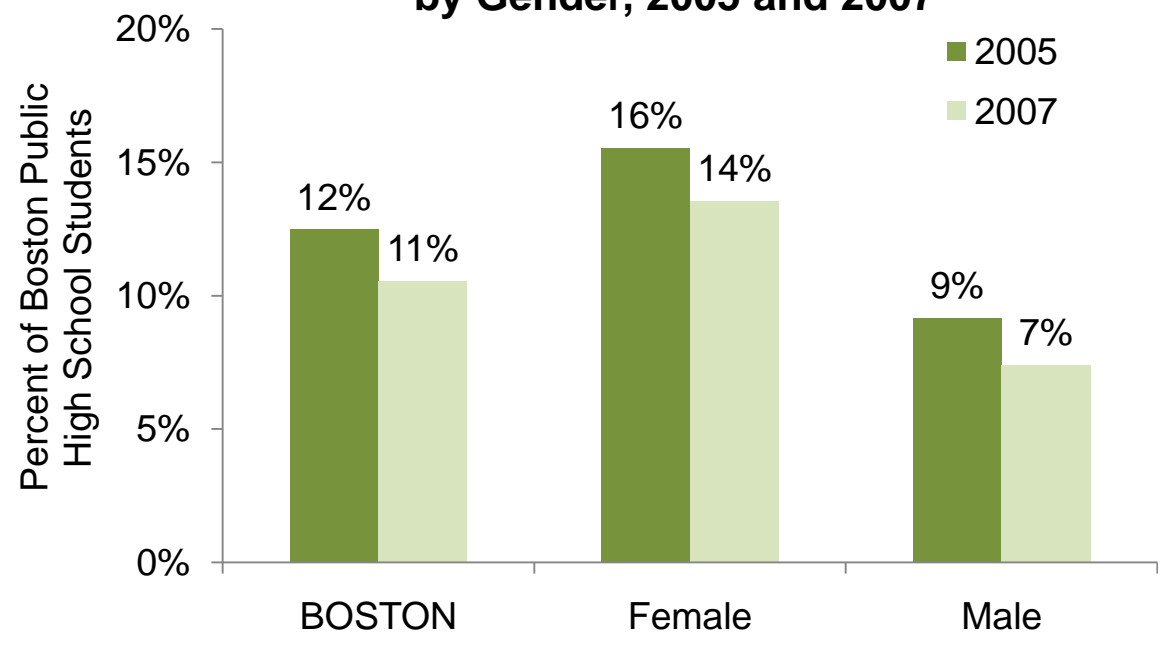
NOTE: Survey question reads, “During the past 12 months, did you ever seriously consider attempting suicide?”

DATA SOURCE: Youth Risk Behavior Survey 2001, 2003, 2005 and 2007, Youth Risk Behavioral Surveillance System (YRBSS), Centers for Disease Control and Prevention (CDC)

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- A lower percentage of Boston high school students reported they had seriously considered attempting suicide in 2007 than in 2001.

Figure 11.4 Considered Attempting Suicide by Gender, 2005 and 2007



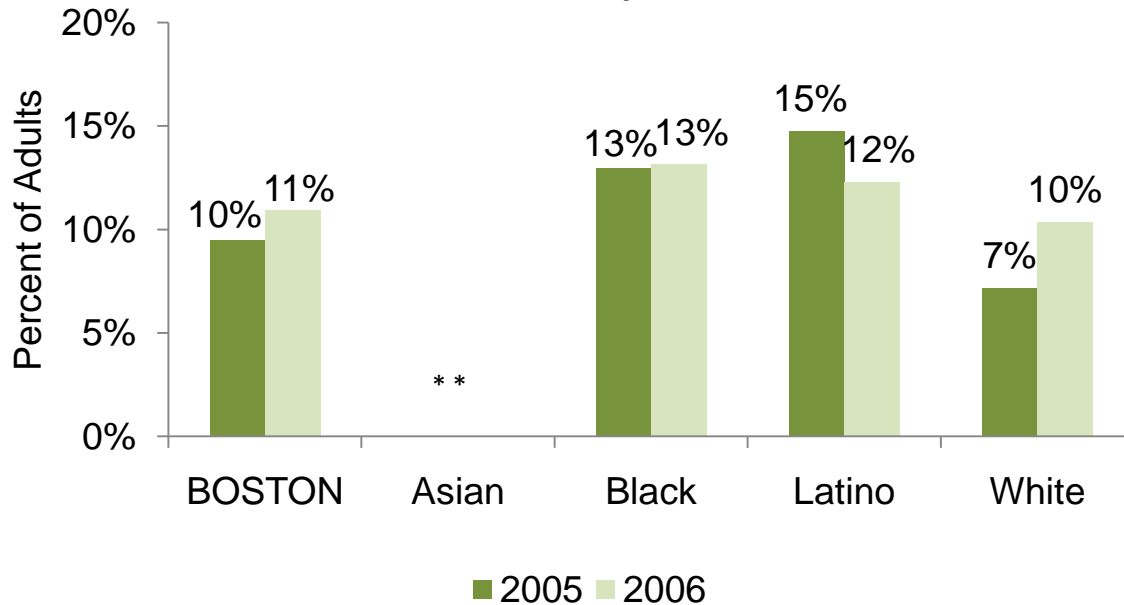
NOTE: Survey question reads, "During the past 12 months, did you ever seriously consider attempting suicide?"

DATA SOURCE: Youth Risk Behavior Survey 2005 and 2007, Youth Risk Behavioral Surveillance System (YRBSS), Centers for Disease Control and Prevention (CDC)

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- For both 2005 and 2007, a higher percentage of female than male high school students reported they had seriously considered attempting suicide.

Figure 11.5 Poor Physical or Mental Health Limited Activities 15+ Days of Past Month by Race/Ethnicity, 2005 and 2006



**Insufficient sample size for Asians in 2005 and 2006.

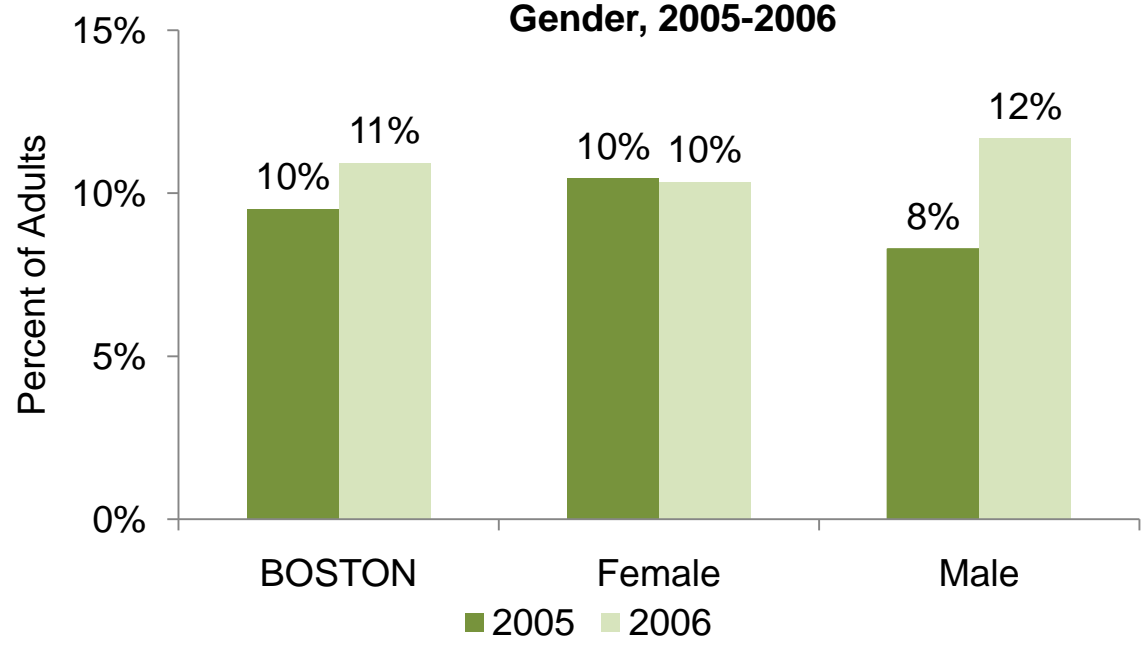
NOTE: Survey question reads, “During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?”

DATA SOURCE: Boston Behavioral Risk Factor Survey 2005 and 2006, Boston Behavioral Risk Factor Surveillance System (BBRFSS), Boston Public Health Commission

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In both 2005 and 2006, about one in nine adults reported that poor physical or mental health limited their activity for 15 or more days during the past month.
- Across racial/ethnic groups, a similar percentage of adults reported that poor physical or mental health limited their activity for 15 or more days during the past month.

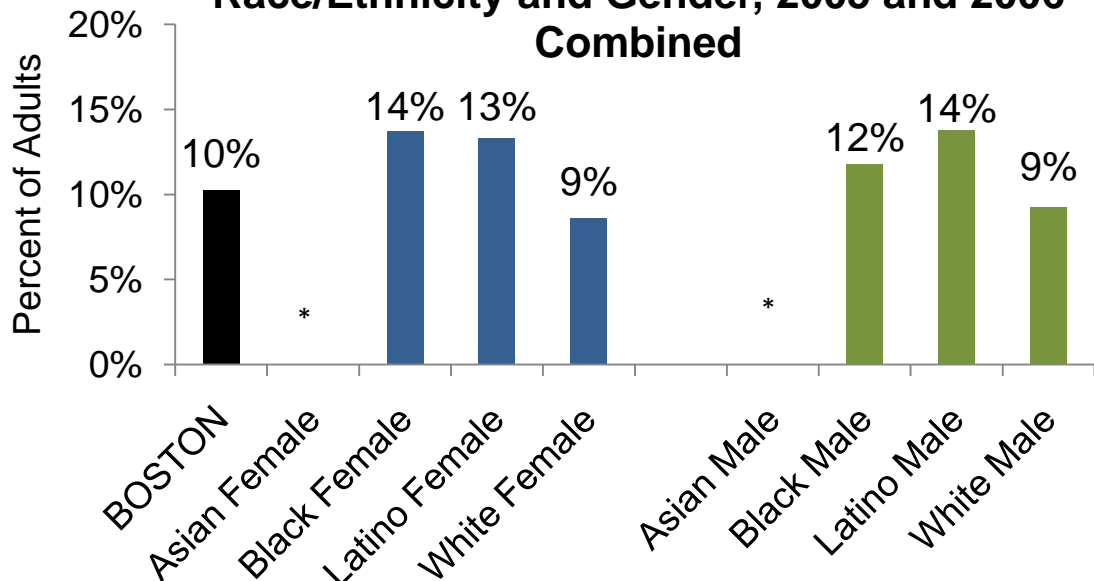
Figure 11.6 Poor Physical or Mental Health Limited Activities 15+ Days of Past Month by Gender, 2005-2006



NOTE: Survey question reads, “During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?”
 DATA SOURCE: Boston Behavioral Risk Factor Survey 2005 and 2006, Boston Behavioral Risk Factor Surveillance System (BBRFSS), Boston Public Health Commission
 DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In 2005 and 2006, a similar percentage of female and male adults reported that poor physical or mental health limited their activity for 15 or more days during the past month.

Figure 11.7 Poor Physical or Mental Health Limited Activities 15+ Days of Past Month by Race/Ethnicity and Gender, 2005 and 2006 Combined



*Insufficient sample size for Asian Females and Asian Males.

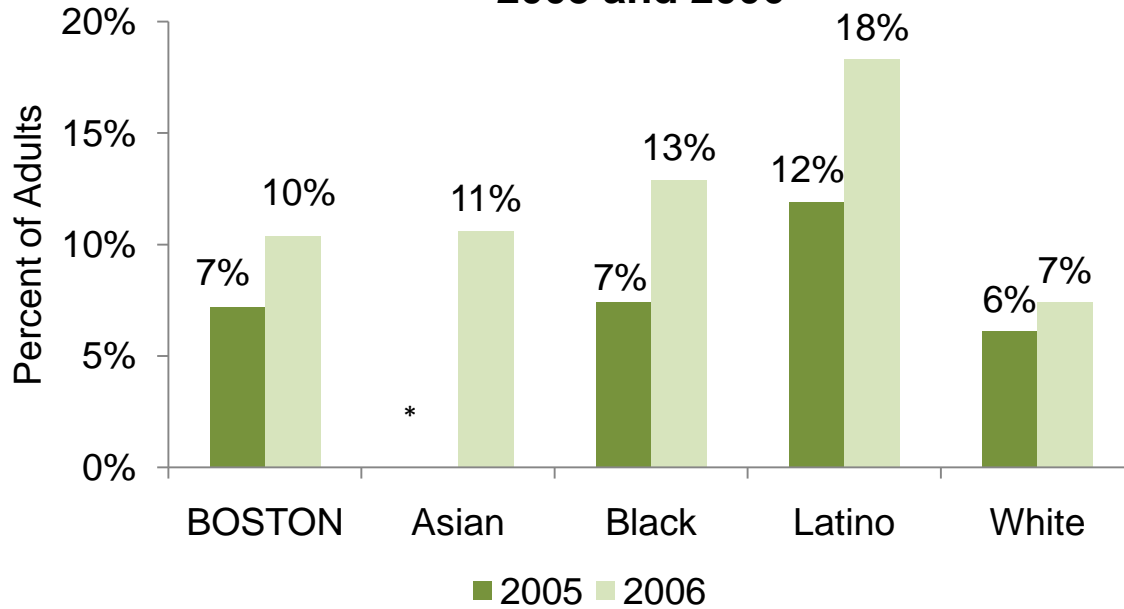
NOTE: Survey question reads, "During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?"

DATA SOURCE: Boston Behavioral Risk Factor Survey 2005 and 2006, Boston Behavioral Risk Factor Surveillance System (BBRFSS), Boston Public Health Commission

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- Across racial/ethnic gender groups, a similar percentage of adults reported that poor physical or mental health limited their activity for 15 or more days during the past month.

Figure 11.8 Felt Sad, Blue, or Depressed 15+ Days of Past Month by Race/Ethnicity 2005 and 2006



*Insufficient sample size for Asians in 2005

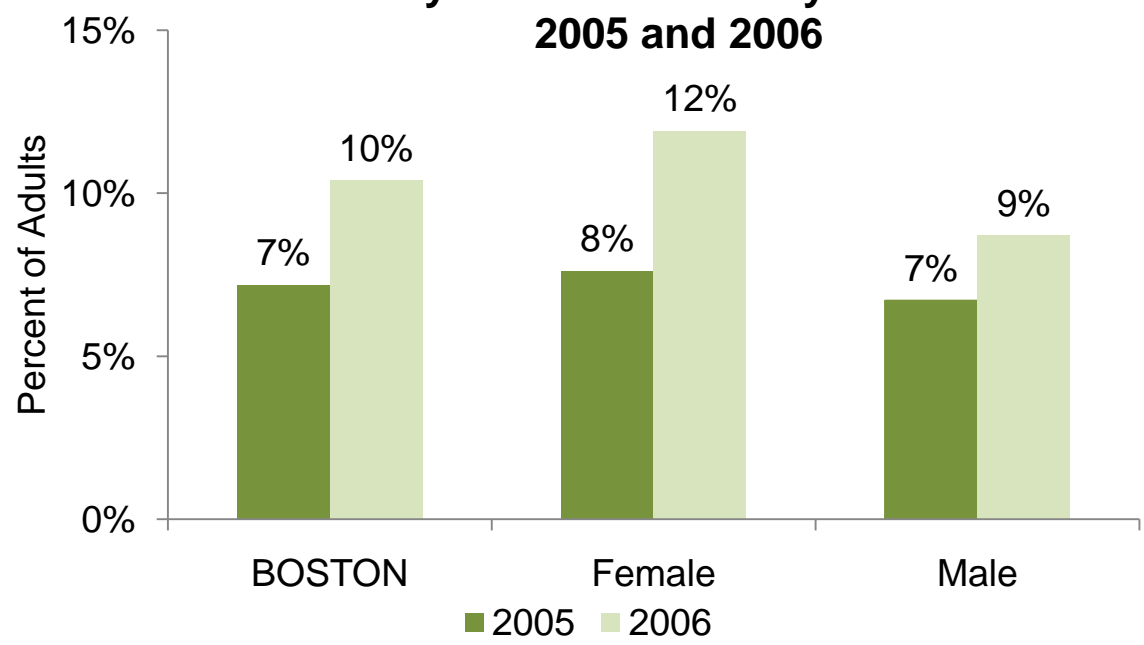
NOTE: Survey question reads, "During the past 30 days, for about how many days have you felt sad, blue, or depressed?"

DATA SOURCE: Boston Behavioral Risk Factor Survey 2005 and 2006, Boston Behavioral Risk Factor Surveillance System (BBRFSS), Boston Public Health Commission

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In 2006, one in ten adults reported feeling sad, blue or depressed 15 or more days during the past month. The percentage of adults who reported feeling sad, blue or depressed increased from 2005 to 2006.
- In 2006, a higher percentage of Latino adults reported feeling sad, blue or depressed 15 or more days during the past month than White adults.

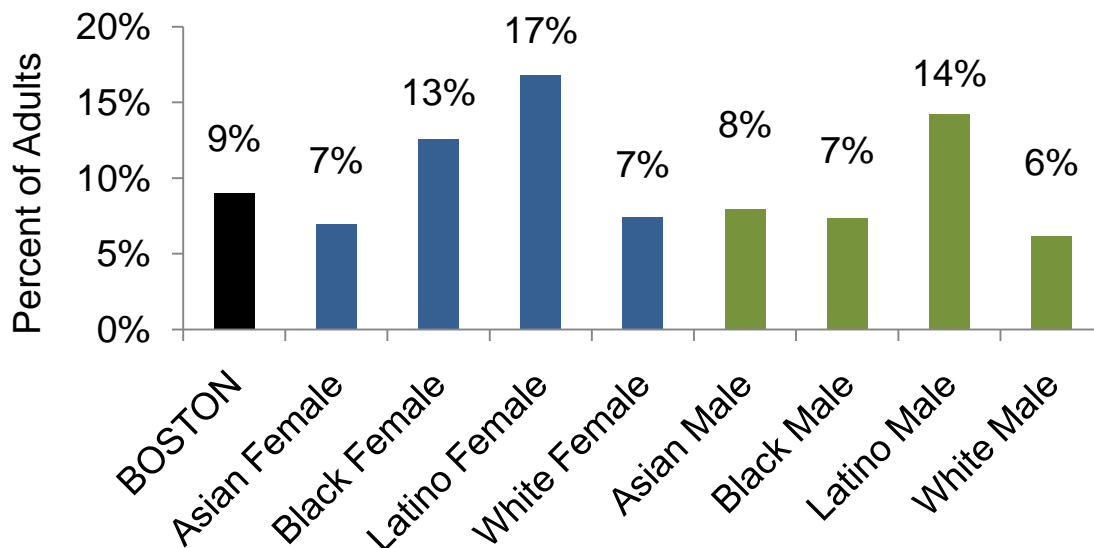
Figure 11.9 Felt Sad, Blue, or Depressed 15+ Days of Past Month by Gender 2005 and 2006



NOTE: Survey question reads, “During the past 30 days, for about how many days have you felt sad, blue, or depressed?”
 DATA SOURCE: Boston Behavioral Risk Factor Survey 2005 and 2006, Boston Behavioral Risk Factor Surveillance System (BBRFSS), Boston Public Health Commission
 DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- The percentage of female adults who reported feeling sad, blue or depressed 15 or more days during the past month increased from 2005 to 2006.

Figure 11.10 Felt Sad, Blue, or Depressed 15+ Days of Past Month by Race/Ethnicity and Gender, 2005 and 2006 Combined



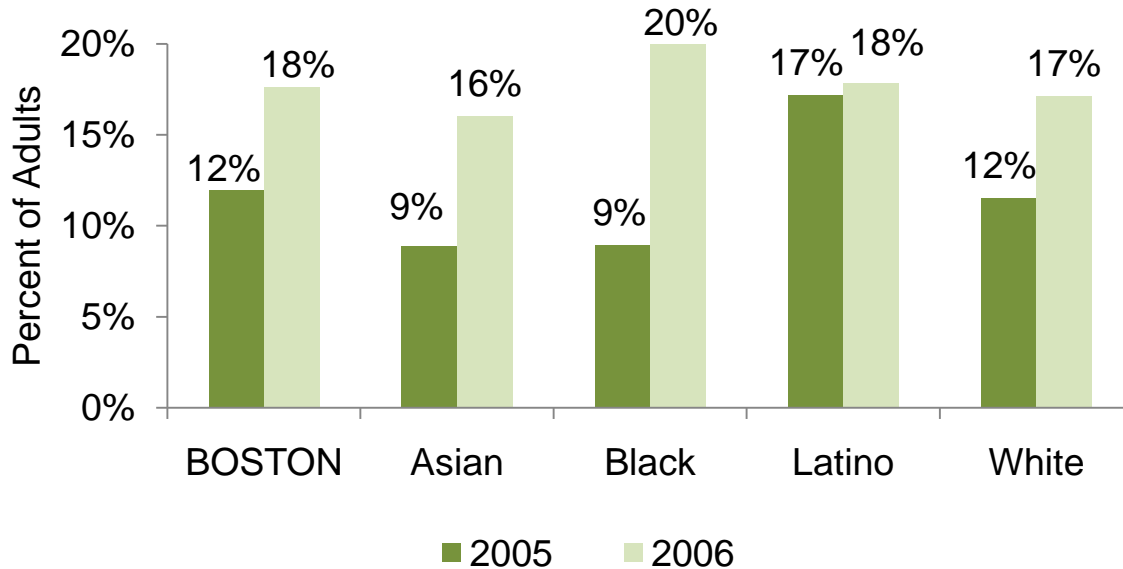
NOTE: Survey question reads, “During the past 30 days, for about how many days have you felt sad, blue, or depressed?”

DATA SOURCE: Boston Behavioral Risk Factor Survey 2005 and 2006, Boston Behavioral Risk Factor Surveillance System (BBRFSS), Boston Public Health Commission

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- The percentage of Black and Latino females who reported feeling sad, blue, or depressed 15 or more days during the past month was higher than the percentage of White females who reported these symptoms.

**Figure 11.11 Felt Worried, Tense, or Anxious
15+ Days of Past Month by Race/Ethnicity,
2005 and 2006**



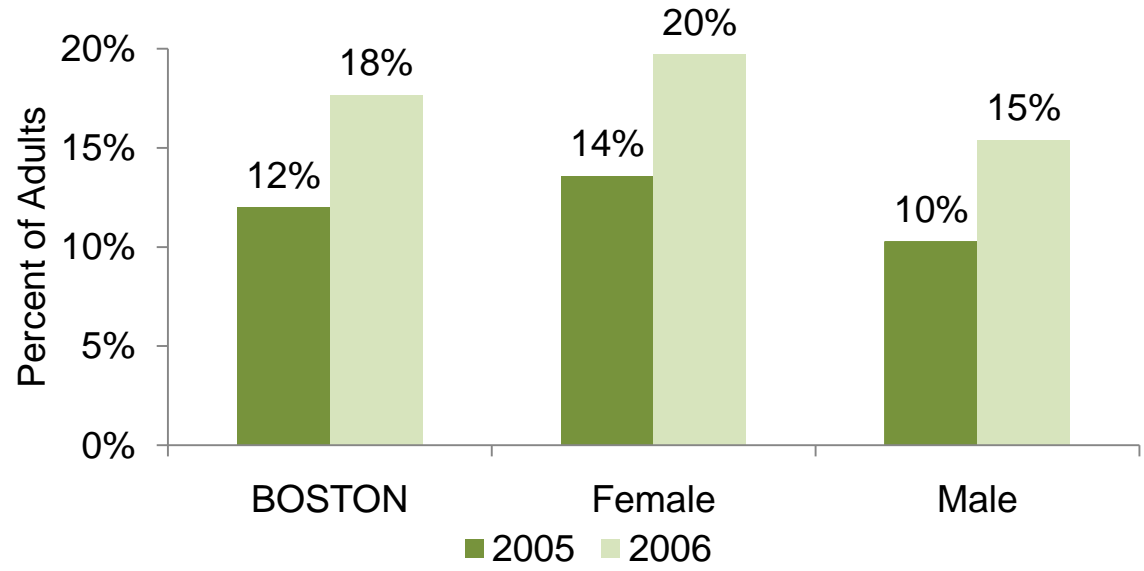
NOTE: Survey question reads, “During the past 30 days, for about how many days have you felt worried, tense, or anxious?”

DATA SOURCE: Boston Behavioral Risk Factor Survey 2005 and 2006, Boston Behavioral Risk Factor Surveillance System (BBRFSS), Boston Public Health Commission

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- The percentage of adults reporting persistent symptoms of anxiety (feeling worried, tense, or anxious one or more days during the past month) increased from 2005 to 2006.
- Higher percentages of Black adults and White adults reported persistent symptoms of anxiety in 2006 compared to 2005.

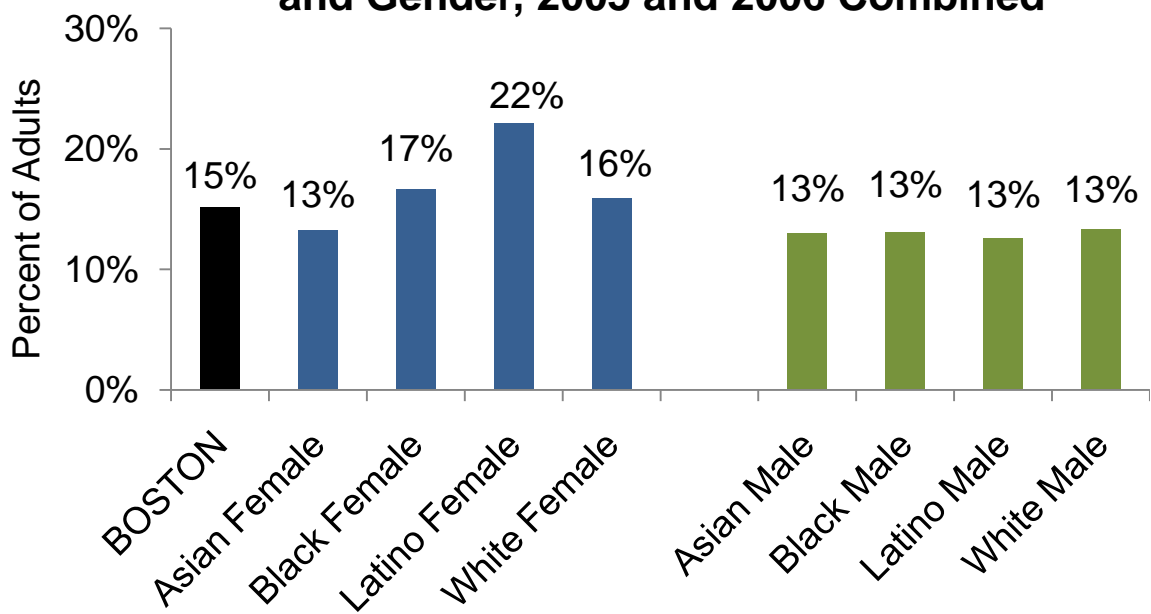
**Figure 11.12 Felt Worried, Tense, or Anxious
15+ Days of Past Month by Gender,
2005 and 2006**



NOTE: Survey question reads, “During the past 30 days, for about how many days have you felt worried, tense, or anxious?”
DATA SOURCE: Boston Behavioral Risk Factor Survey 2005 and 2006, Boston Behavioral Risk Factor Surveillance System (BBRFSS), Boston Public Health Commission
DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- The percentage of females who reported feeling worried, tense or anxious 15 or more days during the past month increased from 2005 to 2006.

Figure 11.13 Felt Worried, Tense, or Anxious 15+ Days of Past Month by Race/Ethnicity and Gender, 2005 and 2006 Combined



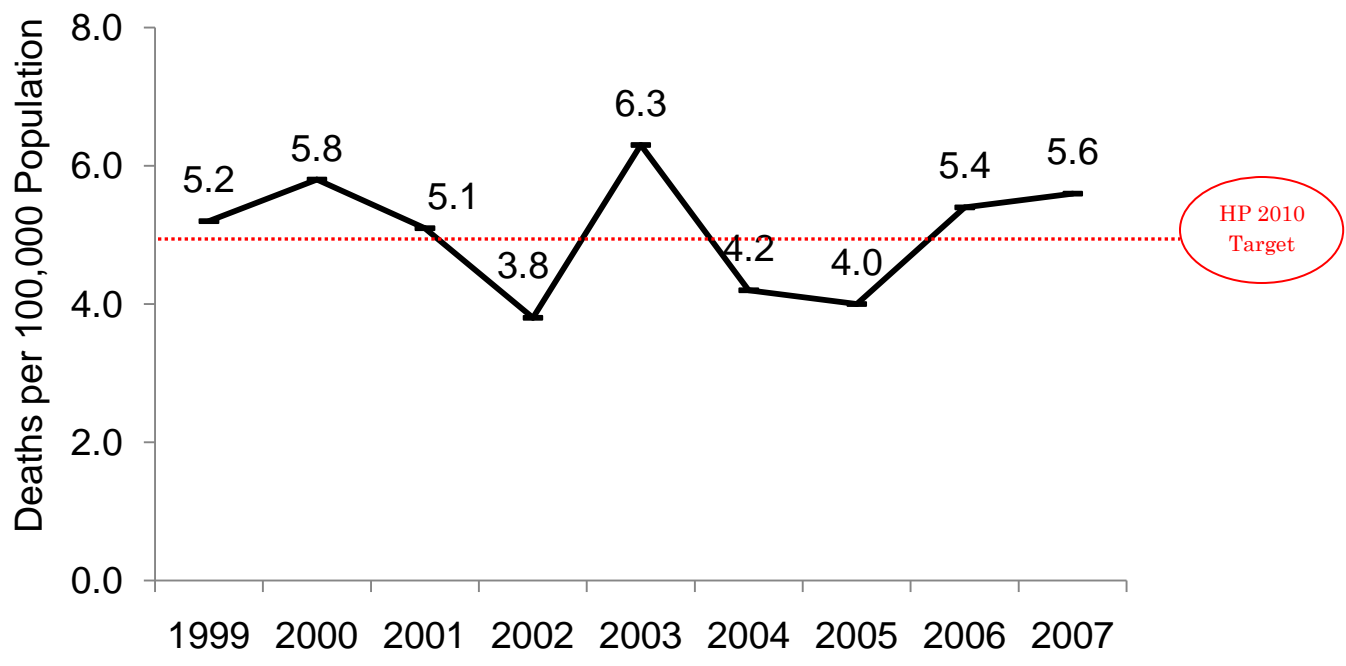
NOTE: Survey question reads, “During the past 30 days, for about how many days have you felt worried, tense, or anxious?”

DATA SOURCE: Boston Behavioral Risk Factor Survey 2005 and 2006, Boston Behavioral Risk Factor Surveillance System (BBRFSS), Boston Public Health Commission

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- More than one in five Latino females reported feeling worried, tense, or anxious 15 or more days during the past month.

Figure 11.14 Suicide, 1999-2007



	1999	2000	2001	2002	2003	2004	2005	2006	2007
Count	31	34	32	22	38	26	23	31	33

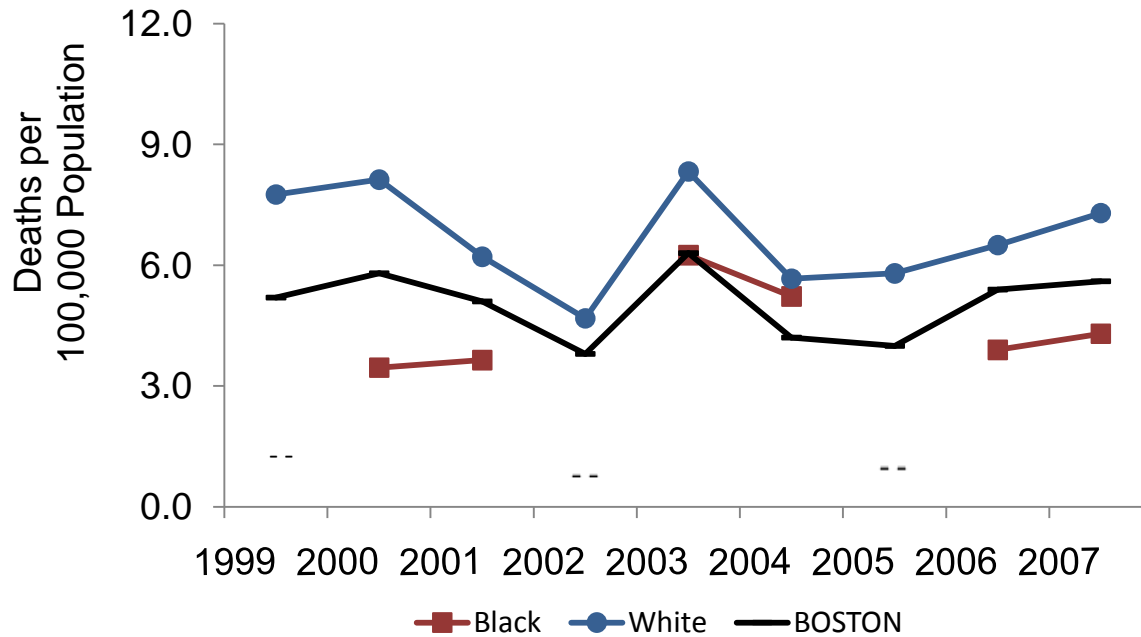
NOTE: Data are shown as age-adjusted rates.

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

DATA ANALYSIS: Boston Public Health Commission Research & Evaluation Office

- Boston's suicide rate increased 40% from 2005 to 2007, after declining 37% during the previous two years from 2003 to 2005.

**Figure 11.15 Suicide by Race/Ethnicity
1999-2007**



Rates	1999	2000	2001	2002	2003	2004	2005	2006	2007
Black	n<5	3.5	3.6	n<5	6.3	5.2	n<5	3.9	4.3
White	7.8	8.1	6.2	4.7	8.3	5.7	5.8	6.5	7.3
BOSTON	5.2	5.8	5.1	3.8	6.3	4.2	4.0	5.4	5.6

Count	1999	2000	2001	2002	2003	2004	2005	2006	2007
Black	n<5	5	5	n<5	9	7	n<5	5	6
White	23	25	20	15	26	16	17	19	22
BOSTON	31	34	32	22	38	26	23	31	33

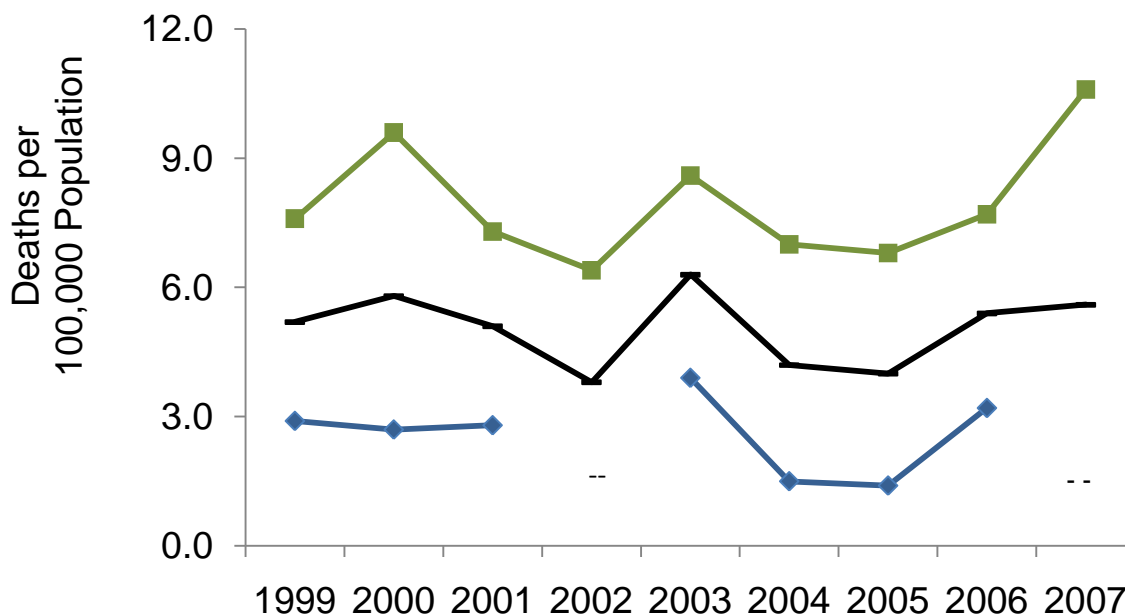
NOTES: Data are shown as age-adjusted rates. Rates are not presented for Asians and Latinos due to the small number of suicides they incurred in each of the years shown. The rate for Blacks in 1999, 2002, and 2005 is not shown due to small number of suicides in each of those years.

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

DATA ANALYSIS: Boston Public Health Commission Research & Evaluation Office

- The suicide rate for White Boston residents was consistently higher than the rate for Black residents.
- From 2006 to 2007, the rate for White residents increased 12% and for Black residents, 10%.

Figure 11.16 Suicide by Gender, 1999-2007



Rates	1999	2000	2001	2002	2003	2004	2005	2006	2007
Female	2.9	2.7	2.8	n<5	3.9	1.5	1.4	3.2	n<5
Male	7.6	9.6	7.3	6.4	8.6	7.0	6.8	7.7	10.6
BOSTON	5.2	5.8	5.1	3.8	6.3	4.2	4.0	5.4	5.6

Count	1999	2000	2001	2002	2003	2004	2005	2006	2007
Female	9	8	9	n<5	11	5	5	10	n<5
Male	22	26	23	18	27	21	18	21	29
BOSTON	31	34	32	22	38	26	23	31	33

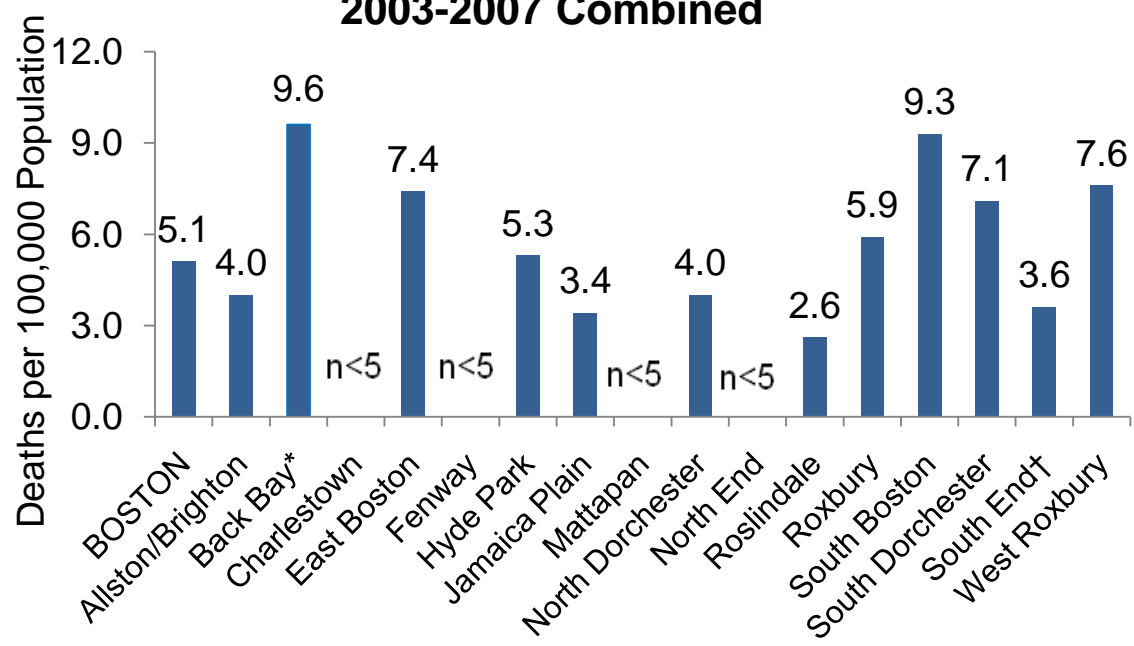
NOTES: Data are shown as age-adjusted rates. Rates are not presented for females in 2002 and 2007 due to the small number of suicides they incurred in these years.

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

DATA ANALYSIS: Boston Public Health Commission Research & Evaluation Office

- The suicide rate for males was consistently and considerably higher than for females from 1999 to 2007. The 2007 rate for males was the highest for all years shown.
- From 2005 to 2007, the suicide rate for males increased 55.8%.

**Figure 11.17 Suicide by Neighborhood
2003-2007 Combined**



BOS	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
5.1	4.0	9.6	<5	7.4	<5	5.3	3.4	<5	4.0	<5	2.6	5.9	9.3	7.1	3.6	7.6

* Includes Beacon Hill, Downtown, and the West End

† Includes Chinatown

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

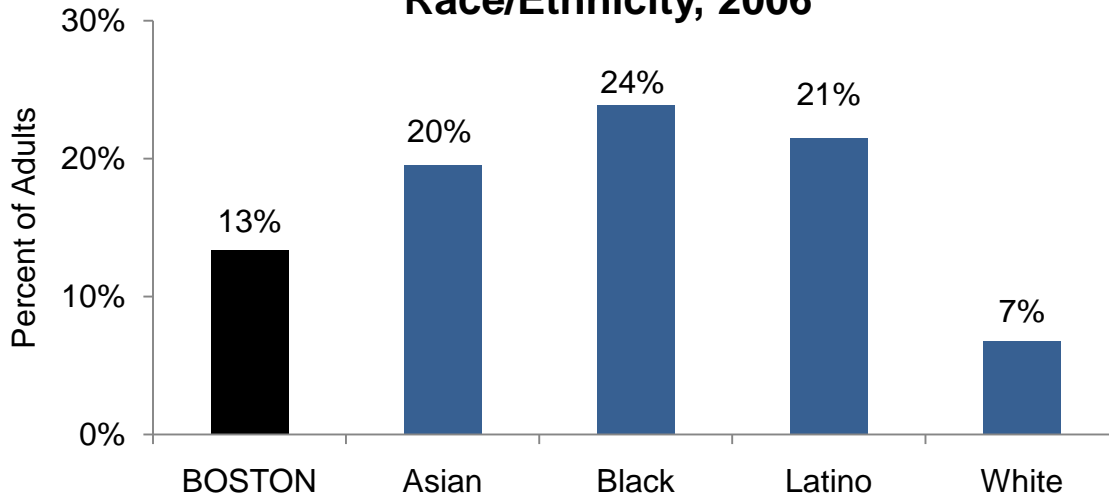
NOTES: Too few deaths among residents of Charlestown, Fenway, Mattapan, and North End to permit the presentation of rates. Data are shown as average annual age-adjusted rates.

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

DATA ANALYSIS: Boston Public Health Commission Research & Evaluation Office

- Back Bay had the highest suicide rate among Boston neighborhoods, 88.2% higher than the rate for Boston overall. South Boston had the second highest suicide rate among Boston neighborhoods, 82.4% higher than the rate for Boston overall.

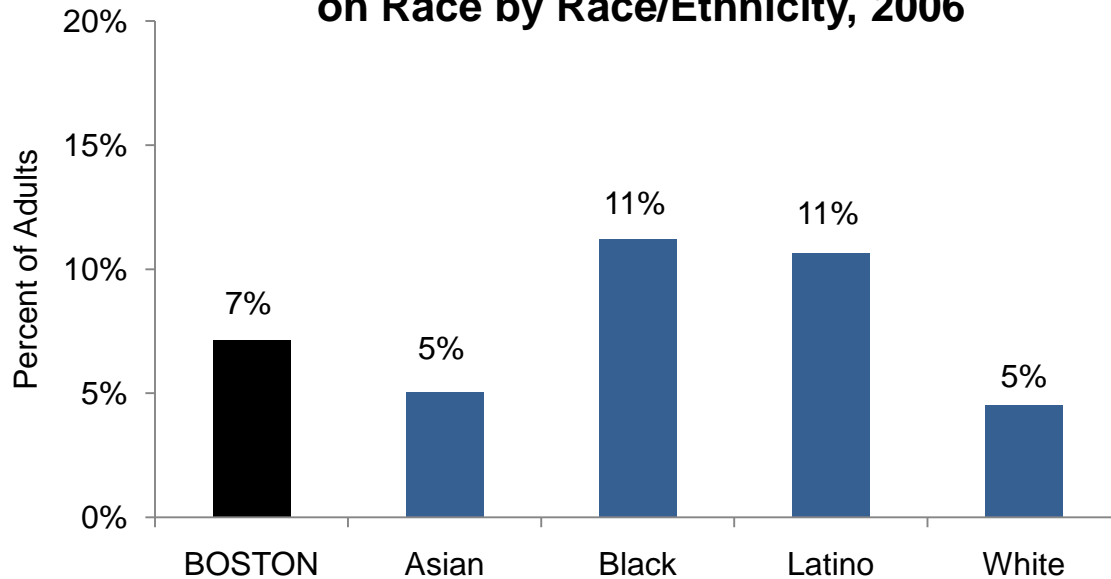
Figure 11.18 Past Month Felt Upset Because of Treatment based on Race by Race/Ethnicity, 2006



NOTE: Survey question reads, “Within the past 30 days, have you felt emotionally upset, for example angry, sad, or frustrated, as a result of how you were treated based on your race?”
 DATA SOURCE: Boston Behavioral Risk Factor Survey 2006, Boston Behavioral Risk Factor Surveillance System (BBRFSS), Boston Public Health Commission
 DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- More than one in eight adults reported feeling emotionally upset within the past month as a result of how they were treated based on their race.
- Compared with White adults, a higher percentage of Black and Latino adults reported feeling emotionally upset as a result of how they were treated based on their race.

Figure 11.19 Past Month Had Physical Symptoms Resulting From Treatment Based on Race by Race/Ethnicity, 2006



NOTE: Survey question reads, "Within the past 30 days, have you experienced any physical symptoms, for example a headache, an upset stomach, tensing of your muscles, or a pounding heart, as a result of how you were treated based on your race?"

DATA SOURCE: Boston Behavioral Risk Factor Survey 2006, Boston Behavioral Risk Factor Surveillance System (BBRFSS), Boston Public Health Commission

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- One in fourteen adults reported experiencing physical symptoms during the past month as a result of how they were treated based on their race.
- A higher percentage of Black and Latino adults compared to White adults reported experiencing physical symptoms for example a headache, an upset stomach, tensing of muscles, or a pounding heart as a result of how they were treated based on their race.

Summary: Mental Health

Although most Boston residents report good mental health, the survey data cited in this section reveal that persistent symptoms of depression and anxiety are experienced by many adults and youths. Ten percent of adults reported depressive symptoms (feeling sad, blue, or depressed) 15 or more days during the past month in 2006. About one in four high school students reported experiencing a depressive episode (depressive symptoms for two weeks straight) during the past year.

Just as disparities in physical health exist, mental health disparities exist too. Consistent with national data (not shown), Boston data reveal higher suicide rates among Boston White residents compared to non-White residents and higher suicide rates among males compared to females. But survey data reveal higher rates of self-reported depressive symptoms among non-Whites, especially among non-White females. Compared with Whites, a higher percentage of Latinos reported depressive symptoms 15 or more days during the past month. Compared with White females, a higher percentage of Black and Latino females reported depressive symptoms 15 or more days during the past month.

There are likely many causes and explanations for the observed differences among racial/ethnic groups. One contributing factor could be the experience of racism. When compared with White adults, a higher percentage of Black and Latino adults reported that they experienced stress and physical symptoms resulting from treatment they believed was based on their race.

This section provided a description of the mental health experiences of various groups including adolescents and adults, males and females, and various racial/ethnic groups. The diversity of experiences among the groups underscores the complex nature of mental health.

References

1. **World Health Organization.** What is Mental Health? *World Health Organization*. [Online] September 3, 2007. [Cited: February 24, 2009.] <http://www.who.int/features/qa/62/en/index.html>.
2. **National Alliance on Mental Illness.** What is Mental Illness: Mental Illness Facts. *About Mental Illness*. [Online] [Cited: February 24, 2009.] http://www.nami.org/Content/NavigationMenu/Inform_Yourself/About_Mental_Illness/About_Mental_Illness.htm.
3. **Department of Health and Human Services.** Healthy People 2010 Midcourse Review Focus Area 18 Mental Health and Mental Disorders. *Healthy People 2010 Midcourse Review*. [Online] April 9, 2007. [Cited: February 24, 2009.] <http://www.healthypeople.gov/data/midcourse/html/focusareas/FA18TOC.htm>.