Chapter 9:
Mental Health

Mental Health

Mental wellness is a fundamental component of overall health. The World Health Organization defines mental health as "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 his or her community" (1). Individuals can experience a small or large degree of impairment in their mental wellness. Although mental disorders are the "end point" of the spectrum, more moderate degrees of impairment can still darken the way that people feel, reason, and relate to others (2).

Impaired mental health is common, and attributed to a variety of genetic, environmental, psychological, and developmental factors. In a given year, an estimated 26% of Americans ages 18 and older—about one in four adults—suffer from a diagnosable mental illness such as depression or anxiety (3). Improvements in mental health lead to more positive health behaviors, such as improved sleep and diet, as well as decreases in smoking and alcohol intake (2). Difficulty with reasoning and impaired social relationships can directly and indirectly influence physical health. For example, the impulsiveness and poor judgment inherent in Borderline Personality disorder makes individuals more likely to be a victim of violence (4). Individuals who struggle with eating disorders are at risk for brain damage, anemia, infertility, and multi-organ failure (5).

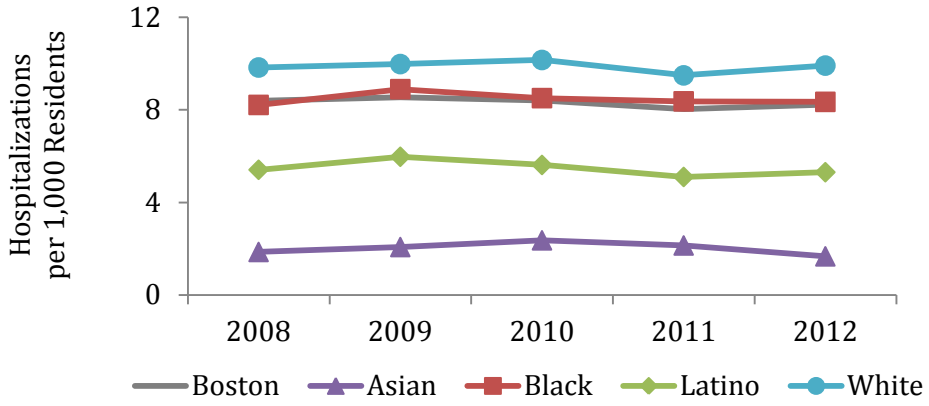
There are marked differences in the distribution of mental disorders by gender, race/ethnicity, and socioeconomic status (6). Anxiety disorders alone impact about 40 million adults every year, with women 60% more likely than men to experience the symptoms of generalized anxiety disorder, obsessive-compulsive disorder, panic disorder, post-traumatic stress disorder, and social phobia. With regards to race, White individuals are more likely than Black individuals to experience depression and anxiety in their lifetime.

Exposure to stressors may explain, in part, why certain groups suffer from poorer mental and physical health outcomes than others (7). Economic difficulties, physical deprivation, job strain, family responsibilities, material disadvantage and discrimination can have detrimental effects on mental health (8, 9). In addition, chronic stress shares a well-established connection with morbidity and mortality (8). A growing body of evidence demonstrates how chronic stress levels, even low levels, "get under the skin" and influence the release of stress hormones that affect cholesterol levels, blood pressure, and inflammation. These markers of high stress are connected with both depression and

heart disease, demonstrating how mental health is integrated with the “whole person” health experience (2).

All too often, the stigma surrounding mental health prevents individuals from seeking the help they need. In 2008, The Mental Health Parity and Addiction Equity Act proved a major step in ending discrimination against those seeking mental health services. The Act required insurance companies that offer coverage for mental health disorders to provide the same level of benefits that they do disorders related to physical health (10). The Act originally applied to group health plans and group health insurance coverage, but the Patient Protection and Affordable Care Act of 2010 extended it to include individual health insurance coverage (11).

Figure 9.1 Mental Health Hospitalizations by Race/Ethnicity and Year*



*Age-adjusted rates

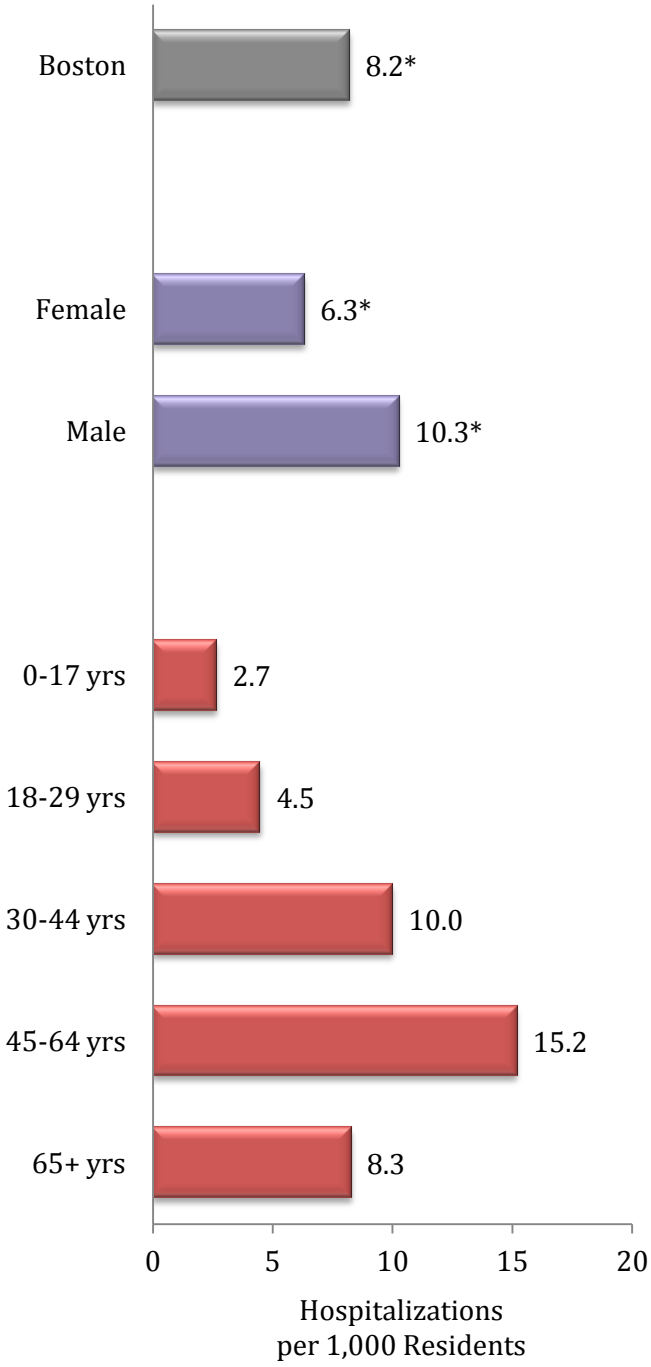
DATA SOURCE: Inpatient Hospital Discharge Database, Massachusetts Center for Health Information and Analysis

From 2008 to 2012, the rate of mental health hospitalizations in Boston decreased over time (8.4 vs. 8.2 hospitalizations per 1,000 residents), however, there were no significant changes over time within each racial/ethnic group. In 2012, mental health hospitalization rates were lower for Asian, Black, and Latino residents compared to White residents.

In 2012, Boston residents had 4,921 mental health hospitalizations; 4,525 (92%) of which were anonymously linked to 3,201 unique individuals. Of these individuals, 76% had 1 mental health hospitalization, 15% had 2 mental health hospitalizations, and 8% had 3 or more mental health hospitalizations.

As a note, a high percentage of hospitalizations for children and Latino residents could not be linked to unique individuals.

Figure 9.2 Mental Health Hospitalizations by Gender and Age, 2012

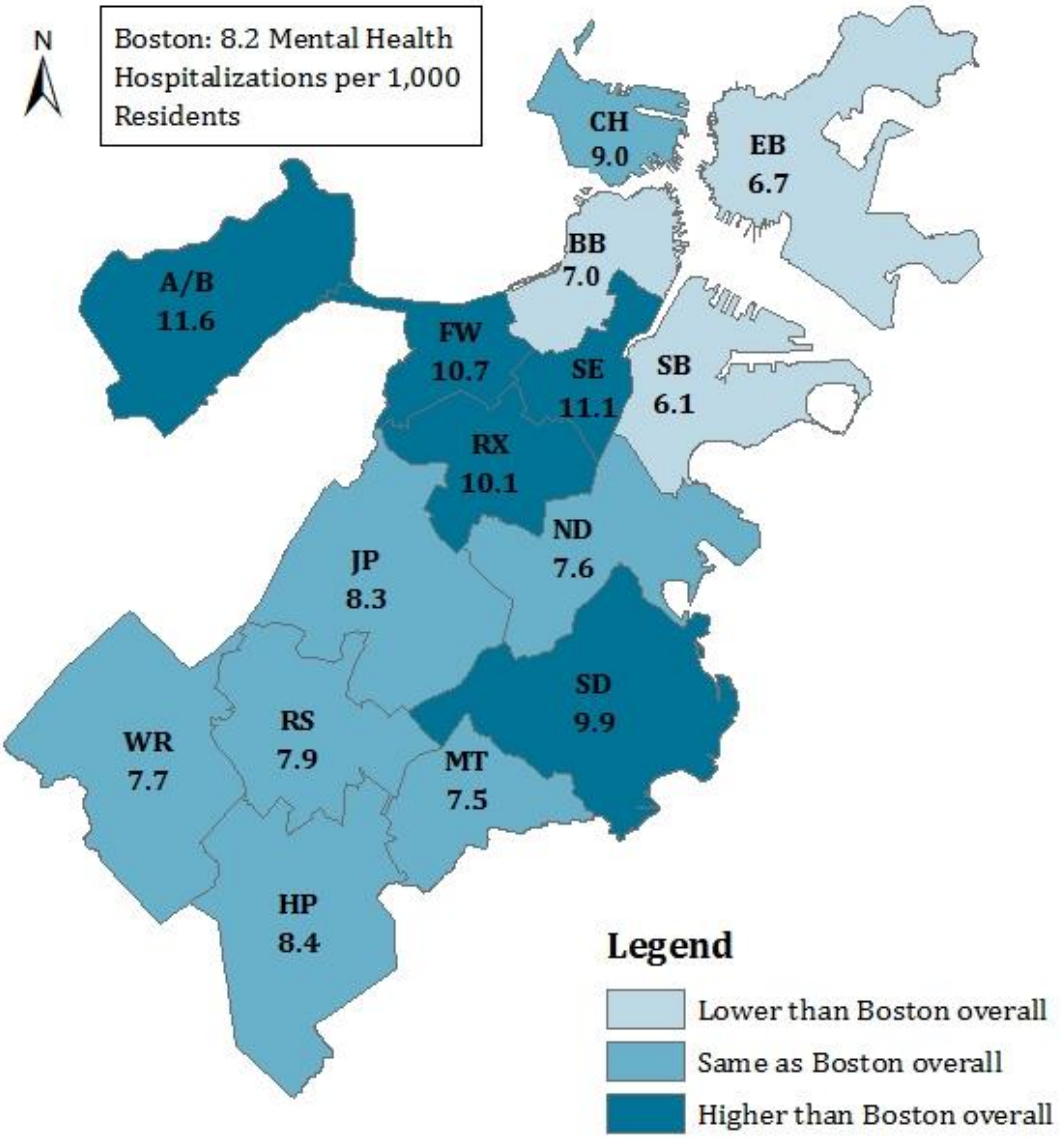


*Age-adjusted rates

DATA SOURCE: Inpatient Hospital Discharge Database, Massachusetts Center for Health Information and Analysis

In 2012, the rate of mental health hospitalizations for female residents was lower than the rate for male residents. Boston's mental health hospitalization rates varied by age group. Residents under the age of 18 had a lower rate than residents between the ages of 18 and 29 years. All other age groups shown had a higher rate than residents 18 to 29 years of age.

Figure 9.3 Mental Health Hospitalizations by Neighborhood*, 2012



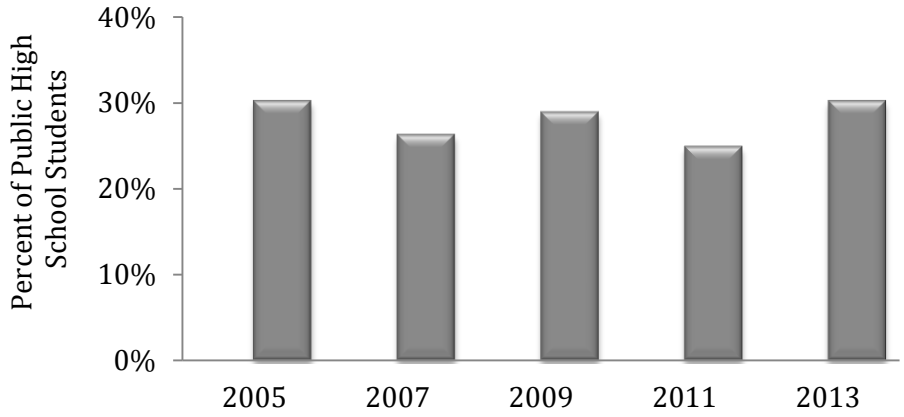
*Age-adjusted rates

DATA SOURCE: Inpatient Hospital Discharge Database, Massachusetts Center for Health Information and Analysis

The mental health hospitalization rate for Boston residents in 2012 was 8.2 hospitalizations per 1,000 residents. Rates differed by neighborhood and were higher for Allston/Brighton, Fenway, Roxbury, South Dorchester, and the South End than the rate for Boston. Back Bay, East Boston, and South Boston had lower rates than Boston overall.

Students were asked if during the past 12 months they felt sad or hopeless everyday for 2 weeks or more. In 2013, 30% of Boston public high school students reported persistent sadness. Between 2005 and 2013, there was no significant change in the percentage of those who experienced persistent sadness.

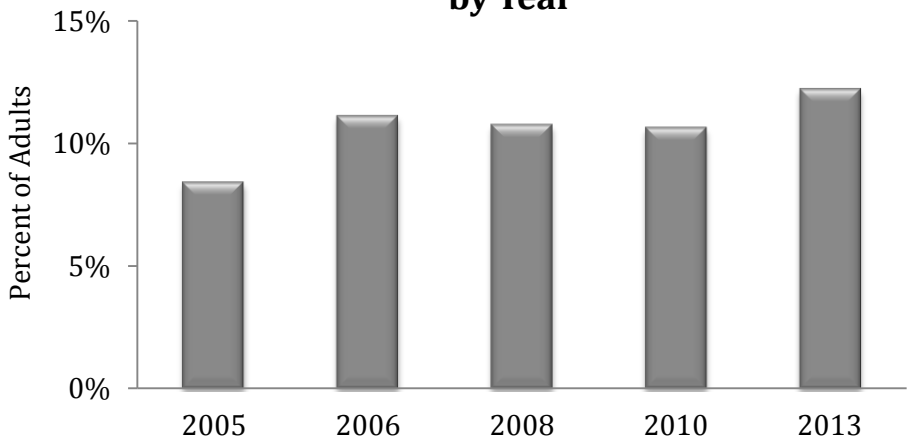
Figure 9.4 Persistent Sadness Among Public High School Students by Year



2005	2007	2009	2011	2013
30.1% (27.8-32.4)	26.2% (23.6-28.8)	28.8% (26.1-31.5)	24.8% (20.6-28.9)	30.1% (26.5-33.8)

DATA SOURCE: Youth Risk Behavior Survey (2005, 2007, 2009, 2011, and 2013), Centers for Disease Control and Prevention

Figure 9.5 Persistent Sadness Among Adults by Year

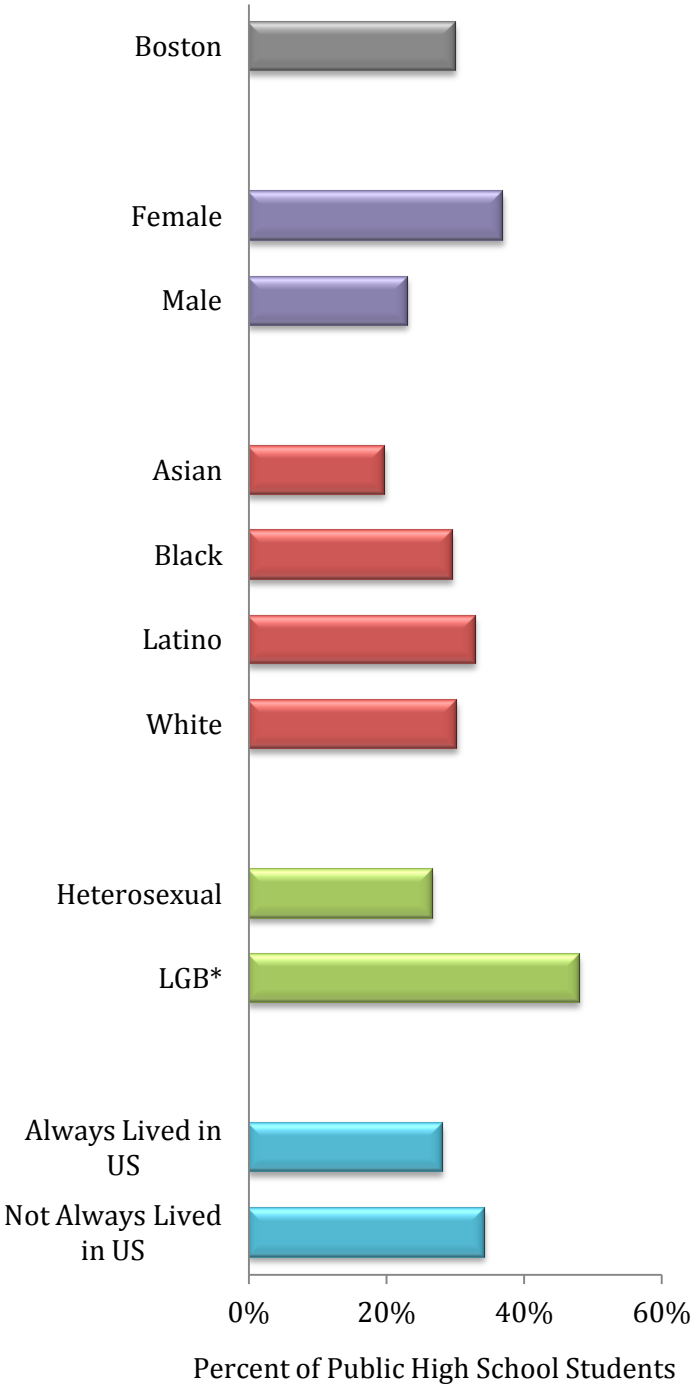


2005	2006	2008	2010	2013
8.4% (6.8-10.1)	11.1% (9.4-12.8)	10.8% (9.0-12.5)	10.6% (8.9-12.4)	12.2% (10.7-13.7)

DATA SOURCE: Boston Behavioral Risk Factor Survey (2005, 2006, 2008, 2010 and 2013), Boston Public Health Commission

In 2008, 8% of Boston adults experienced persistent sadness (being sad, blue, or depressed more than 15 days within the past month) while in 2013, 12% experienced persistent sadness. This was a significant increase in the percentage of adults who experienced persistent sadness.

Figure 9.6 Persistent Sadness Among Public High School Students by Selected Indicators, 2013



Boston	30.1% (26.5-33.8)
Gender	
Female	37.0% (33.0-41.0)
Male	23.1% (18.4-27.8)
Race/Ethnicity	
Asian	19.8% (11.4-28.3)
Black	29.6% (24.1-35.1)
Latino	32.9% (27.3-38.4)
White	30.3% (20.9-39.7)
Sexual Orientation	
Heterosexual	26.7% (22.9-30.5)
LGB*	48.1% (39.3-56.8)
Time Living in U.S.	
Always Lived in US	28.2% (24.2-32.2)
Not Always Lived in US	34.3% (27.1-41.5)

*Includes lesbian, gay, bisexual, and 'Not Sure'

DATA SOURCE: Youth Risk Behavior Survey (2013), Centers for Disease Control and Prevention

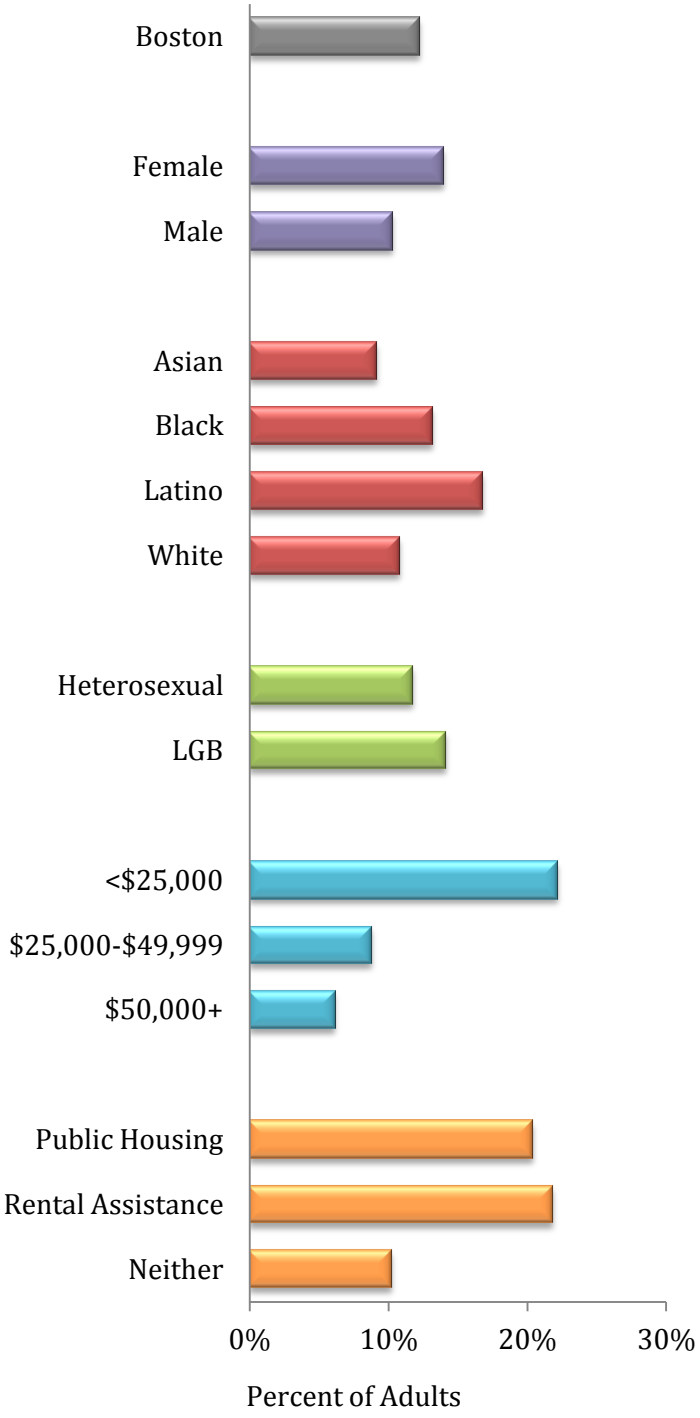
In 2013, 30% of Boston public high school students experienced persistent sadness. The percentage varied by gender, race/ethnicity, sexual orientation, and time living in the U.S. The percentage for female students was higher than for male students. The percentage for LGB students was higher compared to heterosexual students. The percentages of Asian, Black, and Latino students who experienced persistent sadness were similar compared to the percentage for White students.

Boston	12.2% (10.7-13.7)
Gender	
Female	14.0% (11.9-16.0)
Male	10.3% (8.0-12.5)
Race/Ethnicity	
Asian	9.1% (4.6-13.7)
Black	13.1% (10.3-16.0)
Latino	16.7% (12.8-20.6)
White	10.8% (8.5-13.0)
Sexual Orientation	
Heterosexual	11.7% (10.2-13.3)
LGB	14.1% (7.0-21.2)
Income	
<$25,000*	22.2% (18.6-25.8)
$25,000-$49,999*	8.7% (5.9-11.6)
$50,000+*	6.1% (4.4-7.8)
Housing Assistance	
Public Housing	20.4% (14.4-26.3)
Rental Assistance	21.8% (15.8-27.8)
Neither	10.2% (8.6-11.8)

* 15-20% of unweighted sample was missing data.

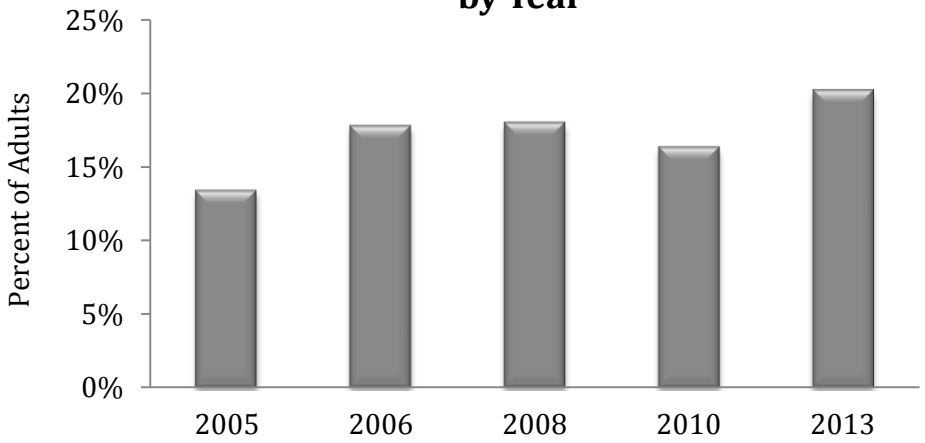
Twelve percent of Boston adults experienced persistent sadness during 2013. The percentage varied by gender, race/ethnicity, sexual orientation, annual household income, and subsidized housing status. The percentage of adults who experienced persistent sadness was higher for adults with annual household incomes of less than 25,000 compared to adults with annual household incomes of $50,000 or more. It was also higher for adults who lived in public housing or received rental assistance compared to adults in neither situation. Within race/ethnicity, a higher percentage of Latino adults experience persistent sadness compared to White adults. There were no significant differences by gender or sexual orientation.

Figure 9.7 Persistent Sadness Among Adults by Selected Indicators, 2013



DATA SOURCE: Boston Behavioral Risk Factor Survey (2013), Boston Public Health Commission

Figure 9.8 Persistent Anxiety Among Adults by Year

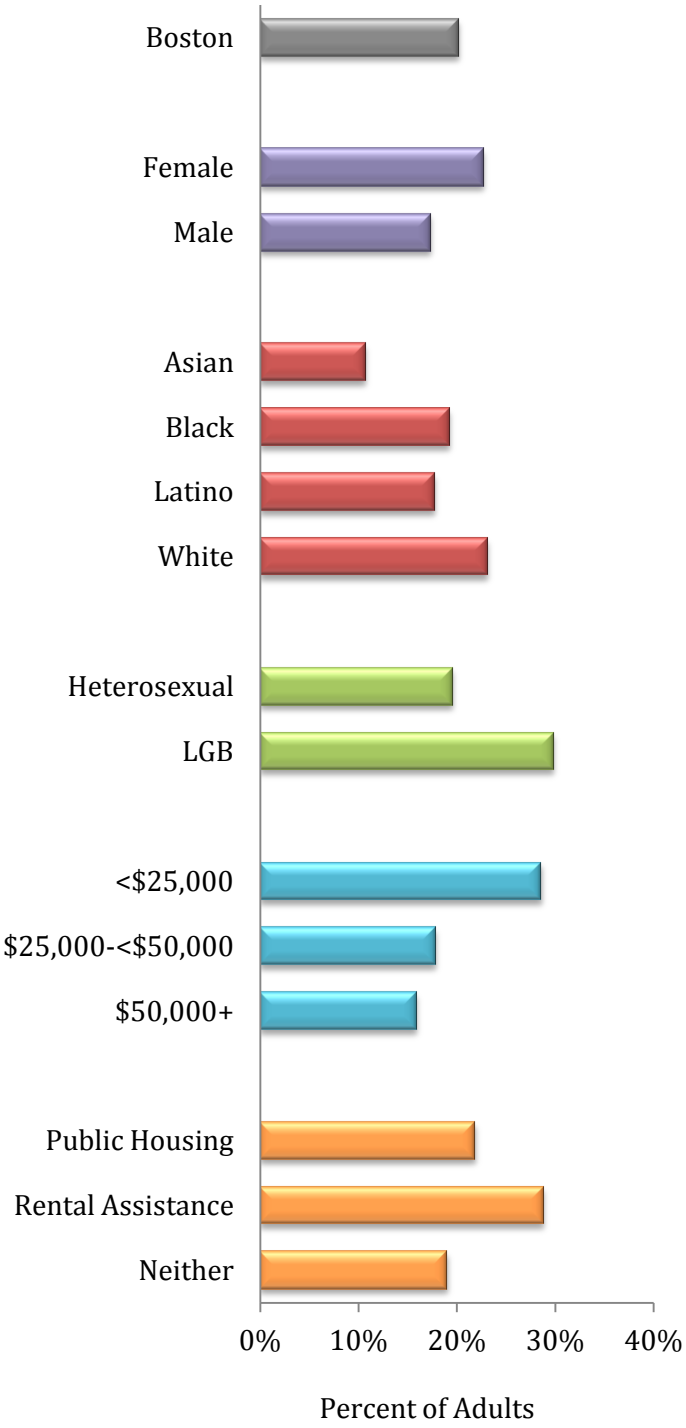


2005	2006	2008	2010	2013
13.4% (11.4-15.4)	17.8% (15.7-19.8)	18.0% (15.8-20.1)	16.3% 14.3-18.4)	20.2% (18.3-22.1)

DATA SOURCE: Boston Behavioral Risk Factor Survey (2005, 2006, 2008, 2010 and 2013), Boston Public Health Commission

In 2005, 13% of Boston adults experienced persistent anxiety (feeling worried, tense, or anxious for more than 15 days within the past 30 days). By 2013, that percentage had significantly increased to 20%.

Figure 9.9 Persistent Anxiety Among Adults by Selected Indicators, 2013



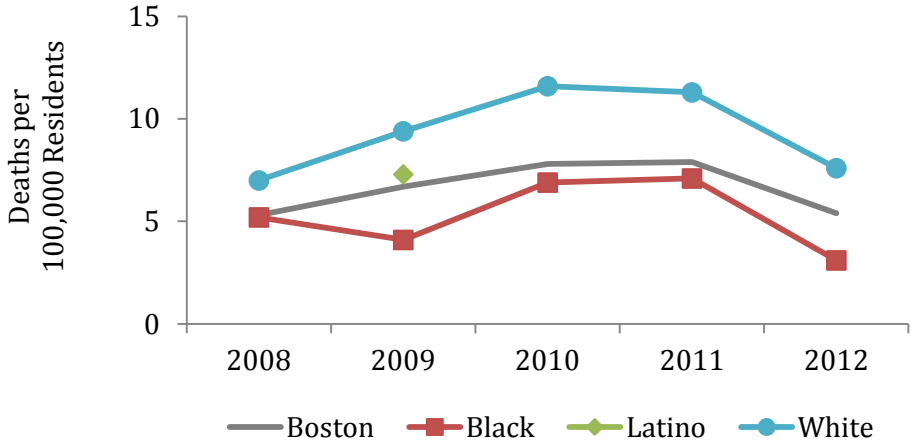
Boston	20.2% (18.3-22.1)
Gender	
Female	22.7% (20.1-25.3)
Male	17.4% (14.6-20.2)
Race/Ethnicity	
Asian	10.7% (5.7-15.7)
Black	19.2% (16.0-22.5)
Latino	17.7% (13.6-21.8)
White	23.1% (20.0-26.1)
Sexual Orientation	
Heterosexual	19.6% (17.6-21.6)
LGB	29.8% (21.1-38.4)
Income	
<$25,000*	28.6% (24.5-32.7)
$25,000-$49,999*	17.8% (13.7-21.9)
$50,000+*	15.9% (13.2-18.5)
Housing Assistance	
Public Housing	21.8% (15.7-28.0)
Rental Assistance	28.8% (22.3-35.3)
Neither	19.0% (16.9-21.2)

*15-20% of unweighted sample was missing data.

DATA SOURCE: Boston Behavioral Risk Factor Survey (2013), Boston Public Health Commission

The percentage of Boston adults who experienced persistent anxiety during 2013 varied by gender, race/ethnicity, sexual orientation, annual household income, and subsidized housing status. The percentage of residents who experienced anxiety was higher for those who received rental assistance compared to residents who were in neither situation. The percentage of residents who experienced persistent anxiety was also higher among those who reported an annual household income of less than $25,000 as compared to those with an annual household income of $50,000 or more. Percentages were similar within gender and sexual orientation.

Figure 9.10 Suicide by Race/Ethnicity and Year*



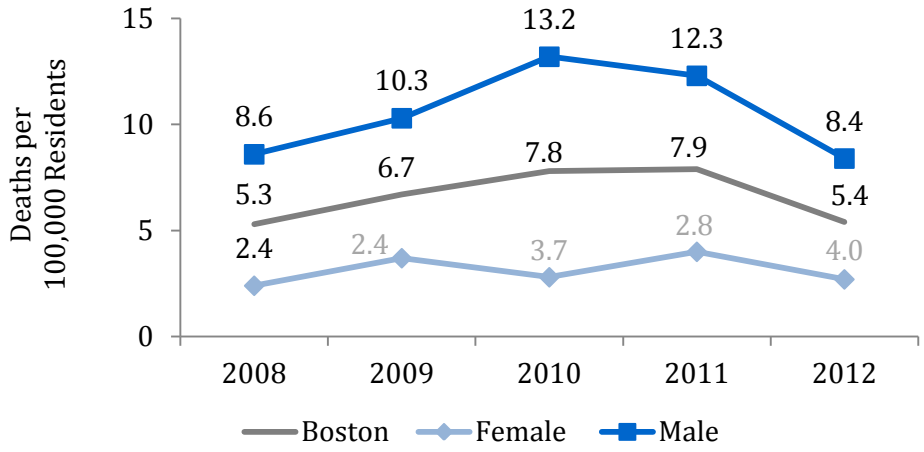
*Age-adjusted rates

NOTES: Rates for Asian residents for the years 2008-2012 and for Latino residents for the years 2008 and 2010-2012 were not presented due to the small number of cases.

DATA SOURCE: Boston Resident Deaths, Massachusetts Department of Public Health

Between 2008 and 2012, the age-adjusted suicide rate for Boston residents did not change. Age-adjusted suicide rates among Boston residents were similar between Black and White residents in 2012. There was no significant increase over time in the suicide mortality rate among Black or White residents.

Figure 9.11 Suicide by Gender and Year*



*Age-adjusted rates

NOTES: Gray text represents rates based on counts less than 20 and should be interpreted with caution. Black text represents rates based on counts of at least 20.

DATA SOURCE: Boston Resident Deaths, Massachusetts Department of Public Health

In 2008, the age-adjusted suicide rate for Boston residents was 5.3 per 100,000, and 5.4 in 2012. Rates for female residents were lower than those of male residents.

References

1. World Health Organization. What is mental health? [Online] September 30, 2007. [Cited: February 18, 2014.] http://www.who.int/features/qa/62/en/index.html.

2. Friedli, L. Mental health, resilience, and inequalities. Copenhagen : WHO Regional Office for Europe, 2009.

3. Prevalence, Severity, and Comorbidity of Twelve-month DSM-IV Disorders in the National Comorbidity Survey Replication (NCS-R). Kessler, R. C., et al. 6, 2005 : Archives of General Psychiatry, Vol. 62.

4. National Institute of Mental Health. What is Borderline Personality Disorder. [Online] [Cited: February 14, 2014.] http://www.nimh.nih.gov/health/topics/borderline-personality-disorder/index.shtml.

5. —. What are eating disorders? [Online] [Cited: February 14, 2014.] http://www.nimh.nih.gov/health/publications/eating-disorders/index.shtml.

6. Administration, Substance Abuse Mental Health Service. Results from the 2009 National Survey on Drug Use and Health: Mental Health Findings. Rockville : Office of Applied Studies, NSDUH Series H-39, HHS Publication No. SMA 10-4609, 2010.

7. Racial Disparities in Health: How Much Does Stress Really Matter? Sternthal, M. J., Slopen, N. and Williams, D. R. 1, s.l. : Du Bois Review: Social Science Research on Race, 2011, Vol. 8.

8. National Research Council Panel on Race, Ethnicity, and Health in Later Life. Understanding Racial and Ethnic Differences in Health in Late Life: A Research Agenda. Washington D.C. : National Academies Press, 2004.

9. American Psychology Association. How stress affects your health. [Online] [Cited: February 14, 2014.] https://www.apa.org/helpcenter/stress-facts.pdf.

10. American Psychological Association. Mental Health Parity and Addiction Equity Act: How does the new mental health parity law affect my insurance coverage? [Online] [Cited: February 14, 2014.] http://www.apa.org/helpcenter/parity-law.aspx.

11. The Center for Consumer Information & Insurance Oversight. The Mental Health Parity and Addiction Equity Act. [Online] [Cited: February 2014, 2014.] http://www.cms.gov/CCIIO/Programs-and-Initiatives/Other-Insurance-Protections/mhpaea_factsheet.html.