

Introduction: Socioeconomic Status

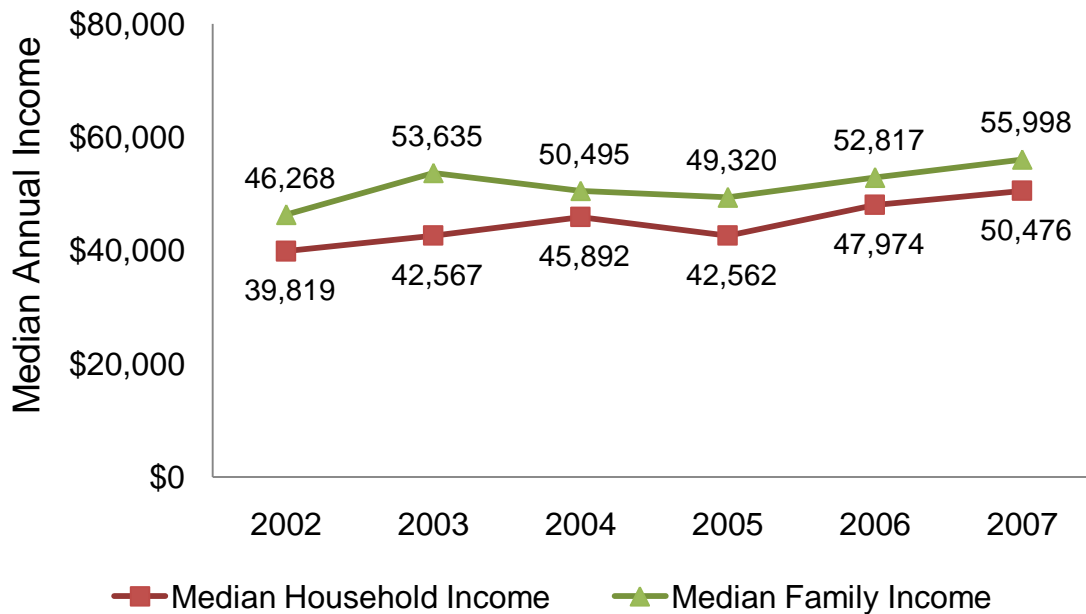
Socioeconomic status (SES) is a measure of an individual's or family's economic and social position relative to others based on income, education, and occupation. Income, education, and race are such strong predictors of health that an assessment of the health of Boston would be incomplete without consideration of the socioeconomic status of its residents. An individual's place on the socioeconomic ladder can play a role in the person's level of health and even how long that person may live (1). Socioeconomic status and race entwine to contribute to inequities in chronic disease, disability, mental health, birth outcomes, injuries, violence, and mortality.

Socioeconomic status impacts health by creating barriers to regular health care, adequate housing, quality education, nutritious food, recreational opportunities, and other resources associated with a healthy lifestyle. Racism limits economic and social opportunities and affects the living and working conditions of people of color (2). The daily stressors associated with lower socioeconomic status and racism can trigger physiological changes that over time can damage immune defenses and vital organs resulting in more rapid onset and progression of chronic illnesses (3).

Socioeconomic status affects health at every age; however, the effect of family income and education on children is especially powerful. Socioeconomic adversity in childhood is associated with worse health during childhood and later in adulthood (4,5). Poor housing, schools and communities contribute to lower educational attainment among poor children. Lower education level is associated with reduced employment prospects and lower income levels in adulthood and their potential health impacts (4). In addition, poor nutrition and inferior housing associated with low income levels contribute to infectious and chronic disease, injuries, and poor development which create further barriers to children's success (5).

This section will present data on measures related to socioeconomic status. These include measures of income (median family and median household income, and poverty levels), impact of low income levels (foreclosures, homelessness, and food stamp caseloads), and measures associated with income status (educational level and employment levels).

Figure 2.1 Median Annual Household and Family Income, 2002-2007



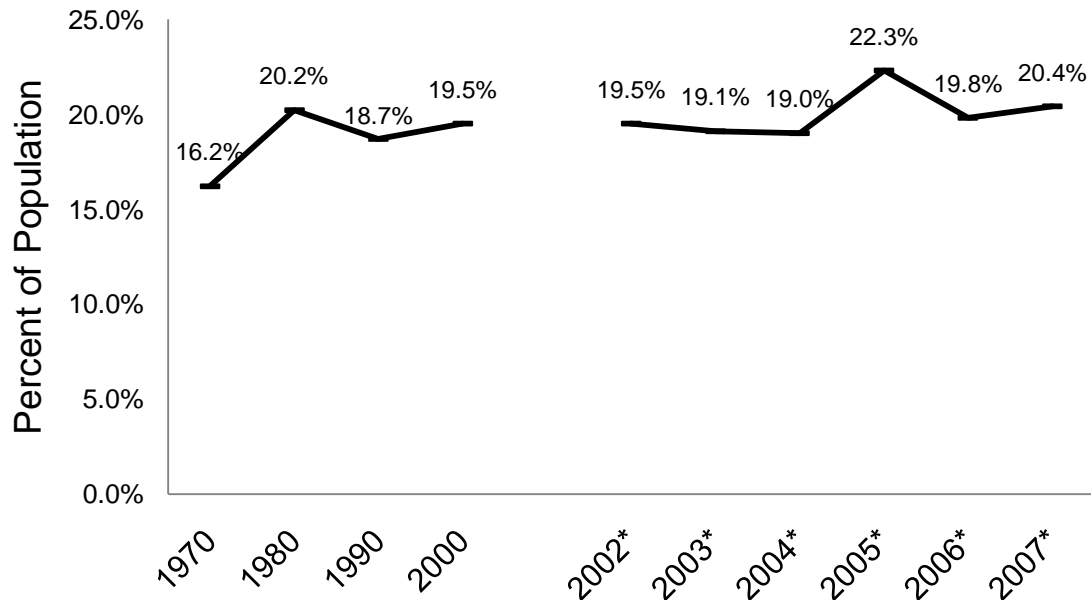
NOTES: Data are estimates based on the American Community Survey. Household income is the total pre-tax money income from all household members over the age 15. It includes wages and salary, as well as income received from sources such as unemployment insurance, child support, and dividends from investments. Household members can be related or unrelated. *Median Household Income* is the amount which divides the group in half - half of the households will fall above the median and half fall below. *Family income* is defined the same as household income, except the family consists of at least two related individuals.

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American FactFinder, 2002-2007 American Community Survey

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In 2007, the median family income in Boston was \$55,998 while the median household income was \$50,476.
- Between 2002 and 2007, median family income increased by 21% while median household income increased by 27%.

Figure 2.2 Population Living in Poverty, Selected Years, 2002-2007



	1970	1980	1990	2000	2002*	2003*	2004*	2005*	2006*	2007*
Count	99, 262	106,770	102,092	109,128	106,335	102,857	98,989	116,110	108,617	118,125

* Data are estimates based on the American Community Survey.

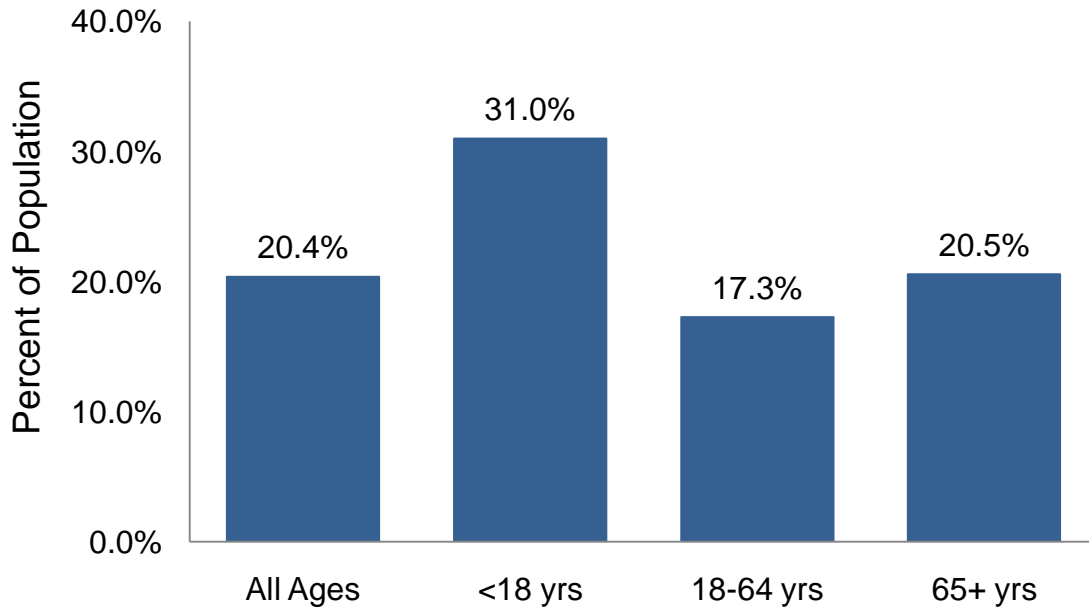
NOTES: Poverty threshold, which is updated annually by the U.S. Census Bureau, is defined as the minimum level of income needed to achieve the adequate standard of living. In 2007, the federal poverty threshold for a family of four was \$21,203. The figures shown in the chart have been adjusted to account for different family sizes and compositions.

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American FactFinder, 2002-2007 American Community Surveys; U.S. Department of Commerce, Bureau of the Census, Census 2000, Census 1990 Summary File-Sample Data, Census 1980, Census 1970

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In 2007, 20.4% of Boston residents had income below the poverty line. The percentage of individuals living in households with income below poverty level has remained fairly constant over the last three decades.

Figure 2.3 Population in Households with Income below Poverty Level by Age, 2007



	All Ages	<18	18-64	65+
Count	118,125	36,196	69,724	12,205

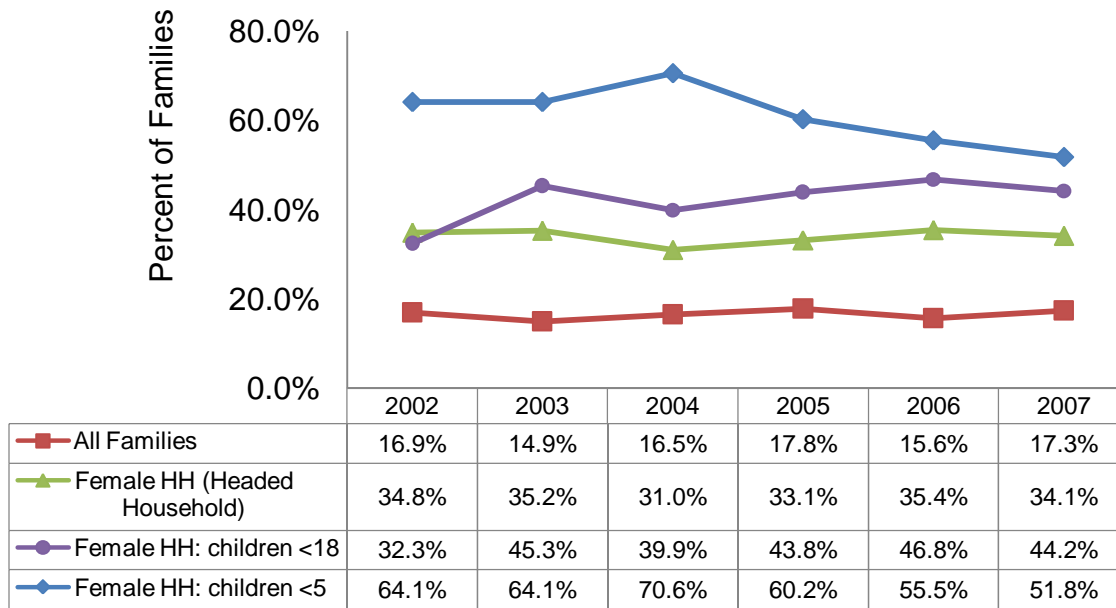
NOTES: Data are estimates based on the American Community Survey. Poverty threshold, which is updated annually by the U.S. Census Bureau, is defined as the minimum level of income needed to achieve the adequate standard of living. In 2007, the federal poverty threshold for a family of four was \$21,203. The figures shown in the chart have been adjusted to account for different family sizes and compositions.

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American FactFinder, 2007 American Community Survey

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In 2007, almost one-third (31%) of children lived in households with income below poverty level.

Figure 2.4 Families with Income Below Poverty Level, 2002-2007



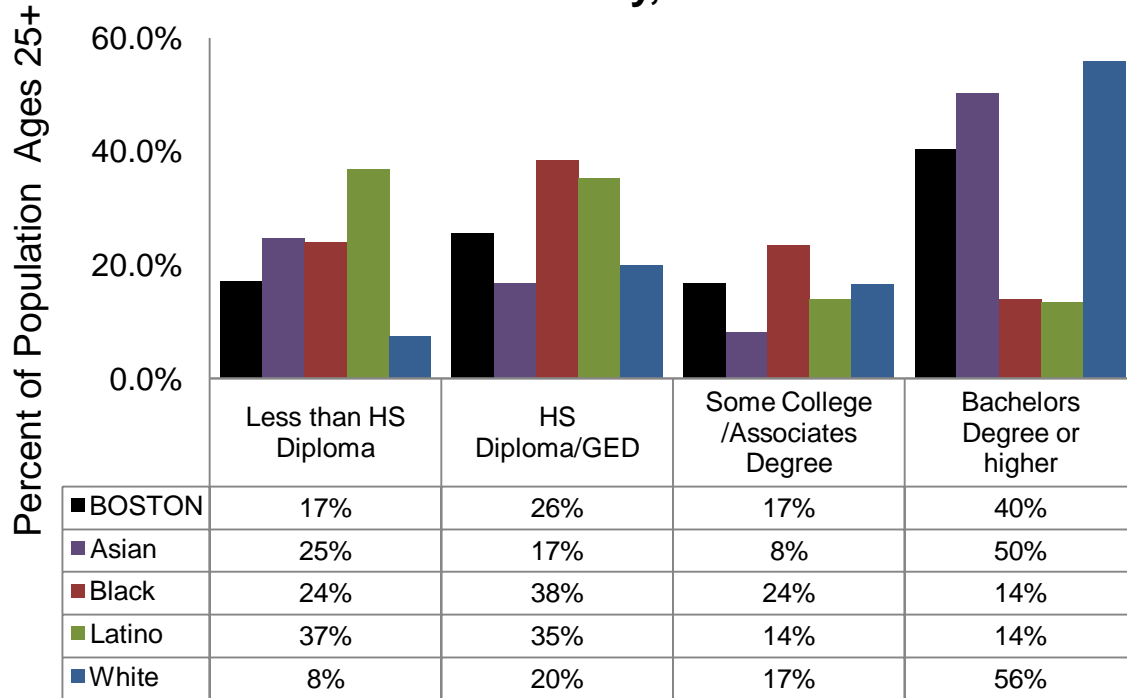
NOTES: Data are estimates based on the American Community Survey. Poverty threshold, which is updated annually by the U.S. Census Bureau, is defined as the minimum level of income needed to achieve the adequate standard of living. In 2007, the federal poverty threshold for a family of four was \$21,203. The figures shown in the chart have been adjusted to account for different family sizes and compositions. Female head of household: In 1980, the U.S. Census replaced the term “head of household” with “householder.” The census uses the term “householder” to refer to the individual in whose name the housing unit is owned or rented (if a unit is co-owned or rented, either individual may be called the “householder.” If no such person resides in the unit, any adult may be considered the “householder.” Families in which a female is responsible for the care of children census is inferred through the census category, “female householder, no husband present, with children.”

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American FactFinder, 2002-2007 American Community Surveys

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In 2007, the percentage of female headed households with income below the poverty level (34.1%) was about twice as high as the percentage for all families (17.3%).
- Between 2004 and 2007, the percentage of female headed households below poverty level with children under five decreased from 70.6% to 51.8%.
- Despite a sharp decrease between 2004 and 2007, the percentage of families in poverty remained highest among female headed families with children under 5.

Figure 2.5 Educational Level by Race/Ethnicity, 2007



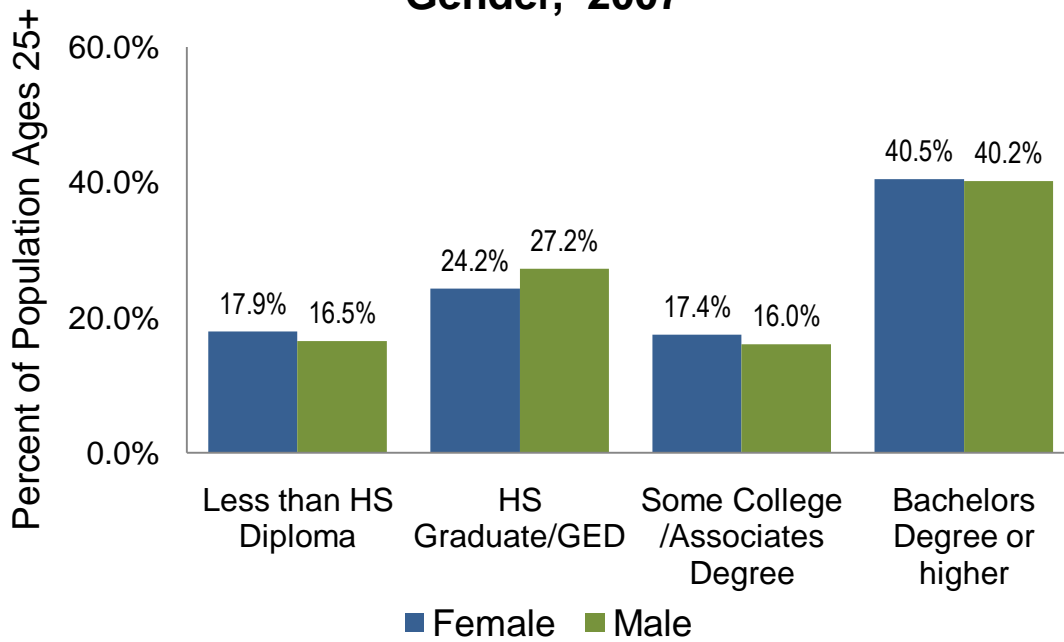
NOTE: Data are estimates based on the American Community Survey.

DATA SOURCE: US Department of Commerce, Bureau of the Census, American FactFinder, 2007 American Community Survey

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In 2007, over one-third (37%) of Hispanic adults had less than a high school diploma or GED.
- The percentages of White adults who had educational levels of Bachelors Degree or higher was four times higher than the percentages of Black/African American and Hispanic/Latino adults with this level of education.
- While half of Asian adults had educational levels of Bachelors Degree or higher, 25% had less than a high school diploma.

Figure 2.6 Educational Level by Gender, 2007



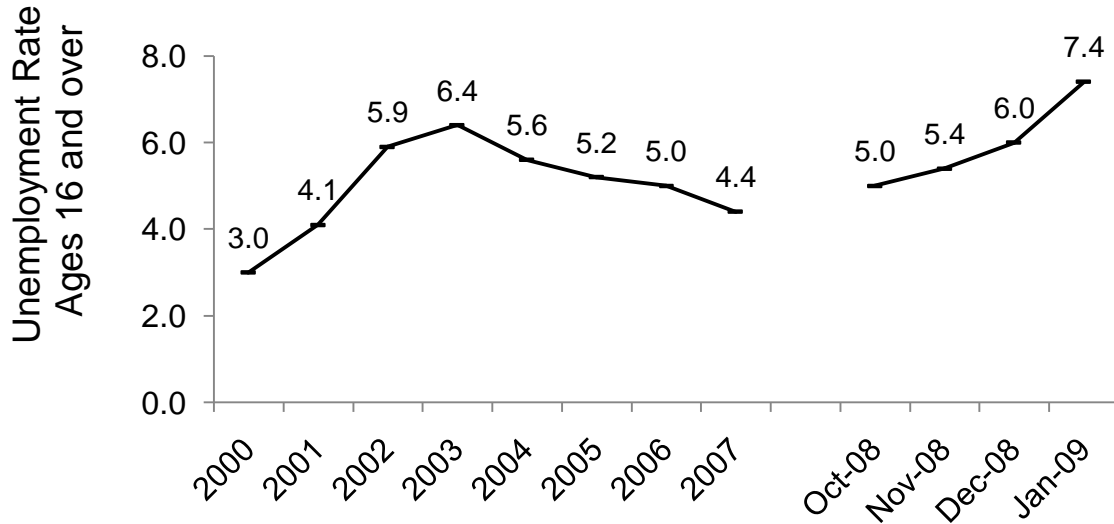
NOTE: Data are estimates based on the American Community Survey

DATA SOURCE: US Department of Commerce, Bureau of the Census, American FactFinder, 2007 American Community Survey

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- At each educational level, males and females had approximately the same level of achievement.

**Figure 2.7 Unemployment Rate
2000-2007
and October 2008-January 2009**



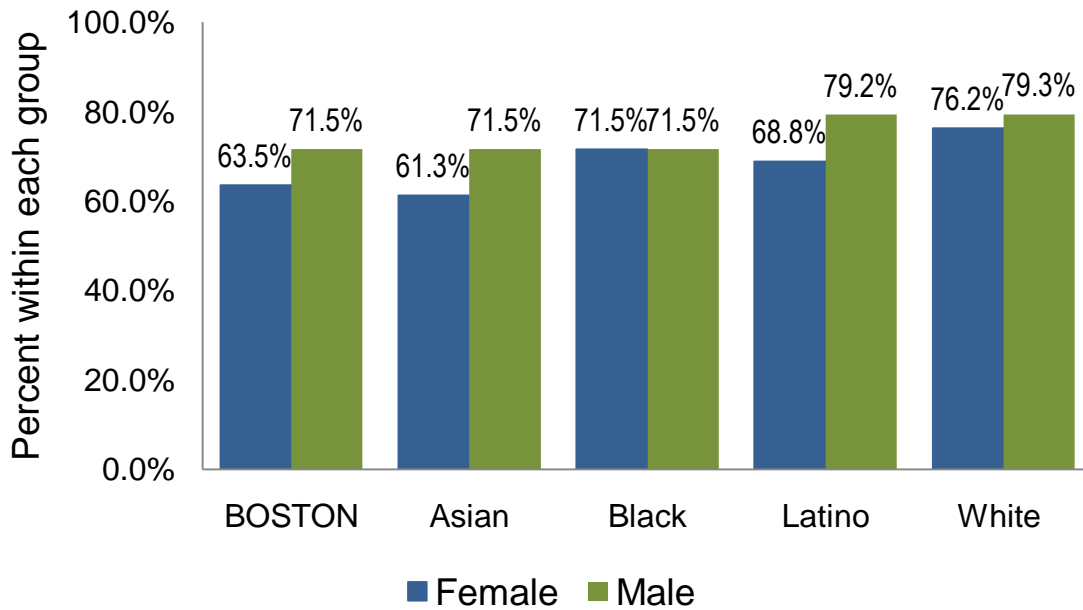
NOTE: The labor force and unemployment data are based on the same concepts and definitions as those used for the official national estimates obtained from the Current Population Survey (CPS), a sample survey of households that is conducted for the Bureau of Labor Statistics (BLS) by the U.S. Census Bureau. The LAUS program measures employment and unemployment on a place-of-residence basis. The universe for each is the civilian noninstitutional population 16 years of age and over. Employed persons are those who did any work at all for pay or profit in the reference week (the week including the 12th of the month) or worked 15 hours or more without pay in a family business or farm, plus those not working who had a job from which they were temporarily absent, whether or not paid, for such reasons as labor-management dispute, illness, or vacation. Unemployed persons are those who were not employed during the reference week (based on the definition above), had actively looked for a job sometime in the 4-week period ending with the reference week, and were currently available for work; persons on layoff expecting recall need not be looking for work to be counted as unemployed. The labor force is the sum of employed and unemployed persons. The unemployment rate is calculated as the number of unemployed/civilian labor force*100.

DATA SOURCE: US Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics, <http://www.bls.gov/LAU/>

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- The annual unemployment rate experienced a period of steady decline between 2003 and 2007. Between October 2008 and January 2009, the monthly unemployment rate increased from 5.0% in October to 7.4 in January.

Figure 2.8 Labor Force Participation Rate by Race/Ethnicity and Gender, 2007



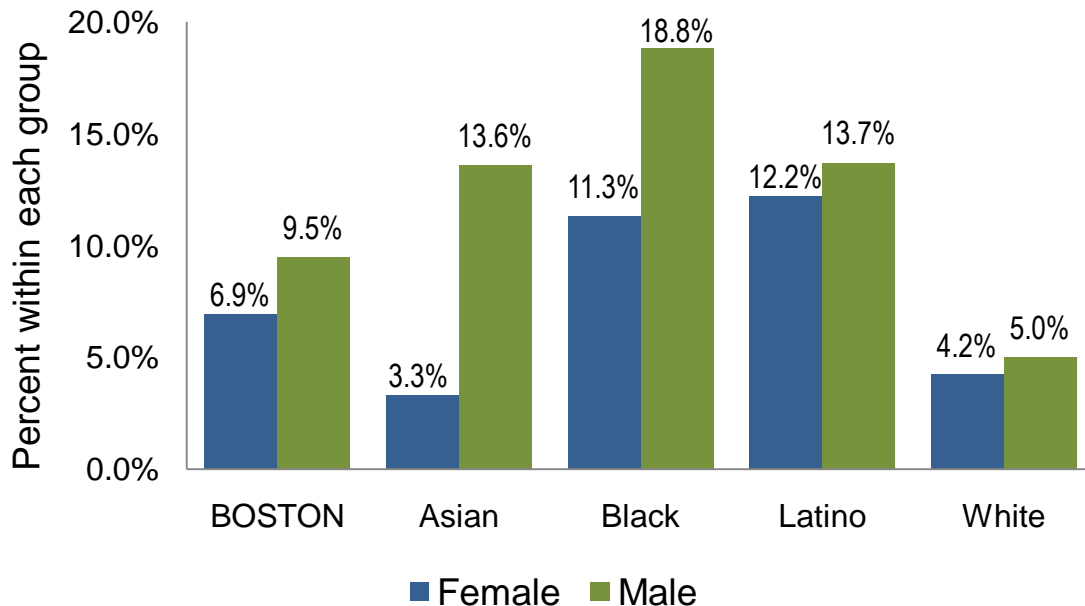
NOTE: Data are estimates based on the American Community Survey. The federal Bureau of Labor Statistics conducts monthly household surveys to gather national, state and local employment data. The survey uses the following definitions in calculating employment-related rates. Individuals who are not in the military and not in an institution (such as a jail or hospital) are part of this survey. Individuals with jobs are considered *employed*. Jobs can be part-time and temporary and includes unpaid work done on behalf of a family enterprise. Individuals are considered *unemployed* if they did not have a job, but are available for work and are looking for a job. The *civilian labor force* consists of individuals who are either employed or unemployed. Individuals who are not employed and not looking for work are *not in the civilian labor force*. The survey defines labor force participation rate (*LFPR*) as a proportion of the civilian population who are either employed or unemployed (but looking for working). The LFPR is calculated as the number of employed and unemployed/civilian population*100.

DATA SOURCE: US Department of Commerce, Bureau of the Census, American FactFinder, 2007 American Community Survey

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- The Labor Force Participation Rate (LFPR) of both Black females and males was 71.5%. Among Asian, Latino, and White residents, males had higher LPRs than females.

Figure 2.9 Unemployment by Race/Ethnicity and Gender, 2007



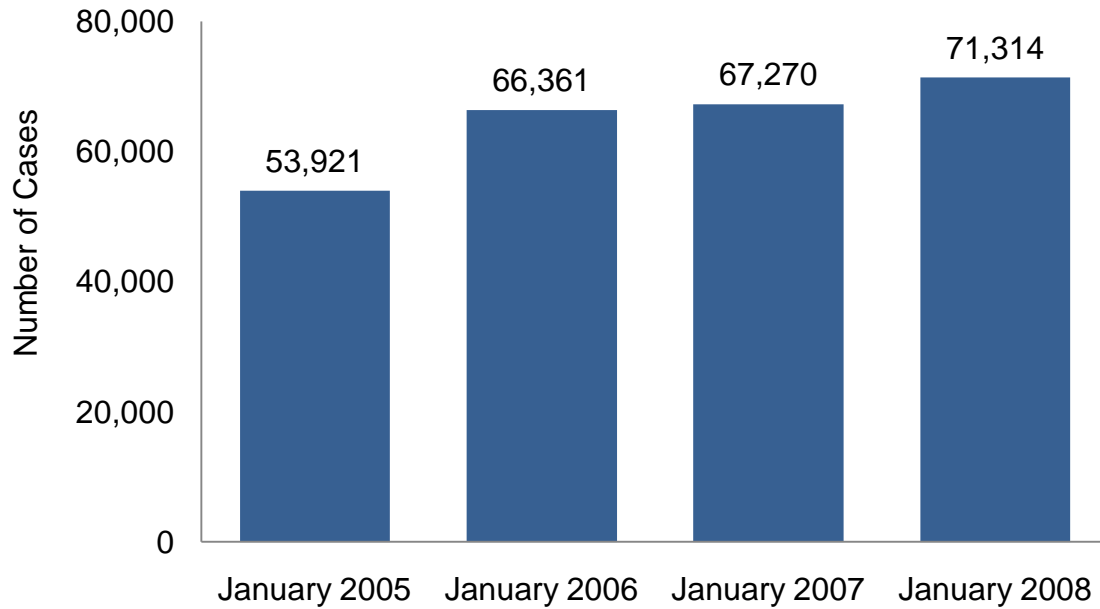
NOTE: Data are estimates based on the American Community Survey. The federal Bureau of Labor Statistics conducts monthly household surveys to gather national, state and local employment data. The survey uses the following definitions in calculating employment-related rates. Individuals who are not in the military and not in an institution (such as a jail or hospital) are part of this survey. Individuals with jobs are considered *employed*. Jobs can be part-time and temporary and includes unpaid work done on behalf of a family enterprise. Individuals are considered *unemployed* if they did not have a job, but are available for work and are looking for a job. The *civilian labor force* consists of individuals who are either employed or unemployed. Individuals who are not employed and not looking for work are *not in the civilian labor force*. An *unemployment rate* is calculated by dividing the number of individuals not employed (but available and looking) into the number in the civilian labor force.

DATA SOURCE: US Department of Commerce, Bureau of the Census, American FactFinder, 2007 American Community Survey

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- The unemployment rate among Black males was almost four times higher than the rate among White males. The rate among Asian and Latino males was almost three times higher than among White males.
- The unemployment rate was lowest among Asian females. The unemployment rates among Black females and Latino females were almost three times higher than among White females.
- For each racial and ethnic group, the unemployment rate among males was higher than among females. The rate among Asian males was almost four times the rate among Asian females.

Figure 2.10 January Food Stamp Cases, 2005, 2006, 2007, and 2008



DATA SOURCE: Commonwealth of Massachusetts, Department of Transitional Assistance, Supplemental Nutrition Assistance Program (SNAP)

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In January, there were 71,314 food stamp cases in Boston, 32% more than in January 2005.

Figure 2.11 Food Stamp Cases in Boston Neighborhoods, January 2005 and January 2008

	Jan-05	Jan-08	% Change
Boston	53,921	71,314	32%
Allston/Brighton	2,674	3,563	33%
Back Bay*	901	1,695	88%
Charlestown	1,408	1,782	27%
East Boston	2,898	4,240	46%
Fenway/Kenmore	1,613	2,446	52%
Hyde Park	2,044	2,847	39%
Jamaica Plain	2,577	3,365	31%
Mattapan	3,096	4,014	30%
North Dorchester	11,225	13,652	22%
Roslindale	2,120	2,942	39%
Roxbury	6,450	9,246	43%
South Boston	2,522	3,471	37%
South Dorchester	10,714	12,668	18%
South End†	3,329	4,764	43%
West Roxbury	350	619	77%

*Includes Beacon Hill, North End, and West End

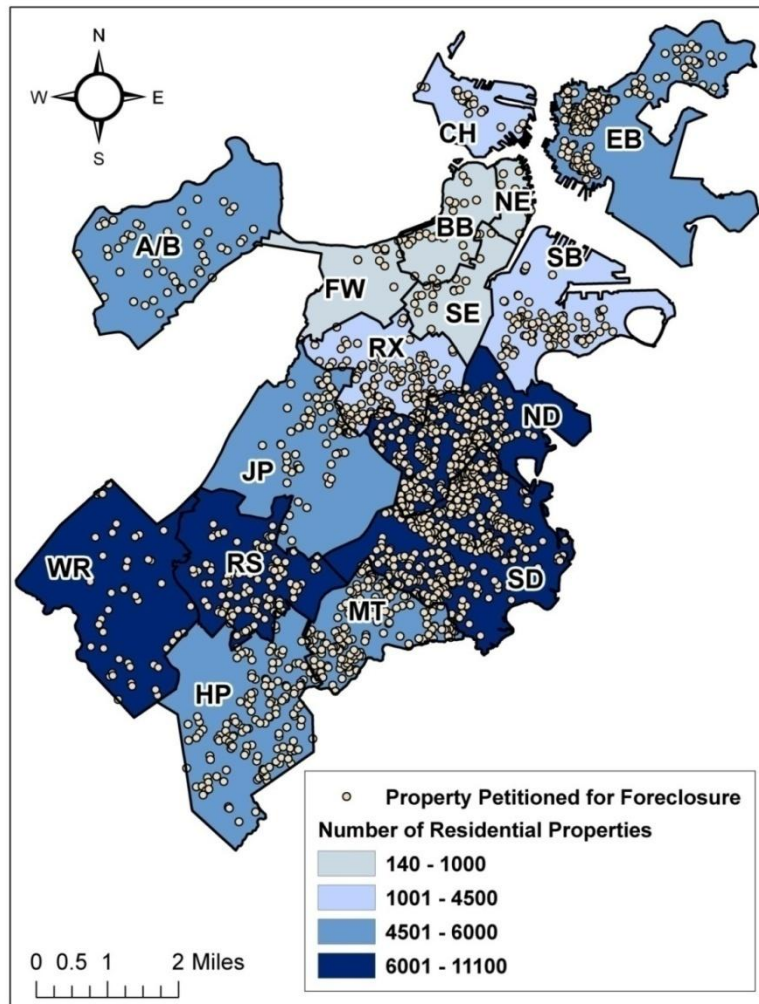
† Includes Chinatown

DATA SOURCE: Commonwealth of Massachusetts, Department of Transitional Assistance, Supplemental Nutrition Assistance Program (SNAP)

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In January 2008, there were 71,314 food stamp cases in Boston, 38% more than in January 2005. All neighborhoods experienced an increase in food stamp cases during this time.
- Roxbury, North Dorchester, and South Dorchester have the largest number of food stamp cases and experienced the largest increase in number of cases.
- West Roxbury and the Back Bay neighborhoods experienced the largest percent increase in cases, although these neighborhoods had the fewest number of cases,

Figure 2.12 Foreclosure Petitions and Number of Residential Properties by Neighborhood, 2007



ABBREVIATIONS KEY: A/B=Allston/Brighton, BB=Back Bay (includes Beacon Hill, Downtown, and the West End), 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 (includes Chinatown), and WR=West Roxbury

NOTE: Residential properties include single family dwellings, residential condominium units, two family dwellings, and three family dwellings. Professionally managed properties, such as rental buildings, are not considered residential properties.

DATA SOURCE: City of Boston, Department of Neighborhood Development

DATA ANALYSIS: Department of Neighborhood Development and the Boston Public Health Commission Research and Evaluation Office

MAP CREATED BY: Boston Public Health Commission Research and Evaluation Office and Information Technology Systems, Geographical Information Systems Program

- The following map shows the locations of the properties on which a foreclosure petition was filed. Shading is used to show the total number of residential properties in each neighborhood.
- In 2007, foreclosure petitions were filed on just over 3.5% of all residential properties in Boston. Most affected were Roxbury, Mattapan, and Dorchester—60% of all foreclosure petitions occurred in these three neighborhoods.

Figure 2.13 Foreclosure Petitions in Boston Neighborhoods, 2007 and 2008			
	2007	2008	% Change
BOSTON	2,430	1,897	-21.9%
Allston/Brighton	67	60	-10.4%
Back Bay†	34	32	-5.9%
Charlestown	32	26	-18.8%
East Boston	169	185	9.5%
Fenway	11	9	-18.2%
Hyde Park	182	156	-14.3%
Jamaica Plain	95	70	-26.3%
Mattapan	241	183	-24.1%
North Dorchester	410	276	-32.7%
North End/Downtown	2	2	0.0%
Roslindale	132	109	-17.4%
Roxbury	192	155	-19.3%
South Boston	94	97	3.2%
South Dorchester	664	462	-30.4%
South End‡	32	22	-31.3%
West Roxbury	75	53	-29.3%

†Includes Beacon Hill and West End

‡Includes Chinatown

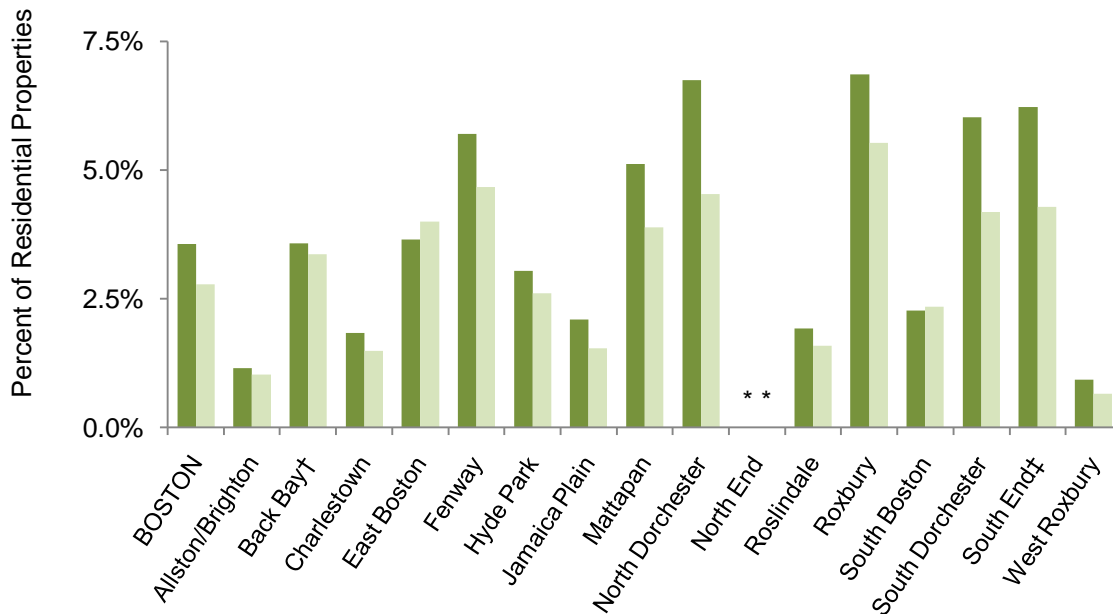
NOTE: Residential properties include single family dwellings, residential condominium units, two family dwellings, and three family dwellings. Professionally managed properties, such as rental buildings, are not considered residential properties.

DATA SOURCE: City of Boston, Department of Neighborhood Development

DATA ANALYSIS: Department of Neighborhood Development and the Boston Public Health Commission Research and Evaluation Office

- The total number of foreclosure petitions in 2007 was 2,430 while the total number in 2008 was 1,897. In both 2007 and 2008, about half of all foreclosure petitions were filed in Mattapan and the two Dorchester neighborhoods.

Figure 2.14 Foreclosure Petitions as Percentage of all Residential Properties, 2007 and 2008



%	BOSTON	A/B	BB	CH	EB	FW	HP	JP	MT	ND	NE	RS	RX	SB	SD	SE	WR
2007	3.6	1.1	3.6	1.8	3.6	5.7	3.0	2.1	5.1	6.7	n<5	1.9	6.9	2.3	6.0	6.2	0.9
2008	2.8	1.0	3.4	1.5	4.0	4.7	2.6	1.5	3.9	4.5	n<5	1.6	5.5	2.3	4.2	4.3	0.7

*Too few foreclosures to permit presentation of data

†Includes Beacon Hill, and West End;

‡ Includes Chinatown

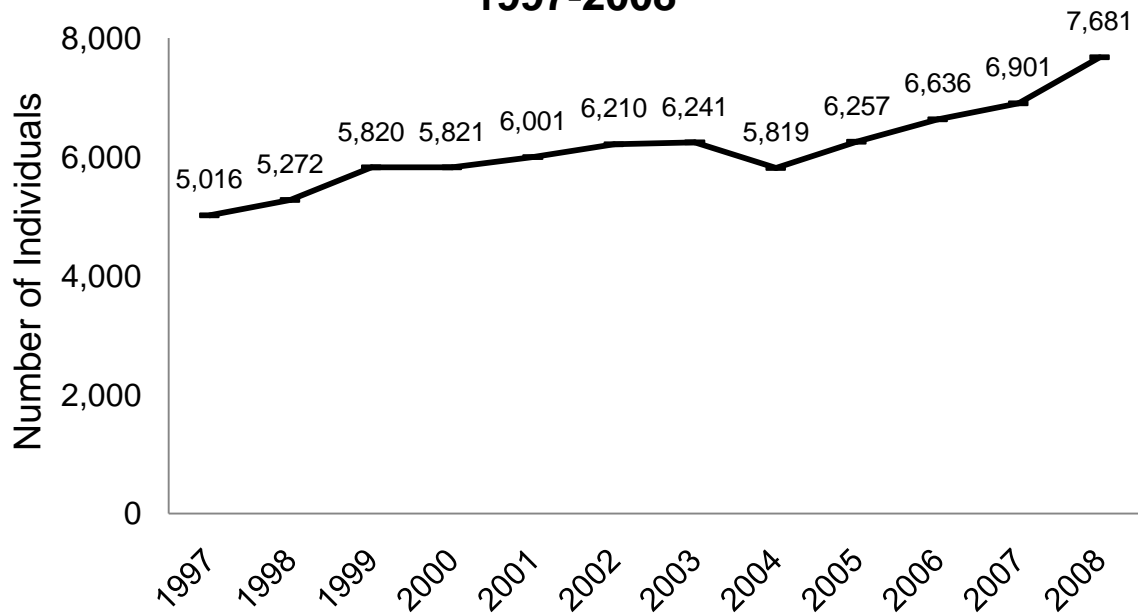
NOTE: Residential properties include single family dwellings, residential condominium units, two family dwellings, and three family dwellings. Professionally managed properties, such as rental buildings, are not considered residential properties.

DATA SOURCE: City of Boston, Department of Neighborhood Development

DATA ANALYSIS: Department of Neighborhood Development and the Boston Public Health Commission Research and Evaluation Office

- Citywide, between 2007 and 2008, the percentage of residential properties on which a foreclosure petition was filed, decreased from 3.5% to 2.7%.
- The total number of foreclosure petitions in 2007 was 2,430 while the total number in 2008 was 1,897.
- In 2007, foreclosure petitions were filed on over 6% of residential properties in North Dorchester, Roxbury, South Dorchester, and the South End. Although, the percentage of foreclosure petitions in these neighborhoods decreased in 2008, they remained high, exceeding 4%.

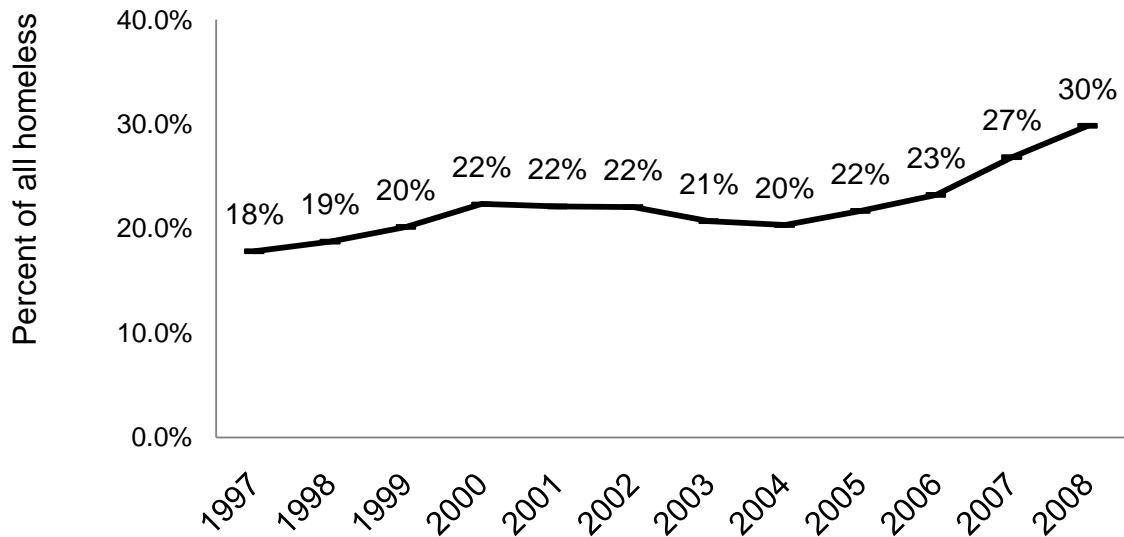
**Figure 2.15 Homeless Count by Year
1997-2008**



DATA SOURCE: City of Boston, Emergency Shelter Commission, Homeless Counts, 1997-2008
 DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- Between 2007 and 2008, the number of homeless individuals increased by 11.3%. During this time, the number of homeless adults increased by 6.2%, the number of homeless children increased by 23.7% (data not shown).

Figure 2.16 Percentage of Homeless who are Children, 1997-2008



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Count	893	987	1,171	1,298	1,325	1,367	1,291	1,181	1,354	1,540	1,849	2,288

DATA SOURCE: City of Boston, Emergency Shelter Commission, Homeless Counts, 1997-2008

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

- In 2008, 30% of Boston’s homeless were children, a dramatic increase compared with 2004 when children accounted for 20% of homeless individuals.
- Between 2004 and 2008, the number of homeless children nearly doubled.

Summary: Socioeconomic Status

While many Boston residents enjoy relatively high levels of education and income, these benefits are not shared by all. The burden of poverty is disproportionately felt by children, especially children living in female-headed households. In 2007, almost one-third (31%) of children lived in households whose income fell below the poverty level; 51.8% of female-headed households with preschool children have income below the poverty line. The number of homeless children increased dramatically between 2004 and 2008. In 2008, 30% of Boston's homeless were children.

Educational achievement and employment, two primary routes out of poverty, are unequally distributed among racial/ethnic groups. In 2007, 56% of White adults had an educational level of Bachelors degree or higher compared with 14% of Black and Latino adults. Over one-third (37%) of Latino adults had less than a high school diploma or GED. Though half of Asian adults had an educational level of Bachelors Degree or higher, 25% had less than a high school diploma. Black, Latino, and Asian males are unemployed at a substantially higher rate than White males. In 2007, the unemployment rate among Black males was almost four times the rate among White males; among Asian and Latino males, the rate was almost three times as high.

Two Boston neighborhoods—Roxbury and Dorchester—disproportionately share the burden of housing and food insecurity. The number of families in Boston receiving food stamps increased by 32% between January 2005 and January 2008. Roxbury, North Dorchester, and South Dorchester had the largest number of food stamp cases and experienced the largest increase in the number of cases. Foreclosures have become a national issue and were felt in every neighborhood – in 2008, foreclosure petitions were filed on just over 2.8% of all residential properties in Boston. Most affected were Dorchester, Mattapan, and Roxbury – 56.7% of all foreclosure petitions in Boston occurred in these neighborhoods.

This section focuses on socioeconomic status of Boston residents. Racial/ethnic disparities are associated with lower socioeconomic status and both combine to create health disparities. Socioeconomic status creates a gradient in which higher economic status is correlated with better health. However, it is important to note that because of several factors, including the impact of racism, people of color have worse health outcomes than their White counterparts at every level of socioeconomic status. Therefore, both race and socioeconomic status need to be considered in understanding and addressing the health issues presented in this report.

References

1. **Adler, Nancy and Stewart, Judith.** Reaching for a Healthier Life: Facts on Socioeconomic Status and Health in the U.S.: The John D. and Catherine T. MacArthur Foundation Research Network on Socioeconomic Status and Health, 2007.
2. **Robert Wood Johnson Foundation.** Overcoming Obstacles to Health.: Robert Wood Johnson Foundation Commission to Build a Healthier America, February 2008.
3. **Hayward, Karen.** Tides of Change:Addressing Inequity and Chronic Disease in Atlantic Canada. Halifax, Nova Scotia, CA : Population and Public Health Branch, Atlantic Regional Office, Health Canada, 2003.
4. **Chen E, Martin AD, Matthews KA.** Trajectories of Socioeconomic Status Across Children's Lifetime Predict Health. *Pediatrics* . 2007 Aug: 120(2): 297-303.
5. **Laaksonen M, Rahkonen O, Martikainen P, Lahelma E.** Socioeconomic Position and Self-Rated Health: The Contribution of Childhood Socioeconomic Circumstances. *American Journal of Public Health*, 2005 Aug: 95 (8):1403-1409.
6. **William DR, Collins C.** US Socioeconomic and Racial Differences in Health: Patterns and Explanations. *Annual Review of Sociology*. 1995 Aug: 21: 349-386.
7. **Krieger J and Higgins DL.** Housing and Health: Time Again for Public Health Action. *American Journal of Public Health*,: 2007 May: 758–768.