

## Residents Living in Boston Public Housing and Mental Health/Substance Abuse

*This is one of three fact sheets in a series on Health and Public Housing Data, Boston, 2001-2006. This information comes from the Partners in Health and Housing - Prevention Research Center, an equitable partnership of Boston University School of Public Health, Boston Housing Authority, Boston Public Health Commission, and the Community Committee for Health Promotion. This information was provided to the National Center for Health in Public Housing in order to increase awareness of the health disparities faced by public housing residents and to facilitate the process of developing solutions to eliminate these inequities.*

### Health and Public Housing Data, Boston, 2001-2006

Since 1999, the Boston Public Health Commission (BPHC) has collected health data among Boston adults utilizing a broad-based random telephone survey, the Boston Behavioral Risk Factor Surveillance System (BBRFSS). This project is based on a national model, which originated at the Centers for Disease Control and Prevention and has been conducted annually in every state since the 1990s. Beginning in 2001, as part of its partnership with the Partners in Health and Housing - Prevention Research Center, BPHC enhanced the BBRFSS health surveillance project by collecting information on type of residency among its respondents. This allowed for the first time the ability to assess the health of public housing residents across a range of health measures and directly compare their disease burden and behavioral health experiences with those of Boston residents who do not reside in public housing.

The data in this document are drawn from four BBRFSS data sets, collected in 2001, 2003, 2005 and 2006, from Boston residents. Data are weighted by gender and age to reflect the Boston population. Some indicators did not appear in all survey years and are noted.

The data contained in this document are derived from a telephone-based survey in which a number of Boston residents were asked to respond to a series of questions. The survey data were collected among a random sample of adults within a random sample of Boston households. The resulting data were applied to represent the entire adult population for the city of Boston and are described as percentages or point estimates. These numeric values are further described by a numeric range called a confidence interval. The confidence interval describes the likelihood that the true percentage estimate falls within the range of values given, and thus describes the error around the percentage estimate. To compare two percentage estimates and determine whether one is higher or lower than the other, one must look not only at the individual percentages but the associated confidence intervals. Comparisons described as "statistically different" have been determined to be highly likely to reflect actual differences between the groups compared. In this document, the difference between one percentage (point estimate) and another is described as "significantly higher", "significantly lower", or "statistically similar" based on statistical testing. Since point estimates are sometimes referred to as rates, similar terminology describes the statistical difference between two rates.

## MENTAL HEALTH/SUBSTANCE ABUSE

### Poor Mental Health†, Boston, 2001, 2003, 2005 and 2006 Combined

	Public Housing (n=1,309)		Other Residents (n=6,807)	
	%	95% CI	%	95% CI
Overall	19.9	16.8-22.9	7.5	6.6-8.4
Sex				
Female	20.3	16.7 – 23.8	8.2	7.0 – 9.4
Male	19.0	13.0 – 25.0	6.8	5.5 – 8.1
Age				
18-34	15.9	10.6 – 21.3	7.5	5.8 – 9.1
35-49	26.2	20.9 – 31.5	8.8	7.4 – 10.2
50-64	26.5	19.8 – 33.3	8.0	6.4 – 9.6
≥65	14.5	8.9 – 20.0	4.4	3.0 – 5.9
Race/Ethnicity				
Black	18.6	13.4 – 23.8	9.1	6.9 – 11.3
Hispanic	20.3	14.3 – 26.2	12.0	8.0 – 16.1
White	21.6	16.4 – 26.8	6.4	5.5 – 7.4
Place of Birth*				
United States	23.6	18.0 – 29.2	8.1	6.8 – 9.4
Outside U.S.	12.2	6.4 – 17.9	5.0	3.2 – 6.9
Education				
<High School Grad	23.6	16.8 – 30.4	12.7	7.9 – 17.4
High School Grad	17.3	12.7 – 21.9	9.4	6.7 – 12.2
Some College	20.9	14.5 – 27.2	9.1	7.0 – 11.2
College Grad	19.0	11.4 – 26.6	5.7	4.8 – 6.7
Type of Living				
Development	17.8	13.7-21.9	---	---
Rental Assistance	22.0	17.4-26.6	---	---

†Poor mental health is defined as 15 or more days in the past month in which mental health was “not good.”

\*Data on place of birth were not collected in 2006. Data for this indicator are from 2001, 2003 and 2005 combined only.

- Experiences with poor mental health varied dramatically, with approximately 1 in 5 public housing residents reporting experiencing 15 or more days in the past month when their mental health was not good, compared with only 1 in 13 non-public housing residents.
- Overall and for each demographic group shown here, significantly higher percentages of public housing residents reported 15 or more days of poor mental health than their non-public housing counterparts.
- A statistically similar percentage of those receiving rental assistance as those residing in public housing developments reported 15 or more days of poor mental health.

**Experienced Anxiety Fifteen of More Days in Past Month, Boston, 2001, 2003, 2005 and 2006 Combined**

	Public Housing (n=1,283)		Other Residents (n=6,737)	
	%	95% CI	%	95% CI
Overall	19.6	16.7-22.4	13.6	12.5-14.8
Sex				
Female	20.6	17.2 – 24.0	15.4	13.8 – 17.0
Male	17.4	12.2 – 22.6	11.9	10.3 – 13.5
Age				
18-34	14.8	10.0 – 19.6	14.2	12.1 – 16.2
35-49	24.8	19.9 – 29.6	15.2	13.3 – 17.0
50-64	27.9	21.4 – 34.5	13.3	11.2 – 15.3
≥65	18.0	12.0 – 23.9	8.6	6.7 – 10.5
Race/Ethnicity				
Black	15.1	10.6 – 19.6	14.5	11.3 – 17.6
Hispanic	19.8	14.5 – 25.1	18.2	13.8 – 22.7
White	24.5	19.0 – 30.1	12.7	11.4 – 14.0
Place of Birth*				
United States	23.3	17.7 – 28.9	11.9	10.5 – 13.4
Outside U.S.	16.4	10.5 – 22.3	10.0	7.2 – 12.7
Education				
<High School Grad	21.6	15.5 – 27.7	16.3	10.8 – 21.9
High School Grad	17.4	13.1 – 21.7	15.9	12.7 – 19.0
Some College	18.1	12.6 – 23.5	15.0	12.5 – 17.6
College Grad	25.8	16.6 – 35.0	12.1	10.7 – 13.4
Type of Living				
Development	16.0	12.7-19.3	---	---
Rental Assistance	23.1	18.6-27.7	---	---

\*Data on place of birth were not collected in 2006. Data for this indicator are from 2001, 2003 and 2005 combined only.

- Overall, a significantly higher percentage of public housing residents experienced feelings of anxiety for 15 or more days in the past 30 days compared to non-public housing residents. This finding held for demographic groups by gender and each age group except the 18-34 year old age group.
- Among racial/ethnic groups, only White public housing residents reported experiencing anxiety at a significantly higher rate than their non-public housing counterparts. Black and Hispanic public housing residents reported experiencing 15 or more days of anxiety at statistically similar rates as their respective non-public housing groups.
- By educational level only public housing residents who were *college graduates* experienced anxious feelings for 15 or more days in the past 30 days at a significantly higher rate compared to their non-public housing counterparts.

**Experienced Depressed Feelings Fifteen or More Days in Past Month, Boston, 2001, 2003, 2005 and 2006 Combined**

	Public Housing (n=1,282)		Other Residents (n=6,763)	
	%	95% CI	%	95% CI
Overall	17.3	14.5-20.1	7.3	6.4-8.1
Sex				
Female	17.5	14.3 – 20.7	8.3	7.0 – 9.5
Male	16.8	11.1 – 22.5	6.2	5.1 – 7.4
Age				
18-34	14.9	10.0 – 19.9	6.9	5.4 – 8.5
35-49	21.1	16.5 – 25.7	8.3	6.9 – 9.8
50-64	20.5	14.8 – 26.2	7.9	6.3 – 9.5
≥65	15.5	9.6 – 21.3	5.6	4.1 – 7.2
Race/Ethnicity				
Black	14.6	10.1 – 19.1	9.1	6.8 – 11.5
Hispanic	19.0	13.4 – 24.5	14.4	10.1 – 18.7
White	19.0	13.8 – 24.1	5.6	4.8 – 6.5
Place of Birth*				
United States	21.6	15.8 – 27.4	6.1	5.0 – 7.2
Outside U.S.	11.2	6.4 – 16.0	5.2	3.2 – 7.1
Education				
<High School Grad	22.2	15.7 – 28.7	14.2	8.8 – 19.6
High School Grad	13.5	9.7 – 17.4	10.7	7.9 – 13.4
Some College	15.7	10.3 – 21.0	8.1	6.4 – 9.9
College Grad	22.7	13.6 – 31.8	5.0	4.1 – 5.9
Type of Living				
Development	15.1	11.4-18.8	---	---
Rental Assistance	19.5	15.3-23.8	---	---

\*Data on place of birth were not collected in 2006. Data for this indicator are from 2001, 2003 and 2005 combined only.

- With approximately 1 in 6 reporting depressed feelings, a significantly higher percentage of public housing residents experienced feelings of sadness or depression for 15 or more days in the past 30 days compared to non-public housing residents. This finding held for demographic groups by gender and age group.
- Significantly higher percentages of Black and White public housing residents experienced 15 or more days of depressed feelings compared with their respective non-public housing counterparts.
- Significantly higher percentages of U.S.-born and foreign-born public housing residents experienced 15 or more days of depressed feelings compared with their respective non-public housing counterparts.
- By educational level, only public housing residents who had completed *some college* or were *college graduates* experienced depressed feelings at significantly higher rates than their respective non-public housing counterparts.

### Binge Drinking†, Boston, 2001, 2003 and 2005 Combined

	Public Housing (n=767)		Other Residents (n=4,425)	
	%	95% CI	%	95% CI
Overall	15.1	10.4-19.8	24.3	22.5-26.2
Sex				
Female	10.0	5.9 – 14.0	16.1	13.9 – 18.4
Male	25.3	14.5 – 36.1	32.8	29.9 – 35.7
Age				
18-34	22.2	13.0 – 31.4	37.4	34.0 – 40.7
35-49	9.6	5.6 – 13.7	19.3	16.8 – 21.8
50-64	6.7	1.5 – 12.0	10.2	7.6 – 12.8
≥65	12.2	1.8 – 22.6	4.3	2.4 – 6.1
Race/Ethnicity				
Black	14.1	6.7 – 21.6	6.5	4.1 – 8.9
Hispanic	12.2	4.0 – 20.4	21.7	15.7 – 27.8
White	19.4	9.1 – 29.6	29.7	27.3 – 32.0
Place of Birth*				
United States	17.6	12.0 – 23.3	26.7	24.6 – 28.9
Outside U.S.	9.7	0.2 – 19.2	17.9	13.9 – 21.8
Education				
<High School Grad	11.0	3.7 – 18.4	20.8	13.1 – 28.5
High School Grad	15.4	8.0 – 22.8	15.9	12.1 – 19.7
Some College	18.1	4.5 – 31.8	24.3	19.8 – 28.9
College Grad	17.8	6.5 – 29.1	27.5	25.1 – 29.9
Type of Living				
Development	15.4	7.3-23.6	---	---
Rental Assistance	14.7	9.6-19.9	---	---

†Binge drinking is defined as consuming five or more alcoholic drinks in one sitting at least one time in the past 30 days.

\*Data on place of birth were not collected in 2006. Data for this indicator are from 2001, 2003 and 2005 combined only.

- Overall, a significantly lower percentage of public housing residents engaged in binge drinking behavior in the past 30 days compared with non-public housing residents. Findings by demographic groups were mixed.
- Although a significantly lower percentage of women who reside in public housing reported binge drinking than women who do not live in public housing, there was no statistical difference between men by type of residency.
- By age group, significantly lower percentages of public housing residents for the two youngest age groups reported binge drinking compared with their non-public housing counterparts. Although a higher percentage of the 65 and over age group who live in public housing reported binge drinking than their non-public housing counterparts, this was not a statistically significant difference.
- A higher percentage of Black public housing residents reported binge drinking than Black non-public housing residents. Although this was not a statistical difference, this approached the level of statistical significance ( $p=0.058$ ).

**Heavy Drinking†, Boston, 2001, 2003, 2005 and 2006 Combined**

	Public Housing (n=1,313)		Other Residents (n=6,808)	
	%	95% CI	%	95% CI
Overall	4.9	2.9-7.0	12.7	11.5-13.9
Sex				
Female	3.9	2.2-5.7	13.3	11.7-14.9
Male	7.2	2.0-12.4	12.1	10.2-14.0
Age				
18-34	6.1	2.1-10.0	14.9	12.5-17.2
35-49	4.9	2.1-7.8	10.2	8.7-11.7
50-64	3.6	0.3-7.0	12.5	10.3-14.6
≥65	3.0	0.9-5.2	10.8	8.4-13.2
Race/Ethnicity				
Black	5.2	2.4-8.0	4.2	2.7-5.6
Hispanic	2.1	0.1-4.0	8.0	4.5-11.6
White	9.4	2.8-16.1	16.5	14.9-18.2
Place of Birth*				
United States	6.3	3.3-9.3	14.8	13.0-16.6
Outside U.S.	n<5	---	---	---
Education				
<High School Grad	1.4	0.2-2.6	8.8	4.4-13.2
High School Grad	7.3	3.0-11.6	9.8	7.1-12.4
Some College	5.5	1.8-9.3	14.2	10.6-17.7
College Grad	3.9	0.1-7.6	13.5	12.1-15.0
Type of Living				
Development	5.3	1.8-8.7	---	---
Rental Assistance	4.6	2.5-6.6	---	---

†Heavy drinking is defined as consuming 60 or more drinks per month for men, and 30 or more drinks per month for women.

\*Data on place of birth were not collected in 2006. Data for this indicator are from 2001, 2003 and 2005 combined only.

- Overall, a significantly lower percentage of public housing residents compared with non-public housing residents participated in heavy drinking. This finding held for most of the demographic groups shown here, with the exceptions noted below.
- A statistically similar percentage of men living in public housing reported drinking heavily as men who do not live in public housing.
- Among racial/ethnic groups, there was no statistical difference between Black public housing residents and Black non-public housing residents in the rate of past month heavy drinking.
- By educational level, for each group except *high school graduates*, significantly lower percentages of public housing residents participated in past month heavy drinking compared with their non-public housing counterparts.

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

DATA ANALYSIS: Boston Public Health Commission, Research and Evaluation Office.