



Comparing the health
of Boston's public housing residents
to that of other Boston residents

Who did this study?

The study was done by the Partners in Health and Housing Prevention Research Center (PHH-PRC). This is a four-way partnership to do health research among Boston's public housing residents. In particular, we work with residents of the city's family housing developments. Like other PRCs around the country, this one is funded by a government agency, the US Centers for Disease Control and Prevention (CDC). The four partners are:

- the Boston University School of Public Health,
- the Boston Public Health Commission,
- the Boston Housing Authority, and
- the Community Committee for Health Promotion.

The Community Committee for Health Promotion is made up mostly of people who live in the Boston Housing Authority's family developments. It also includes some community leaders and people from key agencies. The committee takes an active role in every stage of the research process—from planning the studies to writing up the results.

Why did we do this study?

Residents of public housing are more likely than the overall population to have low incomes—that is how they qualify to live in public housing. They are also more likely to belong to a racial or ethnic minority. Both of these characteristics have been linked to poor health by other researchers. But before this study, there was no broad-based survey that directly compared the health of public housing residents in a particular place to the health of other local residents.

Luckily, we had the opportunity to analyze just this kind of information for Boston. We asked this question: How does the health of Boston's public housing residents compare to the health of other residents of the city? We defined health broadly—we asked about health problems, but we also asked about health care and about behaviors that can affect health. This study was *not* designed to ask whether any health differences were actually *caused* by living in one type of housing or the other. The study just compared the two groups of Boston residents.

How exactly did we do this study?

Every year the CDC, the same federal agency that funds the PHH-PRC and other prevention research centers around the country, does a nationwide telephone survey of adult civilians in the United States. The participants are selected randomly from many small areas. The survey asks people about their health, and their use of health care. It also asks about some behaviors that can affect health. This survey is called the Behavioral Risk Factors Surveillance Survey, or BRFSS.

Starting in 1999, the Boston Public Health Commission has administered a local version of the survey every second year. With this survey, the city gathers extra health information about Boston's residents. The Boston survey includes a question asking whether the person lives public housing. Public housing residents include both people who live in a public housing development and people who live in a rental assistance unit. (This is a unit that is in a private residence but is subsidized by a voucher program, such as Section 8.)

By including this question in the BRFSS survey, researchers were able to

compare the health of Boston’s public housing residents to the health of other residents of the city. For example, a result might show that public housing residents were twice as likely—or half as likely—to report some specific health problem. Again, a result like this would not mean that the difference is *caused* by living in public housing. It would just show that this group, with all its bundle of characteristics, is more likely—or less likely—to have this health problem.

What did the study tell us?

The key results of the study are in the table on page 4. In this table, a number larger than one means that the marker of poor health status was more common among public housing residents. (For example, the number 2.5 means the marker was two-and-one-half times as common.) If the number is smaller than one, this means that the marker of poor health status was less common among public housing residents. (For example, the number 0.5 means that the marker was half as common.)

All the results in this table are statistically significant. Researchers use this term to mean that these differences

Looking ahead

The consistent health gap between Boston’s public housing residents and other residents of the city is striking. It’s especially striking since the picture in other areas is not so clearcut. The picture is mixed on barriers to getting routine health care, and also on risky behaviors.

More detailed analyses are needed to understand what the findings of this study mean for particular health problems. Researchers at the PHH-PRC are focusing first on understanding the differences in rates of obesity, poor oral health, and smoking between Boston’s public housing residents and other residents of the city.

between the groups are “real”—they are not due just to the luck of the draw.

Residents of public housing in Boston were more than four times as likely as other residents of the city to report fair or poor health status, as opposed to excellent or good health status. They were also more than three times as likely to report ever having been diagnosed with diabetes, or having felt sad or depressed on 15 days out of the past month. They were more than twice as likely to report ever having had a diagnosis of hypertension, having been disabled for a year or more, having asthma, or having six or more missing teeth.

Unlike the study’s results about health, the results about access to health care and use of health services were mixed. Residents of public housing were about *twice as likely* not to have had their teeth cleaned in more than two years. On the other hand, female residents of public housing were about *half as likely* to have had no clinical breast exam in the past two years. Likewise, residents of publicly supported housing were about *twice as likely* to be smokers. But they were about *half as likely* to have had a binge drinking episode in the past month.

This marker of poor health was ____ times as common among public housing residents
Self-reported health status	
Fair or poor self-reported health (as opposed to excellent or good)	4.57
Specific health problems	
Hypertension (ever diagnosed)	2.57
Asthma (current)	2.46
Diabetes (ever diagnosed)	3.35
Obesity	1.91
Disabled for one year or longer	2.38
Missing 6 or more teeth	2.6
Felt sad, blue, or depressed 15 days in past month	3.12
Barriers to access and preventive screenings	
No clinical breast exam in past 2 years (women only)	0.51
Teeth not cleaned in over 2 years	2.18
Risky behaviors	
Smoker (current)	1.99
Binge drinking episode in past month	0.52
<i>Statistical note:</i> The numbers in this table are unadjusted prevalence odds ratios.	

This is a reader-friendly summary of a published research article: Digenis-Bury EC, Brooks DR, Chen L, Ostrem M, Horsburgh CR. Use of a population-based survey to describe the health of Boston public housing residents. *Am J Public Health*, Jan 2008; 98:8 -91. <http://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.2006.094912>. Accessed December 6, 2012.