Health of Older Adults in New York City Public Housing:
Findings from the 2009 New York City Housing Authority Senior Survey

These technical notes provide additional information on the data, methods, and definitions for the report Health of Older Adults in New York City Public Housing (available at http://www.nyc.gov/html/doh/htlm/episrv/nycha-senior-survey.shtml). For more information, please call 311, visit nyc.gov/health, nyc.gov/nycha, nyc.gov/html/dfta, or cuny.edu/sph, or email query@health.nyc.gov.

NYCHA Senior Survey
The NYCHA Senior Survey was a telephone health survey of adults aged 65 and older living in NYC Housing Authority (NYCHA) public housing in all five boroughs of NYC. The survey was designed to provide health-related data for this population on topics including: general physical and mental health, specific health conditions, health behaviors, injuries and accidents, perceptions of safety, insurance coverage, and access to health care and community services. NYCHA and the NYC Department of Health and Mental Hygiene (DOHMH) collaborated with the Baruch College Survey Research Center (BCSR) at the City University of New York (CUNY) to conduct the survey with 1,036 randomly selected older NYCHA residents during June 2009. Interviews were conducted in English, Spanish, Russian, and Chinese, with a cooperation rate of 93.4% among respondents reached by phone and an overall response rate of 34.7%. For the full NYCHA Senior Survey methods report developed by BCSR, please visit the NYCHA Senior Survey project page at nyc.gov/health, nyc.gov/nycha, nyc.gov/html/dfta, or cuny.edu/sph, or email epiquery@health.nyc.gov.

NYCHA Tenant Data System
The Tenant Data System (TDS) is maintained by NYCHA’s Business Solution and Technology Department and has data on public housing residents, including family composition, race/ethnicity, age, disability status, and income by income source. TDS data in this report are taken from system files last updated on July 1, 2010. Unauthorized residents are not represented in the TDS.

Data Analysis and Presentation
Survey data were matched with demographic information from TDS records and de-identified before analysis. To assure that findings based on survey respondents were representative of all older NYCHA adults, an analysis was conducted to compare respondents and nonrespondents on disability status, as reported in the TDS. Respondents and nonrespondents did not differ in mobility, visual, mental, and hearing disabilities or in having any disability. Respondents were
slightly less likely to use a wheelchair than nonrespondents. This evidence supports the
generalization of survey findings on the health of residents who participated in the survey to
the full older NYCHA population.

| Disability Status among NYCHA Senior Survey Respondents and Non-Respondents |
|------------------|------------------|
| Disability       | Respondents | Nonrespondents |
| Any              | 50%         | 51%          |
| Mobility         | 25%         | 23%          |
| Visual           | 7%          | 7%           |
| Mental           | 5%          | 6%           |
| Hearing          | 3%          | 4%           |
| Wheelchair*      | 3%          | 5%           |

*Statistically significant difference between groups.

Data were weighted to be representative of the entire NYCHA population of older adults on
gender, income level, borough, age, and race/ethnicity. All percentages presented in the report
have been rounded to the nearest whole number and are not age-adjusted. The relative
standard error (RSE) was calculated for all estimates. RSE is a measure of estimate precision
based on both variability in the data and size of the sample. Rates with RSEs of ≥30% to <50%
are potentially unreliable and flagged in the report to be interpreted with caution. No estimates
with RSEs of ≥50% are presented. Chi-square tests were computed to determine significant
differences between prevalence estimates. Only significant differences (p<0.05) are discussed
in the text without preface.

Comparison Data
The following sources were used to provide demographic and outcome-specific comparison
estimates for older adults in NYC overall and the United States (US). Additional information on
each source can be found online.

American Community Survey: The American Community Survey (ACS), conducted as part of
the Decennial Census Program, provides annual demographic, socioeconomic, and housing
information about America's communities. Five-year estimates based on ACS data collected
from 2005 through 2009 were used to provide demographic estimates among older NYC
adults. For full survey details, visit factfinder.census.gov.

Behavioral Risk Factor Surveillance System: The Behavioral Risk Factor Surveillance System
(BRFSS) is an ongoing telephone health surveillance system that tracks health conditions and
risk behaviors among adults in the US annually. Estimates for select health indicators among
older adults in the US were obtained from the BRFSS. For full survey details, visit
http://www.cdc.gov/brfss/.

Community Health Survey: The Community Health Survey (CHS) is an annual telephone
survey of approximately 10,000 New Yorkers aged 18 and older conducted by the DOHMH.
Estimates for select health indicators among older NYC adults were obtained from the CHS.
For full survey details, visit nyc.gov/health/survey.
National Health and Nutrition Examination Survey: The National Health and Nutrition Examination Survey (NHANES) is a program of studies that combines interviews and physical examinations to assess the health and nutritional status of adults and children in the US. Estimates for select indicators among older adults in the US were obtained from NHANES. For full survey details, visit http://www.cdc.gov/nchs/nhanes.htm.

New York City Health and Nutrition Examination Survey: The NYC Health and Nutrition Survey (NYC HANES) was a health survey conducted in 2004 by the DOHMH that included both a detailed health interview and brief physical exam. Estimates for select health indicators among older NYC adults were obtained from NYC HANES. For full survey details, visit nyc.gov/health/nychanes.

Limitations
The strengths of this report’s findings lie in the large, diverse study sample, coupled with administrative data on older residents living in public housing. However, there are limitations to the conclusions that can be drawn. All survey findings are cross-sectional, barring the ability to draw any conclusions about cause and effect. For example, the order of events between a heart attack in the past five years and a fall in the past year cannot be determined, even if there is a positive association between the two indicators. In addition, the survey data are all self-reported, which means that any undiagnosed conditions or those unknown to respondents are not included in prevalence estimates. Certain variables may be more affected by this limitation, due to undiagnosed conditions, such as diabetes, which the 2004 New York City Health and Nutrition Examination survey found to be undiagnosed in more than one quarter of NYC adults.

Income comparisons between older NYCHA and NYC residents overall are based on income data with slightly different methodologies. Information on income level among older adults in NYC overall is based on the 2005-2009 ACS, and income level among older NYCHA residents is based on the TDS. While both the ACS and TDS measures for income level are based on reported income in the past 12 months, the TDS measure is calculated using household income and may include the income of non-family household members. The ACS measure is calculated using only family income and also excludes households with no reported income from analysis. Thus, the ACS measure may slightly overestimate poverty among older adults in NYC overall. However, very few older adults in NYC live in multiple-person, non-family households (<1%), providing confidence in this comparison to understand differences in income between older NYCHA and NYC residents.

Additional Information and Definitions

Older adults: All references to older adults in NYCHA, NYC, or the US refer to those aged 65 and older.

Race/ethnicity: Information on older NYCHA residents’ race/ethnicity was obtained from the NYCHA TDS data and included five categories: white, black, Hispanic, Asian, and other. Hispanic residents who also identified a separate race were categorized as Hispanic. Data on residents of other race/ethnicity are not presented as a separate subgroup in the report.
The Patient Health Questionnaire (PHQ-2): The PHQ-2 has two questions about the frequency of depressed mood and inability to experience pleasure. It has been validated as a good screening tool for major depression in older people. PHQ-2 screening should be followed by a more comprehensive diagnosis in clinical settings. For more information, see http://onlinelibrary.wiley.com/doi/10.1111/j.1532-5415.2007.01103.x/abstract. The PHQ-2 was used in this report to identify older adults at risk of current depression.

Body mass index: Body Mass Index (BMI), a measure commonly used to evaluate obesity, was calculated using self-reported height and weight information.

\[ \text{BMI} = \frac{\text{weight in pounds}}{(\text{height in inches}) \times (\text{height in inches})} \times 703 \]

Community Services:

- Senior centers - DFTA had 301 senior centers operating at the time of the survey and 91 (30%) of these were located at NYCHA developments. These centers serve hot meals and provide a wide range of activities, including opportunities for socializing, exercise, and education. The number of attendees and diversity of programs offered in each center varies widely. Some senior centers have dedicated staff to help older adults navigate available social services. Centers may also provide special meals or activities tailored to ethnic and cultural groups attending the centers. Centers can be housed within larger community facilities that serve all ages, though some primarily serve an older population. In addition to the DFTA-sponsored centers, NYCHA operated 43 senior centers at its developments at the time of the survey. These centers also vary in services provided, may not serve meals, and generally have small staffs.

- Congregate meal programs - Many organizations, such as houses of worship, offer meal programs for older adults. In addition, DFTA-sponsored senior centers serve at least one meal per day five days a week, averaging 28,000 meals served per day across the city. Some NYCHA-sponsored senior centers also serve meals. Senior center meals provide one third of recommended daily nutrient intake for older adults, according to federal guidelines, and also conform to state nutrition requirements and NYC Agency Food Standards, which require that they be low in sodium.

- Meal delivery services - DFTA’s Home Delivered Meals program (HDML), sometimes known as Meals on Wheels, provides meals to older adults who are unable to attend a congregate meal site or to prepare their own meals, and who lack family, friends, or a home attendant who could prepare meals. Older adults may be asked for a voluntary contribution to pay for these meals. In addition, City Meals on Wheels, a non-profit organization, provides home-delivered meals on weekends and holidays when the HDML program does not operate. Older adults may also receive meals delivered by other organizations.

- Transportation services - Eligible disabled patients who are Medicaid clients may receive door-to-door transportation to medical services by livery, ambulette, or ambulance. MTA New York City Transit Access-A-Ride provides curb-to-curb transportation as an alternative to the bus or subway for people with certified disabilities at the same fees as
NYC public transit. In addition, many senior centers offer transportation services for their clients to and from the centers and/or other destinations.

- **Homemaker services** - Medicaid covers long-term use of homemaker services for older adults who meet certain eligibility criteria. Although the NYS Expanded In-Home Services for the Elderly Program, administered by DFTA, may provide homemaker services for older adults ineligible for Medicaid who have unmet needs, only a small proportion of eligible older adults receives services through this program.


**Suggested Report Citation**

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