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Wireless Substitution: Preliminary Data from the 2005 National Health Interview Survey

by Stephen J. Blumberg, Ph.D. and Julian V. Luke, Division of Health Interview Statistics

Preliminary Results

Preliminary results from the 2005 National Health Interview Survey (NHIS) indicate that the number of adults living in households with only wireless telephones continues to increase. During the last 6 months of 2005, more than 1 out of 10 American homes did not have a landline telephone. These estimates are the most up-to-date estimates available from the federal government concerning the size of this population.

The estimates are based on in-person interviews with adults aged 18 years and over as part of NHIS. This cross-sectional survey of the U.S. civilian noninstitutionalized population, conducted annually, looks at health status, health conditions, and health-related behaviors. The survey also includes information about household telephones and whether anyone in the household has a wireless telephone (i.e., cellular telephone, cell phone, mobile phone). From July through December 2005, interviews were completed in 19,893 households. These households included 37,146 adults and 13,741 children.

Because NHIS is conducted throughout the year and the sample is designed to yield a nationally representative sample each week, data can be analyzed quarterly. The Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS) creates weights for each calendar quarter of the NHIS sample. NHIS data weighting procedures have been described in more detail in an NCHS published report ([Series Report Number 2, Volume 130](#)  [PDF - 300 KB]). Because the estimates using the July-December 2005 data are being released prior to final data editing and final weighting, they should be considered preliminary and may differ slightly from estimates using the final data files.

Among the findings from the last 6 months of 2005, approximately 8.4 percent of households do not have a traditional landline telephone, but do have at least one wireless telephone. Approximately 7.8 percent of all adults—17.1 million adults—live in households with only wireless telephones; 7.7 percent of all children—5.7 million children—live in households with only wireless telephones.

Two percent of households do not have any telephone service (wireless or landline). Approximately 3.7 million adults (1.7 percent) and 1.4 million children (1.9 percent) live in these households.

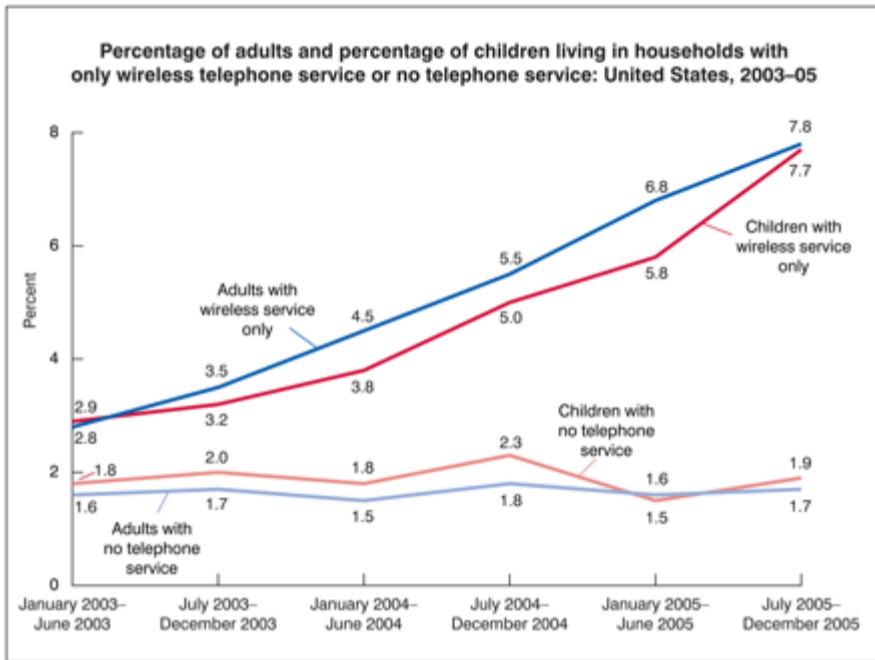
The results also reveal that:

- One in three adults living with unrelated roommates live in households with only wireless telephones (34.0 percent). This is the highest prevalence rate among the population subgroups examined.
- Adults renting their home (19.6 percent) are more likely than adults owning their home (3.9 percent) to be living in households with only wireless telephones.
- Among adults under 25 years of age, 5 million live in households with only wireless telephones. More than 1 in 6 adults aged 18-24 years live in households with only wireless telephones (17.8 percent).
- The prevalence rate decreases for older adults: 10.7 percent for adults aged 25-44 years; 3.7 percent for adults aged 45-64 years; and 1.2 percent for adults aged 65 years or over.
- Men (8.6 percent) are more likely than women (7.0 percent) to be living in households with only wireless telephones.
- Hispanic adults (11.3 percent) are more likely to be living in households with only wireless telephones than are non-Hispanic white adults (7.0 percent) or non-Hispanic black adults (8.6 percent).

- Adults living in poverty (14.3 percent) are more likely than higher income adults to be living in households with only wireless telephones.

Most major survey research organizations, including NCHS, do not include wireless telephone numbers when conducting random-digit-dial telephone surveys. Therefore, the inability to reach households with only wireless telephones (or with no telephone service) has potential implications for health surveys, political polls, and other research conducted using random-digit-dial telephone surveys. For more information about the potential implications for health surveys based on telephone interviews, see:

- Blumberg SJ, Luke JV, Cynamon ML. Telephone coverage and health survey estimates: Evaluating the need for concern about wireless substitution. *American Journal of Public Health* 96:926-931. 2006.



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