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July 22, 2008

Ex Parte

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: In the Matter of Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160 (c) in the Denver, Minneapolis-St. Paul, Phoenix and Seattle Metropolitan Statistical Areas, WC Docket No. 07-97

Dear Ms. Dortch:

Today, Ed Shakin and I met with Mr. Scott Deutchman, Legal Advisor to Commissioner Copps, and separately with Mr. N. Alexander, Legal Advisor to Commissioner McDowell. We reviewed the positions presented in the June 30 Verizon Ex Parte filed in the above proceeding. Additionally, we reviewed the attached CDC report, "Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July-December 2007." We explained that the CDC study offers updated evidence that a significant segment of the population has "cut-the-cord" and is replacing wireline service with wireless service. 1 out of 6 Americans have only wireless service. Additionally, those customers that continue to maintain landlines have begun replacing a significant percentage of their wireline minutes with wireless minutes. Moreover, this trend is not relegated to a single part of the country. The changes made to the CDC study questionnaire in 2007 improve the quality of the data. The CDC study includes separate data by region, which confirms that the trend is widespread.

Given that the Commission has previously recognized the importance of wireless competition, and in particular, relied on the nationwide CDC cut-the-cord data in its evaluation of Verizon's forbearance petition for 6 MSAs, there is no justification to ignore this significant competition in this proceeding. Regardless of whether the Commission would prefer more granular information, it may not simply ignore the data already in the record, which provides the best available evidence.

Sincerely,

Dee May

Attachment

cc: N. Alexander
A. Bender
S. Deutchman
A. Kirschenbaum
A. Lewis
T. Stelzig
J. Veach

(Released 05/13/2008)

Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, July-December 2007

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

Overview

Preliminary results from the July-December 2007 National Health Interview Survey (NHIS) indicate that nearly one out of every six American homes (15.8%) had only wireless telephones during the second half of 2007. In addition, more than one out of every eight American homes (13.1%) received all or almost all calls on wireless telephones despite having a landline telephone in the home. This report presents the most up-to-date estimates available from the federal government concerning the size and characteristics of these populations.

NHIS Early Release Program

This report is published as part of the NHIS Early Release Program. In May and December of each year, the Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS) releases selected estimates of telephone coverage for the civilian noninstitutionalized U.S. population based on data from NHIS, along with comparable estimates from NHIS for the previous 3 years. The estimates are based on in-person interviews. NHIS interviews are conducted continuously throughout the year to collect information on health status, health-related behaviors, and health care utilization. The survey also includes information about household telephones and whether anyone in the household has a wireless telephone (also known as a cellular telephone, cell phone, or mobile phone).

Two additional reports are published as part of the Early Release Program. ***Early Release of Selected Estimates Based on Data from the National Health Interview Survey*** is published quarterly and provides estimates of 15 selected measures of health. ***Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey*** is also published quarterly and provides additional estimates of health insurance coverage.

Methods

For many years, NHIS has included questions on residential telephone numbers to permit re-contact of survey participants. Starting in 2003, additional questions determined whether the family's telephone number was a landline telephone. All survey respondents were also asked whether "you or anyone in your family has a working cellular telephone." A family can be an individual or a group of two or more related persons living together in the same housing unit. Thus, a family can consist of only one person, and more than one family can live in a household (including, for example, a household where there are multiple single-person families, as when unrelated roommates are living together).

In this report, families are identified as wireless families if anyone in the family had a working cellular telephone. Households are identified as wireless-only if they include at least one wireless family and if there are no working landline telephones inside the household. Persons are identified as wireless-only if they live in a wireless-only household. A similar approach is used to identify adults living in households with no telephone service (neither wireless nor landline). Household telephone status (rather than family telephone status) is used in this report because most telephone surveys draw samples of households rather than families.

From July through December 2007, household telephone status information was obtained for 13,083 households. These households included 24,514 adults aged 18 years and over and 9,122 children less than 18 years of age. Analyses of demographic characteristics are based on data from the NHIS Family file. Data for all civilian adults living in interviewed households were used in these analyses. Estimates stratified by poverty are based only on reported income. Income is unknown for nearly 18% of families.

Analyses of selected health measures are based on data from the NHIS Sample Adult file. Data for one civilian adult randomly selected from each family were used in these analyses. From July through December 2007, data on household telephone status and selected health measures were collected from 10,551 randomly selected adults.

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. Weights are created 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**). The estimates using the July-December 2007 data are being released prior to final data editing and final weighting to provide access to the most recent information from NHIS. The resulting estimates should be considered preliminary and may differ slightly from estimates using the final data files.

Point estimates and 95% confidence intervals were calculated using SUDAAN software to account for the complex sample design of NHIS. Differences between percentages were evaluated using two-sided significance tests at the 0.05 level. Terms such as

"more likely" and "less likely" indicate a statistically significant difference. Lack of comments regarding the difference between any two estimates does not necessarily mean that the difference was tested and found to be not significant. Due to small sample sizes, estimates based on less than 1 year of data may have large variances, and caution should be used in interpreting these estimates.

Questionnaire Changes in 2007

From 2003 to 2006, families were considered to have landline telephone service if the survey respondent provided a telephone number, identified it as "the family's phone number," and said that it was not a cellular telephone number. If the family's phone number was reported to be a cellular telephone number, the respondent was asked if there was "at least one phone inside your home that is currently working and is not a cell phone."

In 2007, the questionnaire was changed so that all survey respondents were asked if there was "at least one phone inside your home that is currently working and is not a cell phone," unless the respondent indicated not having any phone when asked for a telephone number.

From 2003 to 2006, the questions about cellular telephones were asked at the end of the survey. Because of incomplete interviews, more than 10% of households were not asked about wireless telephones. In 2007, these questions were moved earlier in the survey, resulting in fewer families with unknown wireless telephone status.

In 2007, a new question was added to the survey for persons living in families with both landline and cellular telephones. Respondents were asked to consider all of the telephone calls that their family receives and to report whether "all or almost all calls are received on cell phones, some are received on cell phones and some on regular phones, or very few or none are received on cell phones." This new question permits the identification of persons living in "wireless-mostly" households, defined as households with both landline and cellular telephones in which all families receive all or almost all calls on cell phones.

Finally, in 2007, the questionnaire was redesigned to improve the collection of income information. Initial evaluations of the distribution of poverty among selected demographic variables suggest that poverty estimates are generally comparable to years 2006 and earlier. However, as a result of the changes, the poverty ratio variable has fewer missing values in 2007 compared with prior years. Analyses of the impact of this change have been published by the Early Release program (**http://www.cdc.gov/nchs/data/nhis/income.pdf**).

Telephone Status

In the last 6 months of 2007, nearly one out of every six households (15.8%) did not have a landline telephone, but did have at least one wireless telephone (**Table 1**). Approximately 14.5% of all adults-more than 32 million adults-lived in households with only wireless telephones; 14.4% of all children-more than 10 million children-lived in households with only wireless telephones.

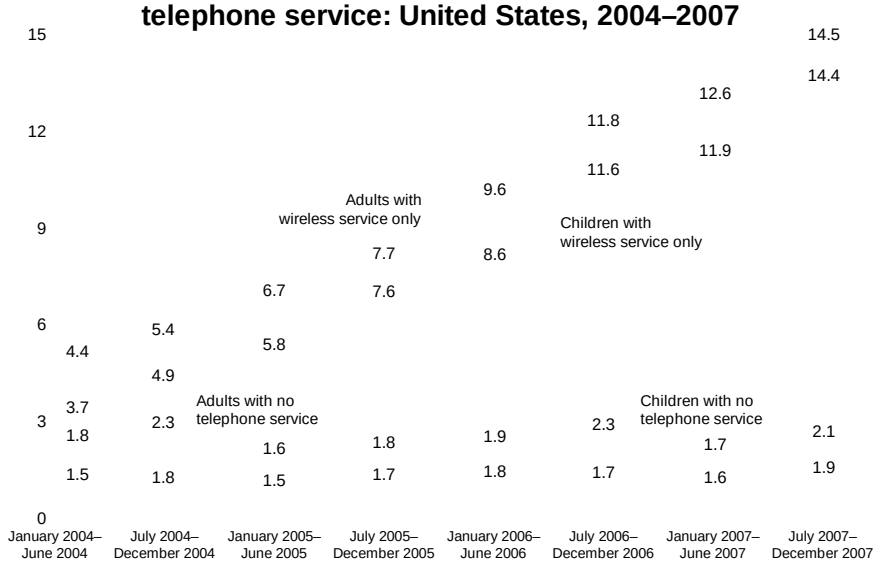
The percentage of adults living in wireless-only households has been steadily increasing (see **Figure**). During the last 6 months of 2007, more than one out of every seven adults lived in wireless-only households. One year before that (that is, during the last 6 months of 2006), fewer than one out of every eight adults lived in wireless-only households. And 2 years before that (that is, during the last 6 months of 2004), only 1 out of every 18 adults lived in wireless-only households.

The percentage of adults and the percentage of children living without any telephone service have remained relatively unchanged over the past 3 years. Approximately 2.2% of households had no telephone service (neither wireless nor landline). Approximately 4 million adults (1.9%) and 1.5 million children (2.1%) lived in these households.

Demographic Differences

The percentage of U.S. civilian noninstitutionalized adults living in wireless-only households is shown by selected demographic characteristics and by survey time period in **Table 2**. For the period July through December 2007:

Percentage of adults and percentage of children living in households with only wireless telephone service or no telephone service: United States, 2004–2007



- More than one-half of all adults living with unrelated roommates (56.9%) lived in households with only wireless telephones. This is the highest prevalence rate among the population subgroups examined.
- Adults renting their home (30.9%) were more likely than adults owning their home (7.3%) to be living in households with only wireless telephones.
- More than one in three adults aged 25-29 years (34.5%) lived in households with only wireless telephones. Nearly 31% of adults aged 18-24 years lived in households with only wireless telephones.
- As age increased, the percentage of adults living in households with only wireless telephones decreased: 15.5% for adults aged 30-44 years; 8.0% for adults aged 45-64 years; and 2.2% for adults aged 65 years and over.
- Men (15.9%) were more likely than women (13.2%) to be living in households with only wireless telephones.
- Adults living in poverty (27.4%) were more likely than higher income adults to be living in households with only wireless telephones.
- Adults living in the South (17.1%) and Midwest (15.3%) were more likely than adults living in the Northeast (10.0%) to be living in households with only wireless telephones.
- Non-Hispanic white adults (12.9%) were less likely than Hispanic adults (19.3%) or non-Hispanic black adults (18.3%) to be living in households with only wireless telephones.

Wireless-Mostly Households

Among households with both landline and cellular telephones, 22.3% received all or almost all calls on the cellular telephones, based on data for the period July through December 2007. These wireless-mostly households make up 13.1% of all households. Both of these estimates of the size of the wireless-mostly household population have increased since the first 6 months of 2007. During the first 6 months of 2007, the estimates were 20.5% and 12.1%, respectively. (These increases are statistically significant at the 0.10 level but not at the 0.05 level.)

Approximately 31 million adults (14.0%) lived in wireless-mostly households during the last 6 months of 2007, an increase from 28 million (12.6%) during the first 6 months of 2007. **Table 3** presents the percentage of adults living in wireless-mostly households by selected demographic characteristics and by survey time period. For the period July through December 2007:

- Non-Hispanic Asian adults (20.3%) were more likely than Hispanic adults (14.5%), non-Hispanic white adults (13.2%), or non-Hispanic black adults (15.1%) to be living in wireless-mostly households.
- Adults with college degrees (16.2%) were more likely to be living in wireless-mostly households than were high school graduates (12.7%) or adults with less education (8.7%).
- Adults living in poverty (8.6%) and adults living near poverty (11.4%) were less likely than higher income adults (15.9%) to be living in wireless-mostly households.
- Adults living in metropolitan areas (14.7%) were more likely to be living in wireless-mostly households than were adults living in more rural areas (10.9%).

Selected Health Measures by Household Telephone Status

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 results from health surveys, political polls, and other research conducted using random-digit-dial telephone surveys. Coverage bias may exist if there are differences between persons with and without landline telephones for the substantive variables of interest.

The NHIS Early Release program updates and releases estimates for 15 key adult health indicators every 3 months. **Table 4** presents estimates by household telephone status (landline, wireless-only, or without any telephone service) for all but two of these measures. ("Pneumococcal vaccination" and "personal care needs" were not included because these indicators are limited to adults aged 65 years and over.) For the period July through December 2007:

- The prevalence of binge drinking (i.e., having five or more alcoholic drinks in 1 day during the past year) among wireless-only adults (37.3%) was twice as high as the prevalence among adults living in landline households (17.7%). Wireless-only adults were also more likely to be current smokers.
- Compared with adults living in landline households, wireless-only adults were more likely to report that their health status was excellent or very good, and they were more likely to engage in regular leisure-time physical activity.
- The percentage without health insurance coverage at the time of the interview among wireless-only adults (28.7%) was twice as high as the percentage among adults living in landline households (13.7%).
- Compared with adults living in landline households, wireless-only adults were more likely to have experienced financial barriers to obtaining needed health care, and they were less likely to have a usual place to go for medical care. Wireless-only adults were also less likely to have received an influenza vaccination during the previous year.

- Wireless-only adults (47.6%) were more likely than adults living in landline households (34.7%) to have ever been tested for HIV, the virus that causes AIDS.

Conclusions

The potential for bias due to undercoverage remains a real and growing threat to surveys conducted only on landline telephones. For more information about the potential implications for health surveys based on landline telephone interviews, see:

- Blumberg SJ, Luke JV. Coverage bias in traditional telephone surveys of low-income and young adults. Public Opinion Quarterly 71:734-749. 2007.
- 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 96:926-31. 2006.
- Blumberg SJ, Luke JV, Cynamon ML, Frankel MR. Recent trends in household telephone coverage in the United States. In JM Lepkowski et al. (eds.), Advances in Telephone Survey Methodology (pp. 56-86). New York: John Wiley and Sons, Inc. 2008.

In addition, this report is the first to demonstrate that the number of adults living in wireless-mostly households in the U.S. is growing and is nearly equal to the number of adults living in wireless-only households. If the prevalence of wireless-mostly households continues to grow, and if adults living in wireless-mostly households rarely (if ever) answer their landline telephones, landline telephone surveys may experience increasing rates of nonresponse.

For More Information

For more information about the National Health Interview Survey or the Early Release program, or to find other Early Release reports, please see the following websites:

- **http://www.cdc.gov/nchs/nhis.htm**.
- **http://www.cdc.gov/nchs/about/major/nhis/releases.htm**.

Suggested citation

Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health Interview Survey, July-December 2007. National Center for Health Statistics. Available from: **http://www.cdc.gov/nchs/nhis.htm**. May 13, 2008.

Table 1. Percent distribution of household telephone status, by date of interview, for households, adults, and children: United States, January 2004-December 2007

Date of interview	Number of households (unweighted)	Household telephone status: Landline households with a wireless telephone	Landline households without a wireless telephone	Landline households with unknown wireless telephone status	Nonlandline households with unknown wireless telephone status	Wireless-only households	Phoneless households	Total
		Percent of households						
January-June 2004	16,284	43.2	39.6	9.9	0.5	5.0	1.8	100.0
July-December 2004	20,135	43.1	38.7	9.4	0.5	6.1	2.2	100.0
January-June 2005	18,301	42.4	34.4	13.2	0.8	7.3	1.9	100.0
July-December 2005	20,088	42.6	32.4	13.8	0.8	8.4	1.9	100.0
January-June 2006	16,009	45.6	30.9	10.3	0.7	10.5	2.0	100.0
July-December 2006	13,056	44.3	29.6	10.2	0.8	12.8	2.2	100.0
January-June 2007[1]	15,996	58.9	23.8	1.7	0.1	13.6	1.9	100.0
July-December 2007[1]	13,083	58.8	21.8	1.3	0.1	15.8	2.2	100.0
95% confidence interval[2]		57.27 - 60.29	20.60 - 23.11	0.94 - 1.73	0.05 - 0.19	14.61 - 17.14	1.87 - 2.53	
	Number of adults (unweighted)	Percent of adults						
January-June 2004	30,423	46.9	36.3	10.4	0.5	4.4	1.5	100.0
July-December 2004	37,611	46.8	35.7	9.7	0.5	5.4	1.8	100.0
January-June 2005	34,047	46.1	31.5	13.5	0.7	6.7	1.6	100.0
July-December 2005	37,622	46.4	29.7	13.9	0.7	7.7	1.7	100.0
January-June 2006	29,842	49.5	28.2	10.4	0.6	9.6	1.8	100.0
July-December 2006	24,473	48.1	27.3	10.5	0.7	11.8	1.7	100.0
January-June 2007[1]	29,982	63.3	20.8	1.7	0.1	12.6	1.6	100.0
July-December 2007[1]	24,514	63.2	19.1	1.2	0.1	14.5	1.9	100.0
95% confidence interval[2]		61.69 - 64.75	17.90 - 20.33	0.86 - 1.71	0.05 - 0.18	13.28 - 15.73	1.63 - 2.25	

See footnotes at end of table.

Date of interview	Number of children (unweighted)	Household telephone status: Landline households with a wireless telephone	Landline households without a wireless telephone	Landline households with unknown wireless telephone status	Nonlandline households with unknown wireless telephone status	Wireless-only households	Phoneless households	Total
		Percent of children						
January-June 2004	11,718	49.6	31.6	12.6	0.7	3.7	1.8	100.0
July-December 2004	14,368	49.4	31.4	11.6	0.5	4.9	2.3	100.0
January-June 2005	12,903	49.3	27.0	15.8	0.7	5.8	1.5	100.0
July-December 2005	13,883	50.5	23.9	15.2	0.9	7.6	1.8	100.0
January-June 2006	11,670	53.4	23.8	11.5	0.9	8.6	1.9	100.0
July-December 2006	9,165	51.9	21.5	11.9	0.9	11.6	2.3	100.0
January-June 2007[1]	11,532	68.3	16.4	1.6	0.0	11.9	1.7	100.0
July-December 2007[1]	9,122	68.5	13.8	1.1	0.0	14.4	2.1	100.0
95% confidence interval[2]		66.29 - 70.62	12.26 - 15.51	0.67 - 1.83	0.01 - 0.09	12.94 - 16.07	1.68 - 2.70	

[1] Questionnaire changes that occurred in 2007 should be considered when evaluating recent trends in household telephone status. See text for more information about these changes.

[2] Confidence intervals refer to the time period July-December 2007.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, January 2004-December 2007.

Table 2. Percentage of adults living in wireless-only households, by selected demographic characteristics and by calendar half-years: United States, January 2004-December 2007

Demographic characteristic	Calendar half-year								
	Jan-Jun 2004	Jul-Dec 2004	Jan-Jun 2005	Jul-Dec 2005	Jan-Jun 2006	Jul-Dec 2006	Jan-Jun 2007[1]	Jul-Dec 2007[1]	95% confidence interval[2]
	Percent								
Race/ethnicity									
Hispanic or Latino, any race(s)	6.0	6.8	8.5	11.2	11.2	15.3	18.0	19.3	(16.86 - 22.07)
Non-Hispanic white, single race	4.2	5.1	6.5	6.9	9.0	10.8	11.3	12.9	(11.54 - 14.32)
Non-Hispanic black, single race	4.1	5.8	6.6	8.5	10.5	12.8	14.3	18.3	(15.90 - 20.88)
Non-Hispanic Asian, single race	3.3	4.7	5.3	6.7	10.2	11.8	10.6	12.1	(9.14 - 15.80)
Non-Hispanic other, single race	7.6	10.2	*11.1	*8.0	9.8	17.2	22.8	17.5	(9.66 - 29.57)
Non-Hispanic multiple race	8.9	11.2	8.1	11.5	15.4	14.6	17.3	22.8	(17.22 - 29.53)
Age									
18-24 years	10.3	14.2	16.6	17.5	22.6	25.2	27.9	30.6	(26.72 - 34.74)
25-29 years	9.9	11.4	16.5	19.8	22.3	29.1	30.6	34.5	(31.48 - 37.62)
30-44 years	4.4	5.4	6.5	7.8	9.4	12.4	12.6	15.5	(14.06 - 16.96)
45-64 years	2.3	2.7	3.2	3.7	5.3	6.1	7.1	8.0	(7.13 - 8.97)
65 years and over	0.9	0.8	0.9	1.2	1.3	1.9	2.0	2.2	(1.67 - 3.01)
Sex									
Male	5.2	6.5	7.5	8.6	10.7	13.1	13.8	15.9	(14.37 - 17.47)
Female	3.7	4.5	6.0	6.9	8.5	10.5	11.5	13.2	(12.12 - 14.26)
Education									
Some high school or less	4.9	5.5	6.7	8.0	8.3	12.9	14.6	15.4	(13.48 - 17.43)
High school graduate or GED[3]	4.2	5.1	6.9	7.6	9.6	10.6	11.8	13.4	(12.17 - 14.77)
Some post-high school, no degree	5.6	7.2	8.2	9.4	11.9	14.4	14.7	17.0	(14.76 - 19.56)
4-year college degree or higher	3.2	4.3	5.5	6.3	8.5	10.1	10.8	12.7	(11.13 - 14.39)
Employment status last week									
Working at a job or business	5.1	6.4	8.0	9.2	11.6	13.9	15.0	16.6	(15.26 - 17.96)
Keeping house	3.6	4.0	5.1	6.1	7.1	8.6	9.5	12.8	(11.09 - 14.72)
Going to school	7.1	12.2	10.8	15.5	17.3	20.4	21.3	28.9	(20.01 - 39.73)
Something else (incl. unemployed)	2.6	2.8	3.6	3.7	4.2	6.2	6.4	7.6	(6.69 - 8.69)

See footnotes at end of table.

Demographic characteristic	Calendar half-year Jan-Jun 2004	Jul-Dec 2004	Jan-Jun 2005	Jul-Dec 2005	Jan-Jun 2006	Jul-Dec 2006	Jan-Jun 2007[1]	Jul-Dec 2007[1]	95% confidence interval[2]
Household structure									
Adult living alone	8.3	9.7	11.2	12.3	16.2	18.2	20.3	22.9	(20.61 - 25.27)
Unrelated adults, no children	19.7	33.1	36.0	33.6	44.2	54.0	55.3	56.9	(43.85 - 69.00)
Related adults, no children	3.2	3.6	5.3	5.9	7.1	8.5	9.8	11.0	(9.82 - 12.25)
Adult(s) with children	3.6	4.7	5.4	7.0	8.6	10.5	11.3	13.0	(11.65 - 14.43)
Household poverty status[4]									
Poor	8.0	10.1	11.8	14.2	15.8	22.4	21.6	27.4	(23.02 - 32.36)
Near poor	6.7	7.6	10.8	12.7	14.4	15.7	18.5	20.8	(18.36 - 23.49)
Not poor	3.7	5.1	6.2	7.0	9.4	11.3	10.6	11.9	(10.79 - 13.18)
Geographic region[5]									
Northeast	2.3	2.9	4.1	4.7	7.2	8.6	8.8	10.0	(7.12 - 13.76)
Midwest	5.1	6.4	7.2	8.8	10.2	11.4	14.0	15.3	(13.56 - 17.31)
South	5.3	6.3	7.6	9.6	11.4	14.0	14.9	17.1	(15.05 - 19.40)
West	4.2	5.4	7.0	6.2	7.8	11.0	10.9	12.9	(10.70 - 15.48)
Metropolitan statistical area status									
Metropolitan	5.0	6.3	7.7	8.7	10.3	12.7	13.7	15.5	(14.14 - 16.99)
Not metropolitan	2.9	3.4	4.1	5.1	7.0	8.0	8.4	10.0	(8.36 - 11.87)
Home ownership status[6]									
Owned or being bought	2.1	2.6	3.1	3.8	5.1	5.8	6.7	7.3	(6.49 - 8.12)
Renting	10.9	13.9	16.7	19.3	22.5	26.4	28.2	30.9	(28.32 - 33.52)
Other arrangement	6.3	10.1	10.7	8.4	10.7	*20.3	22.5	23.2	(15.48 - 33.35)
Number of wireless-only adults in survey sample (unweighted)	1,348	2,065	2,263	2,918	2,804	2,878	3,819	3,558	

*Estimate has a relative standard error greater than 30% and does not meet NCHS standards for reliability.

[1] Questionnaire changes that occurred in 2007 should be considered when evaluating recent trends in household telephone status. See text for more information about these changes.

[2] Confidence intervals refer to the time period July-December 2007.

[3] GED is General Educational Development high school equivalency diploma.

[4] Poverty status is based on household income and household size using the U.S. Census Bureau's poverty thresholds. "Poor" persons are defined as those below the poverty threshold. "Near poor" persons have incomes of 100% to less than 200% of the poverty threshold. "Not poor" persons have incomes of 200% of the poverty threshold or greater. Early Release estimates stratified by poverty are based only on the reported income and may differ from similar estimates produced later that are based on both reported and imputed income. NCHS imputes income when income is unknown, but the imputed income file is not available until a few months after the annual release of NHIS microdata. For households with multiple families, household income and household size were calculated as the sum of the multiple measures of family income and family size.

[5] In the geographic classification of the U.S. population, states are grouped into the following four regions used by the U.S. Census Bureau. Northeast includes Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, and Pennsylvania. Midwest includes Ohio, Illinois, Indiana, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Kansas, and Nebraska. South includes Delaware, Maryland, District of Columbia, West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Oklahoma, Arkansas, and Texas. West includes Washington, Oregon, California, Nevada, New Mexico, Arizona, Idaho, Utah, Colorado, Montana, Wyoming, Alaska, and Hawaii.

[6] For households with multiple families, home ownership status was determined by considering the reported home ownership status for each family. If any family reported owning the home, than the household level variable was classified as "owned or being bought" for all persons living in the household. If one family reported renting the home and another family reported "other arrangements," then the household level variable was classified as "other arrangement" for all persons living in the household.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, January 2004-December 2007.

Table 3. Percentage of adults living in landline households with wireless telephones, by proportion of calls received on wireless telephones, by selected demographic characteristics, and by calendar half-years: United States, January-December 2007

Demographic characteristic	January-June 2007		July-December 2007		
	Receive some or very few calls on wireless phones[1]	Receive all or nearly all calls on wireless phones[1]	Receive some or very few calls on wireless phones	Receive all or nearly all calls on wireless phones	95% confidence interval[2]
	Percent				
Race/ethnicity					
Hispanic or Latino, any race(s)	41.5	13.2	41.1	14.5	(12.34 - 17.00)
Non-Hispanic white, single race	53.3	12.3	51.7	13.2	(12.10 - 14.45)
Non-Hispanic black, single race	43.0	11.9	39.7	15.1	(12.96 - 17.55)
Non-Hispanic Asian, single race	52.0	16.0	50.5	20.3	(17.33 - 23.55)
Non-Hispanic other, single race	24.4	14.6	40.7	*8.6	(3.13 - 21.35)
Non-Hispanic multiple race	45.7	14.6	37.8	19.7	(13.45 - 27.87)
Age					
18-24 years	38.6	17.3	35.8	18.2	(15.85 - 20.84)
25-29 years	35.5	17.2	31.6	19.7	(17.29 - 22.33)
30-44 years	51.9	15.5	49.5	17.3	(15.59 - 19.05)
45-64 years	58.4	11.5	56.9	13.0	(11.86 - 14.24)
65 years and over	47.7	3.4	49.6	3.9	(3.16 - 4.92)
Sex					
Male	49.6	13.2	48.1	14.3	(13.27 - 15.48)
Female	50.7	12.0	49.2	13.6	(12.54 - 14.81)
Education					
Some high school or less	37.1	8.0	37.7	8.7	(7.38 - 10.30)
High school graduate or GED[3]	48.4	10.6	46.1	12.7	(11.40 - 14.17)
Some post-high school, no degree	51.5	15.7	49.6	16.6	(15.07 - 18.36)
4-year college degree or higher	60.6	14.9	58.3	16.2	(14.65 - 17.92)
Employment status last week					
Working at a job or business	52.1	15.5	49.9	16.8	(15.57 - 18.14)
Keeping house	52.6	9.3	52.9	10.4	(8.50 - 12.57)
Going to school	43.8	17.2	37.2	20.4	(16.56 - 24.91)
Something else (incl. unemployed)	45.8	5.3	46.4	6.7	(5.89 - 7.60)

See footnotes at end of table.

Demographic characteristic	January-June 2007 Receive some or very few calls on wireless phones[1]	January-June 2007 Receive all or nearly all calls on wireless phones[1]	July-December 2007 Receive some or very few calls on wireless phones	July-December 2007 Receive all or nearly all calls on wireless phones	95% confidence interval[2]
Household structure					
Adult living alone	27.7	10.8	27.9	10.7	(9.43 - 12.08)
Unrelated adults, no children	19.7	13.9	13.0	20.1	(13.07 - 29.58)
Related adults, no children	54.6	11.6	53.6	12.1	(10.92 - 13.44)
Adult(s) with children	55.3	14.4	53.1	17.2	(15.61 - 18.96)
Household poverty status[4]					
Poor	26.9	8.4	24.2	8.6	(6.92 - 10.57)
Near poor	37.1	9.7	36.0	11.4	(9.57 - 13.52)
Not poor	58.8	14.8	57.0	15.9	(14.63 - 17.29)
Geographic region[5]					
Northeast	53.4	11.3	52.4	11.7	(9.43 - 14.49)
Midwest	49.7	10.6	48.0	13.3	(11.33 - 15.51)
South	49.1	13.8	46.4	14.3	(12.60 - 16.18)
West	49.7	13.7	49.9	15.9	(14.05 - 18.06)
Metropolitan statistical area status					
Metropolitan	49.1	13.2	48.1	14.7	(13.56 - 15.91)
Not metropolitan	54.5	10.2	51.0	10.9	(9.31 - 12.81)
Home ownership status[6]					
Owned or being bought	59.2	12.1	57.8	14.0	(12.78 - 15.32)
Renting	28.0	13.9	29.0	13.8	(12.14 - 15.64)
Other arrangement	34.0	12.2	33.9	14.1	(9.60 - 20.14)
Number of adults in survey sample who live in landline households with wireless telephones (unweighted)	14,740	3,733	11,779	3,435	

*Estimate has a relative standard error greater than 30% and does not meet NCHS standards for reliability.

[1] The sum of the percentage of adults in households that receive some or very few calls on wireless phones and the percentage of adults in households that receive all or nearly all calls on wireless phones is nearly equal to the percentage of adults living in landline households with wireless telephones. The percentage of adults in landline households with wireless telephones who did not report the frequency of wireless telephone use was generally small (fewer than 1% of households with both landline and wireless telephones).

[2] Confidence intervals refer to the estimate of the percentage of adults living in households that receive all or nearly all calls on wireless telephones, for the time period July-

December 2007.

[3] GED is General Educational Development high school equivalency diploma.

[4] Poverty status is based on household income and household size using the U.S. Census Bureau's poverty thresholds. "Poor" persons are defined as those below the poverty threshold. "Near poor" persons have incomes of 100% to less than 200% of the poverty threshold. "Not poor" persons have incomes of 200% of the poverty threshold or greater. Early Release estimates stratified by poverty are based only on the reported income and may differ from similar estimates produced later that are based on both reported and imputed income. NCHS imputes income when income is unknown, but the imputed income file is not available until a few months after the annual release of NHIS microdata. For households with multiple families, household income and household size were calculated as the sum of the multiple measures of family income and family size.

[5] In the geographic classification of the U.S. population, states are grouped into the following four regions used by the U.S. Census Bureau. Northeast includes Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, and Pennsylvania. Midwest includes Ohio, Illinois, Indiana, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Kansas, and Nebraska. South includes Delaware, Maryland, District of Columbia, West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Oklahoma, Arkansas, and Texas. West includes Washington, Oregon, California, Nevada, New Mexico, Arizona, Idaho, Utah, Colorado, Montana, Wyoming, Alaska, and Hawaii.

[6] For households with multiple families, home ownership status was determined by considering the reported home ownership status for each family. If any family reported owning the home, than the household level variable was classified as "owned or being bought" for all persons living in the household. If one family reported renting the home and another family reported "other arrangements," then the household level variable was classified as "other arrangement" for all persons living in the household.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, January-December 2007.

Table 4. Prevalence rates (and 95% confidence intervals) for selected measures of health status, conditions, and behaviors for adults 18 years of age and over, by household telephone status: United States, July-December 2007

	Household telephone service					
	Landline household[1]		Wireless-only household		Phoneless household	
	Percent (95% confidence interval)					
Health-related behaviors						
Five or more alcoholic drinks in 1 day at least once in past year[2]	17.7	(16.58 - 18.96)	37.3	(33.76 - 40.91)	27.1	(20.17 - 35.26)
Current smoker[3]	18.0	(16.67 - 19.35)	30.6	(27.60 - 33.68)	38.6	(30.33 - 47.52)
Engaged in regular leisure-time physical activity[4]	29.9	(28.50 - 31.44)	36.4	(32.93 - 39.97)	22.9	(17.04 - 29.94)
Health status						
Health status described as excellent or very good[5]	59.5	(57.91 - 61.03)	67.5	(64.30 - 70.56)	49.2	(41.17 - 57.31)
Experienced serious psychological distress in past 30 days[6]	2.4	(2.05 - 2.89)	4.1	(3.09 - 5.39)	8.4	(4.77 - 14.44)
Obese (adults 20 years of age and over)[7]	27.6	(26.26 - 29.06)	22.6	(19.98 - 25.40)	25.7	(18.87 - 33.85)
Asthma episode in the past year[8]	3.8	(3.37 - 4.37)	3.6	(2.67 - 4.91)	*3.6	(1.57 - 7.95)
Ever diagnosed with diabetes[9]	8.8	(8.11 - 9.47)	4.5	(3.45 - 5.74)	5.4	(3.19 - 9.11)
Health care service use						
Received influenza vaccine during past year[10]	32.7	(31.20 - 34.31)	16.6	(14.45 - 19.02)	20.9	(15.33 - 27.81)
Ever been tested for HIV[11]	34.7	(33.17 - 36.22)	47.6	(44.15 - 51.13)	45.8	(37.91 - 53.82)
Health care access						
Has a usual place to go for medical care[12]	87.5	(86.47 - 88.38)	68.0	(64.90 - 70.88)	61.8	(54.22 - 68.83)
Failed to obtain needed medical care in past year due to financial barriers[13]	7.3	(6.69 - 7.95)	15.9	(13.63 - 18.39)	13.3	(9.14 - 19.07)
Currently uninsured[14]	13.7	(12.69 - 14.68)	28.7	(25.78 - 31.76)	44.1	(36.74 - 51.71)
Number of adults in survey sample (unweighted)	8,424		1,871		256	

*Estimate has a relative standard error greater than 30% and does not meet NCHS standards for reliability.

[1] In this analysis, landline households include households that also have wireless telephone service.

[2] A year is defined as the 12 months prior to the interview. The analyses excluded adults with unknown alcohol consumption (about 2% of respondents each year).

[3] Current smokers were defined as those who smoked more than 100 cigarettes in their lifetime and now smoke every day or some days. The analyses excluded persons with unknown smoking status (about 1% of respondents each year).

[4] Regular leisure-time physical activity is defined as engaging in light-moderate leisure-time physical activity for greater than or equal to 30 minutes at a frequency greater than or equal to five times per week or engaging in vigorous leisure-time physical activity for greater than or equal to 20 minutes at a frequency greater than or equal to three times per week. Persons who were known to have not met the frequency recommendations are classified as "not regular," regardless of duration. The analyses excluded persons with unknown physical activity participation (about 3% of respondents each year).

[5] Health status data were obtained by asking respondents to assess their own health and that of family members living in the same household as excellent, very good, good, fair, or poor. The analyses excluded persons with unknown health status (about 0.5% of respondents each year).

[6] Six psychological distress questions are included in the NHIS. These questions ask how often during the past 30 days a respondent experienced certain symptoms of psychological distress (feeling so sad that nothing could cheer you up, nervous, restless or fidgety, hopeless, worthless, that everything was an effort). The response codes of the six items for each person are summed to yield a scale with a 0-to-24 range. A value of 13 or more for this scale indicates that at least one symptom was experienced “most of the time” and is used here to define serious psychological distress.

[7] Obesity is defined as a Body Mass Index (BMI) of 30 kg/m^2 or more. The measure is based on self-reported height and weight.

The analyses excluded people with unknown height or weight (about 4% of respondents each year).

[8] Information on an episode of asthma or asthma attack during the past year is self-reported by adults aged 18 years and over. A year is defined as the 12 months prior to the interview. The analyses excluded people with unknown asthma episode status (about 0.3% of respondents each year).

[9] Prevalence of diagnosed diabetes is based on self-report of ever having been diagnosed with diabetes by a doctor or other health professional. Persons reporting "borderline" diabetes status and women reporting diabetes only during pregnancy were not coded as having diabetes in the analyses. The analyses excluded persons with unknown diabetes status (about 0.1% of respondents each year).

[10] Receipt of flu shots and receipt of nasal spray flu vaccinations were included in the calculation of flu vaccination estimates. Responses to the flu vaccination questions cannot be used to determine when the subject received the flu vaccination during the 12 months preceding the interview. In addition, estimates are subject to recall error, which will vary depending on when the question is asked because the receipt of a flu vaccination is seasonal. The analyses excluded those with unknown flu vaccination status (about 1% of respondents each year).

[11] Individuals who received HIV testing solely as a result of blood donation were considered as not having been tested for HIV. The analyses excluded those with unknown human immunodeficiency virus (HIV) test status (about 4% of respondents each year).

[12] The usual place to go for medical care does not include a hospital emergency room. The analyses excluded persons with an unknown usual place to go for medical care (about 0.6% of respondents each year).

[13] A year is defined as the 12 months prior to the interview. The analyses excluded persons with unknown responses to the question on failure to obtain needed medical care due to cost (about 0.5% of respondents each year).

[14] A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, State Children's Health Insurance Program (SCHIP), state-sponsored or other government-sponsored health plan, or military plan at the time of the interview. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service such as accidents or dental care. The data on health insurance status were edited using an automated system based on logic checks and keyword searches. The analyses excluded persons with unknown health insurance status (about 1% of respondents each year).

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, July-December 2007.