Health Tracking Survey 2012 - EXCERPT

Final Topline   09/10/2012

Data for August 7–September 6, 2012

Princeton Survey Research Associates International for
the Pew Research Center's Internet & American Life Project

Sample: n=3,014 national adults, age 18 and older, including 1,206 cell phone interviews
Interviewing dates: 08.07.2012 – 09.06.2012

Margin of error is plus or minus 2 percentage points for results based on Total [n=3,014]
Margin of error is plus or minus 3 percentage points for results based on internet users [n=2,392]
Margin of error is plus or minus 3 percentage points for results based on cell phone owners [n=2,581]
Margin of error is plus or minus 3 percentage points for results based on online health seekers [n=1,741]
Margin of error is plus or minus 4 percentage points for results based on caregivers [n=1,171]

INTUSE Do you use the internet, at least occasionally?

EMLOCC Do you send or receive email, at least occasionally?

INTMOB Do you access the internet on a cell phone, tablet or other mobile handheld device, at least occasionally?[1]

	USES INTERNET	DOES NOT USE INTERNET
Current	81	19
August 2012[i]	85	15
April 2012	82	18
February 2012	80	20
December 2011	82	18
August 2011	78	22
May 2011	78	22
January 2011[ii]	79	21
December 2010[iii]	77	23
November 2010[iv]	74	26
September 2010	74	26
May 2010	79	21
January 2010[v]	75	25
December 2009[vi]	74	26
September 2009	77	23
April 2009	79	21
December 2008	74	26
November 2008[vii]	74	26
August 2008[viii]	75	25
July 2008[ix]	77	23
May 2008[x]	73	27
April 2008[xi]	73	27

[1] The definition of an internet user varies from survey to survey. From January 2005 thru February 2012, an internet user is someone who uses the internet at least occasionally or sends/receives email at least occasionally (two-part definition with question wording "Do you use the internet, at least occasionally?" OR "Do you send or receive email, at least occasionally?"). Prior to January 2005, an internet user is someone who goes online to access the internet or to send and receive email (question wording "Do you ever go online to access the Internet or World Wide Web or to send and receive email?").

	USES INTERNET	DOES NOT USE INTERNET
January 2008[xii]	70	30
December 2007[xiii]	75	25
September 2007[xiv]	73	27
February 2007[xv]	71	29
December 2006[xvi]	70	30
November 2006[xvii]	68	32
August 2006[xviii]	70	30
April 2006[xix]	73	27
February 2006[xx]	73	27

INTUSE/EMLOCC/INTMOB continued...

	USES INTERNET	DOES NOT USE INTERNET
December 2005[xxi]	66	34
September 2005[xxii]	72	28
June 2005[xxiii]	68	32
February 2005[xxiv]	67	33
January 2005[xxv]	66	34
Nov 23-30, 2004[xxvi]	59	41
November 2004[xxvii]	61	39
June 2004[xxviii]	63	37
February 2004[xxix]	63	37
November 2003[xxx]	64	36
August 2003[xxxi]	63	37
June 2003[xxxii]	62	38
May 2003[xxxiii]	63	37
March 3-11, 2003[xxxiv]	62	38
February 2003[xxxv]	64	36
December 2002[xxxvi]	57	43
November 2002[xxxvii]	61	39
October 2002[xxxviii]	59	41
September 2002[xxxix]	61	39
July 2002[xl]	59	41
March/May 2002[xli]	58	42
January 2002[xlii]	61	39
December 2001[xliii]	58	42
November 2001[xliv]	58	42
October 2001[xlv]	56	44
September 2001[xlvi]	55	45
August 2001[xlvii]	59	41
February 2001[xlviii]	53	47
December 2000[xlix]	59	41
November 2000[l]	53	47
October 2000[li]	52	48
September 2000[lii]	50	50
August 2000[liii]	49	51
June 2000[liv]	47	53
May 2000[lv]	48	52

Methodology

August 2012 Health Survey

Prepared by Princeton Survey Research Associates International
for the Pew Social & Demographic Trends Project

SUMMARY

The 2012 Health Survey, sponsored by the Pew Research Center's Internet & American Life Project, obtained telephone interviews with a nationally representative sample of 3,014 adults living in the United States. Telephone interviews were conducted by landline (1,808) and cell phone (1,206, including 624 without a landline phone). The survey was conducted by Princeton Survey Research Associates International. Interviews were done in English and Spanish by Princeton Data Source from August 7 to September 6, 2012. Statistical results are weighted to correct known demographic discrepancies. The margin of sampling error for the complete set of weighted data is ±2.4 percentage points.

Details on the design, execution and analysis of the survey are discussed below.

DESIGN AND DATA COLLECTION PROCEDURES

Sample Design

A combination of landline and cell random digit dial (RDD) samples was used to reach a representative sample of all adults the United States who have access to either a landline or cellular telephone. Both samples were disproportionately-stratified to increase the incidence of African-American and Hispanic respondents. Within strata, phone numbers were drawn with equal probabilities. The landline samples were list-assisted and drawn from active blocks containing three or more residential listing while the cell samples were not list-assisted, but were drawn through a systematic sampling from dedicated wireless 100-blocks and shared service 100-blocks with no directory-listed landline numbers.

Contact Procedures

Interviews were conducted from August 7 to September 6, 2012. As many as 7 attempts were made to contact every sampled telephone number. Sample was released for interviewing in replicates, which are representative subsamples of the larger sample. Using replicates to control

the release of sample ensures that complete call procedures are followed for the entire sample. Calls were staggered over times of day and days of the week to maximize the chance of making contact with potential respondents. Each phone number received at least one daytime call.

For the landline sample, interviewers asked to speak with either the youngest male or youngest female currently at home based on a random rotation. If no male/female was available at the time of the call, interviewers asked to speak with the youngest adult of the opposite sex. This systematic respondent selection technique has been shown to produce samples that closely mirror the population in terms of age and gender when combined with cell sample.

For the cell sample, interviews were attempted with the person who answered the phone. Interviewers first verified that the person was and adult and in a safe place before continuing with the interview.

WEIGHTING AND ANALYSIS

Weighting is generally used in survey analysis to adjust for effects of the sample design and to compensate for patterns of nonresponse that might bias results. The weighting was accomplished in multiple stages to account for the disproportionately-stratified sample, the overlapping landline and cell sample frames and differential non-response associated with sample demographics.

The first-stage of weighting compensated for the disproportionate sample design. This adjustment (called SAMPWT in the dataset) was computed by dividing the proportion of the population from each stratum by the proportion of sample drawn from the stratum. The landline and cell samples were drawn using the same relative sampling fractions within strata so the. Table 1 shows the SAMPWT values by strata.

Table 1. SAMPWT by Stratum

Strata	Population Dist'n	Sample Dist'n	SAMPWT
1	10.8%	4.1%	2.63
2	9.0%	3.4%	2.63
3	9.8%	3.7%	2.63
4	9.5%	3.6%	2.63
5	10.6%	8.1%	1.31
6	9.0%	10.2%	0.88
7	9.7%	11.1%	0.88
8	11.4%	17.4%	0.66
9	9.3%	17.8%	0.53
10	10.7%	20.5%	0.53

The second stage of weighting corrected for different probabilities of selection based on the number of adults in each household and each respondents telephone use (i.e., whether the respondent has access to a landline, to a cell phone or to both types of phone).

The second-stage weight can be expressed as:

$$\frac{1}{LL_i \left(\frac{S_{LL}}{S_{CP}} \times \frac{1}{AD_i} \right) + (CP_i \times R)}$$

LL_i	=1 if respondent has a landline phone and =0 if respondent has no landline phone
CP	=1 if respondent has a cell phone and =0 if respondent has no cell phone
S_{LL}	the size of the landline sample
S_{CP}	the size of the cell sample
R	the estimated ratio of the size of the landline sample frame to the size of the cell sample frame. For this survey R=0.55.

Both adjustments were incorporated into a first-stage weight that was used as an input weight for post-stratification. The data was raked to match sample distributions to population parameters. The African-American and White/Other samples were raked to match parameters for sex by age, sex by education, age by education and region. Hispanics were raked to match population parameters for sex by age, sex by education, age by education and region. In addition, the Hispanic group was raked to a nativity parameter.

The combined data was then raked to match population parameters for sex by age, sex by education, age by education, region, household phone use and population density. The white, non-Hispanic subgroup was also balanced by age, education and region. The telephone usage parameter was derived from an analysis of recently available National Health Interview Survey data[2]. The population density parameter is county-based and was derived from Census 2000 data. All other weighting parameters were derived from the Census Bureau's 2011 Annual Social and Economic Supplement (ASEC).

This stage of weighting, which incorporated each respondent's first-stage weight, was accomplished using Sample Balancing, a special iterative sample weighting program that simultaneously balances the distributions of all variables using a statistical technique called the

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[2] Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health Interview Survey, July-December, 2011. National Center for Health Statistics. June 2012.

Deming Algorithm. The raking corrects for differential non-response that is related to particular demographic characteristics of the sample. This weight ensures that the demographic characteristics of the sample closely approximate the demographic characteristics of the population. Table 2 compares full sample weighted and unweighted sample demographics to population parameters.

Table 2. Sample Demographics

	Parameter	Unweighted	Weighted
Gender			
Male	48.6	44.4	48.9
Female	51.4	55.6	51.1
Age			
18-24	12.8	10.0	12.8
25-34	18.0	12.4	17.5
35-44	17.2	13.2	17.3
45-54	19.0	17.8	19.2
55-64	16.0	18.5	16.0
65+	17.0	28.1	17.3
Education (changed)			
Less than HS Graduate	13.3	9.0	11.7
HS Graduate	30.4	27.7	30.6
Some College/Assoc Degree	28.5	26.0	28.8
College Graduate	27.8	37.3	28.9
Race/Ethnicity			
White/not Hispanic	67.8	63.0	68.1
Black/not Hispanic	11.5	16.8	11.8
Hisp - US born	6.6	7.6	6.6
Hisp - born outside	7.4	6.8	7.0
Other/not Hispanic	6.7	5.7	6.5
Region			
Northeast	18.3	16.4	19.2
Midwest	21.7	19.0	22.1
South	36.8	41.5	36.1
West	23.2	23.0	22.6

(continued…)

Table 2. Sample Demographics *(…continued)*

	Parameter	Unweighted	Weighted
County Pop. Density			
1 - Lowest	20.1	18.8	20.4
2	20.0	18.0	20.1
3	20.1	18.9	20.2
4	20.2	20.0	19.9
5 - Highest	19.6	24.4	19.3

Household Phone Use			
LLO	7.0	7.9	7.2
Dual - few,some cell	39.0	54.4	40.3
Dual - most cell	18.8	16.9	18.9
CPO	35.2	20.8	33.6

Effects of Sample Design on Statistical Inference

Post-data collection statistical adjustments require analysis procedures that reflect departures from simple random sampling. PSRAI calculates the effects of these design features so that an appropriate adjustment can be incorporated into tests of statistical significance when using these data. The so-called "design effect" or *deff* represents the loss in statistical efficiency that results from a disproportionate sample design and systematic non-response. The total sample design effect for this survey is 1.75.

PSRAI calculates the composite design effect for a sample of size *n*, with each case having a weight, w_i as:

$$deff = \frac{n \sum_{i=1}^{n} w_i^2}{\left(\sum_{i=1}^{n} w_i \right)^2} \qquad \text{formula 1}$$

In a wide range of situations, the adjusted *standard error* of a statistic should be calculated by multiplying the usual formula by the square root of the design effect ($\sqrt{deff}$). Thus, the formula for computing the 95% confidence interval around a percentage is:

$$\hat{p} \pm \left(\sqrt{deff} \times 1.96 \sqrt{\frac{\hat{p}(1-\hat{p})}{n}} \right) \qquad \textit{formula 2}$$

where $\hat{p}$ is the sample estimate and *n* is the unweighted number of sample cases in the group being considered.

The survey's *margin of error* is the largest 95% confidence interval for any estimated proportion based on the total sample— the one around 50%. For example, the margin of error for the entire sample is ±2.4 percentage points. This means that in 95 out of every 100 samples drawn using the same methodology, estimated proportions based on the entire sample will be no more than 2.4 percentage points away from their true values in the population. It is important to remember that sampling fluctuations are only one possible source of error in a survey estimate. Other sources, such as respondent selection bias, question wording and reporting inaccuracy may contribute additional error of greater or lesser magnitude. Table 3 shows design effects and margins of error for key subgroups.

Table 3. Design Effects and Margins of Sampling Error

	Sample Size	Design Effect	Margin of Error
Total Sample	3,014	1.75	2.4 percentage points
White, not Hispanic	1,864	1.75	3.0 percentage points
African American, not Hispanic	497	1.62	5.6 percentage points
Hispanic	427	1.56	5.9 percentage points

RESPONSE RATE

Table 4 reports the disposition of all sampled telephone numbers ever dialed from the original telephone number samples. The response rate estimates the fraction of all eligible sample that was ultimately interviewed.[3]

Table 4. Sample Disposition

Landline	Cell	
1807	1205	I=Completes
8660	10980	R=Refusal and breakoff
3941	5570	NC=Non contact
164	87	O=Other
40051	13668	OF=Business/computer/not working/child's cell phone
4225	619	UH/UO=Unknown household/Unknown other
0.27	0.57	AAPOR's e=(I+R+NC+O)/(I+R+NC+O+OF)
11.5%	**6.6%**	**AAPOR RR3=I/[I+R+NC+O+(e*UH/UO)]**

Endnotes

[i] August 2012 trends based on the Civic Engagement Tracking Survey 2012, conducted July 16–August 7, 2012 [N=2,253, including 900 cell phone interviews].

[ii] January 2011 trends based on the Pew Internet Project/Project for Excellence in Journalism/Knight Foundation "Local News survey," conducted January 12-25, 2011 [N=2,251, including 750 cell phone interviews].

[iii] December 2010 trends based on the Social Side of the Internet survey, conducted November 23–December 21, 2010 [N=2,303, including 748 cell phone interviews].

[iv] November 2010 trends based on the Post-Election Tracking Survey 2010, conducted November 3-24, 2010 [N=2,257, including 755 cell phone interviews].

[v] January 2010 trends based on the Online News survey, conducted December 28, 2009 – January 19, 2010 [N=2,259, including 562 cell phone interviews].

[3] The sample disposition codes and reporting are consistent with the American Association for Public Opinion Research standards.

[vi] December 2009 trends based on the Fall Tracking "E-Government" survey, conducted November 30 – December 27, 2009 [N=2,258, including 565 cell phone interviews].

[vii] November 2008 trends based on the Post-Election 2008 Tracking survey, conducted November 20-December 4, 2008 [N=2,254].

[viii] August 2008 trends based on the August Tracking 2008 survey, conducted August 12-31, 2008 [N=2,251].

[ix] July 2008 trends based on the Personal Networks and Community survey, conducted July 9-August 10, 2008 [N=2,512, including 505 cell phone interviews]

[x] May 2008 trends based on the Spring Tracking 2008 survey, conducted April 8-May 11, 2008 [N=2,251].

[xi] April 2008 trends based on the Networked Workers survey, conducted March 27-April 14, 2008. Most questions were asked only of full- or part-time workers [N=1,000], but trend results shown here reflect the total sample [N=2,134].

[xii] January 2008 trends based on the Networked Families survey, conducted December 13, 2007-January 13, 2008 [N=2,252].

[xiii] December 2007 trends based on the Annual Gadgets survey, conducted October 24-December 2, 2007 [N=2,054, including 500 cell phone interviews].

[xiv] September 2007 trends based on the Consumer Choice survey, conducted August 3-September 5, 2007 [N=2,400, oversample of 129 cell phone interviews].

[xv] February 2007 trends based on daily tracking survey conducted February 15-March 7, 2007 [N=2,200].

[xvi] December 2006 trends based on daily tracking survey, conducted November 30 - December 30, 2006 [N=2,373].

[xvii] November 2006 trends based on Post-Election tracking survey, conducted Nov. 8-Dec. 4, 2006 [N=2,562]. This includes an RDD sample [N=2,362] and a cell phone only sample [N=200]. Results reflect combined samples, where applicable.

[xviii] August 2006 trends based on daily tracking survey, conducted August 1-31, 2006 [N=2,928].

[xix] April 2006 trends based on the Annual Gadgets survey, conducted Feb. 15-Apr. 6, 2006 [N=4,001].

[xx] February 2006 trends based on the Exploratorium Survey, conducted Jan. 9-Feb. 6, 2006 [N=2,000].

[xxi] December 2005 trends based on daily tracking survey conducted Nov. 29-Dec. 31, 2005 [N=3,011].

[xxii] September 2005 trends based on daily tracking survey conducted Sept. 14-Oct.13, 2005 [N=2,251].

[xxiii] June 2005 trends based on the Spyware Survey, conducted May 4-June 7, 2005 [N=2,001].

[xxiv] February 2005 trends based on daily tracking survey conducted Feb. 21-March 21, 2005 [N=2,201].

[xxv] January 2005 trends based on daily tracking survey conducted Jan. 13-Feb.9, 2005 [N=2,201].

[xxvi] November 23-30, 2004 trends based on the November 2004 Activity Tracking Survey, conducted November 23-30, 2004 [N=914].

[xxvii] November 2004 trends based on the November Post-Election Tracking Survey, conducted Nov 4-Nov 22, 2004 [N=2,200].

[xxviii] June 2004 trends based on daily tracking survey conducted May 14-June 17, 2004 [N=2,200].

[xxix] February 2004 trends based on daily tracking survey conducted February 3-March 1, 2004 [N=2,204].

[xxx] November 2003 trends based on daily tracking survey conducted November 18-December 14, 2003 [N=2,013].

[xxxi] August 2003 trends based on 'E-Government' survey conducted June 25-August 3, 2003 [N=2,925].

[xxxii] June 2003 trends based on 'Internet Spam' survey conducted June 10-24, 2003 [N=2,200].

[xxxiii] May 2003 trends based on daily tracking survey conducted April 29-May 20, 2003 [N=1,632].

[xxxiv] March 3-11, 2003 trends based on daily tracking survey conducted March 3-11, 2003 [N=743].

[xxxv] February 2003 trends based on daily tracking survey conducted February 12-March 2, 2003 [N=1,611].

[xxxvi] December 2002 trends based on daily tracking survey conducted Nov. 25–Dec. 22, 2002 [N=2,038].

[xxxvii] November 2002 trends based on daily tracking survey conducted October 30-November 24, 2002 [N=2,745].

[xxxviii] October 2002 trends based on daily tracking survey conducted October 7-27, 2002 [N=1,677].

xxxix September 2002 trends based on daily tracking survey conducted September 9-October 6, 2002 [N=2,092].

xl July 2002 trends based on 'Sept. 11th-The Impact Online' survey conducted June 26-July 26, 2002 [N=2,501].

xli March/May 2002 trends based on daily tracking surveys conducted March 1-31, 2002 and May 2-19, 2002.

xlii January 2002 trends based on a daily tracking survey conducted January 3-31, 2002 [N=2,391].

xliii December 2001 trends represent a total tracking period of December 1-23, 2001 [N=3,214]. This tracking period based on daily tracking surveys conducted December 17-23, 2001 and November 19-December 16, 2001.

xliv November 2001 trends represent a total tracking period of November 1-30, 2001 [N=2,119]. This tracking period based on daily tracking surveys conducted October 19 – November 18, 2001 and November 19 – December 16, 2001.

xlv October 2001 trends represent a total tracking period of October 1-31, 2001 [N=1,924]. This tracking period based on daily tracking surveys conducted September 20 – October 1, 2001, October 2-7, 2001, October 8-18, 2001, and October 19 – November 18, 2001.

xlvi September 2001 trends represent a total tracking period of September 1-30, 2001 [N=742]. This tracking period based on daily tracking surveys conducted August 13-September 10, 2001, September 12-19, 2001 and September 20 – October 1, 2001.

xlvii August 2001 trends represent a total tracking period of August 12-31, 2001 [N=1,505]. This tracking period based on a daily tracking survey conducted August 13-September 10, 2001.

xlviii February 2001 trends based on a daily tracking survey conducted February 1, 2001-March 1, 2001 [N=2,096].

xlix December 2000 trends based on a daily tracking survey conducted December 2-22, 2000 [N=2,383].

l November 2000 trends based on a daily tracking survey conducted November 2, 2000 – December 1 [N=6,322].

li October 2000 trends based on a daily tracking survey conducted October 2 – November 1, 2000 [N=3,336].

lii September 2000 trends based on a daily tracking survey conducted September 15 – October 1, 2000 [N=1,302].

liii August 2000 trends based on a daily tracking survey conducted July 24 – August 20, 2000 [N=2,109].

liv June 2000 trends based on a daily tracking survey conducted May 2 – June 30, 2000 [N=4,606].

lv May 2000 trends based on a daily tracking survey conducted April 1 – May 1, 2000 [N=2,503].