Behavioral Risk Factor Surveillance System

2012 Summary Data Quality Report
July 3, 2013

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Introduction

The BRFSS is a state-based system that is used to gather information through telephone surveys conducted by the health departments of all 50 states, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam, with assistance from CDC. This Summary Data Quality Report was created to present detailed descriptions of the 2012 BRFSS calling outcomes. This document, therefore, presents call summary information for each of the states and territories that participated in the 2012 BRFSS. All BRFSS public-use data are collected by landline telephone and cellular telephone to produce a single data set aggregated from the 2012 BRFSS state-level datasets. The variables and outcomes provided in this document are applicable to a combined data set of responses from landline telephone - and cellular telephone-respondents within each of the states.

The inclusion of data from cellular telephone interviews in the BRFSS public release dataset has been standard protocol since 2011. In many respects, 2011 was a year of change in terms of BRFSS approach and methodology. Concurrent with the addition of cellular telephone interviews in 2011, the BRFSS also adopted new weighting procedures in order to accommodate the inclusion of new weighting variables. Data users should note that new weighting procedures are likely to affect trend lines when comparing BRFSS data collected before and after 2011; because of these changes, users are advised not to make direct comparisons with pre-2011 data, and instead, begin new trend lines with that year. Details of changes beginning with the 2011 BRFSS are provided in the Morbidity and Mortality Weekly Report (MMWR), which highlights weighting and coverage effects on trend lines.

The measures presented in this document are designed to summarize the quality of the 2012 BRFSS survey data. Response rates, cooperation rates, and refusal rates for BRFSS are calculated using standards set by the American Association of Public Opinion Research (AAPOR).[2] The BRFSS has calculated 2012 response rates using AAPOR Response Rate #4, which is in keeping with rates provided by BRFSS prior to 2011 using rates from the Council of American Survey Research Organizations (CASRO) .[2]

Based on the guidelines of AAPOR, response rate calculations include assumptions of eligibility among potential respondents/households that are not interviewed. Changes in the geographic distribution of cellular telephone numbers by telephone companies and the portability of landline telephone numbers are likely to make it more difficult than in the past to ascertain which telephone numbers are out-of-sample and which telephone phone numbers represent "likely households." The BRFSS calculates likely households using the proportions of eligible households among all phone numbers where eligibility has been determined. This "eligibility factor" appears in calculations of response, cooperation, resolution, and refusal rates.

Interpretation of BRFSS Response Rates

Because this report reflects the initial inclusion of BRFSS cellular telephone interviews, contextual information on cell phone response rates is provided below. Although cellular telephone response rates are generally lower than landline telephone response rates across most surveys, the BRFSS has achieved a cellular telephone response rate that compares favorably with other similar surveys (Table 1).

Table 1
Examples of Cell Phone and Landline Survey Response Rates

Survey	Year(s)	Response Rates	
		Landline	Cell Phone
California Health Interview Survey (CHIS)[1]	2007-2008	35.5%	22.1%
The Commonwealth Fund 2010 Biennial Health Insurance Survey[2]	2010	29.0%	25.0%
National Immunization Survey Cell Phone Pilot (NIS)[3]	2007-2008	N/A	21.4%
National Immunization Survey (NIS)[4]	2011	61.7% [a]	25.2%
Pew Research Center for People and the Press[5]	2006	30.0%	20.0%
Pew Internet and American Life Project[6]	2012	11.1%	10.0%
BRFSS	2012	49.1%	35.3%

[a]Unlike the BRFSS, the NIS does not include household sampling in the landline portion of the study, but interviews the adult who self-identifies as "most knowledgeable" about household immunization information.

[1]http://www.statcan.gc.ca/pub/12-001-x/2011001/article/11443-eng.pdf

[2]http://www.commonwealthfund.org/Surveys/2011/Mar/2010-Biennial-Health-Insurance-Survey.aspx?view=print&page=all.

[3]http://www.amstat.org/sections/srms/proceedings/y2008/Files/barronmartin.pdf

[4]http://www.cdc.gov/vaccines/stats-surv/nis/dual-frame-sampling-08282012.htm

[5]http://www.pewinternet.org/reports/2012/Politics-on-SNS/methodology

[6]http://www.people-press.org/2006/05/15/the-cell-phone-challenge-to-survey-research/.

In the following tables, landline telephone and cellular telephone calling outcomes and rates are presented. The BRFSS cellular telephone survey was collected in a manner similar to the BRFSS landline telephone survey. One important difference, however, is that interviews conducted by landline telephones include random selection among adults within households, while cellular telephone interviews are conducted with adults who are contacted on personal (nonbusiness) cellular telephones. The report presents data on three general types of measure by state:

1. Call outcome measures, including response rates, which are based on landline telephone disposition codes.

2. Call outcome measures, including response rates, which are based on cellular telephone disposition codes.

3. A weighted response rate, based on a combination of the landline telephone response rate with the cellular telephone response rate proportional to the total sample used to collect the data for a state.

The BRFSS recommends that authors/researchers referencing BRFSS data quality include the following language:

Response rates for BRFSS are calculated using standards set by the American Association of Public Opinion Research (AAPOR) Response Rate Formula #4 (http://www.aapor.org/Standard_Definitions2.htm). The response rate is the number of respondents who completed the survey as a proportion of all eligible and likely-eligible persons. The median survey response rate for all states and Washington, DC, in 2012 was 45.2, and ranged from 27.7 to 60.4.[a] Response rates for states and territories included in this analysis had a median of [provide median] and ranged from [provide range],[b] For detailed information see the BRFSS Summary Data Quality Report.[c]
[a] Response rates and ranges should reflect the year(s) included in the analyses. [b] Response rates for states selected for analysis should be included here. This sentence may be omitted if all states are used in the analysis. [c] This link is to the Summary Data Quality Report for the year(s) included in the analyses. http://www.cdc.gov/brfss/technical_infodata/quality.htm

BRFSS 2012 Call Outcome Measures and Response Rate Formulae

The calculations of calling outcome rates are based on final disposition codes that are assigned after all calling attempts have been exhausted. The BRFSS may make up to 15 attempts to reach respondents prior to assigning a final disposition code. In 2012, the BRFSS used a single set of disposition codes for both landline and cell phones, adapted from standardized AAPOR disposition codes for telephone surveys. A few disposition codes apply only to landline telephone or cellular telephone sample numbers. For example, answering-device messages may confirm household eligibility for landline telephone numbers but are not used to determine eligibility of cellular telephone numbers. Disposition codes reflect whether interviewers have completed or partially completed an interview (1000 level codes), determined that the household was eligible without completing an interview (2000 level codes), determined that a household or respondent was ineligible (4000 level codes) or was unable to determine the eligibility of a household and/or respondent (3000 level codes). The table below illustrates the codes used by the BRFSS in 2012. Instances where codes are used only for landline telephone or cellular telephone sample numbers are noted in the table.

Table 2
2012 Landline Telephone and Cellular Telephone BRFSS Disposition Codes

Category	Code	Description
Interviewed (1000 level codes)	1100	Completed interview
	1200	Partially completed interview
Eligible, Non-Interview (2000 level codes)	2111	Household level refusal (used for landline only)
	2112	Known respondent refusal
	2120	Break off/termination within questionnaire
	2210	Respondent never available
	2220	Household (nonbusiness) answering device (used for landline only)
	2320	Respondent physically or mentally unable to complete interview
	2330	Language barrier of selected respondent
Unknown Eligibility	3100	Unknown if housing unit
	3130	No answer
	3140	Answering device, unknown whether eligible
	3150	Telecommunication barrier (i.e. call blocking)
	3200	Household, unknown whether eligible
	3322	Physical or mental impairment, unknown whether eligible
	3330	Language barrier, unknown whether eligible
	3700	On never call list

Table 2
2012 Landline Telephone and Cellular Telephone BRFSS Disposition Codes

Category	Code	Description
Not Eligible	4100	Out of sample
	4200	Fax/data/modem
	4300	Nonworking/disconnected number
	4400	Technological barrier (i.e. fast busy, phone circuit barriers)
	4430	Call forwarding/pager
	4450	Cellular telephone number (used for landline telephone only)
	4460	Landline telephone number (used for cellular telephone only)
	4470	Cellular telephone respondent ineligible due to percent of landline usage
	4500	Non-residence
	4510	Group home
	4700	No eligible respondent (teen phone/minor child cell phone)
	4900	Miscellaneous, non-eligible

Factors affecting the distribution of disposition codes by state include differences in telephone systems, sample designs, surveyed populations, and data collection processes. Table 3 defines the categories of disposition codes used to calculate outcome and response rates illustrated in Tables 4A through 6.

Table 3 2012 Landline and Cell Phone BRFSS Disposition Codes		
Category	**Disposition Code Definitions**	**Formulae Abbreviation**
Completed interviews	1100+1200	COIN
Eligible	1100+1200+2111+2112+2120+2210+2220+2320+2330	ELIG
Contacted eligible	1100+1200+2111+2112+2120+2210+2320+2330	CONELIG
Terminations and refusals	2111+2112+2120	TERE
Ineligible phone numbers	All 4000 level disposition codes	INELIG
Unknown whether eligible	All 3000 level disposition codes	UNKELIG
Eligibility factor	ELIG/(ELIG + INELIG)	E

Eligibility Factor

E = ELIG/ (ELIG + INELIG)

The Eligibility Factor is the proportion of eligible phone numbers from the among sample numbers for which eligibility has been determined. The eligibility factor, therefore, provides a measure of eligibility that can be applied to sample numbers with unknown eligibility. The purpose of the eligibility factor is to estimate the proportion of the sample that is likely to be eligible. The eligibility factor is used in the calculations of refusal and response rates. Separate eligibility factors are calculated for landline telephones and cellular telephone samples for each state and territory.

Resolution Rate

((ELIG + INELIG) / (ELIG+INELIG+UNKELIG))*100

The Resolution Rate is the percentage of numbers in the total sample for which eligibility has been determined. The total number of eligible and ineligible sample phone numbers is divided by the total number of phone numbers in the entire sample. The result is multiplied by 100 to calculate the percentage of the sample for which eligibility is determined. Separate resolution rates are calculated for landline telephone and cellular telephone samples for each state and territory.

Interview Completion Rate

(COIN / (COIN + TERE)) * 100

The Interview Completion Rate is the rate of completed interviews among all respondents who have been determined to be eligible and selected for interviewing. The numerator is the number of complete and partially completed interviews. This number is divided by the number of completed interviews, partially completed interviews, and all break offs, refusals and terminations. The result is multiplied by

100 to provide the percentage of completed interviews among eligible respondents who are contacted by interviewers. Separate interview completion rates are calculated for landline telephone and cellular telephone samples for each state and territory.

Cooperation Rate

(COIN / CONELIG) *100

The AAPOR Cooperation Rate is the number of complete and partial complete interviews divided by the number of contacted and eligible respondents. The BRFSS Cooperation Rate follows the guidelines of AAPOR Cooperation Rate #2. Separate cooperation rates are calculated for landline telephone and cellular telephone samples for each state and territory.

Refusal Rate

(TERE / (ELIG + (E * UNKELIG))) * 100

The BRFSS Refusal Rate is the proportion of all eligible respondents who refused to complete an interview or terminated an interview prior to the threshold required to be considered a partial interview. Refusals and terminations (TERE) are in the numerator, and the denominator includes all eligible numbers and a proportion of the numbers with unknown eligibility. The proportion of numbers with unknown eligibility is determined by the eligibility factor (E; described above). The result is then multiplied by 100 to provide a percentage of refusals among all eligible and likely to be eligible numbers in the sample. Separate refusal rates are calculated for landline telephone and cellular telephone samples for each state and territory.

Response Rate

(COIN / ((ELIG + (E * UNKELIG))) * 100

A Response Rate is an outcome rate with the number of complete and partial interviews in the numerator and an estimate of the number of eligible units in the sample in the denominator. The BRFSS Response Rate calculation assumes that the unresolved numbers contain the same percentage of eligible households or eligible personal cell phones as the records whose eligibility or ineligibility are determined. The BRFSS Response Rate follows the guidelines for AAPOR Response Rate #4. It also is similar to the BRFSS CASRO Rates reported prior to 2011. Separate eligibility factors are calculated for landline telephone and cellular telephone samples for each state and territory and a combined landline telephone and cellular telephone Response Rate also is calculated. The combined landline telephone and cellular telephone response rate is generated for by weighting to the respective size of the two samples. The total sample equals the landline sample plus cell phone sample. The proportion of each sample is calculated using the total sample as the denominator. The formulae for the proportions of the sample are:

P_1 = TOTAL LANDLINE SAMPLE /
(TOTAL LANDLINE SAMPLE + TOTAL CELL PHONE SAMPLE);

P_2 = TOTALCELL PHONE SAMPLE /
(TOTAL LANDLINE SAMPLE + TOTAL CELL PHONE SAMPLE);

Therefore, the formula for the Combined Landline Telephone and Cellular Telephone Weighted Response Rate is:

COMBINED RESPONSE RATE=
(P_1 * LANDLINE RESPONSE RATE) + (P_2 * CELL PHONE RESPONSE RATE).

Tables of Outcomes and Rates by State

The tables on the following pages illustrate calling outcomes in categories of eligibility, rates of cooperation, refusal, resolution, and response by landline telephone and cellular telephone samples.

- Tables 4A and 4B provide information on the size of the sample and the numbers and percentages of completed interviews, terminations and refusals, and contacts with eligible households by state and territory.
- Tables 5A and 5B provide information on the number and percentage of landline and cell phone sample numbers that are eligible, ineligible, and of unknown eligibility.
- Table 6 provides response rates for landline telephone samples, cellular telephone samples and combined samples.

Table 4A Completions, Terminations and Refusals, Contacted Eligible Households and Total Sample by State/ Landline Only							
	COIN[1]		TERE[1]		CONELIG[1]		
State	N	%	N	%	N	%	Total Sample
AL	7,333	7.3	3,858	3.8	13,401	13.3	100,436
AK	3,538	5.3	1,033	1.6	5,423	8.1	66,570
AZ	5,754	5.4	2,581	2.4	9,710	9.2	106,020
AR	4,001	6.6	1,977	3.3	6,765	11.1	60,810
CA	11,158	3.7	14,941	5.0	29,058	9.7	298,765
CO	9,490	10.4	1,709	1.9	12,992	14.3	90,900
CT	7,158	6.8	2,543	2.4	11,508	10.9	105,870
DE	4,197	8.0	2,991	5.7	8,594	16.3	52,739
DC	3,200	3.7	1,254	1.4	5,284	6.1	86,820
FL	6,241	5.2	2,938	2.4	10,791	9.0	120,001
GA	4,952	6.0	667	0.8	7,139	8.7	82,410
HI	4,115	6.0	1,214	1.8	7,176	10.5	68,220
ID	5,239	7.2	1,844	2.5	8,000	11.1	72,360
IL	4,541	6.6	1,515	2.2	7,157	10.5	68,340
IN	6,467	6.6	2,965	3.0	10,666	10.8	98,400
IA	5,654	9.2	1,861	3.0	8,516	13.9	61,470
KS	9,288	8.8	3,519	3.3	14,351	13.7	105,119
KY	9,250	7.1	2,107	1.6	12,604	9.7	129,600
LA	7,882	6.1	2,919	2.2	11,960	9.2	129,917
ME	8,040	10.4	2,302	3.0	11,381	14.7	77,520
MD	11,832	7.8	2,697	1.8	17,677	11.7	151,110
MA	18,325	6.3	4,704	1.6	29,849	10.3	290,850
MI	8,414	5.6	2,253	1.5	12,773	8.5	150,660
MN	9,191	7.3	1,372	1.1	12,798	10.1	126,750
MS	6,243	8.3	2,338	3.1	10,023	13.3	75,563
MO	5,311	9.0	1,558	2.6	8,010	13.6	58,861
MT	6,686	9.2	1,770	2.4	9,515	13.1	72,450
NE	15,183	10.5	3,721	2.6	21,538	14.9	144,209
NV	3,810	7.9	1,060	2.2	5,474	11.4	48,059

Table 4A
Completions, Terminations and Refusals, Contacted Eligible Households and Total Sample by State/ Landline Only

State	COIN[1]		TERE[1]		CONELIG[1]		
	N	%	N	%	N	%	Total Sample
NH	6,596	9.0	2,142	2.9	9,676	13.2	73,290
NJ	13,101	6.9	2,982	1.6	20,492	10.8	189,600
NM	5,989	8.6	2,061	3.0	9,210	13.2	69,540
NY	4,645	5.4	2,509	2.9	8,418	9.8	86,040
NC	8,896	10.1	2,945	3.4	13,565	15.4	87,869
ND	3,966	9.1	1,132	2.6	5,624	12.9	43,470
OH	10,310	6.9	2,216	1.5	15,652	10.5	149,370
OK	5,783	11.3	1,673	3.3	8,774	17.1	51,207
OR	4,125	6.7	1,762	2.9	6,036	9.8	61,417
PA	16,077	7.6	7,268	3.4	26,532	12.5	211,790
RI	4,612	9.0	1,994	3.9	7,704	15.1	51,060
SC	9,828	9.4	2,519	2.4	14,541	14.0	104,219
SD	5,708	7.2	1,094	1.4	7,986	10.0	79,830
TN	5,476	5.3	2,221	2.1	8,141	7.8	103,933
TX	6,538	6.3	2,475	2.4	10,428	10.1	103,140
UT	9,868	10.2	2,216	2.3	14,589	15.1	96,870
VT	5,161	12.0	1,073	2.5	7,009	16.2	43,170
VA	6,085	6.3	1,046	1.1	8,816	9.2	95,970
WA	12,761	6.6	6,160	3.2	22,161	11.5	192,930
WV	4,296	17.6	947	3.9	5,789	23.7	24,420
WI	4,277	8.7	1,796	3.7	6,745	13.7	49,200
WY	5,373	5.7	2,202	2.3	8,456	8.9	94,740
GU	1,728	6.1	731	2.6	3,676	12.9	28,440
PR	3,357	7.4	349	0.8	4,791	10.5	45,450
Minimum	1,728	3.7	349	0.8	3,676	6.1	24,420
Maximum	18,325	17.6	14,941	5.7	29,849	23.7	298,766
Median	6,085	7.2	2,142	2.4	9,515	11.1	86,820

[1]These abbreviations refer to the formulae for calculations of calling outcomes and rates presented in Table 3.

Table 4B Completions, Terminations and Refusals, Contacted Eligible Households and Total Sample by State/ Cell Phone Only							
	COIN[1]		TERE[1]		CONELIG[1]		
State	N	%	N	%	N	%	Total Sample
AL	1,677	5.0	522	1.6	2,374	7.1	33,250
AK	852	5.6	105	0.7	1,049	6.8	15,330
AZ	1,420	4.7	835	2.8	2,784	9.2	30,270
AR	1,191	6.5	460	2.5	1,969	10.8	18,270
CA	3,083	5.3	3,388	5.8	6,729	11.5	58,531
CO	2,780	12.4	330	1.5	3,392	15.1	22,470
CT	1,796	3.2	1,090	2.0	3,756	6.7	55,650
DE	1,097	7.5	34	0.2	1,872	12.8	14,670
DC	793	2.6	449	1.5	1,640	5.4	30,390
FL	936	7.0	234	1.7	1,184	8.8	13,380
GA	1,017	5.7	104	0.6	1,155	6.5	17,790
HI	3,929	8.1	1,491	3.1	6,029	12.4	48,480
ID	622	14.6	144	3.4	784	18.4	4,260
IL	916	5.5	201	1.2	1,207	7.2	16,650
IN	2,205	7.7	641	2.2	2,942	10.2	28,710
IA	1,427	11.6	219	1.8	1,754	14.2	12,330
KS	2,590	5.4	992	2.1	3,973	8.2	48,270
KY	2,058	5.8	204	0.6	2,333	6.5	35,700
LA	1,181	5.5	226	1.0	1,456	6.8	21,538
ME	1,997	7.6	484	1.8	2,543	9.7	26,310
MD	778	4.8	130	0.8	952	5.8	16,350
MA	3,570	4.9	1,398	1.9	5,265	7.2	73,320
MI	2,120	6.8	656	2.1	3,292	10.6	31,170
MN	4,396	9.1	409	0.9	4,935	10.3	48,090
MS	1,541	9.4	259	1.6	1,868	11.4	16,349
MO	1,384	8.1	266	1.5	1,829	10.6	17,190
MT	2,115	8.1	351	1.3	2,710	10.3	26,250
NE	4,293	11.7	739	2.0	5,526	15.0	36,780
NV	1,015	6.9	218	1.5	1,284	8.7	14,816
NH	993	4.3	526	2.3	1,841	8.1	22,860

Table 4B
Completions, Terminations and Refusals, Contacted Eligible Households and Total Sample by State/ Cell Phone Only

State	COIN[1]		TERE[1]		CONELIG[1]		
	N	%	N	%	N	%	Total Sample
NJ	2,805	4.9	1,022	1.8	4,014	7.0	57,510
NM	2,940	9.9	608	2.0	3,743	12.6	29,676
NY	1,166	4.8	526	2.2	1,812	7.5	24,120
NC	2,903	6.4	911	2.0	4,077	9.0	45,169
ND	993	4.9	228	1.1	1,250	6.2	20,160
OH	2,723	5.6	505	1.0	3,340	6.8	48,810
OK	2,258	7.5	875	2.9	3,760	12.4	30,293
OR	1,094	7.0	203	1.3	1,419	9.1	15,614
PA	4,008	5.2	1,277	1.7	5,532	7.2	76,950
RI	917	4.7	432	2.2	1,719	8.8	19,620
SC	3,042	8.6	794	2.3	4,183	11.9	35,188
SD	2,339	6.4	415	1.1	2,949	8.0	36,780
TN	1,520	5.1	226	0.8	1,756	5.9	29,608
TX	2,169	7.7	657	2.3	2,929	10.5	28,020
UT	2,664	11.8	391	1.7	3,677	16.3	22,491
VT	957	5.1	383	2.1	1,614	8.6	18,660
VA	1,087	6.3	217	1.3	1,363	7.9	17,340
WA	2,506	3.8	2,103	3.2	6,557	10.0	65,700
WV	1,155	8.2	232	1.7	1,495	10.6	14,039
WI	1,013	10.3	233	2.4	1,253	12.7	9,840
WY	909	4.0	355	1.6	1,489	6.5	22,830
GU	306	3.1	118	1.2	471	4.8	9,780
PR	2,990	18.4	280	1.7	3,967	24.4	16,288
Minimum	306	2.6	34	0.2	471	4.8	4,260
Maximum	4,396	18.4	3,388	5.8	6,729	24.4	76,950
Median	1,541	6.4	409	1.7	2,333	8.9	24,120

[1]These abbreviations refer to the formulae for calculations of calling outcomes and rates presented in Table 3.

Table 5A Categories of Eligibility by State Landline Only						
	ELIG[1]		INELIG[1]		UNKELIG[1]	
State	N	%	N	%	N	%
AL	17,912	17.8	68,970	68.7	13,554	13.5
AK	5,861	8.8	54,516	81.9	6,193	9.3
AZ	10,377	9.8	78,568	74.1	17,075	16.1
AR	7,558	12.4	45,155	74.3	8,097	13.3
CA	31,041	10.4	203,609	68.2	64,115	21.5
CO	13,577	14.9	65,311	71.8	12,012	13.2
CT	12,534	11.8	70,632	66.7	22,704	21.4
DE	8,594	16.3	33,761	64.0	10,384	19.7
DC	6,175	7.1	65,004	74.9	15,641	18.0
FL	13,403	11.2	83,206	69.3	23,392	19.5
GA	7,140	8.7	58,970	71.6	16,300	19.8
HI	8,021	11.8	50,010	73.3	10,189	14.9
ID	8,739	12.1	54,215	74.9	9,406	13.0
IL	8,139	11.9	49,521	72.5	10,680	15.6
IN	11,791	12.0	71,190	72.3	15,419	15.7
IA	8,819	14.3	45,863	74.6	6,788	11.0
KS	15,583	14.8	76,695	73.0	12,841	12.2
KY	13,415	10.4	95,881	74.0	20,304	15.7
LA	15,349	11.8	94,773	72.9	19,794	15.2
ME	12,241	15.8	53,011	68.4	12,268	15.8
MD	17,736	11.7	98,604	65.3	34,770	23.0
MA	29,855	10.3	183,269	63.0	77,726	26.7
MI	14,430	9.6	115,138	76.4	21,092	14.0
MN	12,799	10.1	93,323	73.6	20,628	16.3
MS	12,041	15.9	53,961	71.4	9,561	12.7
MO	8,402	14.3	42,293	71.9	8,166	13.9
MT	10,640	14.7	54,467	75.2	7,343	10.1
NE	25,254	17.5	107,816	74.8	11,139	7.7
NV	6,341	13.2	32,010	66.6	9,708	20.2

Table 5A Categories of Eligibility by State Landline Only						
	ELIG[1]		INELIG[1]		UNKELIG[1]	
State	N	%	N	%	N	%
NH	12,006	16.4	48,594	66.3	12,690	17.3
NJ	20,493	10.8	123,694	65.2	45,413	24.0
NM	9,561	13.7	52,112	74.9	7,867	11.3
NY	9,788	11.4	56,403	65.6	19,849	23.1
NC	17,173	19.5	58,220	66.3	12,476	14.2
ND	6,001	13.8	32,306	74.3	5,163	11.9
OH	15,652	10.5	107,471	71.9	26,247	17.6
OK	9,006	17.6	35,582	69.5	6,619	12.9
OR	7,546	12.3	41,025	66.8	12,846	20.9
PA	30,823	14.6	131,668	62.2	49,299	23.3
RI	8,738	17.1	32,457	63.6	9,865	19.3
SC	16,543	15.9	74,346	71.3	13,330	12.8
SD	8,411	10.5	65,400	81.9	6,019	7.5
TN	8,940	8.6	74,346	71.5	20,643	19.9
TX	12,973	12.6	72,396	70.2	17,771	17.2
UT	14,724	15.2	69,789	72.0	12,357	12.8
VT	7,436	17.2	28,941	67.0	6,793	15.7
VA	8,816	9.2	64,639	67.4	22,515	23.5
WA	25,827	13.4	135,692	70.3	31,411	16.3
WV	6,057	24.8	13,686	56.0	4,677	19.2
WI	7,321	14.9	35,026	71.2	6,853	13.9
WY	10,717	11.3	70,237	74.1	13,786	14.6
GU	3,800	13.4	22,608	79.5	2,032	7.1
PR	4,839	10.6	36,383	80.1	4,227	9.3
Minimum	3,800	7.1	13,686	56.0	2,032	7.1
Maximum	31,041	24.8	203,609	81.9	77,726	26.7
Median	10,640	12.4	64,639	71.6	12,690	15.7

[1]These abbreviations refer to the formulae for calculations of calling outcomes and rates presented in Table 3.

Table 5B Categories of Eligibility by State Landline Only						
	ELIG[1]		INELIG[1]		UNKELIG[1]	
State	N	%	N	%	N	%
AL	2,374	7.1	14,409	43.3	16,467	49.5
AK	1,049	6.8	9,437	61.6	4,844	31.6
AZ	2,784	9.2	11,273	37.2	16,213	53.6
AR	1,969	10.8	8,550	46.8	7,751	42.4
CA	6,729	11.5	25,373	43.3	26,429	45.2
CO	3,392	15.1	8,069	35.9	11,009	49.0
CT	3,756	6.7	18,854	33.9	33,040	59.4
DE	1,872	12.8	5,889	40.1	6,909	47.1
DC	1,640	5.4	13,019	42.8	15,731	51.8
FL	1,184	8.8	3,314	24.8	8,882	66.4
GA	1,155	6.5	7,677	43.2	8,958	50.4
HI	6,029	12.4	16,316	33.7	26,135	53.9
ID	784	18.4	1,539	36.1	1,937	45.5
IL	1,207	7.2	6,666	40.0	8,777	52.7
IN	2,942	10.2	10,594	36.9	15,174	52.9
IA	1,754	14.2	6,693	54.3	3,883	31.5
KS	3,973	8.2	22,202	46.0	22,095	45.8
KY	2,333	6.5	14,915	41.8	18,452	51.7
LA	1,456	6.8	7,634	35.4	12,448	57.8
ME	2,543	9.7	9,711	36.9	14,056	53.4
MD	952	5.8	6,229	38.1	9,169	56.1
MA	5,265	7.2	27,575	37.6	40,480	55.2
MI	3,292	10.6	12,834	41.2	15,044	48.3
MN	4,935	10.3	19,041	39.6	24,114	50.1
MS	1,868	11.4	6,664	40.8	7,817	47.8
MO	1,829	10.6	6,231	36.2	9,130	53.1
MT	2,710	10.3	13,707	52.2	9,833	37.5
NE	5,526	15.0	16,168	44.0	15,086	41.0
NV	1,284	8.7	4,919	33.2	8,613	58.1
NH	1,841	8.1	8,834	38.6	12,185	53.3

Table 5B Categories of Eligibility by State Landline Only						
	ELIG[1]		INELIG[1]		UNKELIG[1]	
State	N	%	N	%	N	%
NJ	4,014	7.0	23,940	41.6	29,556	51.4
NM	3,743	12.6	13,195	44.5	12,737	42.9
NY	1,812	7.5	7,595	31.5	14,713	61.0
NC	4,077	9.0	16,497	36.5	24,595	54.5
ND	1,250	6.2	12,459	61.8	6,451	32.0
OH	3,340	6.8	19,048	39.0	26,422	54.1
OK	3,760	12.4	13,482	44.5	13,051	43.1
OR	1,419	9.1	3,474	22.2	10,721	68.7
PA	5,532	7.2	26,391	34.3	45,027	58.5
RI	1,719	8.8	7,268	37.0	10,633	54.2
SC	4,183	11.9	14,703	41.8	16,302	46.3
SD	2,949	8.0	22,644	61.6	11,187	30.4
TN	1,756	5.9	9,402	31.8	18,448	62.3
TX	2,929	10.5	9,393	33.5	15,698	56.0
UT	3,677	16.3	7,267	32.3	11,547	51.3
VT	1,614	8.6	7,764	41.6	9,282	49.7
VA	1,363	7.9	6,695	38.6	9,282	53.5
WA	6,557	10.0	21,651	33.0	37,492	57.1
WV	1,495	10.6	2,787	19.9	9,757	69.5
WI	1,253	12.7	4,931	50.1	3,656	37.2
WY	1,489	6.5	15,348	67.2	5,993	26.3
GU	471	4.8	5,835	59.7	3,474	35.5
PR	3,967	24.4	5,757	35.3	6,564	40.3
Minimum	471	4.8	1,539	19.9	1,937	26.3
Maximum	6,729	24.4	27,575	67.2	45,027	69.5
Median	2,333	8.9	9,437	39.0	12,185	51.4

[1]These abbreviations refer to the formulae for calculations of calling outcomes and rates presented in Table 3.

Table 6 Response Rates for Landline and Cell Phone Samples			
State	Landline Response Rate	Cell Phone Response Rate	Combined Response Rate
AL	35.4	35.7	35.5
AK	54.7	55.6	54.9
AZ	46.5	23.7	41.4
AR	45.9	34.8	43.3
CA	28.2	25.1	27.7
CO	60.7	41.8	56.9
CT	44.9	19.4	36.1
DE	39.2	31.0	37.4
DC	42.5	23.3	37.5
FL	37.5	26.6	36.4
GA	55.6	43.7	53.5
HI	43.6	30.0	38.0
ID	52.2	43.3	51.7
IL	47.1	35.9	44.9
IN	46.3	35.3	43.8
IA	57.0	55.7	56.8
KS	52.3	35.4	47.0
KY	58.2	42.6	54.8
LA	43.5	34.2	42.2
ME	55.3	36.6	50.5
MD	51.4	35.9	49.9
MA	45.0	30.4	42.0
MI	50.1	33.3	47.3
MN	60.1	44.4	55.8
MS	45.3	43.1	44.9
MO	54.4	35.5	50.2
MT	56.5	48.8	54.4
NE	55.5	45.8	53.5
NV	47.9	33.1	44.4
NH	45.4	25.2	40.6
NJ	48.6	34.0	45.2

Table 6 Response Rates for Landline and Cell Phone Samples			
State	Landline Response Rate	Cell Phone Response Rate	Combined Response Rate
NM	55.6	44.8	52.3
NY	36.5	25.1	34.0
NC	44.4	32.4	40.4
ND	58.2	54.0	56.9
OH	54.3	37.4	50.1
OK	55.9	34.2	47.8
OR	43.2	24.2	39.4
PA	40.0	30.1	37.4
RI	42.6	24.4	37.5
SC	51.8	39.0	48.6
SD	62.7	55.2	60.4
TN	49.1	32.6	45.4
TX	41.7	32.6	39.8
UT	58.5	35.3	54.1
VT	58.5	29.8	49.8
VA	52.8	37.1	50.4
WA	41.4	16.4	35.0
WV	57.3	23.6	45.0
WI	50.3	50.8	50.4
WY	42.8	45.0	43.3
GU	42.2	41.9	42.1
PR	62.9	45.0	58.2
Minimum	28.2	16.4	27.7
Maximum	62.9	55.7	60.4
Median	49.1	35.3	45.2

References

1. Methodologic Changes in the Behavioral Risk Factor Surveillance System in 2011 and Potential Effects on Prevalence Estimates. MMWR Weekly June 8, 2012 / 61(22);410-413, www.cdc.gov/mmwr/preview/mmwrhtml/mm6122a3.htm.

2. The American Association for Public Opinion Research. 2011. Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys. 7th edition. AAPOR. Available from http://www.aapor.org/Standard_Definitions2.htm.

3. Groves, R. M. 2006. "Nonresponse Rates and Nonresponse Bias in Household Surveys." Public Opinion Quarterly 70 (5): 646–75.