

1992 BRFSS SUMMARY QUALITY CONTROL REPORT



BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM QUALITY CONTROL DOCUMENTATION

RESPONSE RATES

The response rate measures the extent to which interviews were completed from among the telephone numbers selected for the sample. The higher the response rate, the lower the potential will be for bias in the data.

No definitive formula for response rate estimates exists. The two estimates that are used for BRFSS provide a combination of monitoring information that are useful for program management. The formulas for each, translated into BRFSS call disposition codes, are as follows:

<u>CASRO</u>: This response rate formula, developed by the Council of American Survey Research Organizations (CASRO), apportions dispositions with unknown eligibility status (ring-no-answer [04] and busy (10]) to dispositions representing eligible respondents in the same proportion as exists among calls of known status (all other BRFSS call dispositions). The resulting estimate reflects telephone sampling efficiency and the degree of cooperation among eligibles contacted.

$$\begin{array}{c|c} & 01 \\ \hline (01+02+07+09) + & (01+02+07+09) & x (04+10) \\ \hline & (01+02+07+09) + (03+05+06+08+11) \\ \hline \end{array}$$

<u>Upper Bound:</u> The most liberal of response rate formulas, the upper bound calculation includes only refusals (02s), terminations (09s), and completed interviews Ols. The resulting estimate reflects the cooperation of eligibles contacted and is not affected by differences in telephone sampling efficiency.

Because the rules of replacement are disregarded during wind-down interviewing (see page 3), total response rates for a survey period will not accurately reflect performance under the rules of replacement during regular mode interviewing. Therefore, the 1991 and 1992 response rate estimates included in this report have been calculated using only the records dispositioned during regular mode interviewing. Response rate estimates calculated for previous years included wind-down records.

OTHER IMPORTANT QUALITY CONTROL INDICATORS

<u>Survey Efficiency</u>: The efficiency rate used for BRFSS is the percentage of all numbers called (excluding numbers rejected during Waksberg prescreening) that resulted in completed interviews. This indicator is directly related to the percent of telephone numbers in the survey area that are assigned to households. The degree to which interviewers adhere to survey procedures and gain respondent cooperation also affects efficiency. This percentage should remain static unless there is a change in-the phone companies' assignment of phone numbers in the survey area, a change in sampling design, or a substantial change in interviewer performance.

<u>Percent Ols on Day One:</u> The objective for completed interviews on the first day of the interviewing period is 33% of the total sample. This percentage reflects the degree of success reaching the telephones in the sample. When using Waksberg cluster sampling, 33% of the telephone numbers have been identified as private residences through prescreening, thus the goal of 33%. A broader objective, directly related to this, is to strive to call, at least once, all available numbers on each interview

occasion, including the first. The number and percentage of completes by interviewing date are included in the monthly quality control reports prepared by CDC.

Wind-Down: In order to terminate data collection activities within the allotted time period each month, wind-down procedures (i.e., suspension of the rules of replacement) are permitted once 95 percent of the sample has been completed. Each interview completed in the wind-dawn mode should be coded as such. Generally, if the percentage of wind-down interviews is greater than five percent, the survey supervisor is going into wind-down too early. The greater the proportion of interviews completing in wind-down mode, the greater the potential is for bias in the survey results. This is because data collected during wind-down is reflective only of those respondents who are easiest to reach. Respondents who are more difficult to reach may differ significantly from those who are easier to reach.

<u>Respondent Sex Distribution:</u> The standard sex distribution within a population *is* approximately 52 percent female and 48 percent male. Survey samples with a respondent sex distribution that differs substantially from the norm may produce biased estimates of risk factor prevalences.

Substantially skewed sex distributions suggest that interviewing staff may not be adhering to respondent selection procedures. Sex distribution percentages are included in the monthly quality control reports prepared by CDC.

<u>Refused Interview:</u> The percentage of refusals (02s) of total dispositions in a given interviewing period is an indicator of both interviewer performance and degree of potential bias in the survey data. Ten percent' refusals or less in any given survey is a generally accepted standard.

<u>Ring-No-Answer:</u> The percentage of ring-no-answers (04s) reflects how many attempts are made and with what time variation on unanswered phone numbers. The objective for 04s is 10%' or less of total dispositions. States that exceed this percentage may not be following prescribed survey procedures.

No Eligible Respondent Could be Reached During Interview Period: This disposition (07) is used most often in wind-down and is therefore reflective of the proportion of calling done during wind-down. It also reflects the diligence of efforts to contact eligibles whose availability is limited. The objective for 07s is 3%' or less of total dispositions. Those states that exceed this percentage may need to extend their interviewing period.

<u>Line Busy:</u> This disposition (10) should be infrequent. The objective is 0.3%' or less. A. higher percentage than 0.3 may indicate that survey guidelines are not being fully adhered to.

Because this percentage *is* affected by the efficiency of the sampling methodology (i.e., the number of 03 [nonworking] and 05 [nonresidential] dispositions that occur), comparisons between surveys with different sampling methods may not be meaningful. However, for a particular survey, month-to-month and year-to-year changes in this percentage are important to monitor.

BRFSS CALL DISPOSITION CODES

- 01 Completed interview
- 02 Refused interview
- 03 Nonworking number
- 04 Ring-no-answer
- 05 Business phone
- 06 No eligible respondent at this number
- 07 No eligible respondent available during interviewing period
- 08 Language barrier
- 09 Interview terminated
- 10 Busy
- 11 Respondent unable to communicate due to physical or mental impairment

BRFSS CALL DISPOSITIONS FREQUENCY DISTRIBUTION BY STATE, 1992

	Disposition Number																						
	1		2		l 3		4		l 5	-	6		7		l 8		9		10)	l 11	1	TOTAL
State	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No
AK	1537	27.6	278	5.0	2368	42.5	425	7.6	650	11.7	12	0.2	202	3.6	44	0.8	2	0.0	30	0.5	24	0.4	5572
AL	2160	60.8	122	3.4	827	23.3	55	1.5	299	8.4	5	0.1	31	0.9	3	0.1	0	0.0	2	0.1	51	1.4	3555
AZ	1847	35.2	510	9.7	1814	34.6	240	4.6	504	9.6	40	8.0	193	3.7	13	0.2	4	0.1	26	0.5	50	1.0	5241
CA	4000	33.5	1001	8.4	2758	23.1	1539	12.9	1492	12.5	95	8.0	551	4.5	194	1.6	82	0.7	93	8.0	138	1.2	11943
CO	1800	42.6	229	5.4	973	23.1	204	4.8	759	18.0	25	0.6	148	3.5	16	0.4	2	0.0	3	0.1	62	1.5	4221
CT	1798	39.9	401	8.9	645	14.3	1164	25.8	334	7.4	13	0.3	10	0.2	28	0.6	18	0.4	90	2.0	7	0.2	4508
DC	1512	21.8	295	4.3	2715	39.1	548	7.9	1333	19.2	17	0.2	251	3.6	77	1.1	6	0.1	6	0.1	178	2.6	6938
DE	1512	41.0	111	3.0	848	23.0	554	15.0	469	12.7	28	0.8	115	3.1	11	0.3	9	0.2	4	0.1	31	8.0	3692
FL	2724	35.2	619	8.0	1853	23.9	841	10.9	945	12.2	187	2.4	375	4.8	42	0.5	32	0.4	17	0.2	112	1.4	7747
GA	1964	37.2	316	6.0	1552	29.4	302	5.7	618	11.7	9	0.2	479	9.1	17	0.3	0	0.0	5	0.1	12	0.2	5274
HI	1943	28.3	439	6.4	2382	34.7	522	7.6	827	12.0	187	2.7	346	5.0	106	1.5	29	0.4	36	0.5	56	0.8	6873
IA	1728	41.9	256	6.2	1052	25.5	496	12.0	304	7.4	7	0.2	214	5.2	3	0.1	7	0.2	9	0.2	53	1.3	4129
ID	1796	48.1	91	2.4	807	21.6	369	9.9	443	11.9	10	0.3	111	3.0	19	0.5	8	0.2	5	0.1	77	2.1	3736
IL	2157	29.2	411	5.6	2375	32.2	338	4.6	1404	19.0	55	0.7	348	4.7	126	1.7	7	0.1	0	0.0	155	2.1	7376
IN	2373	44.7	283	5.3	1756	33.1	301	5.7	322	6.1	13	0.2	179	3.4	9	0.2	2	0.0	11	0.2	63	1.2	5312
KS	1440	8.2	162	0.9	14352	82.2	317	1.8	905	5.2	7	0.0	186	1.1	23	0.1	4	0.0	6	0.0	54	0.3	17456
KY	2160	36.0	295	4.9	1912	31.8	639	10.6	455	7.6	9	0.1	379	6.3	5	0.1	9	0.1	16	0.3	128	2.1	6007
LA MA	1665	13.0	1322	10.3	1219	9.5	6162	48.1	427	3.3	136	1.1	565	4.4	14 0	0.1	902	7.0	368	2.9	32	0.2	12812
MD	1463	25.9	738	13.1	1931	34.2	259	4.6 14.7	922 748	16.3	141	2.5	81	1.4		0.0	38	0.7	22	0.4	52	0.9	5647
	2193 1260	34.2	399 232	6.2	1575	24.6	939			11.7	35	0.5	412	6.4	48	0.7	18	0.3	13	0.2	28	0.4	6408 3434
ME MI	2413	36.7 30.6	588	6.8 7.5	1146 2122	33.4 26.9	303 1145	8.8 14.5	306 814	8.9 10.3	36 47	1.0 0.6	113 579	3.3 7.3	7 36	0.2	3 64	0.1	11 36	0.3	17 43	0.5	7887
MN	3419	44.0	481	6.2	1836	23.6	690	8.9	813	10.5	56	0.6	358	4.6	28	0.3	28	0.6	18	0.3	46	0.6	7773
MO	1512	35.4	521	12.2	858	20.1	729	17.1	452	10.5	10	0.7	69	1.6	10	0.4	9	0.4	32	0.2	64	1.5	4266
MS	1578	40.2	435	11.1	925	23.6	334	8.5	303	7.7	4	0.2	236	6.0	6	0.2	4	0.2	18	0.5	84	2.1	3927
MT	1188	39.5	134	4.5	836	27.8	259	8.6	337	11.2	14	0.1	184	6.1	1	0.2	3	0.1	7	0.3	44	1.5	3007
NC	2144	37.3	425	7.4	1657	28.9	598	10.4	618	10.8	9	0.2	207	3.6	15	0.3	2	0.0	17	0.2	50	0.9	5742
ND	1800	46.6	114	3.0	1175	30.4	265	6.9	305	7.9	13	0.3	140	3.6	1	0.0	0	0.0	13	0.3	34	0.9	3860
NE	1626	22.0	262	3.5	4025	54.5	526	7.1	629	8.5	17	0.2	212	2.9	14	0.2	1	0.0	28	0.4	44	0.6	7384
NH	1500	40.1	378	10.1	869	23.3	347	9.3	476	12.7	49	1.3	60	1.6	16	0.4	5	0.1	2	0.1	36	1.0	3738
NJ	1495	36.8	436	10.7	441	10.9	1190	29.3	318	7.8	35	0.9	28	0.7	28	0.7	24	0.6	65	1.6	1	0.0	4061
NM	1188	37.1	386	12.0	589	18.4	394	12.3	439	13.7	11	0.3	156	4.9	8	0.2	1	0.0	11	0.3	22	0.7	3205
NV	1634	55.8	208	7.1	233	8.0	348	11.9	144	4.9	119	4.1	65	2.2	92	3.1	0	0.0	21	0.7	65	2.2	2929
NY	2390	33.4	555	7.8	1768	24.7	879	12.3	823	11.5	14	0.2	395	5.5	200	2.8	17	0.2	6	0.1	99	1.4	7146
OH	1293	35.0	548	14.8	593	16.1	642	17.4	294	8.0	4	0.1	228	6.2	9	0.2	10	0.3	35	0.9	36	1.0	3692
OK	1512	35.9	415	9.8	1161	27.5	523	12.4	318	7.5	23	0.5	178	4.2	9	0.2	5	0.1	18	0.4	54	1.3	4216
OR	3365	40.3	1095	13.1	1699	20.3	450	5.4	1151	13.8	24	0.3	356	4.3	63	0.8	42	0.5	9	0.1	99	1.2	8353
PA	2417	29.5	963	11.8	2925	35.7	334	4.1	1236	15.1	84	1.0	105	1.3	0	0.0	43	0.5	24	0.3	59	0.7	8190
RI	1808	38.2	444	9.4	1194	25.2	390	8.2	631	13.3	21	0.4	94	2.0	45	1.0	8	0.2	13	0.3	85	1.8	4733
SC	2025	32.4	474	7.6	1991	31.8	671	10.7	468	7.5	50	0.8	508	8.1	8	0.1	4	0.1	28	0.4	30	0.5	6257
SD	1800	50.5	151	4.2	739	20.7	325	9.1	354	9.9	2	0.1	140	3.9	2	0.1	4	0.1	2	0.1	48	1.3	3567
TN	2697	39.3	665	9.7	1752	25.5	878	12.8	543	7.9	17	0.2	185	2.7	20	0.3	3	0.0	51	0.7	49	0.7	6860
TX	2508	30.2	946	11.4	2090	25.2	1244	15.0	828	10.0	49	0.6	474	5.7	27	0.3	4	0.0	35	0.4	101	1.2	8306
UT	1799	37.8	205	4.3	1484	31.2	284	6.0	578	12.2	21	0.4	266	5.6	26	0.5	3	0.1	16	0.3	71	1.5	4753
VA	1798	39.3	406	8.9	1054	23.0	389	8.5	534	11.7	17	0.4	188	4.1	58	1.3	37	0.8	47	1.0	45	1.0	4573
VT	1891	39.9	164	3.5	838	17.7	810	17.1	643	13.6	115	2.4	160	3.4	4	0.1	4	0.1	57	1.2	48	1.0	4734
WA	2571	38.1	1025	15.2	1281	19.0	426	6.3	830	12.3	96	1.4	324	4.8	81	1.2	30	0.4	9	0.1	82	1.2	6755
WI	1528	26.6	402	7.0	2842	49.5	153	2.7	664	11.6	37	0.6	41	0.7	0	0.0	28	0.5	10	0.2	31	0.5	5736
WV	2412	43.6	582	10.5	1429	25.9	445	8.0	388	7.0	13	0.2	120	2.2	4	0.1	3	0.1	36	0.7	96	1.7	5528
CUM	96343	33.3	21918	7.6	87266	30.2	32185	11.1	30397	10.5	2038	0.7	11345	3.9	1616	0.6	1568	0.5	1437	0.5	2946	1.0	289059
MED	1800	37.1	406	7.4	1484	25.2	445	8.9	543	10.8	21	0.4	188	3.7	16	0.3	6	0.1	17	0.3	51	1.0	

BRFSS CASRO RESPONSE RATE ESTIMATES BY STATE, 1988-1992

	1988 1989 1990 1991* 1992*											
State		ObjMet		ObjMet	Rate	ObjMet		ObjMet		ObjMet		
AK	Rate NA	NA	Rate NA	NA	NA	NA	77.5	Objiviet	77.3	Objiviet		
AL	96	Y	98	Y	92.6	Y	43.7**	N	91.9	Y		
AZ	65	N	60	N	63.9	N	70.1	N	70.6	N		
CA	57	N	64	N	62.4	N N	69.3	N	70.6	N		
CO	NA	NA NA	NA	NA NA	73.4	N N	82.1	Y	81.6	Y		
CT			51							_		
DC	56 72	N N	74	N N	58.7 68.2	N N	70.0 68.7	N N	58.3 69.3	N N		
DE	NA	NA NA	NA	NA NA	37.9	N	73.8	N	75.0	Y		
FL	66	N	64	N	64.6	N N	37.7**	N	64.6	N N		
GA	60	N	73	N	76.8	Y	70.5	N N	67.0	N		
HI	67	N	63	N	61.2	N N	68.2	N	71.2	N		
IA	77	Y	70	N	71.7	N N		N	80.7	Y		
ID	63	N N	66	N N	66.5	N N	73.3 74.6	N N	81.2	Y		
IL IN	61 81	N Y	64 78	N Y	71.8 81.8	N Y	70.3	N Y	70.4 82.5	N Y		
KS							83.4			Y		
	NA CO	NA	NA CO	NA	NA C7.C	NA	NA 74.0	NA	82.4			
KY	69	N	68	N	67.6	N	71.8	N	73.7	N		
LA	NA CF	NA	NA 47	NA	NA 50.5	NA	NA CO.C	NA	17.9	N		
MA	65	N	47	N	56.5	N	60.6	N	59.9	N		
MD	49	N	62	N	60.1	N	58.2	N	62.3	N		
ME	57	N	66	N	73.5	N	75.2	Y	76.3	Y		
MI	NA 70	NA	55	N	54.1	N	50.2	N	57.4	N		
MN	70	N	72	N	76.2	Y	77.3	Y	75.4	Y		
MO	67	N	67	N	64.1	N	64.2	N	67.0	N		
MS	NA	NA	NA 70	NA	68.1	N	69.0	N	67.4	N		
MT	69	N	72	N	72.9	N	77.5	Y	76.1	Y		
NC ND	66	N	64	N	68.7	N	71.3	N	72.1	N Y		
ND	84	Y	83	Y	73.7	N	83.7	Y	86.6	-		
NE	70	N	64	N	64.4	N	72.8	N	79.0	Y		
NH	62	N	65	N	69.4	N	70.9	N N	70.0	N		
NJ	NA 74	NA	NA CO	NA	NA C4.2	NA	41.2		52.1	N		
NM NV	71	N	60	N	61.2	N	70.8	N	63.5	N		
NV	NA 50	NA	NA F0	NA	NA 50.4	NA	NA 74.0	NA	74.9	N		
NY	58	N	50	N N	59.4	N	71.8	N N	68.2	N		
OH	56	N	54		57.7	N	69.2		59.8	N		
OK OR	61 NA	N NA	66 61	N N	59.7 63.0	N N	74.0 66.3	N N	72.6 65.4	N N		
PA	NA NA	NA NA	54	N N	62.1	N N	64.9	N N	65.5	N N		
RI	66	NA N	65	N N	64.9	N N	72.9	N N	74.7	N N		
SC	81	Y	87	Y	64.6	N N	67.3	N N	63.1	N N		
SD	83	Y	84	Y	82.4	Y	83.0	Y	82.8	Y		
TN						-		-		-		
TX	58 57	N N	68 66	N N	64.9	N N	65.9	N N	68.8	N		
UT	57 57	N N	61	N N	64.5	N N	61.5 39.6**	N N	58.1	N Y		
VA	NA	NA NA	53	N N	67.3 68.4	N N	72.4	N N	80.1	N N		
VA	NA NA	NA NA	NA	NA NA	65.8	N N	72.4	N N	66.0 69.6	N N		
WA	69	NA N	65	NA N	61.1	N N	60.7	N N	60.7	N N		
WI	69 78	Y	79	Y	78.1	Y	76.2	Y	74.3	N N		
WV	76 72	N N	69	N N	68.8	N N	75.3	Y	77.3	Y		
MEDIAN	66	N	65	N N	65.4	N N	70.8	N N	70.6	N		
RANGE	49-96	7 of 36	47-98	6 of 40	37.9-92.6	8 of 44	37.7-83.7	10 of 47	17.9-91.9	16 of 49		
	49-90		41,490	0 01 40	37.3-32.0	0 01 44	31.1303.1	10 01 47	17.3-31.3	10 01 49		

*Excluding wind-down records
**Query CATI pilot site

BRFSS UPPER BOUND RESPONSE RATE ESTIMATES BY STATE, 1988-1992

	1988 1989 1990 1991* 1992*											
Ctoto				os ObjMet					1			
State AK	Rate	ObjMet NA	Rate		Rate	ObjMet	Rate 89.3	ObjMet	Rate	ObjMet		
AL	NA 98	Y	NA 99	NA Y	NA 97.3	NA Y	93.1**	N Y	86.4 94.7	N Y		
AZ		N N		N				N N		N N		
CA	86 80	N N	84 83	N N	84.1 82.1	N N	80.7 79.9		78.1 80.7			
								N		N		
CO	NA 70	NA	NA C2	NA	82.4	N	88.3	N	89.1	N		
CT DC	73 91	N Y	63 92	N Y	64.9 87.1	N N	81.6 80.5	N N	81.1 83.6	N N		
		NA		_				Y		Y		
DE FL	NA 84		NA 83	NA	80.4 82.4	N	93.6	N N	93.2 80.7	N N		
	82	N N	88	N N	88.4	N N	82.5**	N N	86.1	N N		
GA HI		N N	 79	N N	80.6		87.7			N N		
	83	Y				N Y	81.9	N	82.9			
IA	90		88	N	90.2	Y	88.9	N Y	89.4	N Y		
ID	79	N	79	N	90.7		94.8		94.8			
IL IN	81	N Y	83 94	N Y	85.3	N Y	84.5	N Y	83.8	N		
	92				92.3		91.3		89.6	N Y		
KS	NA 04	NA	NA O4	NA	NA 00.5	NA	NA OC 4	NA	90.8			
KY	94	Y	91	Y	88.5	N	86.4	N	88.4	N		
LA	NA 02	NA	NA C4	NA	NA C4.4	NA	NA CE O	NA	42.2	N		
MA	83	N	64	N	64.1	N	65.2	N	65.3	N		
MD	70	N	79	N	84.9	N	78.0	N	84.0	N		
ME	81	N	84	N	86.9	N	84.9	N	85.5	N		
MI	NA 07	NA	81	N	91.7	Y	93.0	Y	79.3	N		
MN	87	N	86	N	88.8	N	87.5	N	87.3	N		
MO	83	N	82	N	78.9	N	73.4	N	77.1	N		
MS	NA 07	NA	NA 00	NA	82.0	N Y	79.8	N Y	78.7	N		
MT	87	N	89	N	90.9		90.6		89.6	N N		
NC ND	86 93	N Y	84 93	N Y	84.7 91.3	N Y	84.1 92.0	N Y	83.9 94.5	Y		
NE NE	93 87	N N	83	N	82.2	N	88.8	N N	88.8	N N		
NH	81	N	83	N	80.1	N	79.2	N	79.7	N		
NJ	NA	NA NA	NA	NA	NA	NA	69.7	N	76.5	N		
NM	84	N	74	N	76.3	N	76.6	N	75.0	N		
NV	NA	NA NA	NA	NA NA	NA	NA	NA	NA	88.7	N		
NY	81	N	79	N	81.8	N	85.3	N	81.1	N		
OH	74	N	79	N	76.2	N N	78.9	N N	73.7	N		
OK	78	N N	71	N N	73.1	N N		N N	81.2	N		
OR	NA	NA NA	79	N N	74.9	N N	81.1 74.9	N N	74.6	N N		
PA	NA NA	NA NA	69	N	68.0	N	69.0	N	74.6	N		
RI	77	N	80	N N	85.8	N	84.2	N	80.5	N		
SC	92	Y	95	Y	85.3	N	85.3	N	81.4	N		
SD	92 95	Y	95	Y	94.7	Y	92.4	Y	92.1	Y		
TN	70	N	83	N	80.8	N	79.0	N	81.0	N		
TX	70	N N	78	N N	75.7	N N	75.9	N N	74.8	N N		
UT	85	N N	87	N N	90.1	Y	87.5**	N N	89.4	N		
VA	NA	NA NA	74	N N	81.0	N	80.1	N N	79.5	N N		
VA	NA NA	NA NA	NA	NA NA	88.2	N	90.0	Y	91.8	Y		
WA	81	N	73	N	87.1	N	71.0	N	70.8	N		
WI	83	N	83	N	81.8	N	80.3	N	78.0	N		
WV	86	N	85	N N	82.1	N	84.3	N	83.6	N		
MEDIAN	83	N	83	N	83.3	N	84.1	N N	82.9	N		
RANGE	70-98	8 of 36	63-99	7 of 40	64.1-97.3	9 of 44	65.2-94.8	9 of 47	42.2-94.8	7 of 49		
*T 1 1	10-30	0 01 00	00.00	7 01 40	UT. 1-31.3	J 01 44	00.2 94.0	3 01 41	72.2-34.0	1 01 43		

^{*}Excluding wind-down records
**Query CATI pilot site

BRFSS EFFICIENCY RATES BY STATE, 1988-1992

	1988 1989 1990 1991* 1992*											
State	Rate	ObjMet	Rate	o9 ObjMet	Rate	ObjMet	Rate	ObjMet	Rate	ObjMet		
AK	NA	NA	NA	NA	NA	NA	29.4	N	27.6	N		
AL	68	Y	67	Y	63.8	Y	20.0*	N	60.8	Y		
AZ	37	N	31	N	32.6	N	32.1	N	35.2	N		
CA	35	N	36	N	33.8	N	32.1	N	33.5	N		
CO	NA	NA NA	NA	NA	41.1	Y	45.5	Y	42.6	Y		
CT						-				_		
DC	33 39	N N	29 31	N N	19.2 26.0	N N	28.2 19.9	N N	39.9 21.8	N N		
DE	NA	NA NA	NA	NA	23.8	N	35.8	N	41.0	Y		
FL	39	N	36	N N	37.0	N N	20.0*	N	35.2	N N		
GA	32	N	45	Y	44.3	Y	39.8	N N	37.2	N		
HI	40	Y	34	N	31.1	N	27.7	N	28.3	N		
IA	47	Y	43	Y		Y		Y		Y		
ID	35	N N	40	Y	46.3 39.6	N N	45.8 43.1	Y	41.9 48.1	Y		
IL IN	35 49	N Y	37 53	N Y	35.7 50.1	N Y	33.4 47.8	N Y	29.2 44.7	N Y		
KS										-		
KY	NA 41	NA Y	NA 40	NA Y	NA 20.9	NA N	NA 38.5	NA N	8.2	N N		
		NA	NA	NA	39.8 NA	NA NA	38.5 NA	NA NA	36.0	N N		
LA	NA 42								13.0			
MA	43	Y N	26	N	20.8	N	17.5	N	25.9	N		
MD	27		35	N	34.6	N	29.0	N	34.2	N		
ME	37	N	38	N	44.2	Y	41.5	Y	36.7	N		
MI	NA 46	NA	34	N	33.5	N	30.1	N	30.6	N		
MN	46	Y	47	Y	48.1	Y	45.8	Y	44.0	Y		
MO	45	Y	43	Y	39.1	N	33.6	N	35.4	N		
MS	NA	NA	NA	NA	43.1	Y	38.2	N	40.2	Y		
MT	36	N	41	Y	39.2	N	39.7	N	39.5	N		
NC	38	N	32	N	38.8	N	38.2	N	37.3	N Y		
ND	44	Y	44	Y	43.3	Y	43.9	Y	46.6	-		
NE	30	N	28	N	30.0	N	33.3	N	22.0	N		
NH	30	N	36 NA	N	43.7	Y	41.8	Y N	40.1	Y		
NJ	NA 42	NA		NA	NA 20.0	NA	33.6	Y	36.8	N		
NM NV	43	Y	38	N	36.6	N	40.8		37.1	N Y		
NV	NA	NA	NA	NA	NA 25.0	NA	NA 20.2	NA	55.8	•		
NY	33	N	29	N	35.2	N	38.3	N	33.4	N		
OH OK	29 34	N N	29 42	N Y	28.5 34.6	N N	31.1	N Y	35.0	N N		
OR	NA	NA NA	38	N	39.5	N N	40.6 41.0	Y	35.9 40.3	Y		
PA	NA NA	NA NA	28	N N	20.8	N N	17.7	N	29.5	N N		
RI	41	Y	38	N	35.7	N N	30.6	N	38.2	N		
SC	46	Y	40	Y	35.7	N N	33.0	N N	32.4	N N		
SD	46	Y	52	Y	52.2	Y	51.7	Y	50.5	Y		
TN	39	N N	41	Y	42.1	Y	36.7	N	39.3	N N		
TX	29	N N	36	N N	34.1	N N	29.5	N N	39.5	N N		
UT	33	N N	33	N N	39.1	N	29.5 18.5*	N N	37.8	N		
VA	NA	NA NA	31	N N	39.1	N N	39.9	N N	39.3	N N		
VA	NA NA	NA NA	NA	NA	37.0	N N	38.1	N	39.9	N		
WA	45	Y	41	Y	40.3	Y	37.4	N N	38.1	N N		
WI	29	N N	29	N	28.0	N N	28.6	N N	26.6	N N		
WV	41	Y	43	Y	45.9	Y	45.2	Y	43.6	Y		
MEDIAN	38.5	N	37.5	N	37.9	N N	36.7	N	37.3	N		
RANGE	27-68	15 of 36	26-67	16 of 40	19.2-63.8	14 of 44	17.5-51.7	14 of 47	8.2-60.8	14 of 49		
	ATI milet sit		20-01	10 01 40	13.2203.0	14 01 44	17.551.7	14 01 47	0.2-00.0	14 01 43		

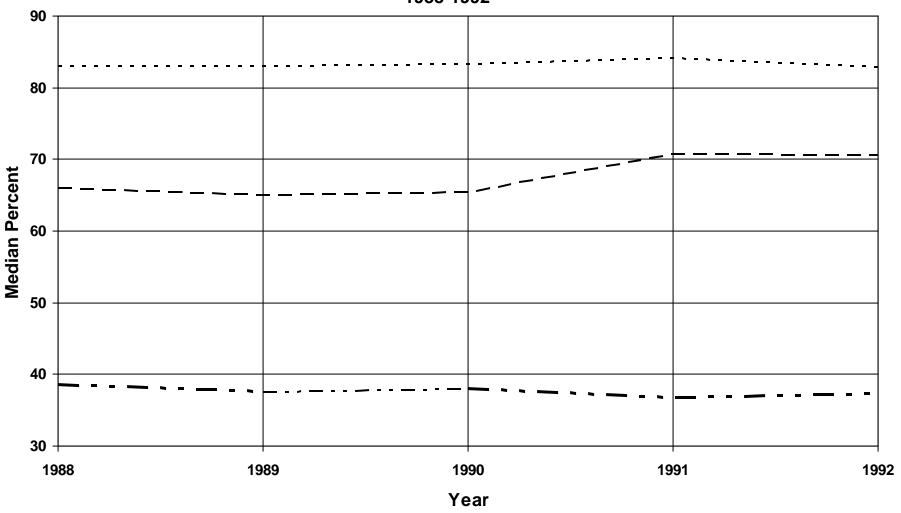
^{*}Query CATI pilot site

BRFSS WIND-DOWN RATES BY STATE, 1990-1992

1990 1991* 1992*										
State	_	Rate ObjMet Rate ObjMet Rate								
AK	NA	NA	5.8	N	6.4	ObjMet N				
AL	0.6	Y	0.0*	Y	0.0	Y				
AZ										
	6.4	N	7.6	N	6.1	N				
CA	7.3	N	8.9	N	5.9	N				
CO	4.3	Y	4.4	Y	4.8	Y				
CT	0.4	Y	6.9	N	0.0	Y				
DC	5.8	N	4.2	Y	2.6	Y				
DE	2.7	Y	1.7	Y	1.1	Y				
FL	4.2	Y	0.3*	Y	0.0	Y				
GA	0.1	Y	0.0	Y	0.0	Y				
HI	10.1	N	10.5	N	6.2	N				
IA	5.2	N	4.5	Y	14.6	N				
ID	5.5	N	3.1	Y	0.4	Y				
IL	1.8	Y	0.0	Y	0.0	Y				
IN	12.7	N	4.3	Y	4.3	Y				
KS	NA	NA	NA	NA	3.8	Υ				
KY	5.4	N	4.9	Υ	4.8	Υ				
LA	NA	NA	NA	NA	6.3	N				
MA	0.4	Y	0.0	Y	0.0	Υ				
MD	36.5	N	39.3	N	0.9	Υ				
ME	5.2	N	5.1	N	5.6	N				
MI	4.5	Y	4.2	Y	0.7	Υ				
MN	3.8	Y	4.5	Υ	2.2	Υ				
MO	6.2	N	6.4	N	6.4	N				
MS	4.7	Υ	5.9	N	4.9	Υ				
MT	4.9	Υ	4.5	Υ	4.9	Υ				
NC	4.1	Υ	2.3	Υ	3.1	Υ				
ND	7.5	N	6.2	N	4.6	Υ				
NE	0.0	Υ	0.0	Υ	5.4	N				
NH	0.0	Υ	0.0	Υ	0.0	Y				
NJ	NA	NA	0.0	Υ	0.0	Y				
NM	13.3	N	12.9	N	8.2	N				
NV	NA	NA	NA	NA	0.0	Y				
NY	9.1	N	3.8	Y	3.9	Υ				
ОН	12.5	N	13.7	N	8.0	N				
OK	8.7	N	7.5	N	11.4	N				
OR	4.3	Y	0.0	Y	0.5	Y				
PA	0.8	Y	0.0	Y	0.0	Υ				
RI	6.0	N	7.1	N	3.2	Y				
SC	12.1	N	9.8	N	5.8	N				
SD	5.0	Y	4.9	Υ	4.7	Υ				
TN	3.5	Y	1.3	Y	3.4	Υ				
TX	4.2	Υ	4.9	Y	0.0	Υ				
UT	16.6	N	11.8*	Y	5.2	N				
VA	66.4	N	3.2	Υ	4.7	Υ				
VT	0.0	Y	0.0	Υ	0.0	Υ				
WA	0.2	Y	0.0	Y	0.7	Υ				
WI	0.1	Y	0.0	Y	0.0	Υ				
WV	5.7	N	4.6	Y	5.5	N				
MEDIAN	5.0	Υ	4.5	Υ	3.8	Υ				
RANGE	0-66.4	23 of 44	0-39.3	31 of 47	0-14.6	34 of 49				

*Query CATI pilot site

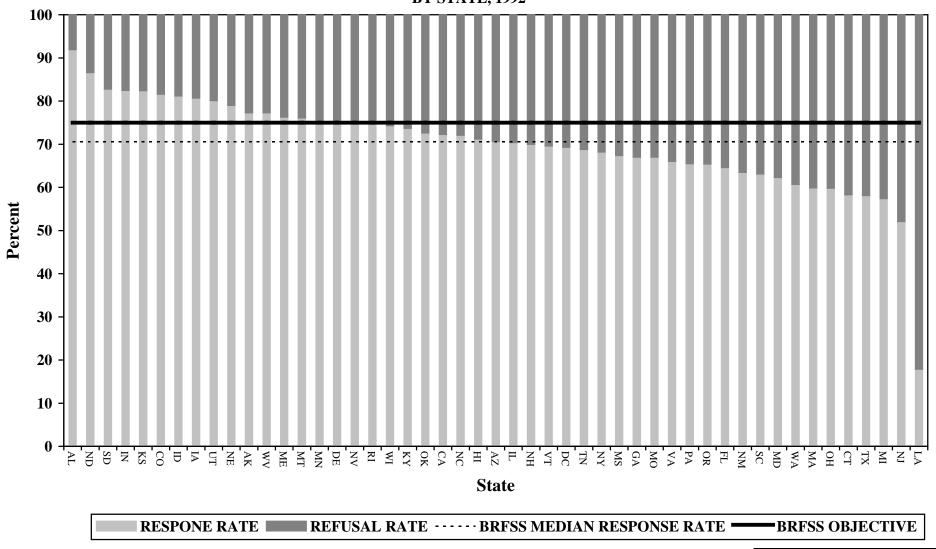
BRFSS
MEDIAN UPPER BOUND, CASRO, AND EFFICIENCY
1988-1992



---- UPPER BOUND — CASRO — - EFFICIENCY

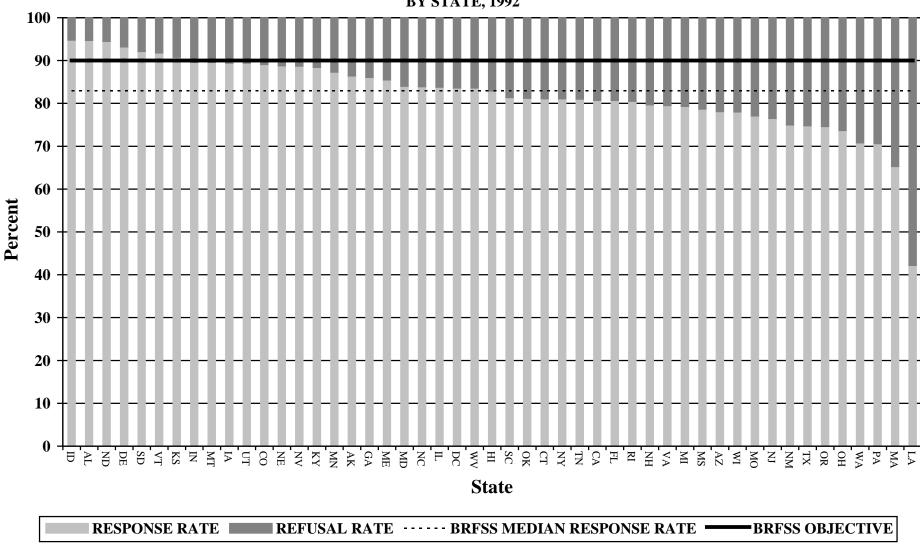
Wind-down records excluded from response rates in 1991 and 1992

BRFSS
CASRO ESTIMATES OF RESPONSE AND REFUSAL RATES
BY STATE, 1992



Wind-down records excluded

BRFSS
UPPERBOUND ESTIMATES OF RESPONSE AND REFUSAL RATES
BY STATE, 1992



Wind-down records excluded

1992 BRFSS QUALITY CONTROL INDICATORS All PARTICIPATING STATES

	BRFSS	OBJE	ECTIVE	BRFSS	
INDICATOR	OBJECTIVE	MET	NOT MET	MEDIAN	
CASRO RESPONSE RATE	>75		*	70.6	
UPPER BOUND	>90		*	82.9	
SURVEY EFFICIENCY	>40		*	37.3	
% 01s DURING WIND DOWN	<5	*		3.8	
% 02s	<10	*		7.4	
% 04s	<10	*		8.9	
% 07s	<3		*	3.7	
% 10s	< 0.3	*		0.3	

Revised 11/8/93