



1994 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 is useful for program management. The formulas for each, translated into BRFSS call disposition codes, are as follows:

CASRO: 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 all calls of known status (all other BRFSS call dispositions). The resulting estimate reflects telephone sampling efficiency as well as the degree of cooperation among eligibles contacted.

$$\frac{01}{(01+02+07+09) + \frac{(01+02+07+09)}{(01+02+07+09) + (03+05+06+08+11)} \times (04 + 10)}$$

Upper Bound: The most liberal of response rate formulas, the upper bound calculation includes only refusals (02s), terminations (09s), and completed interviews (01s). The resulting estimate reflects the cooperation of eligibles contacted and is not affected by differences in telephone sampling efficiency.

$$\frac{01}{01+02+09}$$

Because the rules of replacement are disregarded during wind-down interviewing (see page 3), total response rates for an interviewing period will not accurately reflect performance under the rules of replacement during regular mode interviewing. Therefore, the 1991 through 1994 response rate estimates included in this report have been calculated using only the records dispositioned during regular mode interviewing. Response rate estimates calculated for 1990 included wind-down records.

OTHER IMPORTANT QUALITY CONTROL INDICATORS

Survey Efficiency: 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.

$$\frac{01}{\text{Total Telephone Numbers Used}}$$

Percent Ols on Day One: When using Waksberg cluster sampling, 33% of the telephone numbers have been identified as private residences through prescreening. Consequently, the objective for completed interviews on the first day of the interviewing period is 33% of the total sample. This percentage is important with Waksberg sampling because finishing

within the BRFSS interviewing period is a function of how early in the interviewing period unproductive numbers are replaced. A broader objective, directly related to this one, is to strive to call, at least once, all available numbers on each interview occasion, including the first. If a different sample design than Waksberg is used, a different objective for the first day may be appropriate.

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) may be necessary with Waksberg sampling. Wind-down is permitted once 95% of the sample has been completed. Each interview completed in the wind-down 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 completed 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.

Respondent Sex Distribution: The expected sex distribution within a population is approximately 52% female and 48% 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 interviewers may not be interviewing randomly selected respondents.

Refused Interview: The percentage of refusals (02s) of total numbers called in a given interviewing period is an indicator of both interviewer performance and degree of potential bias in the survey data. Ten percent¹ refusals or less is a generally accepted standard.

Ring-No-Answer: 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%¹ or less of total numbers called. States that exceed this percentage may not be following prescribed call-back procedures or may be using this disposition inappropriately as a final disposition for a selected respondent who was not interviewed.

Selected Respondent Not Available During the Interviewing Period: This disposition (07) is used most often in wind-down and therefore reflects the proportion of calling done during wind-down. It also reflects the diligence of efforts to contact selected respondents whose availability is limited. The objective for 07s is 3%¹ or less of total numbers called. Those states that exceed this percentage may need to use the entire 14-day interviewing period if they are not already.

Line Busy: This disposition (10) should be infrequent. The objective is 0.3%¹ or less. A higher percentage than 0.3 may indicate that call-back procedures are not being carefully followed or that this disposition is being used inappropriately as a final disposition for a selected respondent who was not interviewed.

¹Because this percentage is affected by the efficiency of the sampling methodology (i.e., by the number of 03 [nonworking] and 05 [nonresidential] dispositions in the denominator), 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 - Not a private residence
- 06 - No eligible respondent at this number
- 07 - Selected respondent not available during the interviewing period
- 08 - Language barrier
- 09 - Interview terminated within questionnaire
- 10 - Line Busy
- 11 - Respondent unable to communicate due to physical or mental impairment

BRFSS CALL DISPOSITIONS FREQUENCY DISTRIBUTION BY STATE, 1994

State	1		2		3		4		5		6		7		8		9		10		11		TOTAL
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No
AK	1535	23.8	292	4.5	3079	47.7	446	6.9	778	12.0	1	0.0	265	4.1	24	0.4	3	0.0	15	0.2	21	0.3	6459
AL	2072	45.2	512	11.2	967	21.1	397	8.7	427	9.3	20	0.4	79	1.7	14	0.3	4	0.1	21.0	0.5	72	1.6	4585
AR	1622	38.2	387	9.1	1066	25.1	387	9.1	490	11.6	23	0.5	142	3.3	4	0.1	7	0.2	11	0.3	102	2.4	4241
AZ	1907	33.3	641	11.2	1380	24.1	705	12.3	632	11.0	53	0.9	238	4.2	27	0.5	8	0.1	24	0.4	107	1.9	5722
CA	4033	36.1	1084	9.7	2113	18.9	1480	13.3	1438	12.9	38	0.3	481	4.3	229	2.1	82	0.7	38	0.3	152	1.4	11168
CO	1812	31.4	324	5.6	1366	23.6	649	11.2	1225	21.2	48	0.8	233	4.0	20	3.0	1	0.0	25	0.4	76	1.3	5779
CT	1794	49.5	232	6.4	728	20.1	432	11.9	323	8.9	5	0.1	27	0.7	22	0.6	13	0.4	26	0.7	24	0.7	3626
DC	1384	29.1	181	3.8	1689	35.5	489	10.3	722	15.2	13	0.3	106	2.2	47	1.0	4	0.1	14	0.3	114	2.4	4763
DE	2112	40.0	244	4.6	1054	20.0	880	16.7	644	12.2	15	0.3	206	3.9	27	0.5	16	0.3	18	0.3	58	1.1	5274
FL	3580	36.1	1083	10.9	1919	19.4	1101	11.1	1321	13.3	225	2.3	380	3.8	43	0.4	21	0.2	17	0.2	221	2.2	9911
GA	2255	29.0	1037	13.3	2491	32.0	868	11.2	963	12.4	26	0.3	55	0.7	13	0.2	8	0.1	42	0.5	25	0.3	7783
HI	2163	11.6	557	5.8	2647	27.7	1512	15.8	1507	15.8	176	1.8	593	6.2	242	2.5	24	0.3	43	0.6	87	0.9	9551
IA	2430	39.4	538	8.7	1866	30.3	602	9.8	513	8.3	30	0.5	107	1.7	14	0.2	9	0.1	20	0.3	33	0.5	6162
ID	1794	27.0	499	7.5	2566	38.6	578	8.7	743	11.2	32	0.5	174	2.6	70	1.1	26	0.4	36	0.5	126	1.9	6644
IL	2193	27.0	411	5.1	2600	32.0	128	1.6	1803	22.2	93	1.1	375	4.6	273	3.4	39	0.5	2	0.0	208	2.6	7917
IN	2345	39.3	416	7.0	1892	31.7	448	7.5	501	8.4	23	0.4	272	4.6	15	0.3	6	0.1	7	0.1	44	0.7	5925
KS	1441	60.6	94	4.0	275	11.6	285	12.0	136	5.7	19	0.8	94	4.0	5	0.2	1	0.0	1	0.0	28	1.2	2379
KY	2397	30.3	303	3.6	3053	38.6	749	9.5	747	9.4	5	0.1	496	5.3	7	0.1	4	0.1	51	0.6	105	1.3	7917
LA	1655	35.8	479	10.4	1074	23.2	597	12.9	437	9.5	147	3.2	127	2.7	25	0.5	20	0.4	17	0.4	45	1.0	4623
MA	1782	36.5	667	13.3	1083	21.6	253	5.0	996	19.8	27	0.5	127	2.5	48	1.0	7	0.1	8	0.2	27	0.5	5025
MD	4473	28.2	1713	10.8	4005	25.3	2194	13.8	2500	15.8	115	0.7	544	3.4	141	0.9	7	0.0	46	0.3	121	0.8	15859
ME	1384	36.5	294	7.8	1070	28.3	404	10.7	408	10.8	48	1.3	131	3.5	12	0.3	6	0.2	15	0.4	15	0.4	3787
MI	2413	21.9	1240	11.3	2755	25.0	1601	14.5	1647	15.0	52	0.5	1177	10.7	27	0.2	0	0.0	32	0.3	68	0.6	11012
MN	4154	40.8	685	6.7	2480	24.4	914	9.0	1139	11.2	80	0.8	520	5.1	33	0.3	75	0.7	31	0.3	60	0.6	10171
MO	1516	28.8	585	11.1	1378	26.2	1006	19.1	520	9.9	20	0.4	99	1.9	15	0.3	20	0.4	34	0.6	72	1.4	5265
MS	1590	37.5	321	7.6	1052	24.8	436	10.3	439	10.3	28	0.7	261	5.2	8	0.2	6	0.1	26	0.6	75	1.8	4242
MT	1190	35.0	150	4.4	1038	30.5	325	9.6	395	11.6	17	0.5	172	5.1	7	0.2	10	0.3	29	0.9	70	2.1	3403
NC	2138	29.8	459	4.0	2434	34.0	957	13.4	771	10.8	11	2.0	291	4.1	13	0.2	1	0.0	18	0.3	74	1.0	7167
ND	1800	44.3	86	2.1	1380	34.0	234	5.8	333	8.2	12	0.3	175	4.3	8	0.2	1	0.0	2	0.0	28	0.7	4059
NE	1794	29.8	356	5.9	2531	42.0	441	7.3	620	10.3	7	0.1	206	3.4	10	0.2	6	0.1	18	0.3	38	0.6	6027
NH	1521	25.9	478	8.1	1619	27.6	831	14.1	845	14.4	98	1.7	354	6.0	26	0.4	15	0.3	38	0.6	51	0.9	5876
NJ	1489	53.8	221	8.0	207	7.5	577	20.8	202	7.3	19	0.7	15	0.5	14	0.5	11	0.4	12	0.4	2	0.1	2769
NM	1292	25.8	879	17.5	1021	20.4	866	17.3	705	14.1	19	0.4	131	2.6	37	0.7	2	0.0	38	0.8	20	0.4	5010
NV	1804	42.7	278	6.6	780	18.5	308	7.3	555	13.1	186	4.4	77	1.8	120	2.8	0	0.0	76	1.8	43	1.0	4227
NY	2321	27.5	786	9.3	1811	21.5	1467	17.4	1030	12.2	26	0.3	532	6.3	298	3.5	21	0.2	25	0.3	118	1.4	8435
OH	1340	29.6	400	8.8	1263	27.9	729	16.1	482	10.6	4	0.1	211	4.7	17	0.4	12	0.3	35	0.8	34	0.8	4527
OK	1831	23.6	661	8.5	2767	35.6	1248	16.1	840	10.8	76	1.0	207	2.7	15	0.2	21	0.3	64	0.8	39	0.5	7769
OR	2844	32.4	812	9.2	1944	22.1	836	9.5	1519	17.3	74	0.8	423	4.8	99	1.1	65	0.7	71	0.8	92	1.0	8779
PA	3640	36.3	1468	14.6	2521	25.1	405	4.0	1628	16.2	93	0.9	106	1.1	0	0.0	72	0.7	14	0.1	94	0.9	10041
SC	2116	31.6	352	5.3	2077	31.0	1135	16.9	606	9.0	146	2.2	149	2.2	11	0.2	20	0.3	64	1.0	24	0.4	6700
SD	1844	48.5	180	4.7	852	22.4	393	10.3	302	7.9	7	0.2	157	4.1	3	0.1	4	0.1	5	0.1	55	1.4	3802
TN	3059	36.1	901	10.6	2093	24.7	1285	15.2	784	9.3	17	0.2	172	2.0	24	0.3	11	0.1	53	0.6	71	0.8	8470
TX	1501	30.1	582	11.7	934	18.7	861	17.3	625	12.5	36	0.7	296	5.9	20	0.4	0	0.0	42	0.8	85	1.7	4982
UT	1822	34.7	248	4.7	1535	29.2	403	7.7	838	16.0	31	0.6	239	4.6	46	0.9	9	0.2	22	0.4	58	1.1	5251
VA	1800	36.1	528	10.6	1119	22.4	539	10.8	568	11.4	36	0.7	253	5.1	51	1.0	8	0.2	0	0.0	86	1.7	4902
VT	2449	46.3	317	6.0	691	13.1	657	12.4	731	13.8	180	3.4	189	3.6	13	0.2	6	0.1	11	0.2	49	0.9	5244
WA	3351	41.2	1169	14.4	1345	16.5	486	6.0	1105	13.6	47	0.6	297	3.7	138	1.7	53	0.7	17	0.2	128	1.6	8136
WI	1562	26.8	414	7.1	2645	45.4	140	2.4	909	15.5	49	0.8	44	0.8	0	0.0	17	0.3	7	0.1	37	0.6	5824
WV	2427	42.1	432	7.5	1472	25.6	577	10.0	500	8.7	30	0.5	219	3.8	4	0.1	9	0.2	25	0.4	65	1.1	5760
WY	1259	28.7	277	6.3	1416	32.3	469	10.7	539	12.3	24	0.5	135	3.1	51	1.2	15	0.3	29	0.7	167	3.8	4381
CUM	106030	33.4	27253	8.6	85143	26.8	35710	11.2	40431	12.7	2607	0.8	12359	3.9	2430	0.8	806	0.3	1335	0.4	3227	1.1	314724
MED	1827	34.9	446	7.7	1504	25.1	588	10.8	714	11.6	30	0.5	206	3.8	21	0.4	9	0.2	25	0.4	67	1.0	

**BRFSS CASRO RESPONSE RATE ESTIMATES
BY STATE, 1990-1994**

State	1990		1991*		1992*		1993*		1994*	
	Rate	ObjMet	Rate	ObjMet	Rate	ObjMet	Rate	ObjMet	Rate	ObjMet
AK	NA	NA	77.5	Y	77.3	Y	75.1	Y	74.6	N
AL	92.6	Y	43.7**	N	91.9	Y	91.1	Y	71.0	N
AR	NA	NA	73.6	N	NA	NA	69.7	N	71.9	N
AZ	63.9	N	70.1	N	70.6	N	64.2	N	63.5	N
CA	62.4	N	69.3	N	72.3	N	63.5	N	61.4	N
CO	73.4	N	82.1	Y	81.6	Y	75.8	Y	74.8	N
CT	58.7	N	70.0	N	58.3	N	65.1	N	75.9	Y
DC	68.2	N	68.7	N	69.3	N	79.1	Y	76.1	Y
DE	37.9	N	73.8	N	75.0	Y	73.6	N	69.7	N
FL	64.6	N	37.7**	N	64.6	N	66.0	N	66.7	N
GA	76.8	Y	70.5	N	67.0	N	63.3	N	62.5	N
HI	61.2	N	68.2	N	71.2	N	61.9	N	59.6	N
IA	71.7	N	73.3	N	80.7	Y	78.4	Y	75.3	Y
ID	66.5	N	74.6	N	81.2	Y	73.6	N	66.2	N
IL	71.8	N	70.3	N	70.4	N	71.3	N	71.5	N
IN	81.8	Y	83.4	Y	82.5	Y	80.1	Y	77.1	Y
KS	NA	NA	NA	NA	82.4	Y	81.2	Y	77.9	Y
KY	67.6	N	71.8	N	73.7	N	73.8	N	73.6	N
LA	NA	NA	NA	NA	17.9	N	64.1	N	67.3	N
MA	56.5	N	60.6	N	59.9	N	62.8	N	65.4	N
MD	60.1	N	58.2	N	62.3	N	58.2	N	58.6	N
ME	73.5	N	75.2	Y	76.3	Y	73.6	N	73.2	N
MI	54.1	N	50.2	N	57.4	N	50.6	N	42.6	N
MN	76.2	Y	77.3	Y	75.4	Y	74.9	N	73.3	N
MO	64.1	N	64.2	N	67.0	N	62.5	N	63.3	N
MS	68.1	N	69.0	N	67.4	N	73.6	N	73.1	N
MT	72.9	N	77.5	Y	76.1	Y	75.8	Y	74.7	N
NC	68.7	N	71.3	N	72.1	N	69.4	N	68.3	N
ND	73.7	N	83.7	Y	86.6	Y	85.3	Y	86.8	Y
NE	64.4	N	72.8	N	79.0	Y	75.9	Y	70.2	N
NH	69.4	N	70.9	N	70.0	N	65.4	N	62.0	N
NJ	NA	NA	41.2	N	52.1	N	65.5	N	67.5	N
NM	61.2	N	70.8	N	63.5	N	53.7	N	53.3	N
NV	NA	NA	NA	NA	74.9	N	77.5	Y	76.0	Y
NY	59.4	N	71.8	N	68.2	N	65.4	N	60.6	N
OH	57.7	N	69.2	N	59.8	N	59.4	N	66.2	N
OK	59.7	N	74.0	N	72.6	N	82.2	Y	71.2	N
OR	63.0	N	66.3	N	65.4	N	65.6	N	65.3	N
PA	62.1	N	64.9	N	65.5	N	66.5	N	66.0	N
RI	64.9	N	72.9	N	74.7	N	73.1	N	NA	NA
SC	64.6	N	67.3	N	63.1	N	66.0	N	76.8	Y
SD	82.4	Y	83.0	Y	82.8	Y	81.7	Y	79.4	Y
TN	64.9	N	65.9	N	68.8	N	68.2	N	65.4	N
TX	64.5	N	61.5	N	58.1	N	54.6	N	57.7	N
UT	67.3	N	39.6**	N	80.1	Y	76.1	Y	79.4	Y
VA	68.4	N	72.4	N	66.0	N	72.7	N	60.9	N
VT	65.8	N	72.9	N	69.6	N	71.5	N	72.3	N
WA	61.1	N	60.7	N	60.7	N	62.6	N	64.8	N
WI	78.1	Y	76.2	Y	74.3	N	76.7	Y	74.7	N
WV	68.8	N	75.3	Y	77.3	Y	77.7	Y	77.5	Y
WY	NA	NA	NA	NA	NA	NA	NA	NA	66.9	N
MEDIAN	65.4	N	70.8	N	70.6	N	71.4	N	70.0	N
RANGE	37.9-92.6	8 of 44	37.7-83.7	10 of 47	17.9-91.9	16 of 49	50.6-91.1	16 of 50	42.6-86.8	11 of 50

* Excluding wind-down records

** Query CATI pilot site

**BRFSS UPPER BOUND RESPONSE RATE ESTIMATES
BY STATE, 1990-1994**

State	1990		1991*		1992*		1993*		1994*	
	Rate	ObjMet	Rate	ObjMet	Rate	ObjMet	Rate	ObjMet	Rate	ObjMet
AK	NA	NA	89.3	N	86.4	N	85.8	N	84.7	N
AL	97.3	Y	93.1**	Y	94.7	Y	96.5	Y	80.0	N
AR	NA	NA	80.7	N	NA	NA	79.6	N	81.4	N
AZ	84.1	N	80.7	N	78.1	N	71.5	N	74.6	N
CA	82.1	N	79.9	N	80.7	N	78.5	N	77.6	N
CO	82.4	N	88.3	N	89.1	N	88.4	N	86.0	N
CT	64.9	N	81.6	N	81.1	N	85.6	N	88.0	N
DC	87.1	N	80.5	N	83.6	N	90.7	Y	88.3	N
DE	80.4	N	93.6	Y	93.2	Y	89.9	N	89.4	N
FL	82.4	N	82.5**	N	80.7	N	79.0	N	77.4	N
GA	88.4	N	87.7	N	86.1	N	73.2	N	68.5	N
HI	80.6	N	81.9	N	82.9	N	81.1	N	79.8	N
IA	90.2	Y	88.9	N	89.4	N	86.0	N	82.3	N
ID	90.7	Y	94.8	Y	94.8	Y	82.3	N	77.8	N
IL	85.3	N	84.5	N	83.8	N	85.0	N	83.0	N
IN	92.3	Y	91.3	Y	89.6	N	88.7	N	85.5	N
KS	NA	NA	NA	NA	90.8	Y	95.2	Y	93.8	Y
KY	88.5	N	86.4	N	88.4	N	89.2	N	88.5	N
LA	NA	NA	NA	NA	42.2	N	75.2	N	76.8	N
MA	64.1	N	65.2	N	65.3	N	69.3	N	72.6	N
MD	84.9	N	78.0	N	84.0	N	76.7	N	72.4	N
ME	86.9	N	84.9	N	85.5	N	84.0	N	83.0	N
MI	91.7	Y	93.0	Y	79.3	N	73.9	N	66.1	N
MN	88.8	N	87.5	N	87.3	N	86.1	N	84.9	N
MO	78.9	N	73.4	N	77.1	N	72.1	N	73.6	N
MS	82.0	N	79.8	N	78.7	N	83.2	N	85.2	N
MT	90.9	Y	90.6	Y	89.6	N	90.2	Y	88.1	N
NC	84.7	N	84.1	N	83.9	N	81.8	N	82.5	N
ND	91.3	Y	92.0	Y	94.5	Y	94.3	Y	95.4	Y
NE	82.2	N	88.8	N	88.8	N	88.3	N	83.2	N
NH	80.1	N	79.2	N	79.7	N	75.7	N	76.7	N
NJ	NA	NA	69.7	N	76.5	N	85.3	N	86.5	N
NM	76.3	N	76.6	N	75.0	N	63.0	N	61.9	N
NV	NA	NA	NA	NA	88.7	N	89.4	N	86.6	N
NY	81.8	N	85.3	N	81.1	N	77.9	N	74.9	N
OH	76.2	N	78.9	N	73.7	N	74.2	N	79.4	N
OK	73.1	N	81.1	N	81.2	N	87.3	N	75.2	N
OR	74.9	N	74.9	N	74.6	N	75.9	N	76.9	N
PA	68.0	N	69.0	N	70.6	N	70.5	N	70.3	N
RI	85.8	N	84.2	N	80.5	N	78.8	N	NA	NA
SC	85.3	N	85.3	N	81.4	N	81.0	N	84.2	N
SD	94.7	Y	92.4	Y	92.1	Y	91.5	Y	90.6	Y
TN	80.8	N	79.0	N	81.0	N	79.5	N	77.7	N
TX	75.7	N	75.9	N	74.8	N	75.3	N	73.4	N
UT	90.1	Y	87.5**	N	89.4	N	85.2	N	87.7	N
VA	81.0	N	80.1	N	79.5	N	81.4	N	76.2	N
VT	88.2	N	90.0	Y	91.8	Y	87.5	N	88.3	N
WA	87.1	N	71.0	N	70.8	N	71.1	N	73.5	N
WI	81.8	N	80.3	N	78.0	N	79.7	N	78.4	N
WV	82.1	N	84.3	N	83.6	N	85.1	N	85.0	N
WY	NA	NA	NA	NA	NA	NA	NA	NA	81.4	N
MEDIAN	83.3	N	84.1	N	82.9	N	82.1	N	81.4	N
RANGE	64.1-97.3	9 of 44	65.2-94.8	9 of 47	42.2-94.8	7 of 49	63.0-96.5	6 of 50	61.9-95.4	3 of 50

* Excluding wind-down records

** Query CATI pilot site

BRFSS EFFICIENCY RATES **BY STATE, 1990-1994**

State	1990		1991*		1992*		1993*		1994*	
	Rate	ObjMet	Rate	ObjMet	Rate	ObjMet	Rate	ObjMet	Rate	ObjMet
AK	NA	NA	29.4	N	27.6	N	17.1	N	23.8	N
AL	63.8	Y	20.0*	N	60.8	Y	58.0	Y	45.2	Y
AR	NA	NA	40.3	Y	NA	NA	39.7	N	38.2	N
AZ	32.6	N	32.1	N	35.2	N	30.9	N	33.3	N
CA	33.8	N	32.6	N	33.5	N	24.5	N	36.1	N
CO	41.1	Y	45.5	Y	42.6	Y	35.1	N	31.4	N
CT	19.2	N	28.2	N	39.9	N	52.3	Y	49.5	Y
DC	26.0	N	19.9	N	21.8	N	29.1	N	29.1	N
DE	23.8	N	35.8	N	41.0	Y	42.0	Y	40.0	Y
FL	37.0	N	20.0*	N	35.2	N	33.5	N	36.1	N
GA	44.3	Y	39.8	N	37.2	N	34.9	N	29.0	N
HI	31.1	N	27.7	N	28.3	N	25.6	N	22.6	N
IA	46.3	Y	45.8	Y	41.9	Y	42.8	Y	39.4	N
ID	39.6	N	43.1	Y	48.1	Y	33.4	N	27.0	N
IL	35.7	N	33.4	N	29.2	N	27.0	N	27.0	N
IN	50.1	Y	47.8	Y	44.7	Y	44.6	Y	39.3	N
KS	NA	NA	NA	NA	8.2	N	56.3	Y	60.6	Y
KY	39.8	N	38.5	N	36.0	N	35.0	N	30.3	N
LA	NA	NA	NA	NA	13.0	N	33.3	N	35.8	N
MA	20.8	N	17.5	N	25.9	N	34.6	N	35.5	N
MD	34.6	N	29.0	N	34.2	N	28.7	N	28.2	N
ME	44.2	Y	41.5	Y	36.7	N	35.7	N	36.5	N
MI	33.5	N	30.1	N	30.6	N	25.1	N	21.9	N
MN	48.1	Y	45.8	Y	44.0	Y	44.9	Y	40.8	Y
MO	39.1	N	33.6	N	35.4	N	29.0	N	28.8	N
MS	43.1	Y	38.2	N	40.2	Y	41.2	Y	37.5	N
MT	39.2	N	39.7	N	39.5	N	36.1	N	35.0	N
NC	38.8	N	38.2	N	37.3	N	30.3	N	29.8	N
ND	43.3	Y	43.9	Y	46.6	Y	47.7	Y	44.3	Y
NE	30.0	N	33.3	N	22.0	N	28.6	N	29.8	N
NH	43.7	Y	41.8	Y	40.1	Y	28.8	N	25.9	N
NJ	NA	NA	33.6	N	36.8	N	52.0	Y	53.8	Y
NM	36.6	N	40.8	Y	37.1	N	29.3	N	25.8	N
NV	NA	NA	NA	NA	55.8	Y	54.0	Y	42.7	Y
NY	35.2	N	38.3	N	33.4	N	29.9	N	27.5	N
OH	28.5	N	31.1	N	35.0	N	34.5	N	29.6	N
OK	34.6	N	40.6	Y	35.9	N	42.7	Y	23.6	N
OR	39.5	N	41.0	Y	40.3	Y	35.2	N	32.4	N
PA	20.8	N	17.7	N	29.5	N	36.3	N	36.3	N
RI	35.7	N	30.6	N	38.2	N	40.7	Y	NA	NA
SC	34.9	N	33.0	N	32.4	N	26.2	N	31.6	N
SD	52.2	Y	51.7	Y	50.5	Y	53.1	Y	48.5	Y
TN	42.1	Y	36.7	N	39.3	N	39.3	N	30.1	N
TX	34.1	N	29.5	N	32.5	N	28.3	N	32.4	N
UT	39.1	N	18.5*	N	37.8	N	31.7	N	34.7	N
VA	39.6	N	39.9	N	39.3	N	39.0	N	36.1	N
VT	37.0	N	38.1	N	39.9	N	44.0	Y	46.3	Y
WA	40.3	Y	37.4	N	38.1	N	41.0	Y	41.2	Y
WI	28.0	N	28.6	N	26.6	N	27.5	N	26.8	N
WV	45.9	Y	45.2	Y	43.6	Y	43.1	Y	42.1	Y
WY	NA	NA	NA	NA	NA	NA	NA	NA	28.7	N
MEDIAN	37.9	N	36.7	N	37.3	N	35.1	N	34.0	N
RANGE	19.2-63.8	14 of 44	17.5-51.7	14 of 47	8.2-60.8	14 of 49	17.1-58.0	17 of 50	21.9-60.6	12 of 50

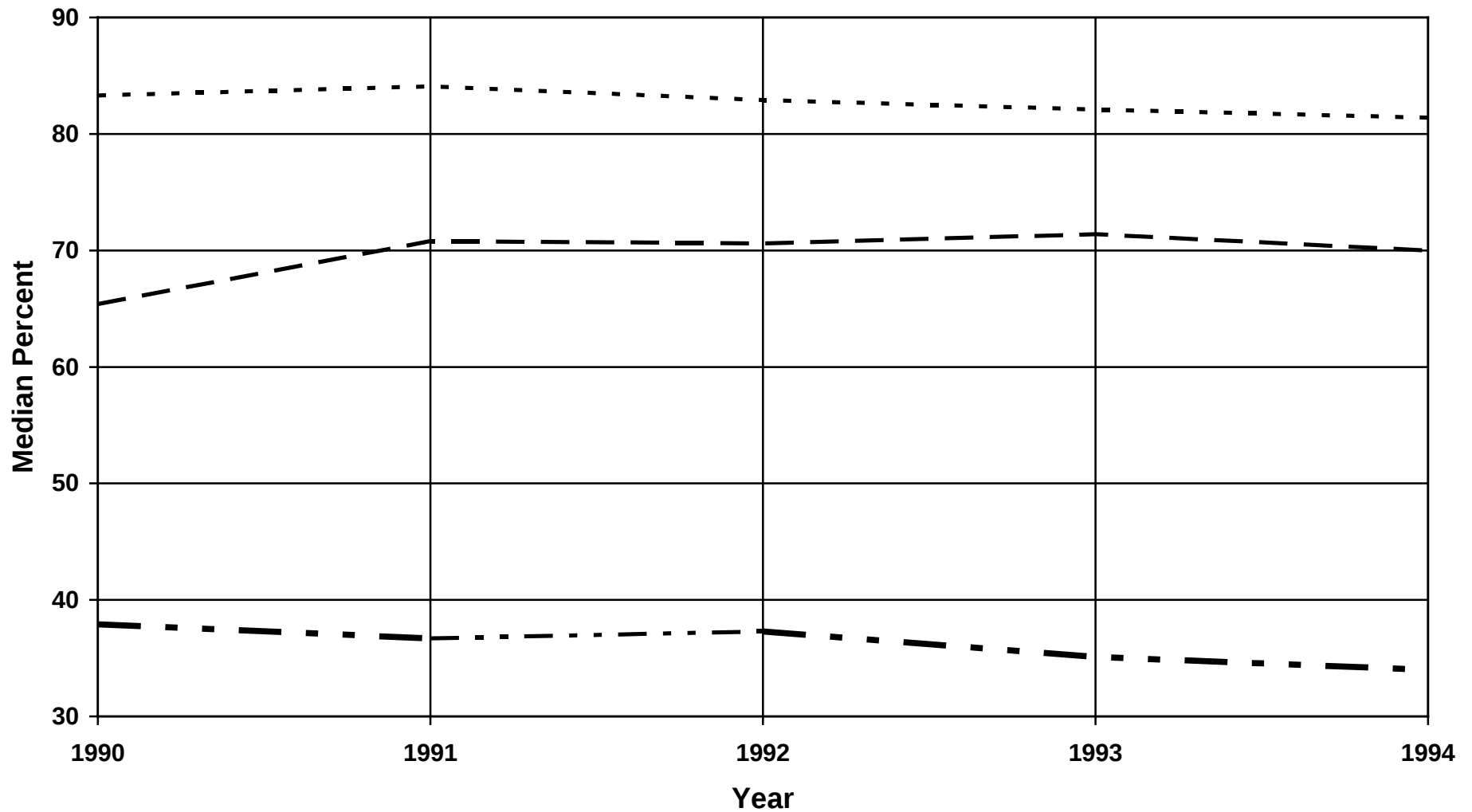
*Query CATI pilot site

BRFSS WIND-DOWN RATES BY STATE, 1990-1994

State	1990		1991*		1992*		1993*		1994*	
	Rate	ObjMet	Rate	ObjMet	Rate	ObjMet	Rate	ObjMet	Rate	ObjMet
AK	NA	NA	5.8	N	6.4	N	5.5	N	5.9	N
AL	0.6	Y	0.0*	Y	0.0	Y	0.3	Y	0.8	Y
AR	NA	NA	5.3	N	NA	NA	4.9	Y	4.5	Y
AZ	6.4	N	7.6	N	6.1	N	6.4	N	5.0	Y
CA	7.3	N	8.9	N	5.9	N	12.2	N	0.0	Y
CO	4.3	Y	4.4	Y	4.8	Y	4.8	Y	5.0	Y
CT	0.4	Y	6.9	N	0.0	Y	0.0	Y	0.0	Y
DC	5.8	N	4.2	Y	2.6	Y	5.7	N	3.1	Y
DE	2.7	Y	1.7	Y	1.1	Y	1.2	Y	1.1	Y
FL	4.2	Y	0.3*	Y	0.0	Y	3.8	Y	3.0	Y
GA	0.1	Y	0.0	Y	0.0	Y	0.4	Y	5.2	N
HI	10.1	N	10.5	N	6.2	N	3.9	Y	5.0	Y
IA	5.2	N	4.5	Y	14.6	N	8.9	N	4.8	Y
ID	5.5	N	3.1	Y	0.4	Y	3.4	Y	0.6	Y
IL	1.8	Y	0.0	Y	0.0	Y	4.8	Y	0.0	Y
IN	12.7	N	4.3	Y	4.3	Y	4.4	Y	4.8	Y
KS	NA	NA	NA	NA	3.8	Y	4.4	Y	2.3	Y
KY	5.4	N	4.9	Y	4.8	Y	5.4	N	5.8	N
LA	NA	NA	NA	NA	6.3	N	5.3	N	4.3	Y
MA	0.4	Y	0.0	Y	0.0	Y	0.0	Y	0.0	Y
MD	36.5	N	39.3	N	0.9	Y	2.7	Y	7.9	N
ME	5.2	N	5.1	N	5.6	N	5.2	N	7.7	N
MI	4.5	Y	4.2	Y	0.7	Y	0.0	Y	0.0	Y
MN	3.8	Y	4.5	Y	2.2	Y	2.9	Y	5.5	N
MO	6.2	N	6.4	N	6.4	N	6.5	N	0.0	Y
MS	4.7	Y	5.9	N	4.9	Y	5.2	N	6.3	N
MT	4.9	Y	4.5	Y	4.9	Y	4.5	Y	4.4	Y
NC	4.1	Y	2.3	Y	3.1	Y	2.6	Y	5.1	N
ND	7.5	N	6.2	N	4.6	Y	4.3	Y	4.1	Y
NE	0.0	Y	0.0	Y	5.4	N	5.4	N	0.0	Y
NH	0.0	Y	0.0	Y	0.0	Y	0.0	Y	7.7	N
NJ	NA	NA	0.0	Y	0.0	Y	0.0	Y	0.0	Y
NM	13.3	N	12.9	N	8.2	N	8.7	N	28.6	N
NV	NA	NA	NA	NA	0.0	Y	0.0	Y	0.0	Y
NY	9.1	N	3.8	Y	3.9	Y	4.2	Y	7.9	N
OH	12.5	N	13.7	N	8.0	N	9.4	N	6.3	N
OK	8.7	N	7.5	N	11.4	N	7.7	N	22.3	N
OR	4.3	Y	0.0	Y	0.5	Y	3.4	Y	4.0	Y
PA	0.8	Y	0.0	Y	0.0	Y	0.0	Y	0.0	Y
RI	6.0	N	7.1	N	3.2	Y	0.0	Y	NA	NA
SC	12.1	N	9.8	N	5.8	N	17.6	N	17.9	N
SD	5.0	Y	4.9	Y	4.7	Y	4.7	Y	6.1	N
TN	3.5	Y	1.3	Y	3.4	Y	3.3	Y	4.7	Y
TX	4.2	Y	4.9	Y	0.0	Y	6.1	N	5.0	Y
UT	16.6	N	11.8*	Y	5.2	N	5.6	N	4.9	Y
VA	66.4	N	3.2	Y	4.7	Y	3.4	Y	4.8	Y
VT	0.0	Y	0.0	Y	0.0	Y	0.0	Y	0.0	Y
WA	0.2	Y	0.0	Y	0.7	Y	0.0	Y	0.0	Y
WI	0.1	Y	0.0	Y	0.0	Y	0.0	Y	0.0	Y
WV	5.7	N	4.6	Y	5.5	N	4.9	Y	5.3	N
WY	NA	NA	NA	NA	NA	NA	NA	NA	0.7	Y
MEDIAN	5.0	Y	4.5	Y	3.8	Y	4.4	Y	4.6	Y
RANGE	0-66.4	23 of 44	0-39.3	31 of 47	0-14.6	34 of 49	0-17.6	33 of 50	0-28.6	34 of 50

*Query CATI pilot site

**BRFSS
MEDIAN UPPER BOUND, CASRO, AND EFFICIENCY
1990-1994**



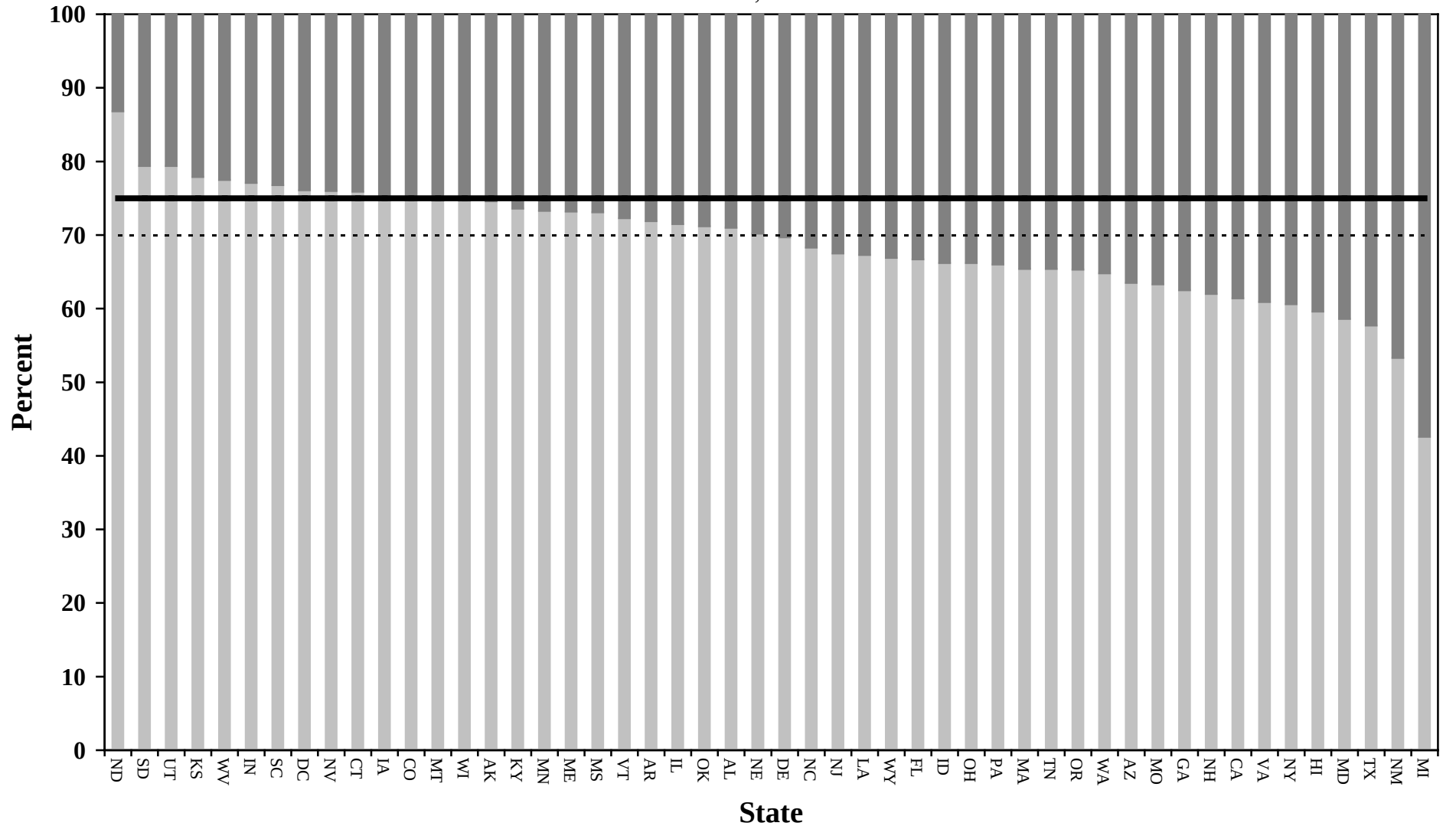
- - - UPPER BOUND - - - CASRO — EFFICIENCY

Wind-down records included
in response rates in 1990

BRFSS

CASRO ESTIMATES OF RESPONSE AND REFUSAL RATES

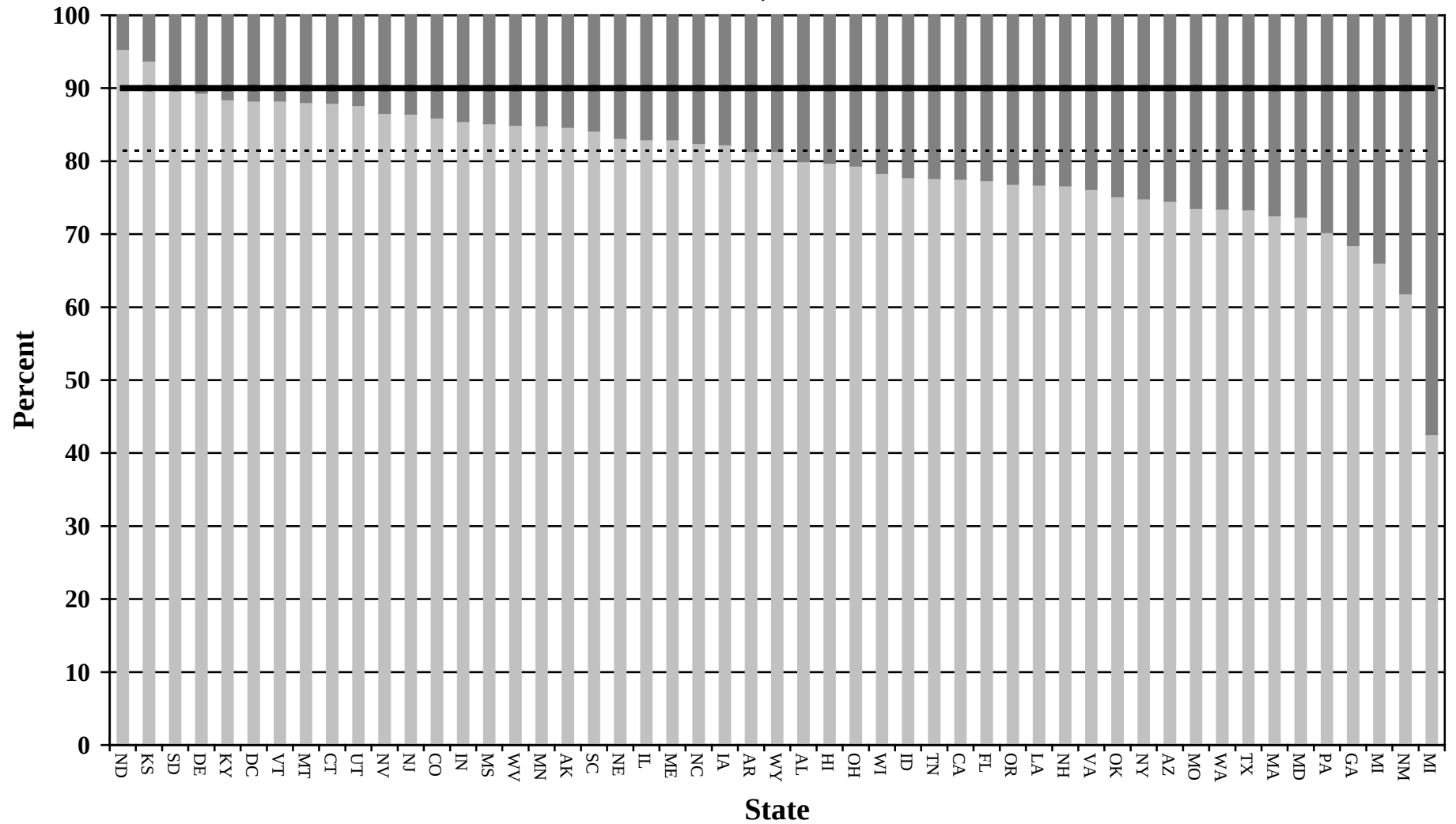
BY STATE, 1994



RESPONSE RATE
 REFUSAL RATE
 BRFSS MEDIAN RESPONSE RATE
 BRFSS OBJECTIVE

Wind-down records excluded

BRFSS UPPERBOUND ESTIMATES OF RESPONSE AND REFUSAL RATES BY STATE, 1994



Wind-down records excluded

**1994 BRFSS QUALITY CONTROL INDICATORS
All PARTICIPATING STATES**

INDICATOR	BRFSS OBJECTIVE	OBJECTIVE		BRFSS MEDIAN
		MET	NOT MET	
CASRO RESPONSE RATE	>75		*	70.0
UPPER BOUND	>90		*	81.4
SURVEY EFFICIENCY	>40		*	34.0
01s DURING WIND DOWN	<5	*		4.6
02s	<10	*		7.7
04s	<10		*	10.8
07s	<3		*	3.8
10s	<0.3		*	0.4