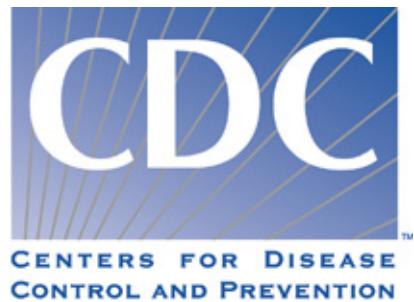




# **1995 BRFSS SUMMARY QUALITY CONTROL REPORT**



## **BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM QUALITY CONTROL DOCUMENTATION**

This report provides selected statistical indicators which are monitored in the Behavioral Risk Factor Surveillance System (BRFSS) to detect changes in the quality of the data collection procedures used in states. The value of these indicators is primarily for individual states to identify changes that may occur in their data collection process over time. When the indicators are below the objectives, it is appropriate to review data collection procedures and determine whether the procedures are optimal. When there are no evident procedural deficiencies and the quality indicators are stable, not meeting an objective is not an indication of poor quality. Similarly, it is useful to look at how the indicators differ between states to assess whether data collection procedures are optimal in all states. However, quality indicators that rank lower in one state than in another do not necessarily mean the quality of the data collection effort is also lower.

### **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 (see page 6), 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 and busy) 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, terminations, and completed interviews. 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 call-back rules are disregarded during wind-down interviewing (see page 3), total response rates for an interviewing period will not accurately reflect performance under the call-back rules during regular mode interviewing. Therefore, the response rate estimates included in this report have been calculated using only the records dispositioned during regular mode interviewing.

### **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.

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Total Telephone Numbers Used

**Percent Completes on Day One (not included in this report):** When using Waksberg cluster sampling, 33% of the telephone numbers released the first day of interviewing 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 call-back rules) 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 (not included in this report):** 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 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 percent<sup>1</sup> refusals or less is a generally accepted standard.

**Ring-No-Answer:** The percentage of ring-no-answers reflects how many attempts are made and with what time variation on unanswered phone numbers. The objective for ring-no-answers is 10%<sup>1</sup> 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 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 this disposition is 3%<sup>1</sup> 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 should be infrequent. The objective is 0.3%<sup>1</sup> 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.

<sup>1</sup>Because this percentage is affected by the efficiency of the sampling methodology (i.e., by the number of nonworking and 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, 1995**

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	22.4	410	6.0	2766	40.3	481	7.0	1216	17.7	7	0.1	359	5.2	36	0.5	7	0.1	18	0.3	33	0.5	6868
AL	1792	40.6	423	9.6	1045	23.7	450	10.2	465	10.5	15	0.3	108	2.4	3	0.1	10	0.2	36	0.8	71	1.6	4418
AR	1800	35.6	578	11.4	1059	20.9	590	11.7	618	12.2	25	0.5	200	4.0	10	0.2	23	0.5	25	0.5	127	2.5	5055
AZ	1913	31.5	651	10.7	1421	23.4	839	13.8	760	12.5	78	1.3	151	2.5	60	1.0	40	0.7	66	1.1	97	1.6	6076
CA	4046	31.5	1594	12.4	2313	18.0	1963	15.3	1447	11.3	46	0.4	773	6.0	324	2.5	118	0.9	45	0.4	158	1.2	12827
CO	2461	29.0	397	4.7	3209	37.8	317	3.7	1708	20.1	38	0.4	202	2.4	33	0.4	1	0.0	4	0.0	125	1.5	8495
CT	1869	26.3	500	7.0	2331	32.8	554	7.8	1378	19.4	43	0.6	262	3.7	86	1.2	1	0.0	33	0.5	51	0.7	7108
DE	2112	38.8	239	4.4	1064	19.6	892	16.4	753	13.8	1	0.0	256	4.7	21	0.4	12	0.2	11	0.2	80	1.5	5441
FL	3335	30.3	1052	9.6	2054	18.7	1257	11.4	1373	12.5	244	2.2	1389	12.6	41	0.4	33	0.3	18	0.2	217	2.0	11013
GA	2388	38.2	450	7.2	1656	26.5	847	13.6	787	12.6	12	0.2	51	0.8	24	0.4	5	0.1	11	0.2	18	0.3	6249
HI	2157	17.9	508	4.2	3393	28.2	2295	19.1	1885	15.7	142	1.2	1169	9.7	281	2.3	13	0.1	67	0.6	110	0.9	1020
IA	3600	41.1	519	5.9	2331	26.6	517	5.9	1116	12.7	14	0.2	477	5.4	30	0.3	22	0.3	11	0.1	127	1.4	8764
ID	2743	31.5	800	9.2	2016	23.1	1291	14.8	1420	16.3	33	0.4	142	1.6	63	0.7	33	0.4	96	1.1	84	1.0	8721
IL	2889	23.6	1103	9.0	3840	31.3	617	5.0	2615	21.3	82	0.7	630	5.1	207	1.7	15	0.1	11	0.1	249	2.0	12258
IN	2412	41.6	386	6.7	1667	28.8	474	8.2	598	10.3	7	0.1	201	3.5	7	0.1	3	0.1	4	0.1	38	0.7	5797
KS	2009	54.3	222	6.0	515	13.9	446	12.1	230	6.2	35	0.9	171	4.6	23	0.6	1	0.0	2	0.1	44	1.2	3698
KY	2388	35.4	351	5.2	2120	31.4	559	8.3	672	10.0	21	0.3	476	7.1	12	0.2	4	0.1	36	0.5	109	1.6	6748
LA	1657	33.6	521	10.6	1134	23.0	706	14.3	573	11.6	150	3.0	107	2.2	16	0.3	1	0.0	18	0.4	46	0.9	4929
MA	1768	25.1	775	11.0	2045	29.0	373	5.3	1710	24.2	28	0.4	183	2.6	46	0.7	15	0.2	78	1.1	33	0.5	7054
MD	5107	27.5	1766	9.5	4494	24.2	3088	16.6	3154	17.0	58	0.3	537	2.9	160	0.9	6	0.0	50	0.3	128	0.7	18548
ME	1279	35.4	255	7.1	1193	33.0	266	7.4	319	8.8	26	0.7	233	6.4	8	0.2	2	0.1	10	0.3	22	0.6	3613
MI	2475	10.4	523	2.2	13227	55.5	1058	4.4	5050	21.2	31	0.1	1097	4.6	57	0.2	92	0.4	179	0.8	38	0.2	23827
MN	3943	34.5	307	2.7	3676	32.1	1187	10.4	1643	14.4	97	0.8	419	3.7	56	0.5	5	0.0	46	0.4	59	0.5	11438
MO	1572	22.7	801	11.6	2313	33.4	1250	18.1	700	10.1	27	0.4	97	1.4	9	0.1	21	0.3	63	0.9	64	0.9	6917
MS	1592	42.5	319	8.5	674	18.0	418	11.1	422	11.3	16	0.4	182	4.9	9	0.2	7	0.2	38	1.0	72	1.9	3749
MT	1193	36.0	150	4.5	1042	31.4	272	8.2	419	12.6	11	0.3	152	4.6	1	0.0	0	0.0	16	0.5	58	1.8	3314
NC	3340	30.7	517	4.8	3454	31.8	1363	12.5	1309	12.0	23	0.2	668	6.1	29	0.3	3	0.0	46	0.4	118	1.1	10870
ND	1860	43.6	100	2.3	1264	29.6	301	7.0	453	10.6	14	0.3	232	5.4	4	0.1	0	0.0	6	0.1	36	0.8	4270
NE	1819	19.3	441	4.7	5250	55.7	663	7.0	843	8.9	14	0.1	211	2.2	15	0.2	2	0.0	112	1.2	59	0.6	9429
NH	1502	26.4	385	6.8	1439	25.3	1052	18.5	785	13.8	67	1.2	367	6.4	19	0.3	13	0.2	28	0.5	42	0.7	5699
NJ	1251	45.5	180	6.5	451	16.4	589	21.4	182	6.6	38	1.4	17	0.6	17	0.6	12	0.4	13	0.5	2	0.1	2752
NM	1297	24.9	907	17.4	1135	21.8	772	14.8	845	16.2	59	1.1	87	1.7	12	0.2	10	0.2	68	1.3	24	0.5	5216
NV	1802	58.8	191	6.2	241	7.9	201	6.6	197	6.4	108	3.5	137	4.5	101	3.3	0	0.0	60	2.0	27	0.9	3065
NY	2477	24.0	1020	9.9	2668	25.9	1444	14.0	1413	13.7	27	0.3	558	5.4	438	4.3	25	0.2	85	0.8	149	1.4	10304
OH	1346	29.7	377	8.3	1263	27.9	806	17.8	494	10.9	14	0.3	130	2.9	13	0.3	2	0.0	55	1.2	29	0.6	4529
OK	1779	30.0	442	7.5	1852	31.3	801	13.5	778	13.1	41	0.7	105	1.8	14	0.2	24	0.4	41	0.7	46	0.8	5923
OR	2845	25.9	1349	12.3	2497	22.8	1145	10.4	2075	18.9	78	0.7	565	5.2	156	1.4	54	0.5	100	0.9	106	1.0	10970
PA	3601	32.2	1551	13.9	3168	28.4	553	4.9	1877	16.8	130	1.2	111	1.0	0	0.0	65	0.6	25	0.2	91	0.8	11172
RI	1776	29.6	530	8.8	2031	33.9	230	3.8	1145	19.1	20	0.3	164	2.7	28	0.5	4	0.1	29	0.5	37	0.6	5994
SC	2038	30.4	389	5.8	2084	31.1	1205	18.0	714	10.6	84	1.3	81	1.2	9	0.1	9	0.1	68	1.0	26	0.4	6707
SD	1810	39.5	217	4.7	1452	31.7	465	10.1	430	9.4	29	0.6	135	2.9	3	0.1	5	0.1	11	0.2	29	0.6	4586
TN	2040	35.3	555	9.6	1563	27.1	878	15.2	512	8.9	19	0.3	113	2.0	7	0.1	5	0.1	30	0.5	50	0.9	5772
TX	1703	31.0	568	10.3	1011	18.4	984	17.9	744	13.5	49	0.9	300	5.5	15	0.3	1	0.0	31	0.6	87	1.6	5493
UT	2891	33.3	393	4.5	2498	28.8	895	10.3	1309	15.1	96	1.1	385	4.4	44	0.5	8	0.1	101	1.2	64	0.7	8684
VA	1799	33.6	567	10.6	1141	21.3	593	11.1	709	13.2	37	0.7	343	6.4	63	1.2	7	0.1	0	0.0	101	1.9	5360
VT	2490	35.0	290	4.1	2120	29.8	673	9.5	1137	16.0	102	1.4	233	3.3	5	0.1	8	0.1	12	0.2	49	0.7	7119
WA	3351	37.9	1243	14.1	1465	16.6	692	7.8	1264	14.3	74	0.8	348	3.9	136	1.5	62	0.7	37	0.4	172	1.9	8844
WI	2210	27.0	708	8.6	3502	42.8	150	1.8	1379	16.8	97	1.2	47	0.6	0	0.0	48	0.6	10	0.1	39	0.5	8190
WV	2434	42.5	489	8.5	1341	23.4	584	10.2	607	10.6	4	0.1	157	2.7	2	0.0	3	0.1	47	0.8	65	1.1	5733
WY	2437	27.6	575	6.5	2371	26.9	1589	18.0	1369	15.5	41	0.5	243	2.8	22	0.2	34	0.4	56	0.6	87	1.0	8824
CUM	113933	29.9	29584	7.8	111859	29.4	41635	10.9	55601	14.6	2552	0.7	15761	4.1	2775	0.7	894	0.2	2063	0.5	3793	1.0	380450
MED	2039	31.5	****	7.4	****	27.5	****	10.7	****	12.9	0.5	****	3.7	****	0.3	****	0.1	****	0.5	****	0.9	****	

Revised 2/10/97

**BRFSS CASRO RESPONSE RATE ESTIMATES\***  
**BY STATE, 1991-1995**

State	1991		1992		1993		1994		1995	
	Rate	Obj Met								
AK	77.5	Y	77.3	Y	75.1	Y	74.6	N	68.4	N
AL	43.7**	N	91.9	Y	91.1	Y	71.0	N	68.3	N
AR	73.6	N	NA	NA	69.7	N	71.9	N	65.7	N
AZ	70.1	N	70.6	N	64.2	N	63.5	N	65.1	N
CA	69.3	N	72.3	N	63.5	N	61.4	N	52.3	N
CO	82.1	Y	81.6	Y	75.8	Y	74.8	N	77.4	Y
CT	70.0	N	58.3	N	65.1	N	75.9	Y	65.1	N
DC	68.7	N	69.3	N	79.1	Y	76.1	Y	NA	NA
DE	73.8	N	75.0	Y	73.6	N	69.7	N	68.3	N
FL	37.7**	N	64.6	N	66.0	N	66.7	N	54.6	N
GA	70.5	N	67.0	N	63.3	N	62.5	N	77.6	Y
HI	68.2	N	71.2	N	61.9	N	59.6	N	48.6	N
IA	73.3	N	80.7	Y	78.4	Y	75.3	Y	73.3	N
ID	74.6	N	81.2	Y	73.6	N	66.2	N	66.8	N
IL	70.3	N	70.4	N	71.3	N	71.5	N	61.6	N
IN	83.4	Y	82.5	Y	80.1	Y	77.1	Y	78.9	Y
KS	NA	NA	82.4	Y	81.2	Y	77.9	Y	73.6	N
KY	71.8	N	73.7	N	73.8	N	73.6	N	72.6	N
LA	NA	NA	17.9	N	64.1	N	67.3	N	67.3	N
MA	60.6	N	59.9	N	62.8	N	65.4	N	60.4	N
MD	58.2	N	62.3	N	58.2	N	58.6	N	60.9	N
ME	75.2	Y	76.3	Y	73.6	N	73.2	N	70.2	N
MI	50.2	N	57.4	N	50.6	N	42.6	N	56	N
MN	77.3	Y	75.4	Y	74.9	N	73.3	N	78.1	Y
MO	64.2	N	67.0	N	62.5	N	63.3	N	59.1	N
MS	69.0	N	67.4	N	73.6	N	73.1	N	75.4	Y
MT	77.5	Y	76.1	Y	75.8	Y	74.7	N	77.5	Y
NC	71.3	N	72.1	N	69.4	N	68.3	N	69.2	N
ND	83.7	Y	86.6	Y	85.3	Y	86.8	Y	84.5	Y
NE	72.8	N	79.0	Y	75.9	Y	70.2	N	67.5	N
NH	70.9	N	70.0	N	65.4	N	62.0	N	59.5	N
NJ	41.2	N	52.1	N	65.5	N	67.5	N	66.9	N
NM	70.8	N	63.5	N	53.7	N	53.3	N	52.5	N
NV	NA	NA	74.9	N	77.5	Y	76.0	Y	77.4	Y
NY	71.8	N	68.2	N	65.4	N	60.6	N	60.2	N
OH	69.2	N	59.8	N	59.4	N	66.2	N	69.5	N
OK	74.0	N	72.6	N	82.2	Y	71.2	N	76.2	Y
OR	66.3	N	65.4	N	65.6	N	65.3	N	56.9	N
PA	64.9	N	65.5	N	66.5	N	66.0	N	64.1	N
RI	72.9	N	74.7	N	73.1	N	NA	NA	68.7	N
SC	67.3	N	63.1	N	66.0	N	76.8	Y	74.5	N
SD	83.0	Y	82.8	Y	81.7	Y	79.4	Y	81.2	Y
TN	65.9	N	68.8	N	68.2	N	65.4	N	68.7	N
TX	61.5	N	58.1	N	54.6	N	57.7	N	60.2	N
UT	39.6**	N	80.1	Y	76.1	Y	79.4	Y	78.5	Y
VA	72.4	N	66.0	N	72.7	N	60.9	N	62.3	N
VT	72.9	N	69.6	N	71.5	N	72.3	N	74.5	N
WA	60.7	N	60.7	N	62.6	N	64.8	N	61.4	N
WI	76.2	Y	74.3	N	76.7	Y	74.7	N	71.9	N
WV	75.3	Y	77.3	Y	77.7	Y	77.5	Y	77.5	Y
WY	NA	NA	NA	NA	NA	NA	66.9	N	69.2	N
MEDIAN	70.8	N	70.6	N	71.4	N	70.0	N	68.4	N
RANGE	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	48.6-84.5	12 of 50

\*Excluding wind-down records

\*\*Query CATI pilot site

**BRFSS UPPER BOUND RESPONSE RATE ESTIMATES\***  
**BY STATE, 1991-1995**

State	1991		1992		1993		1994		1995	
	Rate	Obj Met								
AK	89.3	N	86.4	N	85.8	N	84.7	N	80.0	N
AL	93.1**	Y	94.7	Y	96.5	Y	80.0	N	79.9	N
AR	80.7	N	NA	NA	79.6	N	81.4	N	76.0	N
AZ	80.7	N	78.1	N	71.5	N	74.6	N	73.6	N
CA	79.9	N	80.7	N	78.5	N	77.6	N	70.3	N
CO	88.3	N	89.1	N	88.4	N	86.0	N	86.1	N
CT	81.6	N	81.1	N	85.6	N	88.0	N	78.9	N
DC	80.5	N	83.6	N	90.7	Y	88.3	N	NA	NA
DE	93.6	Y	93.2	Y	89.9	N	89.4	N	89.8	N
FL	82.5**	N	80.7	N	79.0	N	77.4	N	77.1	N
GA	87.7	N	86.1	N	73.2	N	68.5	N	83.4	N
HI	81.9	N	82.9	N	81.1	N	79.8	N	82.2	N
IA	88.9	N	89.4	N	86.0	N	82.3	N	86.9	N
ID	94.8	Y	94.8	Y	82.3	N	77.8	N	76.0	N
IL	84.5	N	83.8	N	85.0	N	83.0	N	73.2	N
IN	91.3	Y	89.6	N	88.7	N	85.5	N	86.5	N
KS	NA	NA	90.8	Y	95.2	Y	93.8	Y	89.9	N
KY	86.4	N	88.4	N	89.2	N	88.5	N	87.1	N
LA	NA	NA	42.2	N	75.2	N	76.8	N	77.4	N
MA	65.2	N	65.3	N	69.3	N	72.6	N	69.1	N
MD	78.0	N	84.0	N	76.7	N	72.4	N	75.7	N
ME	84.9	N	85.5	N	84.0	N	83.0	N	83.8	N
MI	93.0	Y	79.3	N	73.9	N	66.1	N	80.1	N
MN	87.5	N	87.3	N	86.1	N	84.9	N	92.9	Y
MO	73.4	N	77.1	N	72.1	N	73.6	N	68.6	N
MS	79.8	N	78.7	N	83.2	N	85.2	N	85.3	N
MT	90.6	Y	89.6	N	90.2	Y	88.1	N	88.7	N
NC	84.1	N	83.9	N	81.8	N	82.5	N	86.8	N
ND	92.0	Y	94.5	Y	94.3	Y	95.4	Y	95.0	Y
NE	88.8	N	88.8	N	88.3	N	83.2	N	80.4	N
NH	79.2	N	79.7	N	75.7	N	76.7	N	78.7	N
NJ	69.7	N	76.5	N	85.3	N	86.5	N	86.7	N
NM	76.6	N	75.0	N	63.0	N	61.9	N	60.5	N
NV	NA	NA	88.7	N	89.4	N	86.6	N	90.4	Y
NY	85.3	N	81.1	N	77.9	N	74.9	N	72.4	N
OH	78.9	N	73.7	N	74.2	N	79.4	N	81.4	N
OK	81.1	N	81.2	N	87.3	N	75.2	N	79.2	N
OR	74.9	N	74.6	N	75.9	N	76.9	N	67.9	N
PA	69.0	N	70.6	N	70.5	N	70.3	N	69.0	N
RI	84.2	N	80.5	N	78.8	N	NA	NA	76.9	N
SC	85.3	N	81.4	N	81.0	N	84.2	N	83.9	N
SD	92.4	Y	92.1	Y	91.5	Y	90.6	Y	89.0	N
TN	79.0	N	81.0	N	79.5	N	77.7	N	79.7	N
TX	75.9	N	74.8	N	75.3	N	73.4	N	75.6	N
UT	87.5**	N	89.4	N	85.2	N	87.7	N	87.4	N
VA	80.1	N	79.5	N	81.4	N	76.2	N	75.9	N
VT	90.0	Y	91.8	Y	87.5	N	88.3	N	89.3	N
WA	71.0	N	70.8	N	71.1	N	73.5	N	72.0	N
WI	80.3	N	78.0	N	79.7	N	78.4	N	74.5	N
WV	84.3	N	83.6	N	85.1	N	85.0	N	85.0	N
WY	NA	NA	NA	NA	NA	NA	81.4	N	79.5	N
MEDIAN	84.1	N	82.9	N	82.1	N	81.4	N	80.0	N
RANGE	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	60.5-95.0	3 of 50

\*Excluding wind-down records

\*\*Query CATI pilot site

**BRFSS EFFICIENCY RATES  
BY STATE, 1991-1995**

State	1991		1992		1993		1994		1995	
	Rate	Obj Met	Rate	Obj Met	Rate	Obj Met	Rate	Obj Met	Rate	Obj Met
AK	29.4	N	27.6	N	17.1	N	23.8	N	22.4	N
AL	20.0*	N	60.8	Y	58.0	Y	45.2	Y	40.6	Y
AR	40.3	Y	NA	NA	39.7	N	38.2	N	35.6	N
AZ	32.1	N	35.2	N	30.9	N	33.3	N	31.5	N
CA	32.6	N	33.5	N	24.5	N	36.1	N	31.5	N
CO	45.5	Y	42.6	Y	35.1	N	31.4	N	29.0	N
CT	28.2	N	39.9	N	52.3	Y	49.5	Y	26.3	N
DC	19.9	N	21.8	N	29.1	N	29.1	N	NA	NA
DE	35.8	N	41.0	Y	42.0	Y	40.0	Y	38.8	N
FL	20.0*	N	35.2	N	33.5	N	36.1	N	30.3	N
GA	39.8	N	37.2	N	34.9	N	29.0	N	38.2	N
HI	27.7	N	28.3	N	25.6	N	22.6	N	17.9	N
IA	45.8	Y	41.9	Y	42.8	Y	39.4	N	41.1	Y
ID	43.1	Y	48.1	Y	33.4	N	27.0	N	31.5	N
IL	33.4	N	29.2	N	27.0	N	27.0	N	23.6	N
IN	47.8	Y	44.7	Y	44.6	Y	39.3	N	41.6	Y
KS	NA	NA	8.2	N	56.3	Y	60.6	Y	54.3	Y
KY	38.5	N	36.0	N	35.0	N	30.3	N	35.4	N
LA	NA	NA	13.0	N	33.3	N	35.8	N	33.6	N
MA	17.5	N	25.9	N	34.6	N	35.5	N	25.1	N
MD	29.0	N	34.2	N	28.7	N	28.2	N	27.5	N
ME	41.5	Y	36.7	N	35.7	N	36.5	N	35.4	N
MI	30.1	N	30.6	N	25.1	N	21.9	N	10.4	N
MN	45.8	Y	44.0	Y	44.9	Y	40.8	Y	34.5	N
MO	33.6	N	35.4	N	29.0	N	28.8	N	22.7	N
MS	38.2	N	40.2	Y	41.2	Y	37.5	N	42.5	Y
MT	39.7	N	39.5	N	36.1	N	35.0	N	36.0	N
NC	38.2	N	37.3	N	30.3	N	29.8	N	30.7	N
ND	43.9	Y	46.6	Y	47.7	Y	44.3	Y	43.6	Y
NE	33.3	N	22.0	N	28.6	N	29.8	N	19.3	N
NH	41.8	Y	40.1	Y	28.8	N	25.9	N	26.4	N
NJ	33.6	N	36.8	N	52.0	Y	53.8	Y	45.5	Y
NM	40.8	Y	37.1	N	29.3	N	25.8	N	24.9	N
NV	NA	NA	55.8	Y	54.0	Y	42.7	Y	58.8	Y
NY	38.3	N	33.4	N	29.9	N	27.5	N	24.0	N
OH	31.1	N	35.0	N	34.5	N	29.6	N	29.7	N
OK	40.6	Y	35.9	N	42.7	Y	23.6	N	30.0	N
OR	41.0	Y	40.3	Y	35.2	N	32.4	N	25.9	N
PA	17.7	N	29.5	N	36.3	N	36.3	N	32.2	N
RI	30.6	N	38.2	N	40.7	Y	NA	NA	29.6	N
SC	33.0	N	32.4	N	26.2	N	31.6	N	30.4	N
SD	51.7	Y	50.5	Y	53.1	Y	48.5	Y	39.5	N
TN	36.7	N	39.3	N	39.3	N	30.1	N	35.3	N
TX	29.5	N	32.5	N	28.3	N	32.4	N	31.0	N
UT	18.5*	N	37.8	N	31.7	N	34.7	N	33.3	N
VA	39.9	N	39.3	N	39.0	N	36.1	N	33.6	N
VT	38.1	N	39.9	N	44.0	Y	46.3	Y	35.0	N
WA	37.4	N	38.1	N	41.0	Y	41.2	Y	37.9	N
WI	28.6	N	26.6	N	27.5	N	26.8	N	27.0	N
WV	45.2	Y	43.6	Y	43.1	Y	42.1	Y	42.5	Y
WY	NA	NA	NA	NA	NA	NA	28.7	N	27.6	N
MEDIAN	36.7	N	37.3	N	35.1	N	34.0	N	31.5	N
RANGE	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	10.4-58.8	9 of 50

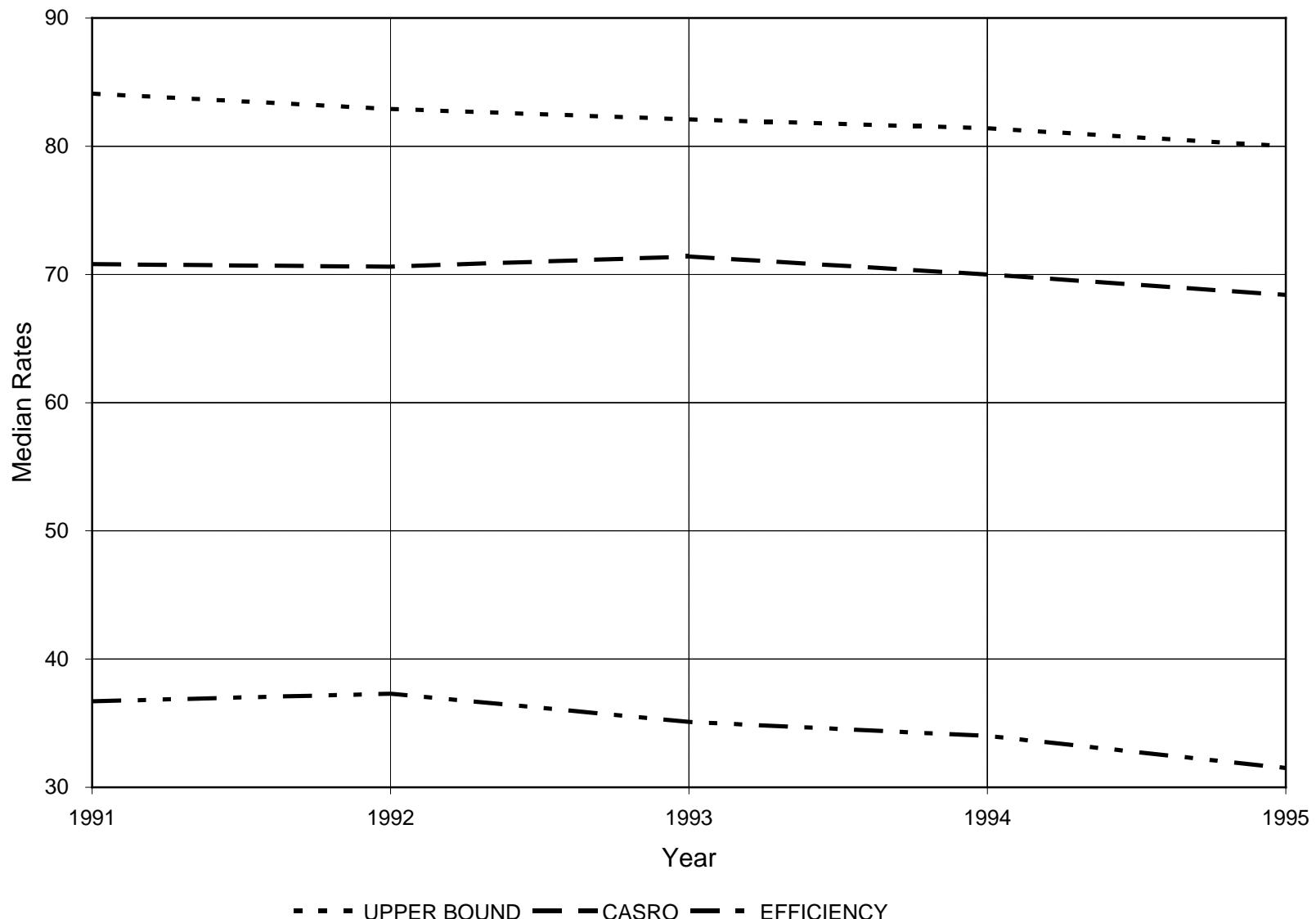
\*Query CATI pilot site

**BRFSS WIND-DOWN RATES  
BY STATE, 1991-1995**

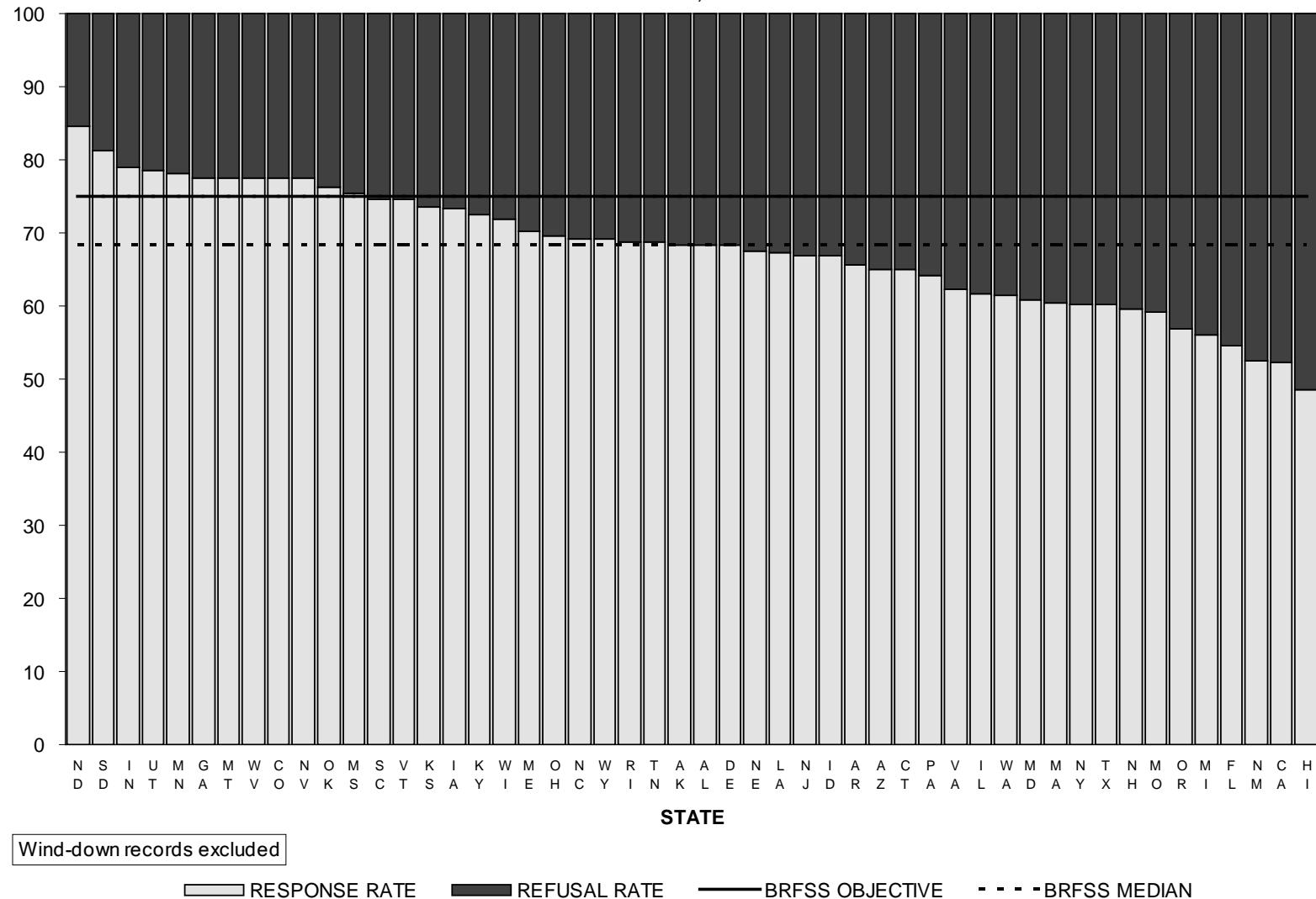
State	1991		1992		1993		1994		1995	
	Rate	Obj Met								
AK	5.8	N	6.4	N	5.5	N	5.9	N	5.8	N
AL	0.0*	Y	0.0	Y	0.3	Y	0.8	Y	5.1	N
AR	5.3	N	NA	NA	4.9	Y	4.5	Y	4.9	Y
AZ	7.6	N	6.1	N	6.4	N	5.0	Y	6.0	N
CA	8.9	N	5.9	N	12.2	N	0.0	Y	0.0	Y
CO	4.4	Y	4.8	Y	4.8	Y	5.0	Y	0.0	Y
CT	6.9	N	0.0	Y	0.0	Y	0.0	Y	0.0	Y
DC	4.2	Y	2.6	Y	5.7	N	3.1	Y	NA	NA
DE	1.7	Y	1.1	Y	1.2	Y	1.1	Y	0.8	Y
FL	0.3*	Y	0.0	Y	3.8	Y	3.0	Y	3.5	Y
GA	0.0	Y	0.0	Y	0.4	Y	5.2	N	5.0	Y
HI	10.5	N	6.2	N	3.9	Y	5.0	Y	5.1	N
IA	4.5	Y	14.6	N	8.9	N	4.8	Y	0.0	Y
ID	3.1	Y	0.4	Y	3.4	Y	0.6	Y	5.7	N
IL	0.0	Y	0.0	Y	4.8	Y	0.0	Y	1.3	Y
IN	4.3	Y	4.3	Y	4.4	Y	4.8	Y	4.4	Y
KS	NA	NA	3.8	Y	4.4	Y	2.3	Y	1.1	Y
KY	4.9	Y	4.8	Y	5.4	N	5.8	N	5.2	N
LA	NA	NA	6.3	N	5.3	N	4.3	Y	4.2	Y
MA	0.0	Y								
MD	39.3	N	0.9	Y	2.7	Y	7.9	N	13.6	N
ME	5.1	N	5.6	N	5.2	N	7.7	N	5.9	N
MI	4.2	Y	0.7	Y	0.0	Y	0.0	Y	0.0	Y
MN	4.5	Y	2.2	Y	2.9	Y	5.5	N	3.1	Y
MO	6.4	N	6.4	N	6.5	N	0.0	Y	6.7	N
MS	5.9	N	4.9	Y	5.2	N	6.3	N	6.0	N
MT	4.5	Y	4.9	Y	4.5	Y	4.4	Y	4.8	Y
NC	2.3	Y	3.1	Y	2.6	Y	5.1	N	4.0	Y
ND	6.2	N	4.6	Y	4.3	Y	4.1	Y	5.3	N
NE	0.0	Y	5.4	N	5.4	N	0.0	Y	0.0	Y
NH	0.0	Y	0.0	Y	0.0	Y	7.7	N	6.9	N
NJ	0.0	Y								
NM	12.9	N	8.2	N	8.7	N	28.6	N	13.1	N
NV	NA	NA	0.0	Y	0.0	Y	0.0	Y	0.0	Y
NY	3.8	Y	3.9	Y	4.2	Y	7.9	N	7.0	N
OH	13.7	N	8.0	N	9.4	N	6.3	N	7.1	N
OK	7.5	N	11.4	N	7.7	N	22.3	N	13.8	N
OR	0.0	Y	0.5	Y	3.4	Y	4.0	Y	4.1	Y
PA	0.0	Y								
RI	7.1	N	3.2	Y	0.0	Y	NA	NA	0.0	Y
SC	9.8	N	5.8	N	17.6	N	17.9	N	13.1	N
SD	4.9	Y	4.7	Y	4.7	Y	6.1	N	10.1	N
TN	1.3	Y	3.4	Y	3.3	Y	4.7	Y	6.7	N
TX	4.9	Y	0.0	Y	6.1	N	5.0	Y	4.7	Y
UT	11.8*	Y	5.2	N	5.6	N	4.9	Y	6.1	N
VA	3.2	Y	4.7	Y	3.4	Y	4.8	Y	4.3	Y
VT	0.0	Y								
WA	0.0	Y	0.7	Y	0.0	Y	0.0	Y	0.0	Y
WI	0.0	Y								
WV	4.6	Y	5.5	N	4.9	Y	5.3	N	5.0	Y
WY	NA	NA	NA	NA	NA	NA	0.7	Y	5.7	N
MEDIAN	4.5	Y	3.8	Y	4.4	Y	4.6	Y	4.8	Y
RANGE	0-39.3	31 of 47	0-14.6	34 of 49	0-17.6	33 of 50	0-28.6	34 of 50	0-13.8	29 of 50

\*Query CATI pilot site

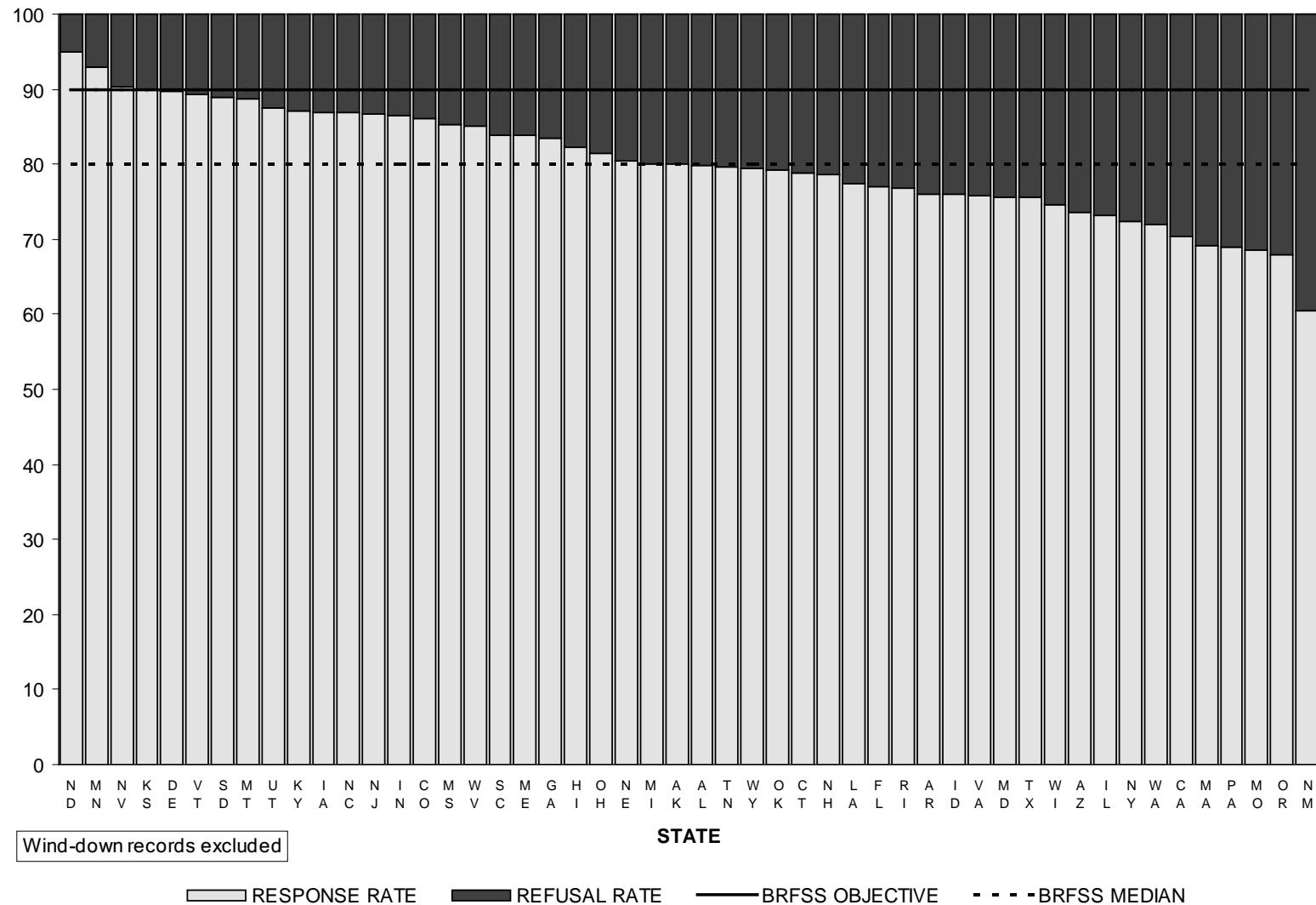
**BRFSS**  
**MEDIAN UPPER BOUND, CASRO, AND EFFICIENCY**  
1991-1995



## BRFSS CASRO ESTIMATES OF RESPONSE AND REFUSAL RATES BY STATE, 1995



## BRFSS UPPER BOUND ESTIMATES OF RESPONSE AND REFUSAL RATES, BY STATE, 1995



**1995 BRFSS QUALITY CONTROL INDICATORS**  
**All PARTICIPATING STATES**

INDICATOR	BRFSS OBJECTIVE	OBJECTIVE MET	OBJECTIVE NOT MET	BRFSS MEDIAN
CASRO RESPONSE RATE	$\geq 75$		*	68.4
UPPER BOUND	$\geq 90$		*	80.0
SURVEY EFFICIENCY	$\geq 40$		*	31.5
% COMPLETES DURING WIND-DOWN	$\leq 5$	*		4.8
% REFUSAL	$\leq 10$	*		7.4
% RING-NO-ANSWER	$\leq 10$		*	10.7
% RESPONDENT-NOT-AVAILABLE	$\leq 3$		*	3.7
% LINE BUSY	$\leq 0.3$		*	0.5

*Revised 1/6/98*