BRFSS

2017

Behavioral Risk Factor Surveillance System

Asthma Call-back Survey

Summary Data Quality Report

National Asthma Control Program

Version 1.0.0
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ACKNOWLEDGMENTS

2017 Asthma Call-back Survey (ACBS) Summary Data Quality Report

Introduction
Procedures for interview disposition and response rates for the Behavioral Risk Factor Surveillance System (BRFSS) Asthma Call-back Survey (ACBS) follow the usual BRFSS procedures; however, some additions and adaptations are required for the call-back survey. Disposition codes, disposition code categories, and response rates are discussed in the sections below. Figure one (1) is a flow chart that describes the eligibility paths BRFSS respondents with asthma follow through the ACBS process.

Because asthma characteristics vary by season, a seasonal analysis must consider any state for which interviewing was not conducted throughout the year. States may have interrupted interviewing due to contract interruptions with their data collection company. In addition, some ACBS interviews are finalized in the first few months of the next calendar year. If a state has less than 6 complete months of child or adult data, the data from that state are not considered sufficiently comparable with the data from other states and are excluded from the public release file and the response rate calculations. If a state has fewer than seventy-five (75) complete child interviews, reliable weights cannot be calculated and the child data from that state are excluded from the public release file.

Appendix A includes tables showing disposition code categories, response rates and completed interviews by month for each state participating in the ACBS each year. Appendix B includes additional instructions on assigning the ACBS-specific disposition codes. Appendix C includes the ACBS nonresponse bias analysis plan and supporting tables showing demographic breakout and prevalence for each state. Details on BRFSS response rates and procedures can be found in the BRFSS Data Quality Report Handbook and the BRFSS Summary Data Quality Report for each survey year (http://www.cdc.gov/brfss/annual_data/annual_data.htm).

Disposition Codes
The BRFSS disposition codes are used for the ACBS; however, a few additional codes are needed to account for situations specific to a call-back survey. In the list below, disposition codes added to the ACBS are underlined and bolded. There are no equivalent BRFSS codes for ACBS-specific codes. Detailed descriptions of the ACBS codes can be found in Appendix B.

The ACBS 4-digit disposition codes for 2017 are:

    I. Eligible, contacted: complete interview

        1100   Complete.
        1200   Partial complete (through the end of section 8).

    II. Eligible, contacted: refusal or termination

        4413   Refused to participate in the call-back during the BRFSS interview.

        2112   Refused to begin the ACBS interview after contacted.
        2120   Terminated within the questionnaire during the ACBS interview before section 9.
        2211   Refused to allow combining ACBS responses with BRFSS responses.
        2212   Refused to answer the "ever had asthma" question during the ACBS interview.

    III. Eligible, lost to follow-up because unable to contact or communicate with the BRFSS respondent with asthma

2111   Hang up or termination before respondent contacted. Household contacted but ACBS respondent not contacted.
2210   Selected respondent never reached or reached but did not begin interview during interviewing period. Selected respondent away from residence during the entire interviewing period.
2220   Telephone answering device, message confirming private residential status. Telecommunication technological barrier, message confirming private residential status.

2330   Language problem after respondent selection.

3100   Contact, hang-up or termination, unknown if private residence.
3130   No answer.
3140   Telephone answering device, unknown if private residence.
3200   Hang-up or termination, known household. Household contact, eligibility undetermined.
3322   Physical or mental impairment.
3330   Language problem.

4100   Household members away from residence during entire interviewing period.
4900   Miscellaneous, non-eligible (for ACBS miscellaneous non-contact).

4306   Selected ACBS respondent no longer living in the BRFSS household.

Temporary codes: should be resolved prior to submission
5050   Hang-up, unknown if housing unit.
5100   Appointment.
5111   Household-level refusal.
5112   Refusal: hang-up or termination.
5120   Break off/termination in questionnaire before Section 9.
5130   No answer.
5140   Answering machine, unknown if private residence.
5220   Answering machine, message confirming residential status.
5320   Physical or mental impairment.
5330   Language problem.
5550   Busy.
5560   Unsafe location for interview.

IV.   Eligible, lost to follow-up for technical reasons

3150   Telecommunication technological barrier, unknown if private residence.
3700   On never-call list.

4200   Dedicated fax/data/modem line with no human contact.
4300   Telephone number no longer in service or changed. Non-working/disconnected number.
4400   Busy/Fast busy/Circuit busy.
4430   Call forwarding/Pager.
4450   Landline sample number connects to cell phone.
4460   Cell phone sample number connects to landline.
4470   Cell phone respondent also has landline, less than 90% of all calls on cell phone.
4500   Not a private residence – business.
4510   Not a private residence – group home.

5150   Technological barrier other than answering machine–unknown if private residence.
5200   Fax/Data/Modem.
5300   Phone number temporarily out of service. Possible non-working number.

5400	Technological barrier other than answering machine with message confirming residential status. Fast busy. Circuit busy.
5599	Mistaken Ctrl-End.
5700	Supervisor attention needed.
5900	Null attempt.
9999	Missing disposition code.

V. Ineligible: all codes specific to ACBS (no BRFSS equivalent)

2290	Most-knowledgeable person is not parent or guardian.
2291	No parent or legal guardian in the household (child ineligible).
4480	Not recruited for call-back at BRFSS interview (excluded by state).
4490	Random child/adult selection: adult ineligible, child selected.
4491	Random child/adult selection: child ineligible, adult selected.
4405	Out-of-state when ACBS records are not transferred to state of residence.
4700	Household, no eligible respondent (respondent does not have asthma).
4411	Selected respondent not eligible for follow-up.
4412	Transferred from BRFSS but not attempted (excluded by state).
4471	Misdiagnosed asthma in respondent.

Definitions and Labels for Disposition Code Categories

Because the ACBS is a call-back interview, all those identified with asthma at the BRFSS interview are, with a few notable exceptions, eligible for the call-back survey. The ACBS eligibility flow chart (Figure 1) summarizes how BRFSS respondents are categorized for ACBS response rate calculation.

ACBS interviews are considered complete (COIN) if the respondents finish the entire interview or if they complete through section 8 of the ACBS interview. ACBS interviews are refusals if the respondent refuses participation at either the BRFSS interview or at the time of the ACBS interview. Terminations are ACBS interviews that start but are terminated during the interview before completing section 8.

The disposition codes that relate to contact problems or technology issues are considered "eligible, but lost to follow-up." If they had been contacted, a small proportion of those eligible but lost to follow-up might actually be ineligible. All temporary disposition codes (numbered 5000 or higher) that should have been resolved but were not are treated as comparable 4000-level codes.

BRFSS respondents with asthma who are considered ineligible for the ACBS include those who are not asked to participate at the time of the BRFSS interview. Each year, between 10% and 15% of those technically eligible are not asked to participate in the call-back survey. Respondents might not be asked for several reasons:
- States with split samples may include respondents in the call-back only if they are in specified splits of the BRFSS sample. Counts for states that exclude split-sample respondents are excluded from the following tables and rate calculations.
- The BRFSS respondent may partially complete the BRFSS interview but terminate before the call-back request.
- Specific state BRFSS call-back contracts may limit the number of call-back interviews due to budgetary constraints.
- States may stop conducting call-back interviews during contract negotiations.

BRFSS respondents with asthma who are asked to participate in the ACBS but are later classified as ineligible include:
- Respondents in households where both the selected adult and selected child in the household have asthma. When both have asthma, only one is eligible for the ACBS.

- Respondents who move out-of-state between the BRFSS interview and the ACBS interview in states that are not transferring ACBS interview data or to/from states not participating in the ACBS.
- Respondents who indicate, at the time of the ACBS interview, that the reported diagnosis of asthma was an error.
- Child respondents for whom the adult BRFSS respondent is not the child's parent or guardian.
- Some respondents in states that have reached a pre-specified quota for ACBS interviews.

The following table indicates how disposition codes are grouped into response rate categories shown in the eligibility flow chart (Figure 1):

Category	Disposition Codes	Notes
Eligible COIN Completed interview	1100, 1200	Through section 8
Eligible TERE Terminations and refusals	**4413**	At BRFSS interview
	2112, **2120**, **2211**, **2212**,	At ACBS
Eligible, lost to follow-up Not interviewed	2111, 2210, 2220, 2320, 2330, 3100, 3130, 3140, 3200, 3322, 3330, 4100, 4900, **4306**, 5050, 5100, 5111, 5112, 5120, 5130, 5140, 5220, 5320, 5330, 5550, 5560	Unable to contact or communicate with eligible respondent
	3150, 3700, 4200, 4300, 4400, 4430, 4450, 4460, 4470, 4500, 4510, 5400, 5150, 5200, 5300, 5599, 5700, 5900, **9999**	Technical problems
Ineligible	**2290**, **2291**, **4480**, **4490**, **4491**	At BRFSS interview
	4405, **4700**, **4411**, **4471**	At ACBS
	4412	No ACBS attempt

Figure 1: ACBS Eligibility Flow Chart:
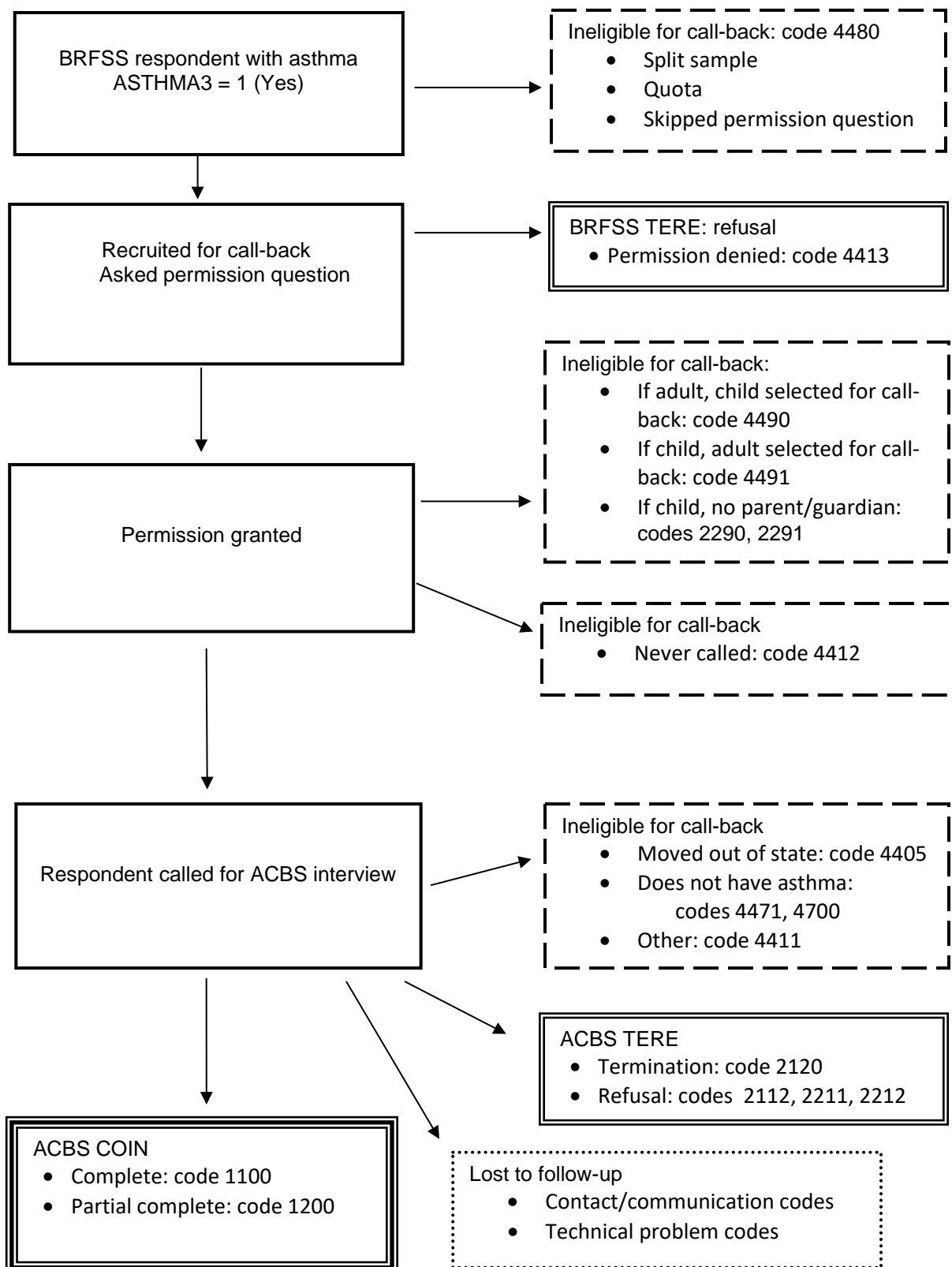
ACBS Response Rates

The ACBS Interview Completion Rate is the proportion of completed interviews among eligible respondents who are actually contacted for and started the ACBS interview. Those who refuse at the initial BRFSS interview (4413), those ineligible, and those never contacted are excluded from the denominator. This rate is based on actual contacts with the eligible respondents at the time of the call-back interview. The numerator of the rate includes completed interviews (COIN). The denominator of the rate includes completed interviews (COIN), plus the number contacted later for the ACBS interview who refused or terminated the interview (disposition codes 2112, 2120, 2211, and 2212).

The ACBS Cooperation Rate is the proportion of completed interviews among all eligible respondents who are recruited and contacted for the ACBS interview. Eligible respondents who refuse the call-back at the time of the BRFSS interview are included. Non-contacts are excluded from the denominator, but contacts with communication problems specific to the respondent with asthma are included. The numerator of the rate consists of completed interviews (COIN). The denominator of the rate includes completed interviews (COIN), plus refusals and terminations (TERE), plus the number of non-interviews that involved language problems with the respondent with asthma (2330) or physical/mental impairment of the respondent with asthma (2320). A Cooperation Rate below sixty-five percent (65%) may indicate some problem with interviewing techniques.

The Refusal Rate is the percentage of all eligible respondents who refuse to be interviewed or terminate an interview early in the questionnaire. The numerator includes terminations and refusals (TERE). The denominator is the same as for the CASRO rate (below). The denominator includes completed interviews (COIN), terminations and refusals (TERE), and a proportion of those eligible, but lost to follow-up. The proportion represents an estimate of the number of those lost to follow-up who would be expected to remain eligible if they had been contacted. The proportion of cases lost to follow-up that are estimated to be eligible is the same as the proportion of cases not lost to follow-up that are eligible. A Refusal Rate above thirty-five percent (35%) indicates some problem with interviewing techniques.

The Council of American Survey Research Organizations (CASRO) rate is a measure of respondent cooperation and is generally defined as the proportion of all eligible respondents in the sample for whom an interview has been completed. The numerator of the CASRO rate includes completed interviews (COIN). The denominator includes completed interviews (COIN), terminations and refusals (TERE), and a proportion of those eligible, but lost to follow-up. The proportion represents an estimate of the number of those lost to follow-up who would be expected to remain eligible if they had been contacted. The proportion of cases lost to follow-up that are estimated to be eligible is the same as the proportion of cases not lost to follow-up that are eligible. A CASRO rate below forty percent (40%) should be cause for a review of data collection practices that could affect it, especially sample management and interviewer recruitment, retention, training, supervision, and monitoring.

Response rate formulae for the ACBS are specified below. Response rate tables for the ACBS, including response rates for each state/area participating in the ACBS, can be found in Appendix A. Details on ACBS-specific disposition codes can be found in Appendix B.

Response Rate Formulae for the ACBS

ACBS Interview Completion Rate:

$$\frac{1100 + 1200}{1100 + 1200 + \mathbf{2120} + \mathbf{2211} + \mathbf{2212} + \mathbf{2112}}$$

ACBS Cooperation Rate:

$$\frac{1100 + 1200}{1100 + 1200 + \mathbf{2120} + \mathbf{2211} + \mathbf{2212} + \mathbf{2112} + \mathbf{4413} + 2320 + 2330}$$

ACBS CASRO Rate:

$$\frac{1100 + 1200}{[\ 1100 + 1200 + \mathbf{2120} + \mathbf{2211} + \mathbf{2212} + \mathbf{2112} + \mathbf{4413}\ ] + P * [\ \text{Eligible lost}\ ]}$$

ACBS Refusal Rate:

$$\frac{\mathbf{2120} + \mathbf{2211} + \mathbf{2212} + \mathbf{2112} + \mathbf{4413}}{[\ 1100 + 1200 + \mathbf{2120} + \mathbf{2211} + \mathbf{2212} + \mathbf{2112} + \mathbf{4413}] + P * [\ \text{Eligible lost}\ ]}$$

Where:

P (Proportion) = (COIN + ACBS TERE) / (COIN + ACBS TERE + Ineligible)

$$\frac{[(1100+1200) + (\mathbf{2120} + \mathbf{2211} + \mathbf{2212} + \mathbf{2112}\ )]}{[(1100+1200)+(\mathbf{2120}+\mathbf{2211}+\mathbf{2212}+\mathbf{2112})+\mathbf{4405}+\mathbf{4700}+\mathbf{4411}+\mathbf{4471}+\mathbf{2291}+\mathbf{2290}+\mathbf{4480}+\mathbf{4490}+\mathbf{4491}+\mathbf{4412})]}$$

Eligible lost = 2111, 2210, 2220, 2320, 2330, 3100, 3130, 3140, 3200, 3322, 3330, 4100, 4900, 4306, 5050, 5100, 5111, 5112, 5120, 5130, 5140, 5220, 5320, 5330, 5550, 5560, 3150, 3700, 4200, 4300, 4400, 4430, 4450, 4460, 4470, 4500, 4510, 5400, 5150, 5200, 5300, 5599, 5700, 5900, 5999

ACBS Nonresponse Bias

The Asthma Call-back Survey (ACBS) uses post-stratification weighting to ensure the sample conforms to the state estimated asthma population with respect to geography, age, sex, race, ethnicity, and other characteristics. Nonresponse bias, however, cannot be completely removed. In order to communicate the potential impact of nonresponse bias on the ACBS analysis results, in Appendix C two groups of tables are being provided (see Appendix C). The first group of tables presents ACBS unweighted frequencies for respondents, non-respondents, and BRFSS-eligible asthma respondents by age, sex, and race/ethnicity demographic categories for each state. The second group of tables report current asthma prevalence (Appendix C). ACBS respondents are those respondents who completed or partially completed the interview. Nonresponse for the ACBS is influenced by eligible BRFSS respondents for which no interview was conducted such as: (1) refusals, terminations, and non-consent; (2) lost to follow-up due to non-contact or communication; and (3) lost to follow-up due to technological circumstances. BRFSS-eligible respondents are individuals on the BRFSS survey who answered, "Yes" to the question, "Has a doctor, nurse, or other health professional EVER told you that you had asthma?" A respondent is classified as current prevalence if he or she also responded "Yes" to the question: "Do you still have asthma?"

List of Tables in the 2017 BRFSS ACBS Summary Data Quality Report

Landline and Cell Phone Samples

Table 1.1 ACBS 2017 Disposition Categories by State/Territory: Adult Landline and Cell Phone Sample
Table 1.2 ACBS 2017 Disposition Categories by State/Territory: Child Landline and Cell Phone Sample

Table 2.1 ACBS 2017 Response Rates by State/Territory: Adult Landline and Cell Phone Sample
Table 2.2 ACBS 2017 Response Rates by State/Territory: Child Landline and Cell Phone Sample

Table 3.1 ACBS 2017 Completed Interviews by State/Territory and Month: Adult Landline and Cell Phone Sample
Table 3.2 ACBS 2017 Completed Interviews by State/Territory and Month: Child Landline and Cell Phone Sample

Appendix A

Table 1.1 ACBS 2017 Disposition Categories by State/Territory: Adult Landline and Cell Phone Sample

STATE	BRFSS Asthma	Ineligible Not Recruited		Refused BRFSS TERE		Agreed		Adult selected	Never Called	Total Called	COIN	ACBS TERE	Lost to follow-up Contact	Technical	Ineligible
Arizona	2287	303	13%	693	30%	1291	56%	0	1	1287	678	72	484	40	13
California	1289	346	27%	370	29%	573	44%	11	6	556	270	42	205	27	12
Connecticut	1575	251	16%	413	26%	911	58%	27	0	883	489	51	316	17	10
Florida	2628	766	29%	551	21%	1311	50%	47	0	1264	858	46	335	24	1
Georgia	654	122	19%	153	23%	379	58%	17	0	362	239	9	104	10	0
Hawaii	1279	179	14%	340	27%	760	59%	27	5	728	394	30	297	5	2
Illinois	663	65	10%	167	25%	431	65%	9	0	422	240	17	150	15	0
Indiana	1877	228	12%	458	24%	1191	63%	27	11	1153	732	13	387	14	7
Iowa	883	118	13%	213	24%	552	63%	0	0	551	305	31	196	16	3
Kansas	2793	298	11%	685	25%	1810	65%	58	40	1712	715	85	840	71	1
Kentucky	1272	124	10%	234	18%	914	72%	0	0	914	438	16	404	38	18
Maine	1491	130	9%	275	18%	1086	73%	28	6	1052	698	21	297	26	10
Massachusetts	1018	86	8%	340	33%	592	58%	0	43	549	282	62	174	28	3
Michigan	1629	125	8%	499	31%	1005	62%	40	7	958	654	83	196	10	15
Minnesota	1714	250	15%	473	28%	991	58%	26	0	965	665	25	266	9	0
Missouri	903	40	4%	237	26%	626	69%	19	0	607	308	28	207	49	15
Montana	755	54	7%	227	30%	474	63%	14	1	459	277	7	146	20	9
Nebraska	1672	167	10%	402	24%	1103	66%	28	1	1073	631	64	357	13	8
Nevada	475	51	11%	119	25%	305	64%	0	5	300	177	8	102	12	1
New Hampshire	880	120	14%	278	32%	482	55%	0	0	482	254	34	175	13	6
New Jersey	1416	263	19%	341	24%	812	57%	23	0	789	580	27	176	5	1
New Mexico	924	108	12%	266	29%	550	60%	14	2	534	303	33	181	15	2
New York*	806	112	14%	167	21%	527	65%	14	10	502	262	15	205	18	2
Ohio	1502	486	32%	278	19%	738	49%	19	26	693	516	13	150	14	0
Oregon	836	121	14%	187	22%	528	63%	22	161	345	189	41	85	25	5
Pennsylvania	903	82	9%	182	20%	639	71%	16	100	523	278	16	224	5	0
Rhode Island	934	104	11%	251	27%	579	62%	8	0	571	301	36	211	16	7
Texas	1352	182	13%	283	21%	887	66%	0	3	884	488	40	332	17	7
Utah	1338	92	7%	404	30%	842	63%	26	2	813	462	32	292	14	13
Vermont	1010	113	11%	277	27%	620	61%	11	0	607	338	34	212	14	9
Wisconsin	715	146	20%	104	15%	465	65%	13	7	445	306	38	91	4	6
Puerto Rico**	814	19	2%	148	18%	647	79%	33	259	355	199	10	100	33	13
32 Area Totals	40287	5651	14%	10015	25%	24621	61%	577	696	23338	13526	1079	7897	637	199

NOTES:
* States only included in version 1 of the sample split: New York
** Puerto Rico did not collect 6 consecutive months of adult data but did collect 6 or more months of data throughout 2017 and 2018 altogether.

Appendix A

Table 1.2 ACBS 2017 Disposition Categories by State/Territory: Child Landline and Cell Phone Sample

STATE	BRFSS Asthma	Ineligible Not Recruited		Recruited for call-back Refused BRFSS TERE		Agreed		Ineligible Child selected	Never Called	Total Called	COIN	ACBS TERE	Eligible Lost to follow-up Contact	Technical	Ineligible
California*	201	1	1%	73	36%	127	63%	0	0	112	42	5	58	5	2
Connecticut*	332	26	8%	86	26%	220	66%	0	0	167	74	3	83	3	4
Florida	510	91	18%	109	21%	310	61%	0	0	262	154	17	82	9	0
Georgia*	147	20	14%	27	18%	100	68%	0	0	80	52	4	24	0	0
Hawaii*	317	65	21%	65	21%	187	59%	0	0	138	56	8	71	3	0
Illinois*	128	20	16%	33	26%	75	59%	0	0	55	31	3	18	2	1
Indiana	341	45	13%	71	21%	225	66%	0	1	184	95	2	78	6	3
Kansas	655	71	11%	114	17%	470	72%	0	16	364	137	10	197	14	6
Maine	227	21	9%	40	18%	166	73%	0	1	126	82	1	37	4	2
Massachusetts* **	90	0	0%	26	29%	64	71%	0	7	40	18	5	13	3	1
Michigan	321	3	1%	109	34%	209	65%	0	5	170	85	20	43	1	21
Minnesota	275	35	13%	59	21%	181	66%	0	0	154	95	2	56	1	0
Missouri*	201	24	12%	31	15%	146	73%	0	0	110	46	7	47	8	2
Montana*	141	26	18%	29	21%	86	61%	0	0	68	36	2	29	1	0
Nebraska	318	43	14%	58	18%	217	68%	0	1	185	87	11	83	1	3
New Jersey	356	66	19%	72	20%	218	61%	0	0	179	120	7	51	1	0
New Mexico*	188	38	20%	16	9%	134	71%	0	0	106	35	11	47	4	9
New York* **	167	29	17%	28	17%	110	66%	0	3	82	37	1	43	1	0
Ohio*	258	78	30%	46	18%	134	52%	0	0	122	74	1	44	3	0
Oregon*	113	0	0%	26	23%	87	77%	0	15	72	30	7	28	6	1
Pennsylvania*	181	20	11%	23	13%	138	76%	0	22	95	39	2	52	2	0
Rhode Island*	164	1	1%	33	20%	130	79%	0	0	99	41	4	48	3	3
Utah	324	34	10%	78	24%	212	65%	0	0	178	92	8	73	3	2
Vermont*	171	3	2%	39	23%	129	75%	0	0	97	40	7	49	0	1
Wisconsin*	104	18	17%	8	8%	78	75%	0	1	65	37	8	19	1	0
Puerto Rico*	249	21	8%	33	13%	195	78%	0	50	120	51	7	34	17	11
26 Areas Total	6479	799	12%	1332	21%	4348	67%	0	122	3430	1686	163	1407	102	72

Notes:

* Child data for California, Connecticut, Georgia, Hawaii, Illinois, Massachusetts, Missouri, Montana, New Mexico, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Vermont, Wisconsin, and Puerto Rico were not included in the public-release data file because of having too few records (<75) to produce reliable weights.
** States only included in version 1 of the sample split: Massachusetts and New York
*** States who did not collect child data: Arizona, Iowa, Kentucky, New Hampshire, Nevada, and Texas

Appendix A

Table 2.1 ACBS 2017 Response Rates by State/Territory: Adult Landline and Cell Phone Sample

STATE	Completion Rate	Cooperation Rate	Refusal Rate	CASRO Rate
Arizona	90%	47%	42%	37%
California	87%	40%	52%	34%
Connecticut	91%	51%	40%	42%
Florida	95%	59%	36%	52%
Georgia	96%	60%	34%	50%
Hawaii	93%	52%	38%	41%
Illinois	93%	56%	33%	43%
Indiana	98%	61%	31%	49%
Iowa	91%	55%	35%	43%
Kansas	89%	48%	37%	34%
Kentucky	96%	64%	24%	43%
Maine	97%	70%	24%	56%
Massachusetts	82%	41%	48%	34%
Michigan	89%	53%	42%	47%
Minnesota	96%	57%	37%	49%
Missouri	92%	54%	34%	39%
Montana	98%	54%	36%	43%
Nebraska	91%	57%	34%	46%
Nevada	96%	58%	32%	45%
New Hampshire	88%	45%	45%	36%
New Jersey	96%	61%	34%	54%
New Mexico	90%	50%	40%	41%
New York*	95%	59%	31%	44%
Ohio	98%	64%	33%	58%
Oregon	82%	45%	49%	41%
Pennsylvania	95%	58%	32%	45%
Rhode Island	89%	51%	38%	40%
Texas	92%	60%	30%	46%
Utah	94%	51%	38%	41%
Vermont	91%	52%	38%	41%
Wisconsin	89%	68%	28%	60%
Puerto Rico**	95%	55%	39%	49%
32 Area Totals	93%	55%	37%	45%

Notes:
* States only included in version 1 of the sample split: New York
** Puerto Rico did not collect 6 consecutive months of adult data but did collect 6 or more months of data throughout 2017 and 2018 altogether.

Appendix A

Table 2.2 ACBS 2017 Response Rates by State/Territory: Child Landline and Cell Phone Sample

STATE	Completion Rate	Cooperation Rate	Refusal Rate	CASRO Rate
California*	89%	35%	47%	25%
Connecticut*	96%	44%	43%	36%
Florida	90%	55%	38%	47%
Georgia*	93%	63%	32%	54%
Hawaii*	88%	43%	47%	36%
Illinois*	91%	46%	47%	41%
Indiana	98%	57%	34%	45%
Kansas	93%	52%	35%	39%
Maine	99%	67%	28%	56%
Massachusetts* **	78%	37%	55%	32%
Michigan	81%	40%	53%	35%
Minnesota	98%	61%	32%	50%
Missouri*	87%	55%	35%	42%
Montana*	95%	54%	38%	45%
Nebraska	89%	56%	34%	43%
New Jersey	94%	60%	35%	53%
New Mexico*	76%	56%	33%	43%
New York* **	97%	56%	35%	44%
Ohio*	99%	61%	33%	52%
Oregon*	81%	48%	38%	35%
Pennsylvania*	95%	61%	29%	46%
Rhode Island*	91%	51%	35%	38%
Utah	92%	52%	39%	41%
Vermont*	85%	47%	40%	35%
Wisconsin*	82%	70%	25%	57%
Puerto Rico*	88%	56%	37%	47%
26 Areas Total	91%	53%	38%	43%

Notes:

* Child data for California, Connecticut, Georgia, Hawaii, Illinois, Massachusetts, Missouri, Montana, New Mexico, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Vermont, Wisconsin, and Puerto Rico were not included in the public-release data file because of having too few records (<75) to produce reliable weights.

** States only included in version 1 of the sample split: Massachussetts and New York

*** States who did not collect child data: Arizona, Iowa, Kentucky, New Hampshire, Nevada, and Texas

Table 3.1 ACBS 2017 Completed Interviews by State/Territory and Month: Adult Landline and Cell Phone Sample																	
	2017												2018					
STATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	May	TOTAL
Arizona	.	18	78	74	72	43	65	27	57	75	72	77	20	.	.	.	.	678
California	.	.	2	3	.	15	.	34	13	72	84	4	43	.	.	.	.	270
Connecticut	.	33	114	41	48	21	59	18	32	50	32	37	4	.	.	.	.	489
Florida	60	49	45	28	143	353	101	67	.	.	12	.	.	.	.	.	.	858
Georgia	16	12	6	2	4	15	31	40	25	9	18	43	18	.	.	.	.	239
Hawaii	18	41	32	37	46	29	30	19	35	23	35	15	34	.	.	.	.	394
Illinois	.	.	25	5	5	39	26	18	12	31	30	25	22	1	1	.	.	240
Indiana	.	37	23	42	66	67	93	93	93	79	70	67	2	.	.	.	.	732
Iowa	.	28	23	36	25	35	39	24	2	22	22	27	22	.	.	.	.	305
Kansas	.	39	6	2	45	99	115	54	26	25	.	3	40	128	86	38	9	715
Kentucky	.	44	43	26	28	19	47	25	30	37	69	47	23	.	.	.	.	438
Maine	.	128	64	52	54	41	52	52	43	67	78	67	.	.	.	.	.	698
Massachusetts	.	20	66	19	28	18	14	24	23	21	24	25	.	.	.	.	.	282
Michigan	.	55	63	79	61	32	22	60	27	54	40	49	57	40	15	.	.	654
Minnesota	41	68	19	23	44	63	49	74	76	30	45	98	35	.	.	.	.	665
Missouri	.	.	.	25	27	39	24	48	30	29	17	24	42	.	.	.	.	308
Montana	.	.	.	24	32	28	19	41	31	20	24	19	11	28	.	.	.	277
Nebraska	.	28	65	48	44	48	65	45	50	56	42	70	63	7	.	.	.	631
Nevada	1	6	4	26	21	21	20	14	8	10	7	20	16	3	.	.	.	177
New Hampshire	.	24	53	33	24	1	7	24	27	22	21	11	7	.	.	.	.	254
New Jersey	.	16	7	6	29	52	64	141	74	21	24	103	43	.	.	.	.	580
New Mexico	.	.	.	.	85	25	24	28	22	28	29	27	35	.	.	.	.	303
New York*	.	33	30	20	17	24	17	25	21	14	30	28	3	.	.	.	.	262
Ohio	34	78	21	15	63	46	72	102	54	17	14	.	.	.	.	.	.	516
Oregon	.	.	.	.	.	37	34	26	30	23	18	21	.	.	.	.	.	189
Pennsylvania	8	33	24	38	17	35	37	36	41	9	.	.	.	.	.	.	.	278
Rhode Island	.	17	56	23	29	12	17	20	35	25	16	40	11	.	.	.	.	301
Texas	.	60	43	30	38	52	46	48	33	39	52	47	.	.	.	.	.	488
Utah	.	.	.	38	5	80	70	.	94	46	28	75	26	.	.	.	.	462
Vermont	.	33	48	30	36	11	23	22	34	45	22	28	6	.	.	.	.	338
Wisconsin	5	7	45	9	10	34	38	34	21	23	11	44	19	6	.	.	.	306
Puerto Rico**																		
32 Area Totals	183	907	1005	834	1186	1478	1329	1307	1099	1022	990	1150	611	264	114	38	9	13526

Notes:
* States Only included in version 1 of the sample split: New York
**Puerto Rico did not collect 6 consecutive months of adult data but did collect 6 or more months of data throughout 2017 and 2018 altogether.

Appendix A

Table 3.2 ACBS 2017 Completed Interviews by State/Territory and Month: Child Landline and Cell Phone Sample															
	2016												2017		
STATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	TOTAL
California*	.	.	.	.	.	1	.	3	1	15	11	2	9	.	.	42
Connecticut*	.	6	19	8	8	4	8	7	5	4	4	1	.	.	.	74
Florida	10	7	6	3	29	58	7	11	13	6	4	.	.	.	.	154
Georgia*	.	1	.	2	4	3	11	4	3	2	5	10	7	.	.	52
Hawaii*	.	7	4	5	4	5	4	4	4	6	7	2	4	.	.	56
Illinois*	.	.	2	1	2	2	1	2	4	9	3	1	3	1	.	31
Indiana	.	6	1	4	4	12	11	21	10	12	8	6	.	.	.	95
Kansas	4	5	5	11	9	12	9	11	15	29	12	7	6	2	.	137
Maine	.	15	9	8	5	3	8	7	9	5	4	9	.	.	.	82
Massachusetts* **	.	.	5	4	.	3	.	1	2	3	.	.	.	.	.	18
Michigan	.	8	13	5	7	4	2	6	2	7	8	6	4	11	2	85
Minnesota	5	17	.	2	9	6	13	10	4	6	8	10	5	.	.	95
Missouri*	.	.	.	.	3	5	6	10	6	2	3	.	10	1	.	46
Montana*	.	.	.	.	2	2	4	4	4	5	.	3	3	9	.	36
Nebraska	.	1	10	3	6	4	11	11	6	3	12	10	9	1	.	87
New Jersey	.	.	3	2	9	10	12	30	21	2	6	17	8	.	.	120
New Mexico*	.	.	.	.	8	4	2	2	2	6	5	2	4	.	.	35
New York* **	.	6	2	1	4	1	5	3	3	4	4	4	.	.	.	37
Ohio*	10	11	3	2	8	5	12	12	8	3	.	.	.	.	.	74
Oregon*	.	.	8	1	1	4	8	1	1	1	2	3	.	.	.	30
Pennsylvania*	2	6	6	2	5	3	4	4	6	1	.	.	.	.	.	39
Rhode Island*	.	2	9	4	5	3	4	1	3	3	5	2	.	.	.	41
Utah	.	.	.	7	.	12	15	.	20	10	3	19	6	.	.	92
Vermont*	.	6	5	3	5	.	5	2	2	4	2	5	1	.	.	40
Wisconsin*	.	1	7	2	2	2	2	6	1	2	2	6	3	.	1	37
Puerto Rico*	.	.	.	.	.	8	11	20	.	.	.	.	.	12	.	51
26 Areas Total	31	105	117	80	139	176	175	193	155	150	118	125	82	37	3	1686

Notes:
* Child data for California, Connecticut, Georgia, Hawaii, Illinois, Massachusetts, Missouri, Montana, New Mexico, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Vermont, Wisconsin, and Puerto Rico were not included in the public-release data file because of having too few records (<75) to produce reliable weights.
** States only included in version 1 of the sample split: Massachussetts and New York
*** States who did not collect child data: Arizona, Iowa, Kentucky, New Hampshire, Nevada, and Texas

Appendix A

Appendix B: Instructions for Assigning Additional ACBS Disposition Codes

Following are descriptions of the ACBS disposition codes adapted from standard BRFSS disposition codes and the ACBS disposition codes added to the standard set of BRFSS disposition codes. For detailed definitions for the standard BRFSS disposition codes, see the Data Quality Handbook for each survey year (http://www.cdc.gov/brfss/annual_data/annual_data.htm).

I.   Eligible, contacted: complete interview

1100 Complete
  Definition: Respondent completes the ACBS interview through the last question.

1200 Partial complete
  Definition: Respondent completes the ACBS interview at least through the end of Section 8 (medications).

II. Eligible, contacted: refusal

4413 Refused to participate in the call-back during the BRFSS interview
  Definition: During the BRFSS interview, respondents who indicate they have ever been told by a doctor that they have asthma are asked if they will participate in an additional survey at a later date. Some state Institutional Review Boards (IRBs) require that the content of the additional survey (asthma) be disclosed; other state IRBs require that the specific content not be disclosed. Some states have multiple call-back surveys in the field and do not specify the content of any of the call-back interviews. If a respondent refuses to participate in the call-back survey, that record is assigned disposition code 4413.

2112 Refused to begin the ACBS interview after contacted
  Definition: If the selected respondent is contacted for the ACBS interview but refuses to begin the interview, then the record is assigned code 2112.

2120 Terminated within the questionnaire during the ACBS interview
  Definition: If the respondent is contacted for the ACBS and terminates after the interview begins (section 3) but before completing section 8, then record is considered incomplete and is assigned disposition code 2120.

2211 Refused to allow combining ACBS responses with BRFSS responses
  Definition: Some states require that the respondent provide active approval to combine their responses from the initial BRFSS interview with their responses from the ACBS interview. This approval may be requested at either the initial BRFSS interview or at the beginning of the ACBS interview. If the respondent does not approve combining data from the two interviews, the record is assigned disposition code 2211.

2212 Refused to answer the "ever had asthma" question during the ACBS interview
  Definition: The selected respondent is contacted for the ACBS interview but refuses to answer the initial asthma question. If the respondent answers "don't know" or "refused" to the ACBS question EVER-ASTH (2.1) "Have you ever been told by a doctor or other health professional that (you have/sample child has) asthma?", then the record is assigned code 2212.

III. Eligible, lost to follow-up because unable to contact or communicate with the BRFSS respondent

4306 Selected ACBS respondent no longer living in the BRFSS household
    Definition: The BRFSS respondent with asthma left the BRFSS household between the BRFSS interview and the ACBS interview. If the selected respondent (from the BRFSS) no longer lives in the BRFSS household but did live in the household during the BRFSS interview, then attempts should be made to obtain new contact information for the selected respondent, and the follow-up should be conducted using the new telephone number. If this is not possible or the household refuses to provide new contact information, then the record is assigned disposition code 4306.

Refer to the Data Quality Handbook for each survey year for the definitions of all other codes in this category (http://www.cdc.gov/brfss/annual_data/annual_data.htm).

IV. Eligible, lost to follow-up for technical reasons

Refer to the Data Quality Handbook for each survey year for the definitions of all codes in this category (http://www.cdc.gov/brfss/annual_data/annual_data.htm).

V. Ineligible

2290 The person the most knowledgeable about the selected child with asthma is not the parent or legal guardian (child ineligible)
    Definition: This code applies only to the child ACBS interview. The child selected during the BRFSS interview is eligible for the ACBS (the BRFSS respondent indicated that the selected child has an asthma diagnosis). The ACBS child protocol allows a parent or guardian to transfer the interview to a more knowledgeable proxy respondent. If the BRFSS respondent is not the parent or guardian of the selected child with asthma, but the parent or guardian is present to transfer to the person most knowledgeable about the child's heath, but the most knowledgeable person is not available, then the child is ineligible for the ACBS. The child record is assigned disposition code 2290

2291 No parent or legal guardian in the household (child ineligible)
    Definition: This code applies only to the child ACBS interview. The child selected during the BRFSS interview is eligible for the ACBS (the BRFSS respondent indicated that the selected child has an asthma diagnosis); however, ACBS child protocol requires that the BRFSS respondent must be the parent or guardian of the child to provide proxy responses for the child or to approve transfer to a more-knowledgeable proxy respondent. If there is no parent or guardian of the selected child with asthma in the household, the child is ineligible for the ACBS. The child record is assigned disposition code 2291.

4405 Out-of-state
    Definition: The BRFSS question that determines eligibility for the ACBS is "Have you ever been told by a doctor, nurse, or other health professional that (you have/the sample child has) asthma?" Respondents who answer "yes" are eligible for the ACBS. If the respondent is a state resident at the time of the BRFSS interview, but moves to an out-of-state residence between the BRFSS interview and the ACBS interview, the respondent is not eligible for the ACBS if either the new state or the old state is not participating in record transfers, and the record is assigned disposition code 4405.

4700 Household, no eligible respondent (respondent does not have asthma)
    Definition: The BRFSS question that determines eligibility for the ACBS is "Have you ever been told by a doctor, nurse, or other health professional that (you have/the sample child has) asthma?" Respondents who answer "yes" are eligible for the ACBS. If the respondent informs the ACBS interviewer that the recorded response from the BRFSS interview was in error and terminates the call, then the respondent is not eligible for the ACBS, and the record is assigned disposition code 4700.

Appendix B

4411 Selected respondent not eligible for follow-up
Definition: If the respondent disagrees with the recorded response to the asthma question from the BRFSS interview and answers "no" to the ACBS question EVER-ASTH (2.1) "Have you ever been told by a doctor or other health professional that (you have/the sample child has) asthma?", then the respondent is not eligible for the ACBS, and the record is assigned disposition code 4411.

4412 Transferred from BRFSS but not attempted (excluded by state)
Definition: The BRFSS question that determines eligibility for the ACBS is "Have you ever been told by a doctor, nurse, or other health professional that (you have/the sample child has) asthma?" Respondents who answer "yes" are eligible for the ACBS. Eligible respondents are then asked for permission to call back. Those that agree should be called for the ACBS interview, but if a respondent eligible to be called is transferred from BRFSS to the ACBS but never called, then the record is assigned disposition code 4412.

4471 Misdiagnosed asthma in respondent (2008 and later)
Definition: The BRFSS question that determines eligibility for the ACBS is "Have you ever been told by a doctor, nurse, or other health professional that (you have/the sample child has) asthma?" Respondents who answer "yes" are eligible for the ACBS. The initial diagnosis, however, could have been in error and changed. This misdiagnosis is not captured by the BRFSS or ACBS. If the respondent informs the interviewer of the misdiagnosis, the respondent is not eligible for the ACBS, and the record is assigned disposition code 4470.

4480 Not recruited for call-back at BRFSS interview (excluded by state)
Definition: The BRFSS question that determines eligibility for the ACBS is "Have you ever been told by a doctor, nurse, or other health professional that (you have/the sample child has) asthma?" Respondents who answer "yes" are eligible for the ACBS. Eligible respondents are then asked for permission to call back. Those who agree should be called for the ACBS interview. However, if a respondent eligible to be called is not transferred from BRFSS to the ACBS and is never called, then the record is assigned disposition code 4480.

4490 Random child/adult selection: adult ineligible, child selected
Definition: If both the BRFSS respondent and the randomly selected child in the household have asthma and the BRFSS respondent agrees to the call-back interview, one or the other is randomly selected to be eligible for the call-back. If the child is selected, the adult is ineligible, and the adult record is assigned disposition code 4490.

4491 Random child/adult selection: child ineligible, adult selected
Definition: If both the BRFSS respondent and the randomly selected child in the household have asthma and the BRFSS respondent agrees to the call-back interview, one or the other is randomly selected to be eligible for the call-back. If the adult is selected, the child is ineligible, and the child record is assigned disposition code 4491.

Appendix C:
Asthma Call-back Survey (ACBS)
Non-response Bias Analysis

Two data tables follow for adult and child participants. The first table reports ACBS unweighted frequencies for respondents, non-respondents, and BRFSS-eligible asthma respondents by age, sex, and race/ethnicity demographic categories for each state. The second table reports estimated current asthma percentage among individuals who have ever been diagnosed with asthma.

Table 1A. Percentage of ACBS adult respondents, non-respondents, and BRFSS-eligible asthma respondents by demographic groups and state/territory
Table 1B. Percentage of ACBS child respondents, non-respondents, and BRFSS-eligible asthma respondents by demographic groups and state/territory

Table 2A. Estimated percentage of current asthma status among adults ever-diagnosed with asthma by state/territory
Table 2B. Estimated percentage of current asthma status among children ever-diagnosed with asthma by state/territory

Table 1A. Percentage of ACBS adult* respondents, and BRFSS-eligible asthma respondents by demographic groups and state/territory										
ADULT		BRFSS				ACBS		ACBS			
State	Demographics	Eligible Asthma Respondents				Non-Respondents		Respondents			
		Sample size (unweighted)	Percent (unweighted)	Weighted total	Percent (weighted)	Sample size (unweighted)	Percent (unweighted)	Sample size (unweighted)	Percent (unweighted)	Weighted total	Percent (weighted)
States/areas total	Male	14,571	36	10,297,271	41	9,323	36	5,248	36	10,319,695	41
	Female	25,716	64	14,967,066	59	16,359	64	9,357	64	14,997,573	59
	Age 18 to 24	3,203	8	3,918,089	16	2,338	9	865	6	3,904,853	16
	Age 25 to 34	4,750	12	4,499,778	18	3,425	14	1,325	9	4,532,096	18
	Age 35 to 44	4,806	12	3,807,652	15	3,405	14	1,401	10	3,474,322	14
	Age 45 to 54	6,260	16	3,935,088	16	4,068	16	2,192	15	4,335,472	17
	Age 55 to 64	8,581	22	4,238,465	17	5,094	20	3,487	24	4,297,331	17
	Age 65 or older	12,230	31	4,591,192	18	6,971	28	5,259	36	4,627,309	18
	White - Non-Hispanic	29,461	75	15,380,359	62	18,147	72	11,314	79	16,602,716	66
	Black - Non-Hispanic	2,717	7	2,966,142	12	1,827	7	890	6	2,582,363	10
	Other race only, Non-Hispanic	1,863	5	1,457,112	6	1,311	5	552	4	1,289,776	5
	Multiracial, Non-Hispanic	1,470	4	593,861	2	908	4	562	4	759,504	3
	Hispanic	3,992	10	4,422,900	18	2,905	12	1,087	8	3,782,049	15
Arizona	Male	857	38	363,097	45	580	38	277	37	365,189	45
	Female	1,430	63	451,532	55	957	62	473	63	452,270	55
	Age 18 to 24	164	7	133,610	17	138	9	26	4	135,473	17
	Age 25 to 34	230	10	156,803	20	187	12	43	6	156,803	19
	Age 35 to 44	238	11	104,165	13	190	13	48	7	104,106	13
	Age 45 to 54	363	16	126,344	16	245	16	118	16	125,394	16

Appendix C

	Age 55 to 64	453	20	123,144	15	289	19	164	22	124,334	15
	Age 65 or older	806	36	159,064	20	464	31	342	46	160,417	20
	White - Non-Hispanic	1,614	73	491,077	62	1,028	69	586	80	510,209	64
	Black - Non-Hispanic	81	4	40,288	5	57	4	24	3	34,448	4
	Other race only, Non-Hispanic	159	7	52,316	7	127	9	32	4	49,215	6
	Multiracial, Non-Hispanic	49	2	13,139	2	30	2	19	3	22,713	3
	Hispanic	321	14	197,648	25	246	17	75	10	182,182	23
California	Male	527	41	1,707,306	44	388	40	139	45	1,709,299	44
	Female	762	59	2,186,085	56	589	60	173	55	2,187,042	56
	Age 18 to 24	125	10	590,749	15	105	11	20	6	564,018	15
	Age 25 to 34	184	14	574,593	15	145	15	39	13	602,281	16
	Age 35 to 44	181	14	630,150	16	148	15	33	11	423,540	11
	Age 45 to 54	181	14	609,933	16	142	15	39	13	801,195	21
	Age 55 to 64	275	22	715,378	19	207	21	68	22	718,190	19
	Age 65 or older	333	26	742,417	19	221	23	112	36	743,807	19
	White - Non-Hispanic	708	56	1,764,619	46	526	55	182	59	1,835,427	47
	Black - Non-Hispanic	81	6	303,231	8	63	7	18	6	186,598	5
	Other race only, Non-Hispanic	115	9	593,127	15	87	9	28	9	558,033	14
	Multiracial, Non-Hispanic	53	4	102,044	3	36	4	17	6	188,267	5
	Hispanic	318	25	1,095,547	28	253	26	65	21	1,112,618	29
Connecticut	Male	568	36	193,410	42	352	34	216	40	193,567	42
	Female	1,007	64	272,871	59	683	66	324	60	273,417	59
	Age 18 to 24	104	7	84,095	18	74	7	30	6	84,095	18
	Age 25 to 34	163	11	87,654	19	122	12	41	8	87,654	19

Appendix C

State	Category										
	Age 35 to 44	191	12	71,408	16	144	14	47	9	71,408	15
	Age 45 to 54	288	19	72,040	16	212	21	76	14	71,849	16
	Age 55 to 64	362	23	74,305	16	213	21	149	28	76,912	17
	Age 65 or older	443	29	71,817	16	250	25	193	36	72,688	16
	White - Non-Hispanic	1,174	76	300,626	66	730	72	444	83	342,536	74
	Black - Non-Hispanic	111	7	43,708	10	87	9	24	5	38,560	8
	Other race only, Non-Hispanic	51	3	17,402	4	32	3	19	4	23,014	5
	Multiracial, Non-Hispanic	33	2	5,446	1	18	2	15	3	9,823	2
	Hispanic	178	12	89,310	20	144	14	34	6	50,757	11
Florida	Male	909	35	775,429	38	609	35	300	33	776,103	38
	Female	1,719	65	1,260,254	62	1,115	65	604	67	1,263,200	62
	Age 18 to 24	198	8	284,696	14	142	8	56	6	284,696	14
	Age 25 to 34	307	12	358,225	18	208	12	99	11	361,628	18
	Age 35 to 44	317	12	330,150	16	222	13	95	11	256,959	13
	Age 45 to 54	409	16	280,082	14	266	16	143	16	362,188	18
	Age 55 to 64	585	23	369,926	18	372	22	213	24	374,829	18
	Age 65 or older	789	30	395,191	20	491	29	298	33	399,002	20
	White - Non-Hispanic	1,795	71	1,066,908	54	1,159	71	636	72	1,287,447	64
	Black - Non-Hispanic	280	11	266,264	14	188	11	92	10	248,533	12
	Other race only, Non-Hispanic	100	4	43,408	2	60	4	40	5	48,852	2
	Multiracial, Non-Hispanic	55	2	18,320	1	33	2	22	3	24,026	1
	Hispanic	300	12	579,099	29	204	12	96	11	417,042	21
Georgia	Male	210	32	343,215	40	137	34	73	29	343,215	40
	Female	444	68	510,796	60	269	66	175	71	510,796	60

Appendix C

	Age 18 to 24	49	8	139,314	17	34	9	15	6	121,441	14
	Age 25 to 34	65	10	130,233	15	33	8	32	13	151,021	18
	Age 35 to 44	73	11	152,129	18	44	11	29	12	166,542	20
	Age 45 to 54	97	15	137,562	16	62	16	35	14	128,701	15
	Age 55 to 64	152	24	155,353	18	95	24	57	23	155,508	18
	Age 65 or older	211	33	130,160	15	131	33	80	32	130,798	15
	White - Non-Hispanic	366	58	482,514	59	224	58	142	58	463,540	56
	Black - Non-Hispanic	195	31	270,325	33	124	32	71	29	281,276	34
	Other race only, Non-Hispanic	18	3	17,615	2	13	3	5	2	21,254	3
	Multiracial, Non-Hispanic	23	4	20,195	3	13	3	10	4	23,446	3
	Hispanic	29	5	29,605	4	14	4	15	6	39,570	5
Hawaii	Male	541	42	85,341	45	366	43	175	41	85,804	45
	Female	738	58	104,675	55	489	57	249	59	104,796	55
	Age 18 to 24	124	10	31,127	17	95	11	29	7	28,909	15
	Age 25 to 34	204	16	42,050	22	155	18	49	12	44,559	24
	Age 35 to 44	180	14	31,218	17	132	16	48	11	30,530	16
	Age 45 to 54	185	15	23,472	13	128	15	57	14	24,446	13
	Age 55 to 64	234	19	25,108	13	143	17	91	22	25,305	13
	Age 65 or older	338	27	34,968	19	190	23	148	35	35,087	19
	White - Non-Hispanic	288	23	36,967	20	164	20	124	30	49,548	27
	Black - Non-Hispanic	11	1	5,173	3	8	1	3	1	3,838	2
	Other race only, Non-Hispanic	381	30	65,870	35	270	32	111	27	61,706	33
	Multiracial, Non-Hispanic	421	33	53,003	28	283	34	138	33	53,005	29
	Hispanic	161	13	26,243	14	118	14	43	10	18,148	10

Appendix C

Illinois	Male	250	38	517,823	44	158	39	92	36	519,771	45
	Female	413	62	648,913	56	248	61	165	64	648,913	56
	Age 18 to 24	46	7	152,498	13	32	8	14	5	148,065	13
	Age 25 to 34	70	11	207,181	18	45	11	25	10	211,615	18
	Age 35 to 44	93	14	215,304	19	61	15	32	13	215,304	18
	Age 45 to 54	95	14	168,271	15	60	15	35	14	169,944	15
	Age 55 to 64	134	20	205,343	18	80	20	54	21	208,162	18
	Age 65 or older	223	34	215,595	19	126	31	97	38	215,595	18
	White - Non-Hispanic	450	68	771,381	66	269	67	181	71	851,417	73
	Black - Non-Hispanic	114	17	184,241	16	77	19	37	15	108,184	9
	Other race only, Non-Hispanic	19	3	60,730	5	11	3	8	3	67,651	6
	Multiracial, Non-Hispanic	6	1	14,709	1	4	1	2	1	2,223	0
	Hispanic	70	11	130,471	11	43	11	27	11	132,014	11
Indiana	Male	636	34	286,956	39	380	34	256	34	287,167	39
	Female	1,241	66	442,873	61	752	66	489	66	444,454	61
	Age 18 to 24	148	8	151,772	21	105	10	43	6	151,772	21
	Age 25 to 34	166	9	114,721	16	120	11	46	6	115,164	16
	Age 35 to 44	199	11	112,688	16	139	13	60	8	112,688	16
	Age 45 to 54	283	15	110,317	15	166	15	117	16	112,266	15
	Age 55 to 64	413	22	113,666	16	231	21	182	25	114,699	16
	Age 65 or older	642	35	120,606	17	349	31	293	40	122,686	17
	White - Non-Hispanic	1,539	84	575,445	80	894	80	645	88	611,110	85
	Black - Non-Hispanic	152	8	79,981	11	106	10	46	6	57,404	8
	Other race only, Non-Hispanic	35	2	13,775	2	27	2	8	1	4,711	1

Appendix C

	Multiracial, Non-Hispanic	53	3	16,335	2	38	3	15	2	16,297	2
	Hispanic	65	4	34,063	5	47	4	18	3	30,859	4
Iowa	Male	355	40	123,581	41	216	40	139	41	124,133	41
	Female	528	60	175,390	59	331	61	197	59	175,821	59
	Age 18 to 24	74	9	53,550	18	47	9	27	8	53,550	18
	Age 25 to 34	112	13	53,645	18	84	16	28	8	53,909	18
	Age 35 to 44	104	12	43,656	15	71	13	33	10	39,419	13
	Age 45 to 54	136	16	41,516	14	83	15	53	16	46,843	16
	Age 55 to 64	186	21	48,368	16	107	20	79	24	48,761	16
	Age 65 or older	259	30	55,127	19	146	27	113	34	55,787	19
	White - Non-Hispanic	786	90	259,444	88	479	89	307	93	268,202	91
	Black - Non-Hispanic	20	2	12,349	4	13	2	7	2	14,173	5
	Other race only, Non-Hispanic	17	2	7,764	3	13	2	4	1	2,770	1
	Multiracial, Non-Hispanic	18	2	3,732	1	11	2	7	2	3,817	1
	Hispanic	29	3	11,283	4	22	4	7	2	6,161	2
Kansas	Male	1,119	40	124,258	42	804	40	315	39	124,258	42
	Female	1,674	60	173,036	58	1,189	60	485	61	173,225	58
	Age 18 to 24	276	10	58,735	20	227	12	49	6	58,735	20
	Age 25 to 34	359	13	53,091	18	276	14	83	11	52,451	18
	Age 35 to 44	350	13	46,277	16	285	15	65	8	46,915	16
	Age 45 to 54	404	15	41,789	14	293	15	111	14	42,298	14
	Age 55 to 64	595	22	44,729	15	397	20	198	25	44,775	15
	Age 65 or older	769	28	49,430	17	482	25	287	36	49,672	17
	White - Non-Hispanic	2,314	84	229,679	78	1,631	83	683	87	245,087	84
	Black - Non-Hispanic	141	5	20,191	7	115	6	26	3	8,163	3

Appendix C

	Other race only, Non-Hispanic	86	3	8,835	3	60	3	26	3	7,107	2
	Multiracial, Non-Hispanic	88	3	7,931	3	59	3	29	4	12,590	4
	Hispanic	118	4	26,152	9	94	5	24	3	17,836	6
Kentucky	Male	440	35	225,609	45	305	37	135	30	225,617	45
	Female	832	65	274,911	55	513	63	319	70	275,411	55
	Age 18 to 24	98	8	61,404	12	80	10	18	4	45,525	9
	Age 25 to 34	127	10	83,157	17	94	12	33	7	99,109	20
	Age 35 to 44	145	12	80,024	16	101	12	44	10	79,080	16
	Age 45 to 54	219	17	90,659	18	143	18	76	17	91,267	18
	Age 55 to 64	319	25	89,806	18	180	22	139	31	90,107	18
	Age 65 or older	357	28	93,496	19	215	26	142	31	94,131	19
	White - Non-Hispanic	1,009	80	415,291	84	647	80	362	81	436,296	88
	Black - Non-Hispanic	152	12	50,988	10	96	12	56	13	42,613	9
	Other race only, Non-Hispanic	33	3	10,045	2	24	3	9	2	4,795	1
	Multiracial, Non-Hispanic	45	4	9,191	2	31	4	14	3	5,790	1
	Hispanic	17	1	10,138	2	11	1	6	1	5,888	1
Maine	Male	514	35	66,955	40	264	34	250	35	67,492	40
	Female	977	66	101,958	60	508	66	469	65	103,011	60
	Age 18 to 24	78	5	21,431	13	48	6	30	4	21,936	13
	Age 25 to 34	172	12	33,339	20	118	15	54	8	33,936	20
	Age 35 to 44	182	12	23,127	14	107	14	75	11	23,127	14
	Age 45 to 54	222	15	24,922	15	125	16	97	14	26,090	15
	Age 55 to 64	361	24	30,156	18	170	22	191	27	30,622	18
	Age 65 or older	466	32	34,488	21	196	26	270	38	34,619	20
	White - Non-Hispanic	1,365	93	152,591	92	706	93	659	94	156,796	93

Appendix C

State											
	Black - Non-Hispanic	9	1	3,054	2	6	1	3	0	746	0
	Other race only, Non-Hispanic	34	2	4,475	3	22	3	12	2	4,998	3
	Multiracial, Non-Hispanic	42	3	5,041	3	16	2	26	4	5,020	3
	Hispanic	15	1	1,417	1	11	1	4	1	894	1
Massachusetts	Male	374	37	341,581	43	239	36	135	39	342,788	43
	Female	644	63	458,628	57	435	65	209	61	459,929	57
	Age 18 to 24	62	6	122,621	16	47	7	15	5	122,368	16
	Age 25 to 34	116	12	140,398	18	84	13	32	10	143,710	18
	Age 35 to 44	104	11	106,168	14	70	11	34	10	109,660	14
	Age 45 to 54	153	16	121,037	16	101	16	52	15	132,212	17
	Age 55 to 64	235	24	147,001	19	151	23	84	25	147,830	19
	Age 65 or older	318	32	136,701	18	198	30	120	36	134,898	17
	White - Non-Hispanic	791	80	572,901	74	509	78	282	84	625,043	79
	Black - Non-Hispanic	46	5	53,695	7	32	5	14	4	20,171	3
	Other race only, Non-Hispanic	31	3	32,798	4	24	4	7	2	37,963	5
	Multiracial, Non-Hispanic	33	3	19,225	3	20	3	13	4	35,192	4
	Hispanic	87	9	96,738	13	67	10	20	6	76,773	10
Michigan	Male	558	34	446,785	37	304	34	254	35	447,817	37
	Female	1,071	66	753,001	63	588	66	483	66	755,466	63
	Age 18 to 24	181	11	218,967	19	110	13	71	10	219,999	18
	Age 25 to 34	185	12	194,345	16	109	12	76	10	194,345	16
	Age 35 to 44	189	12	174,228	15	118	14	71	10	177,185	15
	Age 45 to 54	239	15	172,879	15	132	15	107	15	176,274	15
	Age 55 to 64	327	20	211,734	18	156	18	171	23	213,300	18

Appendix C

	Age 65 or older	486	30	210,890	18	251	29	235	32	212,509	18
	White - Non-Hispanic	1,232	77	864,227	73	653	75	579	80	925,883	78
	Black - Non-Hispanic	227	14	216,256	18	138	16	89	12	171,468	14
	Other race only, Non-Hispanic	38	2	34,310	3	23	3	15	2	28,066	2
	Multiracial, Non-Hispanic	63	4	29,090	3	34	4	29	4	29,781	3
	Hispanic	36	2	37,420	3	22	3	14	2	32,699	3
Minnesota	Male	679	40	189,408	43	402	39	277	40	189,713	43
	Female	1,035	60	255,097	57	622	61	413	60	255,246	57
	Age 18 to 24	154	9	75,072	17	109	11	45	7	75,072	17
	Age 25 to 34	222	13	78,019	18	140	14	82	12	78,019	18
	Age 35 to 44	221	13	70,720	16	138	14	83	12	70,750	16
	Age 45 to 54	251	15	62,321	14	149	15	102	15	65,367	15
	Age 55 to 64	359	21	76,644	17	212	21	147	21	77,755	18
	Age 65 or older	491	29	77,642	18	260	26	231	34	77,998	18
	White - Non-Hispanic	1,469	88	371,541	86	863	87	606	89	386,410	88
	Black - Non-Hispanic	52	3	23,769	6	34	3	18	3	18,346	4
	Other race only, Non-Hispanic	60	4	14,617	3	41	4	19	3	9,099	2
	Multiracial, Non-Hispanic	37	2	7,926	2	22	2	15	2	11,769	3
	Hispanic	58	4	13,308	3	36	4	22	3	12,072	3
Missouri	Male	294	33	230,931	40	190	34	104	31	230,931	40
	Female	609	67	351,455	60	377	67	232	69	353,174	61
	Age 18 to 24	81	9	97,735	17	56	10	25	8	97,026	17
	Age 25 to 34	109	12	106,222	19	84	15	25	8	109,281	19
	Age 35 to 44	94	11	82,304	14	67	12	27	8	64,897	11

Appendix C

	Age 45 to 54	148	17	93,020	16	98	18	50	15	112,149	19
	Age 55 to 64	167	19	81,949	14	89	16	78	23	82,856	14
	Age 65 or older	291	33	110,937	19	162	29	129	39	111,972	19
	White - Non-Hispanic	690	77	442,911	77	424	76	266	80	475,283	82
	Black - Non-Hispanic	135	15	82,127	14	90	16	45	14	69,699	12
	Other race only, Non-Hispanic	27	3	17,726	3	16	3	11	3	19,553	3
	Multiracial, Non-Hispanic	25	3	16,172	3	17	3	8	2	5,671	1
	Hispanic	15	2	16,158	3	11	2	4	1	12,774	2
Montana	Male	302	40	52,814	47	183	39	119	42	52,949	47
	Female	453	60	58,629	53	288	61	165	58	58,734	53
	Age 18 to 24	62	8	17,750	16	47	10	15	5	21,056	19
	Age 25 to 34	83	11	18,633	17	64	14	19	7	15,781	14
	Age 35 to 44	81	11	16,722	15	63	14	18	6	16,548	15
	Age 45 to 54	90	12	13,334	12	62	13	28	10	13,246	12
	Age 55 to 64	180	24	21,020	19	104	22	76	27	21,128	19
	Age 65 or older	250	34	22,322	20	124	27	126	45	22,831	21
	White - Non-Hispanic	568	77	88,846	81	342	74	226	81	96,442	87
	Other race only, Non-Hispanic	118	16	9,542	9	77	17	41	15	11,893	11
	Multiracial, Non-Hispanic	21	3	3,056	3	16	4	5	2	1,075	1
	Hispanic	29	4	7,056	6	21	5	8	3	1,852	2
Nebraska	Male	657	39	74,127	44	377	39	280	40	74,148	43
	Female	1,015	61	96,346	57	600	61	415	60	97,221	57
	Age 18 to 24	146	9	31,068	18	101	10	45	7	31,068	18
	Age 25 to 34	238	14	34,337	20	166	17	72	10	34,845	20
	Age 35 to 44	191	12	24,885	15	133	14	58	8	25,105	15

Appendix C

	Age 45 to 54	244	15	26,382	16	145	15	99	14	26,694	16
	Age 55 to 64	334	20	25,149	15	170	18	164	24	25,132	15
	Age 65 or older	514	31	27,917	16	259	27	255	37	28,005	16
	White - Non-Hispanic	1,459	88	142,531	84	842	87	617	90	142,476	84
	Black - Non-Hispanic	41	3	10,440	6	18	2	23	3	13,462	8
	Other race only, Non-Hispanic	44	3	2,819	2	33	3	11	2	2,651	2
	Multiracial, Non-Hispanic	34	2	4,690	3	21	2	13	2	5,171	3
	Hispanic	79	5	8,529	5	54	6	25	4	6,882	4
Nevada	Male	170	36	102,242	37	97	33	73	40	102,242	38
	Female	305	64	171,045	63	193	67	112	61	169,838	62
	Age 18 to 24	38	8	37,197	14	30	11	8	4	37,544	14
	Age 25 to 34	46	10	41,791	15	33	12	13	7	39,677	15
	Age 35 to 44	56	12	45,201	17	38	13	18	10	32,470	12
	Age 45 to 54	72	15	44,740	17	46	16	26	14	56,065	21
	Age 55 to 64	110	24	51,788	19	60	21	50	27	53,025	20
	Age 65 or older	147	31	50,043	19	79	28	68	37	50,447	19
	White - Non-Hispanic	315	67	145,579	54	185	65	130	71	168,679	62
	Black - Non-Hispanic	37	8	41,564	15	26	9	11	6	26,933	10
	Other race only, Non-Hispanic	34	7	35,366	13	24	8	10	5	14,810	6
	Multiracial, Non-Hispanic	31	7	8,933	3	14	5	17	9	15,489	6
	Hispanic	53	11	40,138	15	37	13	16	9	45,754	17
New Hampshire	Male	298	34	76,752	41	211	36	87	30	76,810	41
	Female	582	66	109,765	59	381	64	201	70	110,326	59
	Age 18 to 24	43	5	28,034	15	37	6	6	2	21,276	11

Appendix C

	Age 25 to 34	77	9	32,360	18	60	10	17	6	39,118	21
	Age 35 to 44	89	10	26,031	14	57	10	32	11	34,862	19
	Age 45 to 54	146	17	31,942	17	101	17	45	16	24,110	13
	Age 55 to 64	203	24	34,055	19	136	23	67	24	34,651	19
	Age 65 or older	306	35	32,084	17	189	33	117	41	32,211	17
	White - Non-Hispanic	808	94	167,410	91	545	94	263	94	160,523	88
	Other race only, Non-Hispanic	21	2	5,566	3	16	3	5	2	4,392	2
	Multiracial, Non-Hispanic	19	2	2,873	2	10	2	9	3	8,412	5
	Hispanic	14	2	8,059	4	10	2	4	1	9,279	5
New Jersey	Male	435	31	335,295	42	251	31	184	30	335,295	41
	Female	981	69	472,242	59	558	69	423	70	473,839	59
	Age 18 to 24	69	5	91,829	12	37	5	32	5	91,829	11
	Age 25 to 34	126	9	144,372	18	76	10	50	8	144,372	18
	Age 35 to 44	137	10	99,969	13	91	12	46	8	103,617	13
	Age 45 to 54	264	19	163,407	21	166	21	98	16	170,820	21
	Age 55 to 64	333	24	137,664	17	171	22	162	27	141,119	17
	Age 65 or older	464	33	156,068	20	245	31	219	36	157,376	19
	White - Non-Hispanic	865	62	429,386	54	457	58	408	68	477,491	60
	Black - Non-Hispanic	232	17	139,630	18	149	19	83	14	109,360	14
	Other race only, Non-Hispanic	55	4	44,641	6	37	5	18	3	29,502	4
	Multiracial, Non-Hispanic	28	2	12,285	2	12	2	16	3	22,071	3
	Hispanic	206	15	169,958	21	129	17	77	13	163,433	20
New Mexico	Male	332	36	95,670	41	201	34	131	39	95,670	41
	Female	592	64	138,972	59	387	66	205	61	139,172	59

Appendix C

	Age 18 to 24	65	7	39,557	17	52	9	13	4	37,471	16
	Age 25 to 34	125	14	52,547	22	98	17	27	8	54,633	23
	Age 35 to 44	107	12	35,045	15	75	13	32	10	35,045	15
	Age 45 to 54	124	14	31,929	14	72	12	52	16	32,101	14
	Age 55 to 64	210	23	37,084	16	131	22	79	24	37,084	16
	Age 65 or older	290	32	37,913	16	158	27	132	39	38,128	16
	White - Non-Hispanic	482	54	101,858	45	285	50	197	60	114,724	50
	Black - Non-Hispanic	7	1	2,189	1	3	1	4	1	3,528	2
	Other race only, Non-Hispanic	110	12	21,448	9	75	13	35	11	22,664	10
	Multiracial, Non-Hispanic	19	2	6,071	3	10	2	9	3	6,629	3
	Hispanic	279	31	97,097	43	194	34	85	26	82,285	36
New York	Male	283	35	839,681	37	168	32	115	42	840,332	37
	Female	523	65	1,447,139	63	361	68	162	59	1,452,208	63
	Age 18 to 24	61	8	336,423	15	34	7	27	10	365,234	16
	Age 25 to 34	103	13	511,165	23	76	15	27	10	483,421	21
	Age 35 to 44	98	12	288,370	13	70	14	28	10	271,131	12
	Age 45 to 54	138	17	345,945	16	101	19	37	14	355,603	16
	Age 55 to 64	152	19	286,186	13	99	19	53	19	314,746	14
	Age 65 or older	243	31	465,943	21	140	27	103	38	472,180	21
	White - Non-Hispanic	521	66	1,172,564	52	326	63	195	71	1,310,926	58
	Black - Non-Hispanic	103	13	380,252	17	63	12	40	15	501,618	22
	Other race only, Non-Hispanic	29	4	169,878	8	23	5	6	2	107,744	5
	Multiracial, Non-Hispanic	22	3	88,770	4	15	3	7	3	72,479	3
	Hispanic	113	14	426,539	19	87	17	26	10	261,379	12

Appendix C

Ohio	Male	495	33	459,348	39	325	33	170	32	459,455	39
	Female	1,007	67	714,390	61	648	67	359	68	715,687	61
	Age 18 to 24	105	7	204,562	18	71	7	34	6	204,982	17
	Age 25 to 34	129	9	182,742	16	88	9	41	8	182,742	16
	Age 35 to 44	150	10	159,427	14	107	11	43	8	162,040	14
	Age 45 to 54	260	17	219,059	19	167	17	93	18	219,059	19
	Age 55 to 64	341	23	179,821	15	213	22	128	24	180,934	15
	Age 65 or older	511	34	224,341	19	321	33	190	36	225,385	19
	White - Non-Hispanic	1,224	83	902,384	78	780	82	444	84	918,293	78
	Black - Non-Hispanic	140	10	174,730	15	97	10	43	8	175,551	15
	Other race only, Non-Hispanic	40	3	23,753	2	26	3	14	3	16,873	1
	Multiracial, Non-Hispanic	44	3	26,414	2	28	3	16	3	42,232	4
	Hispanic	28	2	33,933	3	19	2	9	2	21,693	2
Oregon	Male	308	37	213,680	42	238	39	70	30	213,858	42
	Female	528	63	295,579	58	368	61	160	70	296,006	58
	Age 18 to 24	58	7	57,577	12	45	8	13	6	72,148	14
	Age 25 to 34	131	16	116,407	23	105	18	26	12	102,013	20
	Age 35 to 44	93	11	66,655	13	76	13	17	8	55,340	11
	Age 45 to 54	109	13	61,970	12	80	14	29	13	75,307	15
	Age 55 to 64	183	22	94,136	19	119	20	64	28	95,523	19
	Age 65 or older	246	30	103,760	21	168	28	78	34	103,308	21
	White - Non-Hispanic	675	83	413,686	83	483	82	192	85	448,865	89
	Other race only, Non-Hispanic	19	2	20,653	4	15	3	4	2	17,834	4
	Multiracial, Non-Hispanic	72	9	21,058	4	48	8	24	11	18,205	4
	Hispanic	40	5	32,525	7	34	6	6	3	19,940	4

Appendix **C**

Pennsylvania	Male	335	37	580,467	40	222	37	113	38	582,745	40
	Female	568	63	869,665	60	387	64	181	62	872,365	60
	Age 18 to 24	98	11	263,499	18	64	11	34	12	263,499	18
	Age 25 to 34	124	14	259,422	18	95	16	29	10	259,422	18
	Age 35 to 44	132	15	244,159	17	90	15	42	14	245,187	17
	Age 45 to 54	164	18	213,126	15	117	19	47	16	216,549	15
	Age 55 to 64	171	19	219,702	15	103	17	68	23	224,713	16
	Age 65 or older	206	23	241,820	17	133	22	73	25	243,658	17
	White - Non-Hispanic	707	80	1,093,227	77	471	79	236	82	1,137,052	79
	Black - Non-Hispanic	80	9	135,017	10	51	9	29	10	154,101	11
	Other race only, Non-Hispanic	24	3	28,959	2	20	3	4	1	20,232	1
	Multiracial, Non-Hispanic	21	2	27,099	2	13	2	8	3	32,432	2
	Hispanic	54	6	139,436	10	42	7	12	4	88,556	6
Rhode Island	Male	319	34	59,309	41	200	34	119	35	59,487	41
	Female	615	66	84,840	59	397	67	218	65	85,119	59
	Age 18 to 24	43	5	18,349	13	30	5	13	4	19,059	13
	Age 25 to 34	106	12	28,521	20	77	13	29	9	27,812	19
	Age 35 to 44	99	11	22,510	16	74	13	25	7	18,435	13
	Age 45 to 54	186	20	25,753	18	115	20	71	21	31,042	22
	Age 55 to 64	212	23	24,553	17	131	22	81	24	25,172	17
	Age 65 or older	275	30	22,984	16	157	27	118	35	23,087	16
	White - Non-Hispanic	732	80	102,649	73	462	80	270	81	104,035	72
	Black - Non-Hispanic	45	5	8,075	6	31	5	14	4	5,497	4
	Other race only, Non-Hispanic	29	3	4,931	4	19	3	10	3	6,474	5

Appendix C

	Multiracial, Non-Hispanic	29	3	3,961	3	13	2	16	5	7,074	5
	Hispanic	78	9	21,458	15	53	9	25	8	21,485	15
Texas	Male	438	32	822,587	41	270	33	168	32	823,630	41
	Female	914	68	1,210,797	60	554	67	360	68	1,211,033	60
	Age 18 to 24	86	6	287,514	14	61	8	25	5	287,514	14
	Age 25 to 34	130	10	389,133	19	101	13	29	6	389,133	19
	Age 35 to 44	130	10	244,635	12	90	11	40	8	244,879	12
	Age 45 to 54	189	14	364,103	18	112	14	77	15	376,175	19
	Age 55 to 64	271	20	411,308	20	147	18	124	24	412,633	20
	Age 65 or older	531	40	323,253	16	300	37	231	44	322,927	16
	White - Non-Hispanic	858	65	1,054,502	53	478	60	380	74	1,232,440	62
	Black - Non-Hispanic	149	11	355,259	18	101	13	48	9	257,717	13
	Other race only, Non-Hispanic	28	2	66,225	3	19	2	9	2	72,515	4
	Multiracial, Non-Hispanic	22	2	27,094	1	15	2	7	1	48,397	2
	Hispanic	264	20	486,592	25	191	24	73	14	366,021	19
Utah	Male	545	41	120,704	41	343	41	202	41	120,704	41
	Female	793	59	175,895	59	501	59	292	59	176,650	59
	Age 18 to 24	177	13	66,420	23	131	16	46	9	66,420	22
	Age 25 to 34	218	17	60,080	21	146	18	72	15	60,080	20
	Age 35 to 44	233	18	52,287	18	161	19	72	15	54,007	18
	Age 45 to 54	195	15	39,565	14	112	14	83	17	40,937	14
	Age 55 to 64	220	17	38,096	13	129	16	91	19	38,203	13
	Age 65 or older	280	21	36,384	12	153	18	127	26	36,542	12
	White - Non-Hispanic	1,156	88	242,437	83	724	87	432	88	238,397	81
	Black - Non-Hispanic	8	1	3,643	1	5	1	3	1	2,935	1

Appendix C

	Other race only, Non-Hispanic	38	3	8,150	3	26	3	12	3	7,416	3
	Multiracial, Non-Hispanic	23	2	10,470	4	8	1	15	3	23,425	8
	Hispanic	94	7	27,911	10	67	8	27	6	23,026	8
Vermont	Male	357	35	34,966	40	220	35	137	37	35,101	40
	Female	653	65	51,880	60	418	66	235	63	52,015	60
	Age 18 to 24	74	7	16,197	19	56	9	18	5	16,034	19
	Age 25 to 34	125	13	14,680	17	95	15	30	8	15,046	17
	Age 35 to 44	137	14	14,087	16	91	14	46	12	14,124	16
	Age 45 to 54	159	16	12,107	14	110	17	49	13	11,896	14
	Age 55 to 64	230	23	14,252	17	129	20	101	27	14,376	17
	Age 65 or older	277	28	15,210	18	151	24	126	34	15,225	18
	White - Non-Hispanic	911	92	77,446	90	565	90	346	94	80,084	92
	Black - Non-Hispanic	12	1	2,572	3	9	1	3	1	4,209	5
	Other race only, Non-Hispanic	34	3	3,013	4	29	5	5	1	999	1
	Multiracial, Non-Hispanic	25	3	1,104	1	14	2	11	3	900	1
	Hispanic	12	1	1,507	2	9	1	3	1	625	1
Wisconsin	Male	233	33	207,354	38	136	37	97	28	209,615	38
	Female	482	67	345,608	63	235	63	247	72	345,709	62
	Age 18 to 24	46	7	71,107	13	33	9	13	4	72,648	13
	Age 25 to 34	89	13	107,904	20	52	14	37	11	106,363	19
	Age 35 to 44	104	15	102,694	19	64	18	40	12	105,141	19
	Age 45 to 54	113	16	83,848	15	62	17	51	15	84,804	15
	Age 55 to 64	133	19	82,494	15	62	17	71	21	84,499	15
	Age 65 or older	219	31	97,528	18	89	25	130	38	98,937	18
	White - Non-Hispanic	587	84	446,087	82	293	81	294	86	502,056	92

Appendix C

	Black - Non-Hispanic	42	6	45,354	8	27	8	15	4	23,233	4
	Other race only, Non-Hispanic	36	5	17,354	3	22	6	14	4	4,989	1
	Multiracial, Non-Hispanic	16	2	8,485	2	6	2	10	3	6,083	1
	Hispanic	21	3	25,818	5	13	4	8	2	11,284	2
Puerto Rico **	Male	233	29	200,592	40	187	31	46	22	204,788	40
	Female	581	71	302,800	60	418	69	163	78	305,481	60
	Age 18 to 24	70	9	73,628	15	60	10	10	5	84,390	17
	Age 25 to 34	109	13	92,008	18	89	15	20	10	82,155	16
	Age 35 to 44	108	13	91,258	18	88	15	20	10	64,280	13
	Age 45 to 54	134	17	81,715	16	95	16	39	19	112,580	22
	Age 55 to 64	141	17	68,546	14	98	16	43	21	60,450	12
	Age 65 or older	249	31	95,091	19	173	29	76	37	105,395	21
	Hispanic	811	100	501,745	100	602	100	209	100	510,269	100

Notes:

* Adult: aged ≥ 18
** Puerto Rico did not collect 6 consecutive months of adult data but did collect 6 or more months of data throughout 2017 and 2018 altogether.

		BRFSS				ACBS		ACBS			
Child		**Eligible Asthma Respondents**				**Non-Respondents**		**Respondents**			
State	*Demographics*	*Sample size (unweighted)*	*Percent (unweighted)*	*Weighted total*	*Percent (weighted)*	*Sample size (unweighted)*	*Percent (unweighted)*	*Sample size (unweighted)*	*Percent (unweighted)*	*Weighted total*	*Percent (weighted)*
States/areas total	Boy	1,981	60	824,967	58	1,375	61	606	59	840,393	59
	Girl	1,307	40	593,882	42	892	39	415	41	594,211	41
	Age 0 to 4	270	9	203,449	16	187	10	83	8	218,441	15
	Age 5 to 9	634	21	360,389	27	419	21	215	22	389,405	27
	Age 10 to 14	1,075	36	411,607	31	710	36	365	37	466,373	33
	Age 15 to 17	989	33	339,343	26	658	33	331	33	351,414	25
	White only	2,456	76	884,363	64	1,680	76	776	78	943,377	68
	Black or African American only	405	13	337,239	24	285	13	120	12	278,789	20
	Other Races and Multiracial	353	11	163,842	12	251	11	102	10	174,482	13
Florida	Boy	316	63	266,422	58	215	66	101	59	274,368	58

Table 1B. Percentage of ACBS child* respondents, non-respondents, and BRFSS eligible asthma respondents by demographic groups and state/territory

Appendix C

	Girl	183	37	194,376	42	113	35	70	41	195,875	42
	Age 0 to 4	52	12	70,467	16	34	13	18	11	84,139	18
	Age 5 to 9	113	26	137,234	32	70	27	43	25	140,946	30
	Age 10 to 14	161	37	118,165	27	92	35	69	40	138,406	29
	Age 15 to 17	107	25	106,308	25	66	25	41	24	106,752	23
	White only	334	69	268,499	59	226	72	108	65	278,798	61
	Black or African American only	97	20	141,703	31	58	18	39	24	108,181	24
	Other Races and Multiracial	50	10	42,847	10	31	10	19	11	68,847	15
Indiana	Boy	212	63	100,464	64	152	63	60	62	101,383	64
	Girl	125	37	57,510	36	88	37	37	38	57,850	36
	Age 0 to 4	23	8	16,546	12	18	9	5	6	19,602	13
	Age 5 to 9	63	21	32,467	23	43	21	20	22	32,073	22
	Age 10 to 14	112	37	51,451	36	76	36	36	40	56,018	38
	Age 15 to 17	103	34	41,230	29	73	35	30	33	41,230	28
	White only	264	81	117,491	78	182	78	82	87	132,221	86
	Black or African American only	39	12	22,575	15	34	15	5	5	11,883	8
	Other Races and Multiracial	23	7	11,535	8	16	7	7	7	10,047	7
Kansas	Boy	378	58	52,301	58	287	57	91	62	53,477	59
	Girl	270	42	37,196	42	214	43	56	38	37,196	41

Appendix C

State	Category										
	Age 0 to 4	49	8	9,813	12	38	8	11	8	7,254	9
	Age 5 to 9	136	23	25,439	30	100	22	36	26	29,471	35
	Age 10 to 14	211	35	25,559	31	162	35	49	35	25,487	30
	Age 15 to 17	203	34	22,747	27	160	35	43	31	23,267	27
	White only	515	81	66,645	75	392	80	123	84	72,940	81
	Black or African American only	62	10	11,632	13	53	11	9	6	7,300	8
	Other Races and Multiracial	62	10	10,554	12	48	10	14	10	9,589	11
Maine	Boy	133	59	16,244	59	92	64	41	49	16,244	59
	Girl	94	41	11,436	41	52	36	42	51	11,436	41
	Age 0 to 4	10	5	1,357	5	7	5	3	4	352	1
	Age 5 to 9	47	22	9,383	36	27	21	20	25	10,388	38
	Age 10 to 14	81	39	8,318	32	53	41	28	35	9,369	34
	Age 15 to 17	72	34	6,974	27	43	33	29	36	7,286	27
	White only	190	85	22,326	82	116	82	74	90	25,104	91
	Other Races and Multiracial	27	12	4,047	15	19	13	8	10	2,415	9
Michigan	Boy	178	56	141,130	57	128	60	50	49	141,039	58
	Girl	140	44	105,873	43	87	41	53	52	101,734	42
	Age 0 to 4	36	12	32,463	14	21	11	15	16	37,021	15
	Age 5 to 9	59	20	65,698	28	37	19	22	23	71,101	28
	Age 10 to 14	98	33	79,385	34	69	35	29	30	86,600	35

Appendix C

	Age 15 to 17	103	35	54,141	23	73	37	30	31	55,680	22
	White only	207	67	139,120	57	140	67	67	66	139,495	58
	Black or African American only	67	22	73,820	30	42	20	25	25	69,580	29
	Other Races and Multiracial	37	12	30,018	12	27	13	10	10	29,766	13
Minnesota	Boy	168	63	48,635	61	106	62	62	65	50,456	62
	Girl	99	37	30,856	39	65	38	34	35	30,856	38
	Age 0 to 4	13	6	7,741	11	8	6	5	5	10,199	13
	Age 5 to 9	38	16	16,291	23	24	18	14	14	13,833	17
	Age 10 to 14	90	39	20,531	29	55	41	35	36	30,516	37
	Age 15 to 17	91	39	27,108	38	48	36	43	44	27,108	33
	White only	213	80	54,622	70	135	78	78	85	56,280	73
	Black or African American only	17	6	7,571	10	11	6	6	7	6,194	8
	Other Races and Multiracial	36	14	16,281	21	28	16	8	9	14,231	19
Nebraska	Boy	191	60	25,868	60	129	59	62	64	26,547	60
	Girl	125	40	17,529	40	90	41	35	36	17,831	40
	Age 0 to 4	27	9	5,925	15	22	11	5	5	4,647	11
	Age 5 to 9	52	18	9,449	24	36	18	16	17	12,086	27
	Age 10 to 14	108	36	13,260	33	75	37	33	34	15,148	34

Appendix C

	Age 15 to 17	110	37	11,419	29	68	34	42	44	12,212	28
	White only	250	79	30,183	70	172	79	78	80	34,180	77
	Black or African American only	18	6	5,999	14	13	6	5	5	4,430	10
	Other Races and Multiracial	48	15	7,202	17	34	16	14	14	5,768	13
New Jersey	Boy	195	55	124,832	53	120	53	75	59	127,808	53
	Girl	157	45	109,542	47	105	47	52	41	111,870	47
	Age 0 to 4	35	11	52,996	24	25	14	10	8	46,089	19
	Age 5 to 9	59	19	47,766	22	38	21	21	17	60,052	25
	Age 10 to 14	114	37	64,876	30	66	36	48	38	73,699	31
	Age 15 to 17	103	33	51,654	24	55	30	48	38	59,838	25
	White only	196	59	121,758	55	118	55	78	66	140,044	61
	Black or African American only	91	27	68,106	31	65	30	26	22	64,304	28
	Other Races and Multiracial	46	14	33,457	15	31	15	15	13	26,417	11
Utah	Boy	210	65	49,070	62	146	65	64	64	49,070	62
	Girl	114	35	29,564	38	78	35	36	36	29,564	38
	Age 0 to 4	25	9	6,142	9	14	7	11	11	9,139	12
	Age 5 to 9	67	23	16,662	24	44	23	23	24	19,454	25
	Age 10 to 14	100	35	30,061	43	62	32	38	39	31,130	40

Appendix C

	Age 15 to 17	97	34	17,762	25	72	38	25	26	18,042	23
	White only	287	90	63,718	83	199	91	88	88	64,316	82
	Black or African American only	7	2	4,977	7	2	1	5	5	6,917	9
	Other Races and Multiracial	24	8	7,903	10	17	8	7	7	7,402	9

Note:
*Child: aged 0-17

Appendix C

Table 2A. Estimated percentage of current asthma status among adults ever diagnosed with asthma by state/territory

Adult	ACBS Respondents				BRFSS Eligible Asthma Respondents			
State	ACBS Sample size	Current Prevalence (weighted percent)	Standard Error	CI ACBS	BRFSS Sample size	Current Prevalence (weighted percent)	Standard Error	CI BRFSS
States/areas total	13,319	68	1.08	(65.4 - 69.6)	40,043	66	0.53	(65.3 - 67.4)
Arizona	667	74	2.76	(68.1 - 78.9)	2,210	65	1.37	(62.0 - 67.3)
California	269	60	4.46	(50.6 - 67.9)	1,258	57	1.95	(53.5 - 61.1)
Connecticut	480	66	3.5	(59.3 - 72.9)	1,523	65	1.8	(61.5 - 68.5)
Florida	851	61	3.62	(53.3 - 67.4)	2,556	63	2.19	(58.6 - 67.2)
Georgia	237	66	4.22	(57.6 - 74.0)	637	71	2.34	(66.0 - 75.2)
Hawaii	391	58	3.99	(49.6 - 65.1)	1,260	58	1.99	(54.0 - 61.8)
Illinois	238	66	4.19	(57.8 - 74.1)	655	63	2.5	(57.7 - 67.5)
Indiana	724	71	2.7	(65.7 - 76.3)	1,828	70	1.47	(66.7 - 72.4)
Iowa	302	80	2.79	(73.5 - 84.4)	868	72	1.96	(68.3 - 75.9)
Kansas	698	71	2.42	(65.5 - 75.0)	2,711	68	1.15	(66.1 - 70.7)
Kentucky	426	74	4.37	(65.0 - 82.0)	1,236	71	2.29	(66.0 - 74.9)
Maine	691	74	2.92	(67.7 - 79.1)	1,461	72	1.85	(68.0 - 75.3)
Massachusetts	279	75	4	(66.6 - 82.2)	979	73	2.29	(67.8 - 76.8)
Michigan	632	73	2.51	(67.9 - 77.7)	1,572	70	1.54	(66.4 - 72.5)
Minnesota	665	68	2.54	(62.8 - 72.8)	1,677	69	1.49	(66.4 - 72.3)
Missouri	303	72	3.92	(63.2 - 78.5)	884	69	2.36	(63.8 - 73.0)
Montana	269	78	3.72	(69.5 - 84.1)	737	67	2.44	(62.0 - 71.5)
Nebraska	619	70	3.38	(62.7 - 75.8)	1,625	70	1.77	(66.7 - 73.6)
Nevada	173	73	6.16	(59.4 - 83.2)	467	76	3.05	(69.0 - 80.9)
New Hampshire	253	74	6.17	(59.9 - 83.8)	855	76	2.27	(71.3 - 80.2)
New Jersey	574	74	3.11	(67.8 - 80.0)	1,374	73	1.92	(69.0 - 76.6)
New Mexico	298	74	4.65	(63.4 - 81.6)	897	71	2.2	(66.5 - 75.1)
New York	256	64	4.32	(54.7 - 71.5)	1,611	68	1.65	(65.0 - 71.4)
Ohio	511	67	3.3	(60.5 - 73.3)	1,469	74	1.77	(70.2 - 77.2)
Oregon	186	69	4.68	(58.7 - 76.8)	799	68	2.02	(63.6 - 71.5)
Pennsylvania	274	68	3.93	(59.4 - 74.7)	885	66	2.1	(61.7 - 69.9)
Rhode Island	292	72	4.09	(62.9 - 78.9)	901	74	2.14	(69.5 - 77.9)
Texas	477	71	5.43	(59.7 - 80.7)	1,316	66	2.96	(59.6 - 71.2)
Utah	446	68	2.99	(62.1 - 73.8)	1,291	64	1.76	(60.7 - 67.6)
Vermont	333	73	3.92	(64.3 - 79.6)	985	68	2.11	(64.1 - 72.3)
Wisconsin	305	78	3.86	(69.3 - 84.4)	707	74	2.34	(69.0 - 78.2)
Puerto Rico**	200	71	4.98	(60.8 - 80.1)	809	66	2.21	(61.7 - 70.4)

Notes:

*Adult: aged ≥ 18 years

** Puerto Rico did not collect 6 consecutive months of adult data but did collect 6 or more months of data throughout 2017 and 2018 altogether.

Appendix C

Table 2B. Estimated percentage of current asthma status among children* ever diagnosed with asthma by state/territory								
Child	ACBS Respondents				BRFSS Eligible Asthma Respondents			
State	ACBS Sample size	Current Prevalence (weighted percent)	Standard Error	CI ACBS	BRFSS Sample size	Current Prevalence (weighted percent)	Standard Error	CI BRFSS
States/areas total	937	66	3.42	(59.2 - 72.6)	3,240	67	1.83	(63.6 - 70.8)
Florida	153	58	8.66	(41.0 - 73.8)	496	63	4.68	(53.3 - 71.5)
Indiana	95	60	5.86	(48.4 - 71.0)	338	65	3	(59.3 - 71.1)
Kansas	133	69	5	(58.6 - 78.0)	635	72	2.35	(67.4 - 76.6)
Maine	81	68	7.32	(52.6 - 80.7)	223	72	3.85	(64.1 - 79.1)
Michigan	80	80	4.93	(68.3 - 87.7)	309	74	2.93	(68.3 - 79.7)
Minnesota	95	65	5.8	(53.1 - 75.5)	267	71	3.53	(63.8 - 77.6)
Nebraska	90	78	7.23	(60.7 - 88.9)	307	67	4.23	(58.3 - 74.8)
New Jersey	119	68	7.04	(52.9 - 79.9)	348	65	4.03	(56.7 - 72.4)
Utah	91	69	5.93	(56.7 - 79.7)	317	71	3.15	(64.2 - 76.5)

Note:
* Children: aged 0-17 years

Appendix C