

# COLORADO HEALTH ACCESS SURVEY

2025

## Sampling Methodology



COLORADO HEALTH INSTITUTE

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## Summary

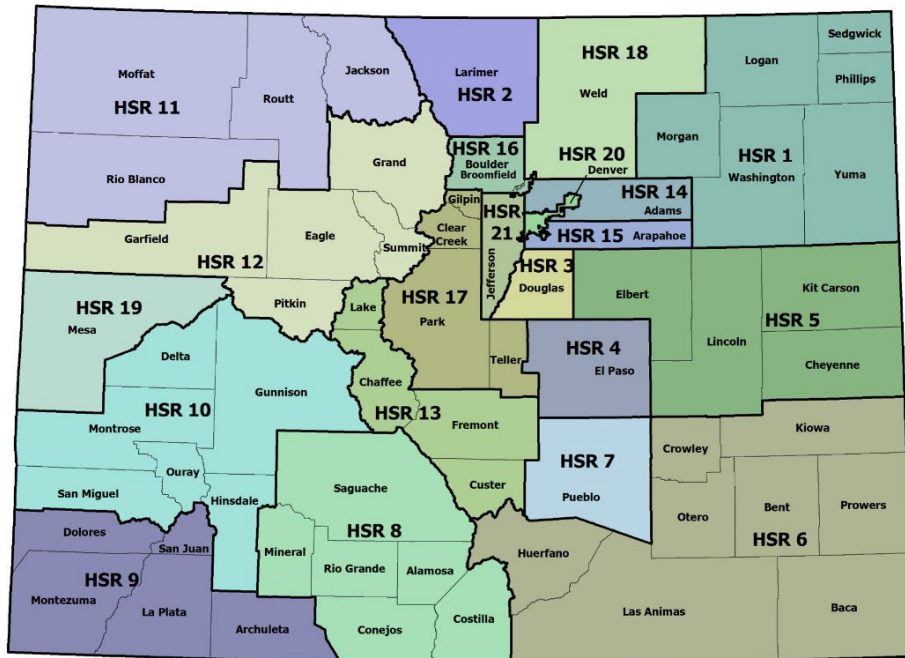
The Colorado Health Institute (CHI) contracted with NORC at the University of Chicago to conduct the 2025 Colorado Health Access Survey (CHAS). The CHAS represents the non-institutionalized population in Colorado. It aims to document health insurance coverage, access to and use of health care, and social factors influencing health, including housing, food access, experiences of discrimination, internet access, and social connection. NORC developed this report to provide information about the methods used to collect, clean, and document the data in the CHAS data files.

NORC conducted the study for CHI using address-based sampling (ABS) via a multimode design that included web and phone surveys. The ABS version of the 2023 CHAS questionnaire was the basis for the 2025 CHAS questionnaire. CHI added variables in 2025 that were relevant to changes in health care and current events.

Interviews were conducted from February 11, 2025, to July 21, 2025, among a probability sample of Colorado households containing at least one person age 18 or older. This excluded the unhoused population and people who are not full-time residents of Colorado. The selected sample was stratified by two dimensions: 22 health statistics regions (HSRs), as shown in Exhibit 1, and eight demographically targeted strata, for a total of 176 strata, to ensure adequate representation by region within the state of Colorado and demographic group. In total, 10,459 interviews were completed online, and 463 interviews were completed via phone call-ins, for a total of 10,922 interviews.

Details of the sample design, questionnaire development, data collection procedures, weighting, and response rates follow. To access more information, including the survey questionnaire, go to <https://www.coloradohealthinstitute.org/research/colorado-health-access-survey>.

## Exhibit 1. Colorado Health Statistics Regions (HSRs)<sup>a</sup>



<sup>a</sup> HSR 2 (Larimer County) was split into two regions for analysis at a smaller geographic level.

## Sampling Design

The sampling objective of the CHAS is to produce estimates of health and health-related indicators for Colorado residents. To accomplish this, NORC utilized a multimode ABS push-to-web and call-in design.

A three-wave responsive survey design was employed to account for differences in yields across HSRs and demographic groups and response rate variability. The data collected during the earlier waves informed the design for later waves.

The sampling plan, survey instrument, and materials received Institutional Review Board (IRB) approval. NORC's IRB has corporate responsibility for monitoring survey procedures to ensure the confidentiality of persons and establishments participating in a study. To ensure that the practices and procedures designed to protect the rights and welfare of study participants are effectively implemented, NORC empowered its IRB to freely exercise appropriate administrative oversight of all human subject issues on NORC research projects without having to consider the organization's financial concerns.

As with all research studies, this study has limitations, including the challenges associated with potential measurement and nonresponse bias. All data in this study are self-reported and, therefore, subject to recall bias. Additionally, although ABS and respondent recruitment best practices were followed, the results may be affected by sampling bias.

## Stratified Two-Phase ABS Sample

The 2025 CHAS employed an application of the same stratification sampling technique used in 2023. In this process, a surplus of sample lines in the form of addresses was obtained and characterized, and represented the larger pool, or sample frame, from which the 2025 CHAS sample was selected. For the first phase, a large number of addresses were drawn from a list of all households in Colorado. Third-party commercial data was obtained for these households to make predictions about their membership in subpopulations of interest to CHI. Based on these predictions, the households were stratified into eight groups:

- Age 65 and over
- Black or African American
- No health insurance (uninsured)
- Hispanic or Latino
- Child in the household (defined as a person under the age of 18)
- Age 18-29
- Commercial data available, with no positive predictions (referred to as “residual”)
- No commercial data available for the household (referred to as “no match”)

A total of 74,120 addresses were sampled, 71,175 of which were found to be eligible, mailable addresses. A stratified random sample was drawn from this first phase sample to account for historical differences in response rates across HSRs and subpopulations, and to oversample subpopulations of interest. The second phase increased attention to these oversampled subpopulations.

Exhibit 2 presents the sample frame by Big Data Classifier (BDC) stratum in the first and second phases of stratification.

### Exhibit 2. Sample Frame and Allocation by Big Data Classifier Stratum

Stratum	First Phase		Second Phase	
	Count	%	Count	%
Age 65+	40,342	13%	4,048	5.5%
Black or African American	8,986	2.9%	7,244	9.8%
Uninsured	12,182	3.9%	8,607	11.6%
Hispanic or Latino	43,712	14.1%	8,972	12.1%
Children	35,036	11.3%	16,470	22.2%
Age 18-29	16,238	5.2%	2,646	3.6%

Stratum	First Phase		Second Phase	
	Count	%	Count	%
Residual	104,064	33.5%	18,881	25.5%
No Match	50,255	16.2%	7,252	9.8%
<b>Total</b>	<b>310,815</b>	<b>100%</b>	<b>74,120</b>	<b>100%</b>

*Note: The Big Data Classifier stratum is the predicted characteristic for the household, before sampling.*

A third subpopulation of interest was defined by geographic location (HSR). The geographic distribution of the sample across all HSRs in Colorado is in Exhibit 3. Sample distribution by HSR is further broken down by the demographics comprising the BDC strata, as shown in Exhibit 4.

For the 2025 CHAS, HSR 2 (Larimer County) was split into two regions, and the sampling rate in each region was increased to allow for analysis at a smaller geographic level. In each exhibit that describes HSRs, HSR 2 is split into two regions.

### Exhibit 3. Sample Frame and Allocation by HSR/Region

HSR	Region	First Phase		Second Phase	
		Count	%	Count	%
1	Northeast	5,540	1.8%	3,515	4.7%
2_01	Larimer County – Loveland	8,304	2.7%	1,632	2.2%
2_02	Larimer County – Fort Collins	10,558	3.4%	2,489	3.4%
3	Douglas County	19,539	6.3%	2,491	3.4%
4	El Paso County	33,968	10.9%	3,087	4.2%
5	Central Eastern Plains	3,784	1.2%	2,914	3.9%
6	Southeast	5,614	1.8%	3,096	4.2%
7	Pueblo County	9,296	3.0%	3,089	4.2%
8	San Luis Valley	7,214	2.3%	3,555	4.8%
9	Southwest	6,885	2.2%	2,480	3.3%
10	Gunnison and Dolores Valleys	7,551	2.4%	2,985	4.0%
11	Northwest	5,796	1.9%	3,347	4.5%
12	I-70 Mountain Corridor	9,966	3.2%	3,201	4.3%
13	Upper Arkansas Valley	6,320	2.0%	2,928	4.0%
14	Adams County	21,979	7.1%	5,625	7.6%
15	Arapahoe County	29,166	9.4%	6,727	9.1%
16	Boulder-Broomfield	19,416	6.2%	2,443	3.3%
17	Mountain Gateways	2,520	0.8%	2,520	3.4%

		First Phase		Second Phase	
HSR	Region	Count	%	Count	%
18	Weld County	18,129	5.8%	2,981	4.0%
19	Mesa County	8,117	2.6%	2,373	3.2%
20	Denver County	42,103	13.5%	6,827	9.2%
21	Jefferson County	29,050	9.3%	3,815	5.1%
<b>Total</b>		<b>310,815</b>	<b>100%</b>	<b>74,120</b>	<b>100%</b>

**Exhibit 4. Final Sample Distribution by HSR/Region and Big Data Classifier Stratum**

HSR	Region	Residual	Age 65+	Black/African American or Hispanic/Latino	Uninsured	Children	Age 18-29	No Match	Sample Selected
1	Northeast	1,200	179	699	208	503	149	577	<b>3,515</b>
2_01	Larimer County – Loveland	495	127	160	43	582	109	116	<b>1,632</b>
2_02	Larimer County – Fort Collins	678	131	247	143	745	350	195	<b>2,489</b>
3	Douglas County	529	115	193	13	1,398	85	158	<b>2,491</b>
4	El Paso County	420	145	955	533	696	105	233	<b>3,087</b>
5	Central Eastern Plains	1,409	117	214	13	638	113	410	<b>2,914</b>
6	Southeast	857	172	850	327	295	75	520	<b>3,096</b>
7	Pueblo County	642	170	1,265	372	414	63	163	<b>3,089</b>
8	San Luis Valley	768	166	1,203	515	290	49	564	<b>3,555</b>
9	Southwest	1,055	125	198	164	415	177	346	<b>2,480</b>
10	Gunnison and Dolores Valleys	1,173	166	306	294	443	172	431	<b>2,985</b>
11	Northwest	1,430	116	156	168	529	157	791	<b>3,347</b>
12	I-70 Mountain Corridor	1,007	129	780	296	447	110	432	<b>3,201</b>
13	Upper Arkansas Valley	1,431	161	185	113	388	149	501	<b>2,928</b>
14	Adams County	506	182	1,250	2,220	1,194	65	208	<b>5,625</b>
15	Arapahoe County	387	207	3,311	852	1,743	51	176	<b>6,727</b>

HSR	Region	Residual	Age 65+	Black/African American or Hispanic/Latino	Uninsured	Children	Age 18-29	No Match	Sample Selected
16	Boulder-Broomfield	389	192	184	172	1,242	94	170	<b>2,443</b>
17	Mountain Gateways	1,224	487	65	20	228	56	440	<b>2,520</b>
18	Weld County	851	209	502	251	894	107	167	<b>2,981</b>
19	Mesa County	617	138	253	473	623	124	145	<b>2,373</b>
20	Denver County	1,062	289	2,933	1,040	1,049	130	324	<b>6,827</b>
21	Jefferson County	751	325	307	377	1,714	156	185	<b>3,815</b>
<b>Total</b>		<b>18,881</b>	<b>4,048</b>	<b>16,216</b>	<b>8,607</b>	<b>16,470</b>	<b>2,646</b>	<b>7,252</b>	<b>74,120</b>

*Note: The counts for Black/African American and Hispanic/Latino are summed in this table to protect individuals' privacy.*

## Releasing the Sample in Waves

The 2025 CHAS was conducted in three waves. Wave 1 was designed to establish an understanding of model performance and response rates for different BDC strata and HSRs. Subsequently, each wave used the same stratified random sampling design but with varying sampling rates for each stratum and HSR based on the performance of prior waves. The exception was for Weld County, which was excluded from Wave 2 to avoid overlapping with a health survey conducted by Weld County. We increased the Weld County sample in Wave 1 and Wave 3 to account for this change.

## Developing the Survey Instrument

The questionnaire was initially developed by CHI based on questions contained in the 2008 Massachusetts, Oklahoma, and Minnesota Household Surveys, which closely followed the State Health Access Data Assistance Center (SHADAC) model of health interview survey questionnaires. Specific sections were adjusted for the state of Colorado to develop the CHAS.

Subsequent changes over the years were made to modernize terminology, remain topical, and reflect the research interests of CHI, stakeholders, and collaborating organizations. The 2025 CHAS questionnaire is available here:

<https://www.coloradohealthinstitute.org/programs/colorado-health-access-survey>.

## Programming the Survey Instrument

CHI provided NORC with the 2025 instrument. The instrument included language options for the computer-assisted web interviewing (CAWI) and computer-assisted telephone interviewing (CATI) surveys. For example, language for CATI administration, such as “Now I’m going to read a list” or “Now please tell me”, was modified to “Next is a list” or “Please indicate” in the self-administered CAWI version of the survey. English and Spanish language versions of the instrument were available for the CAWI and CATI modes.

NORC programmed the instruments using CAWI/CATI software that integrates response data from both modes. While the mode of completion is tracked, the software resolves the sampled address as completed, regardless of the mode, to prevent duplicating household data.

Team members reviewed all aspects of survey programming to confirm the accuracy of skip patterns and the instrument's flow. In addition, reviewers scanned the programmed survey with an eye toward respondent usability. They tested the CAWI survey on a variety of devices, including smartphones, tablets, laptops, and desktop

computers, as well as platforms such as Chrome, Safari, Firefox, Internet Explorer, and Microsoft Edge. The team also conducted a rigorous review of the English and Spanish versions of the survey instrument. Questions added to the 2025 CHAS received additional focus to ensure that the skip patterns and intent fulfilled the research needs. The team also reviewed the CATI version of the survey to ensure proper administration by telephone interviewers. Simulated test cases were completed and reviewed by the research team to check for inconsistencies in question delivery, data capture, timing, and other areas where improvements could be made.

## **Data Collection Procedures**

### **Mail Materials**

A multi-phase mailing process was used for the CHAS. Each wave followed this sequence: an invitation letter, a postcard reminder, a final reminder letter, and an additional final reminder letter for participants who had partially completed the survey but did not finish it. All sampled addresses were run through the National Change of Address (NCOA) system, which contains national change of address information and corrects addresses according to the US Postal Service (USPS) standards, identifying unmailable addresses. Mailed materials were sent to all sampled, corrected addresses identified as mailable by NCOA. NCOA identified one address as unmailable, and six addresses were flagged as not being within Colorado state lines (this happens when an address is close to the border of two states, has large errors in the geocoding process leading to misclassifying which state it belongs to, and/or is served by the post office across the state line for logistical purposes). There were an additional 2,124 addresses for which at least one piece of mail was returned as undeliverable, and no contact was recorded.

All mail materials were printed in English and Spanish to ensure Spanish-speaking households received bilingual materials. The letters, envelopes, and postcard contained the CHI logo and the Colorado state logo. CHI's return address was used on the envelopes. Mail that was unable to be delivered was returned to NORC for processing.

### **Invitation Letter and Incentive**

An invitation letter was first sent to households, emphasizing the importance of participation and explaining how the results could benefit Colorado residents. This letter included the survey URL with a unique secure code to access the web survey, a pin-embedded QR code linked to the web survey, and information for households to call NORC's telephone survey research centers if they preferred to complete the survey by phone.

Eighty-two percent of households in Wave 1 received a \$2 pre-incentive with the first invitation mailing. The allocation of the pre-incentive was based on BDC predictions and an experiment to determine whether the \$2 pre-incentive and a \$10 post-incentive were effective in encouraging responses.

First, we identified which records were eligible to receive the \$2 pre-incentive:

- 100% of households that were predicted to have an individual who is Black or African American, uninsured, Hispanic or Latino, has a child in the household, or is ages 18-29.
- 85% of the remaining households for which commercial data were available were randomly assigned the remaining available pre-incentives.
- 0% of households predicted to have an individual age 65 and over, or had no commercial data available.

17,712 of the 21,600 Wave 1 households were selected for the \$2 pre-incentive.

To test the effectiveness of a post-incentive, households in both groups (\$2 and \$0 pre-incentive) were randomly selected to receive \$10 upon completing the survey. Respondents could choose either a \$10 electronic gift card from a selection of three vendors, a \$10 physical gift card mailed to their address, or decline the gift card altogether.

The results from Wave 1 demonstrated increased survey completion rates for respondents who received both the pre-incentive and the post-incentive. Therefore, for Waves 2 and 3, all households received the \$2 pre-incentive and the \$10 post-incentive offer. Exhibit 5 presents the Wave 1 yields by incentive type. Yield is defined as the number of households needed to obtain one completed interview; **thus, the lower the yield, the better.**

$$\frac{\text{Number of invitees}}{\text{Number of complete interviews}}$$

**Exhibit 5. Yield per Incentive Group (Wave 1)**

Incentive Group		Yield
\$2 Pre Incentive	\$10 Post Incentive	
Yes	Yes	5.9
Yes	No	8.6
No	Yes	7.4
No	No	8.3

To maximize the impact of the pre-incentive, the envelopes had a circular window on the back side to display part of the \$2 bill.

## Other Mail Materials

All remaining mail materials included the survey URL with a unique, secure code to access the web survey, a PIN-embedded QR code linked to the web survey, and instructions on how to complete the survey by phone. A postcard reminder was sent 13 to 18 days after the initial invitation, reinforcing the importance of the household's participation in the survey. Another reminder letter was sent 14 days after the postcard reminder, and a final reminder letter was sent at the end of Wave 1 and Wave 3 for households that started the survey but did not finish (partial complete). Exhibit 6 details the mailing cadence by wave. The number of days between mailings varied by wave due to differences in response rates, which determine how many households receive the next mailing.

### Exhibit 6. Mailing Dates

Wave	Invitation Letter	Postcard Reminder	Final Reminder Letter	Reminder Letter to Partial Completes
1	2/11/2025	2/25/2025	3/11/2025	First batch: 4/8/2025 Second batch: 6/27/2025
2	4/11/2025	4/29/2025	5/13/2025	N/A*
3	5/27/2025	6/9/2025	6/23/2025	6/27/2025

*Note: Reminder Letters to Partial Completes were not sent after Wave 2 to avoid exceeding target HSR goals. These letters were only sent to all partial completes in open HSRs across all Waves following Wave 1 and Wave 3. After Wave 3, the only open HSR was HSR 18, which was not sampled in Wave 2.*

The initial invitation letters and the partially-complete reminder letters were sent by first-class mail, while the postcard reminders and final reminder letters were sent by bulk/standard mail.

In Waves 2 and 3, HSRs were closed as they reached their target goal for the number of interviews, and therefore, reminder mailings for those HSRs were not sent. Exhibit 7 includes details on which HSRs received each reminder mailing.

### Exhibit 7. Reminder Mailings by Wave and HSR

Wave	Invitation Letter	Postcard Reminder	Final Reminder Letter	Reminder Letter to Partial Completes
1	All HSRs	All HSRs	All HSRs	All HSRs
2 <sup>a</sup>	All HSRs	All HSRs	All HSRs	No HSRs
3 <sup>b</sup>	All open HSRs <sup>c</sup>	All open HSRs <sup>d</sup>	Only HSRs 2_02, 11, 18, and 21	Only HSR 18

<sup>a</sup> HSR 18 was not sampled in Wave 2 to avoid overlap with the Weld County Community Health Survey.

<sup>b</sup> HSRs 14 and 15 were closed before Wave 3 sampling. HSR 17 was left open for partially-completed cases only until the survey closed on 7/21/25, but they did not receive any Wave 3 mailings.

<sup>c</sup> HSR 5 was not included in the mailing as it closed between Wave 3 sampling and the Wave 3 invitation letter mailing. HSR 16 received the Wave 3 invitation letter, but was closed before the letter was delivered.

<sup>d</sup> HSR 1 was closed between the invitation letter and the postcard mailing.

All printed materials are in Appendix A.

## Email

As a supplement to mail outreach, similar to 2023, we planned to send an email to nonresponding households as a different method of outreach to elicit a response. The initial email invitation included a clickable survey URL and a secure code unique to the household to access the web survey, as well as information for households to call in if they preferred to complete the survey by phone. A reminder email was planned to be sent 10 days after to nonresponding households. A second reminder email was to be sent to all nonresponding households 18 days after the initial email reminder was sent. All emails were in English and Spanish.

We experimented with Wave 1 to determine the effectiveness of the email. A commercial sample vendor appended emails, where available, to each sampled household address. We then randomly assigned households to two groups: those that would receive reminder emails and those that would not. We sent the first reminder email to 6,835 of the 7,807 households selected to receive emails, as they had not yet responded.

Only 13 respondents completed the CHAS by clicking the link in the email. In addition, most of the 13 individuals who completed the interview from the email were not members of the hard-to-reach populations we targeted. The respondents who took the CHAS via the email link were primarily White, non-Hispanic adults ages 30 and over without children. In addition, all 13 respondents reported having health insurance and an income over 138% of the Federal Poverty Limit (FPL).

1. Nine were aged 30-64, and four were aged 65 and over.
2. Ten were White, non-Hispanic.
3. Four had children under the age of 18.

Email outreach was not conducted in Waves 2 and 3 due to the low number of completed surveys associated with the email outreach in Wave 1.

Exhibit 8 contains details on the email cadence to Wave 1.

### Exhibit 8. Email Dates

Wave	Email Invite	Email Reminder	Email Final Reminder
1	3/17/2025	3/27/2025	4/14/2025

All emails are in Appendix A.

## Survey Support

Recipients could call a phone number or email a help desk if they had questions about the survey or if they wanted to be removed from data collection.

## CATI Procedures

A toll-free number was provided to respondents, allowing them to call in and complete the survey over the phone. NORC fielded English and Spanish inbound phone calls from 9 a.m. to 9 p.m. MST/MDT. If respondents called outside these hours, they could leave a message, and an interviewer would return their call. 463 interviews (4.2%) were completed by phone.

## Household and Target Selection

Upon entering either the web or phone survey, respondents were asked a series of questions to determine their eligibility:

### 1. Household-level selection

- Screen to determine if the respondent resided at the address to which the letter was mailed.
- Screen to exclude out-of-state homeowners and vacation homes.
- Screen to exclude respondents under 18 years of age.
- Screen to include adult respondents who can answer questions about health insurance for every member of the household.

### 2. Individual-level (target) selection

- Roster all household members by age, gender, and relationship with the respondent.
- Randomly select a “target” person. If the household contains at least one person under age 18, then randomly select a person under age 18 with a 50% probability.

## Data Collection Final Status

The following exhibits provide the final status of completed interviews by mode, HSR, key demographic groups, and the final status of all sampled addresses. In total, 10,459 web interviews and 463 inbound phone interviews were completed.

### Exhibit 9. Completed Interviews by HSR/Region

HSR	Region	Completed Interviews
1	Northeast	425
2_01	Larimer County – Loveland	323
2_02	Larimer County – Fort Collins	523
3	Douglas County	413
4	El Paso County	417
5	Central Eastern Plains	427
6	Southeast	425
7	Pueblo County	425
8	San Luis Valley	427
9	Southwest	430
10	Gunnison and Dolores Valleys	423
11	Northwest	428
12	I-70 Mountain Corridor	422
13	Upper Arkansas Valley	450
14	Adams County	622
15	Arapahoe County	769
16	Boulder-Broomfield	499
17	Mountain Gateways	416
18	Weld County	415
19	Mesa County	442
20	Denver County	1,030
21	Jefferson County	771
<b>Total</b>		<b>10,922</b>

**Exhibit 10. Completed Interviews by HSR/Region, Gender, and Education**

HSR	Region	Gender <sup>a</sup>			Education			
		Male	Female	Another gender, non-binary, or not provided	Less than High School	High School Diploma	Some College	College Degree+, or not provided <sup>b</sup>
1	Northeast	190	230	0	67	111	86	161
2_01	Larimer County – Loveland	140	180	10	53	43	59	168
2_02	Larimer County – Fort Collins	240	270	20	100	43	77	303
3	Douglas County	200	200	10	92	27	50	244
4	El Paso County	170	230	20	76	60	78	203
5	Central Eastern Plains	210	210	10	76	60	83	208
6	Southeast	210	210	10	63	89	96	177
7	Pueblo County	210	210	10	76	84	84	181
8	San Luis Valley	190	230	10	64	74	83	206
9	Southwest	190	230	10	67	44	73	246
10	Gunnison and Dolores Valleys	190	220	10	62	66	83	212
11	Northwest	200	220	10	56	68	71	233
12	I-70 Mountain Corridor	210	210	10	78	38	55	251
13	Upper Arkansas Valley	190	250	10	57	76	85	232
14	Adams County	290	320	10	147	90	105	280
15	Arapahoe County	330	410	30	166	83	135	385
16	Boulder-Broomfield	220	260	20	103	25	47	324
17	Mountain Gateways	200	200	10	28	44	74	270
18	Weld County	180	230	10	84	63	64	204
19	Mesa County	220	210	10	75	83	77	207
20	Denver County	480	510	40	228	103	132	567
21	Jefferson County	350	390	30	167	64	101	439
<b>Total</b>		<b>5,010</b>	<b>5,630</b>	<b>310</b>	<b>1,985</b>	<b>1,438</b>	<b>1,798</b>	<b>5,701</b>

<sup>a</sup> The counts in the Gender columns are rounded to the nearest multiple of 10 to protect respondents' privacy.

<sup>b</sup> The counts for College Degree+ and Not Provided are summed to protect respondents' privacy.

**Exhibit 11. Completed Interviews by HSR/Region, Age<sup>a</sup>, and Race/Ethnicity<sup>b</sup>**

HSR	Region	0-17	18-34	35-64	65+	White	Black/ African American, or not provided <sup>c</sup>	Hispanic/ Latino	Other
1	Northeast	55	66	182	114	327	10	69	19
2_01	Larimer County – Loveland	49	51	138	80	269	13	25	16
2_02	Larimer County – Fort Collins	96	104	234	85	434	14	40	35
3	Douglas County	93	57	196	62	322	16	40	35
4	El Paso County	68	101	155	86	278	45	61	33
5	Central Eastern Plains	67	48	187	121	348	20	37	22
6	Southeast	44	45	197	139	279	18	107	21
7	Pueblo County	60	64	185	110	235	25	154	11
8	San Luis Valley	44	48	191	140	232	14	164	17
9	Southwest	59	53	199	114	360	15	33	22
10	Gunnison and Dolores Valleys	53	37	192	136	345	10	45	23
11	Northwest	49	61	187	124	370	12	29	17
12	I-70 Mountain Corridor	71	63	191	95	340	11	56	15
13	Upper Arkansas Valley	41	42	196	169	394	7	30	19
14	Adams County	131	133	283	70	355	52	168	47
15	Arapahoe County	152	146	358	101	470	134	114	51
16	Boulder-Broomfield	98	67	240	84	427	9	31	32
17	Mountain Gateways	24	36	181	171	367	14	20	15
18	Weld County	79	68	176	89	316	18	60	21
19	Mesa County	68	76	193	98	353	10	56	23
20	Denver County	185	199	462	172	653	164	148	65
21	Jefferson County	158	115	344	146	615	40	78	38
<b>Total</b>		<b>1,744</b>	<b>1,680</b>	<b>4,867</b>	<b>2,506</b>	<b>8,089</b>	<b>671</b>	<b>1,565</b>	<b>597</b>

<sup>a</sup> There were 125 respondents who did not provide their age. These respondents are not counted in the age columns of this exhibit.

<sup>b</sup> The race/ethnicity categories are mutually exclusive. If an individual is Hispanic or Latino (question D1), they are in the Hispanic/Latino column. If an individual is not Hispanic/Latino but is Black or African American (question D3), they are in the Black/African American column (including individuals of two or more races). If an individual is not Hispanic/Latino or Black or African American but is White (question D3), they are in the White column (including individuals of two or more races). All other individuals are in the Other column, which includes:

- American Indian or Alaska Native
- Asian
- Middle Eastern or North African
- Native Hawaiian or Other Pacific Islander
- Some other race
- Two or more of the options listed above

<sup>c</sup> The counts for "Black/African American" and "not provided" are summed to protect respondents' privacy.

## Exhibit 12. Summary of Final Data Collection Dispositions

Status	Frequency	Details
Cases sampled	74,120	Addresses sampled
Undeliverable	2,131	Unmailable addresses
Phone complete - English	455	
Phone complete - Spanish	8	
Web complete - English	10,304	
Web complete - Spanish	155	
Speeders, skippers, and break-offs	2,902	Interviews flagged for speeding, skipping, and break-offs
Screened out or non-residential	878	Deemed ineligible at the start of the interview
No phone or web activity	57,287	Unresolved

### Length of Interview

Interviews were conducted using a CAWI/CATI platform. Web interviews took an average of 28.1 minutes, and CATI interviews took an average of 54.5 minutes. Crossover interviews (interviews started in one mode and finished in another) had an average duration of 50.1 minutes.

### Break-Offs

There were 2,816 households that started the survey but did not complete it. Some variables of abandonment were sensitive or personal questions, including:

- Mental health
- Substance abuse
- Income (particularly questions asking for a specific amount versus responding to provided ranges)
- Sexual orientation
- Gender identity

Following the protocol that was established in 2023, a completed interview was defined as one in which a respondent provided an answer to the last question before the demographic section (Health System/Health Reform). Before removing any speeders or skippers, there were 402 partial interviews. After removing speeders and skippers, 383 partial interviews were included in the final data set.

### Speeders and Skippers

Following the protocol established in 2021 and 2023, speeders are defined as respondents who completed the interview in an unusually short amount of time. Skippers include web

and phone respondents who had a high number of missingness, including “don’t know”, “refused to answer”, or “web skip” responses. NORC reviewed the data to discard these interviews from the data file. In total, we excluded 86 cases for speeding and/or skipping. Fourteen cases (web only) were completed in less than 33% of the median completion time; these were flagged as speeders and were discarded.

After removing speeders, 72 interviews were missing data for more than 50% of variables among a set of 27 that were:

- Considered particularly important for the study, and
- Asked of every respondent.

Removing speeders and skippers reduced the number of completed interviews from 11,008 to 10,922.

## Back Coding

Open-ended (OE) survey questions are helpful to gain a deeper understanding of the experiences of survey respondents. OE responses may capture concepts that were not initially considered when developing the survey. These concepts may be considered when developing additional response options for subsequent data collection efforts. In addition, when faced with longer lists of response options and an OE option, respondents may skip reading each response option in favor of writing out an OE response. This results in OE responses that do not represent alternate responses but rather repeat the same concept as an existing option. Back coding reallocates OE responses that fit into existing response options back into the code frame, accurately representing the frequency of those existing responses.

For 2025, NORC back coded all OE variables and included the updated data in the 2025 CHAS data file.

Following back coding, variables in the 2025 CHAS data file were reviewed. Unnecessary variables (e.g., multi-punch strings, retired variables, preloads, and other specify flags) were removed from the 2025 CHAS data file to make the data file more concise. A list of variables that were delivered in 2023 but excluded in the 2025 data file is in Appendix B.

## Weighting Procedures

The survey data were weighted to account for discrepancies between sample and population characteristics. The 2025 CHAS survey data were weighted to:

- Adjust for the fact that not all survey respondents were selected with the same probability; and

- Account for gaps in coverage in the sample frame.

Weighting involved three stages:

1. Creating design weights
2. Making weight adjustments
3. Raking and trimming

## Design Weights

Design weights (also known as base weights) address the differential sampling rates across sampling strata and demographic groups of interest. Design weights are the product of:

1. **First phase sampling weight:** The inverse probability of the address being drawn from the Delivery Sequence File (DSF) into the first phase sample.
2. **Second phase sampling weight:** The inverse probability of the address being drawn from the first phase sample, which acts as the second phase sampling frame, and invited to participate in the survey. Addresses in the first phase sample were stratified by:
  - a. **HSR**; and
  - b. **BDC predictions** of the household composition and likely characteristics of household members. These predictions were made before data collection, based on information from a commercial data vendor. The frame was separated into eight mutually exclusive BDC strata:
    - i. Age 65 and over
    - ii. Black or African American
    - iii. No health insurance (uninsured)
    - iv. Hispanic or Latino
    - v. Child in the household (defined as a person under the age of 18)
    - vi. Age 18-29
    - vii. Commercial data available, with no positive predictions (referred to as "residual")
    - viii. No commercial data available for the household (referred to as "no match")

The sampling design consisted of 176 strata: 22 regions by eight BDC strata.

Design weights help account for the unequal sampling probability across strata. For example, the 2025 CHAS oversampled addresses predicted by the BDC to have Black/African American or Hispanic/Latino members, and undersampled addresses predicted to have individuals over the age of 65.

The sample stratification for the 2025 CHAS was different from the 2023 CHAS in the following ways:

- In 2023, “likely to have a low-income person in the household” was one of the BDC strata. In 2023, funding was allocated to oversample this population, whose response rate was much lower than that of the rest of the population. In 2025, we did not create this stratum.
- In 2025, we split HSR 2 (Larimer County) into two regions for sampling to allow for data analysis at a smaller geographic level:
  - HSR 2\_01 (Loveland)
  - HSR 2\_02 (Fort Collins)

These changes are accounted for in the creation of design weights and the raking procedure.

## Weight Adjustments

Design weights are multiplied by adjustment factors based on the following:

- **Response propensity:** This statistic is calculated by fitting a generalized linear model (GLM) to the set of all eligible households, where the response is a binary variable indicating whether the household completed the survey, and the predictors are:
  - BDC stratum; and
  - Self-Response Rate at the tract level from the U.S. Census Bureau’s American Community Survey (ACS) 2017-2021 5-year data release, as recorded in the 2023 Census Planning Database.

The GLM is then applied to the data to make predictions, and the data are binned into quintiles based on the predictions. Finally, the adjustment factor is calculated as the inverse of the probability of completing the survey for each quintile.

- **Household size:** A correction for the number of people in the household (top-coded at 3).
- **Age:** 18 years and younger, down-weighted by a factor of 0.5 to rebalance from oversampling via the screener.

## Raking and Trimming

The adjusted weights are raked to reflect the control totals obtained from the ACS. These counts are indexed by HSR, sex, education, age, home ownership, and race/ethnicity. HSR, family income, and Medicaid insurance status are included in the state-level raking procedure. CHI provided the control totals for Medicaid insurance status based on March

2025 data. Raking involved the repetition of the following series of steps:

- Raking the weights with respect to the control totals of demographic groups for each HSR and for the state of Colorado. The control totals include age groups (0-17, 18-34, 35-64, and 65+).
- Trimming the weights within appropriate parameters at state- and HSR-levels.

Finally, weights were rescaled to sum to the total population of Colorado as estimated by the April 2025 Current Population Survey. The 2023 ACS benchmarks are in Exhibits 13 and 14.

**Exhibit 13. ACS Benchmarks for Sex, Education, and Homeownership by HSR/Region**

HSR	Region	Sex		Education			Homeownership	
		Male	Female	High School or less	Some College	College Degree+	Own	Rent or Occupy
1	Northeast	52.1%	47.9%	59.3%	18.2%	22.6%	70.6%	29.4%
2_01	Larimer County – Loveland	50.4%	49.6%	39.8%	19.0%	41.2%	74.3%	25.7%
2_02	Larimer County – Fort Collins	49.7%	50.3%	34.8%	20.1%	45.1%	64.1%	35.9%
3	Douglas County	50.3%	49.7%	36.7%	14.9%	48.4%	82.0%	18.0%
4	El Paso County	50.8%	49.2%	44.3%	19.6%	36.2%	69.2%	30.8%
5	Central Eastern Plains	52.0%	48.0%	50.5%	18.8%	30.7%	87.3%	12.7%
6	Southeast	53.5%	46.5%	56.8%	20.0%	23.2%	70.5%	29.5%
7	Pueblo County	49.6%	50.4%	53.8%	19.3%	26.9%	70.5%	29.5%
8	San Luis Valley	50.2%	49.8%	52.3%	20.1%	27.7%	69.7%	30.3%
9	Southwest	50.5%	49.5%	44.0%	18.3%	37.7%	74.3%	25.7%
10	Gunnison and Dolores Valleys	51.3%	48.7%	49.0%	18.0%	33.0%	75.0%	25.0%
11	Northwest	52.1%	47.9%	46.8%	16.1%	37.1%	77.4%	22.6%
12	I-70 Mountain Corridor	52.7%	47.3%	43.9%	15.5%	40.6%	69.4%	30.6%
13	Upper Arkansas Valley	55.6%	44.4%	51.6%	18.2%	30.2%	78.1%	21.9%
14	Adams County	50.8%	49.2%	59.6%	15.3%	25.1%	71.4%	28.6%
15	Arapahoe County	49.9%	50.1%	45.6%	15.5%	38.9%	67.7%	32.3%
16	Boulder-Broomfield	50.4%	49.6%	33.7%	16.7%	49.6%	65.9%	34.1%
17	Mountain Gateways	52.0%	48.0%	36.8%	20.5%	42.7%	84.5%	15.5%
18	Weld County	50.8%	49.2%	54.0%	17.3%	28.8%	77.4%	22.6%
19	Mesa County	49.6%	50.4%	50.3%	21.2%	28.5%	74.6%	25.4%
20	Denver County	50.4%	49.6%	38.9%	14.1%	47.1%	54.5%	45.5%
21	Jefferson County	50.3%	49.7%	39.1%	16.2%	44.6%	73.5%	26.5%

**Exhibit 14. ACS Benchmarks for Age and Race/Ethnicity by HSR/Region**

HSR	Region	Age				Race/Ethnicity		
		0-17	18-34	35-64	65+	White	Hispanic/ Latino	Black/African American or Other
1	Northeast	23.6%	21.8%	36.9%	17.7%	67.2%	27.2%	5.6%
2_01	Larimer County – Loveland	19.0%	20.7%	39.0%	21.4%	81.8%	12.4%	5.8%
2_02	Larimer County – Fort Collins	18.5%	34.1%	33.4%	14.0%	78.7%	12.9%	8.4%
3	Douglas County	24.0%	19.6%	43.0%	13.4%	78.3%	9.9%	11.8%
4	El Paso County	23.4%	26.6%	36.3%	13.7%	66.4%	18.3%	15.2%
5	Central Eastern Plains	21.5%	17.5%	42.5%	18.4%	80.9%	11.5%	7.6%
6	Southeast	20.5%	20.0%	37.2%	22.3%	57.4%	35.6%	7.1%
7	Pueblo County	22.0%	21.3%	37.2%	19.4%	51.6%	42.0%	6.4%
8	San Luis Valley	21.8%	21.1%	36.7%	20.4%	49.7%	44.7%	5.6%
9	Southwest	18.5%	18.8%	40.2%	22.5%	75.3%	13.2%	11.5%
10	Gunnison and Dolores Valleys	18.6%	19.0%	38.2%	24.3%	79.3%	15.6%	5.1%
11	Northwest	20.8%	20.5%	41.2%	17.5%	80.3%	11.3%	8.3%
12	I-70 Mountain Corridor	20.5%	22.0%	41.9%	15.6%	67.9%	25.0%	7.1%
13	Upper Arkansas Valley	15.9%	19.9%	41.4%	22.9%	78.9%	13.5%	7.6%
14	Adams County	25.4%	25.2%	38.4%	11.0%	46.2%	42.3%	11.5%
15	Arapahoe County	22.9%	23.7%	39.4%	14.0%	56.4%	21.2%	22.4%
16	Boulder- Broomfield	18.6%	27.9%	37.9%	15.7%	74.9%	14.5%	10.6%
17	Mountain Gateways	15.3%	14.8%	46.9%	23.0%	85.5%	7.4%	7.1%
18	Weld County	25.7%	24.0%	37.6%	12.7%	63.0%	30.5%	6.5%
19	Mesa County	20.9%	21.3%	37.4%	20.4%	79.0%	15.2%	5.7%
20	Denver County	18.3%	31.3%	38.1%	12.3%	54.6%	27.9%	17.5%
21	Jefferson County	18.9%	22.7%	41.0%	17.4%	75.9%	15.9%	8.2%

## Design Effects

Complex survey designs and post-data collection statistical adjustments affect variance estimates and the resulting significance tests and confidence intervals. The impact of the survey design on variance estimates is measured by the design effect, which represents the extent of departure from a simple random sample where all sample units respond. The design effect measures the variance inflation of the sample estimate relative to the variance of an estimate based on a hypothetical random sample of the sample size. Note that such a sample is not feasible or financially viable, as it would require obtaining a full list of the residents of Colorado and ensuring a 100% response rate for all sampled individuals. In more practical terms, the design effect serves as a measure of how inaccurate standard errors would be if they were computed using software that does *not* support statistical analysis with complex survey designs.

### Design Effect for Overall Weights

The unequal weighting estimated design effect for the “overall” weights (***WEIGHT\_POP*** and ***WEIGHT\_SAMP***) is 3.94.

Exhibit 15 compares the design effect for subgroups in the 2025 CHAS versus the 2023 CHAS. The most notable change is in the age subgroups. The 2025 CHAS collected a slightly higher percentage of responses from Coloradans aged 65 and over than the 2023 CHAS. The consequence of this is a higher design effect for the “age less than 65” subgroups.

#### Exhibit 15. Design Effects for Subgroups

Group	Group	Design Effect (2025 CHAS)	Design Effect (2023 CHAS)
Age	0-17	3.50	2.88
	18-34	3.14	3.00
	35-64	4.12	4.01
	65+	3.64	5.14
Race/Ethnicity	White	3.88	4.00
	Hispanic/Latino	3.38	3.34
	Black/African American or Other	3.88	3.84
Education	High School or Less	3.48	3.22
	Some College	3.87	4.23
	College Degree+	3.98	4.02
Homeownership	Own	3.95	4.03
	Rent or Occupy	3.53	3.61

The estimated design effect for the “adult” weights (**ADULT\_WEIGHT\_POP** and **ADULT\_WEIGHT\_SAMP**) is 5.53. In 2023, the estimated design effect for the “adult” weights was 6.30. This design effect is lower in 2025, which means that the demographics of the adult respondents aligned more closely with the adult population of Colorado than they did in 2023. Consequently, these weights may provide more precise estimates for the adult population in 2025 than they did in 2023.

## Response Rates

The response rate for this study was 14.9%, using the American Association for Public Opinion Research’s (AAPOR) RR1 formula (minimal response rate). The response rate is defined as follows:

$$\frac{\text{Complete interviews}}{(\text{Complete} + \text{partial}) + (\text{eligible, non-interview}) + (\text{unknown eligibility, non-interview})}$$

A survey was considered complete when the respondent answered through survey question HR3. The “Completed Interview” disposition category includes all such instances.

Response rates varied across the three waves. Detailed tables by region and wave are in Appendix C.

The data collection protocols can explain some of the variation in response rates by wave seen in Exhibit 16. For Wave 1, NORC experimented with pre- and post-incentives and found that groups receiving different pre- and post-incentives had varied response rates. This compares to Waves 2 and 3, where all households received the \$2 pre-incentive and \$10 post-incentive. For Wave 3, data collection was closed in each HSR when the target number of completed interviews was achieved. This resulted in a lower response rate for Wave 3, as not all respondents received all reminder mailings.

### Exhibit 16. Response Rates by Wave

Disposition	Wave 1	Wave 2	Wave 3	Total
<b>Complete Interview</b>	3,107	6,890	925	10,922
<b>Partial Interview</b>	884	1,798	220	2,902
<b>Eligible Non-Interview</b>	341	1,094	313	1,748
<b>Unknown Eligibility, Non-Interview</b>	16,990	34,683	5,988	57,661
<b>Not Eligible</b>	278	535	74	887
<b>Response Rate</b>	14.6%	15.5%	12.4%	14.9%

Exhibit 17 shows the response rate by incentive type in Wave 1 when the experiment with pre- and post-incentives was conducted. The group that received both incentives, a \$2 pre-incentive and \$10 post-incentive, had the highest response rate.

### Exhibit 17. Response Rates by Incentive Type (Wave 1 only)

Disposition	No incentives	\$2 Pre-incentive only	\$10 Post-incentive only	\$2 Pre-incentive and \$10 Post-incentive	Total
<b>Complete Interview</b>	239	1,061	276	1,531	3,107
<b>Partial Interview</b>	54	358	49	423	884
<b>Eligible Non-Interview</b>	27	135	24	155	341
<b>Unknown Eligibility, Non-Interview</b>	1,608	7,172	1,573	6,637	16,990
<b>Not Eligible</b>	16	130	22	110	278
<b>Response Rate</b>	12.4%	12.2%	14.4%	17.5%	14.6%

Exhibit 18 shows the response rate by Wave for the households receiving both incentives. As shown in the exhibit, Wave 2 response rates were lower than those in Wave 1. In Wave 2, sampling rates by BDC stratum were adjusted to select fewer households from groups that tended to have higher Wave 1 response rates. For example, the Wave 2 sample had a lower percentage of households predicted to have members aged 65 and over than the Wave 1 sample. Wave 3 response rates are lower than those of Waves 1 and 2. This is because, once the target for completed interviews was reached in each HSR, reminder mailings were not sent.

### Exhibit 18. Response Rates by Wave: \$2 Pre-incentive and \$10 Post-Incentive Recipients Only

Disposition	Wave 1	Wave 2	Wave 3	Total
<b>Complete Interview</b>	1,531	6,890	925	9,346
<b>Partial Interview</b>	423	1,798	220	2,441
<b>Eligible Non-Interview</b>	155	1,094	313	1,562
<b>Unknown Eligibility, Non-Interview</b>	6,637	34,683	5,988	47,308
<b>Not Eligible</b>	110	535	74	719
<b>Response Rate</b>	17.5%	15.5%	12.4%	15.4%

## Data Management Procedures<sup>1</sup>

Consistent with prior iterations of the CHAS, CHI incorporated two data processing procedures to facilitate the analysis.

### Insurance Categorization

CHI created a hierarchical insurance variable to categorize individuals who indicated multiple types of insurance into a primary source of coverage. The order of the hierarchy is: Medicaid, Medicare, employer-sponsored insurance, Child Health Plan *Plus*, individual market insurance, and other types of insurance (such as TRICARE or a student health plan). CHI then categorized individuals who did not report any source of coverage as uninsured.

### Income Imputation

About 31% of the survey sample had missing yearly income data for 2024. As in previous years, CHI developed a model to impute missing income data. CHI first log transformed data for a normal distribution. CHI used a procedure in SAS 9.4—PROC SURVEYIMPUTE—to impute missing income data on the 2025 survey. The model included the following predictor variables: age; race/ethnicity; marital status; education level; impact of limitation from physical, mental, or cognitive condition; uninsurance; general health status; employment status; and size of the household. The predictor “problems paying medical bills” was removed from the 2023 CHAS survey and thus could not be used in the 2025 imputation method. All other predictors used were included in previous imputation analyses for past CHAS surveys. CHI then inversely transformed the imputed values to get the final estimates for yearly income.

In previous survey years, income from the previous month was included in the income analysis. However, due to differences in reported monthly income in 2021 compared to reported yearly income in 2020 (due to job loss, COVID-19, and other circumstances), monthly income was excluded. This method was kept consistent for imputation in 2023 and 2025.

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<sup>1</sup> CHI appended this section to NORC’s report.

## Appendices

## Appendix A – Mail Materials and Emails

### Initial Invitation Letter






[COUNTY] County Household  
<address1> <address2>  
<city>, <state> <zip>

[MONTH DAY], 2025

Dear [COUNTY] County Community Member,

Your household has been randomly selected to participate in the **Colorado Health Access Survey** conducted by the Colorado Health Institute in collaboration with the state of Colorado.

This important health and community survey will help us learn about the health and health care needs of people in [COUNTY] County and across Colorado. Sharing your experiences may help people and families in your community.

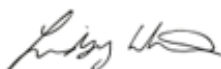
 <p><b>Step 1:</b> Identify an adult (18 years or older) who can answer questions about health care for everyone in the household. <b>Please have that person complete Step 2.</b></p>		
<p><b>Step 2:</b> Take the survey now! Choose one of these easy options:</p>		
<p><b>Option 1:</b> Go to <a href="http://www.colohealthsurvey.com">www.colohealthsurvey.com</a> and enter your access code:  [1XXXXXX]</p>	<p><b>Option 2:</b> Use a mobile phone to scan this QR code:</p> 	<p><b>Option 3:</b> Complete the survey by phone  Call <b>877-267-7915</b> Enter <b>1XXXXXXX</b></p> 

This is not a political poll, and we are not selling anything or asking for money. <We included a \$2 bill with this letter to thank you in advance.> **<As an additional thank you for completing the survey, you will receive a \$10 gift card.>**

Your help is very important to this survey's success. We thank you for your time and hope to hear from you soon.

To learn more about the survey, visit [www.coloradohealthinstitute.org](http://www.coloradohealthinstitute.org).

Sincerely,



Lindsey Whittington, MPH, Principal Investigator  
Colorado Health Access Survey




Hogar del condado de [COUNTY]  
<address1> <address2>  
<city>, <state> <zip>

[MONTH DAY], 2025

Estimado/a miembro/a de la comunidad del condado de [COUNTY],

Su hogar ha sido seleccionado al azar para participar en la **Encuesta sobre el Acceso a la Salud en Colorado**, realizada por el Instituto de Salud de Colorado en colaboración con el estado de Colorado.

Esta importante encuesta de salud y comunidad nos permitirá entender las necesidades de salud y atención médica de las personas en el condado de [COUNTY] y en todo Colorado. Al compartir sus experiencias, usted estará ayudando a las personas y familias de su comunidad.

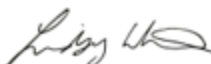
 <b>Paso 1:</b> Identifique a un adulto (mayor de 18 años) en su hogar que pueda responder preguntas sobre la atención médica de todos los miembros del hogar <b>Pídale a esa persona que complete Paso 2.</b>		
<b>Paso 2:</b> ¡Tome la encuesta ahora! Elija una de estas opciones simples:		
<b>Opción 1:</b> Visite <a href="http://www.coloradohealthsurvey.com">www.coloradohealthsurvey.com</a> e ingrese su código de acceso:  <b>[1XXXXXX]</b>	<b>Opción 2:</b> Use un teléfono móvil para escanear este código QR:  	<b>Opción 3:</b> Complete la encuesta por teléfono   Llame al: <b>877-267-7915</b>  Ingrese el código: <b>1XXXXXXX</b>

Esta no es una encuesta política, y no estamos vendiendo nada ni pidiendo dinero. <Incluimos un billete de \$2 con esta carta para agradecerle de antemano.> **< Como agradecimiento adicional por completar la encuesta, recibirá una tarjeta de regalo de \$10.>**

Su ayuda es muy importante para el éxito de esta encuesta. Le agradecemos su tiempo y esperamos recibir sus respuestas pronto.

Para obtener más información sobre la encuesta, visite [www.coloradohealthinstitute.org](http://www.coloradohealthinstitute.org).

Atentamente,



Lindsey Whittington, MPH, Investigadora principal  
Encuesta sobre el Acceso a la Salud en Colorado

## Postcard Reminder

Dear [COUNTY] County Community Member,

About a week ago, we mailed your household a letter asking for your help with the **Colorado Health Access Survey**. This survey looks at the health and health care needs of people and families in [COUNTY] County and throughout Colorado.

If you or someone in your household has already completed the survey, thank you! No further action is needed. If not, please follow these simple steps.



**Step 1:** Identify an adult (18+) in your house who can answer health care questions for everyone there.

**Please have that person complete Step 2.**

**Step 2:** Take this survey now!

Go to

[www.colohealthsurvey.com](http://www.colohealthsurvey.com)

Enter your access code:

[1XXXXXX]

Use a mobile phone to **scan** this QR code:



Complete the survey by phone:

**OR**

Call

**877-267-7915**

and enter

[1XXXXXX]

Your help is very important to this survey's success. To learn more about the survey, please visit [www.coloradohealthinstitute.org](http://www.coloradohealthinstitute.org).

**<As a thank you for completing the survey, you will receive a \$10 gift card.>**

Estimado/a miembro/a de la comunidad del condado de [COUNTY]:

Aproximadamente hace una semana, enviamos por correo a su hogar una carta solicitando su ayuda con la **Encuesta sobre el Acceso a la Salud en Colorado**. Esta encuesta analiza las necesidades de salud y atención médica de las personas y familias en el condado de [COUNTY] y en todo Colorado.

Si usted o alguien en su hogar ya ha completado la encuesta, ¡gracias! No es necesario hacer nada más. Si no, siga estos pasos simples.



**Paso 1:** Identifique a un adulto (mayor de 18 años) en su hogar que pueda responder preguntas sobre la atención médica de todos los miembros del hogar.

**Pídale a esa persona que complete Paso 2.**

**Paso 2:** ¡Tome esta encuesta ahora! Visite [www.coloradohealthsurvey.com](http://www.coloradohealthsurvey.com)

Ingrese su código de acceso: **[1XXXXXX]**

Use un teléfono móvil para escanear **este código QR:**



Complete la encuesta por teléfono:

**OR**

Llame al: **877-267-7915** e ingrese el código **[PIN]**

Su ayuda es muy importante para el éxito de esta encuesta. Para obtener más información sobre la encuesta, visite [www.coloradohealthinstitute.org](http://www.coloradohealthinstitute.org).

**<Como agradecimiento adicional por completar la encuesta, recibirá una tarjeta de regalo de \$10.>**

## Final Reminder Letter




[COUNTY] County Household  
<address1> <address2>  
<city>, <state> <zip>

[MONTH DAY], 2025

Dear [COUNTY] County Community Member,

A few weeks ago, we asked for your help completing the **Colorado Health Access Survey** conducted by the Colorado Health Institute in collaboration with the state of Colorado. If you or someone in your household has already completed the survey, thank you! No further action is needed.

If your household has not completed this survey, please consider this **final opportunity** to participate and share your experiences related to health and health access in [County] County and across Colorado. **<As a thank you for your participation, you will receive a \$10 gift card.>**

	<p><b>Step 1:</b> Identify an adult (18 years or older) who can answer questions about health care for everyone in the household.</p> <p><b>Please have that person complete Step 2.</b></p>	
<p><b>Step 2:</b> Take the survey now! Choose one of these easy options:</p>		
<p><b>Option 1:</b> Go to <a href="http://www.coloradohealthsurvey.com">www.coloradohealthsurvey.com</a> and enter your access code:</p> <p>[1XXXXXX]</p>	<p><b>Option 2:</b> Use a mobile phone to scan this QR code:</p> 	<p><b>Option 3:</b> Complete the survey by phone</p> <p>Call <b>877-267-7915</b> Enter [1XXXXXX]</p>

To learn more about the survey, visit [www.coloradohealthinstitute.org](http://www.coloradohealthinstitute.org).

Your help is very important in understanding the health needs of your community. The information you provide will be valuable in supporting those around you. Thank you for your help.

Sincerely,

Lindsey Whittington, MPH, Principal Investigator  
Colorado Health Access Survey




Hogar del condado de [COUNTY]  
<address1> <address2>  
<city>, <state> <zip>

[MONTH DAY], 2025

Estimado/a miembro/a de la comunidad del condado de [COUNTY],

Hace unas semanas, pedimos su ayuda para completar **la Encuesta sobre el Acceso a la Salud en Colorado** realizada por el Instituto de Salud de Colorado en colaboración con el estado de Colorado. Si usted o alguien en su hogar ya ha completado la encuesta, ¡gracias! No es necesario hacer nada más.

Si su hogar no ha completado esta encuesta, considere esta **última oportunidad** para participar y compartir sus experiencias relacionadas con la salud y el acceso a la salud en el condado de [County] y en todo Colorado. **<Como agradecimiento por su participación, recibirá una tarjeta de regalo de \$10.>**

	<p><b>Paso 1:</b> Identifique a un adulto (mayor de 18 años) que pueda responder preguntas sobre la atención médica de todos los miembros del hogar.</p> <p><b>Pídale a esa persona que complete Paso 2.</b></p>	
<p><b>Paso 2:</b> ¡Tome la encuesta ahora! Elija una de estas opciones simples:</p>		
<p><b>Opción 1:</b> Visite <a href="http://www.coloradohealthsurvey.com">www.coloradohealthsurvey.com</a> e ingrese su código de acceso:</p> <p>[1XXXXXX]</p>	<p><b>Opción 2:</b> Use un teléfono móvil para escanear este código QR:</p> 	<p><b>Opción 3:</b> Complete la encuesta por teléfono</p> <p> Llame al <b>877-267-7915</b></p> <p>Ingres el código [1XXXXXX]</p>

Para obtener más información sobre la encuesta, visite [www.coloradohealthinstitute.org](http://www.coloradohealthinstitute.org).

Su ayuda es muy importante para comprender las necesidades de salud de su comunidad. La información que usted proporcione será valiosa para apoyar a quienes le rodean. Gracias por su ayuda.

Atentamente,



Lindsey Whittington, MPH, investigadora principal  
Encuesta sobre el Acceso a la Salud en Colorado

## Reminder Letter for Partially-Completed Surveys



[COUNTY] County Household  
<address1> <address2>  
<city>, <state> <zip>



[MONTH DAY], 2025

Dear [COUNTY] County Community Member,

We need your help to complete the **Colorado Health Access Survey**.

**You or someone in your household started the Colorado Health Access Survey, and we'd appreciate it if they could finish it.** Please pass this letter along to them so they can pick up where they left off. Depending on their progress, the survey may only take a few more minutes to complete. <We know your time is valuable, so as a thank you, we are offering a **\$10 gift card** for completing the survey.>

This important survey is conducted by the Colorado Health Institute in collaboration with the state of Colorado. It gathers information about the health of people in [COUNTY] County and across Colorado as well as any challenges they may have accessing health care. The results could improve the well-being of people and families in your community, and we need your help to complete the survey.

How to complete the survey		
<p><b>Option 1:</b> Go to <a href="http://www.coloradohealthsurvey.com">www.coloradohealthsurvey.com</a> and enter your access code: [1XXXXXX]</p>	<p><b>Option 2:</b> Use a mobile phone to scan this QR code:</p> 	<p><b>Option 3:</b> Complete the survey by phone</p>  <p>Call <b>877-267-7915</b> Enter [1XXXXXX]</p>

To learn more about the survey, visit [www.coloradohealthinstitute.org](http://www.coloradohealthinstitute.org).

Your help is essential to the success of this survey. Thank you for your help.

Sincerely,

Lindsey Whittington, MPH, Principal Investigator  
Colorado Health Access Survey



Hogar del condado de [COUNTY]  
<address1> <address2>  
<city>, <state> <zip>



[MONTH DAY], 2025

Estimado/a miembro/a de la comunidad del condado de [COUNTY],

Necesitamos su ayuda para completar **La Encuesta sobre el Acceso a la Salud en Colorado**.

**Usted o alguien en su hogar inició la Encuesta sobre el Acceso a la Salud en Colorado y le agradeceríamos mucho que la terminara.** Por favor, entréguele esta carta para que pueda continuar desde donde quedó. Dependiendo de su progreso, la encuesta puede tomar solo unos minutos más. <Sabemos que su tiempo es valioso. Por eso, como agradecimiento, le estamos ofreciendo **una tarjeta de regalo de \$10** por completar la encuesta.>

Esta encuesta importante es llevada a cabo por el Instituto de Salud de Colorado en colaboración con el estado de Colorado. Recopila información sobre la salud de las personas en el condado de [COUNTY] y en todo Colorado, así como sobre cualquier desafío que puedan enfrentar para acceder a la atención médica. Los resultados podrían mejorar el bienestar de las personas y las familias de su comunidad. Por eso, necesitamos su ayuda para completar la encuesta.

Cómo completar la encuesta		
<p><b>Opción 1:</b> Visite <a href="http://www.coloradohealthsurvey.com">www.coloradohealthsurvey.com</a> e ingrese su código de acceso:</p> <p><b>[1XXXXXX]</b></p>	<p><b>Opción 2:</b> Use un teléfono móvil y escanear este código QR:</p> 	<p><b>Opción 3:</b> Complete la encuesta por teléfono</p>  <p>Llame al <b>877-267-7915</b></p> <p>Ingresa el código <b>[1XXXXXX]</b></p>

Para obtener más información sobre la encuesta, visite [www.coloradohealthinstitute.org](http://www.coloradohealthinstitute.org).

Su ayuda es esencial para el éxito de esta encuesta. Gracias por su ayuda.

Atentamente,

Lindsey Whittington, MPH, Investigadora Principal  
Encuesta sobre el Acceso a la Salud en Colorado

## Email Invitation

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**Subject: Invitation to Complete the Colorado Health Access Survey**



***A continuación en español***

Dear [P\_COUNTY] County Community Member,

Your household has been randomly selected to participate in the **Colorado Health Access Survey**.

This important survey is conducted by the [Colorado Health Institute](#) in collaboration with the state of Colorado. The survey gathers information about people's health in [P\_COUNTY] County and across Colorado, as well as any challenges they may have accessing health care. The results could benefit people and families in your community.

We are not selling anything or asking for money. You may also receive a letter in the mail inviting you to complete the survey.

**Who should complete the survey?**

Please have an adult in your household, age 18 or older, who can answer questions about health care for everyone in the household complete the survey by clicking here:

[Colorado Health Access Survey](#)

If you do not have access to the internet or want to complete the survey by phone, please call **1-877-267-7915**.

Your help is very important to the success of this survey. For more information about the Colorado Health Institute, visit our website at [www.coloradohealthinstitute.org](http://www.coloradohealthinstitute.org). Thank you for your assistance.

***PLEASE NOTE: The Colorado Health Access Survey will never make unsolicited calls, attempt to sell you anything, or ask for donations. Nobody will ask you for any credit card, bank account, or social security number information. If you are contacted by anybody requesting this information, do not share it and contact the appropriate authorities.***

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**Asunto: Invitación para completar la Encuesta sobre el Acceso a la Salud en Colorado**



Estimado/a miembro/a de la comunidad del condado de [P\_COUNTY]:

Su hogar fue elegido al azar para participar en la **Encuesta sobre el Acceso a la Salud en Colorado**.

Esta encuesta importante es llevada a cabo por el [Instituto de Salud de Colorado](#) en colaboración con el estado de Colorado. Recopila información sobre la salud de las personas en el condado de [P\_COUNTY] y en todo Colorado, así como sobre cualquier desafío que puedan enfrentar para acceder a la atención médica. Los resultados podrían mejorar el bienestar de las personas y las familias de su comunidad.

No estamos vendiendo nada ni pidiendo dinero. También es posible que reciba una carta por correo con una invitación a completar la encuesta.

**¿Quién debe completar la encuesta?**

Pídale a un adulto en su hogar (mayor de 18 años), que pueda responder preguntas sobre la atención médica de todos los miembros del hogar que complete la encuesta en el sitio web e ingrese el código de acceso.

**Encuesta sobre el Acceso a la Salud en Colorado**

Si no tiene acceso a Internet o desea completar la encuesta por teléfono, llame al **1-877- 267-7915**.

Su ayuda es esencial para el éxito de esta encuesta. Para obtener más información sobre el Instituto de Salud de Colorado, visite nuestro sitio web en [www.coloradohealthinstitute.org](http://www.coloradohealthinstitute.org). Gracias por su ayuda.

***TENGA EN CUENTA LO SIGUIENTE: La Encuesta sobre el Acceso a la Salud en Colorado nunca hará llamadas no solicitadas, no intentará venderle nada ni le pedirá donaciones. Nadie le pedirá ninguna información de tarjeta de crédito, cuenta bancaria o número de seguro social. Si alguien se comunica con usted y le solicita esta información, no la comparta y comuníquese con las autoridades correspondientes.***

## Email Reminder

**Subject: Reminder to Complete the Colorado Health Access Survey**



### ***A continuación en español***

Dear [P\_COUNTY] County Community Member,

About a week ago, we emailed you to ask for your help with the **Colorado Health Access Survey**, a survey about people's health in [P\_COUNTY] County and across Colorado and the issues they may have in accessing health care. You may have also received a letter inviting you to participate.

If you or someone in your household has already completed the questionnaire, please accept our sincere thanks. If not, please have an adult 18 or older who can answer questions about health care for everyone in the household, visit the website listed below to complete the survey.

Click here to respond: [Colorado Health Access Survey](#)

Your help is very important to the success of this survey. For more information on the Colorado Health Institute and this survey, visit our website at [www.coloradohealthinstitute.org](http://www.coloradohealthinstitute.org).

If you do not have access to the internet or want to complete the survey by phone, please call **1-877- 267-7915**.

Thank you.

***PLEASE NOTE: The Colorado Health Access Survey will never make unsolicited calls, attempt to sell you anything, or ask for donations. Nobody will ask you for any credit card, bank account, or social security number information. If you are contacted by anybody requesting this information, do not share it and contact the appropriate authorities.***

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**Asunto: Recordatorio para completar la Encuesta sobre el Acceso a la Salud en Colorado**



Estimado/a miembro/a de la comunidad del condado de [P\_COUNTY]:

Hace aproximadamente una semana, le enviamos un correo electrónico para pedirle su ayuda con la **Encuesta sobre el Acceso a la Salud en Colorado**. Esta encuesta trata sobre la salud de las personas en el condado de [P\_COUNTY] y en todo Colorado, así como los problemas que pueden tener para acceder a la atención médica. Es posible que también haya recibido una carta con una invitación para participar.

Si usted o alguien en su hogar ya ha completado el cuestionario, se lo agradecemos de corazón! Si no, pídale a un adulto mayor de 18 años que pueda responder preguntas sobre la atención médica de todos los miembros del hogar y visite el sitio web que figura a continuación para completar la encuesta.

Haga clic aquí para responder: [Encuesta sobre el Acceso a la Salud en Colorado](#)

Su ayuda es muy importante para el éxito de esta encuesta. Para obtener más información sobre el Instituto de Salud de Colorado y esta encuesta, visite nuestro sitio web en [www.coloradohealthinstitute.org](http://www.coloradohealthinstitute.org).

Si no tiene acceso a Internet o desea completar la encuesta por teléfono, llame al **1-877-267-7915**.

¡Gracias!

***TENGA EN CUENTA LO SIGUIENTE: La Encuesta sobre el acceso a la salud en Colorado nunca hará llamadas no solicitadas, no intentará venderle nada ni le pedirá donaciones. Nadie le pedirá ninguna información de tarjeta de crédito, cuenta bancaria o número de seguro social. Si alguien se comunica con usted y le solicita esta información, no la comparta y comuníquese con las autoridades correspondientes.***

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## Additional Email Reminder

**Subject: Last Chance! Reminder to Complete the Colorado Health Access Survey**



### ***A continuación en español***

Dear [P\_COUNTY] County Community Member,

We previously emailed you asking for your help with the **Colorado Health Access Survey**, a survey about people's health in [P\_COUNTY] County and across Colorado and the issues they may have accessing health care. You may have also received a letter with the same request.

The Colorado Health Access Survey is closing soon, and we need your help to finish. Your household's responses are important for obtaining accurate results and supporting people and families in your community. By hearing from nearly everyone in the sample, we can ensure the results reflect the experiences of residents in [P\_COUNTY] County and across Colorado.

If you or someone in your household has already completed the questionnaire, please accept our sincere thanks. If not, please have an adult 18 or older in your household who can answer questions about health care for everyone living there, go to the website listed below to complete the survey. If someone has already started the survey, please share this email with them so they can pick up where they left off.

### **Who should complete the survey?**

Please have an adult in your household, age 18 or older, who can answer questions about health care for everyone in the household complete the survey by clicking here:

### **Colorado Health Access Survey**

Click here to respond: [Colorado Health Access Survey](#)

Your help is very important to success of this survey. For more information on the Colorado Health Institute and this survey, please visit our website at [www.coloradohealthinstitute.org](http://www.coloradohealthinstitute.org).

If you do not have access to the internet or would prefer to complete the survey by phone, please call **1-877- 267-7915**.

Thank you.

***PLEASE NOTE: The Colorado Health Access Survey will never make unsolicited calls, attempt to sell you anything, or ask for donations. Nobody will ask you for any credit card, bank account, or social security number information. If you are contacted by anybody requesting this information, do not share it and contact the appropriate authorities.***

**Asunto: ¡Última oportunidad! Recordatorio para completar la Encuesta sobre el acceso a la salud en Colorado**

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Estimado/a miembro/a de la comunidad del condado de [P\_COUNTY]:

Anteriormente, le enviamos un correo electrónico para pedirle su ayuda con la **Encuesta sobre el Acceso a la Salud en Colorado**. Esta encuesta trata sobre la salud de las personas en el condado de [P\_COUNTY] y en todo Colorado, así como los problemas que pueden tener para acceder a la atención médica. Es posible que también haya recibido una carta con la misma solicitud.

La Encuesta sobre el acceso a la salud en Colorado cerrará pronto y necesitamos su ayuda para completarla. Las respuestas de su hogar son importantes para obtener resultados precisos y apoyar a las personas y familias de su comunidad. Al escuchar a casi todos los integrantes de la muestra, podemos garantizar que los resultados reflejen las experiencias de los residentes del condado de [P\_COUNTY] y de todo Colorado.

Si usted o alguien en su hogar ya ha completado el cuestionario, se lo agradecemos de corazón! Si no, pídale a un adulto mayor de 18 años que pueda responder preguntas sobre la atención médica de todos los miembros del hogar y visite el sitio web que figura a continuación para completar la encuesta. Si alguien ya ha comenzado la encuesta, comparta este correo electrónico para que pueda continuar desde donde quedó.

Haga clic aquí para responder: [Encuesta sobre el Acceso a la Salud en Colorado](#)

Su ayuda es muy importante para el éxito de esta encuesta. Para obtener más información sobre el Instituto de Salud de Colorado y esta encuesta, visite nuestro sitio web en [www.coloradohealthinstitute.org](http://www.coloradohealthinstitute.org).

Si no tiene acceso a Internet o prefiere completar la encuesta por teléfono, llame al **1-877- 267-7915**.

¡Gracias!

***TENGA EN CUENTA LO SIGUIENTE: La Encuesta sobre el acceso a la salud en Colorado nunca hará llamadas no solicitadas, no intentará venderle nada ni le pedirá donaciones. Nadie le pedirá ninguna información de tarjeta de crédito, cuenta bancaria o número de seguro social. Si alguien se comunica con usted y le solicita esta información, no la comparta y comuníquese con las autoridades correspondientes.***

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## Appendix B – Variables Excluded from CHAS 2025 Data File

Variable Name	Reason for Exclusion
A8DI_OS	Backend flag for other specify
A8EO_OS	Backend flag for other specify
CA_LOGIC	Retired backend variable
CAflg	Retired item
CATI_INT3	Retired item
CC1	Multipunch string
CR2K_OS	Backend flag for other specify
CWA6	Multipunch string
D1AH_OS	Backend flag for other specify
D3	Multipunch string
D3A	Multipunch string
D3B	Multipunch string
D3C	Multipunch string
D3D	Multipunch string
D7	Multipunch string
DHC2M_OS	Backend flag for other specify
DIS_H3A_NO_INSURANCE	Retired item
DISP_H3C_NO_INSURANCE	Retired item
GUARDB	Multipunch string
H2	Multipunch string
INCENT_FORM	New in 2025, flag variable
MG2_GRID_OE12	Backend flag for other specify
P_COUNTY	Preloaded county
P_FPL50UNDER	Retired preload variable
P_FPL51TO138	Retired preload variable
RH2	Multipunch string
RH4	Multipunch string

Variable Name	Reason for Exclusion
S7A1_1	Retired loop
S7A2_10	Retired loop
S7A2_2	Retired loop
S7A2_3	Retired loop
S7A2_4	Retired loop
S7A2_5	Retired loop
S7A2_6	Retired loop
S7A2_7	Retired loop
S7A2_8	Retired loop
S7A2_9	Retired loop
S7A3_2	Retired loop
S7A3_3	Retired loop
S7A3_4	Retired loop
S8_1	Loop variable, all null, not asked of target
SO3	Multipunch string
TRAN1	Multipunch string
VAL_UND18	Retired backend/flag variable



## Appendix C – Detailed Response Rates by HSR

## Response Rate by HSR/Region, Overall

HSR	Region	Complete Interview	Partial Interview, Eligible Non-Interview, or Not Eligible	Unknown Eligibility, Non-Interview	Response Rate
1	Northeast	425	242	2,848	12.2%
2_01	Larimer County – Loveland	323	124	1,185	20.1%
2_02	Larimer County – Fort Collins	523	254	1,712	21.4%
3	Douglas County	413	212	1,866	16.7%
4	El Paso County	417	164	2,506	13.6%
5	Central Eastern Plains	427	221	2,266	14.8%
6	Southeast	425	205	2,466	13.9%
7	Pueblo County	425	207	2,457	13.9%
8	San Luis Valley	427	247	2,881	12.2%
9	Southwest	430	206	1,844	17.6%
10	Gunnison and Dolores Valleys	423	200	2,362	14.4%
11	Northwest	428	230	2,689	13.0%
12	I-70 Mountain Corridor	422	243	2,536	13.5%
13	Upper Arkansas Valley	450	207	2,271	15.6%
14	Adams County	622	453	4,550	11.2%
15	Arapahoe County	769	510	5,448	11.5%
16	Boulder-Broomfield	499	245	1,699	20.6%
17	Mountain Gateways	416	217	1,887	16.7%
18	Weld County	415	211	2,355	14.1%
19	Mesa County	442	160	1,771	18.8%
20	Denver County	1,030	491	5,306	15.3%
21	Jefferson County	771	288	2,756	20.4%
<b>Total</b>		<b>10,922</b>	<b>5,537</b>	<b>57,661</b>	<b>14.9%</b>

*Note: The counts for "Partial Interview", "Eligible Non-Interview", and "Not Eligible" are summed to protect respondents' privacy.*

## Response Rate by HSR/Region, Wave 1

HSR	Region	Complete Interview	Partial Interview, Eligible Non-Interview, or Not Eligible	Unknown Eligibility, Non- Interview	Response Rate
1	Northeast	125	48	705	14.4%
2_01	Larimer County – Loveland	79	34	349	17.4%
2_02	Larimer County – Fort Collins	147	63	484	21.6%
3	Douglas County	89	49	446	15.4%
4	El Paso County	103	38	761	11.5%
5	Central Eastern Plains	108	62	542	15.5%
6	Southeast	126	35	657	15.6%
7	Pueblo County	139	49	874	13.2%
8	San Luis Valley	110	46	654	13.8%
9	Southwest	104	43	447	17.9%
10	Gunnison and Dolores Valleys	104	48	595	14.2%
11	Northwest	100	56	590	13.5%
12	I-70 Mountain Corridor	115	61	634	14.4%
13	Upper Arkansas Valley	119	54	609	15.5%
14	Adams County	216	126	1,525	11.8%
15	Arapahoe County	159	113	1,290	10.3%
16	Boulder-Broomfield	133	47	451	21.4%
17	Mountain Gateways	102	38	460	17.2%
18	Weld County	312	168	1,736	14.2%
19	Mesa County	115	59	585	15.3%
20	Denver County	287	176	1,769	13.1%
21	Jefferson County	215	90	827	19.2%
<b>Total</b>		<b>3,107</b>	<b>1,503</b>	<b>16,990</b>	<b>14.6%</b>

*Note: The counts for "Partial Interview", "Eligible Non-Interview", and "Not Eligible" are summed to protect respondents' privacy.*

## Response Rate by HSR/Region, Wave 2

HSR	Region	Complete Interview	Partial Interview, Eligible Non-Interview, or Not Eligible <sup>a</sup>	Unknown Eligibility, Non- Interview	Response Rate
1	Northeast	263	163	1,820	11.9%
2_01	Larimer County – Loveland	208	81	683	21.7%
2_02	Larimer County – Fort Collins	375	184	1,191	21.8%
3	Douglas County	231	112	1,009	17.2%
4	El Paso County	309	121	1,692	14.7%
5	Central Eastern Plains	319	159	1,660	15.1%
6	Southeast	258	123	1,424	14.5%
7	Pueblo County	237	133	1,313	14.3%
8	San Luis Valley	242	117	1,440	13.7%
9	Southwest	254	123	1,043	18.2%
10	Gunnison and Dolores Valleys	240	108	1,314	14.7%
11	Northwest	280	130	1,725	13.4%
12	I-70 Mountain Corridor	228	137	1,368	13.5%
13	Upper Arkansas Valley	269	102	1,263	16.7%
14	Adams County	406	327	3,025	10.9%
15	Arapahoe County	610	397	4,158	11.9%
16	Boulder-Broomfield	366	187	1,212	20.9%
17	Mountain Gateways	314	179	1,427	16.6%
18	Weld County <sup>b</sup>	N/A	N/A	N/A	N/A
19	Mesa County	300	95	1,074	20.6%
20	Denver County	665	268	3,049	16.9%
21	Jefferson County	516	181	1,793	20.9%
<b>Total</b>		<b>6,890</b>	<b>3,427</b>	<b>34,683</b>	<b>15.5%</b>

<sup>a</sup> The counts for "Partial Interview", "Eligible Non-Interview", and "Not Eligible" are summed to protect respondents' privacy.

<sup>b</sup> No invitations were mailed to Weld County for Wave 2, to avoid overlap with a health survey Weld County fielded during the same period.

### Response Rate by HSR/Region, Wave 3

HSR	Region	Complete Interview	Partial Interview, Eligible Non-Interview, or Not Eligible	Unknown Eligibility, Non-Interview	Response Rate
1	Northeast	37	31	323	9.5%
2_01	Larimer County – Loveland	36	9	153	18.3%
2_02	Larimer County – Fort Collins	1	7	37	2.2%
3	Douglas County	93	51	411	16.9%
4	El Paso County	5	5	53	8.1%
5	Central Eastern Plains	0	0	64	0%
6	Southeast	41	47	385	8.8%
7	Pueblo County	49	25	270	14.4%
8	San Luis Valley	75	84	787	8.0%
9	Southwest	72	40	354	15.6%
10	Gunnison and Dolores Valleys	79	44	453	13.8%
11	Northwest	48	44	374	10.5%
12	I-70 Mountain Corridor	79	45	534	12.3%
13	Upper Arkansas Valley	62	51	399	12.2%
14	Adams County <sup>b</sup>	N/A	N/A	N/A	N/A
15	Arapahoe County <sup>b</sup> <b>Error! Bookmark not defined.</b>	N/A	N/A	N/A	N/A
16	Boulder-Broomfield	0	11	36	0%
17	Mountain Gateways <sup>b</sup> <b>Error! Bookmark not defined.Error! Bookmark not defined.Error! Bookmark not defined.</b>	N/A	N/A	N/A	N/A
18	Weld County	103	43	619	13.7%
19	Mesa County	27	6	112	18.6%
20	Denver County	78	47	488	12.8%

HSR	Region	Complete Interview	Partial Interview, Eligible Non-Interview, or Not Eligible	Unknown Eligibility, Non-Interview	Response Rate
21	Jefferson County	40	17	136	21.1%
<b>Total</b>		<b>925</b>	<b>607</b>	<b>5,988</b>	<b>12.4%</b>

<sup>a</sup> The counts for "Partial Interview", "Eligible Non-Interview", and "Not Eligible" are summed to protect respondents' privacy.

<sup>b</sup> These counties were excluded from Wave 3 due to reaching target completes prior to the Wave 3 invitation letter being sent out.