

# National Health Interview Survey Early Release Program

Table 1. Modeled estimates (with standard errors) of the percent distribution of household telephone status for adults aged 18 and over, by state: United States, 2017

Geographic area	Wireless-only	Wireless- mostly	Dual-use	Landline- mostly	Landline-only	No telephone service	Total
Alabama	52.4 (2.1)	15.1 (1.5)	13.8 (1.4)	8.8 (0.8)	6.5 (0.7)	3.3	100.0
Alaska	51.7 (2.4)	22.0 (2.0)	15.9 (1.6)	4.9 (0.7)	3.2 (0.5)	2.3	100.0
Arizona	63.2 (1.8)	11.5 (1.2)	11.2 (1.1)	5.2 (0.6)	4.8 (0.5)	4.1	100.0
Arkansas	62.8 (2.2)	12.3 (1.5)	10.0 (1.3)	6.4 (0.7)	4.2 (0.6)	4.2	100.0
California	53.0 (1.1)	18.6 (0.8)	15.1 (0.7)	6.2 (0.4)	4.3 (0.2)	2.9	100.0
Colorado	62.0 (1.7)	14.7 (1.3)	11.2 (1.1)	4.9 (0.6)	3.6 (0.4)	3.5	100.0
Connecticut	36.2 (2.0)	21.1 (1.7)	21.3 (1.6)	11.7 (0.9)	7.4 (0.7)	2.2	100.0
Delaware	41.1 (2.2)	19.0 (1.7)	22.4 (1.7)	9.1 (0.8)	5.6 (0.6)	2.8	100.0
District of Columbia	57.4 (2.3)	16.4 (1.8)	13.4 (1.5)	4.6 (0.7)	4.1 (0.5)	4.0	100.0
Florida	57.5 (1.3)	15.0 (1.0)	12.4 (0.8)	5.8 (0.5)	5.2 (0.3)	4.2	100.0
Georgia	55.8 (1.5)	16.8 (1.2)	14.9 (1.0)	5.3 (0.5)	4.1 (0.4)	3.2	100.0
Hawaii	48.5 (2.2)	17.1 (1.8)	21.9 (1.7)	5.2 (0.8)	4.3 (0.6)	3.1	100.0
Idaho	65.6 (2.0)	10.1 (1.4)	10.7 (1.3)	6.2 (0.8)	3.2 (0.5)	4.2	100.0
Illinois	54.4 (1.4)	16.1 (1.1)	14.8 (1.0)	7.5 (0.6)	3.9 (0.4)	3.3	100.0
Indiana	59.5 (1.7)	12.4 (1.2)	12.6 (1.1)	7.4 (0.7)	4.7 (0.5)	3.3	100.0
Iowa	57.0 (1.9)	14.4 (1.4)	13.2 (1.2)	8.2 (0.7)	3.5 (0.4)	3.7	100.0
Kansas	59.9 (2.0)	13.8 (1.5)	11.8 (1.3)	6.3 (0.7)	4.4 (0.5)	3.8	100.0
Kentucky	56.2 (2.0)	14.0 (1.4)	9.7 (1.1)	10.7 (0.8)	6.3 (0.6)	3.1	100.0
Louisiana	52.0 (2.1)	17.9 (1.6)	14.0 (1.4)	7.0 (0.7)	5.9 (0.6)	3.2	100.0
Maine	47.2 (2.5)	13.7 (1.7)	14.6 (1.6)	16.2 (1.2)	5.4 (0.7)	2.8	100.0
Maryland	38.8 (1.8)	25.0 (1.7)	22.0 (1.5)	7.0 (0.7)	4.2 (0.5)	3.0	100.0
Massachusetts	39.0 (1.8)	18.8 (1.4)	23.1 (1.4)	10.8 (0.8)	6.1 (0.5)	2.2	100.0
Michigan	53.7 (1.5)	13.7 (1.1)	14.2 (1.0)	9.9 (0.7)	5.2 (0.4)	3.4	100.0
Minnesota	50.6 (1.7)	18.6 (1.4)	14.8 (1.1)	9.3 (0.7)	3.7 (0.4)	3.1	100.0
Mississippi	61.5 (2.2)	14.2 (1.6)	10.6 (1.3)	4.2 (0.6)	6.1 (0.7)	3.4	100.0
Missouri	58.3 (1.8)	14.8 (1.4)	12.5 (1.2)	7.1 (0.7)	3.6 (0.5)	3.7	100.0
Montana	51.4 (2.4)	12.5 (1.6)	15.1 (1.6)	9.4 (0.9)	8.2 (0.8)	3.5	100.0
Nebraska	54.0 (2.1)	15.1 (1.6)	13.9 (1.4)	8.9 (0.8)	5.0 (0.5)	3.1	100.0
Nevada	60.4 (2.0)	14.3 (1.5)	12.8 (1.2)	3.7 (0.5)	5.2 (0.5)	3.6	100.0
New Hampshire	43.5 (2.5)	19.1 (1.8)	19.1 (1.7)	11.4 (1.1)	5.1 (0.6)	1.9	100.0
New Jersey	35.6 (1.6)	25.6 (1.5)	21.1 (1.3)	9.8 (0.7)	5.2 (0.4)	2.7	100.0
New Mexico	60.1 (2.1)	12.7 (1.5)	10.8 (1.2)	6.2 (0.7)	6.1 (0.6)	4.1	100.0
New York	35.9 (1.1)	20.7 (1.0)	24.9 (0.9)	9.2 (0.5)	6.5 (0.4)	2.8	100.0
North Carolina	53.2 (1.6)	15.9 (1.2)	14.9 (1.1)	7.2 (0.6)	5.3 (0.4)	3.4	100.0
North Dakota	56.5 (2.6)	16.5 (1.9)	13.5 (1.6)	4.3 (0.7)	5.7 (0.7)	3.5	100.0
Ohio	53.2 (1.4)	12.5 (0.9)	15.4 (1.0)	10.5 (0.7)	4.8 (0.4)	3.7	100.0
Oklahoma	61.3 (1.8)	13.9 (1.4)	12.8 (1.2)	3.5 (0.5)	4.8 (0.5)	3.7	100.0
Oregon	58.2 (2.0)	13.6 (1.4)	11.0 (1.2)	7.9 (0.8)	5.6 (0.6)	3.7	100.0
Pennsylvania	41.6 (1.4)	16.0 (1.1)	22.1 (1.1)	12.0 (0.7)	5.8 (0.4)	2.5	100.0
Rhode Island	40.4 (2.1)	17.7 (1.7)	21.1 (1.6)	12.3 (1.0)	5.8 (0.6)	2.8	100.0
South Carolina	53.7 (1.9)	15.9 (1.4)	14.0 (1.2)	8.4 (0.8)	4.3 (0.5)	3.6	100.0
South Dakota	56.2 (2.4)	14.6 (1.7)	12.4 (1.5)	7.3 (0.8)	4.5 (0.6)	4.9	100.0
Tennessee	58.8 (1.7)	14.2 (1.2)	10.8 (1.0)	8.5 (0.7)	4.4 (0.5)	3.3	100.0
Texas	65.3 (1.0)	14.8 (0.8)	9.1 (0.6)	4.2 (0.4)	3.0 (0.2)	3.6	100.0
Utah	63.9 (2.0)	14.5 (1.5)	12.3 (1.3)	3.4 (0.6)	2.7 (0.4)	3.1	100.0
Vermont	48.6 (2.9)	12.1 (1.7)	10.1 (1.4)	12.0 (1.2)	14.6 (1.2)	2.6	100.0
Virginia	46.5 (1.7)	21.2 (1.4)	16.8 (1.2)	7.4 (0.7)	5.2 (0.5)	3.0	100.0
Washington	54.2 (1.8)	16.7 (1.3)	14.6 (1.2)	6.3 (0.6)	4.9 (0.5)	3.4	100.0
West Virginia	52.7 (2.5)	10.5 (1.5)	11.3 (1.4)	13.2 (1.2)	9.1 (0.8)	3.1	100.0
Wisconsin	51.4 (1.7)	14.6 (1.2)	14.3 (1.1)	10.9 (0.8)	5.4 (0.5)	3.3	100.0
Wyoming	62.8 (2.1)	11.5 (1.4)	13.1 (1.4)	5.4 (0.7)	4.4 (0.6)	2.9	100.0

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NOTES: Small-area statistical modeling techniques were used to combine National Health Interview Survey (NHIS) data collected from within specific geographies (states and some counties) with auxiliary data that are representative of those geographies to produce model-based estimates. Estimates were modeled using the procedures described in previous National Health Statistics Reports (e.g., http://www.cdc.gov/nchs/data/nhsr/nhsr039.pdf), with a few modifications: Models were based on five 12-month periods (2013-2017); an Akaike information criterion (AIC) was used to select the best set of covariates for the models given the revised data years; variances for the direct estimates were computed using in-house rather than publicly available sample design variables; and the reported standard errors were based on the variance of the estimate prior to benchmarking to the national NHIS estimates for the corresponding phone category and the state-level American Community Survey (ACS) estimates for the population without telephone service. The proportion of adults living in households with no telephone service was not modeled. Other proportions were adjusted so that this estimate agreed with the 2016 ACS estimate for this proportion. Small-area statistical modeling assumes that the design-based estimates of variance are stable and that the direct estimates are unbiased. Users are therefore cautioned that the approach used to create the model-based estimates can produce substantially biased prevalence estimates and unstable variance estimates when the direct estimate from NHIS is based on small sample sizes, when that sample is drawn from only a few geographic areas, and when those few geographic areas are not representative of the state of interest.

SOURCES: NCHS, National Health Interview Survey, 2013–2017; U.S. Census Bureau, American Community Survey, 2012–2016; and infoUSA.com consumer database, 2013–2017.

ACKNOWLEDGMENTS: Estimates were calculated by Nadarajasundaram Ganesh of NORC at the University of Chicago, in collaboration with Lin Liu of NORC and with staff of the National Center for Health Statistics, Division of Health Interview Statistics and Division of Research and Methodology.



## National Health Interview Survey Early Release Program

Table 2. Modeled estimates (with standard errors) of the percent distribution of household telephone status for children under age 18, by state: United States, 2017

Geographic area	Wireless-only	Wireless- mostly	Dual-use	Landline- mostly	Landline-only	No telephone service	Total
Alabama	65.3 (2.7)	17.2 (2.5)	7.6 (1.8)	3.0 (1.0)	2.6 (0.8)	4.4	100.0
Alaska	62.0 (2.9)	21.7 (2.8)	11.1 (2.3)	0.8 (0.5)	1.4 (0.6)	3.0	100.0
Arizona	74.4 (2.4)	11.7 (2.0)	6.7 (1.7)	0.6 (0.4)	2.2 (0.7)	4.3	100.0
Arkansas	79.2 (2.1)	10.9 (2.0)	1.8 (0.9)	0.7 (0.5)	2.4 (0.7)	4.9	100.0
California	61.9 (1.5)	20.1 (1.4)	10.4 (1.1)	2.0 (0.5)	2.6 (0.5)	3.1	100.0
Colorado	68.2 (2.2)	16.9 (2.1)	9.1 (1.7)	0.5 (0.4)	1.6 (0.6)	3.6	100.0
Connecticut	47.1 (2.8)	29.5 (3.0)	14.5 (2.4)	3.8 (1.1)	2.7 (0.8)	2.4	100.0
Delaware	52.8 (3.2)	23.8 (3.0)	16.5 (2.8)	2.3 (0.9)	2.5 (0.8)	2.1	100.0
District of Columbia	55.3 (3.3)	25.7 (3.6)	12.6 (2.8)	1.2 (0.8)	1.9 (0.7)	3.4	100.0
Florida	71.5 (1.7)	15.1 (1.6)	5.8 (1.1)	1.1 (0.4)	2.1 (0.5)	4.5	100.0
Georgia	65.2 (2.0)	18.0 (2.0)	10.1 (1.6)	0.9 (0.4)	2.4 (0.6)	3.4	100.0
Hawaii	59.2 (2.6)	19.1 (2.7)	16.8 (2.5)	0.5 (0.4)	1.6 (0.6)	2.8	100.0
Idaho	73.1 (2.4)	11.5 (2.3)	7.8 (2.0)	1.3 (0.7)	1.5 (0.6)	4.8	100.0
Illinois	62.9 (2.0)	19.2 (1.9)	11.2 (1.6)	1.8 (0.6)	1.8 (0.5)	3.2	100.0
Indiana	71.4 (2.2)	12.4 (1.9)	7.4 (1.6)	2.5 (0.8)	2.2 (0.7)	4.1	100.0
lowa	62.4 (2.7)	18.7 (2.5)	10.4 (2.0)	3.1 (1.0)	1.7 (0.6)	3.7	100.0
Kansas	70.9 (2.5)	17.1 (2.5)	4.8 (1.5)	1.9 (0.8)	1.2 (0.5)	4.1	100.0
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Kentucky Louisiana	66.2 (2.5)	16.4 (2.3)	6.5 (1.6)	4.4 (1.1)	3.3 (0.8)	3.3 4.0	100.0
	64.8 (2.7)	17.6 (2.4)	8.2 (1.8)	2.7 (0.9)	2.8 (0.8)		
Maine	56.7 (3.0)	17.5 (2.8)	9.9 (2.4)	7.7 (1.7)	3.2 (0.9)	5.0	100.0
Maryland	46.6 (2.7)	31.0 (2.9)	15.2 (2.4)	1.6 (0.7)	1.4 (0.6)	4.1	100.0
Massachusetts	42.8 (2.5)	26.4 (2.7)	21.5 (2.5)	4.2 (1.1)	3.0 (0.8)	2.1	100.0
Michigan	63.2 (2.1)	17.4 (2.0)	10.9 (1.6)	2.6 (0.7)	1.9 (0.6)	3.9	100.0
Minnesota	56.2 (2.5)	23.3 (2.6)	13.4 (2.1)	2.4 (0.8)	1.5 (0.6)	3.3	100.0
Mississippi	75.1 (2.4)	14.3 (2.4)	4.9 (1.6)	0.2 (0.3)	1.9 (0.7)	3.6	100.0
Missouri	67.6 (2.1)	17.1 (2.1)	8.2 (1.6)	1.0 (0.5)	1.3 (0.5)	4.8	100.0
Montana	62.1 (3.1)	15.0 (2.6)	11.8 (2.5)	2.6 (1.0)	2.9 (0.9)	5.7	100.0
Nebraska	68.8 (2.5)	14.6 (2.3)	8.5 (1.9)	2.9 (1.0)	2.4 (0.7)	2.8	100.0
Nevada	65.7 (2.6)	15.8 (2.5)	11.1 (2.2)	0.4 (0.4)	2.6 (0.8)	4.4	100.0
New Hampshire	49.2 (3.5)	26.9 (3.3)	16.3 (2.9)	1.8 (0.9)	2.9 (0.9)	3.0	100.0
New Jersey	37.5 (2.4)	31.3 (2.8)	20.1 (2.4)	5.2 (1.2)	2.8 (0.7)	3.1	100.0
New Mexico	73.1 (2.5)	11.8 (2.2)	8.6 (2.0)	0.6 (0.5)	2.1 (0.7)	3.9	100.0
New York	38.9 (1.7)	24.8 (1.7)	25.7 (1.8)	3.8 (0.7)	3.7 (0.6)	3.1	100.0
North Carolina	62.9 (2.0)	19.2 (2.0)	7.9 (1.4)	2.9 (0.8)	3.1 (0.7)	3.9	100.0
North Dakota	60.1 (3.5)	22.8 (3.1)	10.7 (2.5)	1.1 (0.8)	2.0 (0.8)	3.3	100.0
Ohio	64.5 (2.0)	15.0 (1.7)	9.8 (1.4)	3.8 (0.8)	2.6 (0.6)	4.3	100.0
Oklahoma	70.2 (2.3)	15.6 (2.4)	7.6 (1.8)	0.2 (0.3)	1.9 (0.7)	4.5	100.0
Oregon	70.7 (2.5)	16.4 (2.4)	6.1 (1.6)	0.8 (0.5)	2.5 (0.8)	3.4	100.0
Pennsylvania	49.7 (2.0)	20.7 (1.9)	18.1 (1.8)	4.9 (0.9)	2.8 (0.6)	3.8	100.0
Rhode Island	52.5 (3.0)	23.7 (3.0)	13.7 (2.6)	5.9 (1.5)	2.3 (0.8)	1.8	100.0
South Carolina	68.2 (2.3)	15.9 (2.3)	8.2 (1.7)	2.0 (0.8)	1.8 (0.6)	4.0	100.0
South Dakota	67.5 (3.0)	15.1 (2.5)	9.1 (2.2)	1.2 (0.7)	1.6 (0.7)	5.5	100.0
Tennessee	69.1 (2.2)	16.4 (2.1)	7.1 (1.5)	1.9 (0.7)	1.6 (0.6)	3.9	100.0
Texas	72.8 (1.3)	15.4 (1.3)	5.1 (0.8)	1.5 (0.4)	1.6 (0.4)	3.5	100.0
Utah	68.0 (2.5)	16.0 (2.4)	11.4 (2.1)	0.8 (0.5)	1.2 (0.5)	2.6	100.0
Vermont	54.3 (3.4)	18.6 (2.7)	9.9 (2.1)	7.0 (1.6)	7.9 (1.4)	2.3	100.0
Virginia	50.5 (2.4)	27.9 (2.5)	12.8 (1.9)	2.1 (0.7)	3.4 (0.8)	3.3	100.0
Washington	60.3 (2.4)	20.3 (2.3)	12.9 (2.0)	1.1 (0.6)	2.0 (0.6)	3.4	100.0
West Virginia	70.5 (3.2)	11.4 (2.4)	*	5.4 (1.6)	3.7 (1.0)	3.3	100.0
Wisconsin	62.3 (2.4)	20.0 (2.3)	8.0 (1.6)	4.3 (1.0)	1.5 (0.6)	3.9	100.0
Wyoming	72.6 (2.5)	12.8 (2.1)	8.4 (1.9)	0.9 (0.6)	2.4 (0.8)	2.9	100.0

<sup>\*</sup> Estimate does not meet NCHS standards of reliability as specified in *National Center for Health Statistics Data Presentation Standards for Proportions* (available from: https://www.cdc.gov/nchs/data/series/sr\_02/sr02\_175.pdf).

See additional notes on next page.



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