



## National Health Interview Survey Early Release Program

**Table 1. Modeled estimates (with standard errors) of the percent distribution of personal telephone status for adults aged 18 and over, by state: United States, 2022**

| Geographic area      | Wireless-only adults | Wireless-mostly adults | Dual users | Landline-mostly adults | Landline-only adults | Phoneless adults | Total |
|----------------------|----------------------|------------------------|------------|------------------------|----------------------|------------------|-------|
| Alabama              | 77.1 (2.0)           | 10.7 (1.3)             | 5.0 (0.7)  | 3.1 (0.5)              | 2.6 (0.5)            | 1.5              | 100.0 |
| Alaska               | 73.1 (2.5)           | 18.5 (2.4)             | 3.9 (0.9)  | 2.0 (0.5)              | 1.3 (0.4)            | 1.3              | 100.0 |
| Arizona              | 70.1 (2.2)           | 19.9 (1.8)             | 4.4 (0.6)  | 2.2 (0.4)              | 1.6 (0.4)            | 1.8              | 100.0 |
| Arkansas             | 75.0 (2.3)           | 13.9 (1.8)             | 4.1 (0.7)  | 3.5 (0.6)              | 1.9 (0.4)            | 1.5              | 100.0 |
| California           | 73.0 (1.0)           | 15.4 (0.7)             | 5.9 (0.4)  | 2.2 (0.3)              | 2.2 (0.2)            | 1.3              | 100.0 |
| Colorado             | 77.6 (1.6)           | 12.1 (1.2)             | 4.9 (0.7)  | 3.3 (0.5)              | 1.3 (0.3)            | 0.8              | 100.0 |
| Connecticut          | 58.1 (2.4)           | 23.1 (1.9)             | 9.5 (0.9)  | 4.7 (0.6)              | 3.4 (0.5)            | 1.2              | 100.0 |
| Delaware             | 59.2 (2.3)           | 23.2 (2.1)             | 9.1 (0.9)  | 4.7 (0.7)              | 2.9 (0.6)            | 0.8              | 100.0 |
| District of Columbia | 72.8 (2.2)           | 14.5 (1.8)             | 6.0 (1.0)  | 4.0 (0.7)              | 2.1 (0.5)            | 0.6              | 100.0 |
| Florida              | 70.8 (1.3)           | 17.1 (1.1)             | 6.1 (0.5)  | 2.4 (0.3)              | 2.2 (0.3)            | 1.3              | 100.0 |
| Georgia              | 75.3 (1.5)           | 14.2 (1.2)             | 5.3 (0.6)  | 2.7 (0.4)              | 1.6 (0.3)            | 0.9              | 100.0 |
| Hawaii               | 65.5 (2.4)           | 19.1 (1.7)             | 8.0 (1.1)  | 2.3 (0.5)              | 3.5 (0.7)            | 1.7              | 100.0 |
| Idaho                | 82.2 (2.0)           | 8.5 (1.3)              | 3.2 (0.6)  | 2.7 (0.6)              | 1.9 (0.5)            | 1.5              | 100.0 |
| Illinois             | 71.2 (1.4)           | 16.5 (1.1)             | 5.6 (0.5)  | 3.6 (0.4)              | 2.0 (0.3)            | 1.2              | 100.0 |
| Indiana              | 73.4 (1.9)           | 11.9 (1.2)             | 5.7 (0.7)  | 4.6 (0.5)              | 2.9 (0.5)            | 1.5              | 100.0 |
| Iowa                 | 75.5 (2.1)           | 12.3 (1.3)             | 5.0 (0.7)  | 3.6 (0.6)              | 2.3 (0.5)            | 1.2              | 100.0 |
| Kansas               | 77.1 (2.0)           | 12.5 (1.4)             | 4.7 (0.7)  | 2.9 (0.6)              | 2.0 (0.4)            | 0.9              | 100.0 |
| Kentucky             | 72.0 (2.1)           | 11.0 (1.3)             | 6.7 (0.8)  | 5.1 (0.7)              | 3.8 (0.6)            | 1.4              | 100.0 |
| Louisiana            | 76.2 (1.5)           | 13.2 (1.3)             | 4.6 (0.6)  | 2.6 (0.4)              | 2.0 (0.4)            | 1.4              | 100.0 |
| Maine                | 64.2 (3.2)           | 15.6 (2.0)             | 8.5 (1.1)  | 7.4 (1.0)              | 3.5 (0.7)            | 0.8              | 100.0 |
| Maryland             | 63.0 (2.1)           | 20.9 (1.7)             | 9.1 (0.8)  | 3.6 (0.6)              | 2.2 (0.4)            | 1.2              | 100.0 |
| Massachusetts        | 56.7 (1.7)           | 24.2 (1.5)             | 10.1 (0.8) | 5.5 (0.6)              | 2.6 (0.5)            | 0.9              | 100.0 |
| Michigan             | 74.1 (1.6)           | 10.7 (1.1)             | 6.7 (0.7)  | 5.0 (0.5)              | 2.5 (0.4)            | 1.0              | 100.0 |
| Minnesota            | 73.5 (1.9)           | 13.6 (1.5)             | 6.4 (0.7)  | 3.7 (0.5)              | 1.9 (0.4)            | 1.0              | 100.0 |
| Mississippi          | 80.1 (2.2)           | 9.8 (1.6)              | 3.8 (0.7)  | 2.6 (0.5)              | 2.1 (0.5)            | 1.6              | 100.0 |
| Missouri             | 72.5 (1.7)           | 14.5 (1.3)             | 5.8 (0.6)  | 3.2 (0.5)              | 2.6 (0.4)            | 1.4              | 100.0 |
| Montana              | 73.6 (2.8)           | 12.0 (1.6)             | 4.7 (0.8)  | 4.8 (0.8)              | 3.0 (0.6)            | 1.9              | 100.0 |
| Nebraska             | 74.8 (2.0)           | 14.0 (1.8)             | 5.4 (0.8)  | 2.7 (0.5)              | 1.9 (0.5)            | 1.2              | 100.0 |
| Nevada               | 75.3 (1.7)           | 14.7 (1.7)             | 4.2 (0.6)  | 2.5 (0.5)              | 1.7 (0.4)            | 1.6              | 100.0 |
| New Hampshire        | 57.3 (2.9)           | 22.1 (1.9)             | 10.7 (1.2) | 6.6 (0.9)              | 2.9 (0.6)            | 0.5              | 100.0 |
| New Jersey           | 55.2 (1.9)           | 26.6 (1.7)             | 10.9 (0.9) | 4.2 (0.6)              | 2.0 (0.4)            | 1.2              | 100.0 |
| New Mexico           | 74.2 (2.7)           | 11.6 (1.9)             | 6.9 (1.0)  | 2.6 (0.6)              | 2.8 (0.6)            | 1.8              | 100.0 |
| New York             | 57.1 (1.3)           | 20.8 (1.0)             | 12.2 (0.6) | 4.7 (0.4)              | 3.8 (0.4)            | 1.4              | 100.0 |
| North Carolina       | 73.6 (1.3)           | 13.4 (1.2)             | 6.1 (0.5)  | 3.6 (0.4)              | 2.3 (0.4)            | 1.1              | 100.0 |
| North Dakota         | 67.8 (3.0)           | 18.0 (2.4)             | 6.5 (1.0)  | 3.6 (0.7)              | 2.8 (0.6)            | 1.3              | 100.0 |
| Ohio                 | 72.7 (1.4)           | 12.5 (1.0)             | 6.3 (0.6)  | 4.7 (0.5)              | 2.6 (0.4)            | 1.2              | 100.0 |
| Oklahoma             | 83.3 (1.8)           | 8.0 (1.3)              | 3.9 (0.6)  | 1.7 (0.4)              | 1.9 (0.5)            | 1.2              | 100.0 |
| Oregon               | 76.1 (1.7)           | 12.7 (1.5)             | 5.1 (0.7)  | 3.4 (0.5)              | 1.7 (0.4)            | 1.1              | 100.0 |
| Pennsylvania         | 60.8 (1.5)           | 18.1 (1.1)             | 9.9 (0.7)  | 6.3 (0.6)              | 3.3 (0.4)            | 1.6              | 100.0 |
| Rhode Island         | 59.4 (2.6)           | 20.9 (2.3)             | 9.1 (1.0)  | 5.2 (0.8)              | 3.7 (0.6)            | 1.7              | 100.0 |
| South Carolina       | 74.1 (1.9)           | 11.9 (1.2)             | 6.6 (0.7)  | 4.2 (0.6)              | 2.0 (0.4)            | 1.1              | 100.0 |
| South Dakota         | 73.0 (2.5)           | 14.4 (1.9)             | 5.3 (0.8)  | 3.0 (0.6)              | 2.8 (0.6)            | 1.5              | 100.0 |
| Tennessee            | 76.5 (1.5)           | 11.1 (1.1)             | 5.0 (0.6)  | 4.1 (0.5)              | 2.1 (0.4)            | 1.3              | 100.0 |
| Texas                | 80.1 (1.0)           | 11.8 (0.7)             | 4.0 (0.3)  | 1.5 (0.2)              | 1.4 (0.2)            | 1.3              | 100.0 |
| Utah                 | 80.7 (2.0)           | 14.3 (1.5)             | 2.7 (0.6)  | 0.9 (0.3)              | 0.9 (0.3)            | 0.4              | 100.0 |
| Vermont              | 59.2 (2.4)           | 17.9 (2.3)             | 9.0 (1.1)  | 9.0 (1.1)              | 4.0 (0.7)            | 0.8              | 100.0 |
| Virginia             | 65.2 (1.7)           | 19.3 (1.2)             | 7.3 (0.7)  | 4.0 (0.5)              | 2.9 (0.4)            | 1.4              | 100.0 |
| Washington           | 74.2 (1.5)           | 14.0 (1.3)             | 6.3 (0.6)  | 2.7 (0.4)              | 1.9 (0.3)            | 0.8              | 100.0 |
| West Virginia        | 64.5 (2.9)           | 12.6 (1.9)             | 9.3 (1.1)  | 7.8 (1.0)              | 4.2 (0.7)            | 1.6              | 100.0 |
| Wisconsin            | 70.6 (1.9)           | 13.1 (1.3)             | 6.6 (0.6)  | 5.5 (0.6)              | 3.0 (0.5)            | 1.2              | 100.0 |
| Wyoming              | 77.1 (2.1)           | 13.5 (1.7)             | 3.2 (0.7)  | 3.6 (0.6)              | 1.2 (0.4)            | 1.4              | 100.0 |

See notes on next page.



# National Health Interview Survey Early Release Program

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 for the 50 states and the District of Columbia 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 three 12-month periods (2020-2022).
- LASSO regression models (least absolute shrinkage and selection operator) were used to select the best set of covariates for the models. Covariates for these adult models were allowed to differ from the covariates for models based on children.
- Potential covariates originally drawn from infoUSA.com were dropped in favor of additional covariates from the American Community Survey (ACS) on internet and smartphone use.
- ACS data (2020-2022) used as covariates corresponded to the same year as NHIS data. For example, data from the 2022 ACS were used as covariates in the model for direct estimates derived using data from the 2022 NHIS.
- The proportion of adults living in households with no telephone service (“phoneless adults”) was not modeled. Other proportions were adjusted so that this estimate agreed with the 2022 ACS estimate for this proportion.
- The variances for the direct estimates were computed using in-house rather than publicly available sample design variables.

In 2019, the NHIS underwent a questionnaire redesign to better meet the needs of data users. The redesigned NHIS classifies telephone status for adults rather than households. The modeled estimates reported here for 2022 are for adults aged 18 and over who are wireless-only, wireless-mostly, dual users, landline-mostly, and landline-only instead of adults aged 18 and over *living in households* that are wireless-only, wireless-mostly, dual-use, landline-mostly, or landline-only.

Small-area statistical modeling assumes that the design-based estimates of variance are stable and that the direct estimates are unbiased. Users are 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, 2020-2022; and U.S. Census Bureau, American Community Survey, 2020-2022.

ACKNOWLEDGMENTS: Estimates were calculated by Nadarajasundaram Ganesh of NORC at the University of Chicago, in collaboration 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, 2022**

| Geographic area      | Wireless-only | Wireless and landline | Landline-only | No telephone service | Total |
|----------------------|---------------|-----------------------|---------------|----------------------|-------|
| Alabama              | 85.4 (2.2)    | 13.7 (2.1)            | 0.2 (0.1)     | 0.6                  | 100.0 |
| Alaska               | 84.3 (2.8)    | 15.4 (2.8)            | 0.3 (0.1)     | 0.0                  | 100.0 |
| Arizona              | 81.7 (2.6)    | 17.1 (2.5)            | 0.2 (0.1)     | 1.0                  | 100.0 |
| Arkansas             | 84.3 (2.6)    | 14.8 (2.6)            | 0.2 (0.1)     | 0.7                  | 100.0 |
| California           | 82.6 (1.2)    | 16.0 (1.1)            | 0.8 (0.1)     | 0.6                  | 100.0 |
| Colorado             | 85.6 (2.1)    | 13.6 (2.1)            | 0.4 (0.1)     | 0.4                  | 100.0 |
| Connecticut          | 72.4 (3.0)    | 26.4 (2.9)            | 0.5 (0.1)     | 0.7                  | 100.0 |
| Delaware             | 72.6 (3.3)    | 26.4 (3.3)            | 0.2 (0.1)     | 0.8                  | 100.0 |
| District of Columbia | 84.7 (3.1)    | 14.4 (3.0)            | 0.2 (0.1)     | 0.6                  | 100.0 |
| Florida              | 81.6 (1.8)    | 17.7 (1.7)            | 0.1 (0.0)     | 0.6                  | 100.0 |
| Georgia              | 83.9 (2.0)    | 15.6 (2.0)            | 0.1 (0.1)     | 0.4                  | 100.0 |
| Hawaii               | 78.4 (2.8)    | 20.4 (2.7)            | 0.2 (0.1)     | 1.1                  | 100.0 |
| Idaho                | 91.9 (1.8)    | 7.5 (1.8)             | 0.2 (0.1)     | 0.5                  | 100.0 |
| Illinois             | 84.1 (1.6)    | 15.0 (1.5)            | 0.2 (0.1)     | 0.7                  | 100.0 |
| Indiana              | 83.8 (2.1)    | 14.5 (1.9)            | 0.5 (0.2)     | 1.2                  | 100.0 |
| Iowa                 | 83.5 (2.2)    | 15.5 (2.2)            | 0.3 (0.1)     | 0.7                  | 100.0 |
| Kansas               | 85.7 (2.3)    | 13.8 (2.3)            | 0.2 (0.1)     | 0.4                  | 100.0 |
| Kentucky             | 81.9 (2.6)    | 15.8 (2.4)            | 0.9 (0.2)     | 1.3                  | 100.0 |
| Louisiana            | 85.1 (2.0)    | 14.1 (1.9)            | 0.3 (0.1)     | 0.5                  | 100.0 |
| Maine                | 76.5 (3.5)    | 23.0 (3.5)            | 0.2 (0.1)     | 0.3                  | 100.0 |
| Maryland             | 76.0 (2.4)    | 23.3 (2.4)            | 0.2 (0.1)     | 0.5                  | 100.0 |
| Massachusetts        | 66.4 (2.7)    | 32.8 (2.6)            | 0.3 (0.1)     | 0.4                  | 100.0 |
| Michigan             | 84.7 (2.1)    | 14.0 (1.8)            | 0.6 (0.2)     | 0.7                  | 100.0 |
| Minnesota            | 83.1 (2.1)    | 16.2 (2.1)            | 0.2 (0.1)     | 0.5                  | 100.0 |
| Mississippi          | 89.4 (2.3)    | 9.6 (2.2)             | 0.2 (0.1)     | 0.9                  | 100.0 |
| Missouri             | 85.1 (2.1)    | 13.9 (2.0)            | 0.1 (0.1)     | 0.9                  | 100.0 |
| Montana              | 85.8 (2.7)    | 13.3 (2.7)            | 0.2 (0.1)     | 0.7                  | 100.0 |
| Nebraska             | 84.3 (2.5)    | 14.8 (2.5)            | 0.2 (0.1)     | 0.7                  | 100.0 |
| Nevada               | 84.1 (2.6)    | 15.1 (2.5)            | 0.1 (0.1)     | 0.7                  | 100.0 |
| New Hampshire        | 68.2 (3.6)    | 31.6 (3.6)            | 0.2 (0.1)     | 0.1                  | 100.0 |
| New Jersey           | 66.1 (3.0)    | 33.0 (2.9)            | 0.2 (0.1)     | 0.7                  | 100.0 |
| New Mexico           | 84.7 (2.7)    | 14.0 (2.8)            | 0.4 (0.1)     | 0.8                  | 100.0 |
| New York             | 69.4 (1.9)    | 29.0 (1.9)            | 0.8 (0.1)     | 0.8                  | 100.0 |
| North Carolina       | 83.1 (1.7)    | 16.4 (1.6)            | 0.1 (0.0)     | 0.5                  | 100.0 |
| North Dakota         | 79.7 (3.4)    | 19.8 (3.5)            | 0.2 (0.1)     | 0.3                  | 100.0 |
| Ohio                 | 83.7 (2.1)    | 15.0 (2.0)            | 0.3 (0.1)     | 0.9                  | 100.0 |
| Oklahoma             | 92.4 (1.9)    | 6.8 (1.7)             | 0.3 (0.1)     | 0.5                  | 100.0 |
| Oregon               | 84.5 (2.2)    | 15.0 (2.1)            | 0.1 (0.1)     | 0.4                  | 100.0 |
| Pennsylvania         | 74.6 (2.1)    | 23.1 (2.0)            | 1.2 (0.2)     | 1.1                  | 100.0 |
| Rhode Island         | 70.6 (3.3)    | 28.5 (3.3)            | 0.3 (0.1)     | 0.7                  | 100.0 |
| South Carolina       | 84.3 (2.1)    | 14.9 (2.1)            | 0.1 (0.1)     | 0.6                  | 100.0 |
| South Dakota         | 84.9 (2.5)    | 14.3 (2.5)            | 0.4 (0.1)     | 0.4                  | 100.0 |
| Tennessee            | 85.4 (2.0)    | 13.8 (2.0)            | 0.1 (0.1)     | 0.7                  | 100.0 |
| Texas                | 89.2 (1.1)    | 10.1 (1.0)            | 0.1 (0.0)     | 0.5                  | 100.0 |
| Utah                 | 86.5 (2.1)    | 13.2 (2.1)            | 0.1 (0.1)     | 0.2                  | 100.0 |
| Vermont              | 73.1 (3.3)    | 26.3 (3.3)            | 0.3 (0.1)     | 0.3                  | 100.0 |
| Virginia             | 78.4 (2.1)    | 20.4 (1.9)            | 0.5 (0.1)     | 0.8                  | 100.0 |
| Washington           | 81.9 (2.0)    | 17.4 (1.9)            | 0.4 (0.1)     | 0.3                  | 100.0 |
| West Virginia        | 78.5 (3.4)    | 20.6 (3.3)            | 0.4 (0.2)     | 0.4                  | 100.0 |
| Wisconsin            | 83.7 (2.2)    | 15.0 (2.1)            | 0.1 (0.1)     | 1.2                  | 100.0 |
| Wyoming              | 88.0 (2.5)    | 11.7 (2.3)            | 0.2 (0.1)     | 0.1                  | 100.0 |

0.0 Quantity more than zero but less than 0.05.

See additional notes on next page.



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- Models were based on three 12-month periods (2020-2022).
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- Potential covariates originally drawn from infoUSA.com were dropped in favor of additional covariates from the American Community Survey (ACS) on internet and smartphone use.
- ACS data (2020-2022) used as covariates corresponded to the same year as NHIS data. For example, data from the 2022 ACS were used as covariates in the model for direct estimates derived using data from the 2022 NHIS.
- The proportion of children living in households with no telephone service was not modeled. Other proportions were adjusted so that this estimate agreed with the 2022 ACS estimate for this proportion.
- The variances for the direct estimates were computed using in-house rather than publicly available sample design variables.

In 2019, the NHIS underwent a questionnaire redesign to better meet the needs of data users. The modeled estimates reported here for 2022 are for children under age 18 *living in households* that are wireless-only, have both wireless and landline telephones, or are landline-only. As of 2019, it is no longer possible to identify children living in wireless-mostly or landline-mostly households.

Small-area statistical modeling assumes that the design-based estimates of variance are stable and that the direct estimates are unbiased. Users are 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, 2020-2022; and U.S. Census Bureau, American Community Survey, 2020-2022.

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