

Beginning in 2011, BRFSS methods changed in two ways:¹

- Cell phone-only households were added to the sample.
- Responses were weighted using iterative proportional fitting (IPF) or raking, which allows adjustment for a larger selection of demographic factors and is the weighting schema used by the U.S. Census.

Why is this important?

Cell phone

- The proportion of U.S. households relying only on cellular telephone service is steadily rising; estimates from 2011 show approximately 32% no longer have a land-line.² In Hawaii, the estimate rises to 42%.³
- Research shows that there is a different demographic profile among people who use only cellular phones. They tend to be younger, unmarried, home renters who live in metropolitan areas.
- Omitting people who use only cellular phones skews the estimates of health behaviors and outcomes, making the results less representative.

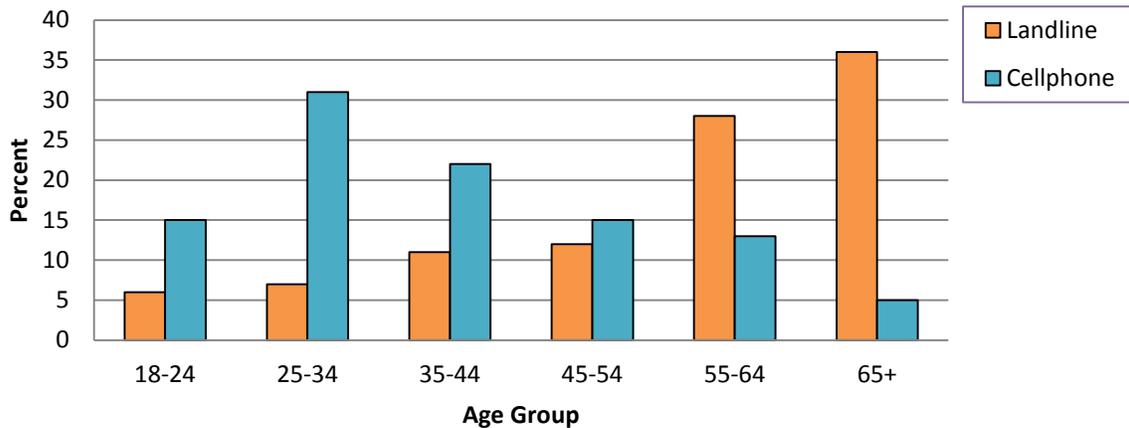
Weighting

- The previous weighting adjusted the survey population based only on three demographic factors: age, race/ethnicity, and gender.
- Advances in computer technology now allow for more sophisticated weighting methods that can adjust for a larger number of demographic factors, including some representing the intersection of two subgroups.
- Adjusting for many demographic variables makes the sample more representative of the population, reducing the potential for bias.

Hawaii BRFSS estimates are adjusted for:

- Age group by gender
- Race/ethnicity
- Education
- Marital status
- Tenure (rent or own)
- Gender
- Age group by race/ethnicity
- Phone usage group
- Region (county)
- Region by age group
- Region by gender
- Region by race/ethnicity

Age Distribution of BRFSS Respondents by Phone Type in Hawaii, 2010



Technical Tips

- BRFSS data from 2011 and forward CANNOT be compared to BRFSS data from 2010 or before since changes in the estimates may be due to the methodology changes.
- Try to only use BRFSS data from 2011 forward or from 2010 back. If data from across both these time periods are used, be sure to explain the change and warn about making comparisons.

References:

1. Centers for Disease Control and Prevention. Methodologic changes in the Behavioral Risk Factor Surveillance System and potential effects on prevalence estimates. MMWR. 2012; 61(22):410-3.
2. Blumberg SJ, Luke VW. Wireless substitution: Early release estimates from the National Health Interview Survey, January-June 2011. Atlanta, GA; Division of Health Interview Statistics, National Center for Health Statistics; 2011.
3. State Level Wireless Only Estimates: January 2013. Marketing Systems Group, Genesys Sampling; Horsham, PA.