



COMMUNITY HEALTH DATA BASE

An Information Service of the Public Health Management Corporation

Info Sheet: Response Rate Issues & Challenges

What Are Response Rates?

Response rates are, basically, the *proportion of people selected and deemed eligible for a study that actually completes the questionnaire.*¹

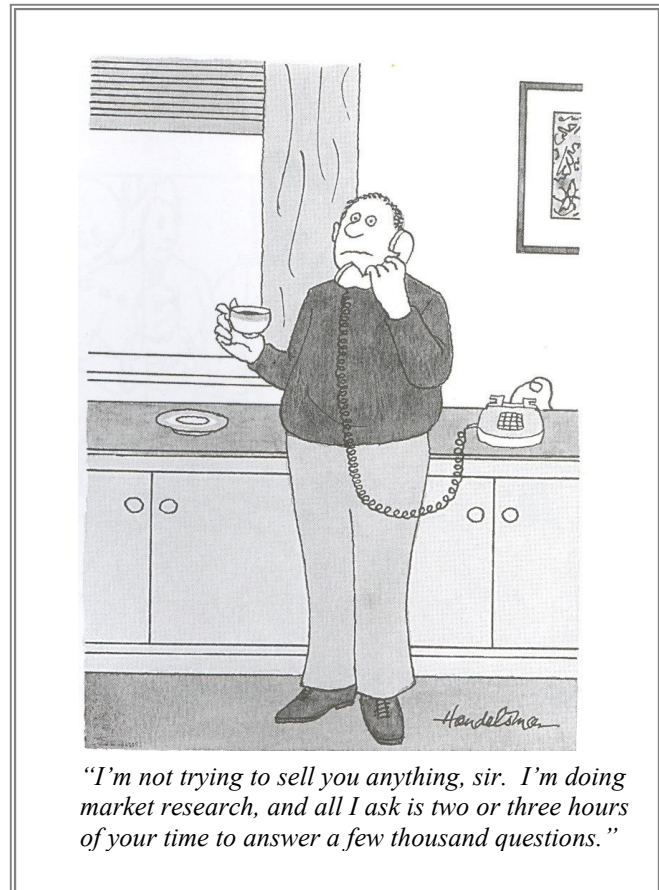
Historically, response rates have been central to survey research in the U.S. This was based on the assumption that the larger the proportion of participating individuals within the sample, the more accurate (or “representative”) the survey estimates.² Response rates are still widely used to assess the representativeness of surveys, although their usage raises many important issues.

The American Association for Public Opinion Research (AAPOR) has issued standard definitions for the sample disposition codes by which response rates are calculated. These standard definitions are used widely, including by the CHDB in calculating response rates for the Household Health Surveys. However, there are many different kinds of sample designs, sample management, and respondent selection – and these have not been standardized, meaning that comparison between polls with different sample designs is not possible.³

More importantly, according to AAPOR, although formulas for calculating rates are now more standardized, **the relationship between response rates and survey quality has become much less clear.**

The Challenge of Declining Response Rates

For the past decade or more, response rates for telephone survey research have been declining nationwide. The Pew Research Center for the People and the Press notes:



As Americans are faced with more demands on their time and a growing number of unsolicited telephone calls, many have armed themselves with increasingly sophisticated technology for screening their calls (e.g., voice mail, caller identification, call blocking and privacy managers) and are exercising more choice over when and how they can be contacted. As a result, fewer Americans are participating in telephone polls than was the case when telephone surveys first became prevalent.⁴

The survey research industry at large, and the Community Health Data Base in particular, have been considering these issues for a number of years and implementing a variety of measures to combat declining response rates.

At the same time, there is now substantial evidence showing that response rates do not necessarily have an impact on survey quality.

Below we briefly describe the current research on these issues, as well as the Community Health Data Base's efforts to maintain and increase response rates.

Response Rates and Survey Quality

From AAPOR:

Two factors have now undermined the role of the response rate as the primary arbiter of survey quality. Largely due to increasing refusals, response rates across all modes of survey administration have declined, in some cases precipitously. As a result, organizations have had to put additional effort into administration, thus making all types of surveys more costly. At the same time, **studies that have compared survey estimates to benchmark data from the U.S. Census or very large governmental sample surveys have also questioned the positive association between response rates and quality.** Furthermore, a growing emphasis on total survey error has caused methodologists to examine surveys—even those with acceptably high response rates—for evidence of nonresponse bias.

Results that show the least bias have turned out, in some cases, to come from surveys with less than optimal response rates. Experimental comparisons have also revealed few significant differences between estimates from surveys with low response rates and short field periods and surveys with high response rates and long field periods.

A few key examples from the literature on response rates:

- ❖ Research has found no significant attitudinal biases as a result of response rate differences. A study published in 2000, found similar results in surveys with 61 and 36 percent response rates.⁵

- ❖ A follow-up in 2006, based on surveys with 50 and 25 percent response rates, again found “little to suggest that unit nonresponse within the range of response rates obtained seriously threatens the quality of survey estimates.”⁶
- ❖ A study published in 2007 concluded, “lower response rates seem not to substantially decrease demographic representativeness... This evidence challenges the assumptions that response rates are a key indicator of survey quality.”⁷

Southeastern Pennsylvania Household Health Survey Response Rates

Although the survey research field remains uncertain about the role that response rates should play in survey research, the CHDB remains committed to achieving the highest possible response rates for a local survey of this size, depth, and complexity, and within a feasible budget. The SEPA Household Health Survey response rate enhancement strategies include:

- ✓ A carefully constructed introduction explaining the importance of the study, and that nothing is being sold or promoted
- ✓ Calling households back up to 14 times
- ✓ Calling on a range of days of the week, including weekends, and calling at different time slots, including most weekday calls being made in the evening
- ✓ Maintaining a relatively long fielding period (10 weeks or more)
- ✓ Using a highly trained team of specialists to reach out to those who initially decline (refusal conversion)

Using AAPOR’s very stringent RR3 formula (considered the gold standard for random digit dial telephone surveys), the cross-sectional response rates from recent waves of the SEPA Household Health Survey area are: 27.3% in 2004, 23.8% in 2006, 24.8% in 2008 and 24.5% in 2010 for all interviews (25.5% for landline interviews and 20.6% for cell phone interviews). These rates are comparable to, and in some cases higher than, other random digit dial surveys of this caliber.

In 2008 and 2010, the CHDB implemented some response rate enhancements to ensure a robust response. These included: (a) Calling households back up to 14 times; (b) Extending the fielding period ; and (c) Mailing letters to households that had initially declined to participate or had proven unreachable, explaining the nature of the survey and offering a \$10 incentive for completion of the interview.

Although we cannot identify all of the factors that may have contributed to the increased response rate in 2008, the CHDB staff were delighted to see that not only did we halt the decline in response rate seen between 2004 and 2006, but have steadily increased landline response since 2006.

Where Do We Go From Here?

The Community Health Data Base team will continue to work diligently to maintain, or if possible improve, response rates. However, these enhancements are extremely costly, so must always be considered in light of the other needs and constraints of the Household Health Survey and the Members of the CHDB Network.

According to AAPOR there is currently no consensus about the factors that produce the disjuncture between response rates and survey quality. But AAPOR does recommend that, “Consumers should pay attention to other indicators of quality that are included in reports and on websites, such as insignificant levels of bias, low levels of missing data, and conformity with other research findings.”⁸ The Community Health Data Base has already been using some of these supplemental approaches for many years – particularly comparison with other research findings. The Household Health Survey is regularly analyzed in comparison with other state and national data.

In addition, given the evidence showing that response rates should not be used as the only indicator of survey quality, the CHDB will continue to monitor the survey research field and consider additional measures of survey quality.

More Information from AAPOR

There is a rich literature on response rates and nonresponse bias. The most recent contributions can be found in the Special Issue of the *Public Opinion Quarterly*, “Nonresponse Bias in Household Surveys” (2006). For more, you can visit AAPOR’s website at www.aapor.org.

For more information about the **Community Health Data Base** or the Household Health Survey, please visit www.CHDBdata.org.

¹ Aday, L. (1996). *Designing and Conducting Health Surveys* (2nd Ed.) San Francisco: Jossey-Bass, p. 99.

² http://www.aapor.org/Response_Rates_An_Overview.htm, accessed 4/15/2010.

³ Langer, G. “About response rates: Some unresolved questions.” *Public Perspective*, May/June 2003. Gary Langer is director of polling for ABC News.

⁴ <http://people-press.org/methodology/collecting/#3>, accessed 4/15/2010.

⁵ Keeter, Miller, Kohut, Groves and Presser, “Consequences of Reducing Nonresponse in a National Telephone Survey,” *Public Opinion Quarterly*, 64: 125-48

⁶ Keeter, Kennedy, Dimock, Best and Craighill, “Gauging the Impact of Growing Nonresponse on Estimates from a National RDD Telephone Survey,” *Public Opinion Quarterly*, 70: 759-79

⁷ Holbrook, Krosnick and Pfent, “The Causes and Consequences of Response Rates in Surveys by the News Media and Government Contractor Survey Research Firms,” in *Advances in Telephone Survey Methodology*, Chapter 23, Wiley, 2007.

⁸ http://www.aapor.org/Response_Rates_An_Overview.htm, accessed 4/15/2010.