Missing sexual orientation and gender identity data in the Behavioral Risk Factor Surveillance System: Sources, Magnitude, Correlates, Implications

Bill M. Jesdale, PhD  he/him/his
Population and Quantitative Health Sciences
University of Massachusetts Medical School, Worcester
William.Jesdale@umassmed.edu
(401) 480-5728
THANK YOU BRFSS!!

BRFSS is an innovative leader in collecting SOGI data.

BRFSS is by far the largest source of population-based sexual orientation data, and the ONLY source of population-based gender identity data.

BRFSS is the ONLY source of SOGI data available at the state level.
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Learning Objectives

1) Sexual orientation and gender identity (SOGI) data are missing more often than researchers realize.

2) This missing data problem is more complicated than researchers realize, and our usual missing data techniques don’t work (well), even at the state level.

3) The only practical solution is to include the SOGI module in the core demographics section, on a national basis.
Sources of Missing BRFSS SOGI Data
Sources of Missing Sexual Orientation and Gender Identity Data, Behavioral Risk Factor Surveillance System, 2014-2017
Sources of Missing Sexual Orientation and Gender Identity Data

RI 2016-2017
GA 2014-2017
TX 2015-2017
CA 2016-2017
MS 2016-2017
WA 2016-2017

Legend:
- Out-of-state Cellphone Respondents
- Interview Termination
- Item Non-Response
- Valid Response
Source of Missing Data by Age Group

- **Age 18-24**
- **Age 75 and older**
Source of Missing Data by Language of Interview

- **English**
  - Out-of-state Cellphone Respondents
  - Interview Termination
  - Item Non-Response
  - Valid Response

- **Spanish**
  - Out-of-state Cellphone Respondents
  - Interview Termination
  - Item Non-Response
  - Valid Response
Source of Missing Data by Year, Hawaii

- 2014
- 2015
- 2016
- 2017

- Out-of-state
- Cellphone Respondents
- Interview Termination
- Item Non-Response
- Valid Response
2017 and Hypothetical Alternative:
SOGI Adopted in National Core

- Optional nature of SOGI module
- Out-of-state Cellphone Respondents
- Interview Termination
- Item Non-Response
- Valid Response
2017 and Hypothetical Alternative: Some states opt in, all insert SOGI in core
Optional nature of SOGI module

Out-of-state Cellphone Respondents

Interview Termination

Item Non-Response

Valid Response

2017 and Hypothetical Alternative: All States opt in, move SOGI to core

2017

All Opt In, SOGI Asked in Core
2017 and Hypothetical Alternative:
All States opt in, move SOGI to core, 100% CP
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Adding SOGI to the nation-wide core will produce the best state-level data.
2017 and Hypothetical Alternative: All States opt in, SOGI module near end
Potential Impact of Alternate Strategies

1) Incorporating SOGI into the national core removes almost all missing-ness, and what is left (item non-response) can be handled with standard statistical techniques.

2) Keeping SOGI as an optional module, but incorporating it into the core demographics at the state level only reduces missing-ness due to interview termination, still leaves us with no “national” estimates, and leaves states with no data for out-of-state cellphones, making even estimates within a state electing to implement SOGI with potentially biased estimates.

3) Push to web for out-of-state cellphone respondents has the potential to reduce missing-ness due to out-of-state cellphones, but takes us back to a high level of missing-ness due to interview termination.