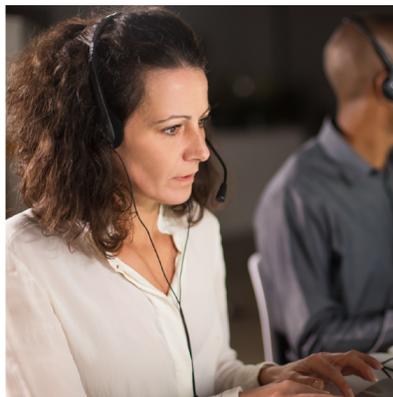
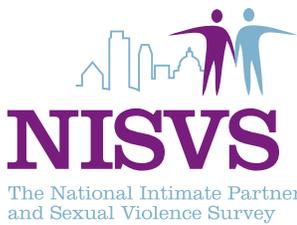


The National Intimate Partner and Sexual Violence Survey



2016/2017 Methodology Report



Centers for Disease
Control and Prevention
National Center for Injury
Prevention and Control

The National Intimate Partner and Sexual Violence Survey: 2016/2017 Methodology Report

Marcie-jo Kresnow, Sharon G. Smith, Kathleen C. Basile, Jieru Chen

Centers for Disease Control and Prevention

Rochelle P. Walensky, MD, MPH, Director

National Center for Injury Prevention and Control

Debra E. Houry, MD, MPH, Director

Division of Violence Prevention

James A. Mercy, PhD, Director

Division of Injury Prevention

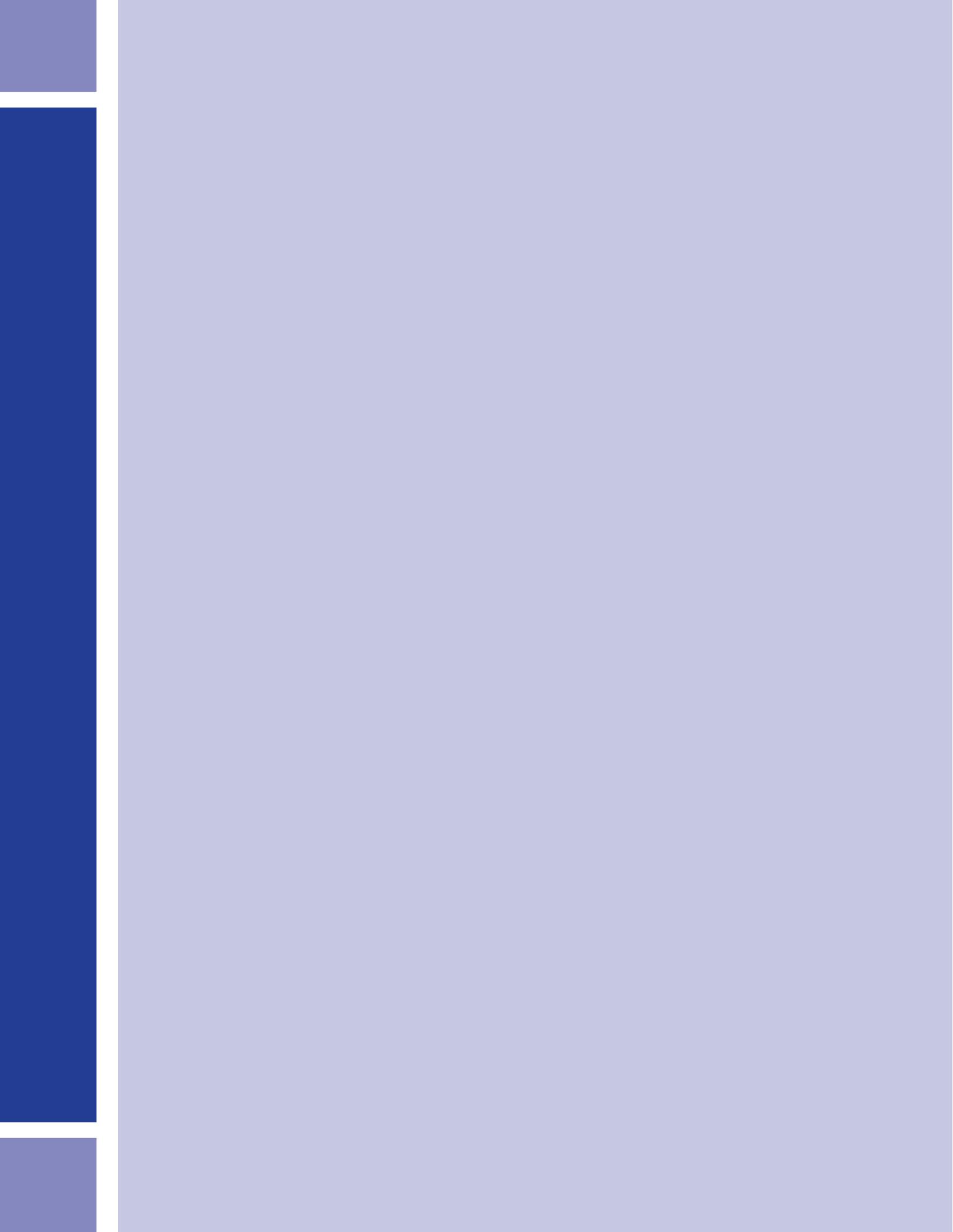
Judith R. Qualters, PhD, Director

January 2022

National Center for Injury Prevention and Control
Centers for Disease Control and Prevention
Atlanta, Georgia

Suggested Citation:

Kresnow M, Smith SG, Basile KC, Chen J. *The National Intimate Partner and Sexual Violence Survey: 2016/2017 methodology report*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2021.



Background and Methods

What is the National Intimate Partner and Sexual Violence Survey?

Intimate partner violence, sexual violence, and stalking are urgent public health problems experienced by millions of Americans each year. Decades of scholarship have shown the impacts of these forms of violence on physical and mental health¹⁻⁴ and their larger costs to society.^{5,6}

The Centers for Disease Control and Prevention (CDC) developed the National Intimate Partner and Sexual Violence Survey (NISVS) to better track these public health problems. NISVS is an ongoing national random-digit-dial (RDD) telephone survey of women and men in the United States that began in 2010. NISVS samples noninstitutionalized English- or

Spanish-speaking persons 18 years and older and uses a dual-frame strategy that includes landlines and cell phones. It is conducted in all 50 states and the District of Columbia.

NISVS includes a section on health-related questions at the start of the survey to establish a health context and to build rapport with respondents which is unlike other surveys that collect data on violence victimization. In addition, NISVS includes numerous behaviorally specific questions to capture each type of violence to improve the participants' understanding of the questions and accuracy in their responses.

The National Intimate Partner and Sexual Violence Survey describes:

- lifetime and 12-month prevalence of intimate partner violence, sexual violence, and stalking in the United States;
- who is victimized by these forms of violence;
- characteristics of the violence (e.g., type and sex of perpetrator);
- age at first victimization;
- impact of the violence victimization; and
- health conditions associated with these forms of victimization.

Survey Instrument

The survey instrument administered in 2016, 2017, and 2018 represents a change in data collection from previous years (2010–2012 and 2015). Goals for the revision were to streamline and improve the flow of the survey, decrease the level of burden on respondents, reduce the number of data elements to improve data usability, and to shorten the time required for both data processing and release. Readers and data users are discouraged from comparing estimates from NISVS 2016/2017 to prior survey years (2010–2012 and 2015) given these revisions, the details of which are described below (also see survey questions in Appendix A).

- The **violence modules** were reordered to begin with stalking, followed by sexual violence, and finally psychological aggression and physical violence by an intimate partner. These revisions were made so that these latter modules are assessed closer to the intimate partner violence impact questions that appear toward the end of the survey.
- **Individual perpetrator initials** were removed and data were instead collected on the victim-perpetrator relationship and perpetrator sex for each set of behaviors. Data were gathered at the time questions were asked rather than at the end of the survey in a relationship module. This revision prevents linking individual perpetrators in the data to specific violence behaviors across the survey. For example, the survey structure can no longer establish that a respondent experienced both rape and physical violence by the same perpetrator. Data regarding the victim-perpetrator relationship were still collected for all perpetrators, but more detail was collected about the first chronological perpetrator within each violence type and subtype. Specifically, the revision adds the following benefits: (a) identification of the type of perpetrator for first experiences of violence by any perpetrator and first experiences of violence by an intimate partner; (b) collection of the respondent's age at first victimization for additional types and subtypes of violence; and (c) collection of perpetrator age at the time of first victimization for additional types and subtypes of violence for those victimized as a minor.
- The number of questions related to **psychological aggression** were expanded (some of the questions from 2010–2012 that were removed in 2015 due to space limitations were added back).
- **Stalking behavior** questions were updated to better measure technology-based stalking (e.g., GPS for tracking, technology used for spying on others). The fear and threat criteria for stalking victimization were also revised.
- The questions that measured **female victimization** of being made to penetrate were removed due to very low prevalence in previous survey administrations.
- More specific impact data for **sexual violence** were captured. Respondents were asked about the impacts of sexual coercion (pregnancy [females only] and sexually transmitted infections) and of rape and made to penetrate combined (fear, concern for safety, pregnancy [females only], sexually transmitted infections, and physical injury).
- An item on **HIV status** was added to the general health-related question set.
- Some **introductory language and survey questions** were revised to improve clarity and to reduce burden based on cognitive testing of the full instrument. This included providing transitions between sections and questions about the number of and relationship to the perpetrator(s).

IRB and OMB Approval

The Office of Management and Budget (OMB # 0920-0822) and the Institutional Review Board of Research

Triangle Institute International (RTI), the contractor administering the survey, approved the survey protocol.

Cognitive Testing

Prior to fielding the study, the survey instrument was cognitively tested to provide information about how participants interpreted the questions and the instructions provided. Participants included both victims and non-victims of the types of violence covered in NISVS. They were

women and men recruited for cognitive testing and diverse across age, race/ethnicity, and educational attainment. Interviewers followed a detailed protocol and all interviews were conducted in person. Results from cognitive testing were used to refine the final questionnaire.

Survey Administration

NISVS was originally to be conducted in four consecutive 6-month periods. The first two consecutive 6-month periods were from mid-March 2016 through mid-March 2017, with a gap for data processing and for making any necessary changes to the survey, and then two more consecutive 6-month periods were from mid-March 2018 to mid-March 2019. However, due to delays in fielding the first survey period, both the first and second collections began fielding 1 week apart (collection 1 began September 9, 2016 and collection 2 began September 15, 2016), and ran concurrently through March 14, 2017. Given the increased complexity, strain on resources, and amount of data collection required to conduct these two efforts in parallel, the collection that began September 9, 2016 was extended by 3 months, ending on May 28, 2017.

2018 Data Year

The survey was administered from mid-April through mid-October of 2018 after multiple data collection changes designed to increase the response rate. These included:

- replacing the 800-number used to contact households with a local number for outbound calls;

- sending a brief text message about the survey and incentive to potential cell phone participants who agreed to receiving a text with more information;
- customizing the text that appeared on the caller ID to potential landline participants;
- adding a reminder postcard to nonparticipants during the initial data collection phase; and increasing the duration of the non-response follow-up phase by 1 week.

Despite these efforts, the 2018 response rate showed little improvement over that for data collected from 2016 through 2017 and data collection was suspended. Further, the cooperation rate in the 2018 data declined compared to the prior periods. Most of those contacted in 2016 and 2017 participated in the survey, but less than one-third did so in 2018. Data from 2018 were excluded from this report and the topical summary reports given the low cooperation rate. This report reflects data collected from 2016 and 2017 combined (referred to as NISVS 2016/2017).

Sampling Strategy

In the first half of 2015, 47.4% of U.S. households had wireless phones only, 41.6% of households had both landline and wireless phones, and 7.6% had landlines only; data for the second half of 2015 were similar with 48.3% reporting wireless phones only, 41.2% both wireless and landline, and 7.2% landline only.⁷ A computer-assisted telephone interview (CATI) system was used to administer the survey, and a dual frame sampling design that included both landline and cell phones was employed, with more of the 2016/2017 sample (71%) allocated to cell phones than in the 2015 sample (67%).

Sampling Frames. Landline sampling used a list-assisted frame comprised of hundred-banks of telephone numbers where each bank of 100 had at least one known residential number. Known business numbers were removed from the purchased sample prior to dialing, and non-working numbers were removed after sample selection through screening. In addition, advance letters were mailed to all potential landline respondents in the sample frame for whom a telephone number and address could be matched prior to data collection. The cell phone sampling frame consisted of phone numbers in telephone banks identified as active and currently in use. Cell phone directory listings were unavailable at the time the sample was being drawn so list-assisted sampling was not possible, nor could business numbers be identified and excluded prior to dialing.

Stratification for State-level Estimates. NISVS has the dual objective of providing national and state-level estimates, creating a trade-off between the two in sampling. While an optimum design for national

estimates would use proportionate allocation across states, an equal allocation across states would be optimal for providing statistically stable estimates at this level. Considering these competing objectives, survey samples were stratified by state (and by sampling frame within state), balancing between having statistically stable state estimates and reduced weight variation in national estimates from oversampling smaller states.

Within Household Selection. Each state sample included both landline and cell phone sampling frames. When a household was reached for the landline sample, the interviewer asked about the number of adult males and females living in the household. The adult in one-adult households was automatically selected to participate in the survey. The survey system randomly selected an adult in two-adult households. The adult with the most recent birthday was selected for households with more than two adults.⁸ For the cell phone sample, the person who answered the phone was selected to participate in the survey, if eligible, because cell phones were considered a personal device.

Non-response Follow-up Phase. NISVS used a two-phase design to increase participation. Phase One was the main data collection phase. Respondents contacted during this phase were offered a \$10 incentive to participate in the survey. A random sample of approximately 50% of the initial non-respondents from the first phase was selected for Phase Two to reduce non-response and non-response bias. The second phase offered a greater incentive (\$40) for participants.

Interviewer Training

Female interviewers conducted the interviews. During the hiring process, interviewers were informed about the purpose of the survey and were carefully screened to ensure their comfort interviewing given the topics included in the survey. Interviewers were trained on survey background, project-specific protocols, confidentiality procedures, safety protocols, respondent distress,

and refusal avoidance. They were also briefed on the potential challenges of administering a survey on sexual violence, stalking, and intimate partner violence, and of questions about these sensitive topics. Interviewers were provided resources to assist them in coping with traumatic and violent events. They were also offered the opportunity to discuss and process difficult or upsetting interviews.

Respondent Safety, Confidentiality, and Informed Consent

The initial person who answered the telephone was provided general information about the survey topic to ensure respondent safety and confidentiality. The specific topics of the survey were only revealed to the respondent who was selected. The interviewer then administered an IRB-approved informed consent to the selected adult to provide information about the voluntary and confidential nature of the survey, the benefits and risks of participation, and contact information for CDC or project staff from RTI, the group contracted by CDC to administer the survey. A graduated informed consent process was used to maximize respondent safety, build rapport, and to help potential interviewees make an informed decision about whether participation

in the survey would be in their best interest. Interviewers established a safety plan at the start of the survey if the respondent needed to discontinue the interview for safety reasons. In addition, interviewers followed established distress protocols, including check-ins with the participant at specific points during the interview to assess their emotional state and to determine if the interview should continue. Respondents were told they could skip any question and could stop the interview at any time. Respondents were provided telephone numbers for the National Domestic Violence Hotline, the National Sexual Assault Hotline, and the National Child Abuse Hotline at the end of the interview.

Data Collection and Security

The survey instrument was programmed in CATI using the Blaise software package. The CATI system contains the actual interview including question text, response options, interviewer instructions, and interview probes. Its data quality control program included skip patterns and range and other online consistency checks throughout the interview to ensure that only relevant and applicable questions were asked of each respondent. The program reduced coding errors and respondent burden. Data collection and entry occur simultaneously within the CATI system and data quality is enhanced through its ability to automatically detect errors, allowing for increased efficiency.

Several steps were taken throughout the collection period to ensure that no identifying information about the respondent could be linked to survey data. First, the address files used to send advance letters were destroyed and were not linked to survey responses. Second, RTI's CATI system included a compartmentalized data structure in which personally identifying information was maintained separately from the actual survey responses. Finally, as an added measure of security, once interviews were completed respondents were transferred to a separate Blaise CATI instrument to collect their contact information and incentive checks could be mailed. Respondent contact information was deleted after the end of data collection.

Data Quality Assurance

CDC developed an independent set of programs to analyze interim data to ensure that skip patterns, response values, missing values, and range and other logical consistency checks had been

implemented correctly as programmed in the CATI system. All discrepancies were investigated and corrected, and changes were made to the CATI program as appropriate.

Weighting Procedures

Weights that reflected the design of the sample, non-response, coverage, and sampling variability were developed for analysis to generate estimates representative of the noninstitutionalized English- or Spanish-speaking U.S. population aged 18 years or older. They consisted of four main components: (1) a selection weight, which included an adjustment for varying selection probabilities in the landline and cell phone frames by state, the differences within household probabilities of selection, and subsampling of Phase Two respondents for non-response follow-up; (2) a multiplicity weight, which adjusts for the increased probability of selection among those from households with both landlines and cell phones; (3) a non-response weight which accounts for the variation in response rates within selected samples; and (4) a post-stratification weight, which adjusts the products of the three aforementioned weights to match the U.S. adult population distribution on main demographic characteristics. Post-stratification was done by sex and included state, age group, race/ethnicity, education, marital status, household composition, and presence of children in the

household. During the survey data weighting process, all key demographic variables were examined. When a record had missing or non-usable information in the weighting variables (e.g., race/ethnicity, state), a statistical process was applied to the record to impute valid values for weighting the dataset.

Two main sets of weights were computed for analyzing NISVS data: one set of weights was for partially completed and completed interviews, and a second set was for completed interviews only. An interview was defined as partially complete if the respondent finished the screening, all questions about demographics and general health, and at least all those questions in the first violence victimization module (Stalking). An interview was complete when the respondent either finished the survey or answered the questions about screening, demographics, general health, and all applicable ones about the five violence victimization modules in the survey. The estimates presented in this report were produced with data from completed interviews and their corresponding weights.

Sample Distribution and Demographic Characteristics

More than 30,000 adults (30,947) were interviewed between September 2016 and May 2017. This includes 27,571 completed and 3,376 partially completed interviews. More than 15,000 women (15,152) and 12,419 men completed the survey. Thirty one percent of completed interviews were conducted by landline telephone and 69% by the respondent's cell phone. Respondents completed the survey in 35 minutes on average.

The response and cooperation rates, computed using weighted counts, relied on American Association for Public Opinion Research (AAPOR) standards. The NISVS 2016/2017 weighted overall Response Rate 4 was 7.6% (AAPOR, 2016),⁹ 1.2% of which was attributed to the non-response follow-up phase (Phase Two). Including Phase Two increased the response rate by almost 19% (18.8%). The response rates for the landline and cell phone frames were 10.6% and 6.5%, respectively. The weighted Cooperation Rate 4 was 58.6% (AAPOR, 2016).⁹ While the response rate is the ratio of all cases interviewed out of all eligible sample units in the study, and included those cases that could not be reached, the cooperation rate reflects the proportion who agreed to participate in the interview and were contacted and determined to be eligible. The cooperation rate for the 2016/2017 NISVS data collection shows that

most respondents chose to participate in the interview once contact was made and eligibility was determined.

Demographic characteristics of the selection weighted landline and cell phone samples, the post-stratified combined samples, and the adult U.S. population are presented in Table 1. Landline and cell phone samples yielded different demographic distributions. For example, while both female and male respondents in the landline sample tended to be non-Hispanic White and older than their cell phone counterparts, more respondents in the cell phone sample reported being Hispanic and never married. When combined, these samples complement one another and provide demographic estimates that more closely reflect the U.S. population distribution. Post-stratified weighted estimates by the demographic characteristics used in weighting illustrate how distributions are further adjusted to match the U.S. population distributions. Household income, which was not used in weighting, is included as a further comparison between the sample population and the U.S. population. The sample had more respondents with household incomes ranging from \$15,000 to \$24,999 and less respondents in the highest income levels (\$50,000 to \$74,000 and \$75,000+) when compared to the U.S. population.

More than 15,000 women and more than 12,000 men completed the NISVS survey between September 2016 and May 2017.



Data Analysis

The estimates in this report are based on completed interviews (n=27,571). Lifetime and 12-month prevalence estimates were calculated for the different forms of violence victimization included in the survey (i.e., sexual violence, stalking, intimate partner violence). Respondents were anchored to the 12-month period with a reminder of the date (e.g., “How many people did [this/these things] to you in the past 12 months, that is, since [fill: date, 12 months ago]?”). Rather than using terms such as stalked or raped, which can be open to interpretation by respondents, NISVS used questions that were behaviorally specific, which were then combined to measure different types of violence victimization. The respondent must have reported having experienced at least one behavior within the relevant violence domain during the timeframe of reference (i.e., during their lifetime, during the 12 months before the survey) to be included in a prevalence estimate. The denominators for prevalence estimates were persons who answered the questions or responded with “don’t know” or “refused.” The denominator for analyses restricted to victims was the specific type of violence victimization of interest.

Prevalence estimates should be interpreted as the percentage of the population who experienced each type of violence at least once because respondents could have experienced each type more than once. However, stalking victimization requires a pattern of behaviors to meet the stalking definition used in NISVS. A respondent must have experienced one or more stalking tactics multiple times by the same perpetrator and felt fearful, threatened with physical harm, or felt concerned for their own safety or the safety of others as a result of the perpetrator’s behavior to be included in the prevalence of stalking.

Within categories of violence, respondents who reported more than one subcategory were included only once in the overall summary estimate but included in each relevant subcategory. For example, victims of completed forced penetration and alcohol/drug-facilitated penetration were included in each of these subtypes of rape but counted only once in the estimate of rape prevalence.

The number of victims affected by a particular form of violence was based on 2015 U.S. population estimates from census projections by sex, state, age group, race/ethnicity, marital status, and education.¹⁰ Statistical inferences for prevalence and population estimates were based on weighted analyses where the impact of complex sample design features such as stratified sampling, weighting for unequal sample selection probabilities, non-response at various stages of selection, and post-stratification adjustments were considered.

Analyses were conducted for females and males separately. Prevalence estimates by selected demographic characteristics were also calculated along with 95% confidence intervals and the estimated total number of victims. No formal statistical comparisons of prevalence estimates between demographic subgroups were made. A degree of uncertainty exists as prevalence and population estimates were based on a sample. The smaller the sample upon which an estimate is based, the less precise the estimate becomes and the more difficult it is to distinguish the findings from what could have occurred by chance. The relative standard error (RSE) is a measure of an estimate’s statistical stability. The RSEs for both the percentages and the number of victims were calculated for all estimates in this report. The estimate was deemed statistically unstable and not reported if either of the RSEs was greater than 30%. The case count was also considered. The estimate was not reported if based on a numerator (unweighted) ≤ 20 . In topic-specific reports, tables are presented in full where specific estimates are missing due to high RSEs or small case counts. Unstable estimates are noted by a double dash (--) so that readers can clearly see what was assessed and where data gaps remain.

Many health conditions were assessed in this survey and Chi-square tests were conducted to measure their differences with respect to violence victimization. A p-value of 0.05 was set as the threshold for establishing statistical significance. All analyses were conducted with SAS-callable SUDAAN™ statistical software (version 11.1) to assess data collected through a complex sample design. For the NISVS State Report, SAS Survey Procedure was used.

Limitations

NISVS 2016/2017 data are subject to several limitations. First, the survey was designed to reach noninstitutionalized adults with a landline or cell phone who speak English or Spanish. As such, NISVS estimates do not include certain subgroups of the population including people experiencing homelessness and those who have been institutionalized (e.g., persons who are incarcerated) and at high risk for the types of violence victimization covered in the survey.

Second, as with other RDD data collection conducted during the same time period (e.g., California Health Interview Study, Ohio Medicaid Assessment Survey),^{11, 12} the NISVS 2016/2017 response rate declined rapidly. However, several efforts were made to mitigate the potential for non-response bias and noncoverage bias. These included implementing a non-response follow-up phase in which a random subset of nonrespondents were recontacted and offered an increased monetary incentive for participating in the survey. In addition, the dual frame sampling approach included both landlines and cell phones which differed demographically on selected population characteristics. Including respondents from both frames increased coverage of the population for characteristics that may have been missed or underrepresented had only a single frame been used. Weights were applied to adjust for selection probabilities and non-response bias and then calibrated to the U.S. population distribution on several demographic characteristics associated with outcomes of interest. This procedure allowed for aligning the distribution of the sample to that of the U.S. population for these characteristics, attenuating the potential confounding effects due to their imbalance on prevalence estimates.

Similar to other population-based surveys, NISVS did not collect data on all population characteristics. Some differences exist between the sample and the U.S. population regarding household income. Therefore, estimates may reflect some non-response bias to the degree that unmeasured or unadjusted (e.g., household income) characteristics that differ between the sample and the population may be associated with violence victimization.

Third, a respondent's decision to participate in the survey might have been influenced by introductory statements about the survey topic. Nevertheless,

efforts were taken to reduce such potential influences while maximizing respondent safety. All eligible persons were invited to participate in the survey which was described using non-specific information about the survey topic. Most (~59%) of those contacted and deemed eligible agreed to participate in the survey. A graduated consent process was then used, through which general health and violence-specific questions were disclosed to those who had already agreed to take part in the survey. Those sampled who ended the survey prematurely did so before hearing the introduction to the victimization questions (approximately 96.3%). This shows that the chance of having bias introduced by interest or disinterest in the violence victimization topics covered in this survey was low.

Fourth, while NISVS captures extensive sexual violence, stalking, and intimate partner violence victimization experiences, the estimates from this survey are likely underestimates of the true prevalence for many reasons. All of the violent behaviors that respondents may have experienced could not be measured. In addition, some victims may have chosen not to disclose these types of experiences due to the stigma or sensitivity associated with these topics. Finally, respondents may have been unable to disclose their victimization experiences if the perpetrator was nearby when the interview took place.

Fifth, recall bias could have been introduced in retrospective and self-reported data collections. NISVS 2016/2017 survey participants might misremember or misreport their victimization experiences for various reasons despite the wide range of behaviorally specific questions used to capture them. However, comparisons with a few violence victimization estimates from the National Survey of Family Growth showed similar estimates. In particular, estimates of forced vaginal penetration (i.e., penis in vagina through rape or being made to penetrate) for both female and male victims and forced oral/anal penetration for male victims (with male perpetrators) among those age 18–49 years were no different from those from the 2015–2017 National Survey of Family Growth (an in-person interview with a response rate of 65.3%).¹³ These results indicate that even with the low response rate, NISVS estimates for similar forms of sexual violence are comparable to an external benchmark with a higher response rate.

Conclusion

NISVS continues to be an important source of information that measures intimate partner violence, sexual violence, and stalking victimization in the U.S. RDD telephone surveys in particular have weathered challenges over the last several years as more Americans use caller identification and screen calls. Response rate is an important indicator of survey quality, but low response rates do not necessarily indicate that the data are not representative of the population of interest. Studies have shown no direct proportional relationship between a survey's response rate and the accuracy of survey results.¹⁴⁻¹⁶ Further, a growing body of literature underscores that response rates are not a reliable indicator of non-response bias.^{17, 18} The NISVS 2016/2017 survey was conducted using probability methods, and data were weighted to be representative of the U.S. population on selected demographic characteristics, many of which are associated with the outcomes of interest. Still, low response rates often cast doubt on survey results. Work is currently underway to identify alternative data collection strategies that increase

response rates and reduce concerns regarding non-response bias in future NISVS surveys. Given the survey revisions and limitations noted, readers and data users are discouraged from comparing estimates from NISVS 2016/2017 to prior survey years (2010–2012 and 2015).

Currently, NISVS is the only ongoing national survey in the field to measure intimate partner violence, sexual violence, and stalking by collecting information directly from the U.S. adult population using behaviorally specific items presented in a health context—an approach that is intentional and purposeful. This is essential for capturing victimization experiences that are not likely reported to the police, may not be considered a crime by the victim, or where treatment by a health provider is either not sought or required. Despite its limitations, NISVS 2016/2017 remains a significant data source for improving our understanding of the public health burden of sexual violence, stalking, and intimate partner violence for females and males, both nationally and at the state level.

References

1. Basile K, Smith S. Sexual violence of women: prevalence, characteristics, and the role of public health and prevention. *Am J Lifestyle Med.* 2011;5(5):407–17.
2. Fletcher J. The effects of intimate partner violence on health in young adulthood in the United States. *Soc Sci Med.* 2010;70(1):130–5.
3. Jordan C, Campbell R, Follingstad D. Violence and women's mental health: the impact of physical, sexual, and psychological aggression. *Annu Rev Clin Psychol.* 2010;6:607–28.
4. Kuehner C, Gass P, Dressing H. Mediating effects of stalking victimization on gender differences in mental health. *J Interpers Violence.* 2012;27(2):199–221.
5. Peterson C, DeGue S, Florence C, Lokey C. Lifetime economic burden of rape among U.S. adults. *Am J Prev Med.* 2017;52(6):691–701.
6. Peterson C, Kearns M, McIntosh W, Estefan L, Nicolaidis C, McCollister K, et al. Lifetime economic burden of intimate partner violence among U.S. adults. *Am J Prev Med.* 2018;55(4):433–44.
7. Blumberg S, Luke J. Wireless substitution: early release of estimates based on data from the National Health Interview Survey, July–December 2015. 2016. Available from: <https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201605.pdf>.
8. Rizzo L, Brick M, Park I. A minimally intrusive method for sampling persons in random digit dial surveys. *Public Opin Q.* 2004;68(2):267–74.
9. American Association for Public Opinion Research (AAPOR). Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys. 9th edition: AAPOR. Available from: https://www.aapor.org/AAPOR_Main/media/publications/Standard-Definitions20169theditionfinal.pdf.
10. U.S. Census Bureau. Summary file data. 2015 American Community Survey 1-year estimates n.d. Available from: <https://www.census.gov/programs-surveys/acs/data/summary-file.2015.html>.
11. California Health Interview Survey. CHIS 2017-2018 Methodology Series: Report 4 - Response Rates. Los Angeles, CA: UCLA Center for Health Policy Research; 2019. Available from: http://healthpolicy.ucla.edu/chis/design/Documents/CHIS_2017-2018_MethodologyReport4_ResponseRates.pdf.
12. Ohio Medicaid Assessment Survey. About OMAS n.d. [June 29, 2021]. Available from: <http://grc.osu.edu/OMAS>.
13. Kresnow M, Holland K, Peytchev A, Chen J, Smith S, Simon T. NISVS 2016/2017 Data Assessment Report: Examination of data representativeness and factors contributing to observed increases in estimates of violence victimization in the presence of low response rates. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2022.
14. Curtin R, Presser S, Singer E. The effects of response rate changes on the index of consumer sentiment. *Public Opin Q.* 2000;64(4):413–28.
15. Keeter S, Kennedy C, Dimock M, Best J, Craighill P. Gauging the impact of growing nonresponse on estimates from a national RDD telephone survey. *Public Opin Q.* 2006;70(5):759–79.

16. Seon Choung R, Locke GI, Schleck C, Ziegenfuss J, Beebe T, Zinsmeister A, et al. A low response rate does not necessarily indicate non-response bias in gastroenterology survey research: a population-based study. *J Public Health*. 2013;21:87–95.
17. Keeter S, Hatley N, Kennedy C, Lau A. What low response rates mean for telephone surveys 2017. Available from: <https://assets.pewresearch.org/wp-content/uploads/sites/12/2017/05/12154630/RDD-Non-response-Full-Report.pdf>.
18. Groves R, Peytcheva E. The impact of nonresponse rates on nonresponse bias: a meta-analysis. *Public Opin Q*. 2008;72(2):167–89.

Appendix A:

Demographic Characteristics of the National Intimate Partner and Sexual Violence Survey 2016/2017 Sample and the U.S. Population

Appendix A

Demographic Characteristics of the National Intimate Partner and Sexual Violence Survey 2016/2017 Sample and the U.S. Population¹

| | Women (%) | | | | Men (%) | | | | Total (%) | |
|--|-------------------------------------|---------------------------------------|----------------------------------|-------------------------------|-------------------------------------|---------------------------------------|----------------------------------|-------------------------------|----------------------------------|-------------------------------|
| | NISVS | | | U.S. | NISVS | | | U.S. | NISVS | U.S. |
| | Landline Sample, Selection Weighted | Cell Phone Sample, Selection Weighted | Combined Sample, Post-Stratified | Population (Age 18 and older) | Landline Sample, Selection Weighted | Cell Phone Sample, Selection Weighted | Combined Sample, Post-Stratified | Population (Age 18 and older) | Combined Sample, Post-Stratified | Population (Age 18 and older) |
| Characteristics Used to Weight the Data | | | | | | | | | | |
| Sex | | | | | | | | | | |
| Female | | | | | | | | | 51.4 | 51.4 |
| Male | | | | | | | | | 48.6 | 48.6 |
| Age Group (years) | | | | | | | | | | |
| 18–24 | 1.0 | 10.4 | 12.3 | 12.0 | 2.4 | 12.3 | 13.6 | 13.3 | 12.9 | 12.4 |
| 25–34 | 3.2 | 17.8 | 17.0 | 8.6 | 3.8 | 18.8 | 18.3 | 9.4 | 17.6 | 17.7 |
| 35–44 | 7.0 | 17.1 | 16.4 | 24.6 | 7.4 | 16.4 | 17.2 | 25.8 | 16.8 | 16.5 |
| 45–64 | 40.7 | 38.7 | 34.2 | 33.8 | 40.5 | 36.1 | 34.4 | 34.0 | 34.3 | 33.9 |
| 65+ | 48.0 | 16.0 | 20.1 | 21.0 | 45.9 | 16.2 | 16.5 | 17.5 | 18.4 | 19.3 |
| Race/Ethnicity | | | | | | | | | | |
| Hispanic | 5.0 | 14.2 | 14.5 | 15.0 | 3.5 | 13.6 | 15.6 | 16.0 | 15.0 | 15.5 |
| Non-Hispanic White | 81.0 | 63.3 | 65.2 | 64.2 | 84.6 | 64.7 | 65.6 | 64.7 | 65.4 | 64.5 |
| Non-Hispanic Black | 10.0 | 14.7 | 12.3 | 12.4 | 6.6 | 12.7 | 11.3 | 11.5 | 11.8 | 12.0 |
| Non-Hispanic Asian or Pacific Islander | 0.9 | 2.8 | 5.6 | 5.9 | 1.6 | 4.1 | 5.2 | 5.4 | 5.4 | 5.7 |
| Non-Hispanic American Indian or Alaska Native | 0.8 | 1.2 | 0.6 | 0.6 | 1.0 | 1.2 | 0.6 | 0.6 | 0.6 | 0.6 |
| Non-Hispanic Multiracial/Other | 2.4 | 3.8 | 1.7 | 1.8 | 2.6 | 3.6 | 1.7 | 1.8 | 1.7 | 1.8 |
| Education² | | | | | | | | | | |
| Didn't graduate from high school | 5.6 | 8.5 | 10.8 | 12.1 | 3.9 | 8.2 | 10.3 | 13.8 | 10.6 | 12.9 |
| High school graduate | 20.0 | 18.9 | 24.8 | 26.9 | 17.3 | 22.4 | 27.9 | 29.0 | 26.3 | 27.9 |
| Technical school or college | 20.7 | 20.3 | 24.5 | 23.7 | 18.5 | 18.9 | 23.5 | 22.8 | 24.0 | 23.3 |
| Associate's degree | 10.3 | 10.9 | 12.1 | 8.7 | 8.8 | 9.2 | 11.4 | 6.9 | 11.8 | 7.8 |
| Four-year college graduate | 22.7 | 22.7 | 15.4 | 18.3 | 24.9 | 23.6 | 14.7 | 17.3 | 15.0 | 17.8 |
| Postgraduate | 20.6 | 18.6 | 12.2 | 10.4 | 26.6 | 17.6 | 12.0 | 10.1 | 12.1 | 10.2 |

| | Women (%) | | | | Men (%) | | | | Total (%) | |
|--|-------------------------------------|---------------------------------------|----------------------------------|-------------------------------|-------------------------------------|---------------------------------------|----------------------------------|-------------------------------|----------------------------------|-------------------------------|
| | NISVS | | | U.S. | NISVS | | | U.S. | NISVS | U.S. |
| | Landline Sample, Selection Weighted | Cell Phone Sample, Selection Weighted | Combined Sample, Post-Stratified | Population (Age 18 and older) | Landline Sample, Selection Weighted | Cell Phone Sample, Selection Weighted | Combined Sample, Post-Stratified | Population (Age 18 and older) | Combined Sample, Post-Stratified | Population (Age 18 and older) |
| Characteristics Used to Weight the Data (continued) | | | | | | | | | | |
| Marital Status³ | | | | | | | | | | |
| Married | 47.0 | 44.9 | 48.9 | 48.1 | 60.9 | 45.0 | 52.7 | 51.8 | 50.8 | 49.9 |
| Divorced | 15.8 | 15.0 | 12.7 | 12.9 | 10.7 | 12.9 | 9.9 | 10.2 | 11.4 | 11.6 |
| Separated | 1.8 | 3.1 | 2.7 | 2.5 | 1.2 | 2.8 | 2.2 | 1.8 | 2.5 | 2.1 |
| Widowed | 21.8 | 7.1 | 9.5 | 9.4 | 8.7 | 3.1 | 2.7 | 2.7 | 6.2 | 6.1 |
| Never Married | 10.6 | 21.9 | 19.7 | 27.2 | 14.6 | 28.9 | 26.6 | 33.4 | 23.0 | 30.2 |
| Living as a Couple | 2.8 | 8.0 | 6.4 | | 3.8 | 7.3 | 5.8 | | 6.1 | |
| Not Used to Weight the Data | | | | | | | | | | |
| Household Income⁴ | | | | | | | | | | |
| <\$10,000 | 3.7 | 6.1 | 6.6 | | 2.7 | 5.7 | 6.3 | | 6.5 | 6.9 |
| \$10,000–\$14,999 | 4.0 | 5.5 | 5.9 | | 2.9 | 4.4 | 4.7 | | 5.3 | 5.0 |
| \$15,000–\$19,999 | 5.9 | 7.2 | 8.0 | | 5.4 | 6.1 | 6.8 | | 7.4 | 5.0 |
| \$20,000–\$24,999 | 9.2 | 9.0 | 10.6 | | 6.4 | 7.6 | 8.0 | | 9.3 | 5.2 |
| \$25,000–\$34,999 | 9.6 | 8.1 | 9.2 | | 7.8 | 8.0 | 9.3 | | 9.2 | 9.8 |
| \$35,000–\$49,999 | 11.9 | 11.6 | 11.8 | | 10.7 | 10.7 | 10.6 | | 11.2 | 13.2 |
| \$50,000–\$74,999 | 14.7 | 13.7 | 12.7 | | 14.9 | 12.8 | 12.8 | | 12.7 | 17.8 |
| \$75,000+ | 30.3 | 30.0 | 25.0 | | 42.3 | 37.0 | 32.8 | | 28.8 | 37.1 |
| <p>¹ Source: U.S. Census Bureau, 2015 American Community Survey 1-Year Estimates and 2015 American Community Survey 1-Year Public Use Microdata Sample (PUMS) estimates.</p> <p>² Education data in NISVS do not add up to 100% due to missing data (“Don’t Know” or “Refused” ranging from 0.1% to 0.2%).</p> <p>³ Marital status data in NISVS do not add up to 100% due to missing data or the other category (“don’t know,” “refused,” or other ranging from 0.1% to 0.2%).</p> <p>⁴ Income data in NISVS do not add up to 100% due to missing data (“Don’t Know” or “Refused” ranging from 6.9% to 10.7%). The American Community Survey includes income of the householder and all other individuals 15 years old and over in the household in the past 12 months, whether they are related to the householder or not (in 2015 inflation-adjusted dollars) (https://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2015_ACSsubjectDefinitions.pdf).</p> <p>Note: Cells in grey indicate data that are not available.</p> | | | | | | | | | | |

Appendix B:

Victimization Questions – National Intimate Partner and Sexual Violence Survey 2016/2017

Appendix B

Victimization Questions – National Intimate Partner and Sexual Violence Survey 2016/2017

Stalking

Stalking Tactics Has anyone ever...

- followed you around and watched you when you did not want them to?
 - approached you or showed up in places, such as your home, work, or school when you did not want them to?
 - used GPS technology or equipment to monitor or track your location when you did not want them to? This includes GPS technology used in a phone or in social media, such as Facebook.
 - left strange or potentially threatening items for you to find?
 - sneaked into your home or car and did things to scare you by letting you know they had been there?
 - used technology such as a hidden camera, recorder, or computer software to spy on you from a distance?
 - made unwanted phone calls to you, including hang-ups and voice messages?
 - sent you unwanted text messages, photo messages, emails, or messages through Facebook, Twitter, or other social media?
 - sent you cards, letters, flowers, or presents when they knew you didn't want them to?
-

Sexual Violence

| | | |
|---|--|---|
| Verbal Sexual Harassment in Public Setting | While you were in a public place, | <ul style="list-style-type: none"> • how many people have ever verbally harassed you in a sexual way that made you feel uncomfortable? |
| Unwanted Sexual Contact | How many people have ever... | <ul style="list-style-type: none"> • kissed you in a sexual way when you didn't want it to happen? • fondled, groped, grabbed, or touched you in a sexual way when you did not want it to happen? |
| Sexual Coercion | How many people have you had vaginal, oral, or anal sex with after they pressured you by doing any of the following... | <ul style="list-style-type: none"> • telling you lies, making promises about the future they knew were untrue, threatening to end your relationship, or threatening to spread rumors about you? • wearing you down by repeatedly asking for sex, or showing they were unhappy? • using their authority over you, for example, your boss or your teacher? |
| Alcohol/Drug-Facilitated Rape, Completed | When you were unable to consent to sex or stop it from happening because you were too drunk, high, drugged, or passed out from alcohol or drugs... | <p data-bbox="824 1178 951 1205">[IF FEMALE]</p> <p data-bbox="824 1234 1406 1291">How many PEOPLE ever did the following when you did not want them to?</p> <ul data-bbox="824 1320 1406 1398" style="list-style-type: none"> • put their mouth on your vagina or anus? • put their fingers or an object in your vagina or anus? <p data-bbox="824 1449 951 1476">[IF FEMALE]</p> <p data-bbox="824 1505 1406 1562">How many MALES ever did the following when you did not want them to ...</p> <ul data-bbox="824 1591 1203 1719" style="list-style-type: none"> • put their penis in your vagina? • put their penis in your anus? • put their penis in your mouth? <p data-bbox="824 1770 927 1797">[IF MALE]</p> <p data-bbox="824 1824 1406 1881">How many PEOPLE ever did the following when you did not want them to?</p> <ul data-bbox="824 1908 1338 1927" style="list-style-type: none"> • put their fingers or an object in your anus? |

[IF MALE]

How many FEMALES ever did the following when you did not want them to ...

- made you put your penis in their vagina?
- put their mouth on your penis?
- made you put your mouth on their vagina?

[IF MALE]

How many MALES ever did the following when you did not want them to ...

- put their mouth on your penis?
- made you put your penis in their anus?

**Physically
Forced Rape,
Completed**

How many PEOPLE have ever used physical force or threats of physical harm to ...

[IF FEMALE]

- put their mouth on your vagina or anus?
- put their fingers or an object in your vagina or anus?

How many MALES have ever used physical force or threats of physical harm to ...

[IF FEMALE]

- put their penis in your vagina?
- put their penis in your anus?
- put their penis in your mouth?

How many PEOPLE have ever used physical force or threats of physical harm to ...

[IF MALE]

- put their fingers or an object in your anus?

How many MALES have ever used physical force or threats of physical harm to ...

[IF MALE]

- put their penis in your mouth?
 - put their penis in your anus?
 - put their mouth on your anus?
-

| | | |
|---|---|---|
| Physically Forced Made to Penetrate, Completed | How many FEMALES have ever used physical force or threats of physical harm to ... | <p>[IF MALE]</p> <ul style="list-style-type: none"> • make you put your penis in their vagina? • put their mouth on your penis? • make you put your mouth on their vagina? |
| | How many MALES have ever used physical force or threats of physical harm to ... | <p>[IF MALE]</p> <ul style="list-style-type: none"> • put their mouth on your penis? • make you put your penis in their anus? |
| Physically Forced Rape, Attempted | How many PEOPLE have ever used physical force or threats of physical harm to ... | <p>[IF FEMALE]</p> <ul style="list-style-type: none"> • TRY to put their mouth on your vagina or anus, but it did not happen? |
| | How many MALES have ever used physical force or threats of physical harm to ... | <p>[IF FEMALE]</p> <ul style="list-style-type: none"> • TRY to put their penis in your vagina, anus, or mouth, but it did not happen? |
| | How many MALES have ever used physical force or threats of physical harm to ... | <p>[IF MALE]</p> <ul style="list-style-type: none"> • TRY to put their penis in your mouth or anus, but it did not happen? • TRY to put their mouth on your anus, but it did not happen? |
| Physically Forced Made to Penetrate, Attempted | How many PEOPLE have ever used physical force or threats of physical harm to ... | <p>[IF MALE]</p> <ul style="list-style-type: none"> • TRY to put their mouth on your penis, but it did not happen? |
| | How many FEMALES have ever used physical force or threats of physical harm to ... | <p>[IF MALE]</p> <ul style="list-style-type: none"> • TRY to make you put your penis in their vagina, but it did not happen? • TRY to make you put your mouth on their vagina, but it did not happen? |

Psychological Aggression by an Intimate Partner

Expressive Aggression

How many of your current or ex-romantic or sexual partners have EVER...

- insulted, humiliated, or made fun of you in front of others?

Coercive Control

How many of your current or ex-romantic or sexual partners have EVER...

- kept you from having your own money?
- tried to keep you from seeing or talking to your family or friends?
- kept track of you by demanding to know where you were and what you were doing?
- made threats to physically harm you?
- threatened to hurt themselves or commit suicide because they were upset with you?
- made decisions for you that should have been yours to make?
- destroyed something that was important to you?

Physical Violence by an Intimate Partner

Slapped, Pushed, Shoved

How many of your current or ex-romantic or sexual partners have EVER...

- slapped you?
- pushed or shoved you?

Severe Physical Violence

How many of your current or ex-romantic or sexual partners have EVER...

- hit you with a fist or something hard?
- kicked you?
- hurt you by pulling your hair?
- slammed you against something?
- tried to hurt you by choking or suffocating you?
- beaten you?
- burned you on purpose?
- used a knife on you?
- used a gun on you?

Centers for Disease Control and Prevention
National Center for Injury Prevention and Control
Division of Violence Prevention

4770 Buford Highway NE, MS-F64
Atlanta, Georgia 30341-3742
www.cdc.gov/violenceprevention



**Centers for Disease
Control and Prevention**
National Center for Injury
Prevention and Control