

**Supporting Statement  
For OMB Information Collection Request**

**Part A**

**OMB# 0920-0822**

**08/07/2012**

**The National Intimate Partner and Sexual Violence Survey (NISVS)**

Supported by:

Department of Health and Human Services  
Centers for Disease Control and Prevention  
National Center for Injury Prevention and Control  
Division of Violence Prevention

Project Officer:

Mikel L. Walters, PhD  
Behavioral Scientist

Contact Information:

Centers for Disease Control and Prevention  
National Center for Injury Prevention and Control  
4770 Buford Highway NE MS F-64  
Atlanta, GA 30341-3724  
phone: 770-488-1361  
fax: 770-488-4349  
email: wai6@cdc.gov

## CONTENTS

<u>Section</u>		<u>Page</u>
A.	JUSTIFICATION.....	5
A.1.	Circumstances Making the Collection of Information Necessary	5
A.2.	Purpose and Use of Information Collection.....	8
A.3.	Use of Improved Information Technology and Burden Reduction	8
A.4.	Efforts to Identify Duplication and Use of Similar Information	9
A.5.	Impact on Small Businesses or Other Small Entities.....	10
A.6.	Consequences of Collecting the Information Less Frequently...	10
A.7.	Special Circumstances Relating to the Guidelines of 5 CFR 1320.5(d)2.....	10
A.8.	Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency.....	11
A.9.	Explanation of Any Payment or Gift to Respondents.....	15
A.10.	Assurance of Confidentiality Provided to Respondents.....	15
A.11.	Justification for Sensitive Questions.....	18
A.12.	Estimates of Annualized Burden Hours and Costs.....	19
A.13.	Estimates of Other Total Annual Cost Burden to Respondents or Record Keepers.....	21
A.14.	Annualized Cost to the Government.....	21
A.15.	Explanation for Program Changes or Adjustments.....	22
A.16.	Plans for Tabulation and Publication and Project Time Schedule	22
A.17.	Reason(s) Display of OMB Expiration Date is Inappropriate....	23
A.18.	Exceptions to Certification for Paperwork Reduction Act Submissions.....	23
B.	COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS.....	24
B.1.	Respondent Universe and Sampling Methods.....	24
B.2.	Procedures for the Collection of Information .....	28
B.3.	Methods to Maximize Response Rates and Deal with Nonresponse	32
B.4.	Tests of Procedures or Methods to be Undertaken.....	35
B.5.	Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data.....	35
	REFERENCES.....	37

List of Tables

Table

1	Estimated Annual Respondent Burden for Each of the first Three Years of NISVS.....	19
2	Estimated Annualized Cost to Respondents.....	20
3	Estimated Annualized Cost to the Government .....	21
4	Project Time Schedule.....	22
5	Sampling Strata.....	25

List of Attachments

- A Authorizing Legislation: Public Health Service Act
- B Published 60-Day Federal Register Notice
- C Public Comment from 60-Day Notice
- D Documentation Regarding Consultation with Other Federal Agencies
- E Interagency Agreement
- F NISVS Institutional Review Board (IRB) Approval
- G National Intimate Partner and Sexual Violence Survey (NISVS) Instrument
- H RTI Confidentiality Agreement
- I Advance Letter of Introduction

## Abstract

CDC proposes a **revision** to this approved Information Collection Request, OMB# 0920-0822 – expiration date: 9/30/2012. CDC requests a six month **extension** to continue collecting national data that will provide more detailed and timely information on intimate partner violence, sexual violence and stalking victimization in the U.S. The proposed revision to the National Intimate Partner and Sexual Violence Survey (NISVS) involves no longer collecting data on special sub-populations (i.e. military, AIAN, elderly) thus focusing the scope of data collection to the general population. The overarching purpose of the information collected has not change.

The National Intimate Partner and Sexual Violence Survey (NISVS) use a dual-frame sampling strategy that includes both landline and cell phone. In 2010, approximately 45.2% of interviews were conducted by landline telephone and 54.8% of interviews were conducted using respondent's cell phone. The overall weighted response for 2010 data collection was 27.5%. The weighted cooperation rate was 81.3%. The cooperation rate reflects the proportion who agreed to participate in the interview among those who were contacted and determined eligible. The cooperation rate obtained for 2010 data collection suggests that, once contact was made and eligibility was determined, the majority of respondents chose to participate in the interview.

## A. JUSTIFICATION

### A.1. Circumstances Making the Collection of Information Necessary

This is a revision and 6 month extension and revision request for the currently approved National Intimate Partner and Sexual Violence Survey (0920-0822) expiration date 09/30/2012.

#### A.1.a) Background

##### (i) Public Health Implications and Costs of Intimate Partner Violence, Sexual Violence and Stalking

Intimate partner violence (IPV), sexual violence (SV), and stalking endanger the health and well-being of women and men across the United States. As described below, more than two decades of research demonstrate that IPV, SV, and stalking are major public health problems with serious long-term health consequences and significant social and public health costs (Basile, Black, Simon, Arias, Brener & Saltzman, 2006; Black and Breiding, 2008; Breiding, Black, & Ryan, 2008; CDC, 2003; Tjaden and Thoennes, 1998). Extensive literature provides evidence indicating IPV, SV, and stalking substantially contribute to negative mental health outcomes, including depression, chronic mental illness, and post-traumatic stress disorder (e.g., Breiding, Black, & Ryan, 2008, Bonomi, Thompson, Anderson, Reid, Carrell, et al., 2006; Vos, Astbury, Piers, Magnus, Heenan, et al., 2006).

Intimate Partner Violence IPV is violence committed by a spouse, ex-spouse, current or former boyfriend or girlfriend; includes physical violence, sexual violence, and emotional abuse and has an estimated annual cost of \$5.8 billion for medical care and lost productivity (National Center for Injury Prevention and Control, 2003). Both men and women are victims of IPV; it can occur among heterosexual and same-sex couples. In 2011, the National Intimate Partner and Sexual Violence Survey (NISVS) estimated that 1 in 3 women and 1 in 4 men reported experiencing IPV (rape, physical violence and/or stalking) during their lifetime (Black, Basile, Breiding, Smith, Walters, Merrick, Chen & Stevens, 2011). This translates into approximately 42.4 million women and 32.2 million men who experienced rape, physical violence and/or stalking by an intimate partner during their lifetime in the United States. In addition, approximately 7 million women and 5.7 million men experienced these types of violence by an intimate partner within the 12 months prior to the survey.

Both women and men have increased risk for long term health problems (Black and Breiding, 2008). However, women are much more likely than men to suffer physical injuries or psychological trauma from IPV (Brush 1990; Gelles, 1997). Women are also significantly more likely than men to be killed by an intimate partner (Puzone et al. 2000).

Studies have also shown that abused women experience more physical and functional health problems and have a higher occurrence of depression, drug and alcohol abuse, and suicide attempts than do women who are not abused (Campbell, et al., 1995; Golding, 1996; Kaslow et al., 1998; Kessler et al., 1994; Krug et al., 2002). Psychological consequences include

posttraumatic stress disorder, depression, substance abuse, and suicidal behaviors and ideation (Caetano and Cunradi 2003; Campbell 2002; Coker et al. 2000; Kaslow et al. 1998, 2002; Koss et al. 2003; Mechanic et al. 2000.)

Sexual Violence SV has a profound and long-term impact on the physical and mental health of the victim. In addition to injury, SV is associated with an immediate and long term increased risk of sexual and reproductive problems (Krug et al., 2002.) The annual cost of rape committed by intimate partners alone exceeds \$319 million (Max, Rice, Finkelstein, Bardwell, & Leadbetter, 2004). According to the Bureau of Justice Statistics, rape is one of the most underreported crimes (Bachar and Koss, 2001), due in large part to the high level of social stigma and shame associated with rape. Approximately 84% of rapes and sexual assaults are not reported to police (Kilpatrick et al., 1992).

Stalking In 2010, The National Intimate Partner and Sexual Violence Survey found that 16.2% of women and 5.2% of men in the United States had experienced stalking during their lifetime in which they felt very fearful or believe that they or someone close to them would be harmed or killed (Black, et al., 2011). This translates into approximately 19.3 million women and 5.8 million men in the United States.

Stalking can result in severe and even fatal outcomes for victims because it often co-occurs with other kinds of partner violence; 81% of women who were stalked by a current or former intimate partner were also physically assaulted by that partner and 31% were sexually assaulted by that partner (Tjaden & Thoennes, 1998). Evidence also suggests that women who are stalked by ex-partners may be at high risk for being killed (Crowell and Burgess, 1996). The estimated economic cost of stalking of women in 1995 was \$342 million (Max, et al., 2004). Adjusted for inflation, this cost was \$438 million in 2005 (Sahr, 2006).

### (iii) Specific Mandates to Monitor and Reduce IPV, SV, and Stalking

The CDC is the lead federal agency for public health objectives related to injury and violence. The *Healthy People 2020* report (U.S. DHHS, 2010) lists several objectives that pertain directly to IPV, SV, and stalking. Applicable objectives include objectives IVP39: “reduce the rate of physical assault by current or former intimate partners”; “reduce sexual violence by a current or former intimate partner”; “reduce psychological violence by a current or former intimate partner”; “reduce stalking by a current or former intimate partner.” Also applicable are objective IPV40 “reduce the annual rate of rape or attempted rape”; “reduce sexual assault other than rape.” The legal justification/legislative authority for this survey may be found in Section 301 of the Public Health Service Act (42 USC 241) in Attachment A.

## A.1.b) Privacy Impact Assessment

### (i) Overview of Data Collection System

The CDC's NCIPC, in collaboration with NIJ and DOD, developed the NISVS in 2009 and it was implemented in 2010. The survey has been conducted annually by RTI International since 2010. The sample is selected using a random digit dialing (RDD) landline and cell phone survey of English and/or Spanish speaking female and male adults (18 years and older) living in the United States. NISVS provides population-based prevalence estimates at the national and state level for IPV, SV, and stalking victimization.

In 2010 16,507 interviews were conducted. In 2011, 12,500 interviews were conducted and in 2012, a projected total of 11,000-12,000 will be conducted. Public use data sets will be archived and made accessible to state and national researchers and practitioners. Unidentifiable information contained in these files will be maintained for use in the foreseeable future.

### (ii) Items of Information to be Collected

Information is collected in a one-time anonymous random digit dialed telephone interview (Attachment G). Questions are asked about all forms of IPV victimization (including physical aggression, and sexual violence); all forms of SV victimization by any perpetrator (including unwanted sexual situations, abusive sexual contact, and forced/nonconsensual sex [completed and attempted]); and stalking victimization by any perpetrator. NISVS gathers information regarding experiences that occurred across respondents' lifespan and in the 12 months preceding the survey.

An improved measure of the impact of violence is also included. For example, questions are included regarding the level of fear, perceived risk of harm, the respondent's well being, injuries, and services used (police, shelter, medical care).

In addition, health related questions and demographic questions are asked (including race/ethnicity, income, and age).

A financial incentive is offered to respondents. If respondents chose to receive the financial incentive then personal identifying information including name and address is collected. If a respondent wishes to donate the financial incentive offered then this personal identifying information is not collected.

Although this type of information is collected, the data is stored in a separate data base and is not transmitted to CDC. As outlined in the Privacy Act Checklist (Attachment J), the incentive PII is stored in the database no more than 24 hours. All incentive PII collected during the data is deleted nightly after it is entered into an Excel file for incentive processing (printing and mailing the check). There is no case ID in the incentive file. Incentives files are processed once a week (for printing and mailing). The incentive files are saved for approximately 2 months after the

end of the current year data collection to allow for RTI to respond to inquiries from respondents about the status of their check.

(iii) Identification of Website Content Directed at Children Under 13 Years of Age.

NISVS only surveys adults over 18 years of age and does not involve web-based data collection methods nor does it refer respondents to websites.

## **A.2. Purpose and Use of Information Collection**

The specific aims of NISVS are to generate consistent and reliable data on the incidence, prevalence, and nature of IPV, SV, and stalking at the state and national level among U.S. women and men. Ongoing surveillance is critical in the further development of prevention and intervention programs to reduce the prevalence and incidence of IPV, SV, and stalking. Stable and precise annual prevalence estimates were produced at the national level in 2011 from the 2010 data. Stable and precise state-level prevalence estimates were also produced in 2011 using the 2010 data and will be available in subsequent years as interviews accrue over time. Currently, for the vast majority of states, the data provided by NISVS is the only population-based information regarding the prevalence of IPV, SV, or stalking.

Researchers and providers across the country are utilizing the much needed data that this surveillance system provides. In the coming years, NISVS will also provide the critical trend data that have not until recently been available and are essential to design and evaluate prevention efforts.

Documenting and monitoring the incidence and prevalence of IPV, SV, and stalking is a critical first step to improving the health status of individuals, making communities safer, and reducing the social and healthcare costs currently burdening state and federal governments and programs. NISVS data helps inform public policies and prevention strategies and helps to guide and evaluate progress towards reducing the substantial health and social burden associated with IPV, SV, and stalking.

## **A.3. Use of Improved Information Technology and Burden Reduction**

All interviews are conducted over the telephone, using computer-assisted telephone interviewing (CATI) software. The use of CATI reduces respondent burden, reduce coding errors, and increase efficiency and data quality. The CATI program involves a computer-based sample management and reporting system that incorporates sample information, creates an automatic record of all dialings, tracks the outcome of each interviewing attempt, documents sources of ineligibility, records the reasons for refusals, and locates mid-questionnaire termination.

The CATI system also includes the actual interview program (including the question text, response options, interviewer instructions, and interviewer probes). The CATI's data quality and



control program includes skip patterns, rotations, range checks and other on-line consistency checks and procedures during the interview, assuring that only relevant and applicable questions are asked of each respondent. Data collection and data entry occur simultaneously with the CATI data entry system. The quality of the data is also improved because the CATI system automatically detects errors and ensures that there is no variation in the order in which questions are asked. Data can be extracted and analyzed using existing statistical packages directly from the system, which significantly decreases the amount of time required to process, analyze, and report the data.

#### **A.4. Efforts to Identify Duplication and Use of Similar Information**

To ensure that NISVS was not duplicating the efforts of others, CDC has consulted with other federal agencies (e.g., DOJ, DOD) and other leading experts and stakeholders in the fields of IPV, SV, and stalking. NCIPC convened a workshop “Building Data Systems for Monitoring and Responding to Violence Against Women” (CDC, 2000). Recommendations provided by those in attendance are reflected in the design of NISVS.

As discussed in the Data Systems workshop, surveys that ask behaviorally specific questions that are couched in a public health context have much higher levels of disclosure than those couched within a crime context (as in the National Crime Victimization Survey (NCVS) conducted by the Bureau of Justice Statistics). In addition, NISVS increases disclosure through the use of multiple behaviorally specific questions (e.g., not asking about rape, but asking about unwanted or forced sex). NISVS also gathers much more detailed information (compared to the NCVS or other surveys) on the full range of: intimate partner violence, , physical violence, sexual violence and stalking; sexual violence, including non touch, touch, forced sex, coercive sex, and alcohol or drug facilitated sex; and stalking behaviors, including technology assisted stalking (e.g., cell phone, Face Book). Information is also gathered with respect to frequency, time frame, relationship to perpetrator(s), patterns of abuse, impact of abuse, and service use.

Prior to NISVS, the most recent national health survey on IPV, SV, and stalking (NVAWS) was completed in 1995, more than a decade ago (Tjaden and Thoennes, 1998). Prior to NVAWS, there had been no similar national health surveys with a specific focus on IPV, SV, and stalking (which are also the types of outcomes that are least likely to be disclosed in crime surveys).

Although the BRFSS included optional IPV and SV modules in 2005, 2006, and 2007, fewer than half of the states administered the module during any one year. Furthermore, the information collected in the optional modules was limited to a small number of relatively simple IPV (n= 7) and SV (n=8) questions and limited to physical and sexual violence. Because of time constraints, there was no information collected on stalking or psychological abuse by an intimate partner. In addition, there was only one question that provided information on the impact of the violence that occurred - “were you injured during the most recent event?”

The BRFSS SV and IPV modules have provided useful, albeit limited, information to participating states regarding their prevalence of IPV and SV. Because consistent survey methods were used, participating states were able to make comparisons between their state and other states that administered the module (Breiding, Black, & Ryan, 2008). Except for NISVS,

no other consistently collected state level data using similar questions and survey methods currently exist. An additional concern is that neither all states nor a statistically representative set of states collected IPV or SV data during the years that funding was available (2005, 2006, and 2007). Only three states have SV data across all three years and only five states have IPV data across all three years in which the optional module was offered. Because financial support from the Division of Violence Prevention no longer exists for the optional modules, few (if any) states continue to collect data IPV or SV data. Thus, the BRFSS does not provide national estimates of IPV or SV. Furthermore, to adequately monitor and evaluate trends, data must be collected more frequently, across all states, using consistent surveillance methods.

Because NISVS has been designed from the public health perspective and because it has multiple behaviorally specific questions on a wide range of intimate partner, sexual violence and stalking outcomes, it provides more accurate and frequent information at the state and national level. NISVS provides more data than are currently available at any level regarding the prevalence and incidence of IPV, SV, and stalking victimization.

#### **A.5. Impact on Small Businesses or Other Small Entities**

No small businesses are involved in this study. Strategies are being employed to eliminate business telephone numbers from the call blocks.

#### **A.6. Consequences of Collecting the Information Less Frequently**

There are no legal obstacles to reducing the burden.

Although NISVS is an ongoing surveillance system, the survey is a one-time request for individual respondents. The likelihood is extremely small (less than one in a million) that respondents will be included in more than one randomly selected sampling pool across the years of the surveillance system.

The need for an ongoing surveillance system is reflected in the fact that prior to NISVS the lack of regular, ongoing surveillance, using uniform definitions and consistent survey methods over time has made it nearly impossible to evaluate trends in IPV, SV, and stalking. The lack of comparable state-specific prevalence data has limited the ability of national and state public health officials to measure the impact of IPV, SV, and stalking in individual states. Improved surveillance helps guide the most effective use of limited prevention resources. More detailed and frequent information informs intervention and prevention strategies at both the national and state levels.

#### **A.7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5**

The request fully complies with the regulation 5 CFR 1320.5.

## **A.8. Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency**

### **A.8.a) Federal Register Notice**

A 60-day Federal Register Notice was published in the *Federal Register* on June 6, 2012, vol. 77 No. 109, pp. 33465 (Attachment B). One public comment was received during this review time (Attachment C).

### **A.8.b) Efforts to Consult Outside the Agency**

CDC participates in a monthly conference call involving federal researchers involved in the study of violence against women (documentation included in Attachment D).

Staff within the Departments of Justice and Defense served as technical reviewers for the proposals submitted in response to CDC's Funding Opportunity Announcement for NISVS. As part of the review team, they participated in the selection of the contractor to do the work and approved the proposed statement of work. DOJ and DoD were also integrally involved in the design of the interview instrument as described below (and see interagency agreement included in Attachment D). As described in Section A.4, CDC worked closely with DoD, NIJ, and other federal agencies in the development of the survey (NISVS). Documentation providing an example of the consultations between CDC, DoD, and DOJ/NIJ regarding NISVS is also included in Attachment D. In addition, CDC staff remains engaged in ongoing discussions with Federal colleagues from NIJ and DOD related to the analysis of 2010 special population data from AIAN and military personnel.

NISVS Expert Panel. As mentioned in Section A.4 and A.8, NCIPC invited a panel of experts to attend a meeting in November 2007 to discuss preliminary findings from the 2007 methodological study (referred to as the NISVS Pilot, although it was not a pilot test of the NISVS survey itself) and to discuss the planned directions for NISVS. The review panel consisted of federal and non-federal subject matter experts with expertise in IPV, SV, and stalking. The following individuals participated in the meeting and provided input to the redevelopment of the survey during monthly conference calls in 2008.

Dr. Antonia (Toni) Abbey  
Professor, Psychology Department  
Wayne State University  
55 Woodward Ave  
Detroit, MI 48202  
Phone : 313-577-6686  
Fax : 313-577-7636  
Email : [Aabbey@wayne.edu](mailto:Aabbey@wayne.edu)

Mr. Bernard Auchter, M.S.W.  
Senior Social Science Analyst and Acting Chief of the Violence and Victimization  
Research Division

National Institute of Justice  
810 Seventh Street NW  
Washington, D.C. 20531  
Phone: 202-307-0154  
Fax: 202-616-0275  
Email: [Bernie.Auchter@USDOJ.GOV](mailto:Bernie.Auchter@USDOJ.GOV)

Dr. Elaine Cassidy  
Program Officer, Research & Evaluation  
Robert Wood Johnson Foundation  
Route 1 and College Road East  
Princeton, NJ 08543  
Phone: 609-627-7611  
Fax: 609-514-5531  
Email: [ecassidy@rwjf.org](mailto:ecassidy@rwjf.org)

Dr. Sarah Cook  
Associate Professor and Director of Undergraduate Studies Department of Psychology  
P.O. Box 5010  
Georgia State University  
Atlanta, GA 30302-5010  
Phone: 404- 413-6265  
Fax: 404- 413-6207  
Email: [Scook@gsu.edu](mailto:Scook@gsu.edu)  
Email: [psyslc@langate.gsu.edu](mailto:psyslc@langate.gsu.edu)

Dr. Walter Dekeseredy  
Director of the Observatory on Sustainable Cities and Urban Communities and Professor  
of Criminology, Justice and Policy  
University of Ontario Institute of Technology  
132 Bassett Blvd.  
Whitby, Ontario,  
Canada, L1N 8X5  
Phone: 905-666-7774  
Fax: 905-721-3372  
Email: [Walter.dekeseredy@uoit.ca](mailto:Walter.dekeseredy@uoit.ca)

Dr. Diane Follingstad  
Women's Circle Endowed Chair and Professor in the Center for Research on Violence  
against Women  
Department of Psychiatry University of Kentucky College of Medicine  
3470 Blazer Pkwy  
Lexington, KY 40509  
Phone (859) 323-5281  
Email: [dfollingstad@uky.edu](mailto:dfollingstad@uky.edu)

Dr. Sherry L. Hamby  
Research Associate Professor, Department of Psychology  
University of North Carolina at Chapel Hill  
12780 Stratford Drive  
Laurinburg, NC 28352-2044  
Phone: 910-276-7298  
Email: [sherry.hamby@unc.edu](mailto:sherry.hamby@unc.edu)

Mr. David Lloyd , J.D.  
Director, Family Advocacy Program  
ODUSD (P&R/MC&FP)  
4000 Defense Pentagon, Room 5A726  
Washington, DC 20301-4000  
Phone: 703)602-4990 ext. 2  
Fax: 703)-602-4977  
Email: [david.lloyd@osd.mil](mailto:david.lloyd@osd.mil)

Ms. Rebecca Odor, M.S.W.  
Director of Sexual & Domestic Violence Prevention  
Division of Injury and Violence Prevention  
Virginia Department of Health  
109 Governor St. #815G  
Richmond, VA 23219  
Phone: 804-864-7740  
Fax: 804-864-7748  
Email: [Becky.odor@vdh.virginia.gov](mailto:Becky.odor@vdh.virginia.gov)

Dr. K. Dan O'Leary  
Distinguished Professor of Psychology  
SUNY-Stoney Brook University  
236 Christian Avenue  
Stony Brook, NY 11790  
Phone: 631-632-7852  
Email: [doleary@notes.cc.sunysb.edu](mailto:doleary@notes.cc.sunysb.edu)

Dr. Angela Moore-Parmley  
Associate Deputy Director for Research and Evaluation  
National Institute of Justice  
810 7th Street, NW  
Washington, D.C. 20531  
Phone: 202-307-0145  
Fax: 202-354-4191  
Email: [angela.moore.parmley@usdoj.gov](mailto:angela.moore.parmley@usdoj.gov)

Dr. Brian Spitzberg  
Professor, School of Communication  
San Diego State University  
5500 Campanile Drive  
San Diego, CA 92182-4560  
Phone: 619-594-7097  
Email: [spitz@mail.sdsu.edu](mailto:spitz@mail.sdsu.edu)

The contractor, RTI, also sought input through a subcontract with one of the leading researchers in the field - Jacquelyn Campbell, Ph.D., R.N., F.A.A.N.

Dr. Jacquelyn Campbell, Ph.D., R.N., F.A.A.N.  
Anna D. Wolf Chair  
Professor and Associate Dean for Faculty Affairs  
Johns Hopkins University School of Nursing  
The Johns Hopkins University School of Nursing  
525 N. Wolfe St. RM 436  
Baltimore, MD 21205-2110  
Phone: 410-955-2778  
FAX: 410-614-8285  
email: [jcampbel@son.jhmi.edu](mailto:jcampbel@son.jhmi.edu)

Numerous presentations were made in 2008, 2009 and 2010 to vet the proposed NISVS among a range of interested stakeholders, including victim advocates, family advocacy programs, Title IX Task Force authorized under the 2005 VAWA, and a number of other conferences and public meetings.

In 2011, prior to the release of the first summary report, several federal agencies and partners were briefed on the initial findings of the survey. These agencies include Administration of Children and Families, Office of the Vice President, and the Office of Violence Against Women in Department of Justice.

### **A.9. Explanation of Any Payment or Gift to Respondents**

A wide variety of research has shown that incentives improve response rates (Armstrong, 1975; Yu and Cooper, 1983; Church, 1993; Singer, 2002; Cantor, O’Hare, and O’Connor, 2007). Incentives can help gain cooperation through fewer calls, which can help make their use cost effective. Additionally, studies have shown that modest incentives are not coercive (Singer & Bossarte, 2006). Thus, implementing an incentive plan can be a cost effective way for surveys to improve response rates and lower refusal rates, and could, over the course of data collection, actually reduce costs and burden to respondents by reducing the need for additional calls to potential respondents.

Increasing the response rate also increase the likelihood that information provided by survey participants are representative of the sample and maximize the utility of all information provided by study participants. However, it is most cost effective for survey researchers to offer the lowest possible amount for incentive payments to respondents while still achieving the “boost” to response rates. Following a protocol similar to the IRB and OMB approved NISVS Pilot (OMB # 0920-0724); respondents are offered a \$10 incentive for completing the interview. The NISVS Pilot Study offered either a \$10 or a \$20 incentive (as randomly assigned). The pilot demonstrated a 2% increase in response rates using a \$20 incentive. However, a \$10 incentive is offered because the boost in the pilot was slight and because of budgetary constraints. However, to further increase the response rate and to reduce the potential for nonresponse bias, a nonresponse phase has been incorporated in the NISVS design. A subsample of the nonrespondents is selected and offered an incentive of \$40. The nonresponse phase is described in more detail in section B.3.c.

### **A.10. Assurance of Confidentiality Provided to Respondents**

At no time does CDC have access to or receive potentially identifiable information. During data collection, the contractor collects names and addresses of those respondents who wish to be mailed a promised \$10.00 or \$40.00 incentive. At no time is this information linked or linkable to survey information. Only limited demographic information is requested (e.g., race, zip code, year of birth). Once the interview is completed, the telephone number is eliminated from the database in an overnight batch process.

The data are collected anonymously. The measures used to insure confidentiality in the approved IRB protocol (Attachment F) closely follows the IRB and OMB approved NISVS Pilot Study Protocol (OMB # 0920-0724). The CDC Privacy Act Officer reviewed the NISVS Pilot OMB application and determined that the Privacy Act was not applicable.

#### Privacy Impact Assessment Information

A. The NISVS is not subject to the Privacy Act.

The original OMB submission was reviewed by ICRO in 2009, who determined that the Privacy Act does not apply. Thus, no certificate of confidentiality is being requested for NISVS.

However, respondents are informed that the information they provide are maintained in a secure manner and that data are reported only in aggregate form.

#### B. How Information will be secured

All data are maintained in a secure manner throughout the data collection and data processing phases. Only RTI International personnel who are conducting the study and have a study-specific need to know have access to the temporary information that could potentially be used to identify a respondent (i.e., the telephone number and address), and all project staff have signed the RTI International confidentiality agreement (Attachment H). While under review, data resides on directories that only the project director can give permission to access. All computers reside in a building with electronic security and are ID and password protected.

Although some sensitive questions on social behaviors and victimization are asked using a RDD telephone survey, respondents' first name or initials only are used for the interview process. The name "resident" is used to send the advanced informational letter prior to the interview and the incentive check is addressed as the respondent specifies after his/her participation. To maximize human subject protection, the letter has been carefully written to provide only general information about the survey. The lack of detailed study information in the advance letter is intentional for the protection of the prospective study participant. If the prospective study participant is in a relationship where IPV is present, we do not want the advance letter to raise suspicion or incite potential perpetrators.

Upon completion of the survey, respondents may choose to receive a \$10 or to have a similar contribution sent to the United Way. In 2011, 54.29% of respondents chose to make a contribution to the United Way rather than receive the offered incentive (unpublished data). This finding suggests that some people are motivated to participate by financial gains and others are motivated by altruism. If the respondent does choose to receive the incentive, it is mailed using the revised protocol for the NISVS Pilot Study, as approved by the human subjects review board. Following survey completion, the interviewer asks for the respondent's name and mailing address. The respondent is informed that this information is being collected for the sole purpose of sending the incentive and that it will not be stored with their survey responses. If the respondent is not comfortable giving this information to the interviewer, the interviewer then offers to have the respondent give the information to her supervisor. If the interviewer thinks that further reassurance is needed, she can offer that her supervisor will not know how the respondent answered any of the questions. If the respondent is still not comfortable with giving their contact information to a call center supervisor, the interviewer will offer to transfer the respondent to a voice mail box to leave their information. The toll-free project hotline number is also offered to respondents so they can call if they had problems leaving their information. In addition to these options, offering to contribute to the United Way provides an alternate option for respondents who do not wish to provide the information needed to mail the promised incentive.

Following the NISVS Pilot survey protocol, the mailing contact information is initially recorded in the case management database, a database separate from the survey data. The phone number,



address, and name information are subsequently removed from the database during an overnight batch process. By utilizing a two step process, identifying information that is potentially linkable is removed quickly and respondent confidentiality is maintained.

RTI International has procedures in place to protect against data loss and down time in the event of equipment failure. These include regularly scheduled back up of data, redundant services in case of server failure, and uninterruptible power supplies to bridge a temporary loss of power. Under normal operating conditions, a complete backup of all files on every disk are written to tape weekly. Every business day, a differential backup is performed of all files created or modified since the last complete backup. In the event of a hardware or software failure, files can be restored to their status as of the time of the last differential backup, usually the evening of the previous business day. Tapes from complete backups are kept for approximately 3 months. Tapes or CD-R drives are used for long-term data archiving.

Several additional measures have been implemented to ensure data security. The address files used to send the letters of introduction are destroyed as soon as the letters are mailed. The CATI system includes a compartmentalized data structure, in which personally identifying information are maintained separately from the actual questionnaire responses. Once an individual has completed his/her survey, all identifying information including first name, and telephone number is stripped from the data files and destroyed in an overnight batch process. These measures safeguard the privacy of participants – once their interview has been completed, it does not have any personal identifiers.

Before any data are released (e.g. in disseminated reports), all demographic information that could potentially lead to identification of an individual are stripped and the information destroyed. The database is configured so that it is not possible to retrieve individual responses or potentially identifying information.

### C. Procedures for Obtaining Informed Consent

A verbal informed consent is obtained prior to the conduct of the interview (page 8, Attachment G). Potential respondents are informed 1) of the purpose for the data collection; 2) that their data will be treated in a secure manner and will not be disclosed; and 3) that all information collected will be pooled with responses from other participants. Following recommended guidelines (WHO, 1993; Sullivan & Cain, 2004; Watts, Heise, Ellsberg, & Moreno, 2001) a graduated informed consent protocol is used. For research on topics such as IPV (and other forms of violence and abuse), a graduated consent process is often most appropriate. Literature regarding the ethical and safe collection of research data on IPV offers many reasons for obtaining informed consent in a graduated manner (WHO, 1993; Sullivan & Cain, 2004). In addition to safety and ethical considerations, a graduated consent process allows the interviewer to build rapport and increases the likelihood of gaining the participant's trust, the key to minimizing non-participation and under-reporting. Carefully conducted studies with well-trained interviewers who are able to build rapport and trust with potential participants are essential both to the collection of valid data and the well-being of respondents.

#### D. Informing Respondents of the Voluntary Nature of Survey Participation

During informed consent and throughout the interviews the respondents are informed that their participation is completely voluntary and reminded that they can stop the interview at any time. They are also informed and reminded that they can skip any question that they do not want to answer (for example pp. 7, 15, 36, Attachment G).

#### A.11. Justification for Sensitive Questions

Because very few people report IPV, SV, or stalking to officials and very few injuries are reported to health care providers, survey data provide the best source of information regarding the prevalence of IPV, SV, and stalking. Until recently, questions about IPV, SV, and stalking were considered by some to be “too sensitive” to ask in an RDD telephone survey. However, CDC evaluated respondent reactions to questions about violence in three large telephone surveys: 1) National and State Surveys on Violence Against Women and the Evaluation of Measurement Tools for IPV (OMB # 0990-0115); 2) Injury Control and Risk Survey (ICARIS-2 Phase 2) (OMB # 0920-0513); and 3) National Intimate Partner and Sexual Violence Surveillance (NISVS) Pilot Study (OMB # 0920-0724).

In all three surveys, results consistently demonstrated that the vast majority of telephone survey respondents: 1) believe that an RDD telephone survey should ask questions about interpersonal violence; 2) are willing to answer such questions during a telephone interview; and 3) are not upset or afraid as a result of being asked about their experiences with violence (Black, Kresnow, Simon, Arias and Shelley, 2006).

In all three surveys, it was consistently found that between 88.0% and 98.4% of participants felt such questions should be asked, regardless of their experience with or their history of interpersonal violence. Victims were as likely as non-victims to believe that such questions should be asked. In addition, responses were consistent, regardless of the respondent’s victimization experience; those with different types of victimizations, those victimized within the past 12 months, and those victimized by an intimate partner all reported that the questions should be asked. Importantly, even among victims who reported that being asked these questions made them feel upset or afraid, the majority felt that such questions should be asked in a telephone survey.

These results suggest that commonly held beliefs and assumptions regarding participants’ reactions to questions about interpersonal violence may be unfounded. Given that issues related to confidentiality, safety, and providing resources are adequately addressed, these findings provide important information for researchers and offer some assurance to those concerned with the ethical collection of data on victimization (Black and Black, 2007).

Still, it is critical that respondent safety remains the primary concern for any data collection asking about violence, particularly IPV, SV, and stalking. Such measures have been well described (Sullivan & Cain, 2004) and are addressed in the interviewer training.

Additional information regarding the potential benefits of participation were gathered in the NISVS pilot study conducted in early 2007 (OMB # 0920-0724). The overall purpose of the 2007 study was to evaluate several methodological issues and to inform the design of NISVS. One of the issues evaluated was the degree to which respondents reported experiencing benefits as a result of participation. More than 70% of respondents reported that they gained something positive from participating (NISVS Pilot, unpublished data). Nearly 70% reported that they felt someone cared about issues that were important to them and over 90% reported the perceived benefit of helping others (NISVS Pilot, unpublished data). When researchers focus solely on the potential for negative impact, such perceived positive responses to participation by respondents may often be overlooked.

Attachment G contains the NISVS survey instrument. The questions that are included in NISVS are closely modeled after questions that were used in the NVAWS, the NISVS Pilot Study or other recent studies regarding IPV, SV, and stalking.

## **A.12. Estimates of Annualized Burden Hours and Costs**

### **A.12.a) Number of respondents, frequency of response, and annual hour burden**

The below data collection included in Table 1 is annualized for one year which includes the number of respondents, frequency of response, and annual hour burden. However, this request only extends our data collection for 6 months. The survey instrument requires approximately 25 minutes to complete for the majority of respondents (those with little or no history of IPV, SV, or stalking). It is anticipated that most respondents with at least some history of IPV, SV, or stalking take approximately 32 minutes to complete the survey. The additional respondent burden associated with reviewing the advance letter is negligible.

The estimated total annual burden in hours for respondents is 9,916. Non-participating screened households is 73,318 and it takes approximately 3 minutes to determine whether a household is eligible and to complete the informed consent. Eligible households that should complete the survey are 15,000 and it is estimated that the total time required to complete the survey is 25 minutes, on average, including screening and informed consent.

The total annual hourly burden is 9,916, derived from the total burden hours for non-participating households and eligible households based on an average response of 3 minutes for screened households and 25 minutes for respondents that complete the survey.

Table 1. Estimated Annual Respondent Burden of NISVS

Type of Respondents	Form Name	Number of Respondents	Number of Responses per Respondent	Average Burden per Response (in hours)	Total Burden (in hours)
Non-Participating Household (Screened)	Advance Letter of Introduction (Attachment I)	73,318	1	3/60	3,666
Eligible Household (Completes Survey)	NISVS Survey Instrument (Attachment G)	15,000	1	25/60	6,250
<b>Total</b>					<b>9,916</b>

A.12.b) Annual cost to respondents

The annual burden of \$196,037.34 for 15,000 completed interviews was estimated using 73,318 as the expected number of households containing an eligible respondent ages 18 and older; and 15,000 of these eligible households completing the survey.

The estimates of individual annualized costs are based on the number of respondents interviewed and the amount of time required from individuals who were reached by telephone and agreed to the one time interview. The average hourly wage obtained from the 2012 U.S. Bureau of Labor Statistics. It takes up to 3 minutes to determine whether a household is eligible and to complete informed consent. For those who agree to participate, the total time required is approximately 25 minutes, on average, including screening and informed consent. The average hourly earnings for those in private, non-farm positions are \$ 19.77

(<http://www.bls.gov/news.release/empsit.t24.htm>). Thus, the response burden for each of the households that are eligible but choose not to participate is approximately \$1.00. The burden for each individual who is eligible and chooses to participate in the survey is \$8.24.

Type of Respondent	Form Name	Number of Respondents	Number of Responses per Respondent	Average Burden per Responses	Average Hourly Wage Rate (in dollars)	Total Respondent Cost
Non-Participating Individuals (Screened)	Advance Letter of Introduction (Attachment I)	73,318	1	3/60	\$19.77	\$72,474.84

Eligible Individuals (Surveyed)	NISVS Survey Instrument (Attachment G)	15,000	1	25/60	\$19.77	\$123,562.50
Total						\$196,037.34

Table 2. Estimated Annual Cost to Respondents for NISVS

**A.13. Estimates of Other Total Annual Cost Burden to Respondents or Record Keepers**

This data collection activity does not include any other annual cost burden to respondents, nor to any record keepers.

**A.14. Annualized Cost to the Government**

The contract to conduct the survey was awarded to RTI International through competitive bid. The total annualized cost is \$2,709,255.40, including \$2,567,037.00 in annual contractor costs and \$71,109.20 in annual costs incurred directly by the federal government (Table 3).

Costs for this study include personnel for designing the study, developing, programming, and testing the survey instrument; drawing the sample; training the recruiters/interviewers; collecting and analyzing the data; and reporting the study results. The government costs include personnel costs for federal staff involved in the oversight, study design, and analysis, which include approximately 40% of a GS-13 Behavioral Scientist, 15% of a GS-13 Behavioral Scientist, 15% of an O-4 Commissioned Corps Officer, 10% of a GS-13 Public Health Advisor, and 15% for Government Statistician.

Table 3. Estimated Annualized Cost to the Government

Type of Cost	Description of Services	Annual Cost
Government Behavioral Scientist (40%)	Project oversight, study and survey design, sample selection, data analysis, and consultation	\$32,649.00
Government Behavioral Scientist (15%)	Provide consultation and input for study and survey content, sample selection, and data analysis	\$6,372.50
Government Behavioral Scientist (15%) O-4 Commissioned Corps Officer	Provide consultation and input for study and survey content, sample selection, and data analysis	\$12,557.10
Government Public Health Advisor (10%)	Project management including oversight of budget and administration	\$9,208.60

Government Statistician (15%)	Provide statistical input and database analysis	\$10,322.00
Subtotal, Government Personnel		\$71,109.20
Contracted Personnel and Services <sup>1</sup>	Study design, interviewer/recruiter training, data collection and analysis	\$2,567,037.00
<b>Total Annual Estimated Costs</b>		<b>\$2,709,255.20</b>

<sup>1</sup>Contracted personnel and services cost estimates are based on bids provided by contractor and was based on estimated funds available during the base year (18 months, August 20, 2008 – February 19, 2010). Since the original contract was awarded, the targeted number of completed interviews has been increased to 35,000 to provide stable annual national estimates for women by age group and by race/ethnicity. The government expects that this task order will be incrementally funded; based upon satisfactory performance and availability of funds, the contract may be renewed for the third option year.

### A.15. Explanation for Program Changes or Adjustments

CDC proposes to continue this national surveillance system for six months and will provide more detailed and timely information on intimate partner violence, sexual violence and stalking victimization in the U.S. based on data collected in 2010, 2011, and 2012. The proposed change to the National Intimate Partner and Sexual Violence Survey is CDC includes no longer collecting data on special sub-populations (i.e. military, elderly, AIAN) and thus, focuses the scope of data collection on the general population.

This proposal seeks to increase the sample size by focusing on the general population and not the special sub-populations listed above. The proposed number of response screened is 73,318 annually while the proposed number of respondent surveyed is 15,000 annually. The average burden per screened respondent remains at 3 minutes (total burden in hours equals 3,666) while the average burden per surveyed respondent is 25 minutes (total burden in hours equals 6,250). The number of individuals screened and individuals surveyed equals a total burden of 9,916 hours. This proposed change reduces the total burden by approximately 54%.

Not collecting data on these special populations will reduce the burden on respondents and will allow CDC to conduct more interviews in the general population thus increasing the reliability of both national and state estimates. The overarching purpose of the information collected has not changed. There are no costs to respondents to participate other than their time.

### A.16. Plans for Tabulation and Publication, and Project Time Schedule

Table 4. Project Time Schedule

<b>1<sup>st</sup> year of data collection - activities</b>	<b>Time Schedule</b>
Letters sent to respondents	Beginning immediately after OMB approval
Initiate telephone contact	Beginning immediately after OMB approval
Clean and edit 3 <sup>rd</sup> year data set	3 month after OMB approval
Conduct analyses	4-5 months after OMB approval
Prepare and distribute reports	6 month after OMB approval

To determine the prevalence of IPV, SV, and stalking among women and men bivariate analyses are conducted using SUDAAN, version 9.0. Weighted estimates of 12-month and lifetime

victimization prevalence are calculated annually. Separate estimates have been produced for population subgroups (e.g., sex, race/ethnicity, sexual orientation and age groups) and will continue to be produced on a regular basis. Chi square tests have been performed on weighted percentages to formally test for statistically significant differences between proportions and will be produced on a regular basis. Additional multivariable logistic regression analyses have been used to adjust the data and further evaluate associations between the outcomes and potential risk factors.

Data from each consecutive survey year will be combined with previous years and remain in password protected files. Various summary and special topic reports will be distributed to stakeholders. Public use data sets will also be made available to state and national researchers and practitioners.

After years 2 and 3 of the annual survey, data will be combined across years and trend analyses will be conducted using data collected through NISVS to aid our understanding of the burden of intimate partner and sexual violence. It can be used to assess prevalence change over time, discern rate of change, and compare patterns of change across different geographic regions. The impact of prevention strategies may potentially be estimated by analyzing prevalence findings before and after the implementation of such strategies. Depending on the data to be collected, a number of mathematical modeling and analytical approaches (e.g., transformation, regression, etc.) could be used to conduct the anticipated trend analyses. Analysis software will be appropriately selected and applied.

#### **A.17. Reason(s) Display of OMB Expiration Date is Inappropriate**

CDC is not seeking approval to not display the expiration date.

#### **A.18. Exceptions to Certification for Paperwork Reduction Act Submissions**

There are no exceptions to the certification.

## REFERENCES

- American Association for Public Opinion Research (2008). *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*, 5<sup>th</sup> edition. Lenexa, Kansas: AAPOR.
- Armstrong, J.S. (1975). Monetary Incentives in Mail Surveys. *Public Opinion Quarterly*, 39, 111-116.
- Bachar K, Koss MP. (2001). From prevalence to prevention: Closing the gap between what we know about rape and what we do. In: Renzetti C, Edleson J, Bergen RK, editors. *Sourcebook on Violence Against Women*. Thousand Oaks (CA): Sage Publications.
- Basile KC, Black MC, Simon TR, Arias I, Brener ND & Saltzman LE. (2006). The Association between self reported lifetime history of forced sexual intercourse and recent health risk behaviors: findings from the 2003 National Youth Risk Behavior Survey. *Journal of Adolescent Health*, 39, 752.
- Basile KC, Chen J, Black MC, & Saltzman LE. (2007). Prevalence and characteristics of sexual violence victimization among U.S. Adults 2001-2003. *Violence and Victims*, 22, 437-448.
- Basile KC & Saltzman LE. (2002). Sexual violence surveillance: uniform definitions and recommended data elements. Version 1.0. Atlanta, GA: *Centers for Disease Control and Prevention, National Center for Injury Prevention and Control*.
- Basile KC, Swahn MH, Chen J & Saltzman LE. (2006). Stalking in the United States: Recent National Prevalence Estimates. *American Journal of Preventive Medicine*, 31, 172-175.
- Behavioral Risk Factor Surveillance System Summary Data Quality Report:  
[http://www.cdc.gov/brfss/technical\\_infodata/pdf/2002SummaryDataQualityReport.pdf](http://www.cdc.gov/brfss/technical_infodata/pdf/2002SummaryDataQualityReport.pdf)
- Black MC & Black RS. (2007). A public health perspective on the ethics of asking and not asking about abuse. *American Psychologist*, 62, 328.
- Black MC & Breiding, MJ. (2008) Adverse health conditions and health risk behaviors associated with intimate partner violence – United States, 2005. *MMWR*, 57, 113-117.
- Blumberg S J & Luke JV. (2008). Wireless Substitution: Early Release of Estimates Based on Data from the National Health Interview Survey, July-December 2007. Retrieved May 13, 2008, from <http://www.cdc.gov/nchs/nhis.htm>.
- Blumberg, S. J., & Luke, J. V. (2012). Wireless Substitution: Early Release of Estimates Based on Data from the National Health Interview Survey, July-December 2011 Retrieved June 28, 2012, from <http://www.cdc.gov/nchs/nhis.htm>



- Bonomi AE, Thompson RS & Anderson MI. (2006). Intimate partner violence and women's physical, mental, and social functioning. *Am J Prev Med*, 30, 458-466
- Breiding MJ, Black MC & Ryan GW. (2008). Prevalence and risk factors of intimate partner violence in Eighteen U.S. States/Territories, 2005. *American Journal of Preventive Medicine*, 34, 112-118.
- Brick, J. M., Cervantes, I. F., Lee, S., & Norman, G. (2011). Nonsampling errors in dual frame telephone surveys. *Survey Methodology*, 37(1), 1-12.
- Brush LD. (1990). Violent acts and injurious outcomes in married couples: methodological issues in the National Survey of Families and Households. *Gender and Society*, 4, 56-67.
- Caetano R & Cunradi C. (2003). Intimate partner violence and depression among whites, blacks, and Hispanics. *Annals of Epidemiology*, 13, 661-5.
- Campbell J, Sullivan CM & Davidson WD. (1995). Women who use domestic violence shelters: changes in depression over time. *Psychology of Women Quarterly* 19, 237-55.
- Campbell JC. (2002). Health consequences of intimate partner violence. *Lancet*, 359, 1331-6.
- Cantor D, O'Hare, BC & O'Connor KS. (2007). The Use of Monetary Incentives to Reduce Non-Response in Random Digit Dial Telephone Surveys. Pp. 471-498 in *Advances in Telephone Survey Methodology*, edited by J.M. Lepkowski, C. Tucker, J.M. Brick, E. de Leeuw, L. Japac, P.J. Lavrakas, M.W. Link, and R.L. Sangster. New York: Wiley.
- Cantor D, Wang K & Abi-Habib N. (2003). Comparing Promised and Pre-Paid Incentives for an Extended Interview on a Random Digit Dial Survey. *Proceedings of the Survey Research Methods Section of the ASA*.
- Centers for Disease Control and Prevention (CDC). (2009). Building data systems for monitoring and responding to violence against women: recommendations from a workshop. *MMWR* 49, No. RR-11).
- Church AH. (1993). Estimating the Effect of Incentives on Mail Survey Response Rates: A Meta-Analysis. *Public Opinion Quarterly*, 57, 62-79.
- Coker AL, Smith PH, Bethea L, King MR & McKeown RE. (2000). Physical health consequences of physical and psychological intimate partner violence. *Archives of Family Medicine*, 9, 451-7.
- Corso PS, Mercy JA, Simon TR, Finkelstein EA & Miller TR. (2007). Medical Costs and Productivity Losses Due to Interpersonal and Self-Directed Violence in the United States. *American Journal of Prevention Medicine*, 32, 474-482.

- Crowell NA, Burgess AW, eds. *Understanding Violence Against Women*. Washington, D.C.; National Academy Press; 1996.
- Dailey R & Claus RE. (2001). The relationship between interviewer characteristics and physical and sexual abuse disclosures among substance users: A multilevel analysis. *Journal of Drug Issues*, 31, 867-88.
- Defense Manpower Data Center. (2008). "August 2007 Status of Services Survey of Active Duty Members: Tabulations and Responses." DMDC Report No. 2007-049.
- Deming W E. (1953). On a Probability Mechanism to Attain an Economic Balance between the Resultant Error of Nonresponse and the Bias of Nonresponse. *Journal of the American Statistical Association*, 48, 743-772.
- Dillman D. (2000) *Mail and Internet Surveys*. New York, NY: John Wiley & Sons, Inc.
- Evans-Campbell T, Lindhorst T, Huang B & Walters KL. (2006). Interpersonal Violence in the Lives of Urban American Indian and Alaska Native Women: Implications for Health, Mental Health, and Help-Seeking. *American Journal of Public Health*, 96, 1416-1422.
- Fahimi M, Kulp D, & Brick JM. (2008). Bias in List-Assisted 100-Series RDD Sampling. Survey Practice. September 2008.
- Fisher BJ. (2004). *Measuring Rape Against Women: The Significance of Survey Questions*. U.S. Department of Justice.
- Fowler Jr FJ & Mangione TW. (1990). *Standardized Survey Interviewing*. Newbury Park: Sage publications.
- Gelles RJ. (1997). *Intimate Violence in Families*. 3<sup>rd</sup> ed. Thousand Oaks (CA): Sage Publications.
- Golding JM. (1996). Sexual assault history and limitations in physical functioning in two general population samples. *Research in Nursing and Health*, 9, 33-44.
- Gondolf EW & Heckert DA. (2003). Determinants of women's perceptions of risk in battering relationships. *Violence & Victims*, 18, 371-386.
- Grossman, S. F., & Lundy, M. (2003). Use of domestic violence services across race and ethnicity by women aged 55 and older. *Violence Against Women*, 9(12), 2003.
- Groves, R. M. (2006). Nonresponse rates and nonresponse bias in household surveys. *Public Opinion Quarterly* 70(5): 646-675.
- Groves R M, Couper MP, Presser S, Singer E, Tourangeau R, Acosta GP & Nelson L. (2006). Experiments in Producing Nonresponse Bias. *Public Opinion Quarterly* 70, 720-736.

- Groves RM & Heeringa S. (2006). Responsive Design for Household Surveys: Tools for Actively Controlling Survey Errors and Costs. *Journal of the Royal Statistical Society Series A: Statistics in Society* 169, 439-457.
- Groves R M & McGonagle KA. (2001). A Theory-Guided Interviewer Training Protocol Regarding Survey Participation. *Journal of Official Statistics* 17, 249-265.
- Groves R M, Singer E & Corning A.(2000). Leverage-Saliency Theory of Survey Participation - Description and an Illustration. *Public Opinion Quarterly*, 64, 299-308.
- Heyman RE, Schaffer R, Gimbel C & Kemer-Hoeg S. (1996). A Comparison of the Prevalence of Army and Civilian Spouse Violence. Prepared by Caliber Associates and Behavioral Science Associates for U.S. Army Community and Family Support Center, September, 1996.
- Health Information National Trends Study.  
([http://cancercontrol.cancer.gov/hints/docs/HINTS\\_refusal\\_incentive\\_abstract.pdf](http://cancercontrol.cancer.gov/hints/docs/HINTS_refusal_incentive_abstract.pdf) ).
- Johnson H. (1996). *Dangerous Domains: Violence Against Women in Canada*. Scarborough, ON: Nelson Canada; 1996.
- Kaslow N, Thompson MP, Meadows L, Jacobs D, Chance S & Gibb B. (1998). Factors that mediate or moderate the link between partner abuse and suicidal behavior in African American Women. *Journal of Consulting and Clinical Psychology*; 66, 533-40.
- Kennedy C. (2007). Constructing Weights for Landline and Cell Phone RDD Surveys. Paper presented at the *Annual Meeting of the American Association for Public Opinion Research*, May 17-20, Anaheim, CA.
- Kessler RC, McGoagle KA, Zhao S, Nelson CB, Hughes M, & Eshleman S. (1994). Lifetime and 12-month prevalence of DSM-II-R psychiatric disorders in the United States: results from the National Comorbidity Survey. *Archives of General Psychiatry*, 51, 8-19.
- Kilpatrick DG, Edmunds CN, Seymour AK. (1992). *Rape in America: A Report to the Nation*. Arlington,VA: National Victim Center & Medical University of South Carolina.
- Kish L. Survey Sampling. John Wiley and Sons, Inc. New York; 1965.
- Koss MP, Bailey JA, Yuan NP, Herrera VM & Lichter EL. (2003). Depression and PTSD in survivors of male violence: research and training initiatives to facilitate recovery. *Psychology of Women Quarterly*, 27, 130-42.
- Krug et al., eds. (2002). *World Report on Violence and Health*. Geneva, World Health Organization; 2002.

- Lundy M & Grossman SF. (2004). Elder abuse: spouse/intimate partner abuse and family abuse among elders. *Journal of Elder Abuse & Neglect*, 16, 85-102.
- Malcoe LH, Duran BM & Montgomery JM. (2004). Socioeconomic Disparities in Intimate Partner Violence Against Native American Women: A Cross-Sectional Study. *BMC Medicine*, 2, 20.
- Marshall A, Panuzio J & Taft CT. (2005). Intimate Partner Violence Among Military Veterans and Active Duty Servicemen. *Clinical Psychology Review*, 25, 862-876.
- Martin SL, Gibbs DA, Johnson RE, Rentz ED, Clinton-Sherrod AM & Hardison J. (In Press). Spouse Abuse and Child Abuse by Army Soldiers. *Journal of Family Violence*.
- Max W, Rice DP, Finkelstein E, Bardwell RA, Leadbetter S. The economic toll of intimate partner violence against women in the United States. *Violence Vict.* 2004;19(3):259-72.
- McCarroll JE, Newby JH, Thayer LE, Norwood AE, Fullerton CS & Ursano RJ. (1999). Reports of Spouse Abuse in the U.S. Army Central Registry (1989-1997). *Military Medicine*, 164, 77-84.
- McCarty C. (2003) Differences in Response Rates Using Most Recent Versus Final Dispositions in Telephone Surveys. *Public Opinion Quarterly*, 67, 396-406.
- Mechanic MB, Uhlmansiek MH, Weaver TL & Resick PA. (2000). The impact of severe stalking experienced by acutely battered women: an examination of violence, psychological symptoms and strategic responding. *Violence and Victims*, 15, 443-58.
- Merrill LL, Newell CE, Milner JS, Koss MP, Hervig LK, Gold SR, Rosswork SG & Thornton SR. (1998). Prevalence of premilitary adult sexual victimization and aggression in a Navy recruit sample. *Military Medicine*, 163, 209-212.
- Mouton CP, Rovi S, Furniss K & Lasser NL. (1999). The associations between health and domestic violence in older women: results of a pilot study. *Journal of Women's Health & Gender-Based Medicine*, 8, 1173-1179.
- National Center for Injury Prevention and Control. (2008). CDC Injury Research Agenda, 2009-2018. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention. Available at: <http://www.cdc.gov/ncipc>.
- National Center for Injury Prevention and Control (NCIPC). (2003). Costs of Intimate Partner Violence Against Women in the United States. Atlanta (GA): Centers for Disease Control and Prevention.
- National Household Education Survey.  
([http://www.amstat.org/sections/srms/Proceedings/papers/1997\\_181.pdf](http://www.amstat.org/sections/srms/Proceedings/papers/1997_181.pdf)).

- National Research Council. (2003). *Elder Mistreatment: Abuse, Neglect, and Exploitation in an Aging America*. Panel to Review Risk and Prevalence of Elder Abuse and Neglect. Richard J. Bonnie and Robert B. Wallace, Editors. Committee on National Statistics and Committee on Law and Justice, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.
- Oetzel J & Duran B. (2004). Intimate Partner Violence in American Indian and/or Alaska Native Communities: A Social Ecological Framework of Determinants and Interventions. *American Indian and Alaska Native Mental Health Research*, 11, 49-68.
- O'Muircheartaigh C & Campanelli P. (1999). A Multilevel Exploration of the Role of Interviewers in Survey Non-Response. *Journal of the Royal Statistical Society*, 162, 437-446.
- Peytchev, A., R. Baxter and L. R. Carley-Baxter (in press). Not All Survey Effort is Equal: Reduction of Nonresponse Bias and Nonresponse Error. *Public Opinion Quarterly*.
- Pollner M. (1998). The effects of interviewer gender in mental health interviews. *Journal of Nervous & Mental Disease*, 186, 369-73.
- Puzone CA, Saltzman LE, Kresnow MJ, Thompson MP & Mercy JA. (2000). National trends in intimate partner homicide. *Violence Against Women*, 6, 409-26.
- Rennison C & Rand M. (2003). Non-lethal intimate partner violence: women age 55 or older. *Violence Against Women*, 12, 1417-1428.
- Robin RW, Chester B, Rasmussen JK, Jaranson JM & Goldman JK. (1997). Prevalence and Characteristics of Trauma and Post-Traumatic Stress Disorder in a Southwestern American Indian Community. *American Journal of Psychiatry*, 154, 1582-1588.
- Sadler AG, Booth BM & Doebbeling BN. (2005). Gang and Multiple Rapes During Military Service: Health Consequences and Health Care. *Journal of the American Medical Women's Association*, 60, 33-41
- Sahr, R. Consumer Price Index (CPI) Conversion Factors 1800 to Estimated 2015 to Convert Dollars of 2005. (Revised January, 18, 2006). Available: [http://oregonstate.edu/Dept/pol\\_sci/fac/sahr/cv2005.xls](http://oregonstate.edu/Dept/pol_sci/fac/sahr/cv2005.xls) (Accessibility Verified January 23, 2006).
- Singer E. (2002). The Use of Incentives to Reduce Nonresponse in Household Surveys. Pp. 163-178 in *Survey Nonresponse*, edited by R.M. Groves, D.A. Dillman, J.L. Eltinge, and R. J.A. Little. New York: Wiley.
- Singer E & Bossarte RM. (2006). Incentives for survey participation: when are they coercive? *Am J Prev Med* 31, 411-418.

- Sullivan CM & Cain D. (2004). Ethical and safety considerations when obtaining information from or about battered women for research purposes. *Journal of Interpersonal Violence*, 19, 603-18.
- Teaster, P.A. (2002). A response to the abuse of vulnerable adults: the 2000 survey of state adult protective services. Washington, D.C.: National Center on Elder Abuse.
- Thompson M, Arias I, Basile KC, & Desai S. (2002). The Association Between Childhood Physical and Sexual Victimization and Health Problems in Adulthood in a Nationally Representative Sample of Women. *Journal of Interpersonal Violence*, 17, 1115-1129.
- Thornberry O, Massey J. (1998). Trends in United States Telephone Coverage Across Time and Subgroups. In R.M. Groves, P.P. Biemer, L.E. Lyberg, J.T. Massey, W.L. Nicholls, II, & J. Wakesberg (Eds.), *Telephone Survey Methodology*. New York: Wiley.
- Tjaden P & Thoennes N. (1998). Prevalence, Incidence, and Consequences of Violence against Women: Findings from the National Violence Against Women Survey. U.S. Department of Justice, Office of Justice Programs, Washington, DC, Report No. NCJ 172837.
- Tjaden P & Thoennes N. (1998). Stalking in America: Findings from the National Violence Against Women Survey: research brief. U.S. Department of Justice; 1998.
- Tjaden P & Thoennes N. (2000). Full Report on the Prevalence, Incidence, and Consequences of Violence Against Women. NCJ Publication # 183781, Washington, DC: National Institute of Justice.
- Tjaden P & Thoennes N. (2006). Extent, Nature, and Consequences of Rape Victimization: Findings From the National Violence Against Women Survey. U.S. Department of Justice, Office of Justice Programs, Washington, DC, Report No. NCJ 210346.
- Traugott MW, Groves RM & Lepkowski J. (1987). Using Dual Frame Designs to Reduce Nonresponse in Telephone Surveys. *Public Opinion Quarterly*, 51, 522-539.
- Tucker C, Brick JM, Meekins B, Morganstein D. (2004). Household Telephone Service and Usage Patterns in the U.S. in 2004. Proceedings of the Section on Survey Research Methods, American Statistical Association, pp. 4528 -4534.
- U.S. Bureau of Statistics. <http://www.dol.gov/dol/topic/statistics/index.htm>).
- U.S. Census. <http://www.census.gov/popest/national/asrh/NC-EST2004/NC-EST2004-01.xls>
- U.S. Department of Health and Human Services (DHHS). *Healthy People 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health 2 vols. Washington, DC: U.S. Government Printing Office; 2000.
- U.S. Department of Health and Human Services. Report from the Secretaries Task Force on Elder Abuse. Feb 1992. <http://aspe.hhs.gov/daltcp/reports/elderab.htm>

Vos T, Astbury J, Piers LS, Magnus A, Heenan M, Stanley L, Walker L & Webster K. (2006). Measuring the Impact of Intimate Partner Violence on the Health of Women in Victoria, Australia. *Bulletin of the World Health Organization*, 84, 9.

Waksberg J (1978). Sampling Methods for Random Digit Dialing. *Journal of the American Statistical Association*, 73, 40-46.

Watts C, Heise L, Ellsberg M & Moreno, G. (2001). Putting women first: ethical and safety recommendations for research on domestic violence against women. (Document WHO/EIP/GPE/01.1). Geneva: World Health Organization, Global Programme on Evidence for Health Policy.

Yu J & Cooper H. (1983). Quantitative Review of Research Design Effects on Response Rates to Questionnaires. *Journal of Marketing Research*, 20, 36-44.