# 2025 and 2027 National Youth Risk Behavior Survey

# Attachment G

Report on the 2018 YRBS External Peer Review

# OF THE NATIONAL YOUTH RISK BEHAVIOR SURVEY

April 2018



# TABLE OF CONTENTS

l.	BACKGROUND	2
II.	EXTERNAL REVIEW PROCESS	
	Table 1. Expert Panelists' Associated Agency and Area of Expertise	
III.	RECOMMENDATIONS FOR THE NATIONAL YOUTH RISK BEHAVIOR SURVEY (YRBS)	4
	Table 2. Recommendation Concurrence Key	4
A	. Frame Development and Sampling Design	4
В	. Recruitment and Maximizing Participation	6
C.	. Transition to Mixed Mode Methodology (paper-and-pencil and Web) Issues	9
D.	. Methodological Strategies to Measure Emerging Topics	11

# **APPENDICES**

- A. <u>Discussion Topics and Participant List</u>
- B. <u>Curriculum Vitae of Peer Review Panel Members</u>



# I. BACKGROUND

The Youth Risk Behavior Surveillance System (YRBSS) was developed in 1990 to monitor priority health risk behaviors that contribute to the leading causes of death, disability, and social problems among youth in the United States. It is a system of school-based surveys conducted among high school students at the national, state, territorial, tribal, and local levels. The national Youth Risk Behavior Survey (YRBS) is the cornerstone of Federal efforts to collect and monitor the following:

- Behaviors that contribute to unintentional injuries and violence
- Sexual behaviors related to unintended pregnancy and sexually transmitted diseases, including HIV infection
- Alcohol and other drug use
- Tobacco use
- Unhealthy dietary behaviors
- Inadequate physical activity

The YRBSS also measures the prevalence of obesity, asthma, and other priority health-related behaviors.

For the national YRBS, information collection employs a cross-sectional design every two years to develop national estimates of risk behaviors among U.S. high school students. YRBS data are used principally to generate prevalence estimates and estimates of co-occurrence of risk behavior patterns and correlates that inform public health programs and activities.

To date, the YRBS has been a self-administered, paper-and-pencil interview (PAPI) of U.S. high school students, grades 9-12. Starting with the 2021 cycle of the national YRBS, the Centers for Disease Control and Prevention (CDC) Division of Adolescent and School Health (DASH) intends to offer schools a mixed mode approach, whereby they can opt to use PAPI or a Web-based survey instrument. A probability based, nationally representative sample is used to select schools. Within selected schools, classes are randomly selected and all students in the selected class are eligible to participate. In order to minimize the burden on the schools and students, the YRBS is completed in one class period.

In the Notice of Action for the previous OMB approval for the national YRBS, OMB requested that the YRBS undergo an external peer review prior to submitting the next package for approval. To ensure continuous scientific rigor of the sample design, best practices for recruitment, and efficient strategies to maximize participation rates, a panel of four experts was convened in April 2018. The panel was also consulted on the transition of the YRBS to a mixed mode methodology and strategies to measure emerging topics of public health importance. The panel was composed of four peer subject matter experts (SME), representing a combination of researchers and academicians. The panel was convened and moderated by ICF, a nationally recognized research and evaluation firm, who is also CDC's contractor for the national YRBS.

#### II. EXTERNAL REVIEW PROCESS

# **Peer Review Meeting and Panel Participants**

ICF convened a panel of four experts in survey methodology, school-based data collection, and health surveys to comment on the YRBS methodology and offer recommendations for improvement. The all-day panel meeting was held on April 26, 2018 at ICF's Atlanta offices and was attended by ICF staff and CDC staff from YRBS's sponsoring division (DASH). Appendix A shows the discussion topics and complete participant list.

Panel participants were recruited from ICF's extensive network of public health professionals in both the public and private sectors, and specifically selected to cover a range of methodological expertise. See table below for panelists' associations and expertise. Appendix B contains the curriculum vitae of panelists.

Table 1. Expert Panelists' Job Title and Area of Expertise

Panel Member	Job Title	<u>Expertise</u>
Laura Clary, PhD	Faculty Research Associate,	School-based data collection,
	Bloomberg School of Public Health	intervention/prevention research, SEL and
	Johns Hopkins University	school climate
Jennifer Parker, PhD	Director, Division of Research and	Health surveys and survey methodology
	Methodology	
	National Center for Health Statistics	
Susan Queen, PhD	Director, Office of Planning, Budget,	Health survey methodology and health policy
	and Legislation	
	National Center for Health Statistics	
Andy Zukerberg, MS	Chief, Cross Sectional Surveys	School-based survey methodology
	Branch, Sample Surveys Division	
	National Center for Education	
	Statistics	

#### **Peer Review Goals and Recommendation Process**

Specific topics of focus during the meeting included the following areas:

- a. Frame Development and Sampling Design: To review how YRBS currently draws its samples of districts, schools, and students and to discuss potential improvements
- b. Maximizing Participation: To review current recruitment strategies at the district and school levels and discuss potential improvements
- c. Transition to a Mixed Mode Methodology: To describe the current fielding process and how it may vary based on offering schools paper-and-pencil instruments (PAPI) and/or Web-based surveys
- d. Methodological Strategy to Address Emerging Topics: To discuss how YRBS can stay abreast of emerging public health topics relevant to youth

Panel members received background materials about the YRBS to review prior to the meeting. They were asked for commentary on the meeting notes and this report. Panelists' feedback has been incorporated into the final recommendations in Section III, which also includes Program's responses and rationale for each recommendation.

# III. RECOMMENDATIONS FOR THE NATIONAL YOUTH RISK BEHAVIOR SURVEY (YRBS)

Recommendations in this section cover Frame Development and Sampling Design (Section III.A), Recruitment and Maximizing Participation (Section III.B), Transition to Mixed Mode Methodology (Section III.C) and Methodological Strategies to Measure Emerging Topics (Section III.D). Following each specific recommendation is ICF's commentary regarding the level of agreement and potential feasibility issues, such as when the potential change could occur, or what additional studies would need to be conducted before implementation. To assist with synthesizing the panelists' comments with program's feedback, responses to recommendations were grouped into one of the four categories shown in Table 2 below.

Table 2. Recommendation Response Key

Recommendation Response Category	Description
Concur and change in effect	Agree, and there is adequate funding, staff, and control over the
	means to begin implementation of the recommendation, or to
	continue the practice if already in place
Concur and change planned for future	Agree and plan to implement based on funding or staff resources
Concur in principle but change cannot be	Agree, but funding or staff resources are currently inadequate or
made	program does not have control over the means to begin
	implementing
Further exploration needed	Needs additional discussion and background work before deciding
	upon a response
Do not concur and change not made	Disagree with the recommendation

# A. Frame Development and Sampling Design

# **Background and Summary of Sample Design Recommendations**

Before addressing recommendations for change, the panel noted several things that the YRBS is doing well with respect to sampling design to meet the key analytic objectives. First, the design leads to relatively small sampling and non-sampling errors. Sampling errors can, of course, be made smaller with larger sample sizes. Second, the sampling frame used to sample school districts and schools is still the most appropriate one for this target population.

The panel made the following recommendations related to enhancing the YRBS frame and sampling design.

1. Increase "sample size" analytically without added data collection cost/burden or compromise to precision by combining multiple years of national YRBS data to generate more powerful estimates for relatively small subgroups or behaviors with low prevalence levels.

# Response: Concur and change in effect

CDC has a long history of using the approach of combining data from different survey years to increase sample size. Most recently, CDC has used this approach for analyses by sexual minority status. This approach can be applied more broadly to other subgroups, school types (e.g., private schools), and variables of interest moving forward.

2. Reduce precision loss due to clustering of the sample by first reassessing the optimal sample design for YRBS precision goals, specifically considering sampling design modifications that reduce clustering effects and unequal weighting effects.

# Response: Concur and change planned for future

Sample clustering, which leads to increases in variances, occurs due to the multistage nature of the sampling design, and the large student samples selected in larger schools magnify this effect. Large within-school samples are a result of the double class sampling approach, which is used to increase the yield in minority groups (black students) and overall. A reduction in sample clustering would be possible with an increase in school sample sizes, and thus, overall sample sizes. Unequal weighting effects and inefficiencies also result from linking schools to form second-stage units (SSUs). This approach would be reassessed as well.

Further, large public school districts (i.e., those with many sampled schools) also lead to inefficiencies due sample clustering, which is compounded by their higher potential nonresponse (discussed further in section III.B below). The sample design should also investigate novel ways of limiting the number of sample schools per district.

The 2021 YRBS sampling design may offer opportunities for the investigation of more efficient sampling designs. Modified sampling designs may include larger numbers of sample PSUs and sample schools, and therefore, potentially greater costs. CDC can investigate alternative sampling designs with larger numbers of sample PSUs and sample schools, and less or no double class sampling, as well as investigating the creation of single-school second stage units (SSUs).

3. Analyze potential coverage bias due to the exclusion of Department of Defense (DOD) and juvenile detention schools by adding a coverage bias study to the 2021 YRBS cycle.

#### Response: Concur in principle but change cannot be made

The panel discussed possible ways to increase coverage of the sampling frame beyond the high level of coverage currently achieved for the target population of high school students nationwide. The frame is constructed by merging various National Center of Education Statistics (NCES) data sets and commercial (MDR Inc.) files, followed by careful deduplication and assignment of unique school IDs. It does not currently include special categories of schools such as DOD schools and juvenile detention schools. The reasons for their exclusion are mostly practical cost-bias trade-offs as the potential bias (reduction) benefits are outweighed by the tremendous cost of recruiting and collecting data for these schools. It would be of interest to quantify the bias in a special study of some of these school categories, however this would require additional funding, which is not currently available.

4. To reduce data collection costs, integrate state-level YRBS data with national YRBS data to refocus resources and fill in "data gaps" that could provide more statistical power overall. Possibly subsample from states and combine with national data. When states draw their samples, consider using state data to supplement national sample size goals where there is overlap between the two, essentially using state data for both state-level and national purposes. Conversely, draw a larger national sample, and wherever there is overlap between national and state in a given year, the states could have extra data.

#### Response: Further exploration needed

While this idea could benefit the survey, it also presents formidable challenges related to the different sample frames, methods, timing, and survey instruments used by states relative to the national YRBS. For example, the frames for the national YRBS include public, private, and Catholic schools. State survey frames include only public schools. Also, some state surveys have overall school and student response rates below 60%, whereas the national YRBS has consistently met or exceeded this level. Instituting a reliance on state-level data "to build" the national data set could imperil the national study's ability to obtain weighted data. In addition, states have less constancy in the timing of their local YRBS efforts, with some states fielding in the spring, others in the fall, and others that have fielded in both semesters. By contrast the national YRBS is always fielded in the spring of odd-numbered years. Complex re-weighting would be necessary for the patchwork of states with and without national sample data (four states do not conduct a state-level YRBS). Perhaps the most serious concern is that states use different questions in their YRBS surveys and do not conform entirely to the national YRBS instrument, which would represent a major loss of data for the national study. All of these issues will need to be explored further if this approach is to be considered further.

5. Consider drawing a "reserve sample" from which to replace refusing districts and/or schools.

#### Response: Do not concur and change not made

School replacements offer an apparent way of preserving target sample sizes in the presence of school and district non-response. However, replacements do nothing to improve response rates or reduce potential non-response bias; rather, they introduce other forms of bias. They also make it difficult to compute proper response rates. From a logistical point of view, replacements make recruitment more inefficient by either 1) increasing the burden associated with recruiting two samples in parallel or 2) starting recruitment very late in the process once a primary entity refuses and thus losing time to work through approvals from the secondary entity. This further compounds the potential negative effect on response rates. At the district level, the arguments against replacements are even stronger along these lines as multiple schools are typically selected within any given district. The effects of a single district refusal are thus compounded in terms of the number of schools that must then be replaced, which may subsequently fall across multiple districts, which in turn increases burden associated with recruitment and renders it more difficult to determine proper response rates.

# **B.** Recruitment and Maximizing Participation

#### Background and Summary of Recommendations

As with sampling, the panel felt that YRBS has many strengths in its approach to district, school, and student recruitment and participation. The panel agreed that engaging state departments of health and education to send letters of support to school districts and schools is a best practice and should be continued. ICF reported that inperson recruitment strategies have been increasing in recent years, and it appears to be effective at gaining cooperation. The panel agreed that continuing this practice with districts and schools added value to the study. More specifically, the panel agreed that working with school districts to provide the information needed for their research approval committees has a strong positive benefit on school-level cooperation. Further, the panel agreed that continuing and strengthening recruitment coordination with the National Youth Tobacco Survey (NYTS) and state level YRBS should have a positive impact on national YRBS.

The most frequent recommendations for change involved the recruitment materials at the district and school levels, particularly for private, non-Catholic schools, which are particularly difficult to recruit.

1. Continue and increase use of in-person recruiters for districts and schools.

# Response: Concur and change in effect

The national YRBS contractor plans to continue using in-person recruitment efforts for districts and schools from which it is particularly difficult to obtain cooperation (including those who initially refuse) and for those districts with a large number of schools selected in the sample. Recent efforts with in-person recruitment have proven to be successful and the expectation would be that as these efforts develop and expand, the YRBS will have continued or increased success.

2. Contact state Departments of Education (DOE) when districts do not participate, and ask for their help in securing cooperation.

# Response: Concur and change in effect

YRBS recruitment efforts include outreach at the state level once the sample has been drawn and approved. This correspondence alerts state DOEs and Departments of Health (DOHs) as to which districts and schools have been selected and seeks their guidance on identifying district health advocates for historically uncooperative districts. Also, a letter of support for the study is requested so that it can be included in study invitation packets. The YRBS plans to continue its practice of reaching back to state-level DOE contacts to confer on refusal conversion tactics in overcoming objections to district or school refusals. Panelists with experience in this strategy suggest that, although it can make some districts unhappy, the practice generally has a strong positive effect on cooperation. The YRBS maintains the voluntary nature of the survey at all levels, so it will not encourage state DOEs to mandate participation from refusing entities; however, insights that the state may have provide excellent context for subsequent discussions with refusing entities.

3. Revise district/school recruitment fact sheet to focus on past results from the YRBS that would be of interest to districts, and not just on what district needs to know to make a decision. Also, consider tailored recruitment materials for schools that are most likely to object to participation (e.g., small private schools).

# Response: Concur and change in effect

The current YRBS fact sheet included with recruitment materials is solely focused on the objectives and processes that decision-makers must consider when deliberating their participation. Panelists agreed that districts are likely more amenable to participation when they are presented with data that is meaningful to them. This may be particularly true in the case of private schools, which represent a substantial proportion of refusing schools. This may require combining private school data across multiple YRBS cycles, but that information is available (see recommendation A.1 above). A revised fact sheet will be used in future rounds of recruitment, including making the document more graphically engaging and including YRBS results that are most relevant to specific audiences.

4. Tailor recruitment efforts for districts that have large numbers of sampled schools within them (i.e., 3 or more), or that have a large impact on representativeness.

#### Response: Concur and change planned for future

Related to recruitment recommendation #1 above, targeted in-person recruitment visits will include visits to district-level decisions makers in those districts that have three or more sampled schools. In prior YRBS cycles, districts with high numbers of schools were not approached as such unless there was reason to suspect a refusal. A more proactive recruitment approach to these districts will consider in-person visits, as the fielding budget allows.

5. Time district and school recruitment to known schedules, including formal research proposal reviews, standardized testing, and seasonal administration availability. Approach districts that historically appear in national samples before sample is drawn to gain extra time in the recruitment/cooperation process.

# Response: Concur and change planned for future

The YRBS already tailors district and school contact attempts and data collection schedules to district- and school-specific schedules. However, more optimization can always be done, particularly for initial contacts with districts. Panelists suggested proactive "relationship-building" contacts with districts that historically are included in the national sample, even before the sample is drawn. This "your district may be sampled" pre-recruitment contact would expend extra effort should a district not appear in a given cycle, but generally the expectation is that the payoff would occur in the future when it would be part of the sample draw. Panelists also emphasized the importance of finding times of year that administrators are most available and flexible with their time, such as July and January when schools are on break but administrators are planning semester class schedules.

6. Analyze potential for nonresponse bias due to using active v. passive/opt out parental consent.

# Response: Concur in principle but change cannot be made

School surveys generally include a non-response bias component due to parental non-consent. Previous analyses of YRBS data show no difference in prevalence of risk behaviors between schools requiring active and passive consent. Additional analyses would require data from students whose parents do not consent, which is not part of current YRBS and would require additional funding for a related study.

7. Consider following the National Assessment of Educational Progress (NAEP) model whereby YRBS project staff are placed in state DOE offices and allocate 75% of their time to the study and donate the remaining 25% to state efforts.

# Response: Concur in principle but change cannot be made

Generally, CDC views the concept of local YRBS ambassadors favorably. In the past, CDC funded both state-level DOEs and DOHs for HIV and chronic disease prevention efforts. Although that specific funding is no longer available, the contacts made at the various state levels have been maintained and prove beneficial to the YRBS. Unfortunately, DASH does not have sufficient resources to follow a NAEP model of placing staff in various DOEs.

8. Consider the use of district-level incentives for allowing access to sampled schools.

# Response: Concur in principle but change cannot be made

Just as household and establishment surveys use both promised and provided incentives to gain cooperation from individuals and households, incentives could be used at the district level to gain cooperation. YRBS already uses incentives at the school level, and the possible addition of a district incentive was discussed following the dip in 2015 response rates. This was not implemented, and response rates rebounded in 2017 without it. However, districts and schools are continuing to be protective of instructional demands, and maintaining high district and school participation rates requires new methods simply to hold steady. CDC recognizes that incentives can be seen as coercion and therefore sometimes frowned upon by OMB and IRB. Also, current funding levels for the YRBS do not include this line item. Therefore additional discussion related to adding incentives would be needed.

9. If receiving resistance about specific survey topics, offer to have data collector remain in the classroom once the survey administration is completed so that they may answer any questions students have about specific content covered in the instrument.

# Response: Do not concur and change not made

Panelists reported success in overcoming administrators' participation concerns related to specific survey topics (e.g., sex, drugs, bullying), by offering to have the data collector debrief students as a group once they've completed the questionnaire. YRBS data collectors are trained in survey administration protocols and are not professionals trained to lead educational sessions related to the YRBS topics or offer opinions. IRB protocols require YRBS field staff to provide students with the name of a school staff person with whom they can talk with about topics of concern related to their participation in the survey. This approach will continue to be used.

# C. Transition to Mixed Mode Methodology (PAPI and Web) Issues

#### **Background and Summary of Recommendations**

Historically, the YRBS has only been offered in a PAPI mode. CDC began exploring the possibility of changing the mode of the YRBS in a 2008 OMB-approved methodological study (OMB Number 0920-0763. This study examined the effects on health risk prevalence estimates across four separate study conditions: 1) school-based PAPI, 2) school-based Web version, 3) school-based Web version of the questionnaire that contained skip patterns, and 4) an "on your own" Web condition that allowed students to access the online questionnaire at a time and place of their choosing, rather than participating as part of an intact classroom while at school. CDC did not find significant differences in prevalence estimates among key indicators in any condition; however, students who participated in the Web-based conditions expressed concerns about their perceptions of privacy that were strong enough that CDC felt it could not rely on Web data collection for YRBS.

In the 10 years since this methodological study, the technological landscape in schools and among youth has changed dramatically. Computer resources are more readily available, and students' technology literacy and familiarity with Web-based tasks is much greater. Stakeholders have continued to make repeated requests to CDC to allow schools to participate via the Web using existing technology resources in schools. In response to stakeholders' requests, and because the 2008 Methodological Study of the YRBS showed comparable prevalence estimates, CDC is transitioning the survey to a mixed mode approach by allowing the use of a Web-based version of the survey. The first mixed mode implementation for the national YRBS is planned for the 2021 cycle; however, state and local sites funded by CDC to do their own YRBS are being given the option to use mixed mode starting in Spring 2019.

Panelists were asked to share their opinion on the expected impact of this mixed mode transition on the national YRBS. ICF also solicited advice on procedures that should be in place during survey design and data collection to ensure a smooth transition. For their consideration, ICF shared the following details with panelists:

- Schools will be given the option to use PAPI, Web, or both
  - Regardless, paper back-up will be available for entire schools, entire classes, or individual students, as needed
- Survey to be completed at school, using school's or students' existing technology resources or students' own personal internet-connected devices
- All other national YRBS protocols remain intact
  - Random class selection process will be maintained
  - Trained survey administrator will be present in each classroom
  - Concerted non-response follow-up efforts at the school-, class-, and student-level

The following section discusses the suggestions by the panelists for transitioning the YRBS to a mixed mode methodology.

1. Prior to the 2021 YRBS cycle, conduct a "bridge study" that will allow CDC to explore what effect the transition to a mixed mode methodology will have on prevalence estimates and established trends.

#### Response: Concur in principle but change cannot be made

CDC does not have sufficient funding to conduct a bridge study. However, CDC feels adequate investigation will be done prior to the 2021 implementation so that confidence in prevalence trends can be maintained. The 2008 Methodological Study of the YRBS was a rigorous, nationally representative study that showed comparable estimates can be obtained from PAPI and Web modes. Also, states conducing their own YRBS will be allowed to offer mixed mode approaches in the 2019 YRBS, which will provide CDC with multiple representative state-level data sets to analyze for potential trend breaks before the 2021 national study. To facilitate analysis by mode, respondent records will be flagged in each data set to indicate the mode of data collection used. In combination, the 2008 Methodological Study and the various 2019 state-level YRBS surveys will provide CDC with confidence moving forward to 2021. As a possible compromise to a full bridge study, panelists thought a small retest of about 50 cases in each condition (PAPI and Web) that showed the same results as the 2008 could be written up in a manuscript and cited in future OMB packages, further illustrating that trend lines will not be affected.

2. Consider only allowing students to use school computer and Web resources rather than their own devices and connections. Panelists shared a concern that by letting students use their own device, CDC loses some control of how the survey looks on screen. For example, questions could be cut off or scrolling issues could appear. Panelists cautioned that an extensive amount of usability testing must be done to control for this across a broad array of devices, rather than limiting usability testing to those devices most commonly found in schools. Panelists also shared that parents may have installed parental controls that allow them to monitor content viewed on their youth's devices, which jeopardizes the anonymity of students' responses and could potentially reduce the candor with which they respond.

#### Response: Further exploration needed

CDC understands the difficulty involved in letting students use their own devices, but is committed to offering schools and students options that make participation most convenient. As such, the guidance to states/districts conducting their own mixed-mode YRBS is to allow the use of students' personal devices. CDC acknowledges that some participating schools will not have sufficient internet-connected devices for all selected students to participate at the same time, thus the available options include PAPI back-up and use of personal devices. However, the complications raised by the panelists during the peer review meeting, as well as preliminary findings from early pilot testing of the web-based YRBS that suggest some students feel their privacy may be impacted, indicate that it is too early to rule decisively on the issue for the national YRBS. Because the states can begin implementing this mixed mode approach starting in 2019, the national YRBS has an opportunity to learn from the experience of the early-adopters and use that insight to shape the 2021 cycle. Regardless of findings from state-level YRBSs conducted in mixed mode, we do not anticipate ever withdrawing the option of PAPI back up. We will work closely with OMB and ICF's and CDC's Institutional Review Boards to ensure an approach that balances human subjects' protections, efficient use of resources, optimal user experience, and perceptions of privacy.

# D. Methodological Strategies to Measure Emerging Topics

# **Background and Summary of Recommendations**

CDC recognizes the value of the rich trend lines that have been established over the lifetime of the YRBS. Further, there is general agreement that keeping survey burden low and acceptable to schools requires maintaining (i.e., not extending) the length of the current questionnaire. However, CDC has struggled with how to capture national data on emerging issues, knowing that adding new questions means having to delete others. Another topic that CDC wished to hear the panelists' opinion on was a reliable indicator for socioeconomic status.

The panelists were queried on their response to these common surveillance dilemmas.

1. Consider creating a question rotation design by asking certain questions every other cycle (i.e., every 4 years), specifically those with trend lines that do not change much over time. This would facilitate continued trend analysis, but would also allow space for including questions on emerging public health issues.

# Response: Concur and change planned for future

The panel acknowledged the difficulty of adding, removing, or modifying questions, especially those that have decades' worth of trend data or are of major interest to key stakeholders. This is a particular challenge for state level stakeholders because state-level sample sizes can be small and they rely on the national YRBS to provide a national comparison. DASH currently engages its state and local partners to vote on changes to the standard questionnaire, which is the base for the national questionnaire. DASH includes an additional ten questions to the standard questionnaire for the national questionnaire. Panelists' experience with this dilemma have included a formal review that accounts for the following:

- How often does the trend change?
- Does the question get heavily edited each round?
- Who are the stakeholders for the data element?

A major strength of the YRBS is its ability to provide data on risk behaviors co-occurrence, so a rotating, modular questionnaire approach requires careful consideration of groups of variables that tend to be used together in stakeholders' analyses.

 Explore ways to determine school-level SES by following the on-going research of Doug Geverdt, who is a statistician with NCES, on the use of catchment areas, or student zip codes, to further build on the SES indicators.

# Response: Concur and change planned for future

The panel recognized the importance of considering SES in the analysis of the YRBS data, but lamented the difficulty in determining a reliable source for SES indicators. There was a consensus that free and reduced-price lunch was not an accurate indicator. Efforts to determine student-level SES, such as a maternal education question, have failed. Growing research is showing that it may be more about the school SES than that of the individual student/household. Using school zip code was an intriguing concept, but there was a recognition that the school zip code does not always match the zip code of the students. There is growing interest in using catchment areas and it was noted that at least one urban school district uses valuable real estate on its local questionnaire to ask about the zip code in which the student lives, allowing them to get at individual student level data. At minimum, YRBS should engage experts in SES and poverty measurement to establish a list of recommended measures that can be calculated from current YRBS data or currently-linked

data, and recommendations for additional measures to create. Some analyses using existing SES indicators (e.g., free and reduced-price lunch) already are underway at CDC.

Appendix A. Discussion Topics and Participant List

# Youth Risk Behavior Survey Peer Review Panel Meeting Discussion Topics

Date: April 26, 2018; Time: 9:30 AM – 3:30 PM EST Location: ICF Office \* 3 Corporate Blvd. NE Suite 370 \* Atlanta, Georgia 30320

- 1. Welcome and Introductions
- 2. History and Background of the National Youth Risk Behavior Survey (YRBS) Methodology
- 3. Primary Discussion Topics
  - a. Analytical objectives of the YRBS
  - b. Frame development and sampling design
  - c. Participation rates and non-response avoidance/correction
  - d. Fielding approach
    - a. Current
    - b. Transition to web-based methodology
  - e. Methodological strategy to address emerging topics, including options for socio-economic status indicators
- 4. Post-meeting roles and responsibilities
- 5. Adjourn

# Youth Risk Behavior Survey Peer Review Panel Meeting Participant List

# **Panel Members**

- a. Laura Clary, Johns Hopkins University
- b. Jennifer Parker, National Center for Health Statistics (NCHS)
- c. Susan Queen, National Center for Health Statistics (NCHS)
- d. Andy Zukerberg, National Center for Education Statistics (NCES)

# CDC/DASH:

- a. Kathleen Either, Division Director
- b. Stephen Banspach, Associate Director for Science
- c. J. Michael Underwood, School-based Surveillance Branch Chief
- d. Lisa Barrios, Research Application and Evaluation Branch Chief
- Nancy Brener, Contracting Officer Representative and Survey Operations Team Lead
- f. Tim McManus, Data Management and Analysis Team Lead
- g. Zewditu Demissie, Scientific Support and Innovation Team Lead
- h. Shari Shanklin, State/Local/Territorial Technical Assistance Lead

#### ICF:

- a. Kate Flint, Senior Advisor/Officer in Charge
- b. Alice Roberts, Project Director
- c. Ronaldo lachan, Senior Statistical Team Lead
- d. Matt Jans, Senior Methodologist
- e. Amy Hughes, YRBS Deputy Project Director/Recruitment and Data Collection Team Lead
- f. Jill Trott, NYTS Deputy Project Director/Recruitment and Data Collection Team Lead

Appendix B. Curriculum Vitae of Peer Review Panel Members

# Laura Clary, PhD

Rockville, MD 20853

(480) 747-7666

lclary3@jhu.edu

#### **Professional Summary**

Dr. Clary's experience includes over 15 years of managing research and evaluation projects, designing research and learning questions, directing data collection, and spearheading data analysis for a variety of federally-funded longitudinal evaluation projects working on school-based projects involving children and adolescents, and their communities, particularly in the area of children's social and emotional learning (SEL). She has strong writing, analytic, and presentation skills developed through years of working in applied research. She managed all aspects of both quantitative and qualitative projects, including developing proposals, designing research and survey protocols, developing and testing questionnaires, implementing data collection and data management procedures, conducting statistical analysis, and drafting reports, briefs, conference presentations, and journal articles. Within these projects, she demonstrated strong organizational skills, the ability to coordinate multiple projects and deadlines, work as part of interdisciplinary teams, and supervise junior staff in the implementation of data collection and data analysis. In addition, she has extensive training and experience with data analysis using a variety of statistical packages.

#### **EDUCATION**

Ph.D. Family and Human Development, Measurement and Statistical Analysis Specialization Arizona State University, December 2015

Dissertation: Child-level predictors of boys' and girls' trajectories of relational, verbal, and physical victimization

Committee: Becky Ladd (chair), Gary Ladd, Kimberly Updegraff, and Carlos Valiente

M.S. Family and Human Development, Measurement and Statistical Analysis Specialization Arizona State University, May 2011

Thesis: Risk and protective factors of peer victimization: The role of preschoolers' affiliations with peers

Committee: Laura Hanish (chair), Carol Martin, and Kimberly Updegraff

B.A. Psychology (major), English Literature (minor), Smith College, June, 1997

#### STATISTICAL EXPERTISE

ANOVA/MANOVA, regression, structural equation modeling (SEM), psychometrics, mediation/moderation, multilevel modeling, longitudinal (trajectory) analysis, using propensity score methods for estimating causal effects, and web scraping. Programming expertise in SPSS, SAS, and Stata. Experience with Mplus, R, Lisrel, and AMOS.

#### PROFESSIONAL RESEARCH EXPERIENCE

# 2017 - present Faculty Research Associate, Department of Mental Health Johns Hopkins University

Serve as Field Director for a randomized control trial of a universal intervention program to improve the social emotional learning(SEL) and overall wellness of urban middle school students exposed to trauma in the Baltimore City Schools (PI: Tamar Mendelson, Johns Hopkins University; funded by IES and NICHD). Oversee overall intervention implementation and data collection, as well as supervising all project staff (i.e., research assistants, junior and senior research coordinators, data manager, and implementation staff).

Identify and lead grant proposal development and assist other department faculty in writing grants. Currently developing two grant proposals to analyze secondary data sets related to SEL development and academic outcomes. Serve as lead and supporting author on relevant journal publications and lead statistical analyses.

# 2012–2017 Co-founder, Methodological Consultants

Provide research design, data collection, and statistical consulting for academic and non-academic research centers (e.g., Davidson Institute, Born This Way Foundation), faculty (e.g., Loyola Marymount University, UCLA, Santa Monica College), and media (e.g., HBO). Includes dissertation/thesis coaching for M.S./M.A., Ph.D., and Ed.D. students in fields of higher education administration, psychology, business, sociology, and family studies, including research design, statistical analysis, and copyediting (with approval of students' committee).

# 2011 – 2012 Research Associate, Center for the Prevention of Youth Violence Johns Hopkins University

Collected student, teacher, and administration observational and interview data in Maryland high schools. Project was part of the Maryland Safe and Supportive Schools (MDS3) Initiative (PI: Catherine Bradshaw, Johns Hopkins University) to provide SEL and positive school climate programs and evaluation.

# 2005 – 2011 Data Manager, T. Denny Sanford School for Social and Family Dynamics, Arizona State University

Data Manager for: (1) Understanding School Success Project, a longitudinal, NICHD-funded study of bullying, social predictors of early school success, positive peer relationships, and school readiness in Phoenix Head Start classrooms; and (2) Bilingual and School Readiness Project, a longitudinal NICHD-funded study to study peer relationships, school readiness, and language acquisition in Phoenix Head Start classrooms (PIs: Carol Martin, Rick Fabes, and Laura Hanish).

Trained and supervised undergraduate and graduate students in data collection procedures and data entry. Conducted analyses, reliability analysis and psychometrics of measures. Assisted in the design of questionnaires and administered to children in school and lab settings.

# 2004 -2005 Project Director, UW Autism Center University of Washington

Directed activities of nationwide NIH-funded project involving 250 families who have two or more children on the autism spectrum. Project focused on broader phenotype characteristics and early identification of children with autism. Served as liaison to Seattle public schools (PI: Geraldine Dawson).

# 2000-2003 Project Director, Center for Social Development and Education University of Massachusetts, Boston

Directed activities of two NIH grant-funded research and intervention projects involving children in inclusive and special education classes in elementary schools in Boston Public Schools and three surrounding school districts. Projects focused on implementation and evaluation of a SEL intervention (PI: Gary Siperstein).

Co-led development of SEL intervention and evaluation which included an antibullying and promoting positive peer friendships curriculum and video assessment tool (*Promoting Social Success*, 2003). Involved in all aspects of implementation, including development and leading of intervention in several classrooms, and teacher training workshops. Served as primary liaison to district and school administration and staff in participating school systems.

Assisted in the development and implementation of surveys and interviews for the evaluation of International Special Olympics and National Best Buddies program.

# 1998-2000 Research Assistant, Center for Social Development and Education University of Massachusetts, Boston

Assisted in multiple grant-funded research and SEL -related intervention projects involving children in inclusive and special education classes in elementary schools in Boston and surrounding districts. Assisted in individual and class-wide data collection, organized teacher workshops, and served as a liaison to teachers and playground staff. In charge of data entry and collection of student and teacher observational data.

#### **EVALUATION AND POLICY REPORTS**

- Jans, M. & Clary, L.K. (2010, October). Total survey error, data quality, and statistical error: Recommendations to the National Science Foundation's Social, Behavioral, and Economic Sciences Directorate for 2020 planning. US Census Bureau, Statistical Division and Arizona State University, Department of Family and Human Development.
- Siperstein, G. N., Hardman, M. L., Wappet, M. T., & Clary, L. K. (2001, December). *National evaluation of the Special Olympics Sports Program*. University of Massachusetts, Boston, Center for Social Development and Education & University of Utah, Department of Special Education.

#### MEDIA INTERVIEWS

2009 Media Interview, Early Ed Watch Blog (The New American Foundation).
Interview: <a href="http://www.newamerica.net/blog/blog/early-ed-watch/2009/making-connection-between-socialbehaviors-preschool-and-kindergarten-success-11">http://www.newamerica.net/blog/blog/early-ed-watch/2009/making-connection-between-socialbehaviors-preschool-and-kindergarten-success-11</a>

#### PEER-REVIEWED PUBLICATIONS

- Martin, C. L., DiDonato, M., **Clary, L. K.,** Fabes, R. A., Palermo, F., Kreiger, T. C., & Hanish, L. D. (2012). Gender Normative and Gender Non-Normative Preschool Children: Psychosocial and Environmental Correlates. *Archives of Sexual Behavior*, 41, 831-84.
- Steketee, G., Van Noppen, B. L., Cohen, I., & Clary, L. K. (1999). Anxiety disorders. In J. B. W. Williams & K. Ell (Eds.), *Advances in mental health research: Implications for practice* (pp. 118-156). Washington, DC: NASW Press

#### JOURNAL ARTICLES IN PROGRESS

- **Clary, L.K**. & Ladd, B.K. (under review). Child-level predictors of boys' and girls' trajectories of relational, verbal, and physical victimization.
- **Clary, L.K.** & Ladd, B.K. (under review). Anti-bullying interventions: An overview of theories and application to elementary school-based prevention.
- Mendelson, T., **Clary, L.K.,** & Greenburg, M. (in progress). Developing a sustainable and community-led universal prevention program for adolescents experiencing trauma.
- Mendelson, T., Harris, A., **Clary, L. K.,** Ebnajaad, C., Gould, L., Dariotis, J., & Greenburg, M. (in progress). Randomized control trial of a wellness intervention and effects on student social competence and internalizing symptoms.

**Clary, L.K.,** & Ladd, B.K. (in progress). Teachers' beliefs about bullying and influence in children's experience of victimization.

#### **CONFERENCE PRESENTATIONS**

- \*Dr. Clary was presenting author
- \*Clary, L. K. & Ladd, B.K. (2016, June). Anti-bullying interventions: An overview of theories and application to elementary school-based prevention. Paper presented at the 2016 Annual Meeting of the Society for Prevention Research.
- \*Clary, L. K. & Ladd, B.K. (2016, April). Boys' and girls' trajectories of relational, verbal, and physical victimization in early elementary school. Paper presented at the 2016 Annual Meeting of the American Educational Research Association.
- \*Clary, L. K., Hanish, L. D., Martin, C. L., & Fabes, R. A. (2011, March). *Time spent with peers:* Risk and protective factors for preschoolers' peer victimization? Poster presented at the Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.
- Mikulski, A., M., Palermo, F., **Clary, L.K**., Meek, S., Fabes, R. A., Hanish, L.D., & Martin, C.L. (2011, March). *Do Spanish-speaking children improve their academic skills after a year in Head Start?* Poster presented at the Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.
- Palermo, F., Mikulski, A., M., Clary, L.K. Fabes, R. A., Hanish, L.D., & Martin, C.L. (2011, March). *Teachers' English use and Spanish-speaking preschoolers' English production skills: The role of English comprehension*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.
- Palermo, F., Mikulski, A. M., Clary, L. K., Hanish, L.D., Martin, C.L., & Fabes, R. A. (2010, June). *Bilingualism and School Readiness: The Role of Teachers' English Use in Head Start Classrooms*. Poster presented at the National Head Start Meeting, Washington, DC.
- \*Clary, L. K., Hanish, L. D., Martin, C. L., & Fabes, R. A. (2009, April). Social behaviors in preschool: Does it predict academic outcomes in kindergarten? Poster presented at the Biennial Meeting of the Society for Research in Child Development, Denver, CO.
- Goble, P. M., Martin, C. L., Hanish, L. D., **Clary, L. K.,** DiDonato, M., and Fabes, R. A. (2009, April). *Gender normative and non-normative children: Activity choices across social contexts*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Denver, CO.
- \*Clary, L. K., Palermo, F., Kreiger, T. C., DiDonato, M., Martin, C. L., Hanish, L. D., & Fabes, R. A. (2008, April). Assessing differences in gender normative and gender non-normative children's characteristics and social play behaviors in preschool. Poster presented at the Third Gender Development Research Conference, San Francisco, CA.

- DiDonato, M., Martin, C. L., Palermo, F., **Clary, L. K.**, Kreiger, T. C., Fabes, R. A., Hanish, L. D. (2008, April). *How does gender non-normativity affect children's peer socialization opportunities?* Poster presented at the Third Gender Development Research Conference, San Francisco, CA.
- Goble, P. M., Hanish, L. D., Fabes, R. A., Martin, C. L., Clary, L. K., and Palermo, F. (2008, April). Exploring the influence of social contexts on young children's gender-typed activity choices. Poster presented at the Third Gender Development Research Conference, San Francisco, CA.
- \*Clary, L. K., Palermo, F., Briggs, P. T., Kreiger, T., Martin, C. L., Fabes, R. A., & Hanish, L. D. (2007, March). Social relationships and literacy in young gender non-normative girls. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Boston, MA.
- Hanish, L. D., Fabes, R. A., Martin, C. L., Clary, L. K., & Palermo, F. (2007, March). Peer socialization of children's aggression in early childhood: Does the gender of peers matter? In L. D. Hanish (Chair), Gender differences in the form and function in aggression across the lifespan. Biennial meeting of the Society for Research in Child Development, Boston, MA.
- \*Palermo, F., Clary, L. K., Hanish, L. D., Martin, C. L., & Fabes, R. A. (2006, April). *Gender non-normative behaviors: Risk factors for peer victimization in preschool?* Poster presented at the Second Gender Development Research Conference, San Francisco, CA.
- Hanish, L. D., Clary, L. K., & Palermo, F. (2006, April). *Peers' socialization of aggression in early and middle childhood: Patterns for boys and girls*. Paper presented at the Second Gender Development Research Conference, San Francisco, CA.
- \*Estes, A., Munson, J., **Clary, L. K.,** & Dawson, G. (2005, April). *Presence of a broader phenotype of autism in siblings from multiplex autism families*. Poster presented at the Biennial meeting of the Society for Research in Child Development, Atlanta, GA.

# TEACHING EXPERIENCE

# University of Maryland, University College, Department of Mathematics and Statistics

# Adjunct Associate Professor

Introduction to Statistics for the Behavioral Sciences (online, Fall 2016, Spring 2017, Summer 2017, Spring 2018)

# **Adjunct Assistant Professor**

Introduction to Statistics for the Behavioral Sciences (in-person, Spring 2011; online, Summer 2011, Fall 2011, Spring 2012, Summer 2012, Fall 2012, Spring 2013, Summer 2013, Fall 2013, Spring 2014, Summer 2014, Fall 2014, Spring 2015, Fall 2015, Spring 2016, Summer 2016).

# Arizona State University, T. Denny Sanford School of Social and Family Dynamics

#### Instructor

Human Development (in-person, Fall 2007; online, Summer 2010)

# University of Massachusetts Boston, Department of Human Development

#### Instructor

Child Development (in-person, Spring 2002)

#### Co-Instructor

Research Methods (in-person, Spring 2000, Fall 2000, Spring 2001, Fall 2001, Fall 2002, Spring 2003)

Human Development (in-person, Fall 1999)

#### **TEACHER TRAINING**

2006-2007 Preparing Future Faculty Program

# COMPETITIVE FELLOWSHIPS AND AWARDS

2018	Nominee, Stanley J. Drazek Teaching Excellence Award, UMUC
2018	Nominee, Undergraduate Teaching Excellence Award, UMUC
2014	Nominee, Stanley J. Drazek Teaching Excellence Award, UMUC
2011	SRCD Student Merit Travel Award (competitive; \$300)
2010	Graduate University Fellowship, Arizona State University (\$3000)
2008	Fellow, Institute on Youth Violence Prevention, UC Riverside (\$1000)
2008	School for Social and Family Dynamics Student Engagement Award
2008	Finalist, Graduate Student Teaching Excellence Award
2005-2008	Graduate University Fellowship, Arizona State University (\$3000 per year)

# **SERVICE ACTIVITIES**

2007-2011	Graduate Student Mentor, School for Social and Family Dynamics
2007-2008	President, Family and Human Development Graduate Student Association 2007-
2008	Member, School for Social & Family Dynamics Conference Committee
2006-2008	Member, School of Social and Family Dynamics Task Force
2006-2007	Secretary/Treasurer, Family and Human Development Graduate Student
	Association
2006-2008	Student Coordinator, Graduate Student Recruitment

# **REVIEWING AND EDITING ACTIVITIES**

2017 - on	Reviewer, Journal of Research on Adolescence
2016	Textbook Reviewer, Introduction to Statistics (Illowsky, B. & Dean, S., 2016)
2009-2013	Grant Reviewer, Jumpstart Grant, Graduate Student Professional Organization,
	Arizona State University
2005-2013	Grant Reviewer, Graduate Student Professional Organization, Arizona State
	University
2007	Textbook Editing Assistant, Discovering Child Development. (Martin, C. L. & Fabes,
	R. A., 2008)

# ASSOCIATION/CONSORTIUM MEMBERSHIPS

Society for Research in Child Development American Educational Research Association Society for Prevention Research University-Based Child and Family Policy Consortium International Bullying Research Network

#### Curriculum Vitae

Name Jennifer Davidson Parker

Current Position Director, Division of Research and Methodology

Office Address National Center for Health Statistics

Centers for Disease Control and Prevention

3311 Toledo Road

Hyattsville, Maryland 20782

(301) 458-4419 jdparker@cdc.gov

Home Address 4323 Woodberry Street

University Park, Maryland 20904

(301) 277-1949, residence (240) 498-3522, cell jdparker@aol.com

Citizenship United States

Education University of California, Berkeley, Ph.D., Biostatistics 1990

University of California, Berkeley, M.A., Biostatistics 1986

University of California, Santa Barbara, B.A., Mathematics-Economics 1984

Experience

Feb 2018-present Director, Division of Research and Methodology. National Center for Health Statistics,

Centers for Disease Control and Prevention, Hyattsville, Maryland.

Sep 2017-Feb 2018 Acting Director, Division of Research and Methodology. National Center for Health

Statistics, Centers for Disease Control and Prevention, Hyattsville, Maryland.

Jan 2017-Sep 2017 Special Assistant to the Director, Division of Research and Methodology. National

Center for Health Statistics, Centers for Disease Control and Prevention, Hyattsville,

Maryland.

May 2015 to present Senior Statistician, Division of Health and Nutrition Examination Statistics. National

Center for Health Statistics, Centers for Disease Control and Prevention, Hyattsville,

Maryland.

Dec 2010-May 2015 Chief, Special Projects Branch, National Center for Health Statistics, Centers for Disease

Control and Prevention, Hyattsville, Maryland.

2012-2018 Adjunct Faculty, University of Maryland, School of Public Health, Maryland Institute of

Applied Environmental Health. College Park, Maryland.

Jul 2010-Dec 2010 Acting Chief, Special Projects Branch, National Center for Health Statistics, Centers for

Disease Control and Prevention, Hyattsville, Maryland.

Aug 2001-Jul 2011 Health Research Scientist, Office of Analysis and Epidemiology, National Center for

	Health Statistics, Centers for Disease Control and Prevention, Hyattsville, Maryland.
Jun 2002- Jun 2004	Acting Chief, Population Epidemiology Branch, National Center for Health Statistics, Centers for Disease Control and Prevention, Hyattsville, Maryland.
Aug 1997-Aug 2001	Senior Staff Fellow, Infant and Child Health Studies Branch, National Center for Health Statistics, Centers for Disease Control and Prevention, Hyattsville, Maryland.
Jan 1996-July1997	Senior Data Analyst, California Medical Review, Inc (CMRI), San Francisco, California.
Sept 1994-May1996	Pew Postdoctoral Fellow, Institute for Health Policy Studies, University of California San Francisco, California.
Jul 1993-Sep 1994	Research Statistician, School of Public Health, University of California, Berkeley California. Part-time.
Feb 1991-Feb 1993	Staff Fellow, National Center for Health Statistics, Centers for Disease Control and Prevention, Hyattsville, Maryland.
Nov 1990-Feb 1991	Research Analyst, CSR Inc., Washington D.C.

#### Selected CDC Awards

- NCHS Merit Award (group), September 2017. The group award included NCHS participants on the on the NHANES Longitudinal Feasibility Study workgroup.
- NCHS Elijah White Memorial Award, 2004.
- NCHS/CDC Director's Award, 2002.
- NCHS/CDC On the Spot Award for service on the OMB Interagency Committee for the Review of Standards for Data on Race and Ethnicity, 1999.
- NCHS/CDC Directors Award (group), June 1999. The group award included NCHS participants on the Interagency Committee for the Review of Standards for Data on Race and Ethnicity.

#### Selected professional activities

- NCHS and CDC activities
  - o NCHS workgroup on Data Suppression/Presentation Standards (lead), 2013-present
  - o NCHS Administrative Data Liaison for OMB M-14-06, April 2014 2015
  - NCHS representative to Federal Committee on Statistical Methodology (FCSM) Subcommittee on Administrative Records, 2010-2015
  - o NCHS representative to CDC Shepard Award committee, 2007, 2008, 2009
  - o NCHS representative to the CDC Statistical Advisory Group, 2005-2006
  - NCHS co-representative to Health and Human Services working group on race and ethnicity data, 2000-2004
  - NCHS representative to Tabulation Working Group. Interagency Committee for the Review of Standards for Data on Race and Ethnicity, 1997-2003
  - o Co-organized NCHS workshop on errors in gestational age reporting, 2000

- Statistical organizations
  - o American Statistical Association
    - Fellow, 2017
    - Pat Doyle Award for service to government statistics, Government Statistics Section, 2017
    - Secretary/Treasurer, Government Statistics Section, American Statistical Association, 2015-2016
    - Bryant Scholarship Committee for an Outstanding Graduate Student in Survey Statistics, 2011-present
    - Nominated for Jeanne Griffith Award for mentoring, Government Statistics Section, 2011
    - Member since 1987
  - o Member, Federal Committee on Statistical Methodology, 2017-present
  - o Elected member International Statistics Institute, 2012-present
  - o Editorial Board, Journal of the International Association of Official Statistics 2013-present
  - Caucus for Women in Statistics
    - President, 2010 (President-Elect 2009, Past-President 2011)
    - Member-at-large, 2005-2007
- Epidemiology and environmental health activities
  - Editorial board, Paediatric and Perinatal Epidemiology 2005-2012
  - o International Collaboration on Pregnancy Outcome and Air Pollution (ICAPPO), 2007-2011
    - 2007- Co-organized workshop: "Methodological Issues in Studies of Air Pollution and Pregnancy Outcome", September, Mexico City, Mexico
    - 2008 Co-organized workshop: "International Workshop to Develop a Standardized Methodological Approach to Data Re-analyses," October, Pasadena, California
    - 2008-2010 Developed protocol and coordinated ICAPPO pilot study
    - 2009 Co-organized workshop: "Workshop to Discuss Progress and Future Directions," August, Dublin, Ireland.
    - 2010 Co-organized workshop: "Workshop to Discuss Progress and Future Directions," August, Seoul, Korea.
  - Environmental Health committees, meetings, external review boards
    - Environmental Protection Agency
      - America's Children and the Environment, 2012 report reviewer, contributed to climate indicator, evaluated sample weights for women of childbearing age
      - Reviewer for Integrated Science Assessment for Carbon Monoxide, US EPA National Center for Environmental Assessment, 2008
    - National Climate Assessment (http://www.globalchange.gov/what-we-do/assessment/nca-overview)
      - Member Health Indicators workgroup, 2013-2015.
         http://www.globalchange.gov/what-we-do/assessment/indicators-system
      - Represented CDC at meeting of National Climate Assessment (NCA)'s Knowledge Management workshop (Sept 2010).

 Invited to participate in NCA workshop: Climate Change Impacts and Responses. Societal Indictors for the National Climate Assessment (meeting April 2011). Report online March 1, 2012 http://downloads.usgcrp.gov/NCA/Activities/Societal\_Indicators\_FINAL.pdf

#### o Scientific committees and review

- Scientific Advisory Committee (SAC) for Emory/Georgia Tech Collaborative: Multi-Scale Assessment of Health Effects of Air Pollution Mixtures Using Novel Measurements and Models (SCAPE). 2011-2015.
- Reviewer, Scientific proposals, Health Effects Institute, "RFA: Impact of Air Pollution on Infant and Children's Health" 2009, "HEI's New Investigator Award", 2010
- External Advisory Committee for "Air Pollution and Environmental Justice: Integrating Indicators of Cumulative Impact and Socioeconomic Vulnerability into Regulatory Decision-Making" California Air Resources Board, 2005-2009
- NRC meeting on linking human and environmental data for climate change research, participant Dec. 11 2009
- International Workshop on Air Pollution and Human Reproduction. May 9-11, 2007.
   Munich (Neuherberg), GSF campus, Institute of Epidemiology
- Represented NCHS on the Monitoring Work Group in the National Conversation on Public Health and Chemical Exposure. Led the health subgroup, about 5-8 people, to develop the health components of the meeting report. 2009-2011
- NCHS representative to CDC working group on climate change, 2007 2010

#### • Academic activities

Provided professional input on 4 Academic Tenure Reviews. Participated on 3 PhD dissertation committees and 2 MA thesis committees. Supervised 1 MPH semester intern, 2 undergraduate summer interns, and a handful of post-graduate fellows.

#### Research funding

- 1. Data Linkage for Environmental Health Policy. Funded by the Office of the Assistant Secretary for Planning and Evaluation (ASPE) 2005. \$200,000.
- 2. Air Pollution and Work Loss Days. Funded by the US EPA. 2007 \$56,120
- 3. Programming Support for Multiple Imputation of Gestational Age in Vital Statistics. Funded by ASPE. 2006. \$30,000.
- 4. Linkage of NCHS data files to climate data. Funded by ASPE. 2009. \$97,000.
- 5. Linkage of NCHS data files to climate data. Funded by National Center for Environmental Health/CDC. 2009. \$73,981.00.
- 6. Examination of Effects of Air Pollution on Mortality Trends and Pregnancy Outcomes. Funded by US EPA. 2009. \$74,000.

#### Scientific Publications

1. Parker JD, Kravets K, Vaidyanathan A. Particulate Matter Air Pollution Exposure and Heart Disease Mortality Risks by Race and Ethnicity in the United States: 1997-2009 NHIS with Mortality Followup Through 201. Circulation. 2018 Apr 17;137(16):1688-1697. Epub 2017 Dec 13

- 2. Miller EA, McCarty F, Parker JD. Estimating missed links by race and ethnicity in record linkage with the National Death Index. Ethnicity and Disease. 2017;27:77-84.
- 3. Romeo Upperman C, Parker J, Jiang C, He X, Murtugudde R, Sapkota A (2015) Frequency of Extreme Heat Event as a Surrogate Exposure Metric for Examining the Human Health Effects of Climate Change. PLoS ONE 10(12): e0144202. doi:10.1371/journal.pone.0144202
- 4. Weissman J, Gindi R, Miller DM, Miller EM, Parker JD. The relationship between linkage refusal and selected health conditions of survey respondents. Survey Practice 2016; 9(5).
- Miller EA, Decker S, Parker JD. Characteristics of Those Who Choose Medicare Advantage over Fee-for-Service Upon Medicare Enrollment at Age 65. Journal of Ambulatory Care Management 2016; 39(3):231-241.
- 6. Aoki Y, Brody DJ, Flegal KM, Fakhouri THI, Axelrad DA, Parker JD, Blood lead and other metal biomarkers as risk factors for cardiovascular disease mortality. Medicine (Baltimore). 2016 Jan; 95(1): e2223.
- 7. Zhang G, Schenker N, Parker JD. Multiple imputation for missingness due to non-linkage and program characteristics: a case study of the National Health Interview Survey linked to Medicare claims, Journal of Survey Statistics and Methodology. 2016 4 (3): 319-338
- 8. Miller EA, Tarasenko YN, Parker JD, Schoendorf KC. Diabetes and colorectal cancer screening among men and women in the USA: National Health Interview Survey: 2008, 2010. Cancer Causes Control. 2014 May;25(5):553-60.
- 9. Simon A, Driscoll A, Gorina Y, Parker J, Schoendorf K. A longitudinal view of child enrollment in Medicaid. Pediatrics, 2013 Oct;132(4):656-62.
- 10. Dadvand P, Parker JD, Bell ML, Matteo Bonzini M, Brauer M, Darrow LA, Gehring U, Glinianaia SV, Gouveia N, Ha EH, Leem JH, van den Hooven EH, Jalaludin B, Jesdale BM, Lepeule J, Rachel Morello-Frosch R, Morgan GG, Pesatori AC, Pierik FH, Pless-Mulloli T, Rich DQ, Sathyanarayana S, Seo J, Slama R, Strickland M, Tamburic L, Wartenberg D, Nieuwenhuijsen MJ, Woodruff TJ. Maternal Exposure to Particulate Air Pollution and Term Low Birth Weight; A Multi-Country Evaluation of Effect and Heterogeneity. Environmental Health Perspectives. 2013 121:367–373.
- 11. Zhang G, Schenker N, Parker JD, Liao D. Identifying implausible gestational ages in preterm babies with Bayesian mixture models. Statistics in Medicine. 2013 May 30;32(12):2097-113.
  - \* 2013 CDC Statistical Science Award for Best Applied Paper.
- 12. Nachman KE, Parker JD. Exposures to fine particulate air pollution and respiratory outcomes in adults using two national datasets: a cross-sectional study. Environmental Health. 2012 Apr 10;11:25.
- 13. Branum AM, Parker JD, Keim SA, Schempf AH. Prepregnancy body mass index and gestational weight gain in relation to child body mass index among siblings. American Journal of Epidemiology. 2011 Nov 15;174(10):1159-65. Epub 2011 Oct 7.
- 14. Parker JD, Rich DQ, Glinianaia SV, Leem JH, Wartenberg D, Bell ML, Bonzini M, Brauer M, Darrow L, Gehring U, Gouveia N, Grillo P, Ha E, van den Hooven EH, Jalaludin B, Jesdale BM, Lepeule J, Morello-Frosch R, Morgan GG, Slama R, Pierik FH, Pesatori AC, Sathyanarayana S, Seo J, Strickland M, Tamburic L, Woodruff TJ. The International Collaboration on Air Pollution and Pregnancy Outcomes: Initial results. Environ Health Perspect. 2011 Jul;119(7):1023-8.
- Akinbami L, Parker JD, Merkle S. Factors associated with school absence among children with symptomatic asthma, United States, 2002-2003. Pediatric Allergy, Immunology, and Pulmonology September 2010, 23(3): 191-200.
- Parker JD, Liao D, Schenker N, Branum A. The use of covariates to identify records with implausible gestational ages using the birthweight distribution. Paediatric and Perinatal Epidemiology, 2010 Sep;24(5):424-32.

- 17. Woodruff TJ, Parker JD, Adams K, Bell ML, Gehring U, Glinianaia S, Ha EH, Jalaludin B, Slama R. International Collaboration on Air Pollution and Pregnancy Outcomes (ICAPPO). International Journal of Environmental Research and Public Health, 2010 Jun;7(6):2638-52. Epub 2010 Jun 17.
- 18. Akinbami LJ, Lynch CD, Parker JD, Woodruff TJ. The association between childhood asthma prevalence and monitored air pollutants in metropolitan areas, United States, 2001-2004. Environmental Research 2010 Apr;110(3):294-301. Epub 2010 Feb 1
- 19. Branum A, Parker JD, Schoendorf K. Trends in U.S. sex ratio by plurality, gestational age, and race/ethnicity. Human Reproduction, 2009 Nov;24(11):2936-44. Epub 2009 Aug 3.
- 20. Johnson D, Parker JD. Air Pollution Exposure and Self Reported Cardiovascular Disease, Environmental Research, 2009 109(5):582-9
- 21. Parker JD, Akinbami L, Woodruff TJ. Air pollution and childhood respiratory allergies in the United States. Environmental Health Perspectives. 2009 117(1):140-7
- 22. Parker JD, Klebanoff M. Invited Commentary. Crossing curves: it's time to focus on gestational-age-specific mortality. American Journal of Epidemiology. 2009 169: 798-801.
- 23. Woodruff TW, Parker JD, Darrow LA, Slama R, Bell ML, Choi H, Diggle P, Glinianaia S, Hoggatt KJ, Karr C, Lobdell D, Pless-Mulloli T, Rankin J, Wilhelm M. Methodological issues in studies of air pollution and reproductive health. Environmental Research. 2009 109(3):311-20
- 24. Parker JD, Mendola P, Woodruff TJ. Preterm birth following the Utah Valley Steel Mill closure. A natural epidemiological experiment. Epidemiology 2008 Nov;19(6):820-3.
- Slama R, Darrow L, Parker J, Woodruff TJ, Strickland M, Nieuwenhuijsen M, Glinianaia S, Hoggatt KJ, Kannan S, Hurley F, Kalinka J, Srám R, Brauer M, Wilhelm M, Heinrich J, Ritz B. Meeting report: atmospheric pollution and human reproduction. Environmental Health Perspectives. 2008 Jun;116(6):791-8
- 26. Parker JD, Kravets N, Akinbami L, Woodruff TJ. Evaluation of the Linkage between the National Health Interview Survey and Air Monitoring Data. Environmental Research 2008 106(3):384-92.
- 27. Parker JD, Woodruff TJ. Influences of study design and location on the relationship between particulate matter air pollution and birthweight. Paediatric and Perinatal Epidemiology. 2008 May;22(3):214-27.
- 28. Woodruff TJ, Darrow LA, Parker JD. Air Pollution and Postneonatal Infant Mortality in the US, 1999-2002. Environmental Health Perspectives 2008 Jan;116(1):110-5.
- 29. Darrow LA, Woodruff TJ, Parker JD. Maternal smoking as a confounder in studies of air pollution and infant mortality. Epidemiology, 2006;17:592-3. (research letter).
- 30. Parker JD. The role of reported primary-race on health measures for multiple-race respondents in the National Health Interview Survey, Public Health Reports, 2006;121:160-8.
- 31. Huynh M, Woodruff TJ, Parker JD, Schoendorf KC. Relationships between air pollution and preterm birth in California. Paediatric and Perinatal Epidemiology, 2006;20:454-61.
- 32. Woodruff T, Parker JD, Schoendorf KC. The Relationship Between Fine Particulate Matter (PM<sub>2.5</sub>) Air Pollution and Selected Causes of Postneonatal Infant Mortality in California. Environmental Health Perspectives, 2006;114:786-90.
- 33. Parker JD, Schenker N. On the possible use of multiple imputation to handle missing and implausible gestational age values in U.S. Natality public-use datasets. Paediatric and Perinatal Epidemiology, 2007;Suppl2:97-105.
- 34. Huynh M, Parker JD, Harper S, Pamuk E, Schoendorf KC. Contextual effect of income inequality on birth outcomes. International Journal of Epidemiology, 2005;34:888-95.
- 35. Parker JD, Woodruff TJ, Basu R, Schoendorf KC. Air Pollution and Birth weight in California. Pediatrics, 2005 115(1):121-8.
- 36. Parker JD, Schenker N, Ingram DD, Weed JA, Heck KE, Madans JH. Bridging between two standards for

- collecting information on race and ethnicity: an application to Census 2000 and vital rates. Public Health Reports, 2004;119:192-205
- 37. Heck KE, Parker JD, McKendry CJ. Multiple-race mortality data for California, 2000-2001. Public Health Reports, 2004;119:187-91
- 38. Basu R, Woodruff TJ, Parker JD, Saulnier L, Schoendorf KC. Comparing exposure metrics in the relationship between PM2.5 and birth weight in California. Journal of Exposure Analysis and Environmental Epidemiology, 2004;14:391-6.
- 39. Woodruff TJ, Parker JD, Kyle AD, Schoendorf KC. Disparities in exposure to air pollution during pregnancy. Environmental Health Perspectives. 2003 Jun;111(7):942-6.
- 40. Howie L, Parker JD, Schoendorf KC. Excessive maternal weight gain patterns in adolescents. Journal of the American Dietetic Association, 2003;103:1653-7.
- 41. Akinbami LJ, Schoendorf KC, Parker J. US childhood asthma prevalence estimates: the Impact of the 1997 National Health Interview Survey redesign. American Journal of Epidemiology, 2003;158:99-104.
- 42. Heck KE, Parker JD, McKendry CJ, Chavez GF. Mind the gap: bridge methods to allocate multiple-race mothers in trend analyses of birth certificate data. Maternal and Child Health Journal, 2003;7:65-70.
- 43. Rhodes JC, Parker JD, Schoendorf KC. Contribution of excess weight gain during pregnancy and macrosomia to the cesarean delivery rate, 1990-2000. Pediatrics, 2003;111:1181-5.
- 44. Schenker N, Parker J. From Single-Race Reporting to Multiple-Race Reporting: Using Imputation Methods to Bridge the Transition. Statistics in Medicine, 2003;22:1571-87.
- 45. Parker JD, Madans J. The Correspondence between Interracial Births and Multiple Race Reporting American Journal of Public Health, 2002;92:1976-81.
- 46. Parker JD, Schoendorf KC. Implications of Cleaning Gestational Age Data. Paediatric and Perinatal Epidemiology, 2002;16:181-7.
- 47. Rolett A, Parker JD, Heck K, Makuc D. Parental Employment, Family Structure, and Child's Health Insurance. Ambulatory Pediatrics, 2001;1:306-13.
- 48. Heck K, Parker J, McKendry CJ, Schoendorf K. Multiple Race Mothers on the California Birth Certificate 2000. Ethnicity and Disease, 2001;11:626-32.
- 49. Jenny A, Schoendorf K, Parker J. The association between community context and mortality among Mexican-American infants. Ethnicity and Disease, 2001;11:722-31.
- 50. Parker J, Makuc D. Methodologic Implications of Allocating Multiple Race Data to Single Race Categories. Health Services Research, 2002;37:203-15.
- 51. Heck K, Parker J. Family Structure, Socioeconomic Status, and Access to Health Care for Children. Health Services Research, 2002;37:173-86.
- 52. Atkinson JO, MacDorman MF, Parker JD. Trends in Births to Parents of Different Races. Ethnicity and Disease, 2001;11:273-85.
- 53. Parker JD, Schoendorf KC, Kiely JL. A Comparison of Recent Trends in Infant Mortality among Twins and Singletons. Paediatric and Perinatal Epidemiology, 2001;15:12-18.
- 54. Parker JD, Schoendorf KC. Variation in hospital discharges for ambulatory care-sensitive conditions among children. Pediatrics, 2000;106(suppl):942-8.
- 55. Parker JD, Lucas JB. Multiple Race Reporting among Children in a National Health Survey. Ethnicity and Disease, 2000; 10: 262-74.
- 56. Parker JD. Birthweight Trends Among Interracial Black and White Infants. Epidemiology, 2000;11:242-8.
- 57. Heck K, Schoendorf K, Parker J. Are Very Low Birthweight Births Among American Indians and Alaska Natives Underregistered? International Journal of Epidemiology, 1999;28:1096-1101.

- 58. Marcus M, Kiely J, Parker J, McGeehin M, Jackson R, Sinks T. Anything Other than Chance? Fertility and Sterility, 1999;71:969-70 (letter).
- Parker JD, Sabogol F, Gebretsadik T. Relationship between Earlier and Later Mammography Screening -California Medicare, 1992 through 1994. Western Journal of Medicine, 1999;170:25-7.
- 60. Parker JD, Gebretsadik T, Sabogol F, Newman J, Lawson H. Mammography Screening among California Medicare Beneficiaries 1993-1994. American Journal of Preventive Medicine, 1998;15:198-205.
- 61. Luft H, Parker JD. Volume and Mortality in Coronary Artery Bypass Grafting (letter). British Medical Journal, 1995; 311:1304-5.
- 62. Parker JD. Ethnic Differences in Midwife-Attended Births. American Journal of Public Health, 1994; 84:1139-41.
- 63. Parker JD, Schoendorf KC, Kiely JL. Association Between Measures of Socioeconomic Status and Pregnancy Outcome in the United States. Annals of Epidemiology, 1994;4:271-8.
- 64. Parker JD, Abrams B. Differences in Postpartum Weight Retention between Black and White Mothers. Obstetrics and Gynecology, 1993; 81:768-74.
- 65. Butler J, Abrams B, Parker J, Roberts JM, Laros RK. Supportive Nurse-Midwifery Care is Associated with a Reduced Incidence of Cesarean Section. American Journal of Obstetrics and Gynecology, 1993;168:1407-13.
- 66. Parker JD, Schoendorf KC. Influence of Paternal Characteristics on the Risk of Low Birth Weight. American Journal of Epidemiology, 1992;136:339-407.
- 67. Parker JD, Abrams B. Prenatal Weight Gain Advice: An Examination of the Recent Prenatal Weight Gain Recommendations of the Institute of Medicine. Obstetrics and Gynecology, 1992;79:664-9.
- 68. Spear R, Bois F, Woodruff T, Auslander D, Parker J, Selvin S. Modeling Benzene Pharmacokinetics: Calibration and Parametric Sensitivity Across Three Sets of Animal Data. Risk Analysis, 1991;11:641-54.
- 69. Abrams B, Parker JD. Ranges of Maternal Weight Gain Associated with Good Pregnancy Outcome. Obstetrics and Gynecology, 1990;76:1-7.
- 70. Abrams B, Newman V, Key T, Parker J. Maternal Weight Gain and Preterm Delivery. Obstetrics and Gynecology, 1989;74:577-583.
- 71. Abrams B, Parker J. Overweight and Pregnancy Complications. International Journal of Obesity, 1987;12:293-303.

#### NCHS Reports

- Lloyd PC, Driscoll AK, Simon AE, Parker JD. Use of the National Health Interview Survey Linked to Medicaid Analytic eXtract Data to Identify Children With Medicaid-covered Births. Natl Health Stat Report. 2018 Apr;(109):1-11.
- 2. Chen TC, Parker JD, Clark J, Shin HC, Rammon JR, Burt VL. National Health and Nutrition Examination Survey: Estimation procedures, 2011–2014. National Center for Health Statistics. Vital Health Stat 2(177). 2018.
- 3. Parker JD, Talih M, Malec D, Beresovsky V, Carroll M, Gonzalez JF Jr, Hamilton B, Ingram DD, Kochanek K, McCarty F, Moriarty C, Shimizu I, Strashny A, Ward BW. National Center for Health Statistics' Data Presentation Standards for Proportions. Vital Health Stat 2. 2017.
- 4. Parker JD, Kruszon-Moran D, Mohadjer LK, Dohrmann SM, Van de Kerckhove W, Clark J, Burt VL. Estimation Methods and Analytic Considerations: California and Los Angeles County, NHANES 1999-2006 and NHANES 2007-2014. National Center for Health Statistics. Vital Health Stat 2. 2017.
- 5. Golden C, Driscoll AK, Simon AE, Judson DH, Miller EA, Parker JD. Linkage of NCHS Population Health Surveys to Administrative Records From Social Security Administration and Centers for Medicare Medicaid Services. Vital Health Stat 1. 2015 Sep;(58):1-53. PubMed PMID: 26375817.

- 6. Weissman JF, Pratt LA, Miller EA, Parker JD. Serious Psychological Distress Among Adults: United States, 2009-2013. NCHS Data Brief. 2015 May;(203):1-8. PubMed PMID: 26046826.
- 7. Lloyd PC, Simon AE, Parker JD. Characteristics of Children in Medicaid Managed Care and Medicaid Fee-for-service, 2003-2005. Natl Health Stat Report. 2015 Jun 8;(80):1-15. PubMed PMID: 26079623.
- 8. Miller EA, Miller DM, Judson DH, He Y, Day HR, Zevallos K, Parker JD, MacKinnon JA, Hernandex MN, Wohler B, Sherman R, Frernandex CA, McClure LA, LeBlance WG, Tannenbaum SL, Zheng DD, Lee DJ. Linkage of 1986–2009 National Health Interview Survey with 1981–2010 Florida Cancer Data System. National Center for Health Statistics. Vital Health Stat 2(167). September 2014.
- 9. Berko J, Ingram DD, Saha S, Parker JD. Deaths attributed to heat, cold, and other weather events in the United States, 2006-2010. Natl Health Stat Report. 2014 Jul;(76):1-16.
- 10. Day, HR, Parker JD. Diabetes in the NHIS and the CMS Chronic Condition Summary File. National Health Statistics Report, Number 69, November 2013.
- 11. Parker J, Branum A, Axelrad D, Cohen J. Adjusting National Health and Nutrition Examination Survey sample weights for women of childbearing age. National Center for Health Statistics. Vital Health Stat 2(157). 2013.
- 12. Judson DH, Parker JD, Larsen MD. Adjusting sample weights for linkage-eligibility using SUDAAN. National Center for Health Statistics, Hyattsville Maryland. May 2013. Available at the following address: <a href="http://www.cdc.gov/nchs/data/datalinkage/adjusting\_sample\_weights\_for\_linkage\_eligibility\_using\_sudaan.pdf">http://www.cdc.gov/nchs/data/datalinkage/adjusting\_sample\_weights\_for\_linkage\_eligibility\_using\_sudaan.pdf</a>
- 13. Parker JD, Kravets K, Nachman K, Sapkota A. Linkage of the 1999-2008 National Health and Nutrition Examination Survey to traffic indicators from the National Highway Planning Network. NCHS National Health Statistics Report. #45. April 2, 2012
- Mirel L, Wheatcroft G, Parker JD, Makuc D. Health Characteristics of Medicare traditional fee-for-service and Medicare Advantage enrollees: 1999-2004 National Health and Nutrition Examination Survey linked to 2007 Medicare data. NCHS National Health Statistics Report. #53. May 3, 2012
- 15. Jones L, Parker JD, Mendola P. Lead and Mercury Exposure in Pregnant Women. NCHS Data Brief. December 2010.
- 16. Kravets N, Parker JD. Linkage of the Third National Health and Nutrition Examination Survey to air quality data. Vital Health Stat 2. 2008 Nov;(149):1-24.
- 17. Parker JD, Kravets N, Woodruff TJ. Linkage of the National Health Interview Survey to Air Monitoring Data from the U.S. EPA. National Center for Health Statistics. Vital Health Statistics, Series 2, 2008.
- 18. Ingram DD, Parker JD, Schenker N, Weed JA, Hamilton B, Arias E, Madans JH. United States Census 2000 population with bridged race categories Vital Health Stat 2. 2003 Sep;(135):1-55.
- 19. Tabulation Working Group. Interagency Committee for the Review of Standards for Data on Race and Ethnicity. Provisional Guidance on the Implementation of the 1997 Standards for Federal Data on Race and Ethnicity. Office of Management and Budget. February 2001 (contributed analysis of data from the National Health Interview Survey).
- 20. Tabulation Working Group. Interagency Committee for the Review of Standards for Data on Race and Ethnicity. Draft Provisional Guidance on the Implementation of the 1997 Standards for Federal Data on Race and Ethnicity. Office of Management and Budget. March 1999. (contributed analysis of data from the National Health Interview Survey).
- 21. Schoendorf KC, Parker JD, Batkin L, Kiely JL. Comparability of the Birth Certificate and the 1988 National Maternal and Infant Health Survey. National Center for Health Statistics. Vital Health Statistics, Series 2 (116), 1993.

Proceedings

- Rammon J, He Y, Parker J. Enhancing the NHANES CMS Medicaid Linked Data with Multiple Imputation. Joint Statistical Meetings, Baltimore. August 2017. In JSM Proceedings, Section on Survey Methods.
- 2. Chen TC, Parker J. Alternate Methods for Constructing BRR Weights with National Health and Nutrition Examination Survey (NHANES) Single-Year Samples. Joint Statistical Meetings, Chicago. August 2016. In JSM Proceedings, Section on Survey Methods.
- 3. Wei R, Parsons V, Parker JD. Studying the Association of Environmental Measures Linked with Health Data: A Case Study Using the Linked National Health Interview Survey and Modeled Ambient PM2.5 Data. 2015 Joint Statistical Meetings, Seattle Washington, August 2015. In JSM Proceedings, Section on Survey Methods.
- 4. Parsons V, Wei R, Parker JD. Evaluations of Design- and Model-Based Regression Methods in Analyzing Complex Survey Data: A Simulation Study. 2013 Joint Statistical Meetings, Montreal Canada, August 2013. In JSM Proceedings, Section on Survey Methods.
- Mirel L, Parker J. Re-weighting the National Health and Nutrition Examination Survey linked to Medicare administrative records. 2011 Joint Statistical Meetings, Miami, FL, August 2011. In JSM Proceedings, Section on Survey Methods.
- 6. Miller DM, Gindi RM, Parker JD. Trends in Record Linkage Refusal Rates: Characteristics of National Health Interview Survey Participants Who Refuse Record Linkage. 2011 Joint Statistical Meetings, Miami, FL, August 2011. In JSM Proceedings, Section on Government Statistics.

#### Selected Online Documentation

- 1. National Center for Health Statistics. Office of Analysis and Epidemiology, NCHS 2011 Linked Mortality Files Matching Methodology, September, 2013. Hyattsville, Maryland. Available at the following address: http://www.cdc.gov/nchs/data\_access/data\_linkage/mortality/linkage\_methods\_analytical\_support/2011\_linked\_mortality\_file\_matching\_methodology.pdf (senior contributor)
- 2. National Center for Health Statistics. Office of Analysis and Epidemiology. Analytic Guidelines for NCHS 2011 Linked Mortality Files, *August*, 2013. Hyattsville, Maryland. Available at the following address: http://www.cdc.gov/nchs/data/datalinkage/2011\_linked\_mortality\_analytic\_guidelines.pdf (senior contributor)
- 3. Judson DH, Parker JD, Larsen MD. Adjusting sample weights for linkage-eligibility using SUDAAN. National Center for Health Statistics, Hyattsville Maryland. May 2013. Available at the following address: <a href="http://www.cdc.gov/nchs/data/datalinkage/adjusting\_sample\_weights\_for\_linkage\_eligibility\_using\_sudaa\_n.pdf">http://www.cdc.gov/nchs/data/datalinkage/adjusting\_sample\_weights\_for\_linkage\_eligibility\_using\_sudaa\_n.pdf</a>
- 4. Simon AE, Driscoll AK, Golden C, Tandon R, Duran CR, Miller EA, Schoendorf KC, Parker JD. Documentation and Analytic Guidelines for NCHS surveys linked to Medicaid Analytic eXtract (MAX) files. Hyattsville, MD: National Center for Health Statistics. Revised December 2012. (Available at the following address:
  - $http://www.cdc.gov/nchs/data/datalinkage/documentation\_and\_analytic\_guidelines\_nchs\_survey\_max\_linked\_data.pdf)$

# **Book Chapters**

Tucker C, Miller S, Parker J. Comparing census race data under the old and new standards. Chapter 19 in The New Race Question: How the Census counts multiracial individuals. J. Perlmann and M Waters (eds). Russell Sage Publications, 2002

Parker JD. Postpartum Weight Change. Clinical Obstetrics and Gynecology 1994; 37:528-37.

#### Presentations (since 2008)

- 1. Parker JD. NCHS data systems and health statistics. Guest lecture for the Cornell University course "INFO7470 Understanding Social and Economic Data" March 2016
- 2. Parker JD. Weissman J, Gindi R, Miller DM, Miller EM. The relationship between linkage refusal and selected health conditions of survey respondents. Presented at the annual meeting of the Joint Statistical Association, Seattle Washington, August 2015.
- 3. Parker JD. Data Presentation Standards at the National Center for Health Statistics. Presented at the NCHS Conference. Bethesda Maryland August 2015.
- 4. Parker JD, Aoki Y, Ingram DD. Does creatinine adjustment method affect estimated BPA levels? Presented at the NCHS Conference. Bethesda Maryland August 2015.
- Parker, JD. Geographic linkages between National Center for Health Statistics' population health surveys and air quality measures. Presented at the National Science Foundation-Census Research Network Meeting, New York, NY. September 11, 2014 (invited)
- 6. Berko J, Aoki Y, Ingram DD, Parker JD (presenter). Does creatinine adjustment method affect estimated BPA levels? Presented at the annual meeting of the International Society for Environmental Health (poster), Seattle, August 2014.
- 7. Parker JD. Data access at NCHS. Invited panel participant for "Best practices for Data Sharing in Environmental Epidemiology" at the annual meeting of the International Society for Environmental Health, Seattle, August 2014.
- 8. Parker, JD. Confidentiality and data sharing issues using large (nation-wide) databases. Health Effects Institute (HEI) initiative to assess adverse effects of exposure to low levels of air pollution, Boston June 30, 2014 (invited).
- 9. Parker JD. Challenges and Opportunities with NCHS Linked Data Files. NCHS webinar, jointly sponsored by COPAFS, on March 20 2014.
- 10. Parker JD. NCHS Linked Data. Presented at the annual meeting of the Society of Behavioral Medicine in a session organized by colleagues at NCI "How can 'Big Data' in the federal government influence the impact and reach of behavioral medicine?" Philadelphia, April 24, 2014.
- 11. Parker JD, Driscoll A. Integration of Survey Data, CMS Data, and Contextual Data for Health Policy Research. Presented at the Academy Health Research Meeting in the NCHS sponsored session NCHS Research Resources for Studying Geographic Disparities: Location, Location, Location. San Diego, CA June 10, 2014.
- 12. Parker JD. Overview of National Center for Health Statistics' Data Collections (invited speaker). The 2013 NCAR/CDC Colloquium on Climate and Health July 9-12, 2013 | NCAR Foothills Laboratory, Boulder, Colorado.
- **13.** Parker JD. Linked NCHS-Medicaid Data Files. Presented at the Joint Statistical Meetings, Montreal, August 2013
- 14. Parker JD. Challenges and Opportunities with NCHS Linked Data Files. Presented to the Washington Statistical Society. June 4, 2013, Washington D.C
- 15. Parker JD. Linked Data for Research and Policy from the National Center for Health Statistics. Organizer, chair and panelist at session at the Academy Health Annual Research Meeting, June 2012, Orlando.
- 16. Parker JD. Data Resources from the National Center for Health Statistics. Presented at the EPA conference "Promoting Health Communities: Developing and Exploring Linkages between Public Health Indicators, Exposures, and Hazard Data", September 26, 2011 (invited).
- 17. Parker JD. "Linkage of the US National Health Interview Survey to Climate Indicators: A Resource for Understanding the Impact of Climate Change." Presented at the annual meeting of the International Society for Environmental Epidemiology (ISEE), Barcelona, Sept 14-17, 2011 (poster).

- 18. Parker JD. New Data Resources for Research and Policy from the National Center for Health Statistics. Panelist at session at the Academy Health Annual Research Meeting, June 2011, Seattle.
- 19. Parker JD. Linked Data Resources at the National Center for Health Statistics. Presented at a Learning Institute at the annual meeting of the American Public Health Association. October 2011, Washington DC.
- 20. Parker J, Mirel L Health Characteristics of Medicare traditional fee-for-service and Medicare Advantage enrollees: 1999-2004 NHANES linked to 2007 Medicare data. Presented at the 9th International Conference on Health Policy Statistics. October 2011, Cleveland.
- Parker JD. Linkage of the National Health Interview Survey to Climate Indicators: A Resource for Understanding Potential Impacts of Climate Change. Presentation at the CDC Science Symposium on Climate and Health, May 17, 2011
- 22. Parker JD, Parsons V, Curtin LR. A Simulation to Evaluate the Impact of Design on Model-Based Methods for National Health and Nutrition Examination Survey (NHANES) Data Linked with Environmental Exposures (poster). Presented at the annual Joint Statistical Meeting (JSM), August 2, 2010, Vancouver Canada.
  (2nd prize in the Survey Methodology Section poster competition)
- 23. Parker JD, Efim S, Kravets N, Akinbami L, Shennasa E, Sapkota A Disparities in traffic exposure in the United States (poster). Presented at the annual meeting of the International Society for Environmental Epidemiology (ISEE), August 26, 2010, Seoul, Korea.
- 24. Parker JD. Data for Assessing and Addressing Disproportionate Environmental Health Impacts Among Minority and Disadvantaged Populations. Strengthening Environmental Justice Research and Decision Making: A Symposium on the Science of Disproportionate Environmental Health Impacts, March 2010, Washington DC. (invited).
- 25. Parker JD, Liao D, Schenker N, Branum A. Can covariates help identify birth records with mis-specified gestational age data in vital statistics? Presented at the annual meeting of the Society for Paediatric and Perinatal Epidemiology (poster), Chicago, June 2009
- 26. Parker JD, Kravets N, Nachman K, Woodruff TJ. Air Pollution and Mortality for Black and White Adults in the United States: Results from the U.S. National Health Interview Survey. Presented at the annual meeting of the International Society for Environmental Epidemiology (ISEE), Dublin, August 2009
- 27. Parker JD, Rich D, Leem JH, Glinianaia S, Woodruff TJ. International Collaboration on Air Pollution and Pregnancy Outcome (ICAPPO): Pilot Study Analytic Plan for Data Re-Analysis. Presented at the annual meeting of the International Society for Environmental Epidemiology (ISEE), Dublin, August 2009
- 28. Parker J, Kravets N, Lochner K, Woodruff T. One more step NHIS linked mortality data linked to EPA air quality data. Presented at the annual Joint Statistical Meeting (JSM), August 2009, Washington DC.
- 29. Parker JD. Linkage of data from the National Center for Health Statistics to air pollution exposure measures from the US EPA. Presented to the HHS Office of Assistant Secretary for Planning and Evaluation (ASPE)
- 30. Parker J, Mendola P, Woodruff T. Preterm delivery during Utah Valley Steel Mill closure. Poster presented at the 21<sup>st</sup> annual meeting of the Society for Pediatric and Perinatal Epidemiologic Research, Chicago, IL, June 2008
- 31. Parker JD, Curtin LR, Kravets N. Linkage of NHANES to EPA Air Monitoring Data. Presented at the Joint Statistical Meeting. Denver. August 5, 2008
- 32. Parker JD. Linkage of the NHIS to EPA Air Monitoring Data. Presented at Division of Health Interview Statistics Analytic Forum, National Center for Health Statistics. September 17 2008
- 33. Parker JD. The Correspondence between Interracial Births and Multiple Race Reporting. Presented at the annual meeting of Academy Health, Washington DC June 2008.

Collaborator presentations (since 2008)

34. Rammon J (presenter), He Y, Parker J. Enhancing the NHANES CMS Medicaid Linked Data with Multiple

- Imputation. Presented at the annual Joint Statistical Meetings, Baltimore. August 2017.
- 35. Chen TC (presenter), Parker JD, Fakhouri TH, National Simulation Study for NHANES Weight Adjustment with Informative Nonresponse (poster). Presented at Joint Statistical Meetings, Baltimore, MD, August 1, 2017.
- 36. Wei R (presenter), Rumcheva P, Parsons, V, Parker J, Vaidyanathan, A. Bootstrap confidence interval bands for estimates in measurement error model with linked NHIS and EPA data. Presented at Joint Statistics Meetings 2017. Baltimore, MD. August 2, 2017.
- 37. Aoki Y (presenter), Parker JD. Effect modifications of blood lead-cardiovascular disease mortality association by time-related factors studied using NHANES linked mortality files (speed poster) Joint Statistical Meetings, Baltimore, MD, August 2<sup>nd</sup> 2017.
- 38. Chen TC (presenter), Parker J. Alternate Methods for Constructing BRR Weights with National Health and Nutrition Examination Survey (NHANES) Single-Year Samples. Presented at the annual Joint Statistical Meetings, Chicago. August 2016.
- 39. Wei R (presenter), Parsons V, Parker J, Vaidyanathan A, Rumcheva P. An Association Study Including Measurement Errors Using Linked NHIS and EPA Modeled Data. Presented at the annual Joint Statistical Meetings, Chicago. August 2016.
- 40. Aoki Y (presenter), Parker JD. Blood Lead and Other Metal Biomarkers as Risk Factors for Cardiovascular Disease Mortality. Environmental Economics Seminar at US EPA, Washington, DC. March 10, 2016.
- 41. Fakhouri T (presenter), Zipf GW, Riddles M, Hughes J, Schaar DM, Krenzke T, Parker JD. Using Paradata to Determine the Optimal Number of Screening Contact Attempts for the National Health and Nutrition Examination Surveys at the 71<sup>st</sup> American Association for Public Opinion Research (AAPOR) annual conference in Austin, TX. 2016.
- 42. Sapkota A (presenter), Parker J, Akinbami L, Curriero F, Ganguly S, Ziska L, Murtugudde R, Jiang C. Alteration in plant phenology and hay fever prevalence among US adults: combined evidence from satellite data and National Health Interview Survey 2002-2013. Oral Presentation, 28th Conference of the International Society for Environmental Epidemiology (ISEE). Rome, Italy. September 1-4, 2016.
- 43. Sapkota A (presenter), Parker J, Akinbami L, Curriero F, Ganguly S, Ziska L, Murtugudde R, Jiang C. Climate Change and Allergic Diseases: A Disparity in Risk. Climate Action 2016/Forum. Panel on Climate Change Resilience/Adaptation. College Park, MD. May4th 2016.
- 44. Sapkota A (presenter), Parker J, Akinbami L, Curriero F, Ziska L, Murtugudde R, Jiang C., Climate Change, Extreme Temperature Events and Chronic Diseases, Public Health Research at Maryland Day, College Park, MD, 2015
- 45. Wei R (presenter), Parsons V, Parker JD. Studying the Association of Environmental Measures Linked with Health Data: A Case Study Using the Linked National Health Interview Survey and Modeled Ambient PM2.5 Data Presented at the annual Joint Statistical Meeting, Seattle, August 2015
- 46. Upperman C (presenter), Parker JD, Akinbami L, Jiang C, He X, Murtugudde R, Curriero F, Ziska L, Sapkota A. The Risk of Exposure to Climate Specific Extreme Heat and Hay Fever Prevalence Among Adults in the Continental United States: Linkage of the National Health Interview Survey. Oral Presentation. 25<sup>th</sup> Annual Meeting of the International Society of Exposure Science (ISES). Henderson, Nevada. October 18-22, 2015
- 47. Zhang G (presenter), Schenker N, Parker J. A Comparison Study of Weighting Adjustment and Multiple Imputation for Missingness Due to Nonlinkage: A Study of the National Health Interview Survey Linked to Medicare Data Files. Presented at the annual Joint Statistical Meeting, Boston, August 2014.
- 48. He Y (presenter), Miller, EA, Judson D, Parker J. Can We Avoid Problems with Movers? Some Analytical Issues with National Data Linked with State-Level Data? Presented at the annual Joint Statistical Meeting, Boston, August 2014.

- 49. Wei R (presenter), Parsons V, Parker J. Data Analysis Using NHIS-EPA--Linked Files: Issues with Using Incomplete Linkage, Presented at the annual Joint Statistical Meeting, Boston, August 2014.
- 50. Judson D (presenter), Parker J, Miller EA. Evaluating Record Linkage Quality in the NCHS Linked Mortality Files. Presented at the annual Joint Statistical Meeting, Boston, August 2014.
- 51. Romeo C (presenter), Jiang C, Akinbami L, Parker JD, Sapkota A. Exposure to an Aggregate Climate Change Metric and Respiratory Health Outcomes in the Continental United States. Presented at the annual meeting of the International Society for Environmental Health, Basel August 2013. (poster)
- 52. Miller EA (presenter), Decker SL, Parker JD. Chronic Health Conditions Prior to Entry into Medicare Fee-for-Service or Medicare Advantage. (Poster) Academy Health Annual Research Meeting, Baltimore, MD. June 24, 2013.
- 53. Miller EA (presenter), Miller DM, Day HR, Judson DH, Fernandez CA, Hernandez M, MacKinnon JA, Lee DJ, Parker JD. National Health Interview Survey-Florida Cancer Data System Linkage: Analytic Challenges. North American Association of Central Cancer Registries Annual Conference. Austin, TX. June 13, 2013.
- 54. Parsons V (presenter), Wei R, Parker JD. Evaluations of Design- and Model-Based Regression Methods in Analyzing Complex Survey Data: A Simulation Study. Presented at the Joint Statistical Meetings, Montreal, August 2013
- 55. Judson D (presenter), Parker JD. Strategies for Enhancing the Linkage of National Center for Health Statistics' Surveys with Death Indices for Mortality Followup. Presented at the Joint Statistical Meetings, Montreal, August 2013
- 56. Zhang G (presenter), Parker JD, Schenker N. Two-Step Imputation of Linked National Health Interview Survey and Medicare Data Files. Presented at the Joint Statistical Meetings, Montreal, August 2013
- 57. Wei R (presenter), Parsons VL, Parker JD. Evaluations of Model-based Methods in Analyzing Complex Survey Data: A Simulation Study using Multistage Complex Sampling on a Finite Population. Presented to the Eastern North America Region of the International Biometric Society (ENAR), Orlando, March 2013.
- 58. Maze A (presenter), Zhang G, Parker JD and Schenker N. Identifying factors related to the implausible gestational ages using mixture models. NCHS Data Users Conference. 2012.

  Second place for the student poster competition at the NCHS conference.
- 59. Mirel L (presenter), Parker J. Re-weighting the National Health and Nutrition Examination Survey linked to Medicare administrative records. 2011 Joint Statistical Meetings, Miami, FL, August 2011.
- 60. Miller DM (presenter), Gindi RM, Parker JD. Trends in Record Linkage Refusal Rates: Characteristics of National Health Interview Survey Participants Who Refuse Record Linkage. 2011 Joint Statistical Meetings, Miami, FL, August 2011.
- 61. Mendola P, (presenter) Jones L, Parker JD. Lead and Mercury Exposure in Pregnant Women in the United States (poster). Presented at the annual meeting of the American College of Epidemiology, San Francisco September 2010
- 62. Branum A, (presenter) Keim S, Parker J. Gestational weight gain and child BMI at age 4 among siblings. Presented at the annual meeting of the Society for Paediatric and Perinatal Epidemiology. Seattle. June 2010.
- 63. Branum A (presenter), Keim S, Parker J. Gestational weight gain and child BMI at age 4 among siblings. Presented at the annual meeting of the Society for Epidemiology Research. Seattle. June 2010.
- 64. Eftim S (presenter), Sapkota A, Parker JD. Methodological Challenges in Linking NHANES Biomarker Data with Ambient Air Data and Surrogate Measures of Traffic-Related Air Pollution Presented at the annual Joint Statistical Meeting (JSM), August 4, 2010, Vancouver Canada.
- 65. Sapkota A (presenter), Eftim S, Nachman K, Kravets N, Shanessa E, Akinbami L, Parker JD. Traffic Exposure and Asthma Exacerbation among Nationally Representative Sample of the US Population (oral presentation). Presented at the annual meeting of the International Society for Environmental Epidemiology (ISEE), August 27, 2010, Seoul, Korea.

- 66. Eftim S (presenter), Parker J, Kravets N, Nachman K, Sapkota A. Validation of Traffic Exposure Surrogates Against Biomarker of Internal Dose Among Non-Smoking US Population (poster). Presented at the annual meeting of the International Society for Environmental Epidemiology (ISEE), August 27, 2010, Seoul, Korea.
- 67. Mehta S (presenter), Parker JD, Murtugudde R, Akinbami L, Sapkota A. Climate events and health outcomes: data linkage from two large national databases (poster). Presented at the annual meeting of the International Society for Environmental Epidemiology (ISEE), August 28, 2010, Seoul, Korea.
- 68. Nachman KE (presenter), Parker JD. Fine Particulate Air Pollution and Asthma in Adults. Presented at the annual meeting of the International Society for Environmental Epidemiology (ISEE), Dublin, August 2009
- 69. Schempf AP (presenter), Mendola P, Parker JD, Schoendorf KC. Black-White Birth Outcome Disparities: An Examination of County-Level Variation. Presented at SER and Academy Health, June 2009.
- 70. Zhang G (presenter), Parker JD, Schenker N, Liao D, Hammad H. Identify Mis-specified Gestational Ages in Pre-Term Babies with Bayesian Mixture Models, Presented at the annual Joint Statistical Meeting (JSM), August 2009
- 71. Mendola P (presenter), Tandon R, Parker JD, Kravets N, MacKay A Delivery hospitalization complicated by preeclampsia in relation to ambient particulate matter exposure prior to admission in the United States, 1999-2005. Presented at the annual meeting of the International Society for Environmental Epidemiology (ISEE), Dublin, August 2009
- 72. Akinbami L (presenter), Parker J. Allergy status, asthma and body mass index among children. Presented at the annual meeting of the Society for Paediatric and Perinatal Epidemiology (poster), Chicago, June 2009
- 73. Akinbami L (presenter), Parker JD. Does allergy status modify the association between body composition and asthma among adolescents? Poster Presentations at the 21<sup>st</sup> Annual Meeting of the Society of Pediatric and Perinatal Epidemiologic Research, held in Chicago, IL, June 23-24, 2008
- 74. Branum A (presenter) Parker JD, Schoendorf KC. Sex ratio trends by plurality, gestational age, and race/ethnicity (poster). Presented at the annual meeting of the Society of Pediatric and Perinatal Epidemiologic Research, Chicago, 2008
- 75. Branum A (presenter), Parker JD, Schoendorf KC. Sex ratio trends by plurality, gestational age, and race/ethnicity (poster). Presented at the annual meeting of the Society of Epidemiologic Research, Chicago, 2008
- 76. Akinbami LJ (presenter), Parker JD. Does allergy status modify the association between body composition and asthma status among adolescents? May 3, 2008—Pediatric Academic Societies' Annual Meeting, Honolulu, HI June 23, 2008-- Society for Perinatal and Pediatric Epidemiologic Research Annual Meeting, Chicago, IL.
- 77. Akinbami LJ (presenter), Parker JD, Merkle S. Risk factors for missed school days among children with symptomatic asthma May 3, 2008—Pediatric Academic Societies' Annual Meeting, Honolulu, HI

# Andrew L. Zukerberg

# **Professional Experience**

# National Center for Education Statistics, Washington, DC

Branch Chief:

June 2014 - Present

Senior Research Scientist:

*November* 2008 – *June* 2014

- Supervise a diverse team that utilizes a budget of over 12 million dollars to collect and report official statistics on education and policy issues.
- Led redesign of a school based survey system to increase the relevance and timeliness of the data.
- Led redesign of a major household education survey system from an interviewer administered telephone survey to self-administered questionnaire that utilized an address based sampling (ABS) approach.
- Advise senior management on status of studies and methodological issues.
- Manage project budgets and schedules.
- Provide technical guidance and oversight for five large and complex data collections.
- Serve as Contracting Officer's Technical Representative (COTR) and oversee data collection contractors.
- Respond to data requests from media and study users.

# Gallup Organization, Washington, DC

January 2008 – November 2008

Research Project Director / Engagement Manager:

- Managed a portfolio of research projects for government clients including the Department of Labor,
   U.S. Mint and Health Resources Services Administration.
- Prepared and presented research reports.
- Monitored project budgets and expenditures.
- Conducted an environmental impact assessment of new currency.
- Planned and conducted large scale research evaluations on healthcare and public policy issues.

#### U.S. Census Bureau, Suitland, MD

December 2002 – January 2008

Branch Chief / Supervisory Survey Statistician:

- Led the development and implementation of several large scale federal surveys involving 100,000 respondents and a budget of over \$10 million dollars. The surveys directly inform national policy decisions.
- Developed and managed multiple complex project schedules and budgets.
- Supervised staff of eight to ensure project goals were achieved.
- Developed and tested computerized survey instruments.
- Prepared and presented research reports to project sponsors.
- Planned and conducted usability tests, focus groups and other qualitative research projects to improve the quality of Census Bureau studies.
- Implemented a major redesign of the data collection methodology for a national education survey.

#### Lexis-Nexis. Bethesda. MD

July 2002 – December 2002

Market Research Manager:

- Co-led an eight country research project to validate a major product design overhaul.
- Developed an online user research panel.
- Consulted on research design and methodology to various groups within the organization.
- Managed market research vendor accounts.

# Microsoft Corporation, Redmond, WA

July 1999 – July 2002

Product Planner:

- Designed, conducted and reported research studies to guide the strategic direction of Microsoft Office.
   These studies utilized both quantitative and qualitative techniques including surveys, focus groups, panels and syndicated research analysis.
- Conducted marketplace reviews to identify new business opportunities.
- Prepared and presented reviews of competitors' products.
- Identified target customers and developed product features to meet their needs.
- Conducted international research projects to steer the development of future versions of Microsoft Office.
- Utilized website metrics to enhance an on-line product resulting in greater product usage.
- Coordinated customer and expert advisory panels to assist in the design and implementation of new products.
- Managed market research vendor accounts and maintained an online panel of over 6,000 customers.
- Developed and taught internal classes on research design and survey methodology.
- Served as a consultant to marketing and usability groups within Microsoft on research design.

#### Usability Engineer:

- Designed, conducted and analyzed focus groups, laboratory and field studies of Microsoft Project software that led to direct changes in the product.
- Conducted a multi-faceted study to define the future direction of the Microsoft Project software utilizing ethnographic and quantitative techniques.
- Assisted in the launch of Project 2000 and played a key role in the planning for future versions of Microsoft Project.

# U.S. Census Bureau, Suitland, MD

October 1994 – May 1999

Survey Statistician (Analyst):

- Conducted usability testing of an Internet self-administered questionnaire.
- Utilized pre-testing techniques including behavior coding, cognitive interviewing and expert review to improve the quality of Census Bureau questionnaires.
- Provided consultation to internal and external sponsors on survey methodology issues.
- Served as one of an eight-member work group to improve interviewer performance on the Current Population Survey March Supplement.
- Assisted in the design, execution and analysis of a large-scale test of the Schools and Staffing Survey.
- Analyzed results of a survey conducted at the U.S. Census Bureau's Annual Research Conference.

#### Mathew Greenwald and Associates, Washington, DC

Market Research Assistant:

- Performed background research for the development of market research studies.
- Designed questionnaires for the software, consumer and insurance industries.
- Analyzed questionnaire data and prepared client reports.
- Designed charts and graphs for presentations.
- Coded surveys and conducted telephone interviews for the collection of data.

# American Demographics, Ithaca, NY

Spring 1993

Intern:

- Researched and co-authored an article for publication in <u>American Demographics Magazine</u>.
- Assisted the editorial research associate in organizing and maintaining a resource center.

#### Education

University of Maryland, College Park, MD Joint Program in Survey Methodology M.S. Survey Methodology August 1996

**Ithaca College**, Ithaca, NY Bachelor of Arts (awarded *Cum Laude*) Major: Sociology Minor: Business May 1993

#### **Professional Activities**

Co-Chair, Federal Committee on Statistical Methodology 2018 Research and Policy Conference

Member, AAPOR task force on Address Based Sampling, 2016

Co-Chair, Federal Committee on Statistical Methodology 2015 Research Conference

Member, AAPOR task force on Survey Refusals, 2014

Member, Conference Planning Committee, Federal Committee on Statistical Methodology 2013 Research Conference

Member, Standards Committee, American Association for Public Opinion Research, 2010-2016

Membership Chair, D.C. Chapter, American Association for Public Opinion Research, 2009

Ad hoc Reviewer, Public Opinion Quarterly, 2005 & 2007

Member Editorial Board, Survey Practice, 2009 & 2010

Session Chair: American Association for Public Opinion Research Annual Conference 2001, 2002, 2006, 2009, 2010, 2011

Session Discussant: American Association for Public Opinion Research 2007 and 2016 Conferences

#### Presentations and Publications

Redline, C., Zukerberg, A., Owens, C. and A. Ho (2016). Instructions in Self-administered Survey Questions: Do They Improve Data Quality or Just Make the Questionnaire Longer? Paper presented at the National Conference of the American Association for Public Opinion Research, Austin, TX., May 2016.

Redline, C., Zukerberg, A., Rizzo, L., and M. Riddles (2015). Hope Springs Eternal: Will a Probability Sample of Schools and Principals Respond by Web and Provide Email Addresses? Paper presented at the National Conference of the American Association for Public Opinion Research, Hollywood, Fl., May 2015.

David Dutwin, John D. Loft, Jill E. Darling, Allyson L. Holbrook, Timothy P. Johnson, Ronald E. Langley, Paul J. Lavrakas, Kristen Olson, Emilia Peytcheva, Jeffery A. Stec, Timothy Triplett, and Andrew Zukerberg. Current Knowledge and Considerations Regarding Survey Refusals: Executive Summary of the AAPOR Task Force Report on Survey Refusals. *Public Opinion Quarterly* 2015. *Q* 79 (2): 411-419

Carroll, S. and A. Zukerberg (2013). Do Names Matter? Experiments Comparing Different Branding and Levels of Personally Identifiable Information in a Mail Questionnaire. Paper presented at the 2013 Federal Committee on Statistical Methodology Research Conference, Washington, DC. November 2013.

Zukerberg, A. and S. Mamedova (2012). Speaking the Same Language: Effective Techniques for Reaching Spanish Speaking Households in a Mail Survey. Paper presented at the National Conference of the American Association for Public Opinion Research, Orlando, Fl., May 2012.

Bielick, S. and A. Zukerberg (2012). Peek-a-boo: Measuring Rare and Hard to Reach Populations in the National Household Education Survey of Children. Paper presented at the International Conference on Methods for Surveying and Enumerating Hard-to-Reach Populations, New Orleans, LA., November 2012.

Zukerberg, Andrew (2011). Measuring Disability in Education Surveys. Paper presented at the Annual Meeting of the American Public Health Association, Washington, DC., October 2011.

Zukerberg, A. and S. Bielick (2011). Who's There? Comparing Respondents From a telephone Survey to a Mail Survey. Paper presented at the National Conference of the American Association for Public Opinion Research, Phoenix, AZ., May 2011.

Zukerberg, A. and C. Chapman (2010) Redesigning the National Household Education Survey: Results from the 2009 Pilot. Poster presented at the Institute for Education Sciences 2010 Research Conference, Oxon Hill, MD.

Zukerberg, A. and D. Han (2010). Impact of Offering a Bilingual Option in a Mail Survey of Linguistically Isolated Areas. Poster presented at the National Conference of the American Association for Public Opinion Research, Chicago, IL., May 2010.

Zukerberg, A., Henly, M., and D. Hall (2007). Money Can Buy Me Love: Experiments to Increase Response Rates Using Monetary Incentives. Paper presented at the 2007 Joint Statistical Meetings, Salt Lake City, UT., July 2007.

White, M., Henly, M., Herron, A. and A. Zukerberg (2007). First Impression: An Advance Contact Experiment to Locate and Engage Potential Respondents. Paper presented at the 2007 Joint Statistical Meetings, Salt Lake City, UT., July 2007.

Zukerberg, A., Henly, M., and T. Gilbert (2007). Calling All Populations: A Comparison of Cell Phone Response Between Generation Y and the General Population (2007). Poster presented at the National Conference of the American Association for Public Opinion Research, Anaheim, CA., May 2007.

Henly, M., Zukerberg, A., and A. Herron (2007). Improving Contact Information for Mobile Populations: An Advance Contact Experiment. Paper presented at the National Conference of the American Association for Public Opinion Research, Anaheim, CA., May 2007.

Zukerberg, Andrew (2007). Implementing an Off the Shelf Internet Data Collection Tool.

Presented at the 2007 International Field Directors and Technologies Conference, Santa Monica, CA., May 2007.

Zukerberg, Andrew (2007). Locating Respondents in the Age of Cell Phones. Presented at the 2007 International Field Directors and Technologies Conference, Santa Monica, CA., May 2007.

Zukerberg, Andrew (2006). Evaluating Off the Shelf Internet Data Collection Tools. Presented at the 2006 International Field Directors and Technologies Conference, Montreal, QC., May 2006.

Zukerberg, A., Soderborg, A., Parmer, R., and S. Tourkin (2005). Too Much of a Good Thing? Working Through Establishment Gatekeepers. Poster presented at the National Conference of the American Association for Public Opinion Research, Miami, FL., May 2005. Presentation subsequently published in the conference proceedings.

Tourkin, S., Cox, S., Parmer, R., and A. Zukerberg (2005). (Inter)net Gain: Experiments to Increased Web-based Response. Paper presented at the National Conference of the American Association for Public Opinion Research, Miami, FL., May 2005. Presentation subsequently published in the conference proceedings.

Pugh, Kathleen and A. Zukerberg (1999). Preparing SASS for the New Millennium: Pretesting Issues in SASS 2000. Paper presented at the 1999 Joint Statistical Meetings, Baltimore, MD., August 1999.

Zukerberg, A., Tedesco, H. and E. Nicholls (1999). Designing Surveys for the Next Millennium: Internet Questionnaire Design Issues. Paper presented at the National Conference of the American Association for Public Opinion Research, St. Petersburg, Fl., May 1999.

Cohen, B., Zukerberg, A. and K. Pugh (1999). Improving Respondent Selection Procedures in Establishment Surveys; Implications from the Schools and Staffing Survey (SASS). Paper Presented at the National Conference of the American Association for Public Opinion Research, St. Petersburg, Fl., May 1999.

Zukerberg, Andrew (1999). Developing and Fielding a Computerized Self-Administered Questionnaire Over the Internet: Experiences from the 1998 Library Media Center Survey. Presented at the 1999 International Field Directors and Technologies Conference, Clearwater, FL., May 1999.

Hess, J., Rothgeb, J. and A. Zukerberg (1998). Developing the Survey of Program Dynamics Survey Instruments. Paper presented at the 1998 Joint Statistical Meetings, Dallas, TX., August 1998.

Zukerberg, A. and M. Lee (1997). Better Formatting for Lower Response Burden. Paper presented at National Conference of the American Association for Public Opinion Research, Norfolk, VA., May 1997. Presentation subsequently published in the conference proceedings.

Zukerberg, A. and J. Hess (1996). Uncovering Adolescent Perceptions: Experiences Conducting Cognitive Interviews With Adolescents. Paper presented at the National Conference of the American Association for Public Opinion Research, Salt Lake City, UT., May 1996. Presentation subsequently published in the conference proceedings.

Zukerberg, A., Von Thurn, D. and J. Moore (1995). Practical Considerations in Sample Size Selection for Behavior Coding Pretest. Paper presented at the National Conference of the American Association for Public Opinion Research, Fort Lauderdale, FL., May 1995. Presentation subsequently published in the conference proceedings.

Davis, W., DeMaio, T. and A. Zukerberg (1995). Can Cognitive Information be Collected Through the Mail? Comparing Cognitive Data Collected in Written Versus Verbal Format. Paper presented at the National Conference of the American Association for Public Opinion Research. Presentation subsequently published in the conference proceedings.

Crispell, D. and Zukerberg, A. (November, 1993). The Decade Waltz. American Demographics Magazine.

#### **Invited Talks**

Joint Program in Survey Methodology 12/5/2013
Washington Statistical Society/ DC-AAPOR Survey Redesign Panel, January 2010
Guest Lecture on Survey Design, George Washington University, February 2010, November 2011
Guest Lecture on Focus Groups, Georgetown University, June 2008

#### Community Involvement

# Friendship Children's Center

Washington, DC Secretary, Board of Directors 2012-2013 Vice President, Board of Directors November 2013 President, Board of Directors 2014 and 2015 Member, 2016