# Information Collection #7:

# National Tobacco Prevention and Control Public Education Campaign: Digital Media Copy Testing for Click-to-Call Ads

Submitted for approval under CDC generic approval **#0920-0910** *Message Testing for Tobacco Communication Activities* 

Submission of this GenIC has been approved by HHS/Assistant Secretary for Planning and Evaluation (ASPE)

December 20, 2013

# Supporting Statement: Part A

#### **Data Collection Instruments**

- 2 Attachment 1a. Screener for Digital Media Copy Testing for Click-to-Call Ads
- 2 Attachment 1b. Main Questionnaire for Digital Media Copy Testing for Click-to-Call Ads

#### **Other Attachments**

- 2 Attachment 2. Email to Potential Respondents (Initial Email Invitation) English
- **?** Attachment 3. Toluna Panelist Privacy Policies
- 2 Attachment 4. Toluna Panelist Terms and Conditions
- 2 Attachment 5. Screenshots of online survey (screener and main)

#### **Notes on Excluded Attachments**

In this GenIC, CDC outlines a plan to test six draft creative ads with content that may be considered sensitive. The draft materials are not included in the attachments for this GenIC because:

The ads have not been approved for public distribution by HHS/Assistant Secretary for Public Affairs (ASPA).

- The untested ads could be perceived by the public as ineffective or offensive (testing is designed to identify potential problems).
- Release of the ads must be coordinated with the launch of a comprehensive HHS/CDC campaign. Unauthorized release could jeopardize the evaluation strategy for the campaign.

To support adequate review of this GenIC by OMB, CDC requests permission to provide OMB with a secure link to the draft materials.

# **Section A: Justification for Information Collection**

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

In winter of 2012, HHS/CDC launched the highly successful "TIPS From Former Smokers" campaign. The "TIPS" campaign was authorized by the Prevention and Public Health Fund of the Affordable Care Act. The third phase, "Tips 3," is currently being developed and will continue to expand on the theme of health consequences of tobacco use. The campaign will encourage smokers to quit smoking and to seek information about smoking cessation support from informed sources, such as 1-800-QUIT-NOW, government Websites and health care providers. The campaign will also provide information about the harmful effects of secondhand smoke and encourage non-smokers to seek smoke-free environments and encourage their loved ones to quit smoking. CDC's Office on Smoking and Health (OSH) has lead responsibility for a number of components of the tobacco education campaign, including the production of effective campaign messages that may be disseminated through a variety of channels, including television, print and/or radio communication channels.

As part of campaign development and planning, CDC conducts rough-cut testing of digital ads to ensure that they are believable, convincing and resonate with the target audiences. The goal of the testing is to optimize the credibility and persuasiveness of the ads to encourage specific behavioral change, that is, to seek information to assist in quitting smoking. These testing activities are not designed to provide findings that contribute to generalizable knowledge for the general population, but rather are used to gather specific insight for campaign planning. Such testing activities are conducted during campaign development to help describe a target audience, understand the factors that influence their behavior, and determine the best messages and communication channels. In testing possible advertising messages, CDC also collects information about audience demographics and tobacco-related behaviors in order to segment the audience into more homogeneous subgroups that may share certain beliefs, knowledge and behaviors related to tobacco use. Messages can then be customized and targeted to specific audience segments, thus improving ad effectiveness and efficient use of public resources. The objective of the test is not to measure likeability of the advertisement. (Likeability, per se, does not necessarily lead directly to changes in audience behavior, as a disliked but memorable ad may still affect consumer behavior in a positive manner.) There is a growing evidence base of empirical research that is showing fairly conclusively that the approach of arousing strong negative emotions (with graphic images, emotional testimonials, or combinations of the two) is the most effective way to generate the type of real desire to quit smoking cigarettes. Davis et al. outline some of this prior empirical work. This evidence also notes that desire to quit manifests in different belief and attitude constructs, such as a combination of changes in the target audience's values attached to a behavioral outcome, behavioral beliefs, normative beliefs, attitudes toward existing behaviors, and motivation to comply. Segmenting audiences based on these constructs is critical to optimizing the message.

In this GenIC, CDC requests OMB approval to collect information for copy testing of six digital ads that feature a call-to-action message. These "Click to Call" interactive ads will be placed on smart phones. The

test will review smokers' understanding of the mobile-enabled "call to action," specifically how smokers are receptive to the ad under test, how they will interact with the ad as well as provide information on how the ad may be optimized. These six ads are one of two sizes, 300x250 (a large mobile banner ad size) and 300x50 (a mobile leaderboard ad size). Both of these ad sizes are optimized for the mobile device, smartphone and tablet. These formats fit into a necessarily small footprint size, as offered by the mobile applications that allow advertising (such as mobile web browsers and other apps). The large mobile banner ad size has been tested to increase interaction with the call-to-action when text and images are part of the ad. Both of these ads are designed to fill the width of the smartphone footprint. Five of the ads feature a direct call-to-action, that is, to click on the ad and call for help to quit smoking. The sixth ad features a general call-to-action, that is, to click on the ad for more information on how to quit smoking, not specifying the mechanism (browser, text, web) the information will be given.

The ads that will undergo digital ad copy testing are:

- 1. 300X250 Call for Free Help
- 2. 300X250 Click to Call Free Help
- 3. 300X250 Black Background
- 4. 300X50 1-800-Quitnow
- 5. 300X50 Click to Call
- 6. 300X50 Click for Info

To test the draft ads, we will ask individuals about their opinions of the advertising messages emphasizing what action the viewer of the ad would take next, if the ad was viewed on their smartphone. The target audiences are smokers of low socio-economic status who are ages 18-54 and own and use smartphones, such as an Android or iPhone type of cell phone. We will segment by smoking behavior, including quitting history, usage and other factors; media usage; and other demographic characteristics, as these groups may have different beliefs and behaviors, and thus may respond differently to certain types of messages. Therefore, in addition to collecting information about respondents' reactions to the draft ads, we will also request basic demographic and tobacco use information in order to understand whether and how these factors may influence individuals' responses to these messages. We will specifically screen for low socioeconomic status (SES), as individuals of low socioeconomic status are known to experience higher rates of smoking and resulting smoking-related diseases than the general population, and these smokers are the target audience of these ads. Approximately 29% of smokers in the U.S. today are of low SES, compared to 21% of the general population.

The six draft creative ads are in the process of being approved by HHS/CDC for public distribution. Thus, they are considered embargoed until approved. Additionally, unauthorized release prior to testing could inadvertently offend the public and could jeopardize the testing/assessment strategy. As a result this information collection request does not include copies of the materials to be tested in order to preserve the orderly release of campaign materials. A secure link to review the draft ads will be provided to OMB under separate cover.

#### **Privacy Impact Assessment Information**

#### **Overview of the Information Collection**

The proposed information collection will involve testing of six TV ads among smokers who are ages 18-54. The target number of respondents is 2,000. All Information will be collected electronically through a selfadministered online survey instrument. The Web-based system is ideal because of the ease of presenting visual stimuli (the ads) to respondents and recording their feedback. Respondents will be recruited through an existing Web-based panel system, and screened for eligibility and interest prior to administration of the main information collection instrument. Each of the eligible individuals will then view one of the six advertisements under test, then undergo a discrete choice comparison across multiple ads, then complete the on-line survey and submit the data electronically through a secure Internet environment. Approximately 330 respondents will view each ad. This will allow us to assess the ad's persuasiveness with respondents who vary in terms of other demographic characteristics such as education, income, gender, age group, and region of the United States, amongst others.

#### Items of Information to be Collected

Information about respondent demographics and smoking behavior will be collected through a screening process (**Attachment 1a**) to verify the respondent characteristics needed for audience segmentation. This information is needed to assess whether the ads are likely to have comparable effects across population sub-groups. In addition, the screener will ask questions about tobacco use behavior. This information is needed to screen for smokers only to participate in the main questionnaire, as the ads are targeted towards effectively moving smokers to seek information about quitting smoking.

The main questionnaire (**Attachment 1b**) will ask respondents to provide opinions about each ad's main message, feelings of relatability, impact, clarity, believability, memorability, persuasiveness, and anticipated effects on respondent behavior. Respondents will report on their reactions to the ads, and will simulate the call-to-action, that is, to call a quit line for further information and help on quitting smoking. The main questionnaire is summarized below.

- Screening items to ascertain respondents who meet the qualifying criteria;
- Smoking behavior items, such as TS1, TS2, TS3 and TS4, and quitting behavior items, as these groups may have dissimilar receptivity to advertisements;
- Attitudes toward smoking, tobacco use, and health, as those respondents who have shared behavior may have similar or dissimilar receptivity to advertisements;
- Demographic (questions #DEMO1, DEMO2, DEMO3, DEMO4, DEMO6, DEMO7, DEMO8, DEMO9, and DEMO11) items to determine specific demographic information about the respondents;
- Technology/Media (questions #T1, T4, T5, T6, T7, T8, T9, T11) and Awareness of Other Campaign (#EAD1, EAD2, OAS1, OAS2). These questions are needed to inform choices of communication channels for messages overall in relative rank to one another. Items regarding awareness of other campaigns, as awareness of those campaigns may impact receptivity of the ads under test
- The rest of the items are determining receptivity of the ads under test.

#### Identification of Website(s) and Website Content Directed at Children Under 13 Years of Age

All respondents will be 18 years of age or older. There is no Website content directed at children younger than 13 years of age.

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

The information to be collected will allow CDC/OSH to assess whether the creative materials under test are likely to be perceived as credible, comprehensible, and persuasive by target audience members. The information will also allow CDC/OSH to determine whether the creative materials motivate respondents to take certain actions, such as calling for assistance in quitting smoking or whether they would visit an informational government Website, speak to their doctor or take other similar actions. If this data collection is not performed, CDC/OSH will not know whether these ads communicate intended messages credibly and effectively across audience segments and whether they motivate the audiences to take actions based on the messages.

These creative materials under test, where appropriate, will be finalized for production after analysis of results from the copy testing. CDC/OSH will use the information collected through digital ad copy testing to inform decisions about whether these creative materials under development must be changed in order to be more effective, or whether to omit one or more ads from the upcoming launch of the campaign.

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

Information will be collected electronically through an online, Web-based panel system. Respondents have the option of completing the survey in one session.

A Web-enabled panel approach uses online technology to collect data from households that participate in an ongoing panel. The Toluna panel will be used for all subpopulations under test. The panels used for this testing are very large, allowing quick selection from the overall pool and rapid identification of several potential respondents from extremely small subgroups of the population. Samples from these panels are not designed to generate nationally representative samples or precise population parameters but rather are used as a highly efficient, low cost, and low burden method of data collection for formative copy testing. Web-based surveys are an especially convenient option for eliciting feedback on visual stimuli.

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

The Office of the Assistant Secretary for Planning and Evaluation (ASPE) in HHS has reviewed this proposed collection of information, and has determined that it does not duplicate other collections because this ICR is targeted to test six specific draft advertising messages, all of which were specifically developed as part of the Tips From Former Smokers campaign. The test itself is also targeted towards smokers of low socio-economic status who are ages 18 – 54 and own and use smartphones. As a result of the specific characteristics of the respondent population as well as the draft advertising messages, this collection of information is not duplicative of other campaign related evaluations.

Prior to conducting any data collection, CDC reviews existing published literature and unpublished qualitative pretesting reports when they are available, and also consults with outside experts to identify information that could facilitate message development. Health messages developed by OSH/HCB are unique in their mix of intended audience, health behavior, concept, and execution. Therefore, there are no similar data available.

The Centers for Disease Control and Prevention's Office on Smoking and Health collaborates with other U.S. government agencies that sponsor or endorse health communication projects, such as the FDA's Center for Tobacco Products, NIH, NCI and SAMHSA. These affiliations serve as information channels, help prevent redundancy, and promote use of consistent measures of effectiveness. Coordination activities include questionnaire review and item standardization where at all possible.

CDC and FDA are developing complementary but distinct communication campaigns. Staff in OSH's Health Communications Branch are thus working closely with staff in FDA's Health Communication and Education unit. Conference calls are held as needed to review plans. The message testing proposed in this GenIC does not duplicate FDA efforts. Points of contact for this coordination are

CDC: Diane Beistle, Chief, Health Communication Branch, telephone (770)488-5066, email <u>zgv1@cdc.gov</u>

CDC: Michelle O'Hegarty, Health Communication Specialist, Health Communication Branch, telephone (770)488-5582, izr0@cdc.gov

FDA: Tesfa Alexander, Health Communication Specialist, Office of Health Communication and Education, telephone (301)796-9335, email <u>Tesfa.Alexander@fda.hhs.gov</u>

FDA: Erica Schlosser, Health Communication Specialist, Office of Health Communication and Education, telephone (301)796-9352, email <u>Erica.Schlosser@fda.hhs.gov</u>

# A.5 Impact on Small Business or Other Small Entities

There will be no impact on small businesses or other small entities.

# A.6 Consequences of Collecting the Information Less Frequently

Without the proposed information collection, CDC/OSH will have only limited and anecdotal information to guide ad development and consequently risks developing a campaign that will not be effective in achieving its goals of getting smokers to quit. Given the large investment of US government funds in the Tips campaign, an ineffective campaign would result in poor use of limited government resources. Finally, the Tips campaign is a critical prevention component of larger efforts of health reform for our nation under the Affordable Care Act.

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

The testing activities fully comply with the regulation and guidelines in **5 CFR 1320.5.** There are no special circumstances.

# **A.8** Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency Not applicable.

### A.9 Explanation of Any Payments or Gift to Respondents

Health message development and testing occur in a highly dynamic, fast-paced environment. Utilization of existing respondent panels allows CDC/OSH to obtain information quickly so that adjustments can be made, as needed, and health messages and campaigns can progress rapidly from the planning stage to the implementation stage. Similar rapid turnaround techniques are used in the private sector.

The panels from which respondents will be drawn are established Toluna panels that provide points as a reward for participation. Immediately upon completion of the survey, each respondent will be provided with a certain number of points that are equivalent to \$1.00. Those points are accrued with other points when the panelist takes part in other surveys. At any time, the panelist is able to redeem their points for different products, such as gift cards.

Toluna manages the rewards programs for its panel and follows a strict privacy policy and safeguards the privacy of panel members at all times. For Toluna's Privacy Policy and Terms and Conditions, please see **Attachment 3** and **Attachment 4**.

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

#### Privacy Act Determination

All respondents will be recruited from an existing panel maintained by CDC's data collection contractor, Toluna. Although demographic information (e.g., gender, age, and race) will be gathered, no direct personal identifiers (e.g., full name, phone number, social security number, etc.) will be collected or maintained as part of the Screener (see **Attachment 1a**), or Main Questionnaire (see **Attachment 1b**). No directly identifying information will be transmitted to CDC/OSH. The Privacy Act does not apply.

#### **Safeguards**

While Toluna has access to personally identifiable information (PII) on panel subscribers, no PII will be shared with CDC or any agencies outside of Toluna. All data will be reported in the aggregate. All data will be stored on password-protected databases to which only Toluna employees working on this project have access. Toluna is firmly committed to protecting the privacy of its panel members. Their policies ensure that PII is not released without panel member permission. In support of its privacy policies, Toluna has been awarded TRUSTe's Privacy Seal signifying that this privacy policy and practices have been reviewed for requirements including transparency, accountability and choice regarding the collection and use of panel member personal information. Toluna also participates in and adheres to the U.S.-EU Safe Harbor Framework as set forth by the U.S. Department of Commerce regarding the collection, use, and retention

of data. Toluna's data collection conforms to the Council of American Survey Research Organizations (CASRO) Code of Standards and Ethics for Survey Research, the European Society of Opinion and Marketing Research (ESOMAR) Codes and Guidelines for Survey Research, the European Commission Directive on Data Protection, SNYTEC in France, the French law on "Informatique et Libertés", CNIL, the American Association for Public Opinion Research (AAPOR) Code of Professional Ethics and Practices, the Federal Trade Commission (FTC) Fair Information Practice Principles, the FTC's Children's Online Privacy Protection Act (COPPA) Final Rule, the Children's Advertising Review Unit (CARU) Guidelines for Advertising on the Internet and Online Services, the Health Insurance Portability and Accountability Act (HIPAA), the Graham-Leach Bliley Act (GLB), and the CAN-SPAM Act. (See **Attachment 3** for further details on privacy policy.)

#### **Respondent Advisements and Consent**

Respondents will be advised of the nature of the activity, the length of time it will require, and that participation is purely voluntary. They are also provided with the Privacy Policy. The appropriate advisements are included in the Screener as well as the initial page of the Main Questionnaire. Respondents will be assured that they will incur no penalties if they wish not to respond to the information collection as a whole or to any specific questions. These procedures conform to ethical practices for collecting data from human participants.

CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) has reviewed this submission and determined that it does not involve research with human subjects and does not require review and approval by CDC's IRB.

#### A.11 Justification for Sensitive Questions

The majority of questions asked will not be of a sensitive nature. There will be no requests for a respondent's Social Security Number (SSN).

It will be necessary to ask some questions considered to be of a sensitive nature in order to assess individuals' attitudes and behaviors or to test messages about the specific health behavior of cigarette smoking in order to understand respondent motivation toward behavior change. The theory of planned behavior, a framework used in the development of this campaign, provides rationale for evidence-based messaging to change attitudes, beliefs, intentions and behavior at the target audience level. Questions about attitudes and behaviors, while some may be considered to be a sensitive nature, are necessary in order to understand respondent motivation toward behavior change. Questions about messages concerning smoking behavior and tobacco use and some demographic information (e.g., Race or Ethnicity and LGBT status) could be considered sensitive, although these items would not generally be considered highly sensitive. Questions about sensitive issues are necessary for audience segmentation and to assess individuals' response to messages. In addition, questions about emotional reactions to the advertisement are necessary to see if the advertisement is achieving intended objectives. Respondents will be informed of the applicable privacy safeguards.

Sensitive information will only be requested when necessary for specific project objectives and questions requesting such information will include a "decline to answer" option.

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

The data collection will occur in a single field period for all respondents. CDC's contractor, Toluna, will collect the necessary data. We expect to screen approximately 2,200 potential respondents who are part of the Toluna panel in order to obtain completed questionnaires from 2,000 respondents in the target age range of 18-54 years, smokers, who own smartphones and are of low socio-economic status.

Toluna has deep profiling and demographic information on its panel members, including smoking status and socio-economic factors such as education and employment. Screening will be conducted to confirm that Toluna's information is correct and to assess whether any information has changed (i.e., educational status, state of residence, smoking status). Once respondents have been screened and have qualified to participate in this health message testing activity, they immediately enter the online Main Questionnaire. Given the similarity of the creative materials under test, each respondent will be shown one ad only, that is, this copy test is a monadic copy test. Respondents will be shown the ad and asked a series of questions specific to the ad regarding believability, engagement with the ad and potential subsequent behavior based on call-to-action. Respondents will then be given a discrete choice test on components of different ads of the same size to give a relative ranking. This portion of the test presents a set of components to the respondent and asks them to make a choice about which component they would pick, given different evaluative factors. The purpose is to allow the respondent to trade-off the characteristics based on importance or preference.

The information collection instruments are included as Attachments 1a/1b.

We estimate that 200 respondents will discontinue their participation after completing the Screener ("Incompletes"). For these respondents, the estimated burden per response is 2 minutes (**Attachment 1a**).

We estimate that 2,000 respondents will complete the screening process and continue to the main questionnaire ("Completes"). For these respondents, the estimated burden is 18 minutes (2 minutes for the Screener [**Attachment 1a**] plus 16 minutes for the Main Questionnaire [**Attachment 1b**]).

The total number of individuals involved in data collection is 2,200. The estimated burden per response varies from 2-18 minutes.

The total estimated burden to respondents is 607 hours.

Type of Respondents	Form Name	Number of Respondents	Number of Responses per Respondent	Average Burden per Response (in hours)	Total Burden (in hours)
Target Population Drawn From Toluna Panel ("Completes")	Screener and Questionnaire	2,000	1	18/60	600
Potential Respondents From Toluna Panel ("Incompletes")	Screener	200	1	2/60	7

Total 2,200	607
-------------	-----

The estimated cost of the time devoted to this information collection by respondents is \$13,961, as summarized in Table A.12.B. To calculate this cost, we used the mean hourly wage of \$23, which represents the Department of Labor estimated mean for state, local, and private industry earnings. There are no direct costs to respondents associated with participation in this information collection.

#### Table A.12.B Estimated Annualized Cost to Respondents

Type of Respondents	Form Name	Total Burden (in hours)	Average Hourly Wage	Total Cost
Target Population Drawn From Toluna Panel ("Completes")	Screener and Questionnaire	600	\$23	\$13,800
Potential Respondents from Toluna Panel ("Incompletes")	Screener	7	\$23	\$161
			Total	\$13,961

#### A.13 Estimates of Other Annual Cost Burden to Respondents and Record Keepers

None.

#### A.14 Annualized Cost to the Federal Government

Approximately 5% of one full-time equivalent (FTE) and 1% of one senior manager will be required to oversee the information collection activities for one month. Responsibilities will include internal coordination and review of materials and reports and maintaining proper accounting of burden hours. The agency estimates that it will take a GS-14, at a wage rate of \$48.41 an hour, approximately 10 hours to manage the project, totaling about \$484.00. It is estimated to take a GS-15, at a wage rate of \$64.54 an hour, approximately two hours to oversee the total project, totaling \$129.08

The total average annualized cost to the government for CDC/OSH oversight is \$613.

Government Personnel	Time Commitment	Hourly Basic Rate	Total
GS-14	5%	\$48.41	\$484
GS-15	1%	\$64.54	\$129
Subtotal, Government Personnel			\$613
Contract Costs			\$97,000
Total Costs			\$97,613

Contractors on CDC/OSH's behalf will conduct the majority of data collection activities. The total cost of the data collection contractors is \$97,000, which includes consultation, instrument design and development, recruitment, data collection, analyses, and reporting. Toluna will collect the data from the respondents. Activities are coordinated through a contract with the Plowshare Group, a specialist in media campaigns.

The grand total cost for the project, including government and contractor cost, is \$97,613.

## A.15 Explanation for Program Changes or Adjustments

This is a new data collection.

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

The information will be used to inform health communication strategies across OSH. The analysis will examine overall levels of perceived effectiveness of the creative materials under test, as measured by the frequency of respondents' reporting that the materials were believable and convincing, a call to action, attention-grabbing, credible, motivational, easy to understand, and provided new information. We will also analyze qualitative open-ended responses for the respondents' answers to open-ended questions, such as respondents' perceptions of the 'main message' of the ad, concerns about the ad, as well as likes and dislikes. Here we will look for commonalities and differences in terms of message interpretation by different segments, and for common themes in terms of elements that resonate well or poorly with respondents. We will examine overall levels of respondent motivation in response to the ads, as measured by the frequency of responses to whether they would talk to someone else about the ad or if the ad would make them take some other action (quit smoking, encourage someone to quit smoking, call the 1-800 Quitline, go online, etc.). Our findings from these analyses will be immediately used to revise the ads and to help ensure this aspect of the campaign is effective.

Assuming an OMB approval date of January 24, 2014, we plan to begin the information collection activity for the six ads on January 25, 2014. We are aiming for a campaign launch date of one or more of these advertisements within the March-May 2014 timeframe, and multiple steps are required between approval of this rough-cut testing activity and the launch in order to meet that target date.

#### Table A.16.A. Estimated Timeline

	Approximate
Task	Due Date
CDC submits OMB Package to OMB for approval	01/10/2014
Milestone: OMB approves Request	01/24/2014
Digital Ad Copy Testing Field Period begins	01/25/2014
Digital Ad Copy Testing Report complete	02/10/2014
Modification of ads based on the results of testing complete	03/01/2014

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

The expiration date of OMB approval will be displayed on all information collection instruments.

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

No exceptions are requested.

# References

Berlin, M., Mohadjer, L., Waksberg, J., Kolstad, A., Kirsch, I., Rock, D., & Yamamoto, K. (1992). An experiment in monetary incentives. In the American Statistical Association (ed.), *Proceedings of the American Statistical Association Section on Survey Research Methods* (pp. 393-398). Alexandria, VA: American Statistical Association.

Church, A. H. (1993). Estimating the effect of incentives on mail survey response rates: A meta-analysis. *Public Opinion Quarterly*, *57*, 62–79.

Davis, T. C., Berkel, H. J., Arnold, C. L., Nandy, I., Jackson, R. H., & Murphy, P. W. (1998). Intervention to increase mammography utilization in a public hospital. *Journal of General Internal Medicine*, 13, 230–233.

Davis, K.C., J. Nonnemaker, J. Duke, and M. Farrelly. *Perceived effectiveness of cessation advertisements: The importance of audience reactions and practical implications for media campaign planning*. Health Communication, 2012.

Emery, S., et al., The effects of smoking-related television advertising on smoking and intentions to quit among adults in the United States: 1999-2007. Am J Public Health, 2012. **102**(4): p. 751-7.

Durkin, S., E. Brennan, and M. Wakefield, *Mass media campaigns to promote smoking cessation among adults: an integrative review*. Tob Control, 2012. **21**(2): p. 127-38. Groves, R., & Couper, M. (1998). *Nonresponse in household interview surveys*. New York: John Wiley & Sons.

Kulka, R. A. (1994) The Use of Incentives to Survey "Hard-to-Reach" Respondents: A Brief Review of Empirical Research and Current Practice. Paper prepared for the Council of Professional Associations on Federal Statistics' Seminar on New Directions in Statistical Methodology. Bethesda, MD.

National Cancer Institute, *The role of the media in promoting and reducing tobacco use. Tobacco Control Monograph No. 19. NIH Pub. No. 07-6242*, 2008, USDHHS, National Institutes of Health, National Cancer Institute: Bethesda MD.

Salant, P., & Dillman, D. A. (1994). How to conduct your own survey. New York: John Wiley & Sons.

Singer, E., Gebler, N., Raghunathan, T., VanHoewyk, J., & McGonagle, K. (in press). The Effect of Incentives on Response Rates in Face-to-Face, Telephone, and Mixed Mode Surveys. *Journal of Official Statistics*.

Singer, E., Gelber, N., Van Hoewyk, J., & Brown, J. (1997). *Does* \$10 *equal* \$10? *The effect of framing on the impact of incentives*. Paper presented at the annual conference of the American Association for Public Opinion Research, Norfolk, VA.

Singer, E., Van Hoewyk, J., & Maher, M. P. (2000). Experiments with incentives in telephone surveys. *Public Opinion Quarterly*, 64(3), 171–188.

Wakefield, M., et al., Smokers' responses to television advertisements about the serious harms of tobacco use: pre-testing results from 10 low- to middle-income countries. Tob Control, 2011.