

Redesigning Contact Materials for the National Survey on Drug Use and Health (NSDUH)

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Abstract

Designing survey contact materials presents a challenge for survey practitioners to determine the content and features most likely to encourage participation among recipients. For general household surveys, limited research exists to inform decisions on whether specific text and graphics in the contact materials are likely to be effective in facilitating cooperation and avoiding refusals. As a result, designing contact materials requires survey researchers to combine relevant data, knowledge, and experience to construct effective documents.

This paper will summarize recent efforts to redesign the primary contact materials for the National Survey on Drug Use and Health (NSDUH). The NSDUH provides national, state, and substate data on substance use and mental health in the civilian, non-institutionalized population age 12 and older. Data are collected on a quarterly basis each year, with approximately 140,000 household screenings and 67,500 interviews completed annually.

Three methods were used in redesigning the advance letter envelope, the advance letter, and the question and answer (Q&A) brochure for the NSDUH. First, the researchers developed alternative versions for each of these contact materials to address potential limitations of the current materials. Second, we submitted the current and alternative versions of the contact materials for expert review and feedback. Third, we conducted 17 focus groups with members of the target population in different parts of the United States to discuss participants' reactions to the different versions of the materials.

This study will identify contributions each of the three methods made toward determining the final text and graphics for each of the three types of contact materials. We will also highlight important themes that emerged from this research, especially from the focus groups. Based on these research findings, we will discuss how various content and feature elements in contact materials are likely to facilitate cooperation in household surveys in the United States.

1. Background and Introduction

The National Survey on Drug Use and Health (NSDUH), sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA), provides national, state, and substate data on substance use and mental health in the civilian, non-institutionalized population age 12 and older. Data are collected on a quarterly basis each year, with approximately 140,000 household screenings and 67,500 interviews completed annually. Like other surveys, the potential for nonresponse bias is an ongoing concern. Nonresponse bias is a function of the nonresponse rate and differences between respondents and nonrespondents on key survey variables. For the NSDUH, the key survey items are substance use prevalence rates.

Historically, interview response rates have been lower among some demographic subgroups, such as those 50 and older (50+) (Murphy, Eyerman, and Kennet, 2004). Recent NSDUH data indicate sample members who are more likely to be underrepresented in the interview data:

- **Adults** over 50 years old, and especially those 65 and older, are somewhat less likely than adults under 50 to participate.
- **Men** are somewhat less likely than women to participate.
- Respondents who are categorized in the **Other race** subgroup and **White** respondents who are not Hispanic are somewhat less likely to participate than respondents who are Hispanic or non-Hispanic Black.

Lower response rates among subgroups may increase bias in overall estimates of prevalence rates. Increasing response rates across all groups would help reduce the potential for such bias.

One way to ensure high participation across subgroups in the population would be to improve any aspects of the survey protocol that could directly influence the decision to participate. In the spring of 2005, 12 focus groups with potential NSDUH respondents were conducted to examine the issue of nonresponse among persons 50 and over (Murphy, Schwerin, Hewitt, and Safir, 2005). Subjects were shown a video of an NSDUH interviewer contacting a sample member, enlisting cooperation to complete the household screening, and then enlisting cooperation for a selected household member to conduct the interview. Participants were also provided with copies of the materials given to respondents, including the lead letter, question and answer (Q&A) brochure, and other materials. Focus group members were then asked questions about the screening and interview process, as well as the contact materials being used during these processes. One set of recommendations from this study focused on examining how well the NSDUH contact materials:

- establish the legitimacy of the sponsoring and research organizations,
- clearly convey the survey objectives and importance of participation, and
- describe the selection process and importance of the selected individual's participation

The investigation described in this paper used expert review and feedback from multiple focus groups on alternative versions of the NSDUH contact materials. The primary goal was to identify ways to improve these contact materials to maximize cooperation among sample members. This paper describes the procedures followed and key findings obtained from the expert review process and focus group discussions.

2. Design and Methods

To identify ways to improve the NSDUH contact materials to maximize cooperation among sample members, SAMHSA and RTI undertook three tasks:

- (1) Developed alternative versions of the lead letter envelope, lead letter, and question and answer (Q&A) brochure.
- (2) Submitted draft versions of the letter and Q&A brochure for review by a prominent expert on survey materials, as well as eight NSDUH field interviewers.
- (3) Conducted focus groups with participants from varied regions of the United States to evaluate how members of the target population would react to different versions of the contact materials.

This section describes each of these tasks.

2.1 Development of Alternative Versions of the Materials

2.1.1 Lead Letter Envelope

Evidence from the results of a brief analysis of the variable on whether the screening respondent recalled seeing the lead letter in the 2001 NSDUH indicated that recall of the lead letter was associated with higher interview response rates for all age groups. The lead letter currently serves as a general introduction to the survey and a notice that an FI will be visiting the dwelling unit. At the time of the screening, the FI must try to persuade the screening respondent to foster interaction with the interview respondent(s). Without the lead letter, a completed screening may be more difficult to obtain because the screening respondent will have had no advance notice of the survey request. However, the screening respondent may be agreeable to completing a five-minute screening interview on the doorstep. When the request then becomes one for a one-hour interview with one or two household members inside the household, concerns about legitimacy, trust, confidentiality, or other apprehensions may be intensified. With a greater likelihood of exposure to the lead letter materials, the likelihood that these barriers to interview completion may be overcome will increase.

To evaluate the idea that changes in the lead letter can improve interview response rates, we considered how respondent perceptions of receiving lead letters in different envelopes could help distinguish the letter from junk mail, attract respondents' attention, and bring attention to the legitimate government survey sponsor. Indeed, earlier focus group participants noted that the letter should appear distinct from junk mail. Strategies for distinguishing the envelope from junk mail could involve using special logos, statements, or other design options. Development of new lead letter envelopes addressed several issues, including:

- Developing a larger 9 inch by 12 inch envelope to be compared to the standard number 10-size business envelope. The expected increase in annual costs for using the larger size envelope was also investigated, so that this factor could be taken into account in determining the cost-effectiveness for each size.
- Moving and reducing the return address information to avoid the possibility of the return address, instead of the recipient address, showing through the envelope window and creating confusion for the postal service.

- Determining if the endorsement “Official Business. Penalty for Private Use” could be used on the envelopes to identify the envelope as a Federally-sanctioned mailing. The two versions of the envelopes presented in the focus groups included this endorsement.
- Using RTI’s Rockville, Maryland office return address instead of the main North Carolina address. Using this return address could possibly reduce recipient questions about why the address is in another state from the sponsoring agency.
- Both envelopes included the same agency logo and return address.

Although NSDUH lead letters have a Spanish translation on the reverse side, they are currently mailed in the same envelopes as the English-only letters. Therefore, none of the text on either version of the lead letter envelopes was translated into Spanish for the focus groups.

2.1.2 Lead Letter

To compare with the current NSDUH lead letter, two alternative versions of the lead letter were developed. In developing the alternative versions, we incorporated survey design principles usually associated with the decision to participate (Groves, Cialdini, and Couper, 1992). In addition, the content and the graphic elements of the letters were presented separately to focus group participants, to take into account the overall impact each letter might have on recipients.

The first alternative version of the lead letter was written in large part by the expert reviewer. This letter differed from the current NSDUH lead letter and the second alternative letter in several respects, including:

- The first alternative letter was addressed to “household members at:” for each address, whereas the other letters were addressed to “resident” of each address.
- The letter began by indicating that a field interviewer would be visiting the household to request participation in a study, as opposed to the other letters which initially focus on the study sponsor.
- The letter noted that the survey is required by Congress, which is not mentioned in the other letters.
- The letter mentioned that the study “is the only one that provides much-needed national statistics on health and health-related behaviors of people throughout the United States,” which is not noted in the other letters.
- In the letterhead, the letter used a smaller logo for the Department of Health and Human Services (DHHS) on the left margin and the heading was simply “United States Department of Health and Human Services.” The letterhead for the current version had a larger logo on the right margin and included the statement “An Important Request from ...” prior to “the Department of Health and Human Services.”
- The letterhead indicated a return city address of Rockville, Maryland, which was not included in the current version of the letter.
- For the image of the field interviewer’s badge, a full color sample picture of a field interviewer was included. The picture of the field interviewer on the current letter and the second alternative letter showed a silhouette of the field interviewer’s head only. In addition, below the image of the field interviewer’s badge a line is included

following the phrase “You will be contacted by ...” so that the field interviewer sending the letter can print her or his name on the letter before mailing.

The second alternative version of the lead letter was in large part modeled after the letter currently used for the National Survey of Family Growth (NSFG). This letter differed from the current NSDUH lead letter and the first alternative letter in several respects, including:

- The second alternative letter used language directed more personally from the study sponsor to letter recipients. For example, first-person pronouns such as “I,” “my,” and “we.”
- The letter provided a more detailed description of the types of data collected in the survey (“use of prescription and non-prescription drugs, alcohol and tobacco, and other aspects of health and mental health”), compared to the other two letters that only mentioned “health issues.”
- Unlike the other two letters, the letter did not provide the address for the study website, but it did include the toll-free study number.
- The letter was signed only by the contact person at the sponsoring agency (SAMHSA). The other two letters were signed by both the contact person at the sponsoring agency and the national field director for the data collection contractor (RTI).
- Like the first alternative letter, the letterhead used a smaller logo for the Department of Health and Human Services (DHHS) on the left margin and the heading “United States Department of Health and Human Services” only.
- Like the first alternative version, the letterhead indicated a return city address of Rockville, Maryland. Unlike the first alternative version, the zip code for Rockville, Maryland was also included in the letterhead.
- Like the current version of the letter, the picture of the field interviewer on the image of the field interviewer’s badge showed a silhouette of the field interviewer’s head, as opposed to a picture.
- Like the first alternative letter, below the image of the field interviewer’s badge a line is included following the phrase “You will be contacted by ...” so that the field interviewer sending the letter can print her or his name on the letter before mailing.

A number of other aspects of the lead letter text and graphics were consistent across the three versions of the letter, including:

- All three versions of the letter asked recipients to “please share this information with any others in your household.”
- At the bottom of each version of the letter, information was included on protection of data confidentiality through the Confidential Information Protection and Statistical Efficiency Act of 2002 (CIPSEA), congressional authorization of the study through the Public Health Service Act, and the Office of Management and Budget (OMB) approval number for the study.
- The bottom of each version of the letter also included the same state-specific sample identification number, although the placement of the identification number varied

between the left margin for the current letter, the right margin for the first alternative letter, and the center for the second alternative letter.

In preparation for the focus groups, the three versions of the lead letters were translated into Spanish by the same two language methodologists, who are native Spanish speakers. The translation process began with the first language methodologist translating the contact materials independently, with the goal of accurately matching the same concepts and taking into account fundamental differences between the languages and cultures. A senior language methodologist then reviewed the initial translations and resolved any discrepancies between the initial translation and their determination of the appropriate translation of the text. The two language methodologists then reviewed the final translation against the English source document to ensure consistency in style, meaning, and terminology.

2.1.3 Q&A Brochure

The NSDUH Q&A brochure is not mailed to selected households with the lead letter, nor is it left by field interviewers at households when no one is home. Instead, the brochure is provided only to household members selected to complete the interview or, occasionally, members of a household where at least one person is selected for the interview. Unlike the lead letter, the impact the Q&A brochure has on response rates is therefore limited to the interview response rate among members of selected households that have been screened and selected for the interview.

Only one alternative version of the Q&A brochure was developed for comparison to the current NSDUH brochure. The primary goals in developing the alternative version were to make the brochure more attractive through color and graphics and to condense the amount of information provided to improve comprehension. The alternative version differed from the current version in a number of important ways, including:

- The alternative version of the brochure included a revised response to the question “What is the National Survey on Drug Use and Health?” presented across two panels with images of the various age, gender, and racial/ethnic groups included in the survey.
- The alternative version reduced the number of questions about the study from 10 to 6. Although much of the same information was provided in the answers to the questions, the alternative version attempted to simplify the document by focusing on fewer key questions.
- Wherever possible, the language used in the alternative version was simplified. Technical terms and other survey jargon were avoided. For example, the language describing the sampling procedures was simplified.
- Wherever possible, language that could potentially raise concerns among those selected for the interview was eliminated. For example, information on privacy and confidentiality already covered by the informed consent statement was removed.
- As necessary, the language from the current responses was also revised to clarify survey procedures.
- Multiple colors across whole panels, on the borders, and in images were added to the alternative version. The current brochure is a two-color document with blue text and graphics on a white background. The expected increase in annual costs for printing a full-

color version of the brochure was also investigated, so that this factor could be taken into account in determining the cost-effectiveness of each version.

- Overall, the number of graphics was reduced and only those graphics that were most relevant to the study were retained.

As necessary, we also updated the current version of the Q&A brochure so that the factual information about the study (such as the incentive amount) was identical to the alternative version. The two versions of the Q&A brochure were translated into Spanish by the same translators for the focus groups.

2.2 Expert Review

Expert review of the materials was utilized at two points in developing alternative versions of the contact materials.

First, the current versions of the lead letter and Q&A brochure were sent to Dr. Don Dillman of the Social and Economic Science Research Center at Washington State University. Dr. Dillman is a well-known expert on developing survey materials to maximize unit response. We initially asked Dr. Dillman to evaluate and comment on the current materials. As noted in *Section 2.1.2*, his initial review also led to an alternative version of the lead letter which was used (with minor revisions) as the second letter in the focus groups. His review also provided some key points to assess when discussing the materials in the focus groups.

Second, after the focus groups were completed and recommendations were compiled, we developed a single version of both the lead letter and the Q&A brochure as draft final versions. We then solicited additional comments from Dr. Dillman on incorporating the findings from the focus groups into the revised contact materials. For this review, we asked Dr. Dillman to focus primarily on the following issues about the revised materials:

- Do the materials seem likely to motivate sampled households and selected individuals to complete the interview, especially individuals in demographic subgroups with lower propensities to participate, such as men and adults over age 50? In what ways could the materials be improved to motivate participation among these sample members?
- Do the materials sufficiently establish the legitimacy of the sponsoring organization (SAMHSA) and the data collection organization (RTI)? In what ways could the materials better convey the legitimacy of the organizations?
- Do the materials clearly convey the objectives of the survey and the importance of participation? In what ways could the materials better present these two points?
- Do the materials clearly describe the selection process and importance of each selected individual's participation in the survey? In what ways could the materials better address these two points?
- Do the graphics used in the letter and Q&A brochure enhance the overall appearance and content of the materials? In what ways could graphics further enhance these materials?

At the same time, we also asked eight NSDUH field interviewers selected from across the country to provide their feedback on the draft final versions of the materials based on the focus group recommendations. To provide some diversity of viewpoints, we selected two field

interviewers from each of the four regions of the country – Northeast, Southeast, Central, and West. Within each of these regions, we selected one field interviewer from a rural area and one from a metropolitan area. For this review, we asked the eight field interviewers to address the same issues as those posed to Dr. Dillman, although we divided each issue into a set of basic questions.

2.3 Focus Groups

Given that the purpose of this investigation was to improve the design of the NSDUH contact materials in ways likely to maximize cooperation rates, a key objective of this research was to evaluate the alternative versions of the materials through focus group discussions. The feedback provided by focus group participants was expected to identify key elements in the lead letter envelope, lead letter, and Q&A brochure likely to be related to completion of the screener and/or interview among selected households. As Fowler (1995) notes, focus groups can quickly broaden researchers' perspective on how people think about the issues under study. As such, the focus groups feedback was expected to be useful in two ways:

1. To examine the reactions members of the target population would have toward specific elements of the materials and participating in the survey based on the information provided in the materials, and
2. To evaluate assumptions about how members of the target population understand key concepts and specific terms used to describe the survey goals and procedures in the materials.

An important goal in selecting sites for the focus groups was to include members of the target population who represented different regions of the country and the two different survey languages, English and Spanish. A total of 17 focus groups were conducted across five metropolitan areas – Chicago, Dallas-Fort Worth, Los Angeles, Raleigh-Durham, and Washington, D.C. To ensure representation of the population who speak primarily English and those who speak primarily Spanish, 11 of the focus groups were conducted in English and six were conducted in Spanish.

A final objective in conducting the focus groups was to ensure the groups were conducted by experienced professionals who did not have a direct stake in the specific study materials or protocol. This facilitated a more objective treatment of the issues and ensured that detailed knowledge of the NSDUH did not unduly influence the direction or content of the focus group discussions. RTI hired professional focus group moderators from Morpace, Inc. to conduct both the English and Spanish focus groups. In addition to having extensive experience in conducting focus groups, the two Morpace moderators had the unique qualifications of training in survey research methods.

SAMHSA and RTI developed the focus group protocol guide, distributed to the Morpace moderators for their review and input, and translated the final materials into Spanish. The focus groups followed the same basic set of procedures, whether in English or Spanish, with the one exception being subject recruitment methods. English-speaking participants were primarily recruited via posted advertisements on craigslist.com for each of the five metropolitan areas. To reach Spanish-only or Spanish-mostly speakers, partnerships were forged with local community organizations to use their facilities and advertisements were posted in Hispanic shopping centers, Hispanic community centers, and Spanish-language newspapers where available. All subjects were recruited between September 23 and October 30, 2009, about one to two weeks prior to

each session at each location. Otherwise, the focus groups were conducted following the same procedures:

- Up to 10 participants comprised each focus group, with most sessions including seven to nine people.
- The contact materials reviewed and discussed included multiple versions of the lead letter envelope, the lead letter text without graphics, the lead letter graphics without text, and the Q&A brochure.
- The order of discussion for the contact materials was (1) the lead letter envelopes, (2) the lead letter text, (3) the lead letter graphics, and (4) the Q&A brochure.
- Participants' primarily provided responses to a set of structured questions and probes presented by the moderators, but the sessions also allowed participants to add spontaneous comments on the contact materials.
- As appropriate, the moderator expanded the discussion on each type of contact material to build on participants' comments and asked others to share their views. A key strategy used by the moderators was to direct questions to participants who had not yet contributed to the current discussion.
- Following the discussion of each type of contact material, the moderator asked participants to mark the version of the material they preferred with the number one.
- The final part of each session gave both participants and any observers a final opportunity to ask questions or make comments.
- At the end of each session, each participant received \$75 in cash.

Table 1 and *Table 2* presents key demographic characteristics of the participants across the 17 focus groups, including age, gender, race, education, income, and urbanicity for each participant.

Table 1. Characteristics of English Focus Group Participants

Location and Age Group	Number	Gender		Race			Education		Income		Geographic Area		
		M	F	White (Non-Hisp)	Black	Other Race	Edu ≤ HS/GED	Edu > HS/GED	Inc ≤ \$100,000	Inc > \$100,000	Urban	Suburban	Rural
Total	96	33	63	56	24	16	11	84	81	14	35	57	3
Raleigh, NC	26	10	16	15	10	1	3	15	20	4	9	14	3
Washington, DC	19*	9	10*	10	6	3	3	15	14	4	7	11	0
Addison, TX	24	7	16	14	6	4	5	19	22	2	9	15	0
Irvine, CA	27	7	21	17	2	8	0	27	23	4	10	17	0

* One no show was replaced by an eligible participant on-site. Since this participant was not completely screened prior to arrival, not all demographic characteristics could be recorded for inclusion in this table.

Table 2. Characteristics of Spanish Focus Group Participants

Location and Age Group	Number	Gender		Country of Origin				Education		Income		Geographic Area		
		M	F	Mexico	Puerto Rico	Central America	South America	Edu ≤ HS/GED	Edu > HS/GED	Inc ≤ \$100,000	Inc > \$100,000	Urban	Suburban	Rural
Total	49	20	29	24	8	3	14	28	21	49	0	46	2	1
Raleigh, NC	20	12	11	6	2	1	11	12	8	20	0	19	0	1
Chicago, IL	29	11	18	18	6	2	3	16	13	29	0	27	2	0

3. Focus Group Results and Recommendations

3.1 Lead Letter Envelope

Before presenting the two versions of the lead letter envelopes, the moderators asked focus group participants to think about the mail they receive each day and identify factors related to their likelihood of opening a specific piece of mail. This discussion was intended to provide background information on how people generally perceive the different types of mailings they receive and how this might affect the likelihood of opening the NSDUH lead letter envelope. Across the focus groups, a few themes emerged that were relevant to the lead letter envelopes:

- Focus group participants felt the decision to keep a piece of mail and open it is usually based on what they know about the sender and the characteristics of the envelope. Participants indicated they usually try to determine whether there is some kind of “connection” between themselves and the senders of the mail. They typically assess this by examining both the return address and to whom the mail is addressed.
- Participants also stated they would be less likely to open mail addressed simply to “Resident,” and some indicated they routinely throw out mail addressed in this way. Some participants in Spanish groups who live in apartment buildings mentioned that they never open mail addressed only to “Resident” because they think this mail was sent to the landlord.
- Most focus group participants indicated adding “Resident of _____ County” to the address would not significantly diminish their inclination to ignore mail addressed in this way. Those who were favorably inclined to this idea noted it could increase the likelihood of opening the envelope because this would indicate the mailing contains something important for them and their local community. Other suggestions made to address this issue included addressing the letter to “Head of household at [ADDRESS]”, “Randomly selected resident at [ADDRESS]”, and “Survey to resident at [ADDRESS]”.

Overall, focus group participants indicated the mail they are most likely to open would have the following characteristics: (1) mail addressed to a specific person in the household, (2) mail that includes the name of a company with which the recipient is familiar, and (3) mail that uses mostly white envelopes with familiar and official-looking logos

Following the discussion of what factors influence the decision to open a piece of mail, the moderators distributed the two versions of the lead letter envelope. **Table 3** presents focus group participants’ preferences with respect to each type of contact material. In the tabulation of participants’ preferences for the lead letter envelopes, slightly more than half of the English group participants preferred the larger envelope. Two-thirds of the Spanish group participants preferred the larger envelope.

Based on their appearance, most participants indicated they would likely open either the standard size or the larger size version of the envelope if they received it in the mail. Key factors mentioned by participants were:

- The Department of Health and Human Services (DHHS) return address would encourage people to open either envelope. Using the DHHS logo and title made the envelope look “business-like” and “official.”

- The Rockville, Maryland return address seemed to reinforce the idea that the mail is legitimate because people recognized that many government offices are located in that part of the country.
- Inclusion of the RTI project number also did not seem to bother participants, but a few mentioned that this information suggested the mailing might reference a survey.
- In the Spanish groups, many participants were not familiar with the DHHS, but did indicate that they would still open the envelopes because they looked “official” and different from marketing materials.
- Reactions from participants suggested that the larger envelope would certainly garner more initial attention than the standard size envelope, because larger envelopes are often used for more “official” mailings, such as sending legal documents.
- The text on the envelopes reading “OFFICIAL BUSINESS. PENALTY FOR PRIVATE USE \$300” tended to enforce the official nature of the mailing for focus group participants. Despite this view, the great majority of participants did not understand exactly what this statement actually meant.
- Participants suggested the use of a regular stamp to make the envelope look more official and distinguish it from junk mail. This recommendation is consistent with the Tailored Design Method for survey mailings, proposed by Dillman (Dillman, 2000).

3.2 Lead Letter Text

The three versions of the lead letter with text only (no graphics) were initially presented to focus group participants and labeled as versions 1a, 2a, and 3a. As **Table 3** indicates, focus group participants varied somewhat in their preferences for each version of the lead letter text. Slightly more than half of the English group participants preferred version 1a, but Spanish group participant preferences were even more mixed. A plurality of about 43 percent of Spanish group participants preferred version 3a and another 35 percent preferred version 1a. Version 2a was the least popular among both English and Spanish group participants. Some key considerations cited by focus group participants in evaluating the three versions of the lead letter text were:

- Versions 1a and 3a were viewed by participants as being better organized, shorter, and more direct than version 2a. Participants also felt these two versions contained most of the information participants wanted to know.
- Participants also note that the way the text was distributed on the page made versions 1a and 3a easier to read, understand, and communicate to other members of the household.
- One of the main differences between version 1a and version 3a was that the latter mentions the specific topic of the survey (drug use, alcohol, and tobacco). Many participants felt that being specific about the topic would increase their interest in the survey and would make them more likely to participate.
- Spanish group participants, who preferred version 3a, suggested that mentioning in the letter (as in the brochure) that both users and non-users of drugs and alcohol needed to participate would be a good idea.
- Version 1a was viewed favorably especially among the younger participants who believed that the text was shorter, more professional, and straight to the point. Both

younger and middle-aged participants in the English groups disliked the tone of letter 3a, particularly the introduction, “My agency...”

- Version 3a was particularly popular among older participants in the English language groups and nearly half of the Spanish group participants. One of the reasons cited by these participants was the more personal tone of the letter.
- One feature used only in version 2a that was viewed favorably by participants was how the “Members of the Household” and “Resident of the [city, county, or state]” made the letter more seem more personally directed toward their household.

Focus group participants were also asked to discuss several key elements addressed by the text in all three versions of the lead letter:

- On the issue of survey confidentiality, a large number of the participants in the English language groups preferred the single sentence used in version 3a, as they viewed it as short and to the point. Participants from the Spanish groups did not notice big differences across letters in terms of information about confidentiality.
- Participants offered mixed opinions on the handling of signatures. Some suggested that two signatures made the letter appear more official and important, while others said they were not very interested in how the government was conducting the survey and a single signature would suffice.
- Mixed reactions were also received to the concept in version 2a to include endorsements of the survey from other organizations. Overall, participants suggested that mentioning the endorsement of a health institution would be more beneficial than endorsements from other types of institutions. When asked about endorsements from the American Medical Association (AMA) or the American Association of Retired Persons (AARP), participants were mixed in terms of how much weight these would carry for them. Many younger adults did not seem to think endorsements would add much to the letters. Also, organization like AMA and AARP had a low level of awareness among the Spanish group participants, so these endorsements would not likely affect their participation in the survey. In addition to the AMA and AARP, other organizations suggested for endorsements were the Centers for Disease Control and Prevention (CDC), American Health Association, the Red Cross, and the March of Dimes.
- Nearly everyone in all the English language groups said they would use the internet to access the RTI website included in the first two versions of the letters. The lack of a web site address in version 3a was often cited by participants as a reason why they did not choose that version of the letter. Spanish group participants also believed that having a web site address was a very positive element in the text. However, for Spanish group participants, having a telephone number was also important among participants who did not have access to the internet.
- In general, participants were not familiar with RTI. They felt the three versions of the letter did a good job explaining the role of RTI. Most participants understood RTI would conduct the interviews and thought it was good to mention that RTI is a non-profit organization.

- The bolding and highlighting of the incentive sentence caught the attention of the readers. It did not seem to have a negative connotation and participants admitted that this line would increase their interest in the letter.

3.3 Lead Letter Graphics

Like the text, the graphics for the lead letters also involved three alternative versions, labeled 1b, 2b, and 3b for the focus groups. Participants were asked to comment on the graphical layout of the letter independent of its content. This objective was accomplished by providing the letters with graphics, but no text. As Table 3 shows, focus group participants indicated mixed preferences for which version of the lead letter graphics they preferred. None of the versions garnered majority approval in either the English or Spanish groups, but half of participants in the Spanish groups preferred version 2b. In contrast, about 45 percent of English group participants preferred version 1b.

Some key considerations cited by focus group participants in evaluating the three versions of the lead letter graphics were:

- Participants noticed differences across the headers and sizes of the logos. Overall, participants viewed the logo as important because it reinforced the official nature of the letter. Some participants liked the larger DHHS logo in version 1b because it could be more easily read. In addition, including Rockville, Maryland and the zip code in the header was viewed as a positive element that made the letter appear more “business-like” and official.
- Across the groups, opinions differed regarding the line in the header of version 1b, “An Important Request from the U.S. Department of Health & Human Services.” Some participants liked how it emphasized the importance of the survey while others suggested that it made the letter look “less business-like.” Overall, greater support for the use of this statement in the header of version 1b was voiced in the 50+ age groups than in the younger age groups. Among Spanish group participants, this statement did not have any negative effect, nor was it considered a significant positive element.
- Responses to the image of the field interviewer’s identification badge consistently favored using an actual photograph, as in version 2b, instead of the silhouette. In addition, nearly all participants indicated their first impression was that the specific field interviewer pictured on the badge would be the one to visit their home. When informed that this would not be the case otherwise, nearly all participants suggested the photo be used on the badge, but some indication should be made that the badge was only an example. Following discussion on the field interviewer badge, most participants agreed that having the hand written name of the interviewer who would visit their home was a good idea.

3.4 Question and Answer Brochure

Focus group participants were shown two versions of the question and answer (Q&A) brochure. The current Q&A brochure (updated to reflect factual information provided in the other version) was labeled version 1. Version 2 was the redesigned version using a variety of background colors and photographs. Overall, version 2 was preferred by participants over version 1 as indicated in *Table 3*. Preferences differed somewhat between the English and Spanish group participants. Over 80 percent of participants in the Spanish groups preferred

version 2 and 51 percent of English group participants preferred version 2. Participants in the English groups (24 percent) were also much more likely to decline to indicate a preference between the two versions compared to those in the Spanish groups (0 percent).

Some key factors noted by focus group participants in determining which version of the Q&A brochure they preferred were:

- Most participants indicated that version 2 was more appealing and something that most people would find more inviting to read. Participants generally felt that the photos included in version 2 of the brochure effectively communicated the different characteristics of people who participate in the survey. This feature led people to note that version 2 appeared more friendly and personal. Participants also liked the colors used in version 2.
- A common complaint among participants was that version 1 contained too much information. People suggested this made the brochure somewhat overwhelming and, therefore, less compelling to read.
- A minority of participants indicated they liked the greater content in version 1. Some of these participants suggested that this version of the brochure might be more effective for describing the survey to another household member. These people suggested that dividing the information into more specific questions in version 1 might be a better approach than the fewer questions presented in version 2.
- One section in version 1 of the brochure that was identified as being particularly effective by participants was the section with the title “What If I Do Not Smoke, Drink, or Use Illegal Drugs?”
- Overall, participants thought the brochures did a better job explaining that not only drug and alcohol users need to participate in the survey. Some participants felt this information would make some people more willing to participate, although they also acknowledged that this might discourage participation among those who have considerable substance use to report.
- Participants generally thought it is important to include the logos of SAMHSA and RTI in the way they are presented in version 2 of the brochure. Even though sample members may or may not be aware of these institutions, people indicated the logos would make them more comfortable by reinforcing the importance and legitimacy of the survey.

Focus group participants also discussed several key elements addressed in both versions of the Q&A brochure:

- Overall, participants felt that the information in the brochures was more understandable and complete compared to the more limited information presented in the letter. The technical and administrative details of the survey seemed less relevant to participants than knowing the purpose and utility of the survey.
- One example of a phrase in the brochures with which some participants had difficulty understanding was “...chosen at random through scientific methods.” It was suggested by some participants that “random” and “scientific” seem to be contradictory. As noted previously, explanations of how participants are selected

randomly and scientifically were often not understood by participants with lower education levels in the In the Spanish groups.

- Overall, participants also felt the brochures did a better job than the letters in explaining the role of RTI in the study. People noted that the brochures provide more detailed information and history about both the NSDUH and the organizations involved. Some participants suggested that this information would cause them to be more favorably disposed towards participating in the survey.
- The 50+ participants in the English groups seemed sincerely motivated to participate in such a survey if it helped the government's health planning and related public policy initiatives. Messages focused in terms of how survey participation would support a worthy endeavor seem likely to be received favorably by older adults.

3.5 Special Concerns of Spanish-speaking Participants

Overall, Spanish-speaking participants shared many of the same impressions of the materials as participants in the English groups. A few special concerns were identified with the Spanish version of the materials in those focus groups:

- The reading level of the letters was only appropriate for Spanish-speakers with at least a high school education or greater. Reading skills and ability to understand the letters differed significantly across participants, based on education level.
- Many Spanish group participants indicated that the endorsement "OFFICIAL BUSINESS. PENALTY FOR PRIVATE USE \$300" made them uncomfortable in opening such an envelope. Some felt intimidated by it, while others felt it meant that the envelope must only be opened by the person to whom it was addressed.
- The use of acronyms in Spanish is not as common as in English, so this element was problematic for Spanish group participants who are unfamiliar with U.S. government agencies, associations, and U.S. code.
- Letters addressed to "Resident" made people in the Spanish groups think that it was not necessarily sent to them. Many thought the letter was addressed to landlords, such as in cases where people live in rented homes.

Table 3. Preference Counts for Each Type of Contact Material

	English Groups		Spanish Groups	
	Count	%	Count	%
<i>Lead letter envelopes</i>				
Lead letter envelope, regular size	39	40.6%	10	20.4%
Lead letter envelope, 9x12	51	53.1%	33	67.3%
No preference expressed	6	6.3%	6	12.2%
TOTAL	96	100.0%	49	100.0%
<i>Lead letter text only</i>				
Lead letter, Version 1a	50	52.1%	17	34.7%
Lead letter, Version 2a	14	14.6%	11	22.4%
Lead letter, Version 3a	20	20.8%	21	42.9%
No preference expressed	12	12.5%	0	0.0%
TOTAL	96	100.0%	49	100.0%
<i>Lead letter graphics</i>				
Lead letters, Version 1b	44	45.8%	15	30.0%
Lead letters, Version 2b	29	30.2%	25	50.0%
Lead letters, Version 3b	18	18.8%	10	20.0%
No preference expressed	5	5.2%	0	0.0%
TOTAL	96	100.0%	50*	100.0%
<i>Q& A brochure</i>				
Q & A brochure, Version 1 (current)	24	25.0%	8	16.3%
Q & A brochure, Version 2 (new)	49	51.0%	41	83.7%
No preference expressed	23	24.0%	0	0.0%
TOTAL	96	100.0%	49	100.0%

* One Spanish group participant selected both versions 1b and 3b

4. Summary and Conclusions

For redesigning the NSDUH contact materials, SAMHSA and RTI developed two versions of the lead letter envelope, three versions of the lead letter, and two versions of the Q&A brochure for focus group discussions. A review process was also used at two points in the process to collect feedback from an expert in survey materials and eight field interviewers who currently work on the NSDUH. Focus groups conducted in five metropolitan areas in the U.S. confirmed the importance of many of the content and formatting elements considered in developing the contact materials. In addition, participants' comments highlighted some key issues that might not be fully addressed by the materials development and expert review. This section synthesizes the focus group reactions into specific recommendations for improving each type of contact materials.

4.1 Lead Letter Envelopes

A majority of focus group participants stated a preference for the larger 9x12 envelope. This majority was greater in the Spanish focus groups. At the same time, participants in the English groups did express concern about using large envelope for only a letter and no additional study materials. In addition, the overwhelming majority of participants indicated that they would open either envelope, primarily because the DHHS logo led them to believe that the mailing was important. The main benefit of the larger envelope appears to be that it will attract greater attention, at least in some households. One benefit for NSDUH interviewers is that they would not have to fold the letters to insert them into the envelopes, which would increase the likelihood that the address information is visible in the address window. Based on these results, the recommendation would be to carefully consider the costs and benefits of using 9x12 envelopes versus the standard number 10 size. Given that the standard size envelope did not generate negative reactions, this size envelope with logo and return address presented in the focus groups may be equally effective as the larger envelope.

Including the endorsement "OFFICIAL BUSINESS. PENALTY FOR PRIVATE USE \$300" appeared to have advantages and drawbacks. Focus group participants felt this statement made the envelopes look more official, but few participants actually understood what this statement meant. The phrase "PENALTY FOR PRIVATE USE \$300" was particularly confusing to many participants. The current envelope used for mailing the lead letters and frequently asked questions for the National Immunization Survey, a study sponsored by DHHS, includes only the "OFFICIAL BUSINESS" part of this statement. The potential for using only the first part of this statement should be investigated further. Given that most participants indicated they would open the envelope because of the DHHS logo, including this statement does not seem critical to the effectiveness of the lead letter envelope.

4.2 Lead Letter Text

A majority of participants in the English groups preferred version (1a) of the lead letter text, but a plurality of Spanish group participants preferred the second alternative version (3a). In most groups, participants made compelling arguments for either version. The first alternative version (2a) was generally viewed as too lengthy and complicated. Based on these results, one recommendation would be to create a hybrid of the text in versions 1a and 3a that would combine the preferred text of each letter, while avoiding text considered to be problematic. For example, many participants indicated version 1a was well-organized and covered the most important information about the study. Participants also thought it was useful that version 3a

specifically mentions the topic of the survey and indicates (as in the Q&A brochure) both users and non-users of drugs and other substances are needed to participate.

One element of the version 2a letter text that could be considered for the new letter was addressing the letter to “Resident of _____ County.” Some participants did not feel this would significantly increase their likelihood of opening the letter, but many felt this would indicate to them that the mailing is important for them and their local community. For this reason, it might be worthwhile to investigate the costs and logistics of adding the county, parish, borough, or district for each addressee.

On the issue of two signatures (included in versions 1a and 2a) versus a single signature (used in version 3a), participants did not indicate a strong preference overall. Most felt including both signatures was the better approach, so recipients would more clearly understand both SAMHSA’s and RTI’s role in conducting the study. Given that there were really no negative reactions to including both signatures, the letter should probably continue to include both the SAMHSA and RTI signatures.

4.3 Lead Letter Graphics

Focus group participants offered mixed preferences for which version of the lead letter graphics they preferred. None of the versions garnered majority approval in either the English or Spanish groups, but half of the participants in the Spanish groups preferred the graphics in alternative version (2b). In contrast, about 45 percent of English group participants preferred the graphics shown on the current version (1b).

Specific elements of the lead letter graphics seemed to heavily influence participant preferences. The larger DHHS logo on version 1b was often cited as preferable to the smaller version displayed on versions 2b and 3b. Another key element was the use of a gray silhouette versus an actual picture in the image of the field interviewer’s identification badge. Overall, participants preferred the actual picture on the identification badge, even though the picture would not be tailored to show the actual field interviewer assigned to each selected household. Participants agreed that a watermark or other graphical feature should be used to indicate the identification badge is only a sample. Many participants were initially unclear that the picture was just a sample, and therefore they would have expected the person in the picture to be the actual field interviewer assigned the recipients’ household. One aspect of the graphics in version 1b that was not received favorably by participants was including the phrase “An Important Request from The U.S. Department of Health & Human Services” in the header. Most participants viewed this as superfluous.

These reactions suggest that the lead letter graphics should incorporate various elements used across the three versions, including:

- the larger DHHS logo shown in the current version (1b)
- the sample picture on the identification badge used in the version (2b), with a watermark indicating that the badge is just a sample
- the line for the interviewers’ name under the identification badge.

Given that focus group participants did not express strong preferences for how the return address was presented in the header, this feature of the header seems unlikely to have a significant impact on recipients’ reaction to the letter.

4.4 Q&A Brochure

Although a majority of focus group participants preferred the alternative version (2) of the Q&A brochure, preferences differed significantly between the English and Spanish group participants. Whereas over 80 percent of participants in the Spanish groups preferred version 2, 51 percent of English group participants preferred version 2. Participants in the English groups were also much more likely to decline to indicate a preference between the two versions compared to those in the Spanish groups.

The primary appeals of the alternative version of the brochure appeared to be the use of colors and pictures, the layout, and the amount of text presented. Participants who perceived the current version as providing more detail than the alternative version viewed this as either a positive or negative feature. Some participants felt the additional details were informative and useful, while others thought these details were overwhelming and would discourage them from reading the brochure.

Feedback on the Q&A brochures indicated that the alternative version had promise, but useful elements from the current version could be incorporated into the alternative brochure. For example, some participants suggested the topics were organized somewhat better in the current version. In addition, the alternative brochure could retain sections viewed as particularly useful by participants and consider reducing or dropping sections viewed as less important.

References

Dillman, Don. (2000). *Mail and Internet Surveys: The Tailored Design Method*. NY: John Wiley and Sons

Fowler, F.J. (1995). *Improving Survey Questions: Design and Evaluation*. Sage: Thousand Oaks, CA.

Groves, R. M., Cialdini, R. B., and Couper, M. P. (1992). "Understanding the Decision to Participate in a Survey." *Public Opinion Quarterly* 56(4): 475-495.

Murphy, J., Eyerman, J., and Kennet, J. (2004). Nonresponse among persons age 50 and older in the National Survey on Drug Use and Health. *Proceedings of the eighth conference on Health Survey Research Methods*, Atlanta, GA.

Murphy, J., Schwerin, M., Hewitt, D., and Safir, A. (2005) "Nonresponse among Respondents Aged 50 and Older Potential Respondents Focus Group Report." Prepared by RTI for Substance Abuse and Mental Health Services Administration.