

**PILOT STUDY EVALUATING THE CROSS-
CULTURAL EQUIVALENCY OF THE TOBACCO
USE SUPPLEMENT TO THE CURRENT
POPULATION SURVEY (TUS-CPS)
(Chinese, Korean, Vietnamese, and Spanish)**

FINAL REPORT

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1. PROJECT BACKGROUND AND INTRODUCTION TO THE REPORT

Westat was contracted by the National Cancer Institute (NCI) to help standardize the Chinese (used to conduct Mandarin Chinese and Cantonese language interviews), Korean, Vietnamese, and Spanish¹ translations of the Tobacco Use Supplement to the Current Population Survey (TUS-CPS). The TUS-CPS is an NCI-sponsored survey of tobacco use that has been administered as part of the U.S. Census Bureau's Current Population Survey in 1992-1993, 1995-1996, 1998-1999, 2000, and 2003. The supplement asks questions on tobacco use patterns and smoking prevalence, workplace smoking policies, level of nicotine dependence, medical and dental advice to quit smoking, quit attempts, cessation methods used, and changes in smoking norms and attitudes. NCI is interested in translating the TUS-CPS into a variety of languages so as to better capture the tobacco-related experiences of non-English-speaking communities within the United States.

In the fall of 2003, the Chinese, Korean, and Vietnamese translations of the TUS-CPS were cognitively tested. Under a different task order, Westat also performed cognitive testing on the Spanish translation in the spring of 2002. Based on the results of those efforts, a variety of revisions were made to all four translations of the questionnaire (Westat memo to NCI, 4/18/2002; Kudela et al., 2004). For this phase of the research, the Westat team tested the translated questionnaires in the field via telephone interviews. In addition, we performed behavior coding on selected items in order to further refine and standardize the questionnaires. The purpose of these tasks was to help ensure that equivalent information will be collected across the groups to which the translated questionnaires will eventually be administered. By making these cross-cultural comparisons, NCI hoped to discover whether respondents interpret the survey items similarly across languages, and if they do not, whether those differences are due to translation, survey design, cultural factors, or something else. The ultimate goal of the pilot study was to use the results to refine the translations in such a way that they are “conceptually equivalent” to the English. That is, the concepts communicated in the English version are also communicated in the target language questionnaires, although sometimes the terms and grammatical structures used to communicate them may differ somewhat in the target languages. (For discussions of the various types of translation equivalencies, see also U.S. Census Bureau, 2004; Johnson, 1998; Weidmer, 1994; Ponce et al., 2004; and Van de Vijver, 1998.)

The remainder of this report is divided into the following sections:

- Sections 2 through 8 present a detailed account of the methods used to conduct the pilot study in five target languages;
- Section 9 provides an overview of the findings and Westat recommendations that were accepted by NCI and incorporated into the final questionnaires; and
- Sections 10 through 16 present detailed results for each tested item.

¹ Referred to in this report as the target languages.

2. DESIGN OF THE TASK

The task of evaluating the four translated TUS questionnaires consisted of three key elements. The first was to test how well the translations work in the field. To accomplish this goal, NCI proposed conducting interviews with 70 respondents in each of the five target languages and English. The second element of the pilot study was to administer a retrospective debriefing questionnaire with about 20 percent of the 70 respondents in each language. Finally, using tape recordings of the interviews, we coded interviewer and respondent behavior in such a way as to identify problems with the questionnaires. We supplemented these key components with insights from interviewers and behavior coders into problems with the questionnaire and its translations.

2.1 TUS Telephone Interviews

We administered the TUS over the telephone in each of the six languages (English, Cantonese, Korean, Mandarin Chinese, Spanish, and Vietnamese) with approximately 70 respondents. The decision to complete 70 interviews in each language served two purposes. First, it allowed us to capture enough data to get meaningful results from the behavior coding exercise. (Minimum sample sizes of 15 to 75 are generally recommended, according to Edwards in the 2005 edition of *Polling America: An Encyclopedia of Public Opinion*.) It also gave us enough interviews to conduct 20 of them in English with bilingual respondents.² By conducting the interviews with non-native (that is, those who indicated during the screening process that they are “more comfortable” speaking the target language than English) English speakers in both English and the target language, NCI felt we would be able to better identify differences across surveys that are cultural rather than strictly related to the quality of the translation. Results from the English interviews with bilingual speakers could then be compared to those from the target language interviews. For example, if Korean-speaking respondents who took the survey in English and Korean both have problems with a certain item, but a similar problem does not appear in the other languages, we can be fairly confident that the problem stems from a cultural, not translation, issue. If, on the other hand, English-speaking Korean respondents have no trouble with an item but their Korean-speaking counterparts do, that would point to a translation problem.

2.2 Retrospective Debriefing Questionnaire

The purpose of the retrospective debriefing questionnaire was to learn more in-depth information from the respondents themselves about what it was like answering selected TUS items. The retrospective debriefing questionnaire was conducted immediately following the TUS questionnaire for the first 20 percent of respondents in each language who agreed to the additional questions. This followup questionnaire probed respondents’ understanding of 13 TUS

² We differentiate between the interviews conducted with native English speakers in the first round of data collection and those conducted with bilingual speakers in the second round by referring to the former as “English only” and the latter as “English bilingual.”

items and concepts, listed in Table 1 below. NCI chose to include these particular TUS items in the retrospective questionnaire either because of a specific interest in them, or in most cases because those items had been identified as problematic during the 2003 cognitive testing of the translated items (the reasons each specific item was included are also listed in Table 1). The retrospective debriefing questions asked, for example, what certain words or phrases meant to respondents (e.g., “regular,” “light,” “snuff”); how easy or difficult it was for them to answer certain questions (e.g., how old they were when they first started smoking, how many cigarettes they smoke each day, the rules about smoking in their homes) and to describe in more detail their answers to certain questions (e.g., the methods they used to quit smoking). Because we knew that telephone interviewers, not more senior-level project staff, would conduct the retrospective debriefing questionnaire, we kept the questions short and limited the number of open-ended followup probes. Appendixes 1 through 5 contain the debriefing questionnaire in English, Chinese, Korean, Spanish, and Vietnamese.

2.3 Interviewer Debriefing Sessions

Another way to get more in-depth information about how well (or not) the translations were working was to learn interviewers’ perspectives on administering the instruments. At the end of data collection, we met with 17 (6 English-language, 2 Cantonese, 2 Korean, 3 Mandarin, 2 Spanish, and 2 Vietnamese) interviewers in a series of five debriefing sessions. During these discussions, we asked interviewers to tell us which items either they themselves consistently had trouble asking, or that respondents consistently had trouble understanding or answering. We also asked for interviewers’ insights into the reasons for the problematic items and any suggestions they had for improvement. Each of these sessions was tape recorded and detailed notes were taken during each. After the sessions were over, the notes were finalized, using the tapes to fill in any gaps.

2.4 Behavior Coding

The “systematic coding of interviewer and respondent behavior” (Fowler and Cannell, 1996) during the TUS interview provided another method for identifying problems with the survey. The data were generated by coders listening to the taped TUS interviews and applying one interviewer code and at least one respondent code for certain (but not all) TUS items. We employed several methods for identifying which TUS items to code. The first was to include almost all the items mentioned as problematic by at least one interviewer in the interviewer debriefing sessions. This yielded 18 items. We also included 10 items from the retrospective

Table 1. TUS items asked about in the retrospective debriefing questionnaire

TUS item	Corresponding retrospective debriefing questionnaire item(s)	Reason for asking about the TUS item
A2. How old were you when you first started smoking cigarettes FAIRLY REGULARLY?	Q1. When I asked you how old you were when you first started smoking cigarettes fairly regularly, how easy or difficult was it for you to answer? Would you say it was very easy, somewhat easy, somewhat difficult, or very difficult? Q1a. [IF RESPONDENT INDICATED DIFFICULTY] What was difficult about figuring out how old you were when you first started smoking cigarettes fairly regularly? [IF NEEDED, Can you tell me more about that?]	NCI interested in how easily respondents can remember the age at which they started smoking fairly regularly
B1/C1a/H4. On the average, about how many cigarettes do you now smoke each day?	Q2-1/2-2/2-3. When I asked you how many cigarettes you smoke each day, how easy or difficult was it for you to answer? Would you say it was very easy, somewhat easy, somewhat difficult, or very difficult? Q2-1a/2-2a/2-3a. What was difficult about figuring out how many cigarettes you smoke each day? [IF NEEDED, Can you tell me more about that?]	Some cognitive interview respondents appeared to underestimate the average number of cigarettes they smoke each day
B2/C2/H7a. Is your usual cigarette brand menthol or non-menthol?	Q3a/b. How sure are you that your usual brand of cigarettes (is/was) menthol/non-menthol? Would you say very sure, somewhat sure, or not sure at all?	NCI interested in how sure respondents are that they smoke menthol or non-menthol cigarettes
B3/C3/H7b. What type of cigarette do you now smoke most often—a regular, a light, an ultralight, or some other type?	Q4a/4b/4c. When I asked you about the type of cigarette you smoke, I used the term “regular” cigarettes. What is it that makes a cigarette “regular”/“full flavor”/“light”? [IF NEEDED, Can you tell me more about that?]	Chinese-speaking cognitive interview respondents often interpreted “regular” to mean “usual” or “ordinary” rather than as referring to the strength of the cigarette
B5cB/H9B. Even in a bad rainstorm, if you ran out of cigarettes, you would probably go to the store to get some more.	Q5. You said if you ran out of cigarettes you would not go out in a bad rainstorm to buy more. Is that because you wouldn’t want to go out in the rain or is it because you make sure you don’t run out of cigarettes?	Some cognitive interview respondents indicated they would never run out of cigarettes, which means a “no” answer to the TUS item is not accurately measuring nicotine dependence in those cases
Up to three quit methods from Sections E or H that respondents reported having tried	Q6-1a/6-1b/6-1c/6-2a/6-2b/6-2c. You said you tried to quit using [FIRST/SECOND/THIRD QUIT METHOD]. Please tell me about that method and how it worked for you. [IF NEEDED, Can you tell me more about that?]	NCI interested in any irregularities about the methods people use to quit smoking
F1/H6a. In the PAST 12 MONTHS, have you seen a medical doctor, dentist, nurse, or other health professional?	Q7. When I asked you whether you had seen a medical doctor, nurse, dentist, or other health professional in the past 12 months, were you thinking only about visits for your own health, visits for other family members, or some other type of visits? [MARK ALL THAT APPLY]	Some cognitive interview respondents who said yes to F1 indicated the visit had been for someone else’s health instead of their own

Table 1. TUS items asked about in the retrospective debriefing questionnaire (continued)

TUS item	Corresponding retrospective debriefing questionnaire item(s)	Reason for asking about the TUS item
J1a. Have you EVER used a pipe, cigar, chewing tobacco, or snuff, EVEN ONE TIME?	Q8. Before this interview, had you ever heard the word “snuff”? Q8a. In your mind, what is snuff? [IF NEEDED, Can you tell me more about that?]	Korean-speaking cognitive interview respondents did not recognize “snuff”
K4. In a usual week, does ANYONE who lives here, including yourself, smoke cigarettes, cigars, or pipes anywhere inside this home?	Q9. I asked you whether anyone smokes cigarettes, cigars, or pipes inside your home. When thinking about who does or doesn’t smoke inside your home, who did you include? [IF NEEDED, Can you tell me more about that?]	Cognitive interview respondents were inconsistent about who was included in their answers to questions about household smoking habits
K6. Which statement best describes the rules about smoking INSIDE YOUR HOME? No one is allowed to smoke anywhere INSIDE YOUR HOME, smoking is allowed in some places or at some times INSIDE YOUR HOME, smoking is permitted anywhere INSIDE YOUR HOME.	Q9a. I also asked you what the rules about smoking inside your home are. Who do those rules apply to? [IF NEEDED, Do the rules about smoking in your home apply only to the people who live there or do they apply to ANYONE who comes into your home?]	Cognitive interview respondents were inconsistent about who was included in their answers to questions about household smoking habits
K7. In your opinion, how easy is it for minors to buy cigarettes and other tobacco products in your community? Very easy, somewhat easy, somewhat difficult, or very difficult.	Q10a. I asked you a question about the ease with which you think minors can buy cigarettes in your community. In your mind, what age range do minors fall into? Q10b. The question asked about buying cigarettes in your community. What do you think we meant by “your community”? [IF NEEDED, Can you tell me more about that?]	Cognitive interview respondents’ definitions of “minor” were inconsistent and Vietnamese-speaking respondents had trouble with the translation of “community”
K9. In bars and cocktail lounges, do you THINK that smoking should be allowed in all areas, allowed in some areas, or not allowed at all?	Q11. When I asked you whether you thought smoking should be allowed in bars or cocktail lounges, how easy or difficult was it for you to answer? Would you say it was very easy, somewhat easy, somewhat difficult, or very difficult? Q11a. What was difficult about deciding whether you think smoking should be allowed in bars and cocktail lounges? [IF NEEDED, Can you tell me more about that?]	NCI interested in how easily respondents were able to choose from among these options, particularly if they were asked the followup question forcing them to choose between “allowed in all areas” and “not allowed at all” after answering “allowed in some areas” to the original question
Whether respondents were thinking of their smoking experiences in the U.S., the country they had previously lived in, or both when answering TUS questions	Q12. When answering questions about your smoking habits, were you thinking about your experiences in the U.S., in the country you lived in previously, or both?	Some cognitive interview respondents appeared to separate their smoking experiences in their native countries from those in the U.S. and report only on one or the other

debriefing questionnaire (all but the questions about quit methods³ and which smoking experience respondents were thinking of when answering the TUS⁴). We examined the TUS frequency distributions to see if any items had unusual distributions or distributions that varied widely across the languages. None did, so no additional items were included for behavior coding based on that review. Finally, because of interest from and importance within the field of tobacco use research, we selected the four nicotine dependence scale items (specifically, NCI was concerned respondents may be offended by these items or view them as too personal) and two items from Section D about quit attempts. The final behavior coding form included a total of 32 items, listed in Table 2 below.

2.5 Behavior Coder Debriefing Sessions

We conducted four debriefing sessions with the behavior coders (one each with the Chinese, Vietnamese, Korean, and Spanish-speaking coders), during which we asked them to provide insight into the problems identified during the behavior coding process.

3. QUESTIONNAIRE DESIGN

The TUS is a well-established questionnaire that has been administered many times in the past 13 years. When administered by the Census Bureau, it is a computer-assisted interview (CAI) instrument. That is, the questions, response options, skip patterns, and interviewer instructions are programmed into a computer that the interviewer then uses to administer the survey. The pilot study schedule and budget did not include a programming task. Therefore, although we did not make changes to the survey items themselves, it was necessary to transform the CAI instrument into a paper-and-pencil instrument that could be administered easily by our telephone interviewers. Some of this work was done when preparing the cognitive interview protocols (e.g., simplifying or clarifying the interviewer instructions, removing some of the range check questions that were redundant with tested items, deleting all programming language that would not be readily understood by interviewers). For the pilot study, we further refined the paper-and-pencil instrument by keeping series of items together on one page, putting boxes around all interviewer instructions, adding in the page numbers to skip pattern instructions, and further clarifying any confusing interviewer instructions.

³ We chose not to behavior code any quit methods items because no one item in this series of about 20 stood out as problematic. Rather, NCI was concerned with respondents' overall understanding of and familiarity with the quit methods listed. Results from the retrospective debriefing questionnaire adequately addressed that concern without the need for behavior coding.

⁴ Only the retrospective debriefing questionnaire asked whether respondents were thinking of their smoking experiences in the United States, their native country, or both when answering the TUS questions. Thus, no corresponding TUS item about this issue could be behavior coded.

Table 2. TUS items selected for behavior coding

*A1. Have you smoked at least 100 cigarettes in your entire life?	+F1/H6a. In the PAST 12 MONTHS, have you seen a medical doctor, dentist, nurse, or other health professional?
+A2. How old were you when you first started smoking cigarettes FAIRLY REGULARLY?	*F5. Which health professional that you saw in the past 12 months spent the MOST time advising you about quitting smoking?
+B1/C1a/H4. On the average, about how many cigarettes do you now smoke each day?	*G3. Overall, on a scale from 1 to 10 where 1 is NOT AT ALL interested and 10 is EXTREMELY interested, how interested are you in quitting smoking?
+B2/C2/H7a. Is your usual cigarette brand menthol or non-menthol?	*G4. If you did try to quit smoking altogether in the next 6 months, how LIKELY do you think you would be to succeed—not at all, a little likely, somewhat likely, or very likely?
+B3/C3/H7b. What type of cigarette do you now smoke most often—a regular, a light, an ultralight, or some other type?	*H7c(2). In the year before you quit smoking, please tell me if each of the following was true for YOU. You smoked (lights/ultralights) as a way to try to quit smoking.
*B5a/C5a/H8a. How soon after you wake up do you typically smoke your first cigarette of the day?	+J1a. Have you EVER used a pipe, cigar, chewing tobacco, or snuff, EVEN ONE TIME?
#B5cA/H9A. Please tell me if EACH of the following statements is true for you. You have trouble going more than a few hours without smoking.	*KSCR. Do you currently work for pay?
+#B5cB/H9B. Even in a bad rainstorm, if you ran out of cigarettes, you would probably go to the store to get some more.	*K1. Which of these best describes the area in which you work MOST of the time? Mainly work indoors, mainly work outdoors, travel to different buildings or sites, in a motor vehicle, somewhere else.
#B5cC/H9C. When you go without smoking for a few hours, you experience craving.	*K1b. Do you mainly work in an office building, in your own home, in someone else's home, or in another indoor place? [IF NEEDED: You said that you now work indoors.]
#B5cD/H9D. If you were in a public place where smoking isn't allowed, you'd probably go outside to smoke a cigarette, even in cold or rainy weather.	*K3a. Which of these best describes your place of work's smoking policy for INDOOR PUBLIC OR COMMON AREAS, such as lobbies, rest rooms, and lunch rooms? Not allowed in ANY public areas, allowed in SOME public areas, allowed in ALL public areas.
*B6b/c and C6b/c. What price did you pay for the LAST pack/carton of cigarettes you bought? Please report the cost after using discounts or coupons.	+K4. In a usual week, does ANYONE who lives here, including yourself, smoke cigarettes, cigars, or pipes anywhere inside this home?
*B7/C7d/H5. What is the total number of years you have smoked EVERY DAY? Do not include any time you stayed off cigarettes for 6 months or longer.	*K5a. In a usual week, how many people WHO LIVE here, including yourself, smoke cigarettes, cigars, or pipes anywhere INSIDE this home?
*B9/C9H12. Have you EVER SWITCHED from a stronger cigarette to a lighter cigarette for at least 6 months?	*K5b. Usually, about how many days per week do people WHO LIVE here smoke anywhere INSIDE this home?
*B11(1)/C11(A). I'm going to read you some statements about how LIGHT cigarettes compare to REGULAR cigarettes. For each one, please tell me whether YOU think it is true, false, or you don't know. Light cigarettes give you less tar or nicotine than regular cigarettes.	+K6. Which statement best describes the rules about smoking INSIDE YOUR HOME? No one is allowed to smoke anywhere INSIDE YOUR HOME, smoking is allowed in some places or at some times INSIDE YOUR HOME, smoking is permitted anywhere INSIDE YOUR HOME.
#Da. During the PAST 12 MONTHS, have you TRIED to QUIT smoking COMPLETELY?	+K7. In your opinion, how easy is it for minors to buy cigarettes and other tobacco products in your community? Very easy, somewhat easy, somewhat difficult, or very difficult.
#D1. Have you EVER stopped smoking for one day or longer BECAUSE YOU WERE TRYING TO QUIT SMOKING?	+K9. In bars and cocktail lounges, do you THINK that smoking should be allowed in all areas, allowed in some areas, or not allowed at all?

*Item identified as problematic by the interviewers.

+Item asked about on the retrospective debriefing questionnaire.

#Item of general interest to the tobacco research community.

There are four places where the paper-and-pencil instrument differs in some key aspect from the CAI. First, it does not contain the screening questions that appear at the front of the CAI. Second, the first items in Section J (up to J4) have been rearranged to facilitate their administration on paper. Given the complicated skip patterns and fill requirements, inserting them into the paper-and-pencil instrument as they had appeared in the CAI would have invited a much higher error rate in administering those items than we were willing to accept. (See the CAI version in Appendix 43 and the paper-and-pencil version in Appendix 44 to compare the two Section Js.) Third, we added an item at the beginning of Section K (KSCR) that asks about respondents' work status. When the TUS is administered as part of the CPS, the labor force information is collected and used in the CAI program to display the proper items in Section K. Conducting the TUS as a stand-alone survey required another means for obtaining work status. Finally, at the end of the paper-and-pencil instrument, we added a few demographic questions (years in the United States, education level, and race/ethnicity) that were not collected by the recruiting screener.

We also made an important formatting change to both the CAI and the paper-and-pencil instruments. In the original CAI version, words that interviewers should emphasize when reading them are capitalized. However, survey convention holds that capitalized words should not be read. Furthermore, capitalization does not exist in written Chinese and Korean. We used underlining, instead of capitalization, to indicate where emphasis should be added.

During data collection, we conducted the English-only interviews first so that we could test our procedures and make any adjustments for the target language data collection. English-language interviewers did find a few small errors in questionnaire skip patterns and instruction boxes, and we fixed those before the second round of data collection. In addition, we incorporated into the target language interviewer training ways to address problems encountered by the English-language interviewers (e.g., confusion about whether to start at Da or D1 in Section D of the questionnaire).

4. SAMPLE SELECTION

We used four different approaches to find the very specific types of respondents we needed—namely, those who spoke fluently one of the languages of interest, currently smoked tobacco cigarettes (as opposed to cigars, pipes, or clove cigarettes) or had quit within the past 5 years, and were willing to have the interview tape recorded. All respondents were provided with a \$20 incentive for their participation.

4.1 English-Language RDD Sample

For the interviews that were conducted in English with (presumably) native speakers, we purchased a random digit dialing (RDD) sample and screened for eligibility. (Appendix 6 contains the English-language RDD screening questionnaire.) Seventy-one interviews were completed in English from the RDD sample.

4.2 Vendor-Purchased Target Language Sample

We anticipated that finding respondents who spoke the target languages via an RDD sample would be time consuming and costly. We decided, instead, to purchase a list sample from an outside vendor who has experience recruiting respondents from different racial, cultural, and ethnic backgrounds. The vendor acquired lists of ethnic households known to speak each of the five languages, telephoned the households, and administered the screening questionnaire. (Appendixes 7 through 11 contain the English, Chinese, Korean, Spanish, and Vietnamese screeners.) The vendor recruited eligible respondents either directly, if they were the household members contacted first by the interviewers, or indirectly, if the household respondent provided the names and confirmed the eligibility of other household members. Westat received from the vendor a list of 140 eligible respondents in each of the five languages (700 total⁵). We completed 325 interviews with this approach, 33 of them in English with bilingual speakers. Table 3 shows these results by language. One flaw in this design was that some of the household members identified by the main respondent as eligible and willing to participate actually refused when contacted by Westat. In the future, we would purchase a larger sample (depending on the required number of completes) to accommodate this problem.

Table 3. Interview results from vendor-purchased sample, by language

Language	Sample size	Target language goal	Target language interviews	English-bilingual goal	English-bilingual interviews	Total interviews
Cantonese	140	50	67	20	5	72
Korean	140	50	64	20	1	65
Mandarin	140	50	57	20	4	61
Spanish	140	50	49	20	18	67
Vietnamese	140	50	52	20	4	56
Total	700	250	289	100	32	321

4.3 Surname List Sample

We assumed we would be able to find bilingual speakers willing to take the survey in English among the 700 respondents provided by the ethnic recruiting vendor. For the Spanish-language respondents, such an approach was effective. However, that strategy did not pan out for the Asian languages. (As Table 3 shows, we easily reached our goal of 50 target language interviews each using the vendor-purchased sample, but fell far short of the 20 English-bilingual interviews needed in each target language.) At the end of the first 2 weeks of data collection, we had no English-language completes in Mandarin and Korean, only three among the Cantonese and one for the Vietnamese. In contrast, we had 15 English-language completes among the Spanish-

⁵ The vendor used 18,131 working telephone numbers to achieve the goal of 700.

speaking respondents. In the future, we would incorporate into the screener questions about respondents' English-speaking abilities.

To recruit the bilingual Asian-language speakers, we purchased 2,000 names each from vendor-provided Vietnamese, Chinese, and Korean surname lists. Since the Chinese surname list was not sold by dialect, we randomly assigned half the names to Cantonese and half to Mandarin. We released 1,000 cases in each language, but given the strict recruiting criteria (bilingual speakers comfortable enough to take the interview in English who also smoked or recently quit smoking and were willing to have the interview tape recorded), we were still only able to complete 13 English-bilingual interviews from the surname lists (3 in Cantonese, 5 in Korean, 2 in Mandarin, and 3 in Vietnamese). (Appendixes 12 and 13 contain the screeners used with the surname sample.)

4.4 Friend-of-Friend Sample

We completed a small number of interviews with respondents we found by means other than the three described above. Twelve interviews were conducted with respondents identified by screened household members who during an interview mentioned a friend, neighbor, co-worker, or someone else who they felt may be eligible and interested in participating. Eight of the 12 were conducted in English (5 with Mandarin speakers, 2 with Vietnamese speakers, and 1 with a Spanish speaker), 2 were conducted in Korean, and 1 was conducted in Spanish. One Spanish-language interview was conducted with a respondent who was a friend of one of the interviewers.

4.5 Level of Effort

Table 4 shows the level of effort expended to reach the completion goals in each language, including the number of cases released for work and how many were worked to reach the goal of 70 completes. These numbers are displayed by sample (English RDD, vendor-purchased, surname list, and friend-of-friend). Given that this was a paper study for which we were aiming simply to reach our completes, some information about level of effort is sometimes missing. As seen in Table 4, the most difficult task was finding Asian-language speaking respondents who currently smoke or had quit within the past 5 years and were willing to take the interview in English.

Table 4. Level of effort expended during data collection, by sample type

Stage of data collection	English RDD	Vendor-purchased*					Surname list				Friend-of-friend+
		Cantonese	Korean	Mandarin	Spanish	Vietnamese	Cantonese	Korean	Mandarin	Vietnamese	
Number of households released	2029	140	140	140	140	140	1000	1000	1000	1000	NA
Number of households worked	1603	140	140	140	140	140	1000	1000	1000	1000	12
Number of households contacted	920	135	127	125	117	131	727	—	—	—	12
Number of respondents screened	450	87	71	70	79	67	502	—	—	—	12
Number of respondents found eligible	74	78	66	62	71	57	4	—	—	—	12
Number of completed interviews	71	72	65	61	67	56	3	5	2	3	12

* Includes target-language and English-bilingual interviews. Of the 700 cases total, all were worked, but we do not have information about the outcome (whether contacted, screened, or found eligible) for 2 Korean, 1 Mandarin, 3 Spanish, and 2 Vietnamese cases.

+ For all languages.

— Data not available.

4.6 Respondent Recruitment Materials and Procedures

Once the eligible respondent was identified (either by Westat interviewers, in the case of the RDD and surname samples, or by the outside vendor, in the case of the list sample), Westat interviewers administered a survey introduction that described in more detail the purpose of the study and its voluntary nature, respondents' confidentiality rights, and survey length. The introduction also reminded respondents of the \$20 incentive and requested permission to tape record the interview. (Appendixes 14, 15, and 16 contain the English-language RDD, list sample, and surname sample introductory scripts, respectively.) If respondents were available, the interviewer immediately administered the survey and a thank you letter was sent with the incentive after completion of the interview. If the respondent was not available, the interviewer scheduled a callback appointment, and a reminder letter was sent with the incentive. (Appendixes 17 and 18 contain the reminder and thank you letters, respectively.) All of these recruiting materials (except the RDD and surname sample introductory scripts) were translated into each of the target languages, as well (Appendixes 19 through 30).

5. INTERVIEWER RECRUITMENT AND TRAINING

5.1 Hiring

Six weeks prior to the start of data collection, Westat ran advertisements 3 days a week in two local English-language newspapers in the Citrus Heights, California, area (where interviewing took place). The ads recruited for candidates fluent in English and one of the five other languages. Responses from Spanish- and Vietnamese-speaking candidates were good, while those from the other languages were light. It may be helpful next time to advertise in language newspapers, as well.

Of the 59 candidates (across all languages) who were invited for an information session and hiring interview, 28 attended. From the 28, we formed a training group of 21 (2 Cantonese/Mandarin speakers, 1 Cantonese only, 2 Korean, 4 Mandarin only, 5 Spanish, and 7 Vietnamese) plus four Spanish-speaking interviewers already employed at Westat.

5.2 Training

New hires attended two training sessions: a 4-hour session on general interviewing techniques, and an 8-hour project-specific training. The first session taught Westat telephone interviewing practices, along with general interview skills and techniques. Project training for the English-language data collection was held December 7, 2004 (TUS questionnaire), and December 9, 2004 (retrospective questionnaire), at the Westat Telephone Research Center (TRC) in Citrus Heights, California. Project training for the target language data collection was held January 29, 2005, at a Sacramento branch of the University of California, Davis. (The project training agendas for all three sessions appear in Appendixes 31 through 33.)

Session content was scripted and prepared before the training and presented verbatim to the interviewers. Interviewer training was divided into nine sessions. The first session provided an introduction to and overview of the study and research goals. Four sessions were devoted to describing the data collection procedures, such as administering a paper questionnaire, using call records, learning the answers to frequently-asked-questions (Appendix 34 through 48), operating tape recorders, and avoiding refusals. Four sessions were spent going over the questionnaires and allowing time for interviewers to practice administering them. During the interactive sessions, interviewers took turns asking the questions and the trainer, acting as the respondent, gave scripted answers. The role play sessions paired trainees with each other, with one acting as the interviewer and the other as the respondent, to practice additional scripted interviews. For both the interactive and role play interviews, the scripted answers simulated specific situations and problems that interviewers might encounter in actual interviews and provided practice with a variety of likely skip pattern scenarios. (The training manuals were delivered separately to NCI at the time of each training.)

Throughout the training, trainers observed interviewer performance on interactive exercises and role plays. During breaks between sessions, the trainers shared observations, evaluated interviewer progress, and identified any issues that needed further explanation. Individuals who failed to meet performance expectations during the training were released from the project before data collection began.

We note that for future endeavors like this one, we will create a 12-hour, instead of 8-hour, training. Given the inexperience of the interviewers, together with, in some cases, a complete lack of familiarity with surveys, trainees will benefit from the additional practice time during training. In fact, the start of data collection was delayed by one day so that trainees could spend more time practicing scripted interviews on January 30. Likewise, the trainers would have liked more information about the communication norms within the various cultures of the bilingual interviewers. For example, one trainer noted that a Korean interviewer who kept her head down during the entire training looked as if she were not paying attention. Later, the trainer was told that Korean women tend not to draw attention to themselves in group settings. The trainers also noted that the bilingual interviewers were more hesitant to ask questions in front of the group than are native English-speaking interviewers (who themselves can sometimes be shy in those situations).

During data collection, we also held a variety of training sessions as needed by the interviewers. For example, some of the newer interviewers experienced a high number of refusals from respondents. These interviewers were provided with additional coaching on refusal avoidance techniques, such as identifying why respondents refuse, being prepared to respond, and tailoring responses to the refusals. Interviewers were also allowed to monitor other more experienced interviewers, both on the TUS project and other Westat studies.

5.3 Retention

By the end of the initial project training, we had lost three Vietnamese interviewers. One never attended the training, another did not return after a scheduled lunch break, and a third failed a

language fluency test administered during the training. Also, two interviewers who had indicated they spoke both Cantonese and Mandarin Chinese failed the Cantonese fluency test. We began the field period with 22 interviewers (1 Cantonese, 2 Korean, 6 Mandarin, 9 Spanish, and 4 Vietnamese). Early in data collection, the one Cantonese-speaking interviewer was released because he was not fluent enough to interview in that language. On February 5, 2005, we trained two Cantonese-speaking interviewers who were already working in our Rockville, Maryland, facility. Besides the two Cantonese-speaking interviewers in Rockville, the only other veteran Westat interviewers were four Spanish speakers and one Mandarin speaker. The remaining interviewers were new to Westat and had no previous interviewing experience.

At the end of data collection, 15 interviewers were working on the project (3 Cantonese, 2 Korean, 2 Mandarin, 6 Spanish, and 2 Vietnamese). Throughout the hiring, training, and data collection stages, we lost candidates and interviewers for a variety of reasons, none of which appeared particularly related to cultural differences. At the initial stages, some candidates wanted more or different hours, higher pay, or a longer term project than was being offered. Others did not possess adequate language skills, including not being truly bilingual or an inability to read in either English or the designated language. The reasons we lost trainees were described above. During data collection, attendance problems, lack of interest in the work, scheduling conflicts, and various other factors all contributed to interviewer attrition. We note that Vietnamese-speaking interviewers seemed somewhat more lax about adhering to their work schedules than their counterparts in the other languages. In order to retain the Vietnamese speakers, supervisors relaxed the attendance policies somewhat.

6. DATA COLLECTION OPERATION AND PROCEDURES

6.1 Dates of Field Period

The first round of data collection for English-only interviews began December 20, 2004, 3 days after receiving approval of the study from the Office of Management and Budget. (As noted in Section 3, we did this to test procedures before launching the target language data collection effort.) Since interviewers had attended the TUS training almost 3 weeks earlier, a brief refresher training was held before actual interviewing began. English-only data collection ended on January 5, 2005. Data collection for Korean-, Mandarin Chinese-, and Spanish-language interviews began January 31, 2005, in Citrus Heights, California. Vietnamese interviewing began a few days later, on February 2, 2005, also in Citrus Heights. The delay occurred while we fixed font problems on the questionnaire (instead of displaying Vietnamese text, the printed questionnaires showed only gibberish) that were discovered during training. Cantonese-language interviewing began February 7, 2005, in Rockville, Maryland. Refusal conversion interviewing for all five languages began on February 18, 2005. Data collection closed on March 20, 2005.

6.2 Management, Staffing, and Scheduling

The telephone operations manager coordinated all interviewing activities with supervisory staff in the two TRCs. The supervisory staff consisted of three bilingual (or multilingual) team leaders, one in Mandarin/Cantonese, one in Vietnamese, and one in Spanish. (We were unable to find a candidate suitable for the Korean team leader position.) Interviewers were scheduled to work across all hours and days of the week the TRCs were open, with particularly heavy scheduling in the evenings and on weekends, when respondents were most likely to be home. Korean-speaking interviewers reported difficulty reaching respondents, many of whom were rarely available during the scheduled calling times. Based on what other household members told the interviewers, they speculated this occurred because these respondents were working long hours, sometimes in more than one job.

Chinese New Year's Eve (Tuesday, February 8) and New Year's Day (Wednesday, February 9) happened during the field period. This holiday is celebrated across many Asian ethnic groups and the interviewers felt it would be difficult to reach respondents during that time, especially New Year's Day. Furthermore, some Asian-language interviewers requested both days off. Generally, for American New Year's Eve, Westat stops calling at 6:00 p.m. and no calling is done on New Year's Day. For our study, Asian-language interviewing stopped at 2:00 p.m. Pacific Time on February 8 and did not resume again until February 10. The Spanish-speaking interviewers worked their regular hours on those 2 days. Also, no interviewers worked on Super Bowl Sunday.

6.3 Interviewer Monitoring

The team leaders regularly monitored interviewer performance by listening in on the interviews. Because most refusals occur at the point of contact, supervisors paid particular attention to the initial contact. Monitoring sessions lasted a minimum of 10 minutes, during which team leaders made notes of interviewers' strengths and weaknesses on a monitoring form. Team leaders discussed the results with each interviewer immediately following a monitoring session. They provided positive feedback along with pointers for improvement in areas such as gaining cooperation and probing. As noted in Section 4, the newer interviewers needed, and were provided with, special attention in refusal avoidance.

6.4 Confidentiality

All Westat personnel, including interviewers, professional staff, and consultants, signed a statement that they would maintain the confidentiality of all survey data (Appendix 39). During data collection, interviewers read the statement in Exhibit 1 to each respondent who was eligible and willing to participate in the study.

Exhibit 1. Statement of confidentiality read by interviewers to respondents

The information you give us will be kept confidential and will only be used for this study. Your answers will be written in an interview booklet and stored in a secure place. Your name will not be revealed to anyone outside the study and your answers will never be linked to your name. Only members of the research team will have access to your information.

6.5 Questionnaire Administration and Case Management

Interviews were conducted using paper-and-pencil versions of the questionnaire. Interviewers recorded the answers by hand onto the paper instrument and followed the skip patterns and interviewer instructions that appeared on each page. After each interview, they reviewed the recorded answers and corrected any errors (in some cases, this entailed calling respondents back to ask questions that had been missed because of an incorrectly administered skip pattern). Team leaders reviewed all completed questionnaires to ensure they had been administered properly.

Information about each case (e.g., respondent name, if available, telephone number, time zone, state, etc.) and space to log each call attempt were displayed on paper call records generated for each case. Each time they made a call into the household, regardless of the result of that call, interviewers recorded the day, date, time, code indicating what happened, notes about the call, and their initials. The call record also served as a folder containing any materials associated with the case such as a paper questionnaire, screener, introductory script, cassette tape, and incentive mailout form. Call records were color coded by language (e.g., blue for Vietnamese, yellow for Cantonese, green for Mandarin) so that an interviewer would not receive cases for households that spoke languages other than that in which the interviewer was fluent.

6.6 Interview Procedures

Once a respondent agreed to participate, interviewers asked permission to tape record the interview. If the respondent refused to be taped, the interview was terminated because, in order to perform the behavior coding, we needed a tape recording of every completed interview. We were concerned that many respondents would refuse to be tape recorded, but our fears were unfounded. Less than 15 respondents refused to participate because of this requirement.

We did not perform any tracing on the list portion of the sample. However, if a list sample respondent had moved and the person (or telephone company recording) reached at the telephone number called by the interviewer had that respondent's new telephone number, the interviewer noted the new number on the call record and thereafter tried to reach the respondent at the new number.

In households where more than one person had been identified as eligible in the list sample, respondents were trained to ask immediately for the next person if the first person was not available.

If, during the course of interviewing one list sample respondent, interviewers discovered that someone else in the household who was not in the list sample was eligible, the interviewer screened the additional member and, if that person agreed, conducted the interview with him or her. No script was created for these situations, but interviewers verified that the additional member was 18 years old or over and had smoked in the past 5 years before proceeding with the interview.

To reach our goal of 20 English-language completes with bilingual speakers of each language, we started each interview with list sample respondents in English. If the respondent could not understand English or answer the survey in English, the interviewer then switched to the designated language. As noted in Section 3, this approach did not yield as many English-language bilingual interviews as anticipated. To increase our English-language bilingual completes, we purchased a surname sample list and began calling those cases in early March (March 1, 2005 in Rockville, and March 3 in Citrus Heights).

6.7 Issues and Problems

Throughout data collection, but most particularly at the start when interviewers were still new to the study themselves, we encountered respondent resistance to several aspects of the interview. As mentioned before, some were hesitant or refused to grant permission to tape record the interview. Some were reluctant to talk to a government agency. Some respondents even balked at the incentive payment, saying they were insulted to have it offered to them (this was more common among the Korean and Vietnamese respondents). Some of these respondents explained that if they chose to participate, it would be out of a sense of altruism, not for so base a reason as money. These issues occurred across the five languages. However, Mandarin-speaking interviewers, specifically, encountered a different problem, which was household “gatekeepers” who blocked interviewers from talking with other eligible respondents in that particular household. TRC team leaders provided interviewers with a variety of techniques to gain the cooperation of these gatekeepers, including establishing rapport, explaining the importance of the study, and emphasizing the incentive when appropriate.

We also encountered some problems reaching list sample respondents. As described in Section 3, when household members were screened by the vendor who provided the list sample, they were asked to name anyone else in that household who fit the recruiting criteria. Those people were then included in the list sample, but were not always aware that their fellow household member had listed them as eligible for the study. As a result, when Westat interviewers reached some of these people, they expressed suspicion about how we got their name and number, and how we knew they smoke. Some list sample respondents thought the screening interview with the vendor was what they had agreed to complete in exchange for the incentive, and reacted angrily when Westat called, not wanting to complete the TUS interview because they had not yet received their payment. Interviewers were trained to respond with patience and explanations in each of

these situations. In the latter case, we would sometimes send the incentive before conducting the interview as a way to regain trust.

Early in the field period, we noticed a high number of hang ups and refusals from Mandarin and Cantonese respondents. We reviewed the words used in the introduction to the interview and discovered that some of them had been translated into Chinese words for “investigation” (for study, survey, or interview), “national” and “U.S.” (for National Institutes of Health). Interviewers also reported that respondents who did not hang up right away asked them if they were calling from U.S. immigration services or some other government agency. We immediately revised those sections of the introduction and started using the revisions on February 14, 2005. We noticed a significant drop in refusals and hang ups after that. Exhibit 2 shows the English words used in the introduction, the English translation of the original equivalents in Chinese, and the English translation of the revised equivalent words.

Exhibit 2. English translation of original and revised Chinese words used in interview introduction

English	English translation of original Chinese	English translation of revised Chinese
A research study about smoking and health	An investigation about smoking and health	An interview about smoking and health
National Institutes of Health	U.S. National Health Organization	National Health Institutes
Westat, the survey research company	Westat is an investigation company	Westat is a research company
By answering the survey questions	Your answers to the investigation	Your answers to the interview
I work for Westat, the survey research company	I’m an investigator from Westat	I’m an interviewer from Westat
You will be paid \$20 to participate in the survey	Those who participate in this investigation can receive \$20	Those who participate in this interview can receive \$20

We heard from the Spanish-, Mandarin-, and Korean-speaking interviewers that many of their respondents were under the impression that by agreeing to be interviewed they would receive information about or be enrolled in a program to quit smoking. They were disappointed and, in some cases, upset, when interviewers did not provide such information. To address this problem, NCI granted permission for Westat to give respondents NCI’s Smoking Quitline (1-800-4CANCER) and the smokefree.gov web site address. Interviewers were instructed to stress that the interview is about tobacco use and only provide the quit information at the end of the interview to respondents who requested the information.

6.8 Data Collection Results

Since our aim was not to interview a representative group of respondents or generalize the results to a larger population, we simply called through each of our samples until reaching around 70 in

each language. Thus, we did not apply some of the rules normally associated with telephone data collection such as working the sample evenly, ensuring each case is called a certain number of times before closing it out, and going to extraordinary measures to contact hard-to-reach cases. We succeeded (and sometimes exceeded) the goal of 50 completes per language in that target language. However, we did not always reach the 20 English-bilingual completes per language. To allow time for the behavior coding (and because the reason for conducting the English-language bilingual interviews was secondary to the overall study goals), NCI granted permission to end data collection before we completed 20 English-bilingual interviews in every language.

Table 5 shows the number of completed interviews within each target language grouping. The second column shows the number of target language completes. The goal of 50 in each language was met or exceeded. The third column shows the number of English-bilingual interviews with speakers of each target language. We met our goal of 20 such interviews only with Spanish speakers. The last column shows the total number of interviews. We met our goal of 70 in all languages but Vietnamese.

Table 5. Number of target language and bilingual completes by designated language

Language	Number of target language completes	Number of English-bilingual completes with speakers of the target language	Total number of completes
Cantonese	67	8	75
Korean	66	6	72
Mandarin	57	11	68
Spanish	51	20	71
Vietnamese	52	9	61

Table 6 shows the number of retrospective debriefing interviews completed in each language. In this table we combined the English-only with English-bilingual interviews because that is how the data were analyzed (see Section 8 for more detail). We met or exceeded our goal of 20 percent of such interviews in all languages except Vietnamese.

Table 6. Number of retrospective interviews completed in each language

Language	Number of completed retrospective interviews
English*	43
Cantonese	12
Korean	12
Mandarin	18
Spanish	25
Vietnamese	7

* English-only and English-bilingual combined.

Table 7 shows the mean time it took to complete interviews in each language. The interviews that included the retrospective debriefing interview are incorporated into these results because we were unable to separate out the time to complete the TUS interview from the time to complete the retrospective interview. The mean time to complete an interview in each of the target language groupings was higher than to complete one in English. This has been the case for other Westat studies as well. We attribute this, in part, to the idea that translations of English-language instruments may generally be longer than the original (e.g., more words are needed to translate concepts that may not be an integral part of the translated language or its associated culture). In addition, the Spanish- and Vietnamese-speaking interviewers told us that they felt their interviews were taking an especially long time because their respondents tended to engage in chit-chat between questions or while answering the questions. The behavior coders confirmed this observation.

Table 7. Mean time to complete an interview, by language*

Language	Mean interview administration time
English+	25.2 minutes
Cantonese	27.5 minutes
Korean	26.3 minutes
Mandarin	29.5 minutes
Spanish	31.5 minutes
Vietnamese	38.7 minutes

* Includes time to complete the retrospective debriefing questionnaire, where applicable.
+ English-only and English-bilingual combined.

6.9 Respondent Demographics

Table 8 shows respondent demographics for the completed interviews in each language. (Note that the number of cases for which data are missing or the respondent answered “don’t know” or “refused” is indicated with the word “Missing” on the same row as the name of the demographic variable being presented. For example, the number of cases missing from the 125 English language completes on the age variable is 17.)

The target language interviews appear to have been conducted more often with older respondents than did the English-language interviews. This is likely an artifact of the language criterion used during the screening process. We screened for respondents who were “more comfortable” speaking the target language than English. The telephone interviewers reported that, in their impression, many of the younger respondents they screened were either equally comfortable in both languages, or more comfortable in English than the target language. The interviewers further reported that it seemed as if younger respondents who were more comfortable in the target language would then be screened out at the smoking question because they did not smoke.

Table 8. Respondent demographics for all completed interviews, by language

Demographic characteristic	English* (n=125)	Cantonese (n=67)	Korean (n=66)	Mandarin (n=57)	Spanish (n=51)	Vietnamese (n=52)
Age	Missing=17	Missing=0	Missing=1	Missing=0	Missing=3	Missing=0
18 to 30	23.2%	3.0%	10.8%	5.3%	6.3%	1.9%
31 to 50	47.2%	38.8%	35.4%	43.8%	31.2%	53.9%
51 to 75	27.8%	53.7%	50.7%	49.2%	54.2%	40.4%
Over 75	1.8%	4.5%	3.1%	1.7%	8.3%	3.8%
Gender	Missing=9	Missing=0	Missing=0	Missing=0	Missing=2	Missing=0
Male	62.9%	92.5%	89.4%	93.0%	59.2%	94.2%
Female	37.1%	7.5%	10.6%	7.0%	40.8%	5.8%
Smoker type	Missing=0	Missing=0	Missing=0	Missing=0	Missing=0	Missing=0
Every day	73.6%	71.6%	81.8%	75.4%	70.6%	82.7%
Some days	11.2%	13.4%	9.1%	15.8%	17.7%	11.5%
Former	15.2%	14.9%	9.1%	8.8%	11.8%	5.8%
Ethnicity	Missing=4	Missing=0	Missing=0	Missing=0	Missing=0	Missing=1
Hispanic	16.0%	0%	1.5%	0%	100.0%	0%
Non-Hispanic	80.8%	100.0%	98.5%	100.0%	0%	98.1%
Race	Missing=18	Missing=0	Missing=0	Missing=0	Missing=27	Missing=1
Asian	30.4%	100.0%	100.0%	98.3%	29.4%	98.1%
Black/Afr. Am.	8.0%	0%	0%	1.8%	0%	0%
White	45.6%	0%	0%	0%	17.7%	0%
Other	1.6%	0%	0%	0%	0%	0%
Years in the U.S.	Missing=0	Missing=0	Missing=0	Missing=0	Missing=0	Missing=1
3 years or less	4.0%	4.5%	1.5%	7.0%	3.9%	1.9%
4 to 10 years	4.8%	13.4%	12.1%	26.3%	0%	23.1%
More than 10 years (but less than entire life)	27.2%	82.1%	84.9%	66.7%	70.6%	73.1%
Entire life	64.0%	0%	1.5%	0%	25.5%	0%
Education level	Missing=0	Missing=0	Missing=3	Missing=0	Missing=0	Missing=1
No formal schooling	0%	0%	0%	0%	3.9%	5.8%
8 th grade or less	4.0%	40.3%	4.6%	19.3%	33.3%	15.4%
High school but not graduated	8.8%	1.5%	0%	3.5%	13.7%	5.8%
High school graduate or GED	32.8%	40.3%	25.8%	26.3%	27.5%	38.5%
Some college, including 2-year degree	27.2%	1.5%	9.1%	5.3%	19.6%	19.2%
College graduate	20.0%	13.4%	50.0%	19.3%	0%	11.5%
Graduate degree	7.2%	3.0%	6.1%	26.3%	2.0%	1.9%

* English-only and English-bilingual combined.

Table 8 shows that far fewer women were interviewed in the target Asian languages than in Spanish or English. During the cognitive interviewing round, our survey language consultants

explained that women in Asian cultures are less likely to smoke, think of themselves as smokers if they do smoke, or reveal to others that they smoke.

As is expected, all or nearly all of the respondents who took the interview in English or the Asian languages were non-Hispanic. All of those who took the interview in Spanish were Hispanic. Most of the 16 percent of Hispanic respondents who took the interview in English were part of the English-bilingual group (as opposed to the English-only group). All or nearly all of respondents who took the interview in one of the Asian languages identified their race as Asian. Most of the 30 percent of Asian respondents who took the interview in English were part of the English-bilingual group. Interestingly, nearly 30 percent of respondents who took the interview in Spanish identified themselves as Hispanic and Asian.

Only one of the respondents (Korean-speaking) who took the interview in one of the Asian languages reported having lived in the United States his or her entire life. However, most have lived here for 10 years or more. In contrast, one-quarter of those who took the interview in Spanish reported living in the United States their entire lives (and almost three-quarters have lived here more than 10 years). Of the 54 English-bilingual respondents, 5 respondents reported living here 3 years or less; 6 reported living here between 4 and 10 years; 29 reported living here more than 10 years but not their entire lives; and only 14 have lived here their entire lives. Sixty-six of the 71 English-only respondents have lived here their entire lives and the rest have lived here more than 10 years.

For the most part, all target language respondents reported lower educational levels than did those who took the interview in English. However, across all six languages, the highest percentage of respondents with high school diplomas were Cantonese- and Vietnamese-language respondents; the highest percentage with college degrees were Korean-language respondents; and the highest percentage with graduate degrees were Mandarin-language respondents.

7. BEHAVIOR CODING

Once data collection was complete, we embarked on the behavior coding task. Behavior coding formed the core of this project. We used a set of codes to characterize interviewer and respondent behavior during each interview as a means of discovering problems with the translated questionnaires. The telephone interviews were conducted so that the behavior coding could be conducted, and the retrospective debriefing interview (which was not behavior coded, since we were not testing that questionnaire), interviewer, and coder debriefing sessions were conducted to supplement the quantitative behavior coding results.

This section describes the steps for completing the behavior coding task, including how we assembled the behavior coding team, developed the coding procedures, conducted training, and implemented quality control measures.

7.1 Hiring the Behavior Coding Team

Of course, the behavior coding task needed to be performed by coders fluent in both English and one or more of the designated languages. Knowledge of survey development and methodology was helpful, but not necessary. We first hired the services of an outside consultant who had previously conducted cognitive testing of the Vietnamese instrument.⁶ We asked him to assemble a team of coders in his area whom he would then help to train and take the lead in supervising. He in turn hired two behavior coders in each of the Asian languages and one in Spanish (the second Spanish-speaking coder is a permanent staff person at the Westat office in Rockville). Most of the coders had at least some translation experience and some were familiar with survey development methods. All resided in the San Francisco Bay area.

7.2 Training

A 3-hour training was held via teleconference with eight behavior coders and the supervisor on April 6, 2005.⁷ The training introduced the study and its purposes; explained what behavior coding is; provided detailed descriptions of each of the behavior codes and their uses, including numerous examples of when to apply them; and went over use of the behavior coding forms and all administrative procedures. (Appendix 40 contains the training agenda; Appendix 41 contains the lecture; and Appendix 42 contains the three coding forms used for every day, occasional, and former smokers, respectively.) Time was allocated for trainees to listen to a scripted (fake) interview and then discuss with each other and the trainer how they would code each item and why they would apply those particular codes. After the lecture session was over, trainees were instructed to listen to and code a practice tape on their own, then meet with a supervisor to go over the results before proceeding with the rest of their assigned tapes. After the coders had finished coding six tapes (three in English and three in the designated language), a debriefing session was held on April 18, 2005, to discuss any procedural difficulties or questions.

7.3 Procedures

We developed a list of codes to capture both interviewer and respondent behavior, with the rationale that difficulty exhibited by either person would hold clues to problems in the questionnaire.⁸ At the same time, we kept the number of codes low and the reasons for applying each code broad. The short list of codes would serve as indicators that some sort of problem

⁶ Mr. Ching Wong is fluent in Vietnamese, Cantonese, Mandarin Chinese, and English. He has more than 10 years' experience translating into Vietnamese government surveys and health education materials, as well as corporate marketing materials. He had previously consulted with Westat on the California Health Interview Survey (CHIS) and is a project coordinator with the University of California's Tobacco-Related Disease Research Program.

⁷ The Spanish-speaking Westat employee was trained in person on April 7 and one Korean-speaking coder whose wife delivered a baby on April 6 was trained in person the following week.

⁸ Our list of codes is based on one developed by Charles Cannell in the 1960s and still widely used today (Cannell, Fowler, & Marquis, 1968).

occurred. We would then learn more details about the problems indicated by the codes when debriefing the coders. This approach seemed more prudent than that of trying to anticipate all interactions and problem situations with a long list of detailed codes. We further found it useful to think of the respondent codes as differentiating between trouble with the question, and trouble with the answer. If the respondent was having trouble with the question, he or she may have asked the interviewer to restate it or explain what it was getting at. If the respondent was having trouble with his or her answer, that answer may have ended up being one that the interviewer was unable to properly record on the TUS questionnaire, or one that the respondent expressed clear uncertainty about. Table 9 shows the interviewer and respondent codes and provides an explanation of each. A more detailed description of the codes appears in Appendix 41.

We also decided to code only the first exchange between the interviewer and respondent (i.e., an interviewer behavior followed by a respondent behavior). The conversation related to a particular question may continue beyond the first exchange, but those further behaviors were not coded. Again, it was enough to simply capture the fact of a problem behavior, learning details about those problems from the coder debriefing sessions rather than the codes themselves. Finally, in those cases where interviewers had to call back into the household to re-ask questions because they had missed them in the first place, recorded them in error, or for some other reason, we instructed the coders to code the first taped interview only (not the re-interview). This technique allowed us to discover any problematic patterns in interviewer administration of the instrument.

Table 9. TUS behavior codes with explanations

Interviewer codes	Explanation of code
Question not read	Applied when the interviewer does not ask a question that should have been asked (the item was left blank if it was properly skipped)
Question read correctly	Applied when the interviewer asks the question either exactly as written, or close enough to its written form that the meaning of the question is not changed
Question read incorrectly	Applied when the interviewer fails to read the question as worded, either by leaving out important words and phrases, or rewording the question in some other way that changes the question's meaning
Respondent codes	
Interrupts	Applied when, for any reason, the respondent interrupts the interviewer's reading of the question
Requests clarification	Applied when the respondent says something to indicate he or she did not hear or understand the question, such as asking for a repeat of the question, asking the interviewer what the question or answer categories mean, or stating that he or she does not understand the question; in some cases, silence on the part of the respondent may indicate a request for clarification
Adequate answer	Applied when the respondent answers the question, and the answer can be recorded using the answer categories on the questionnaire
Problem with the answer	Applied when the respondent answers the question, but the answer does not fit the answer categories (e.g., gives a range instead of a precise number); when the respondent is obviously unsure of an answer; or when the respondent doesn't know the answer or refuses to answer

The three interviewer behavior codes were mutually exclusive—the interviewer either did not read the question, read it correctly, or read it incorrectly. It would be impossible for the interviewer to perform more than one of those behaviors at once. In contrast, the respondent codes overlap each other. For example, if a respondent interrupted a question reading to ask what a certain word or phrase meant, then the item was coded with “interrupts” and “requests clarification.” Or, if the respondent provided an answer that met the question objectives and could be recorded using the questionnaire response categories, but immediately (before the interviewer said anything) followed that answer with a question about what a word, phrase, or the entire question meant, that item was coded “adequate answer” and “requests clarification.” Coders were also instructed to consider respondent answer codes separately from the interviewer question codes. For example, if the interviewer read a question incorrectly, but the respondent’s answer could be recorded using the available response options on the questionnaire, and the answer met the objectives of the question being asked, then it was coded as an adequate answer.

7.4 Quality Control

In addition to the measures described in the section on behavior coding training above, we implemented several other procedures to ensure the quality of the behavior coding results was high. First, we asked the behavior coding team to code their English-language tapes before starting on the target language tapes. Similar to the approach we took in data collection, we assumed that addressing any problems or issues that arose during coding of the English-language interviews would offset similar problems during coding of the other language interviews. As it happened, no significant problems were identified during coding of the English-language tapes.

Throughout the behavior coding task, coders were encouraged to contact their supervisor or the project manager at Westat with questions and concerns. In addition, the supervisor randomly checked the results of each coders’ coding efforts (this was done on the English-language interviews for those languages he did not speak). He did not change results he disagreed with. Rather, he ensured that coders understood the purpose and uses of each code.

We had two coders behavior code 20 percent of the target language cases and 10 percent of the English-only interviews. We had the team double-code more of the target language interviews because we assumed they would contain more problems and hence be more difficult to code. We randomly chose the cases to be double-coded, split them in half between the two coders, and assigned a primary coder to each of them. After coding those cases, they then switched with their coding partner. We did not use this exercise to revise results. If there were differences, we retained the primary coder’s results. However, we did want some measure of how reliable our coding system was.

Table 10 shows the results of comparing the codes assigned by the two coders for those cases that were double-coded. According to Edwards et al. (in press), “Kappa is a statistic that uses expected marginal totals to mitigate the effects of apparent high agreement for low frequency behaviors. Kappa is a proportion ranging from 1.0 (perfect agreement) to -1.0 (perfect disagreement). Kappas of about 0.8 are desirable for behavior coding applications.” For this study, the interviewer behavior codes formed a continuous variable with the values of “question

not read” (used in situations where the interviewer should have read the question), “question read incorrectly,” and “question read correctly or skipped appropriately.” The behavior on the “high” end of the continuum is obviously more desirable than that on the “low” end. Weighted Kappas, which take into account how far apart on the continuum the codes assigned by each coder are, are presented for the interviewer behavior. For the three respondent behaviors, fewer items were included in the analysis since there were no respondent codes assigned to items interviewers did not read (whether appropriately or inappropriately). All three of the respondent behaviors are dichotomous variables, and weighted Kappas do not exist for them.

The table shows fairly wide variation in coder agreement within and across the six languages, as well as across the behaviors. For the most part, coder agreement was lowest for the Korean-language interviews and highest for the Spanish. Coders also more often agreed in their use of the “requests clarification” and “respondent answer” codes than in the “interrupts” or “interviewer behavior” codes.

Table 10. Kappas for double-coded TUS interviews

Code	English*	Cantonese	Korean	Mandarin	Spanish	Vietnamese
Interviewer behavior	.46	.47	.17	.36	.71	.64
Respondent interrupts ⁺	.69	.41	.21	—	.58	.49
Respondent requests clarification	.75	.70	.27	.47	.97	.88
Respondent answer	.77	.61	.70	.35	.83	.57

* Includes English-only and English-bilingual interviews.

+ Weighted Kappas

— Not enough data available to calculate the Kappa statistic.

7.5 Coder Debriefing Sessions

Coder debriefing sessions were held on May 17, 2005, with the Cantonese and Mandarin coders, May 18 with the Spanish coders, May 23 with the Vietnamese coders, and May 26 with the Korean coders. The Cantonese and Mandarin coders were debriefed together since those interviews used the same Chinese language questionnaire. Otherwise, we split the debriefing sessions by language so we could focus exclusively on the problems and findings of one language at a time. The purpose of the debriefing sessions was to discover coder insights into why respondents had problems with the coded TUS items. Specifically, we asked coders to: (1) talk about the reasons they felt interviewers had to explain certain items to respondents or help them with their answers, (2) describe the kinds of help interviewers gave, if any, and (3) provide their opinions about why respondents needed help with or clarification of certain items. The coders also acted as “cultural interpreters,” describing the cultural norms and mores that may explain respondents’ behavior. The debriefing sessions were tape recorded and detailed notes were taken during each one. Immediately after each session, the notes were finalized (and

the tapes referred to if needed to fill in any gaps) and sent to the session participants to review for accuracy.

8. DATA PREPARATION AND ANALYSIS

As mentioned in Section 6, TRC team leaders reviewed every completed questionnaire for accuracy (that is, that all applicable questions were marked with an answer, refused, or don't know, and that the skip patterns were followed correctly) before submitting them for key entry. The TUS questionnaires were key entered twice and discrepancies resolved before delivering the data set as a text-only file to the data programmer.

The programmer read the data into a SAS file and performed a series of cleaning steps. First, he indicated which items were missing because a skip pattern had been correctly followed by setting those items to “.S” missing. Items that should have been collected but were missing for other reasons were set to “.” missing. Where appropriate, answers were back filled to provide the most complete information (for example if answers were filled in sub-questions but the gate question had been left blank). In the course of these two cleaning procedures, it was occasionally necessary to check the original questionnaire against missing items that should have been answered. Where codeable answers were found on the hard copy questionnaire, the data file was updated with them. Since the purpose of the pilot study was to identify problems with the questionnaire, we conducted very little cleaning of the data after that, as we wanted to retain any errors for further analysis, if desired.

Data from the retrospective debriefing questionnaires and the behavior coding forms were key entered into an Access database.⁹ About 50 percent of the debriefing questionnaires and 5 percent of the behavior coding cases were manually checked for accuracy. In addition, logic check programs were created to identify any discrepancies in the retrospective data or the behavior coding data, and those were resolved by checking the hard copy forms. The Access database was then read into SAS. The results for each code at each item were tabulated separately, often resulting in a different denominator for the interviewer codes than for either the respondent question codes (“interrupts” and “requests clarification”) or the respondent answer codes (“adequate answer” and “problem with the answer”). This happened because not every item received a code from each of those three groupings. For example, if the interviewer failed to read a question that should have been read, then no respondent codes would have been used. Or, if a respondent's first comment about an item was an interruption that did not include an answer, that comment (and only that comment, since coders were instructed to code only the first level of exchange) would have been coded as an interruption but no code would have been used to characterize the answer, since there was no answer at that first level of exchange. We chose not to collapse codes or sample sizes because we were interested in the percentage of problems experienced only by the group of respondents to whom the codes were actually applied.

⁹ Target language interviewers whose notes for the open-ended retrospective debriefing items were in the target language translated their own notes before having the questionnaires sent to data entry.

There were two additional issues to resolve before analysis began. The first issue was what to do with respondents who switched languages during the interview. After careful examination of the data, we discovered only one respondent who switched from Spanish to English early in the interview. We set the first five items of that respondent's questionnaire to missing and included the interview with the English-language completes. The second, more pressing, issue was how to address the English-bilingual interviews. As stated earlier, we anticipated analyzing the results of those interviews separately so as to compare them to the associated target language results and identify problems that seemed more related to cultural than translation issues. However, the number of English-bilingual interviews completed within each target language (except Spanish) was so low as to preclude a comparison that would yield results from which we could draw any reasonable conclusions. Furthermore, discussions with the behavior coders did not reveal any apparent differences in problems experienced by the English-bilingual respondents and the English-only respondents. For the present report, we combined the English-only and English-bilingual results for the baseline results. In the future, it would be instructive to more closely examine differences in the TUS interview, retrospective interview, and behavior coding results of English-bilingual respondents and their target language counterparts.

9. SUMMARY OF RESULTS AND REVISIONS TO THE TUS

This section presents a summary of findings and insights into working with the populations of interest. First, we report findings that arose from our methodological approaches. Next we summarize insights from interviewers and behavior coders (themselves members of the target language populations) that may help explain respondent (and some interviewer) behaviors and reactions to the survey. This is followed by a summary of overall data analysis findings. Finally, we present a list of the questionnaire revisions.

9.1 Methodological Findings

- Finding eligible target language respondents, particularly those willing to take the interview in English, required a great deal of effort. To reach the 418 completes, contact attempts were made to more than 25,000 households. In recruiting for bilingual respondents, it seemed as if older respondents smoked but were not comfortable enough in English and younger respondents were comfortable in English, but did not smoke.
- Recruiting, hiring, training, and managing bilingual interviewers did not present any problems significantly different from those experienced with native English-speaking interviewers. In the future, we may increase the recruiting effort by advertising in English and foreign language newspapers. Additionally, advance information about the cultural communication norms of the new interviewers will help ease any misunderstandings during training and data collection.
- During data collection we discovered that extreme care must be taken in choosing words to represent English-language concepts that are uncommon or nonexistent in the target

language. In Chinese, for example, “interview” is a better translation of “survey” than is “investigation,” which connotes police and government intrusion.

- We also encountered respondent resistance to a variety of aspects of data collection, including permission to tape record the interview, acceptance of the incentive (particularly by Vietnamese and Korean respondents), and to participating in a survey sponsored by the government.
- In this study, target language respondents tended to be older and less well-educated than the English-speaking respondents.

9.2 Interviewer and Behavior Coder Insights

- Coders told us that Chinese-speaking respondents may take some of the questions personally, worry about how their answers appear to the interviewer, or forget that the information is being collected for research purposes, not as part of an investigation into their personal lives.
- Coders felt the Chinese-speaking interviewers were not as aggressive or insistent as the native English-speaking interviewers.
- Coders reported that respondents who took the interview in Spanish often wanted to share their histories and engage in chit-chat with the interviewer. Such behavior tended to lengthen the survey administration time. (On average, Spanish-language interviews took longer than all other target language interviews except those conducted in Vietnamese.)
- Vietnamese-language interviews took the longest, on average, to administer. Coders and interviewers offered several reasons for this phenomenon. First, they said that within the Vietnamese culture, people tend to be more open about their lives and share personal information more quickly than is common in Western cultures. (At the same time, Vietnamese speakers may be more hesitant to express their personal opinions, for fear of contradicting those of the interviewer.)
- Another reason for longer answers from Vietnamese respondents may relate to the use of “yes” and “no” in that culture. There are several ways of saying “yes” in the Vietnamese language, and the version the speaker chooses depends on the age and station in life of the person being addressed. Furthermore, use of the words by themselves can connote subservience or obedience to the person on the other end. To avoid indicating this, the speaker may add an explanation to his or her answer so the “yes” or “no” does not stand alone.

9.3 Analytic Findings

- As we expected, we found far fewer problems with the English-language questionnaire than with the translated questionnaires. Of the four translations, however, the Spanish seemed to be in the best shape.
- The types of problems we found related to one (or sometimes more than one) of three issues: translation (usually missing or mis-translated words and phrases); cultural (e.g., Chinese-language respondents having difficulty using a 1 to 10 scale in answering a question, or Asian-language respondents in general not feeling comfortable responding to opinion items); and questionnaire (that is, problems with the original questionnaire, such as questions that elicit range rather than exact answers).
- The goal of this study was to refine the translations so that they remained as close to the original as possible. NCI rejected suggestions for revision that, while addressing cultural issues, strayed too far from the original intent of the questionnaire. Nor did we make a large number of suggestions for revising the original questionnaire, since it is an established survey instrument.

9.4 Revisions to the Questionnaires

The remainder of this section presents the TUS items to which revisions were made based on the results of the pilot study. (More detailed results, including those for items that were not revised, appear for each language in Sections 11 through 16.) The revisions are shown in four groups: those that were made across all five questionnaires, including the English language questionnaire; those that were made across all four of the target language questionnaires; one that was made across the three Asian-language questionnaires; and those that were made to individual target language questionnaires. Unless otherwise noted, all revisions were made to both the CAI and paper-and-pencil instruments. The changes were made to the 2003 version of the TUS. Appendixes 43 and 44 contain the two English questionnaires (CAI and paper-and-pencil, respectively); 46 and 47 the two Chinese; 49 and 50 the Korean; 52 and 53 the Spanish; and 55 and 56 the Vietnamese. The English-language questionnaire also includes, highlighted in yellow, the changes that were made across all the translated questionnaires. A cover page to the English-language questionnaire explains that the highlighted wording was not in the original but reflects the translated versions. In this way, the researcher can choose to include or exclude the highlighted wording.¹⁰

For this pilot study, a series of 11 additional items were inserted at the end of the 2003 questionnaire for testing. These items asked respondents' opinions about whether smoking should be allowed or not in a variety of public settings (e.g., hospitals, shopping malls, restaurants, etc.) Each primary item (that is, the one that asked whether smoking should be

¹⁰ NCI will also create more detailed documentation of the translated questionnaires, specifically addressing how and why they differ from the original. This documentation will accompany the translated questionnaires in whatever venue they are finally presented to the research public.

allowed in all areas, some areas, or not at all in each venue) was followed by an item that asked respondents who said “allowed in some areas” at the primary item to choose between “all areas” or “not at all.” During testing we found this series to be extremely wordy and repetitive, especially in translation. Interviewers reported that respondents became irritated with the item series and would sometimes “learn” not to choose the “allowed in some areas” option so they could avoid the followup item. We recommended NCI delete the item series from the final translations and retain the original item (K9), which simply asked one question about whether smoking should be allowed in bars and cocktail lounges. However, the entire item series (including the bars and cocktail lounges question) is delivered separately in English and the four translations (Appendixes 45, 48, 51, 54, and 57).

9.5 Revisions Across All Five Questionnaires (English, Chinese, Korean, Spanish, Vietnamese)

- At J1a, very few respondents reported using snuff or knowing what it was. A definition of snuff on the NCI Cancer Information Service web site¹¹ was inserted as a note to interviewers after J1a on the CAI and after J1d on the paper-and-pencil instrument.
- As explained in Section 3, we had to collect work status information from the respondent in order to ask the first few questions in Section K. In the pilot study, which used the paper-and-pencil instrument, respondents were often either confused by the first question in Section K (KSCR), which asked if they work for pay, or suspicious of it. We inserted a transitional statement at the beginning of the section explaining that the next questions would be about the smoking rules at the respondent’s job and home.
- For the pilot study, K4 and K5 on the 2003 version (which asked whether anyone smokes in the respondent’s home, and if so, how many people do) was replaced with K4, K5a, and K5b, which asked whether anyone who lives in the home smokes, if so how many people, and how many days per week those people who live there do smoke. The three-item series had been revised based on the National Center for Health Statistics Healthy People 2010 goals and cognitive testing performed by that agency. The series was used successfully in the 2005 National Health Interview Survey. However, it was confusing for pilot study respondents, many of whom had difficulty differentiating the second two items (how many people who live here smoke, and how many days do people who live here smoke) or understanding who to include and exclude when coming up with their answers. For this set of questionnaires, we replaced the three-item series with the original two-item series.

¹¹ http://cis.nci.nih.gov/fact/10_15.htm.

9.6 Revisions Across the Four Translated Questionnaires (Chinese, Korean, Spanish, Vietnamese)

- The nicotine dependence item series (B5cA/H9A through B5cD/H9D) was sometimes difficult for respondents, who tended to answer with stories about their smoking habits or something else other than with one of the existing response options (true/false or yes/no). Interviewers and behavior coders speculated that this was in part because respondents did not seem to understand fully that the true/false statements were actually questions with which they were to agree or disagree. Coders reported that interviewers often ended up prefacing this series with their own explanation of its purpose and how to answer. To ease the confusion and standardize the explanations, a second sentence was added to the introductory statement, which now reads in full, “Please tell me if each of the following statements is true for you. You may answer with true or false, or with yes or no.”
- Respondents also seemed to have trouble answering the questions about how light cigarettes compare to regular cigarettes (B11(1)/C11(A)). In particular, several appeared hesitant to answer questions about which they felt they had no expertise. Here, too, coders reported that interviewers often spent time reassuring respondents that the items are merely asking for their opinions. To clarify that the questions are asking for opinions, not testing knowledge, the phrase “in your opinion” (said with emphasis) was added to the item series introductory statement so that it now reads in full, “I’m going to read you some statements about how light cigarettes compare to regular cigarettes. For each one, please tell me whether, in your opinion, you think it is true, false, or you don’t know.”

9.7 Revision Across the Three Asian-Language Questionnaires (Chinese, Korean, Vietnamese)

- Asian-language respondents had particular trouble with item G3, which asked them to provide their answers using a scale of 1 to 10. Interviewers and coders reported that Asian-language speakers are not used to rating their thoughts and plans on such a scale and that respondents would often try to provide answers other than the numbers 1 through 10. Since the goal of the TUS translation is to keep the translated items as near equivalent as possible to the original, rather than reduce the number of items on the scale, label the scale options, or even replace it with something altogether different, we instead added a second sentence to the question so that it now reads in full, “Overall, on a scale from 1 to 10 where 1 is not at all interested and 10 is extremely interested, how interested are you in quitting smoking? Please indicate how interested you are in quitting by picking a number from 1 to 10.”

9.8 Revisions to the Chinese Questionnaire

- At A1, the phrase “entire life” when translated into Chinese includes the past and the future, one’s whole life from birth to death. The phrase caused confusion both because

respondents were hesitant to predict the future with their answer and because they would rather not think about when they will die. The phrase was replaced with another that means, loosely, “in the past up until now.”

- At K7 in the original translation, the word for “minor” was the same as that for “adult” except in what part of the word was emphasized. Respondents did not usually hear the subtle difference and sometimes even answered the question as if the word were “adult.” The word “minor” was replaced with “those under age 18.”
- Translation errors were fixed or minor refinements made (e.g., more clearly differentiating two items or response options) in items C5a, H9C, B6b/c and C6b/c, F5, H7c(2), K3a, and K9 (in the item series that is being delivered separately, not K9 in the TUS questionnaire).

9.9 Revisions to the Korean Questionnaire

- As with the Chinese translation during cognitive testing, we found during the pilot study that Korean-speaking respondents were often interpreting “regular” cigarettes to mean “usual” or “ordinary” rather than as referring to the strength of the cigarette. As in the Chinese, we replaced “regular” with “full flavor” in all applicable items.
- Translation errors were fixed or minor refinements made (e.g., more clearly differentiating two items or response options) in items B5cA/H9A, B5cC/H9C, G4, H10c(D), and the Section K series that is being delivered separately.

9.10 Revisions to the Spanish Questionnaire

- Translation errors were fixed or minor refinements made (e.g., more clearly differentiating two items or response options) in items B5cA/H9A and K7.

9.11 Revisions to the Vietnamese Questionnaire

- At A1, the phrase “entire life” when translated into Vietnamese, as with the Chinese, includes the past and the future, one’s whole life from birth to death. Vietnamese-speaking respondents experienced problems similar to Chinese-speaking respondents. The phrase was replaced with another that means, loosely, “from the time you first became acquainted with smoking until now.”
- The term “health professional” used in F5, although gaining in use, is not yet common in the Vietnamese language. The question was reworded slightly so that the meaning of “health professional” is now clearer for those unfamiliar with the term.
- Items K1, K1b, K3a ask whether the respondent works indoors or not, where indoor working respondents work (office building, home, etc.) and what the workplace smoking

policies are for indoor public or common areas. All of these items posed translation challenges because the concept of working indoors is not a common one in the Vietnamese language. The translation of “indoors” was revised to reflect more accurately the intent of these items.

- A translation error was fixed in item K7.

10. INTRODUCTION TO THE ITEM-BY-ITEM RESULTS

Sections 11 through 16 present detailed results of the pilot study by language and data source. Each section starts with the number of respondents represented by the results and a brief description of any overall findings related to that particular language. The 32 behavior coded items are listed next. Under each item appears a chart that shows the results of the behavior coding. This chart is followed by a discussion of behavior coder insights (gleaned from the coder debriefing sessions) into those results. In most cases, insights are presented when about 20 percent or more of respondents or interviewers were assigned a problem code for a particular item (i.e., “question not read,” “question read incorrectly,” “interrupts,” “requests clarification,” “problem with the answer”). If a retrospective debriefing question was asked about the item, those results are presented next, followed by any insights from the interviewer debriefing sessions. The results from all data sources are summarized in the conclusion, a recommendation is made, and NCI’s response to the recommendation is reported.

Results of interviews done in English are presented first as a baseline against which to compare the results of interviews conducted with the translated questionnaires.

11. RESULTS OF ENGLISH-LANGUAGE INTERVIEWS

One hundred twenty-five respondents took the TUS-CPS in English. Of those, 117 cases could be behavior coded from tape recordings of the interviews. The tapes of the eight remaining interviews malfunctioned in some way (e.g., the tape recorder did not record or the coder could not hear the interviewer or respondent well enough to code their verbal behaviors).

Eighty-five of the 117 respondents are every day smokers, 14 are some day smokers, and 18 are former smokers (having quit within the past 5 years).

Forty-three respondents received the retrospective debriefing questionnaire in English.

Since the English-language instrument is our baseline, we propose very few recommendations for item revision in this section. We do, however, recommend a few changes to the skip patterns and interviewer instructions on the paper-and-pencil questionnaire. These recommended changes apply across all the translated paper-and-pencil questionnaires.

11.1 A1. Have you smoked at least 100 cigarettes in your entire life?

Behavior coding results for A1

	Interviewer behavior (n=116)			Respondent behavior – Problem with the question (n=117)		Respondent behavior – Problem with answering (n=115)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	97.4%	2.6%	0%	4.3%	94.8%	5.2%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to item A1. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.2 A2. How old were you when you first started smoking cigarettes FAIRLY REGULARLY?

Behavior coding results for A2

	Interviewer behavior (n=116)			Respondent behavior – Problem with the question (n=117)		Respondent behavior – Problem with answering (n=115)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	91.4%	8.6%	.9%	2.3%	94.8%	5.2%

Coder debriefing results: No significant problems noted.

Retrospective interview results: Respondents were asked how easy or difficult it was for them to answer the question about the age at which they started smoking. None of the retrospective debriefing respondents reported that remembering that age was very difficult, and only 3 said it was “somewhat difficult” to remember. When asked what made answering the question difficult, one of the three was “caught off guard” by the question and the other two indicated they were not positive about the exact age. The remaining 40 (93.0%) said it was “very” or “somewhat easy” to remember.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to item A2. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.3 B1/C1a/H4. On the average, about how many cigarettes do you now smoke each day?

Behavior coding results for B1/C1a/H4

	Interviewer behavior (n=116)			Respondent behavior – Problem with the question (n=117)		Respondent behavior – Problem with answering (n=116)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	93.1%	6.9%	0%	.9%	77.6%	22.4%

Coder debriefing results: Coders reported that respondents would often answer with a range instead of an exact number.

Retrospective interview results: Respondents were asked how easy or difficult it was for them to answer the question about how many cigarettes they smoke (or smoked) each day. Only one respondent, an every day smoker, said it was “somewhat difficult.” All others reported it was “very easy” (28 or 65.1%) or “somewhat easy” (14 or 32.6%). When asked what made answering the question difficult, the one respondent explained that deciding on an answer was somewhat difficult because he or she smokes less at home and more when going out.

Interviewer debriefing results: No significant problems noted.

Conclusion: Although respondents tended to answer with a range of the number of cigarettes smoked each day rather than an exact number, they appeared to have little trouble understanding the purpose of the question or providing an appropriate answer. Interviewers read the item as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.4 B2/C2/H7a. Is your usual cigarette brand menthol or non-menthol?

Behavior coding results for B2/C2/H7a

	Interviewer behavior (n=117)			Respondent behavior – Problem with the question (n=111)		Respondent behavior – Problem with answering (n=111)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	4.3%	94.0%	1.7%	0%	.9%	95.5%	4.5%

Coder debriefing results: No significant problems noted.

Retrospective interview results: Of the 42 respondents who were asked how sure they are that their cigarettes are menthol or non-menthol, 38 (90.5%) are “very” or “somewhat” sure. Three (7.1%) were “not sure at all” and one (2.4%) said he or she just doesn’t know. An open-ended follow-up question was not asked for this item.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to the question about whether the cigarettes they smoke are menthol or non-menthol. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.5 B3/C3/H7b. What type of cigarette do you now smoke most often -- a regular, a light, an ultralight, or some other type?

Behavior coding results for B3/C3/H7b

	Interviewer behavior (n=117)			Respondent behavior – Problem with the question (n=112)		Respondent behavior – Problem with answering (n=112)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	4.3%	87.2%	8.6%	3.6%	0%	97.3%	2.7%

Coder debriefing results: No significant problems noted, although coders said that respondents sometimes liked to answer with brand of cigarette rather than its strength.

Retrospective interview results: Respondents were asked to describe what makes a cigarette “regular,” “full flavor” or “light.” Four respondents used the term “full flavor” to describe

regular cigarettes. The largest number (13 of 43) described regular cigarettes as what they are not – not menthol, not light, not ultralight, not Kings, not 100s. Others said regular cigarettes have a stronger taste (7), have more nicotine or tar, or are in general stronger than other cigarettes (8), or are distinguishable by their size (short) or the fact that they do or do not have a filter (9). Five respondents could not define “regular” and five gave some other explanation (e.g., “regular cigarettes are sold from a gas station”).

In contrast, only one respondent use the word “regular” to define “full flavor” cigarettes. Ten of the 43 used the word “taste” to describe full flavor, although most did not elaborate on what it is about the taste that makes a cigarette full flavor. Other respondents said full flavor cigarettes are stronger or have more tar than a light (6), are not menthol or light cigarettes (7), are noteworthy by the type of tobacco in them (5), or have a different filter or size (3). Seven respondents could not define the term and five gave some other definition (e.g., “as long as they satisfy the smoker”).

When asked to describe light cigarettes, 18 of the 43 respondents did so in terms of the amount of tar, nicotine, or tobacco in the cigarette (i.e., light cigarettes have less of one or more of those ingredients). Eleven respondents said the taste is smoother or lighter and 12 described lights as different in size or having a different kind of filter than regular cigarettes. Four respondents said the name of the cigarette is what makes it a light, five could not define the term, and three gave some other answer (e.g., “he gets no pleasure from light cigarettes”).

Interviewer debriefing results: Some interviewers noted that a few respondents paused at the “light/ultralight” distinction, but could still come up with an answer. They also reported that some respondents had to look at their cigarette packs in order to answer the question.

Conclusion: Respondents appear to have little trouble understanding and responding to the question about whether they smoke regular, light, or ultralight cigarettes. Respondents appeared to understand the distinction between regular and light cigarettes, and the word “regular” is probably somewhat more familiar to them as a way to describe non-light cigarettes. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.6 B5a/C5a/H8a. How soon after you wake up do you typically smoke your first cigarette of the day?

Behavior coding results for B5a/C5a/H8a

	Interviewer behavior (n=117)			Respondent behavior – Problem with the question (n=112)		Respondent behavior – Problem with answering (n=107)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	4.3%	88.0%	7.7%	.9%	7.1%	66.4%	33.6%

Coder debriefing results: Coders noted that respondents often would answer with a description of what they typically do when they wake up (e.g., “I have my first cigarette after I brush my teeth,” or “I have my first cigarette after breakfast”) rather than the number of minutes or hours between the time they wake up and the time they smoke their first cigarette.

Interviewer debriefing results: Interviewers said that respondents often had to “think hard” to come up with their answers and had difficulty providing an exact number, answering instead with a range.

Conclusion: Respondents do not consistently infer from the phrase “how soon after you wake up” that the interviewer is seeking an answer in minutes or hours, not a description of their morning routines.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.7 B5cA/H9A. Please tell me if EACH of the following statements is true for you. You have trouble going more than a few hours without smoking.

Behavior coding results for B5cA/H9A

	Interviewer behavior (n=103)			Respondent behavior – Problem with the question (n=98)		Respondent behavior – Problem with answering (n=96)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	4.9%	89.3%	5.8%	0%	5.1%	94.8%	5.2%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted. Interviewers said respondents did not seem embarrassed or ashamed to answer this item series.

Conclusion: Respondents appear to have little trouble understanding and responding to items B5cA and H9A. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.8 B5cB/H9B. Even in a bad rainstorm, if you ran out of cigarettes, you would probably go to the store to get some more.

Behavior coding results for B5cB/H9B

	Interviewer behavior (n=103)			Respondent behavior – Problem with the question (n=98)		Respondent behavior – Problem with answering (n=97)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	4.9%	91.3%	3.9%	0%	0%	94.9%	5.2%

Coder debriefing results: No significant problems noted.

Retrospective interview results: Current every day and former smokers who said they would not go out in a bad rainstorm to buy more cigarettes if they ran out were asked whether they answered the way they did because they wouldn't ever go out in the rain or because they would make sure never to run out of cigarettes. Of the 9 respondents who received this question, only 2 said they would make sure never to run out of cigarettes.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to items B5cB and H9B. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.9 B5cC/H9C. When you go without smoking for a few hours, you experience craving.

Behavior coding results for B5cC/H9C

	Interviewer behavior (n=103)			Respondent behavior – Problem with the question (n=98)		Respondent behavior – Problem with answering (n=94)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	4.9%	92.2%	2.9%	0%	7.1%	89.4%	10.6%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to items B5cC and H9C. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.10 B5cD/H9D. If you were in a public place where smoking isn’t allowed, you’d probably go outside to smoke a cigarette, even in cold or rainy weather.

Behavior coding results for B5cD/H9D

	Interviewer behavior (n=103)			Respondent behavior – Problem with the question (n=98)		Respondent behavior – Problem with answering (n=98)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	4.9%	92.2%	2.9%	1.0%	1.0%	94.9%	5.1%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to items B5cD and H9D. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.11 B6b/c and C6b/c. What price did you pay for the LAST pack/carton of cigarettes you bought? Please report the cost after using discounts or coupons.

Behavior coding results for B6b/c and C6b/c

	Interviewer behavior (n=99)			Respondent behavior – Problem with the question (n=100)		Respondent behavior – Problem with answering (n=96)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	89.9%	10.1%	2.0%	4.0%	86.5%	13.5%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: Some interviewers said a few respondents struggled with this item, most notably those who buy cigarettes with their groceries and so couldn't separate out the cost of the cigarettes.

Conclusion: Respondents appear to have little trouble understanding and responding to items B6b/c and C6b/c. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.12 B7/C7d/H5. What is the total number of years you have smoked EVERY DAY? Do not include any time you stayed off cigarettes for 6 months or longer.

Behavior coding results for B7/C7d/H5

	Interviewer behavior (n=113)			Respondent behavior – Problem with the question (n=113)		Respondent behavior – Problem with answering (n=100)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	.9%	92.9%	6.2%	0%	25.7%	82.0%	18.0%

Coder debriefing results: Coders reported that respondents had trouble calculating their answers and would often just give interviewers their current age and the age when they started smoking then let the interviewer calculate the answer. This accounts, in part, for the high proportion of respondents who were coded as having requested clarification about this item.

Interviewer debriefing results: Several interviewers reported that respondents who’ve smoked a long time had trouble subtracting out the times they were off cigarettes for six months or longer. Interviewers said they had to help respondents “do the math” or respondents just “rounded off” their answers.

Conclusion: Excluding from their answers time they were not smoking for six months or longer is somewhat burdensome for respondents.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.13 B9/C9/H12. Have you EVER SWITCHED from a stronger cigarette to a lighter cigarette for at least 6 months?

Behavior coding results for B9/C9/H12

	Interviewer behavior (n=115)			Respondent behavior – Problem with the question (n=112)		Respondent behavior – Problem with answering (n=108)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	4.4%	93.0%	2.6%	2.7%	3.6%	94.4%	5.6%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: At least two respondents who had switched more than once (or perhaps from a stronger to a lighter and then again to another lighter cigarette) stumbled at this item, although interviewers were uncertain about why.

Conclusion: Respondents appear to have little trouble understanding and responding to the question about whether they’ve ever switched from a stronger cigarette to a lighter cigarette for at least six months. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.14 B11(1)/C11(A). I’m going to read you some statements about how LIGHT cigarettes compare to REGULAR cigarettes. For each one, please tell me whether YOU think it is true, false, or you don’t know. Light cigarettes give you less tar or nicotine than regular cigarettes.

Behavior coding results for B11(1)/C11(A)

	Interviewer behavior (n=99)			Respondent behavior – Problem with the question (n=100)		Respondent behavior – Problem with answering (n=96)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	92.9%	7.1%	0%	6.0%	84.4%	15.6%

Coder debriefing results: No significant problems noted. Note, however, that in most interviewer-administered questionnaires, the “don’t know” option is not read so as to encourage respondents to provide a useable answer. The fact that the “don’t know” option was read at the beginning of this item series likely accounts, in part, for the 15.6 percent of “problem with the answer” codes. (Nineteen percent of all telephone interview respondents who received these items answered with “don’t know,” a much higher percentage than that of “don’t know” answers to other TUS items.) That is, respondents were reminded that “don’t know” was an option, and so may have been more likely to use it, which then triggered a “problem with the answer” code.

Interviewer debriefing results: No significant problems noted.

Conclusion: Aside from a somewhat high number of “don’t know” answers (most likely attributable to the fact that the “don’t know” option was read as part of the question), respondents appear to have little trouble understanding and responding to items B11(1) and C11(A). Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.15 Da. During the PAST 12 MONTHS, have you TRIED to QUIT smoking COMPLETELY?

Behavior coding results for Da

	Interviewer behavior (n=7)			Respondent behavior – Problem with the question (n=8)		Respondent behavior – Problem with answering (n=7)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Some day smokers (n=7)	0%	85.7%	14.3%	0%	0%	71.4%	28.6%

Coder debriefing results: Coders noted that interviewers often did not follow the skip instructions (e.g., if the interviewer read the question when they shouldn’t have, the coder marked the item as “question read incorrectly.”) Coders did not describe any significant problems from respondents. (Note that the 28.6 percent of “problem with the answer” codes represents only two respondents.)

Interviewer debriefing results: Interviewers reported that they made a lot of errors skipping to D1 instead of Da or vice versa because Da appears before D1 on the questionnaire. (This is not a problem on the CAI instrument since the program automatically skips interviewers to the next applicable screen.)

Conclusion: Respondents who correctly received item Da appeared to have little trouble understanding and responding to it. Interviewers who read the question did so correctly the majority of the time. Although this is not an issue for the CAI instrument, the fact that item Da comes before item D1 affects the quality of data collected with the paper-and-pencil questionnaire.

Recommendation: On the paper-and-pencil questionnaire, make the skip instructions at the end of Sections B and C clearer (e.g., “Go to item Da, the first question in Section D, page 17.”) Otherwise, leave the item as it is.

NCI response: Leave the item as it is. Revise the skip pattern instructions as recommended.

11.16 D1. Have you EVER stopped smoking for one day or longer BECAUSE YOU WERE TRYING TO QUIT SMOKING?

Behavior coding results for D1

	Interviewer behavior (n=76)			Respondent behavior – Problem with the question (n=69)		Respondent behavior – Problem with answering (n=67)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	10.5%	88.2%	1.3%	1.5%	1.5%	95.5%	4.5%

Coder debriefing results: Coders reported that interviewers often did not follow the skip patterns for this item correctly (see discussion in Section 11.15).

Interviewer debriefing results: The skip problems mentioned in the section on item Da (Section 11.15) affect item D1 as well.

Conclusion: See conclusions in Section 11.15.

Recommendation: See recommendation in Section 11.15.

NCI response: Revise skip pattern instructions as recommended.

11.17 F1/H6a. In the PAST 12 MONTHS, have you seen a medical doctor, dentist, nurse, or other health professional?

Behavior coding results for F1/H6a

	Interviewer behavior (n=113)			Respondent behavior – Problem with the question (n=108)		Respondent behavior – Problem with answering (n=107)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	4.4%	92.9%	2.7%	0%	3.7%	98.1%	1.9%

Coder debriefing results: No significant problems noted.

Retrospective interview results: Respondents were asked whether, when they answered this question, they were thinking only about visits for themselves or if they had included visits for other family members, or some other type of visit. This was asked because during cognitive testing we found that Korean-speaking respondents included in their answers visits for those other than themselves (e.g., accompanying a pregnant wife to the OB/GYN or children to the pediatrician). To address this problem, the phrase “about your own health” was added to items

F1 and H6a in all four translations of the TUS (Korean, Chinese, Vietnamese, and Spanish). Of the 37 who answered this question, only 4 indicated they were thinking of visits for someone other than themselves.

Interviewer debriefing results: No significant problems noted. Interviewers said respondents seemed to understand this question was asking about visits for their own health.

Conclusion: Respondents appear to have little trouble understanding and responding to the question about whether they’ve seen a health professional in the past 12 months. For the most part, respondents were thinking of health care visits for themselves. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.18 F5. Which health professional that you saw in the past 12 months spent the MOST time advising you about quitting smoking?

Behavior coding results for F5

	Interviewer behavior (n=41)			Respondent behavior – Problem with the question (n=39)		Respondent behavior – Problem with answering (n=36)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	7.3%	73.2%	19.5%	2.6%	5.1%	77.8%	22.2%

Coder debriefing results: Coders noted that interviewers would often read the answer categories as part of the question. They also said that respondents who were read the response options to this item would sometimes answer “none,” thinking they were supposed to choose an answer from that list (rather than provide an open-ended answer, which was the original intent of the question).

Interviewer debriefing results: Some interviewers said that for respondents who said “no” at question F4 (“During the past 12 months, did any doctor, dentist, nurse, or other health professional spend any time talking to you about how you should try to quit smoking?”), F5 appears to be contradicting that “no” answer. This problem was observed during the cognitive testing phase and a recommendation to insert an instruction to skip F4 “no” answers to Section G was approved by NCI. However, that revision was inadvertently omitted during this round of testing.

Conclusion: Interviewers were inconsistent when it came to not reading the answer categories for item F5. When they did read the answer categories, respondents would sometimes say

“none,” a response that does not fit the intent of this question. There is a missing skip pattern instruction at F4.

Recommendation: Insert the skip instruction at item F4 so that those who say “no” at F4 are skipped past F5. Otherwise, leave the item as it is.

NCI response: Leave item as it is and re-insert the F4 skip instruction.

11.19 G3. Overall, on a scale from 1 to 10 where 1 is NOT AT ALL interested and 10 is EXTREMELY interested, how interested are you in quitting smoking?

Behavior coding results for G3

	Interviewer behavior (n=99)			Respondent behavior – Problem with the question (n=100)		Respondent behavior – Problem with answering (n=95)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	96.0%	4.0%	1.0%	12.0%	92.6%	7.4%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: Some interviewers said they did not at first notice the skip instruction at this item, interpreting it to mean skip everyone except those who answer “don’t know” or “refused” past item G4.

Conclusion: Respondents appear to have little trouble understanding and responding to item G3. Interviewers read the question as intended the majority of the time.

Recommendation: Revise the skip instruction at G3 so that it is larger and more noticeable.

NCI response: Revise the skip instruction as recommended.

11.20 G4. If you did try to quit smoking altogether in the next 6 months, how LIKELY do you think you would be to succeed -- not at all, a little likely, somewhat likely or very likely?

Behavior coding results for G4

	Interviewer behavior (n=83)			Respondent behavior – Problem with the question (n=74)		Respondent behavior – Problem with answering (n=70)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	12.1%	84.3%	3.6%	0%	6.8%	92.9%	7.1%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: The mis-read skip instruction described in Section 11.19 may in part explain why over 10 percent of the interviewers did not read item G4 when they should have.

Conclusion: Respondents who received this item had little trouble understanding and responding to it. The item was often skipped in error because the skip instruction at G3 was too small. Most interviewers who did read the item, did so correctly.

Recommendation: See recommendation in Section 11.19.

NCI response: Revise the skip instruction at G3 as recommended.

11.21 H7c(2). In the year before you quit smoking, please tell me if each of the following was true for YOU. You smoked (lights/ultralights) as a way to try to quit smoking.

Behavior coding results for H7c(2)

	Interviewer behavior (n=14)			Respondent behavior – Problem with the question (n=9)		Respondent behavior – Problem with answering (n=9)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Former smokers	35.7%	57.1%	7.1%	0%	0%	100.0%	0%

Coder debriefing results: No significant problems noted. Note that the 35.7 percent in the table above represents only five cases where the item was not read when it should have been.

Interviewer debriefing results: No significant problems noted.

Conclusion: It is unclear why this item was frequently skipped when it shouldn't have been. Those respondents who received the item had no problem understanding and answering it.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.22 J1a. Have you EVER used a pipe, cigar, chewing tobacco or snuff, EVEN ONE TIME?

Behavior coding results for J1a

	Interviewer behavior (n=117)			Respondent behavior – Problem with the question (n=117)		Respondent behavior – Problem with answering (n=114)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	93.2%	6.8%	7.7%	5.1%	100.0%	0%

Coder debriefing results: No significant problems noted.

Retrospective interview results: Respondents were asked whether they had ever heard the word “snuff” before. Those that had were asked to define the term. Seven (17.5%) of the 40 who answered had never heard the term before. Of those who had, 12 said it’s a tobacco product that is snorted through the nose and 13 said it is the same as chewing tobacco or dip. Another six thought the tobacco used in snuff was ground up fine. Three respondents could not define the term and four gave some other answer (e.g., “it’s something nasty”). None described it as tobacco that comes in a teabag-like casing. Note that of the 61 respondents who said yes to J1a during the telephone interview, only one said he or she had used snuff.

Interviewer debriefing results: Interviewers reported that “a lot” of respondents thought snuff and chewing tobacco were the same thing, and some respondents didn’t know what snuff was.

Conclusion: Neither respondents nor interviewers had trouble with this item, based on the behavior coding results. However, respondents do not distinguish between chewing tobacco and snuff.

Recommendation: Consider taking “snuff” out of the question since most if not all respondents do not know what it is and no one reported using it. Or, in the brackets below the question where examples of snuff products are listed, include an explanation of snuff that reads “Snuff, a finely ground or shredded tobacco, is packaged as dry, moist, or in sachets, which are tea bag-like pouches. Typically, the user places a pinch or dip between the cheek and gum.”

NCI response: Leave the item as it is and insert the definition.

11.23 KSCR. Do you currently work for pay?

Behavior coding results for KSCR

	Interviewer behavior (n=117)			Respondent behavior – Problem with the question (n=117)		Respondent behavior – Problem with answering (n=102)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	97.4%	2.6%	0%	21.4%	98.0%	2.0%

Coder debriefing results: Coders noted that the high number of requests for clarification may be due, in part, to the abrupt transition from Section JJ (which asks about respondents’ familiarity with a series of new tobacco products) and Section K, which begins with this question about employment.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers read item KSCR as intended the majority of the time. A notable number of respondents requested clarification to this item, perhaps because of the abrupt transition from the previous section to this one. At the same time, most provided an adequate answer.

Recommendation: Consider adding a transitional statement at the beginning of Section K that reads, “My next questions are about the smoking rules at your job and home.”

NCI response: Make the revision as recommended.

11.24 K1. Which of these best describes the area in which you work MOST of the time? Mainly work indoors, mainly work outdoors, travel to different buildings or sites, in a motor vehicle, somewhere else.

Behavior coding results for K1

	Interviewer behavior (n=80)			Respondent behavior – Problem with the question (n=81)		Respondent behavior – Problem with answering (n=79)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	92.5%	7.5%	16.1%	3.7%	89.9%	10.1%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: Interviewers reported that at least two respondents had trouble with this item. Both (one a restaurant worker) worked equal time at an inside job and an outside job and couldn't decide how to answer the item.

Conclusion: Respondents appear to have little trouble understanding and responding to item K1. Interviewers read the question as intended the majority of the time. The fact that 16.1 percent of respondents interrupted the reading of the question is probably an indication that they gave their answers at the time the appropriate answer category was read rather than waiting for the entire list to be read before providing an answer.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.25 K1b. Do you mainly work in an office building, in your own home, in someone else's home, or in another indoor place? [IF NEEDED: You said that you now work indoors.]

Behavior coding results for K1b

	Interviewer behavior (n=66)			Respondent behavior – Problem with the question (n=64)		Respondent behavior – Problem with answering (n=60)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	4.6%	83.3%	12.1%	7.8%	7.8%	86.7%	13.3%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to item K1b. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.26 K3a. Which of these best describes your place of work’s smoking policy for INDOOR PUBLIC OR COMMON AREAS, such as lobbies, rest rooms, and lunch rooms? Not allowed in ANY public areas, allowed in SOME public areas, allowed in ALL public areas.

Behavior coding results for K3a

	Interviewer behavior (n=50)			Respondent behavior – Problem with the question (n=50)		Respondent behavior – Problem with answering (n=46)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	6.0%	80.0%	14.0%	6.0%	6.0%	89.1%	10.9%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to item K3a. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.27 K4. In a usual week, does ANYONE who lives here, including yourself, smoke cigarettes, cigars, or pipes anywhere inside this home?

Behavior coding results for K4

	Interviewer behavior (n=117)			Respondent behavior – Problem with the question (n=117)		Respondent behavior – Problem with answering (n=113)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	96.6%	3.4%	.9%	8.6%	96.5%	3.5%

Coder debriefing results: No significant problems noted.

Retrospective interview results: Respondents were asked to describe who they were including in their answer to item K4. Twelve of the 43 said they included anyone who ever comes to the house. Twenty-four respondents listed specific family members or simply said “myself.” It was difficult to tell from these answers whether the people they listed comprised all households

members or (as in the case of such answers as “my pops” or “mom”) whether those people actually live in the household.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers read item K4 as intended the majority of the time. Although respondents had little trouble understanding and answering the question, they are inconsistent in their interpretation of the item. Some do not restrict their answers to those who live in the home with them.

Recommendation: See Section 11.29 for recommendations about the entire item series.

NCI response: See Section 11.29.

11.28 K5a. In a usual week, how many people WHO LIVE here, including yourself, smoke cigarettes, cigars, or pipes anywhere INSIDE this home?

Behavior coding results for K5a

	Interviewer behavior (n=49)			Respondent behavior – Problem with the question (n=48)		Respondent behavior – Problem with answering (n=46)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	2.0%	83.7%	14.3%	0%	10.4%	82.6%	17.4%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: A few interviewers said that some respondents, particularly those who live alone, wanted to include people who don’t live with them in their answer.

Conclusion: Interviewers read item K5a as intended the majority of the time. From the interviewer comments, respondents appear to be including those who do not live with them in their answers.

Recommendation: See Section 11.29 for recommendations about the entire item series.

NCI response: See Section 11.29.

11.29 K5b. Usually, about how many days per week do people WHO LIVE here smoke anywhere INSIDE this home?

Behavior coding results for K5b

	Interviewer behavior (n=47)			Respondent behavior – Problem with the question (n=46)		Respondent behavior – Problem with answering (n=40)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	2.1%	93.6%	4.3%	0%	28.3%	92.5%	7.5%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: Here, too, interviewers noted respondents didn't always restrict their answers just to those who live with them.

Conclusion: Interviewers read item K5b as intended the majority of the time. From the interviewer comments, respondents appear to be including those who do not live with them in their answers.

Recommendation: Across all target languages, respondents had varying degrees of trouble with this item series. In addition to being inconsistent in whom they included in their answers, respondents often indicated (either explicitly or by their answers) that K5b sounded to them like the same question as K5a. An additional problem with K5b is in interpreting respondents' answers. For example, is an answer of 5 days per week the total for all household smokers, or is it the number of days for one smoker in the house while others (if there are any) smoke more or fewer days than that? To address the respondent confusion found in this study and the potential analysis problems, replace the current three-item series with the two-item series used in 2003. The two items appear below.

K4. Does anyone smoke cigarettes, cigars, or pipes anywhere inside your home?

K5. On the average, about how many days per week is there smoking anywhere inside your home?

NCI response: Replace the current three-item series with the 2003 two-item series.

11.30 K6. Which statement best describes the rules about smoking INSIDE YOUR HOME? No one is allowed to smoke anywhere INSIDE YOUR HOME, smoking is allowed in some places or at some times INSIDE YOUR HOME, smoking is permitted anywhere INSIDE YOUR HOME.

Behavior coding results K6

	Interviewer behavior (n=117)			Respondent behavior – Problem with the question (n=117)		Respondent behavior – Problem with answering (n=116)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	87.2%	12.8%	11.1%	3.4%	82.8%	17.2%

Coder debriefing results: No significant problems noted.

Retrospective interview results: Respondents were asked to explain to whom the smoking rules in their homes apply. Thirty-nine of the 43 (90.7%) said the rules apply to anyone who comes into the home. Three said the rules apply only to family and the fourth respondent’s answer (“his mom and himself”) appears to do the same, although it is somewhat difficult to decipher.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers read item K6 as intended the majority of the time. For the most part, respondents appeared to understand and answer the question with little difficulty.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.31 K7. In your opinion, how easy is it for minors to buy cigarettes and other tobacco products in your community? Very easy, somewhat easy, somewhat difficult, or very difficult.

Behavior coding results K7

	Interviewer behavior (n=117)			Respondent behavior – Problem with the question (n=117)		Respondent behavior – Problem with answering (n=113)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	85.5%	14.5%	10.3%	6.0%	75.2%	24.8%

Coder debriefing results: No significant problems noted by the coders. However, it is worth mentioning that 8.9 percent (11) of the 125 respondents who took the TUS in English answered with “don’t know.” This percentage is higher than for almost all other TUS items, most of which showed only one or two respondents answering with “don’t know.” Since coders were instructed to code any “don’t know” answers as a problem, this may in part explain the high proportion of “problem with the answer” codes on this item. Respondents’ confusion over what age to think about, as described by the interviewers below, also contributed to problems answering.

Retrospective interview results: Respondents were asked to describe what age range they felt defined “minor.” Of the 43 respondents, 19 (44.2%) answered with some variation of under (but not including) 18. For example, some gave very specific ages such as “11 years old” while others simply said “under 18.” Another nine respondents said minors are 18 and younger, and five said they are 21 and younger. Four respondents didn’t know or gave an out of range answer (e.g., “18 and older”).

Respondents were also asked to define the term “your community.” Seventeen of the 42 respondents asked this question (40.5%) defined it as their “neighborhood,” “where I live,” or the “area where I live” without being more specific. Sixteen defined their community as the city or even county where they live. Four respondents were more specific, saying their community includes anywhere they can walk to from home, or “within 15 blocks” of home, or within a mile or two.

Interviewer debriefing results: Interviewers said that respondents had varying definitions of “minor,” especially in states where minors are under 21 but one need only be 19 to buy cigarettes.

Conclusion: Although some respondents felt they simply did not know how easy or difficult it is for minor to buy cigarettes in their communities, or were somewhat confused about which age to apply when thinking about minors, most had little trouble answering the question. Interviewers read the item as intended the majority of the time. Respondents’ definitions of the words “minor” and “community” vary somewhat in the specifics, but overall most associate the former with teenagers and younger children and the latter with the area they live in (whether that includes only their immediate neighborhood or a larger surrounding area as well).

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

11.32 K9. In bars and cocktail lounges, do you THINK that smoking should be allowed in all areas, allowed in some areas, or not allowed at all?

Behavior coding results K9

	Interviewer behavior (n=116)			Respondent behavior – Problem with the question (n=117)		Respondent behavior – Problem with answering (n=114)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	95.7%	4.3%	5.1%	2.6%	92.9%	7.0%

Coder debriefing results: No significant problems noted.

Retrospective interview results: Respondents were asked how easy or difficult it was to answer this question. Thirty-nine (90.7%) thought it was “very” or “somewhat easy” to answer. Only four said it was somewhat difficult (none said it was very difficult). When asked what made it difficult to answer, they explained it was difficult to decide. One person said drinking and smoking go together while another said it’s “uncomfortable to see someone smoking in a dining area.”

Interviewer debriefing results: Interviewers said some respondents got tired of this entire series of items, but no significant problems were noted with K9.

Conclusion: Interviewers read item K9 as intended the majority of the time. Respondents had little trouble understanding and responding to the question.

In the telephone questionnaire used for this round of testing, item K9 actually appeared as item K12 in a series of six similar items asking about whether respondents felt smoking should be allowed or not in various public gathering places. Each item also had a follow-up forcing those who answered “allowed in some areas” to choose between all or no areas. The item wordings are lengthy and repetitive and some English-language respondents expressed irritation with them.

Recommendation: Leave item K9 (formerly item K12) as it is. At NCI’s request, all other items in this series have been removed from the final questionnaire and will be delivered separately from the TUS.

NCI response: Leave item K9 (formerly item K12) as it is.

11.33 Retrospective debriefing questionnaire results for items not coded

Every day and some day smokers who indicated on the TUS that they had attempted to quit, and all former smokers, were asked to describe the methods they used and how well those methods worked. The purpose of asking these questions was to determine how familiar respondents were with the quit methods listed on the TUS in Section E (items H10a through H10c for former smokers). The 22 (current and former) smokers who were administered the retrospective debriefing questions about quitting mentioned 10 different methods (see Table 11 below).¹² When asked to describe these methods, all seemed to understand what they were, how they functioned, and how well they worked. Note that of the 125 telephone interview respondents, neither current or former smokers reported using a nicotine nasal spray, a nicotine lozenge, or a telephone help line or quit line to help them stop smoking.

Table 11. Quit methods cited by current and former smokers in the retrospective debriefing questionnaire

Method	Number of respondents citing method
Cold turkey	11
Cutting back gradually	8
Help or support from friends and family	7
Nicotine patch	5
Switching to lighter cigarettes	3
Prescription pill	3
Nicotine gum	3
Switching to another tobacco product	1
Nicotine inhaler	1
Internet or world wide web	1
Other quit product	1

During the cognitive interview phase of this project, we heard that some respondents who smoked in their native country and while living in the United States thought only of their U.S. smoking experiences when answering the TUS. To determine the extent of this problem, we asked retrospective debriefing respondents who had not lived in the U.S. their entire lives whether they were thinking about their experiences in the U.S., in the country where they'd lived previously, or both. Of the 11 respondents who received this question, 7 said they thought of both places and 4 said they thought only of their experiences in the U.S. (Only one of these respondents was a smoker in both the U.S. and the country he or she had previously lived in.)

¹² Interviewers asked about up to three quit methods respondents reported on the TUS as having used.

12. RESULTS OF CANTONESE-LANGUAGE INTERVIEWS

Sixty-seven respondents took the TUS-CPS in Cantonese. All 67 cases could be behavior coded from tape recordings of the interviews.

Forty-nine of the 67 respondents are every day smokers, 8 are some day smokers, and 10 are former smokers (having quit within the past five years).

Twelve respondents received the retrospective debriefing questionnaire in Cantonese.

Coders and interviewers described overall issues with the questionnaire they felt were relevant to the Cantonese-speaking respondents (and perhaps to other Asian-language speakers). There is a tendency among this population, according to the coders (who were themselves native Cantonese speakers), to take some of the questions personally and worry about how their answers would appear to the interviewer (social desirability bias is, of course, common in many languages and cultures). The coders said respondents sometimes appeared to forget the information is being collected for research purposes, not as part of an investigation of their particular lifestyle choices. Coders also felt that native speakers of Chinese, not wanting to appear weak, may not always answer some of the nicotine dependence items completely truthfully.

One important issue is use of the Chinese word “investigation” to mean “study” or “survey” (there is no word to convey the English-language concept of “survey” in Chinese). Initially, we experienced a significant number of refusals and telephone hang ups when this word was used in the screening and introductory materials. Interviewers told us they thought the word was scaring off some respondents by perhaps bringing the police or immigration authorities to mind. We revised the materials, substituting “interview” for “investigation,” with much more success.

As for interviewers, the coders reported that the Cantonese-speaking interviewers were not as aggressive or insistent as the English-speaking interviewers. The Cantonese-speaking interviewers tended to leave questions incomplete after being interrupted by respondents, fail to insist on an answer that fit the questionnaire response options, or offer the “don’t know” option much more quickly. The interviewers’ main problems, according to the coders, seemed to be navigating through the instrument and use of tobacco-related words and phrases (e.g., one interviewer consistently mispronounced the word for “tar”). It should be noted that the English-speaking interviewers were much more experienced than the Cantonese-speaking interviewers, which may account in large part for the differences between them.

12.1 A1. Have you smoked at least 100 cigarettes in your entire life?

Behavior coding results for A1

	Interviewer behavior (n=66)			Respondent behavior: Problem with the question (n=67)		Respondent behavior: Problem with answering (n=65)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	98.5%	1.5%	0%	35.8%	83.1%	16.9%

Coder debriefing results: Coders reported that respondents were confused by the phrase “entire life” and were not sure what the question was asking. For this reason, many respondents asked for a repeat or clarification of the question. Respondents who misunderstood the intent of the question would sometimes answer it by telling stories of times when they had smoked lots of cigarettes all at once. Coders also indicated that Cantonese speakers are likely to interpret “entire life” as encompassing not just the past up to this point in time but also the future until death.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents’ interpretation of the phrase “entire life” encompasses the past and the future. Although 35.8 percent requested clarification of the question, most were able to provide a codeable answer. Interviewers read the question as intended the majority of the time. There were no significant problems with this item among English speakers.

Recommendation: Replace “entire life” (一生) with “從過去至目前為止,” loosely translated as “in the past up to now.”

NCI response: Insert the revised translation of “entire life.”

12.2 A2. How old were you when you first started smoking cigarettes FAIRLY REGULARLY?

Behavior coding results for A2

	Interviewer behavior (n=65)			Respondent behavior: Problem with the question (n=66)		Respondent behavior: Problem with answering (n=63)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	1.5%	93.9%	4.6%	0%	12.2%	69.8%	30.2%

Coder debriefing results: Coders reported that respondents tended to answer with a time period (e.g., “very young,” “in middle school”) or a range (“17 or 18”) rather than an exact age. (Since

the questionnaire requires an exact age for an answer, coders applied the “problem with the answer” code whenever one was not given.)

Retrospective interview results: Respondents were asked how easy or difficult it was for them to answer the question about the age at which they started smoking. None of the retrospective debriefing respondents reported that remembering that age was “very difficult,” and only one said it was “somewhat difficult” to remember. When asked what made answering the question difficult, the respondent said, “Since it was a long time ago I needed to think about it.” The remaining 10 (90.9%) said it was “very easy” or “somewhat easy” to remember. English-language respondents said much the same about answering this question.

Interviewer debriefing results: No significant problems noted.

Conclusion: Although respondents often provided a range rather than a single number, they appear to have little trouble understanding and responding to item A2. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

12.3 B1/C1a/H4. On the average, about how many cigarettes do you now smoke each day?

Behavior coding results for B1/C1a/H4

	Interviewer behavior (n=66)			Respondent behavior: Problem with the question (n=67)		Respondent behavior: Problem with answering (n=65)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	97.0%	3.0%	0%	10.5%	69.2%	30.8%

Coder debriefing results: Coders noted that respondents would answer with a range instead of an exact number, and range-type answers would have been coded as “problem with the answer.”

Retrospective interview results: Respondents were asked how easy or difficult it was for them to answer the question about how many cigarettes they smoke (or smoked) each day. Three respondents (two every day smokers and one some day smoker) said it was “somewhat difficult.” All others reported it was “very easy” (8 or 66.7%) or “somewhat easy” (1 or 8.3%). When asked what made answering the question difficult, two respondents said they smoke much less now than before, which contributed to their difficulty calculating, and the other simply said, “The number of cigarettes I smoke every day is different.” English-language respondents found it similarly easy to answer items B1/C1a/H4.

Interviewer debriefing results: No significant problems noted.

Conclusion: Although respondents tended to answer with a range rather than an exact number, they appeared to have little trouble understanding the purpose of the question or providing an appropriate answer. Interviewers read the item as intended the majority of the time.

Recommendation: Leave item as is.

NCI response: Leave item as it is.

12.4 B2/C2/H7a. Is your usual cigarette brand menthol or non-menthol?

Behavior coding results for B2/C2/H7a

	Interviewer behavior (n=64)			Respondent behavior: Problem with the question (n=65)		Respondent behavior: Problem with answering (n=63)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	81.3%	18.8%	0%	3.1%	88.9%	11.1%

Coder debriefing results: Coders said some respondents didn't know whether their cigarette brands were menthol or not and tried to answer by naming the brand or describing the box their cigarettes come in.

Retrospective interview results: Of the 12 respondents who were asked how sure they are that their cigarettes are menthol or non-menthol, 11 (91.7%) are "very" or "somewhat" sure. Only one (8.3%) was "not sure at all." An open-ended follow-up question was not asked for this item. English-language respondent answers to this retrospective item were similar.

Interviewer debriefing results: No significant problems noted.

Conclusion: The majority of respondents appear to have no problem understanding and responding to the question about whether the cigarettes they smoke are menthol or non-menthol. Interviewers read the item as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

12.5 B3/C3/H7b. What type of cigarette do you now smoke most often -- a full flavor, a light, an ultralight, or some other type?

Behavior coding results for B3/C3/H7b

	Interviewer behavior (n=65)			Respondent behavior: Problem with the question (n=65)		Respondent behavior: Problem with answering (n=61)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	72.3%	27.7%	16.9%	0%	80.3%	19.7%

Coder debriefing results: Coders reported that respondents often interrupted interviewers when they heard the type they smoke, and interviewers tended not to finish reading the question after that. Also, some interviewers consistently failed to read the phrase “some other type.” Coders said that some respondents who smoke Chinese cigarette brands had difficulty classifying their type. (Manufacturers of cigarettes sold outside the U.S. are not always required to disclose ingredients in the same way U.S. brand cigarette makers are.) Another reason for the 19.7 percent of “problem with the answer” codes is that some respondents answered the question by naming the brand they smoke rather than by reciting one of the cigarette types listed in the question.

Retrospective interview results: Respondents were asked to describe what makes a cigarette “regular,” “full flavor” or “light.” Of the 12 respondents who received this question, one used the phrase “full flavor” to describe regular cigarettes. Eight respondents (including the one who said “full flavor”) described regular cigarettes in terms of their flavor or taste (e.g., “not strong in flavor,” or “cigarettes with flavor”), and three of those said the flavor is “lighter” (although they did not specify what it is regular cigarettes are lighter than). Two respondents could not define “regular” and one said only that they are “filtered.” In contrast, English-language respondents more often defined regular cigarettes as what they are not (e.g., not menthol, not light cigarettes) or what they consist of (e.g., more nicotine or tar).

In describing “full flavor” cigarettes, 8 of the 12 respondents (some of whom defined the term in more than one way) referred in some way to taste or strength, with most saying it is “strong” or “stronger” in flavor. Three respondents described the physical sensations of smoking a full flavor cigarette (e.g., “give energy,” “not comfortable to the throat”) and two mentioned specific brands or tobacco products (e.g., “Camel brand,” or “like cigars [and] pipes”). English-speaking respondents, too, tended to describe full flavor cigarettes mostly in terms of taste or strength.

When asked to describe light cigarettes, 6 of the 12 respondents said they are lighter in flavor or contain less nicotine. Two talked about taste in general, two named specific brands, and one described the physical sensation of smoking a light cigarette (“when smok[ing] lighter cigarette[s] my throat didn’t feel bad”). English-speaking respondents were most likely to define light cigarettes in terms of the amount of tar, nicotine, or tobacco in the cigarette.

Interviewer debriefing results: No significant problems noted.

Conclusion: During cognitive testing of the questionnaire (Kudela et al., 2004) we found that Chinese-speaking respondents often interpreted “regular” (普通) cigarettes to mean “usual” or “ordinary” cigarettes, rather than the strength of the cigarette. As a result, the Chinese-language questionnaire was revised to use the term “full flavor” (instead of “regular,” as is used in the English-language questionnaire) in all questions that asked about cigarette type. From the retrospective debriefing results, it appears that respondents are indeed more likely to associate the term “full flavor” with regular strength cigarettes. The behavior coding results indicate respondents who smoke non-U.S. brands may have trouble regardless of whether they are asked about “full flavor” or “regular” cigarettes. And some respondents prefer to provide the name of the brand they smoke, perhaps because they are not used to thinking about cigarettes in terms of their strength. (Of the 64 respondents who answered B3, C3 or H7b during the telephone interview, about one-quarter [26.6%] of them answered with “full flavor;” well over half [57.8%] said they smoke or smoked lights; and none answered with “don’t know.”)

Recommendation: Leave item as it is, with “full flavor” (濃味煙) used instead of “regular.”

NCI response: Leave item as it is.

12.6 B5a/C5a/H8a. How soon after you wake up do you typically smoke your first cigarette of the day?

Behavior coding results for B5a/C5a/H8a

	Interviewer behavior (n=65)			Respondent behavior: Problem with the question (n=65)		Respondent behavior: Problem with answering (n=64)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	96.9%	3.1%	0%	16.9%	43.8%	56.3%

Coder debriefing results: Respondents often would answer with a description of what they do in the morning (e.g., “as soon as I open my eyes,” “after I brush my teeth,” or “after breakfast”). Since this type of answer did not fit the questionnaire response category, coders would have coded each instance where this happened as a problem with the answer.

Interviewer debriefing results: Interviewers reported that the current translation of C5a begins “before you quit.”

Conclusion: As with the English-language questionnaire, respondents to the Chinese version do not consistently infer from the phrase “how soon after you wake up” that the interviewer is seeking an answer in minutes or hours, not a description of their morning routine.

Recommendation: Given that the problem described above is specific to the questionnaire and is not a translation or cultural issue, leave the item as it is. However, fix the translation error in C5a.

NCI response: Fix C5a as recommended and otherwise leave item as it is.

12.7 B5cA/H9A. Please tell me if EACH of the following statements is true for you. You have trouble going more than a few hours without smoking.

Behavior coding results for B5cA/H9A

	Interviewer behavior (n=57)			Respondent behavior: Problem with the question (n=57)		Respondent behavior: Problem with answering (n=55)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	0%	50.9%	49.1%	1.8%	5.3%	78.2%	21.8%

Coder debriefing results: Coders reported that interviewers would often fail to read the introductory statement to this series of items (such failure would then trigger a “question read incorrectly” code). As a result, respondents would have trouble understanding that the items in this series were seeking yes/no or true/false answers. Respondents would provide long explanations of why they do or do not engage in the behavior described rather than simply answering yes/no or true/false.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers often failed to read the introductory statement to this item series, resulting in respondent confusion and answers other than yes/no or true/false. The English-language respondents appeared to have little or no trouble with any of the four items in this series.

Recommendation: In several of the other languages, respondents had trouble providing codeable answers to this item series even when interviewers read the introductory statement as intended. We cannot be sure if Cantonese-speaking respondents would have had fewer problems had their interviewers read the introductory statement as written more often. However, for consistency, consider adding a second sentence to the introductory statement that reads “You may answer with true or false, or with yes or no.” (This recommendation is made across all the translations.) (“你可以說是符合或不符合，或者是或否”)

NCI response: Add the second sentence to the introductory statement, as described.

12.8 B5cB/H9B. Even in a bad rainstorm, if you ran out of cigarettes, you would probably go to the store to get some more.

Behavior coding results for B5cB/H9B

	Interviewer behavior (n=57)			Respondent behavior: Problem with the question (n=57)		Respondent behavior: Problem with answering (n=56)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	0%	98.3%	1.8%	1.8%	3.5%	85.7%	14.3%

Coder debriefing results: No significant problems noted.

Retrospective interview results: Current every day and former smokers who said they would not go out in a bad rainstorm to buy more cigarettes if they ran out were asked whether they answered the way they did because they wouldn't ever go out in the rain or because they would make sure never to run out of cigarettes. Of the 5 respondents who received this question, 2 said they would make sure never to run out of cigarettes (which means they are more nicotine dependent than their "no" answer to B5cB/H9B would indicate). The small number of respondents makes it difficult to determine how pervasive this problem is. In the English-language retrospective debriefing, only 2 out of 9 respondents said they would make sure never to run out of cigarettes.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to items B5cB and H9B. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

12.9 B5cC/H9C. When you go without smoking for a few hours, you experience craving.

Behavior coding results for B5cC/H9C

	Interviewer behavior (n=57)			Respondent behavior: Problem with the question (n=57)		Respondent behavior: Problem with answering (n=56)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	0%	100%	0%	0%	1.8%	78.6%	21.4%

Coder debriefing results: Among the 21.4 percent of respondents whose answers were coded as problems were some who, as described above, provided lengthy descriptions of their experiences rather than yes/no or true/false answers.

Interviewer debriefing results: Cantonese interviewers did not report any significant problems. Mandarin interviewers reported that the translations of “experienced craving” are different at B5cC and H9C. Specifically, they said H9C is not as strongly worded (translated loosely as “I’d like to have a cigarette”) as B5cC (“I’ve got to have it or I get shaky”).

Conclusion: Respondents often failed to understand they should answer this item series with yes/no or true/false, most likely, in large part, because interviewers often did not read the introductory statement that instructed them to answer that way. Interviewers read item B5cC/H9C as intended every time, however.

Recommendation: Revise H9C to use the same wording for “experienced craving” as in B5cC.

NCI response: Make the recommended revision.

12.10 B5cD/H9D. If you were in a public place where smoking isn’t allowed, you’d probably go outside to smoke a cigarette, even in cold or rainy weather.

Behavior coding results for B5cD/H9D

	Interviewer behavior (n=57)			Respondent behavior: Problem with the question (n=57)		Respondent behavior: Problem with answering (n=56)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	0%	100%	0%	3.5%	3.5%	89.3%	10.7%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to this item. Interviewers read the item as intended every time. In this item series, A and C caused more trouble for respondents than did B and D. Most likely this is because B and D are clearly hypothetical scenarios that respondents could probably surmise required a yes/no or true/false response. A and C, on the other hand, appear to be making behavioral attributions, which, lacking the instruction to answer yes/no or true/false, led some respondents to defend that behavior.

Recommendation: Leave item as it is. Or, if desired, revise items A and C in the item series to sound more hypothetical (e.g., “If you were to go without smoking for a few hours, you would probably get shaky”).

NCI response: Leave item and item series (aside from recommended revisions in the introductory sentence and in C) as it is.

12.11 B6b/c and C6b/c. What price did you pay for the LAST pack/carton of cigarettes you bought? Please report the cost after using discounts or coupons.

Behavior coding results for B6b/c and C6b/c

	Interviewer behavior (n=57)			Respondent behavior: Problem with the question (n=57)		Respondent behavior: Problem with answering (n=56)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	82.5%	17.5%	3.5%	5.3%	66.1%	33.9%

Coder debriefing results: Coders reported that respondents who have their cigarettes shipped from China had difficulty converting the price. They went on to explain that, in their experience, coupon use is less common among Chinese populations. Given the translation issue raised by interviewers (that the question is asking for the amount of the coupon discount), many of the “problem with the answer” codes were applied to situations where the respondent indicated he or she doesn’t use coupons. Some of the problem answers were used because respondents would answer with a range rather than an exact price. Coders also reported that interviewers sometimes left off the last sentence, perhaps because they realized the translation was wrong.

Interviewer debriefing results: Interviewers pointed out that the translation of these items is asking for the amount of the discount, not how much the cigarettes were after the discount or coupon.

Conclusion: There is a translation error in these items, which most likely contributed to the problems noted by the coders. Obviously, no such problem occurred in the English-language interviews.

Recommendation: Correct the translation to more accurately reflect what is being asked in the second sentence (“Please report the cost after using discounts or coupons”).

NCI response: Make the recommended revision.

12.12 B7/C7d/H5. What is the total number of years you have smoked EVERY DAY? Do not include any time you stayed off cigarettes for 6 months or longer.

Behavior coding results for B7/C7d/H5

	Interviewer behavior (n=63)			Respondent behavior: Problem with the question (n=63)		Respondent behavior: Problem with answering (n=62)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	85.7	14.3	6.4	25.4	58.1%	41.9%

Coder debriefing results: Coders reported that respondents would often just tell the interviewer the age at which they'd started smoking and their current age then expect the interviewer to make the calculation. The coders said they could not tell whether respondents were taking the 6-month exclusion into consideration when answering the question.

Interviewer debriefing results: No significant problems noted.

Conclusion: Similar to the English-language respondents, Cantonese-speaking respondents felt that making the calculation required to answer this item was burdensome enough that they shifted that task over to the interviewer. Interviewers read the item as intended the majority of the time.

Recommendation: Given that the problem described above is specific to the questionnaire and is not a translation or cultural issue, leave the item as it is.

NCI response: Leave item as it is.

12.13 B9/C9/H12. Have you EVER SWITCHED from a stronger cigarette to a lighter cigarette for at least 6 months?

Behavior coding results for B9/C9/H12

	Interviewer behavior (n=65)			Respondent behavior: Problem with the question (n=65)		Respondent behavior: Problem with answering (n=64)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	92.3%	7.7%	9.2%	6.2%	73.4%	26.6%

Coder debriefing results: Coders said that respondents who had never switched felt this question did not apply to them and were impatient with it. Others who had previously said they smoke light cigarettes all the time thought the question was redundant. These respondents'

answers would often be coded as problems because they would comment on the question itself rather than answering (e.g., by saying they'd already given the information to the interviewer or saying this question doesn't apply to them).

Interviewer debriefing results: No significant problems noted.

Conclusion: Some respondents were impatient with what they felt was an inapplicable question. Interviewers read the item as intended the majority of the time. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

12.14 B11(1)/C11(A). I'm going to read you some statements about how LIGHT cigarettes compare to REGULAR cigarettes. For each one, please tell me whether YOU think it is true, false, or you don't know. Light cigarettes give you less tar or nicotine than regular cigarettes.

Behavior coding results for B11(1)/C11(A)

	Interviewer behavior (n=57)			Respondent behavior : Problem with the question (n=57)		Respondent behavior: Problem with answering (n=57)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	93.0%	7.0%	0%	8.8%	56.1%	43.9%

Coder debriefing results: Coders reported that respondents indicated they didn't know enough about tar or nicotine to feel comfortable answering with either true or false. Indeed, of the 57 telephone interview respondents who received this question, 21 (36.8%) answered with "don't know." Note, however, that in most interviewer-administered questionnaires, the "don't know" option is not read so as to encourage respondents to provide a useable answer. The fact that the "don't know" option was read at the beginning of this item series likely accounts, in part, for the 43.9 percent of "problem with the answer" codes. That is, respondents were reminded that "don't know" was an option, and so may have been more likely to use it, which then triggered a "problem with the answer" code.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents were somewhat uncomfortable answering these opinion items when they felt uninformed about the topics in question. Interviewers read the item as intended the

majority of the time. No problems were reported for this item among English-speaking respondents.

Recommendation: Consider revising the second sentence of the introductory statement to read, “For each one, please tell me whether, in your opinion, you think it is true, false, or you don’t know.” (“對於每一項陳述，請用你的意見說出是正確，錯誤，還是不知道”)

NCI response: Revise the introductory statement as recommended.

12.15 Da. During the PAST 12 MONTHS, have you TRIED to QUIT smoking COMPLETELY?

Behavior coding results for Da

	Interviewer behavior (n=3)			Respondent behavior: Problem with the question (n=3)		Respondent behavior: Problem with answering (n=3)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Some day smokers (n=)	0%	100%	0%	0%	33.3%	100%	0%

Coder debriefing results: No significant problems noted. (Note that the 33.3 percent of “requests clarification” codes represents only 1 respondent.)

Interviewer debriefing results: No significant problems noted.

Conclusion: Only three people received this item and all answered it adequately. The interviewers read the item as intended every time.

Recommendation: Leave item as it is. (See Section 11.15 in the English-language results for information about revisions to the Da/D1 skip pattern instructions.)

NCI response: Leave item as it is.

12.16 D1. Have you EVER stopped smoking for one day or longer BECAUSE YOU WERE TRYING TO QUIT SMOKING?

Behavior coding results for D1

	Interviewer behavior (n=54)			Respondent behavior – Problem with the question (n=54)		Respondent behavior – Problem with answering (n=54)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	100%	0%	0%	1.9%	81.5%	18.5%

Coder debriefing results: No significant problems noted. Coders did say that some respondents who had never tried to quit smoking did not answer this item straightforwardly (e.g., by explaining how they’ve never quit smoking), thus triggering a “problem with the answer” code.

Interviewer debriefing results: No significant problems noted.

Conclusion: For the most part, respondents had little trouble understanding and responding to item D1. Interviewers read the item as intended every time.

Recommendation: Leave item as it is. (See Section 11.15 in the English-language results for information about revisions to the Da/D1 skip pattern instructions.)

NCI response: Leave item as it is.

12.17 F1/H6a. In the PAST 12 MONTHS, have you seen a medical doctor, dentist, nurse, or other health professional (about your own health)?

Behavior coding results for F1/H6a

	Interviewer behavior (n=64)			Respondent behavior: Problem with the question (n=62)		Respondent behavior: Problem with answering (n=60)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	3.1%	95.3%	1.6%	0%	12.9%	86.7%	13.3%

Coder debriefing results: Coders said some respondents requested clarification of the question, wondering whether it is asking specifically about doctor visits for smoking-related reasons.

Retrospective interview results: Respondents were asked whether, when they answered this question, they were thinking only about visits for themselves or if they had included visits for other family members, or some other type of visit. This was asked because during cognitive testing we found that Korean-speaking respondents included in their answers visits for those

other than themselves (e.g., accompanying a pregnant wife to the OB/GYN or children to the pediatrician). To address this problem, the phrase “about your own health” was added to items F1 and H6a in all four translations of the TUS (Korean, Chinese, Vietnamese, and Spanish). Among the 12 Cantonese speakers who answered the retrospective debriefing question, only 2 indicated they were thinking of visits for other family members.

Interviewer debriefing results: No significant problems noted.

Conclusion: Some respondents thought the question was asking specifically about doctor visits for smoking-related reasons. Although this did not seem to interfere with their ability to adequately respond to items F1 and H6a, such an interpretation may have resulted in fewer “yes” answers. Interviewers read the item as intended the majority of the time. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is. Although respondents’ interpretation of the question as being about smoking-related doctor visits is not pervasive, adding “for any reason” may help offset the problem. At the same time, adding this phrase will also further clutter up the question, which has already had “for your own health” added to it.

NCI response: Leave item as it is.

12.18 F5. Which health professional that you saw in the past 12 months spent the MOST time advising you about quitting smoking?

Behavior coding results for F5

	Interviewer behavior (n=31)			Respondent behavior: Problem with the question (n=20)		Respondent behavior: Problem with answering (n=20)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	35.5%	48.4%	16.1%	0%	15.0%	65.0%	35.0%

Coder debriefing results: Coders pointed out that the phrases “in the past 12 months” and “advising you about quitting smoking” are missing from the question. They also said that the response options were included in the question stem (they are not included in the English-language version). The truncated question caused a great deal of confusion among respondents, many of whom asked for the question to be clarified or provided an answer other than one of the response options.

Interviewer debriefing results: Interviewers said that for respondents who said “no” at question F4 (“During the past 12 months, did any doctor, dentist, nurse, or other health professional spend any time talking to you about how you should try to quit smoking?”), F5 appears to be contradicting that “no” answer. (Perhaps interviewers took it upon themselves to skip the awkward item, accounting in part for the 35.5 percent of “question not read” codes.)

This problem was observed during the cognitive testing phase and a recommendation to insert an instruction to skip F4 “no” answers to Section G was approved by NCI. However, that revision was inadvertently omitted during this round of testing.

Conclusion: There are several translation errors in this item, along with a missing skip pattern instruction. Despite the fact that the response options are not part of the original question, English-language interviewers would also sometimes read them to respondents.

Recommendation: Put “in the past 12 months” and “advising you about quitting smoking” back into item F5. Remove the response options from the question wording. Insert the skip instruction at item F4 so that those who say “no” at F4 are skipped past F5.

NCI response: Fix the item as recommended and re-insert the F4 skip instruction.

12.19 G3. Overall, on a scale from 1 to 10 where 1 is NOT AT ALL interested and 10 is EXTREMELY interested, how interested are you in quitting smoking?

Behavior coding results for G3

	Interviewer behavior (n=57)			Respondent behavior: Problem with the question (n=57)		Respondent behavior: Problem with answering (n=57)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	100%	0%	3.5%	19.3%	59.6%	40.4%

Coder debriefing results: Coders said respondents had many problems with the scale, including not understanding that they could pick any number between 1 and 10, thinking that 1 is good and 10 is bad, and using numbers other than the scale to answer (e.g., “50/50,” or “100% interested,” “very interested,” or “not interested at all”). One coder explained that Chinese respondents may have trouble with scales because “we either like something or we don’t,” meaning a 10-point scale offers more choices than respondents are prepared to consider.

Interviewer debriefing results: Interviewers said the phrase “where 10 is extremely interested” reads as “where 1 is extremely interested” in the current translation. (This error was caught during interviewer training so interviewers knew to read “where 10 is extremely interested” even though the printed questionnaire was wrong.) Also, interviewers across all languages said they did not at first notice the skip instruction at this item, interpreting it to mean skip everyone except those who answer “don’t know” or “refused” past item G4.

Conclusion: Respondents had trouble using the 1 to 10 scale to answer item G3. Interviewers read the item as intended every time. No problems were reported for this item among English-language respondents.

Recommendation: Revise the translation so it reads “where 10 is extremely interested.” Consider offering a smaller scale (e.g., two or three choices at most) and describing the label for each choice. Alternatively, add an instruction to the respondent in a second sentence to the question that reads, “Please indicate how interested you are in quitting by picking a number from 1 to 10.” (“請選擇由1至10之間的一個號碼來表示你對戒煙的興趣。 ”)

NCI response: Insert the second sentence as recommended.

12.20 G4. If you did try to quit smoking altogether in the next 6 months, how LIKELY do you think you would be to succeed -- not at all, a little likely, somewhat likely or very likely?

Behavior coding results for G4

	Interviewer behavior (n=38)			Respondent behavior: Problem with the question (n=28)		Respondent behavior: Problem with answering (n=27)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	29.0%	63.2%	7.9%	10.7%	3.6%	74.1%	26.0%

Coder debriefing results: Here, too, coders felt respondents were somewhat overwhelmed by the number of response options. They also thought the distinction between “a little” and “somewhat” may be too similar in the current translation. Because of this, coders reported that interviewers sometimes read only the first and last response options. Finally, the high percentage of “question not read” codes is due to the skip pattern problem described in Section 12.19 (interviewers inadvertently skipped G4 because the instruction at G3 was not prominent enough). This was also a problem on the English-language questionnaire.

Interviewer debriefing results: Interviewers said there is no difference between the translations of “a little” and “somewhat.”

Conclusion: Interviewers often skipped G4 because of a skip instruction problem at G3. Respondents had difficulty understanding and answering using the scale provided. There is virtually no difference between the translations of “a little” and that of “somewhat.” Problems with understanding and responding to the scale were not reported for the English-language questionnaires.

Recommendation: Consider offering a smaller scale (e.g., two or three choices at most) and describing the label for each choice. If the current scale is retained, revise the translations of “a little” and “somewhat” so that the difference between them is more apparent. (See Section 11.19 for more details about revising the skip instruction at G3.)

NCI response: Leave item as it is.

12.21 H7c(2). In the year before you quit smoking, please tell me if each of the following was true for YOU. You smoked (lights/ultralights) as a way to try to quit smoking.

Behavior coding results for H7c(2)

	Interviewer behavior (n=5)			Respondent behavior: Problem with the question (n=5)		Respondent behavior: Problem with answering (n=5)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Former smokers	0%	100%	0%	0%	0%	80.0%	20.0%

Coder debriefing results: The 20 percent of respondents who had a problem with the answer represents only one person. Coders did not note any significant problems with this item.

Interviewer debriefing results: Interviewers said that the translation of “in the year” actually reads “right now.”

Conclusion: Although the percentage of problem with the answer codes is high, the actual number of respondents who had that problem is too low to draw any conclusions from. Interviewers read the item as it was translated every time. There is a translation error in the item. No problems were reported for this item among English-language respondents.

Recommendation: Revise the translation to read “in the year” instead of “right now” at the beginning of the question.

NCI response: Fix the item as recommended.

12.22 J1a. Have you EVER used a pipe, cigar, chewing tobacco or snuff, EVEN ONE TIME?

Behavior coding results for J1a

	Interviewer behavior (n=67)			Respondent behavior: Problem with the question (n=67)		Respondent behavior: Problem with answering (n=66)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	94.0%	6.0%	19.4%	6.0%	97.0%	3.0%

Coder debriefing results: No significant problems noted, although respondents would sometimes interrupt the interviewer when they’d heard the product they’d tried.

Retrospective interview results: Respondents were asked whether they had ever heard the word “snuff” before. Those that had heard of “snuff” were asked to define the term. Of the 12 who answered this question, eight (66.7%) had never heard of “snuff” before. Among the four who had, 3 described it as a tobacco product that is snorted through the nose and one respondent could not define it. English-language respondents could not define the term either. Note that of the 20 respondents who said yes to J1a during the telephone interview, none said they had used snuff.

Interviewer debriefing results: No significant problems noted.

Conclusion: The word “snuff” was not recognized by most respondents. Otherwise, respondents had little trouble understanding or answering item J1a and interviewers read the item as intended the majority of the time. No significant problems were reported for this item among English-language respondents.

Recommendation: Consider taking “snuff” out of the question since most if not all respondents do not know what it is and no one reported using it. Or, in the brackets below the question where examples of snuff products are listed, include an explanation of snuff (in Chinese) that reads “Snuff, a finely ground or shredded tobacco, is packaged as dry, moist, or in sachets, which are tea bag-like pouches. Typically, the user places a pinch or dip between the cheek and gum.” (“鼻煙是一種經磨碎或切碎的煙草，弄乾或潤濕後包裝成茶葉包的樣子。用者會捏一小撮放在面頰和牙肉之間。”))

NCI response: Leave the item as it is and insert the definition.

12.23 KSCR. Do you currently work for pay?

Behavior coding results for KSCR

	Interviewer behavior (n=67)			Respondent behavior: Problem with the question (n=67)		Respondent behavior: Problem with answering (n=63)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	47.8%	52.2%	0%	13.4%	96.8%	3.2%

Coder debriefing results: Coders reported that interviewers would often omit the phrase “for pay.” They speculated that this may have happened because, according to them, “Chinese people always work for pay” and so perhaps the interviewers felt it would sound silly to tack on that phrase. The coders also said that some respondents became a little defensive when they heard the question. They reasoned that respondents who are not employed (and therefore ashamed of not having a job) or who are not U.S. citizens may have been worried about what kind of work-related questions would follow.

Interviewer debriefing results: The Cantonese interviewers did not note any significant problems. The Mandarin interviewers were critical of the phrase “for pay” in this question (see Section 14.23 for more detail).

Conclusion: Interviewers consistently left off the phrase “for pay” and some respondents were initially reluctant to answer the question about their work status. English-language respondents also sometimes requested clarification of this item, although for different reasons.

Recommendation: Adding a transitional statement that introduces the new section and explains its purpose (as recommended in the English-language results Section 11.23) may alleviate some respondent worries about the kinds of work-related questions that will be asked. Such a statement would read, “My next questions are about the smoking rules at your job and home.” (“以下的問題是與你在工作場所和家中抽煙的規定有關的。”) Also, consider dropping the phrase “for pay,” since the fact that interviewers omitted it most of the time did not seem to interfere with respondents’ understanding or answering of the question. (“你現在是否有工作?”)

NCI response: Make the revisions as recommended.

12.24 K1. Which of these best describes the area in which you work MOST of the time? Mainly work indoors, mainly work outdoors, travel to different buildings or sites, in a motor vehicle, somewhere else.

Behavior coding results for K1

	Interviewer behavior (n=42)			Respondent behavior: Problem with the question (n=43)		Respondent behavior: Problem with answering (n=41)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	59.5%	40.5%	14.0%	2.3%	87.8%	12.2%

Coder debriefing results: Coders said interviewers would often read only the first two options in the question (“mainly work indoors” and “mainly work outdoors”). This was a problem in the English-language interviews as well.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers tried to shorten this somewhat lengthy item. Respondents appeared to have little trouble understanding or responding to the question.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

12.25 K1b. Do you mainly work in an office building, in your own home, in someone else’s home, or in another indoor place? [IF NEEDED: You said that you now work indoors.]

Behavior coding results for K1b

	Interviewer behavior (n=37)			Respondent behavior: Problem with the question (n=34)		Respondent behavior: Problem with answering (n=34)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	8.1%	89.2%	2.7%	11.8%	5.9%	82.4%	17.7%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to item K1b. Interviewers read the item as intended the majority of the time. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

12.26 K3a. Which of these best describes your place of work’s smoking policy for INDOOR PUBLIC OR COMMON AREAS, such as lobbies, rest rooms, and lunch rooms? Not allowed in ANY public areas, allowed in SOME public areas, allowed in ALL public areas.

Behavior coding results for K3a

	Interviewer behavior (n=28)			Respondent behavior: Problem with the question (n=24)		Respondent behavior: Problem with answering (n=24)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	14.3%	42.9%	42.9%	8.3%	0%	58.3%	41.7%

Coder debriefing results: Coders said the phrase “such as lobbies, restrooms, or lunchrooms” is missing from the translation. Interviewers would often read their own version of the question, which would confuse respondents and make it difficult for them to answer appropriately.

Interviewer debriefing results: No significant problems noted.

Conclusion: There is a translation error in these items, which most likely contributed to the problems noted by the coders. Obviously, no such problem occurred in the English-language interviews.

Recommendation: Put the translation of “such as lobbies, restrooms, or lunchrooms” back in the question.

NCI response: Fix the item as recommended.

12.27 K4. In a usual week, does ANYONE who lives here, including yourself, smoke cigarettes, cigars, or pipes anywhere inside this home?

Behavior coding results for K4

	Interviewer behavior (n=67)			Respondent behavior: Problem with the question (n=67)		Respondent behavior: Problem with answering (n=66)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	97.0%	3.0%	6.0%	9.0%	83.4%	13.6%

Coder debriefing results: Coders said that a few respondents provided answers such as “I’m the only smoker” and so had to be probed for an appropriate yes/no answer.

Retrospective interview results: Respondents were asked to describe who they were including in their answer to item K4. Two of the 12 said they included anyone who ever comes to the house. The rest listed specific family members or simply said “myself.” It was difficult to tell from these answers whether the people they listed comprised all households members or (as in the case of such answers as “brother-in-law” or “mother”) whether those people actually live in the household. These findings are similar to those for the English-language respondents.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers read item K4 as intended the majority of the time. Although respondents had little trouble understanding and responding to the question, they may not be consistent in their interpretation of the item. As in the English-language version, some respondents may not restrict their answers to those who live in the home with them. This issue, however, appears to relate to the construction of the original item, not its Chinese translation.

Recommendation: See Section 12.29 for recommendations about the entire item series.

NCI response: See Section 12.29.

12.28 K5a. In a usual week, how many people WHO LIVE here, including yourself, smoke cigarettes, cigars, or pipes anywhere INSIDE this home?

Behavior coding results for K5a

	Interviewer behavior (n=21)			Respondent behavior: Problem with the question (n=20)		Respondent behavior: Problem with answering (n=19)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	9.52%	76.2%	14.3%	15.0%	15.0%	73.7%	26.3%

Coder debriefing results: Coders said that respondents sometimes forgot to include themselves in their answer. Note that the 26.3 percent of problem answer codes represents only 5 respondents, and the 15.0 percent each of interrupts and requests clarification codes represents only 3 respondents.

Interviewer debriefing results: No significant problems noted.

Conclusion: Although the percentage of problem answer codes seems high, it actually represents only 5 respondents. For the most part, respondents seemed to have little trouble understanding and answering item K5a, and interviewers read it as intended most of the time.

Recommendation: See Section 12.29 for recommendations about the entire item series.

NCI response: See Section 12.29.

12.29 K5b. Usually, about how many days per week do people WHO LIVE here smoke anywhere INSIDE this home?

Behavior coding results for K5b

	Interviewer behavior (n=21)			Respondent behavior: Problem with the question (n=20)		Respondent behavior: Problem with answering (n=20)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	4.8%	90.5%	4.8%	0%	10.0%	65.0%	35.0%

Coder debriefing results: Coders reported that at this item respondents became somewhat confused, thinking the same question was being asked repeatedly and providing inappropriate answers. They also noted the translation of K5b seems “clumsy” in its phrasing, particularly the use of “how many days per week.”

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers read item K5b as intended the majority of the time. Respondents had some trouble with the item, thinking they had already answered it at K4 or K5a.

Recommendation: Across all target languages, respondents had varying degrees of trouble with this item series. In addition to being inconsistent in whom they included in their answers, respondents often indicated (either explicitly or by their answers) that K5b sounded to them like the same question as K5a. An additional problem with K5b is in interpreting respondents’ answers. For example, is an answer of 5 days per week the total for all household smokers, or is it the number of days for one smoker in the house while others (if there are any) smoke more or fewer days than that? To address the respondent confusion found in this study and the potential analysis problems, replace the current three-item series with the two-item series used in 2003. The two items with their translations appear below.

K4. Does anyone smoke cigarettes, cigars, or pipes anywhere inside your home?
 (“是否有人在你家中抽香煙、雪茄或煙斗?”)

K5. On the average, about how many days per week is there smoking anywhere inside your home?
 (“每週平均大約有幾天有人在你家中抽煙?”)

NCI response: Replace the current three-item series with the 2003 two-item series.

12.30 K6. Which statement best describes the rules about smoking INSIDE YOUR HOME? No one is allowed to smoke anywhere INSIDE YOUR HOME, smoking is allowed in some places or at some times INSIDE YOUR HOME, smoking is permitted anywhere INSIDE YOUR HOME.

Behavior coding results K6

	Interviewer behavior (n=67)			Respondent behavior: Problem with the question (n=66)		Respondent behavior: Problem with answering (n=64)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	1.5%	56.7%	41.8%	12.1%	0%	51.6%	48.4%

Coder debriefing results: Coders said respondents had problems with this item because the response options are too long and difficult for them to distinguish among. Interviewers dealt with the problem by summarizing each option more succinctly.

Retrospective interview results: Respondents were asked to explain to whom the smoking rules in their homes apply. Eight of the 12 (66.7%) said the rules apply to anyone who comes into the home. Four of the respondents (25.0%) said the rules apply only to those living there.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers attempted to shorten this lengthy item by summarizing the response options. Respondents had trouble distinguishing among the response options. Most, however, were thinking of house smoking rules that apply to everyone, not just those who live in the home. No problems were reported for this item among English-language respondents.

Recommendation: If possible, revise the translation to shorten the response options. Otherwise, leave item as it is.

NCI response: Leave item as it is.

12.31 K7. In your opinion, how easy is it for minors to buy cigarettes and other tobacco products in your community? Very easy, somewhat easy, somewhat difficult, or very difficult.

Behavior coding results K7

	Interviewer behavior (n=67)			Respondent behavior: Problem with the question (n=67)		Respondent behavior: Problem with answering (n=65)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	55.2%	44.8%	1.5%	10.5%	24.6%	75.4%

Coder debriefing results: Coders reported that respondents had similar problems with the response scale at this item as those described for items G3 and G4 (for example difficulty choosing an option; see Sections 12.19 and 12.20 for more details). To help address these problems, interviewers would often just read “easy” and “difficult.” From the telephone interview results, almost half the respondents (32 or 47.8%) ended up answering with “don’t know” (which would have triggered a “problem with the answer” code).

Coders also noted that interviewers sometimes did not correctly read the word “minor” (which is very close to the word “adult” in Cantonese). This problem was discovered during cognitive testing and the recommendation was to train interviewers to strongly emphasize the word for “minor.” Apparently, a better solution is required for this problem.

Retrospective interview results: Respondents were asked to describe what age range they felt defined “minor.” Of the 12 respondents, 3 answered with some variation of under (but not including) 18 years old while 4 said 18 and younger. However, 5 respondents defined “minor” as over 18 (e.g., “16 and above,” “23,” “over 18”). It could be that these respondents heard the version of the word for “minor” that means “adult.”

Respondents were also asked to define the term “your community.” Six of the 12 respondents defined it as their “neighborhood” or the area where they live. One person said it included the entire city he lives in. Three respondents (including two who used the word “neighborhood”) defined “community” very specifically (e.g., “within 10 blocks,” “within 3 miles,” “within 1 mile”).

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents and interviewers had several problems with this item. Respondents seemed uncomfortable using the response scale to answer the question. Interviewers attempted to compensate by offering only two choices, “easy” and “difficult.” Interviewers did not always enunciate the word “minor” clearly, which may be one reason why a significant number of retrospective debriefing respondents defined the term as over 18. Similar to the English (although in much higher proportion), a large number of Cantonese respondents (47.8%) simply answered “don’t know” for this item.

Recommendation: Consider offering the two response options used by interviewers, “easy” and “difficult.” Also, replace the word “minor” with a more specific phrase such as “those under age 18” (“十八歲以下的青少年”).

NCI response: Leave response options as they are but revise the translation for “minor” as described.

12.32 K9. In bars and cocktail lounges, do you THINK that smoking should be allowed in all areas, allowed in some areas, or not allowed at all?

Behavior coding results K9

	Interviewer behavior (n=67)			Respondent behavior: Problem with the question (n=65)		Respondent behavior: Problem with answering (n=64)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	3.0%	37.3	59.7%	1.5%	6.2%	42.2%	57.8%

Coder debriefing results: Coders noted that the translation of this and similar items in the series is too long and that respondents would get irritated with the repetitiveness of the item series. To alleviate the problem, interviewers often offered their own shortened version of the

question (e.g., “What about bars and cocktail lounges, would you say the same thing?”). At the same time, respondents would answer with discussions of smoking habits in bars or by stating that they wouldn’t know because they never go to bars or cocktail lounges.

Retrospective interview results: Respondents were asked how easy or difficult it was to answer this question. Of the 12 who received the question, all but one (who said it was “very difficult”) thought it was “very easy” or “somewhat easy.” The one respondent could not explain why he or she thought it was difficult to answer, except to say that “I don’t go to the bar but most who go there smoke.”

Interviewer debriefing results: No significant problems noted.

Conclusion: In the telephone questionnaire used for this round of testing, item K9 actually appeared as item K12 in a series of six similar items asking about whether respondents felt smoking should be allowed or not in various public gathering places. Each item also had a follow-up forcing those who answered “allowed in some areas” to choose between all or no areas. The item wordings are lengthy and repetitive, sometimes irritating respondents. Cantonese interviewers tried to alleviate the problem by offering their own shortened versions of the questions.

No problems with this particular item were reported among the English-language respondents.

Recommendation: Leave item K9 (formerly item K12) as it is. At NCI’s request, all other items in this series have been removed from the final questionnaire and will be delivered separately from the TUS.

NCI response: Leave item K9 (formerly item K12) as it is.

12.33 Retrospective debriefing questionnaire results for items not coded

Every day and some day smokers who indicated on the TUS that they had attempted to quit, and all former smokers, were asked to describe the methods they used and how well those methods worked. The purpose of asking these questions was to determine how familiar respondents were with the quit methods listed on the TUS in Section E (items H10a through H10c for former smokers). The 6 current smokers who were administered the retrospective debriefing questions about quitting mentioned 7 different methods (see Table 12 below).¹³ When asked to describe these methods, all seemed to understand what they were, how they functioned, and how well they worked. Note that of the 67 telephone interview respondents, neither current or former smokers reported using a nicotine nasal spray, nicotine inhaler, or telephone help line or quit line to help them stop smoking.

¹³ Interviewers asked about up to three quit methods respondents reported on the TUS as having used.

Table 12. Quit methods cited by current and former smokers in the retrospective debriefing questionnaire

Method	Number of respondents citing method
Cold Turkey	4
Cutting back gradually	3
Help or support from friends and family	2
Switching to light cigarettes	1
Switching to another tobacco product	1
Nicotine Patch	1
Books/Video	1
Hypnosis	1

During the cognitive interview phase of this project, we heard that some respondents who smoked in their native country and while living in the United States thought only of their U.S. smoking experiences when answering the TUS. To determine the extent of this problem, we asked retrospective debriefing respondents who had not lived in the U.S. their entire lives whether they were thinking about their experiences in the U.S., in the country where they’d lived previously, or both. Of the 12 respondents who received this question, 10 said they thought of both places, 1 said he or she thought only of U.S. experiences and 1 said he or she thought only of experiences in the previous country. (Both of these respondents were smokers in both the U.S. and the country they’d previously lived in.)

12.34 Recommendations for items not behavior coded

Item E1b(C)/H10b(C). According to the Cantonese interviewers, the current translation of “counseling” is not common. If desired, substitute a more commonly used translation.

NCI Response: Leave the item as it is.

Item K9 in series on attitudes about smoking in public places (delivered separately). According to a Mandarin interviewer, the translation of “restaurants” in K9 means “bars that sell food.” Replace that translation with one that means “family restaurant” or “dining place” (“餐廳”).

NCI Response: Revise the translation as recommended.

13. RESULTS OF KOREAN-LANGUAGE INTERVIEWS

Sixty-six respondents took the TUS-CPS in Korean. Of those, 65 cases could be behavior coded from tape recordings of the interviews. The tape of the 1 remaining interview was blank.

Fifty-three of the 65 respondents are every day smokers, 6 are some day smokers, and 6 are former smokers (having quit within the past five years).

Twelve respondents received the retrospective debriefing questionnaire in Korean.

Neither coders nor interviewers reported any significant overall cultural or translation issues.

13.1 A1. Have you smoked at least 100 cigarettes in your entire life?

Behavior coding results for A1

	Interviewer behavior (n=65)			Respondent behavior: Problem with the question (n=65)		Respondent behavior: Problem with answering (n=53)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	90.8%	9.2%	0%	20.0%	94.3%	5.7%

Coder debriefing results: No significant problems noted. Coders noted that many of the requests for clarification were confirming that 100 cigarettes equals five packs.

Interviewer debriefing results: No significant problems noted.

Conclusion: Aside from sometimes needing to confirm the number of packs that equals 100 cigarettes, respondents appeared to have little trouble understanding and responding to item A1. Interviewers read the item as intended the majority of the time. There were no significant problems with this item among English speakers.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

13.2 A2. How old were you when you first started smoking cigarettes FAIRLY REGULARLY?

Behavior coding results for A2

	Interviewer behavior (n=65)			Respondent behavior: Problem with the question (n=65)		Respondent behavior: Problem with answering (n=61)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	93.9%	6.2%	0%	6.2%	75.4%	24.6%

Coder debriefing results: Coders reported that respondents tended to answer with an age range or time period (e.g., “when I was in high school”) rather than an exact age. (Since the questionnaire requires an exact age for an answer, coders applied the “problem with the answer” code whenever one was not given.)

Retrospective interview results: Respondents were asked how easy or difficult it was for them to answer the question about the age at which they started smoking. Only one respondent reported that remembering that age was very difficult. When asked what made answering the question difficult, the respondent said, “Too old to remember, long time ago.” The remaining 11 (91.7%) said it was “very” or “somewhat” easy to remember. These results are similar to those for English-speaking respondents.

Interviewer debriefing results: No significant problems noted.

Conclusion: Although respondents often provided a range rather than a single number, they appear to have little trouble understanding and responding to item A2. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

13.3 B1/C1a/H4. On the average, about how many cigarettes do you now smoke each day?

Behavior coding results for B1/C1a/H4

	Interviewer behavior (n=65)			Respondent behavior: Problem with the question (n=65)		Respondent behavior: Problem with answering (n=65)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	89.2%	10.8%	0%	0%	72.3%	27.7%

Coder debriefing results: Coders noted that respondents would answer with a range instead of an exact number, and range-type answers would have been coded as “problem with the answer.”

Retrospective interview results: Respondents were asked how easy or difficult it was for them to answer the question about how many cigarettes they smoke (or smoked) each day. Only one respondent, a former smoker, said it was “somewhat difficult.” All others reported it was “very easy” (8 or 72.7%) or “somewhat easy” (2 or 18.2%). When asked what made answering the question difficult, the former smoker explained that when he or she did smoke “I [did] not smoke any certain number of cigarettes. The number varied day by day.” English-language respondents found it similarly easy to answer items B1/C1a/H4.

Interviewer debriefing results: No significant problems noted.

Conclusion: Although respondents tended to answer with a range rather than an exact number, they appeared to have little trouble understanding the purpose of the question or providing an answer. Interviewers read the item as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

13.4 B2/C2/H7a. Is your usual cigarette brand menthol or non-menthol?

Behavior coding results for B2/C2/H7a

	Interviewer behavior (n=63)			Respondent behavior: Problem with the question (n=63)		Respondent behavior: Problem with answering (n=61)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	98.4%	1.6%	1.6%	1.6%	86.9%	13.1%

Coder debriefing results: Coders said that a few respondents answered this question with “regular” and some would simply name the brand they smoke.

Retrospective interview results: All 11 respondents who were asked how sure they are that their cigarettes are menthol or non-menthol said they are “very” or “somewhat” sure. An open-ended follow-up question was not asked for this item. English-language respondents’ answers to the retrospective item were similar.

Interviewer debriefing results: No significant problems noted.

Conclusion: Most respondents appear to have little trouble understanding and responding to the question about whether the cigarettes they smoke are menthol or non-menthol. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

13.5 B3/C3/H7b. What type of cigarette do you now smoke most often -- a regular, a light, an ultralight, or some other type?

Behavior coding results for B3/C3/H7b

	Interviewer behavior (n=63)			Respondent behavior: Problem with the question (n=63)		Respondent behavior: Problem with answering (n=61)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	84.1%	15.9%	1.6%	3.2%	88.5%	11.5%

Coder debriefing results: Coders indicated some respondents would answer with the brand of cigarette they smoke. Also, instead of reading the question as worded, interviewers would sometimes simply verify the type with respondents who, at item B2, had provided the brand of cigarettes they smoke.

Retrospective interview results: Respondents were asked to describe what makes a cigarette “regular,” “full flavor” or “light.” Six of the 10 respondents who received this question described regular cigarettes in terms of their strength, with 4 saying they are “mild,” 1 saying “light” and the other saying “ultralight.” One respondent described the sensation of smoking regular cigarettes (“feel good to me”) and another simply said they have a filter. Two respondents couldn’t define the term. English-language respondents most often defined regular cigarettes as what they are not (e.g., not menthol, not light cigarettes) or what they consist of (e.g., more nicotine or tar).

Only one respondent used the word “regular” to define “full flavor” cigarettes. Respondents said full flavor cigarettes are stronger or have more nicotine (3), the brand of the cigarette makes it “full flavor” (2), or the fact that it has no filter (1). Four respondents could not define the term. English-speaking respondents tended to describe full flavor cigarettes mostly in terms of taste or strength.

When asked to describe “light” cigarettes, 4 of the 11 respondents did so in terms of the strength or nicotine content (less) of the cigarette. Three respondents described “light” in the terms of the taste (“soft” or “mild”) and 5 used the term “ultralight” or “mild” but did not provide further explanation. English-speaking respondents were most likely to define light cigarettes in terms of the amount of tar, nicotine, or tobacco in the cigarette.

Interviewer debriefing results: No significant problems noted.

Conclusion: There is some indication that, as with respondents to the Chinese-language questionnaire, Korean-speaking respondents tend to interpret “regular” as “usual” or “ordinary.” That is, those who described “regular” as “light” cigarettes may have been thinking about the “usual” cigarettes they themselves smoke. (Of the 64 respondents who answered B3, C3, or H7b during the telephone interview, about one quarter [23.4%] of them answered with “regular;” about three-quarters [76.6%] said they smoke or smoked lights or ultralights; and none answered with “don’t know.”) On the other hand, the definitions of “full flavor” as “strong” cigarettes may be a more accurate interpretation of what is intended by the word “regular” on the survey.

Some respondents prefer to answer the question with the brand of cigarette they smoke rather than its strength. Interviewers read the item as intended the majority of the time.

Recommendation: Consider using “full flavor” (“담배 맛이 충분한 담배”) instead of “regular” in the question wording. This revision applies to items B3, B4(A), B4(C), B11, C3, C4(1), C4(3), C11, H7b, H7c(1), H7c(3).

NCI response: Replace “regular” with “full flavor” as recommended.

13.6 B5a/C5a/H8a. How soon after you wake up do you typically smoke your first cigarette of the day?

Behavior coding results for B5a/C5a/H8a

	Interviewer behavior (n=63)			Respondent behavior: Problem with the question (n=63)		Respondent behavior: Problem with answering (n=62)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	58.7%	41.3%	0%	1.6%	59.7%	40.3%

Coder debriefing results: Respondents often would answer with a description of what they typically do when they wake up (e.g., “after breakfast,” or “after morning coffee”) rather than the number of minutes or hours between the time they wake up and the time they smoke their first cigarette. Since this type of answer did not fit the questionnaire response category, coders would have coded each instance where this happened as a problem with the answer. Coders also said that the interviewers would often reword the question by adding such phrases as “would you say 30 minutes, an hour...?” to the question (perhaps in an attempt to head off descriptive answers.)

Interviewer debriefing results: No significant problems noted.

Conclusion: As with the English-language questionnaire, respondents to the Korean version do not consistently infer from the phrase “how soon after you wake up” that the interviewer is seeking an answer in minutes or hours, not a description of their morning routines. Interviewers frequently reworded this item, apparently in an attempt to elicit codeable answers.

Recommendation: Given that the problem of respondents answering with descriptions of their morning routines is specific to the questionnaire and is not a translation or cultural issue, leave the item as it is.

NCI response: Leave item as it is.

13.7 B5cA/H9A. Please tell me if EACH of the following statements is true for you. You have trouble going more than a few hours without smoking.

Behavior coding results for B5cA/H9A

	Interviewer behavior (n=57)			Respondent behavior: Problem with the question (n=57)		Respondent behavior: Problem with answering (n=53)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	0%	89.5%	10.5%	0%	8.8%	86.8%	13.2%

Coder debriefing results: Coders reported that the translations of items A and C in this series are the same. They also said that some respondents tended to answer with explanations of their behavior rather than yes/no or true/false.

Interviewer debriefing results: Interviewers also said items A and C are exactly the same, except that item C begins with “when you don’t smoke.”

Conclusion: Although some respondents answered the items in this series with explanations of their behavior rather than yes/no or true/false, most seemed to understand and be able to provide useable answers. Interviewers read the item as translated the majority of the time. The English-language respondents appeared to have little or no trouble with any of the four items in this series.

Recommendation: Correct items A and C to more accurately reflect the English versions. In several of the other languages, respondents also had trouble providing codeable answers to this item series. For consistency, consider adding a second sentence to the introductory statement that reads “You may answer with true or false, or with yes or no.” (“귀하는 맞다 또는 틀리다 아니면 예 또는 아니오로 대답하실 수 있습니다.”) (This recommendation is made across all the translations.)

NCI response: Fix items A and C and insert a second sentence into the introductory statement, as recommended.

13.8 B5cB/H9B. Even in a bad rainstorm, if you ran out of cigarettes, you would probably go to the store to get some more.

Behavior coding results for B5cB/H9B

	Interviewer behavior (n=57)			Respondent behavior: Problem with the question (n=57)		Respondent behavior: Problem with answering (n=51)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	0%	87.7%	12.3%	0%	14.0%	78.4%	21.6%

Coder debriefing results: Coders said that some respondents tended to answer with explanations of their behavior rather than yes/no or true/false.

Retrospective interview results: Current every day and former smokers who said they would not go out in a bad rainstorm to buy more cigarettes if they ran out were asked whether they answered the way they did because they wouldn't ever go out in the rain or because they would make sure never to run out of cigarettes. Of the 5 respondents who received this question, only 1 said he or she would make sure never to run out of cigarettes. In the English-language retrospective debriefing, only 2 out of 9 respondents said they would make sure never to run out of cigarettes.

Interviewer debriefing results: No significant problems noted.

Conclusion: Some respondents answered the item with explanations of their behavior rather than yes/no or true/false. Interviewers read the item as translated the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

13.9 B5cC/H9C. When you go without smoking for a few hours, you experience craving.

Behavior coding results for B5cC/H9C

	Interviewer behavior (n=57)			Respondent behavior: Problem with the question (n=56)		Respondent behavior: Problem with answering (n=54)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	1.8%	87.7%	10.5%	0%	3.6%	85.2%	14.8%

Coder debriefing results: Coders reported that the translations of items A and C in this series are the same. They also said that some respondents tended to answer with explanations of their behavior rather than yes/no or true/false.

Interviewer debriefing results: Interviewers also said items A and C are exactly the same, except that item C begins with “when you don’t smoke.”

Conclusion: Although some respondents answered the items in this series with explanations of their behavior rather than yes/no or true/false, most seemed to understand and be able to provide useable answers. Interviewers read the item as translated the majority of the time.

Recommendation: Correct items A and C to more accurately reflect the English versions.

NCI response: Fix items A and C as recommended.

13.10 B5cD/H9D. If you were in a public place where smoking isn’t allowed, you’d probably go outside to smoke a cigarette, even in cold or rainy weather.

Behavior coding results for B5cD/H9D

	Interviewer behavior (n=57)			Respondent behavior: Problem with the question (n=56)		Respondent behavior: Problem with answering (n=54)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	1.8%	86.0%	12.3%	0%	3.6%	94.4%	5.6%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to items B5cD and H9D. Interviewers read the item as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

13.11 B6b/c and C6b/c. What price did you pay for the LAST pack/carton of cigarettes you bought? Please report the cost after using discounts or coupons.

Behavior coding results for B6b/c and C6b/c

	Interviewer behavior (n=58)			Respondent behavior: Problem with the question (n=56)		Respondent behavior: Problem with answering (n=54)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	3.5%	62.1%	34.5%	0%	1.8%	88.9%	11.1%

Coder debriefing results: Coders said that interviewers would frequently omit the second sentence.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to item B6b/c or C6b/c. Interviewers tended to omit the second sentence. No significant problems with these items were noted for the English-language interviews.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

13.12 B7/C7d/H5. What is the total number of years you have smoked EVERY DAY? Do not include any time you stayed off cigarettes for 6 months or longer.

Behavior coding results for B7/C7d/H5

	Interviewer behavior (n=63)			Respondent behavior: Problem with the question (n=65)		Respondent behavior: Problem with answering (n=52)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	95.2%	4.8%	3.1%	20.0%	78.9%	21.2%

Coder debriefing results: Respondents would often answer with a range rather than an exact number of years.

Interviewer debriefing results: Interviewers said that respondents were confused by the second sentence of the question.

Conclusion: Respondents sometimes needed help understanding the exclusionary statement in this question and would often answer with a range rather than an exact number of years. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as is.

NCI response: Leave item as it is.

13.13 B9/C9/H12. Have you EVER SWITCHED from a stronger cigarette to a lighter cigarette for at least 6 months?

Behavior coding results for B9/C9/H12

	Interviewer behavior (n=63)			Respondent behavior: Problem with the question (n=63)		Respondent behavior: Problem with answering (n=61)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	93.7%	6.4%	0%	3.2%	90.2%	9.8%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to items B9/C9/H12. Interviewers read the question as intended the majority of the time. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

13.14 B11(1)/C11(A). I’m going to read you some statements about how LIGHT cigarettes compare to REGULAR cigarettes. For each one, please tell me whether YOU think it is true, false, or you don’t know. Light cigarettes give you less tar or nicotine than regular cigarettes.

Behavior coding results for B11(1)/C11(A)

	Interviewer behavior (n=59)			Respondent behavior: Problem with the question (n=59)		Respondent behavior: Problem with answering (n=56)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	88.1%	11.9%	0%	5.1%	51.8%	48.2%

Coder debriefing results: Coders reported that the Korean translation of the introductory statement for this item series does not include the phrase “you think.” As a result of the missing translation, respondents may have felt they were taking a test and were reluctant to answer “yes” or “no.” Indeed, 45 percent of the 60 telephone interview respondents who received this question answered with “don’t know.” (A “don’t know” response is coded as a problem with the answer.) Note, too, that in most interviewer-administered questionnaires, the “don’t know” option is not read so as to encourage respondents to provide a useable answer. The fact that the “don’t know” option was read at the beginning of this item series may have reminded respondents that “don’t know” was an option, which means they may have been more likely to use it.

Interviewer debriefing results: One interviewer reported that he always explained to the respondents that this series is asking about their opinions, not their behavior.

Conclusion: Almost half the respondents answered this item with “don’t know,” either because they felt uncomfortable expressing their opinions on topics with which they are unfamiliar, or because they were told “don’t know” was an option. Interviewers read the item as translated the majority of the time. No problems were reported for this item among English-speaking respondents.

Recommendation: Reinsert the phrase “you think” and consider revising the introductory statement to read, “I’m going to read you some statements about how light cigarettes compare to regular cigarettes. For each one, please tell me whether, in your opinion, you think it is true, false, or you don’t know.” (“순한 담배와 담배 맛이 충분한 담배를 비교한 다음에 사항들에 대해 당신의 의견에 따라 맞다, 틀리다, 모르겠다고 말씀해 주십시오.”)

NCI response: Revise the introductory statement as described.

13.15 Da. During the PAST 12 MONTHS, have you TRIED to QUIT smoking COMPLETELY?

Behavior coding results for Da

	Interviewer behavior (n=5)			Respondent behavior: Problem with the question (n=5)		Respondent behavior: Problem with answering (n=5)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Some day smokers (n=)	0%	80.0%	20.0%	0%	0%	100%	0%

Coder debriefing results: No significant problems noted. (Note that the 20.0 percent of “question read incorrectly” codes represents only 1 interview.)

Interviewer debriefing results: No significant problems noted.

Conclusion: Only 5 people received this item and all answered it adequately. The interviewers read the item as intended most of the time.

Recommendation: Leave the item as it is. (See Section 11.15 in the English-language results for information about revisions to the Da/D1 skip pattern instructions.)

NCI response: Leave item as it is.

13.16 D1. Have you EVER stopped smoking for one day or longer BECAUSE YOU WERE TRYING TO QUIT SMOKING?

Behavior coding results for D1

	Interviewer behavior (n=53)			Respondent behavior: Problem with the question (n=45)		Respondent behavior: Problem with answering (n=44)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	15.1%	79.3%	5.7%	2.2%	2.2%	95.5%	4.6%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: For the most part, respondents had little trouble understanding and responding to item D1. Interviewers read the item as intended the majority of the time.

Recommendation: Leave the item as it is. (See Section 11.15 in the English-language results for information about revisions to the Da/D1 skip pattern instructions.)

NCI response: Leave item as it is.

13.17 F1/H6a. In the PAST 12 MONTHS, have you seen a medical doctor, dentist, nurse, or other health professional?

Behavior coding results for F1/H6a

	Interviewer behavior (n=63)			Respondent behavior: Problem with the question (n=63)		Respondent behavior: Problem with answering (n=57)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	92.1%	7.9%	1.6%	11.1%	98.3%	1.8%

Coder debriefing results: Coders said some respondents requested clarification of the question, wondering whether it is asking specifically about doctor visits for smoking-related reasons. This interpretation of the question may account, in part, for the 45 percent of telephone interview respondents who said “no” at this item (between 25 and 35 percent said “no” in the five other languages). Coders also speculated that respondents who had seen “Eastern medical practitioners” such as acupuncturists, aroma therapists, and herbalists for their general health may not have included those kinds of visits when coming up with their answers.

Retrospective interview results: Respondents were asked whether, when they answered this question, they were thinking only about visits for themselves or if they had included visits for other family members, or some other type of visit. This was asked because during cognitive testing we found that Korean-speaking respondents included in their answers visits for those other than themselves (e.g., accompanying a pregnant wife to the OB/GYN or children to the pediatrician). To address this problem, the phrase “about your own health” was added to items F1 and H6a in all four translations of the TUS (Korean, Chinese, Vietnamese, and Spanish). Of the 6 who answered this question, only 1 indicated he or she was thinking of visits for someone else.

Interviewer debriefing results: No significant problems noted.

Conclusion: Although from the behavior coding results respondents appear to have little trouble understanding and responding to the question about whether they’ve seen a health professional in the past 12 months, the fact that 45 percent of the telephone interview respondents answered “no” belies those results. It could be respondents were excluding visits to medical practitioners (such as acupuncturists and herbalists) not listed in the question. Or, from the requests for clarification, they may have been thinking only of visits for smoking-related reasons. Almost all debriefing respondents were thinking of health visits solely for themselves when answering this

item. Interviewers read the question as intended the majority of the time. No problems were reported for this item among English-language respondents.

Recommendation: Consider adding examples of Eastern medical practitioners to the response question. Consider adding the phrase “for any reason” to the question. At the same time, adding this phrase will also further clutter up the question, which has already had “for your own health” added to it.

NCI response: Leave item as it is.

13.18 F5. Which health professional that you saw in the past 12 months spent the MOST time advising you about quitting smoking?

Behavior coding results for F5

	Interviewer behavior (n=21)			Respondent behavior: Problem with the question (n=20)		Respondent behavior: Problem with answering (n=19)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	4.8%	90.5%	4.8%	0%	5.0%	94.7%	5.3%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to question F5. Interviewers read the question as intended the majority of the time.

During the cognitive testing phase, we found that for respondents who said “no” at question F4 (“During the past 12 months, did any doctor, dentist, nurse, or other health professional spend any time talking to you about how you should try to quit smoking?”), F5 appears to be contradicting that “no” answer. We made a recommendation to insert an instruction to skip F4 “no” answers to Section G which was approved by NCI. However, that revision was inadvertently omitted during this round of testing.

Recommendation: Leave item as it is. Insert the skip instruction at item F4 so that those who say “no” at F4 are skipped past F5.

NCI response: Leave item as it is and re-insert the F4 skip instruction.

13.19 G3. Overall, on a scale from 1 to 10 where 1 is NOT AT ALL interested and 10 is EXTREMELY interested, how interested are you in quitting smoking?

Behavior coding results for G3

	Interviewer behavior (n=59)			Respondent behavior: Problem with the question (n=59)		Respondent behavior: Problem with answering (n=56)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	100%	0%	0%	8.5%	64.3%	35.7%

Coder debriefing results: According to the coders, Koreans are not used to thinking about things in terms of 1 to 10 scales. Some respondents wanted to use zero instead of 1 to indicate “not at all interested” and others would provide answers in their own words, not using the scale (e.g., “I’ve never decided to quit,” “normally interested,” “I really want to quit,” “I’m very interested in quitting”).

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents had trouble using the 1 to 10 scale to answer item G3. Interviewers read the item as intended every time. No problems were reported for this item among English-language respondents.

Recommendation: Consider offering a smaller scale (e.g., two or three choices at most) and describing the label for each choice. Alternatively, insert in the question an instruction to the respondent that reads, “Please indicate how interested you are in quitting by picking a number from 1 to 10.” (“1 점부터 10점 까지 중에서 점수를 골라 관심을 나타내 주십시오.”)

NCI response: Insert the second sentence as recommended.

13.20 G4. If you did try to quit smoking altogether in the next 6 months, how LIKELY do you think you would be to succeed -- not at all, a little likely, somewhat likely or very likely?

Behavior coding results for G4

	Interviewer behavior (n=52)			Respondent behavior: Problem with the question (n=48)		Respondent behavior: Problem with answering (n=47)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	7.7%	76.9%	15.4%	4.2%	2.1%	55.3%	44.7%

Coder debriefing results: Coders reported that the response categories “a little likely” and “very likely” do not match what is read to the respondents. They also said that, as with G3, respondents had trouble using the scale and often gave such responses as “50/50” or “half and half.”

Interviewer debriefing results: No significant problems noted. However, interviewers across all languages said they did not at first notice the skip instruction at this item, interpreting it to mean skip everyone except those who answer “don’t know” or “refused” past item G4.

Conclusion: Interviewers sometimes skipped G4 because of a skip instruction problem at G3. Respondents had difficulty understanding and answering using the scale provided. The translations of “a little likely” and “very likely” did not match what was read in the question. Problems with understanding and responding to the scale were not reported for the English-language questionnaires.

Recommendation: Consider offering a smaller scale (e.g., two or three choices at most) and describing the label for each choice. If the current scale is retained, revise the translations of “a little likely” and “very likely” in either the question or the response option list so that the two match. (See Section 11.19 for more details about revising the skip instruction at G3.)

NCI response: Revise the two response option translations so that they match. Otherwise, leave item it is.

13.21 H7c(2). In the year before you quit smoking, please tell me if each of the following was true for YOU. You smoked (lights/ultralights) as a way to try to quit smoking.

Behavior coding results for H7c(2)

	Interviewer behavior (n=1)			Respondent behavior: Problem with the question (n=1)		Respondent behavior: Problem with answering (n=1)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Former smokers	0%	100%	0%	0%	0%	100%	0%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: The one respondent who received this question had no problem understanding or answering it. The interviewer read the item correctly. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is. (This recommendation is based on the response of one person.)

NCI response: Leave item as it is.

13.22 J1a. Have you EVER used a pipe, cigar, chewing tobacco or snuff, EVEN ONE TIME?

Behavior coding results for J1a

	Interviewer behavior (n=65)			Respondent behavior: Problem with the question (n=63)		Respondent behavior: Problem with answering (n=61)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	3.1%	80.0%	16.9%	0%	3.2%	96.7%	3.3%

Coder debriefing results: Coders did not note any significant problems with this item, although they did point out that chewing tobacco and snuff are virtually non-existent in Korea.

Retrospective interview results: Respondents were asked whether they had ever heard the word “snuff” before. Those that had heard of “snuff” were asked to define the term. Of the 11 respondents who received this question, none had heard of the term. Some English-language respondents had heard of the term, but none could define it accurately. Note that of the 23

Korean-speaking telephone interview respondents who indicated they had tried one of the tobacco products listed in J1a, none said they currently use it.

Interviewer debriefing results: No significant problems noted.

Conclusion: The word “snuff” was not recognized by most respondents or interviewers. Otherwise, respondents seemed to have little trouble understanding or answering item J1a. Interviewers read the item as intended the majority of the time. Coders noted, however, that chewing tobacco and snuff products are virtually non-existent in Korea. No significant problems were reported for this item among English-language respondents.

Recommendation: Consider taking “snuff” out of the question since most if not all respondents do not know what it is and no one reported using it. Or, in the brackets below the question where examples of snuff products are listed, include an explanation of snuff (in Korean) that reads “Snuff, a finely ground or shredded tobacco, is packaged as dry, moist, or in sachets, which are tea bag-like pouches. Typically, the user places a pinch or dip between the cheek and gum.” (“코담배는 담배를 아주 잘게 썰어서 말리거나 축축하게 해서 티백에 넣은 것으로 보통 조금 집어서 어금니 부분에 넣는다.”)

NCI response: Leave the item as it is and insert the definition.

13.23 KSCR. Do you currently work for pay?

Behavior coding results for KSCR

	Interviewer behavior (n=65)			Respondent behavior: Problem with the question (n=64)		Respondent behavior: Problem with answering (n=63)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	1.5%	83.1%	15.4%	0%	3.1%	88.9%	11.1%

Coder debriefing results: According to the coders, KSCR is translated as “Are you employed for a company and get paid regularly?” They reported that some respondents who said they are self-employed or business owners wondered if they should answer “yes” to this item, although only a small percentage of respondents were coded as requesting clarification. This may also account for the almost 60 percent (57.6%) of telephone interview respondents who answered no to this question. In contrast, between 30 percent and 47 percent answered “no” in the other languages. Coders also pointed out that interviewers would sometimes try to compensate for the translation by adding such phrases as “or do you own your own business?” to the question. (Significant deviations from the translation, even those intended to correct errors, would have been coded as “question read incorrectly.”)

Interviewer debriefing results: No significant problems noted.

Conclusion: Although from the behavior coding results respondents appear to have little trouble understanding and responding to the question about whether they work for pay, the fact that almost 60 percent of the telephone interview respondents answered “no” belies those results. It could be the current translation, which asks if respondents work for a company and get paid regularly, is misleading for those who are self-employed. Interviewers read the question as intended the majority of the time. No problems were reported for this item among English-language respondents.

Recommendation: Revise the translation so that it covers a broader array of employment types, using “지금 일을 하고 계십니까?” which loosely translates back to “Do you work?” Although Korean-speaking respondents did not express the same concerns about responding to this question as did respondents in some of the other languages, for consistency, consider adding a transitional statement at the beginning of Section K, such as “My next questions are about the smoking rules at your job and home.” (“저의 다음 질문은 귀하의 집이나 직장에서 흡연에 관한 규칙에 관한 것입니다.”)

NCI response: Revise KSCR as recommended and insert the transitional statement.

13.24 K1. Which of these best describes the area in which you work MOST of the time? Mainly work indoors, mainly work outdoors, travel to different buildings or sites, in a motor vehicle, somewhere else.

Behavior coding results for K1

	Interviewer behavior (n=30)			Respondent behavior: Problem with the question (n=35)		Respondent behavior: Problem with answering (n=28)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	6.7%	66.7%	26.7%	2.9%	0%	78.6%	21.4%

Coder debriefing results: Coders said that the translation of this item is awkwardly worded, apparently because English grammar rules were applied. Interviewers tended to reword it so it would be clearer to respondents, who had trouble answering when the original wording was used. Respondents would sometimes answer with wording that did not clearly fall into one of the response options.

Interviewer debriefing results: No significant problems noted.

Conclusion: The question is awkwardly worded, making it somewhat difficult for interviewers to read and respondents to answer.

Recommendation: Consider revising the question so that it follows Korean rather than English-language grammar rules.

NCI response: Leave item as it is.

13.25 K1b. Do you mainly work in an office building, in your own home, in someone else’s home, or in another indoor place? [IF NEEDED: You said that you now work indoors.]

Behavior coding results for K1b

	Interviewer behavior (n=18)			Respondent behavior: Problem with the question (n=25)		Respondent behavior: Problem with answering (n=17)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	5.6%	66.7%	27.8%	8.0%	0%	88.2%	11.8%

Coder debriefing results: Respondents sometimes interrupted the interviewer with their answers, and interviewers would often not finish reading the question. Also, interviewers sometimes tried to shorten the question by asking about the first two options (office or home) only.

Interviewer debriefing results: No significant problems noted.

Conclusion: Some respondents interrupted the question reading with their answers. Otherwise, most seemed to have little trouble understanding and responding to the question. Interviewers tried to shorten the question with their own rewording or would not always finish reading the question after being interrupted. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

13.26 K3a. Which of these best describes your place of work’s smoking policy for INDOOR PUBLIC OR COMMON AREAS, such as lobbies, rest rooms, and lunch rooms? Not allowed in ANY public areas, allowed in SOME public areas, allowed in ALL public areas.

Behavior coding results for K3a

	Interviewer behavior (n=12)			Respondent behavior: Problem with the question (n=20)		Respondent behavior: Problem with answering (n=10)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	8.3%	50.0%	41.7%	0%	5.0%	100%	0%

Coder debriefing results: No significant problems noted. (Note that the 41.7 percent of question read incorrectly codes represents only 5 cases.)

Interviewer debriefing results: No significant problems noted.

Conclusion: Although the percentage of “question read incorrectly” codes is high, the actual number it represents is too low to draw conclusions from. Respondents were able to answer appropriately every time. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

13.27 K4. In a usual week, does ANYONE who lives here, including yourself, smoke cigarettes, cigars, or pipes anywhere inside this home?

Behavior coding results for K4

	Interviewer behavior (n=65)			Respondent behavior: Problem with the question (n=65)		Respondent behavior: Problem with answering (n=63)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	96.9%	3.1%	1.5%	4.6%	92.1%	7.9%

Coder debriefing results: Coders reported that the phrases “anyone who lives here,” “including yourself,” and “cigars or pipes” are missing from the translation.

Retrospective interview results: Respondents were asked to describe who they were including in their answer to item K4. Two of the 12 who received this item said they included anyone who comes to the house. The other 10 listed specific family members or simply said “myself.” It was difficult to tell from these answers whether the people they listed comprised all household members or whether those people actually live in the household. These findings are similar to those for the English-language respondents.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers read item K4 as translated the majority of the time. Although respondents had little trouble understanding and responding to the question, they may not be consistent in their interpretation of the item. Given the translation errors, it is likely they are not interpreting the item as intended. As in the English-language version, some respondents may not restrict their answers to those who live in the home with them.

Recommendation: See Section 13.29 for recommendations about the entire item series.

NCI response: See Section 13.29.

13.28 K5a. In a usual week, how many people WHO LIVE here, including yourself, smoke cigarettes, cigars, or pipes anywhere INSIDE this home?

Behavior coding results for K5a

	Interviewer behavior (n=11)			Respondent behavior: Problem with the question (n=14)		Respondent behavior: Problem with answering (n=10)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	9.1%	72.7%	18.2%	0%	0%	90.0%	10.0%

Coder debriefing results: No significant problems noted. Coders did say that because of the translation errors at K4, some respondents’ answers at K5a, K5b, and K6 contradicted their answers at K4. (A contradictory answer would not have been coded as a problem, as long as it fit the answer categories, but indicating confusion or providing answers that did not fit the response options would have been.)

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents had no trouble understanding the item and little trouble responding to it. Interviewers read the item as intended the majority of the time.

Recommendation: See Section 13.29 for recommendations about the entire item series.

NCI response: See Section 13.29.

13.29 K5b. Usually, about how many days per week do people WHO LIVE here smoke anywhere INSIDE this home?

Behavior coding results for K5b

	Interviewer behavior (n=7)			Respondent behavior: Problem with the question (n=11)		Respondent behavior: Problem with answering (n=2)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	100%	0%	0%	54.6%	50.0%	50.0%

Coder debriefing results: No significant problems noted, although respondent answers may have contradicted their answer at K4 because of the K4 translation errors. (Note that the 54.6 percent of “requests clarification” codes represents only 6 respondents and the 50 percent of “problem with the answer” codes represents only 2.)

Interviewer debriefing results: No significant problems noted.

Conclusion: Although the percentages of some problem codes are high, the actual numbers of respondents they represent are too low to draw conclusions from. Interviewers read the item as intended every time.

Recommendation: Across all target languages, respondents had varying degrees of trouble with this item series. In addition to being inconsistent in whom they included in their answers, respondents often indicated (either explicitly or by their answers) that K5b sounded to them like the same question as K5a. An additional problem with K5b is in interpreting respondents’ answers. For example, is an answer of 5 days per week the total for all household smokers, or is it the number of days for one smoker in the house while others (if there are any) smoke more or fewer days than that? To address the respondent confusion found in this study and the potential analysis problems, replace the current three-item series with the two-item series used in 2003. The two items with their translations appear below.

K4. Does anyone smoke cigarettes, cigars, or pipes anywhere inside your home? (“귀하 덕에서는 귀하를 포함해서 집안에서 담배, 시가, 아니면 파이프 담배를 피우는 분이 있습니까?”)

K5. On the average, about how many days per week is there smoking anywhere inside your home? (“귀하의 덕에서는 담배를 피우는 날이 일 주일에 평균 며칠이나 됩니까?”)

NCI response: Replace the current three-item series with the 2003 two-item series.

13.30 K6. Which statement best describes the rules about smoking INSIDE YOUR HOME? No one is allowed to smoke anywhere INSIDE YOUR HOME, smoking is allowed in some places or at some times INSIDE YOUR HOME, smoking is permitted anywhere INSIDE YOUR HOME.

Behavior coding results K6

	Interviewer behavior (n=64)			Respondent behavior: Problem with the question (n=63)		Respondent behavior: Problem with answering (n=60)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	1.6%	78.1%	20.3%	9.5%	3.2%	76.7%	23.3%

Coder debriefing results: Coders reported that respondents would interrupt with their answers, and interviewers would not finish reading the question after that. They said that interviewers also tried to shorten the question by omitting some key words from the response options (e.g., “some times”). And because of the translation errors in item K4, some respondents were confused at this item and provided contradictory answers.

Retrospective interview results: Respondents were asked to explain to whom the smoking rules in their homes apply. Eleven of the 12 (91.7%) said the rules apply to anyone who comes into the home. One said the rules apply only to those who live there.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents tended to interrupt interviewers with their answers, and interviewers wouldn’t always finish reading the question. Almost all the retrospective debriefing respondents reported thinking of house smoking rules that apply to everyone, not just those who live in the home. No problems were reported for this item among English-language respondents.

Recommendation: If possible, revise the translation to shorten the response options. Otherwise, leave item as it is.

NCI response: Leave item as it is.

13.31 K7. In your opinion, how easy is it for minors to buy cigarettes and other tobacco products in your community? Very easy, somewhat easy, somewhat difficult, or very difficult.

Behavior coding results K7

	Interviewer behavior (n=65)			Respondent behavior: Problem with the question (n=65)		Respondent behavior: Problem with answering (n=62)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	100%	0%	0%	4.6%	53.2%	46.8%

Coder debriefing results: Coders said that respondents would very often answer simply with “easy” or “difficult” without adding a qualifier. Also, 21.2 percent of telephone interview respondents answered this item with “don’t know.”

Retrospective interview results: Respondents were asked to describe what age range they felt defined “minor.” Of the 12 respondents, 6 answered with some variation of 18 and under (four of those simply said the age “18”). Another three listed ages under (but not including) 18 years old (e.g., “13 to 15”). Three respondents defined “minor” as over age 18.

Respondents were also asked to define the term “your community.” Six of the 11 respondents defined it as the city they live in. Another 4 thought of their neighborhoods. One person could not define the term.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents seemed to understand item K7, but preferred not to use the “very” and “somewhat” qualifiers when answering. A significant proportion of them answered with “don’t know.” Most respondents defined “minor” as 18 or under, and their community as the city or neighborhood they lived in. Interviewers read the item as intended every time. No significant problems were reported for this item among English-speaking respondents.

Recommendation: Consider offering the two response options “easy” and “difficult.”

NCI response: Leave item as it is.

13.32 K9. In bars and cocktail lounges, do you THINK that smoking should be allowed in all areas, allowed in some areas, or not allowed at all?

Behavior coding results K9

	Interviewer behavior (n=65)			Respondent behavior: Problem with the question (n=64)		Respondent behavior: Problem with answering (n=58)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	1.5%	93.9%	4.6%	1.6%	7.8%	89.7%	10.3%

Coder debriefing results: No significant problems noted.

Retrospective interview results: Respondents were asked how easy or difficult it was to answer this question. Eight of the 12 thought it was “very” or “somewhat” easy to answer. Only three said it was “somewhat difficult” (none said it was “very difficult”). When asked what made it difficult to answer, they explained it was difficult to decide because “drinking and smoking go together” and they know people who go to bars want to enjoy the two at the same time.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents had little trouble understanding and responding to K9. Interviewers read the item as intended the majority of the time. No problems with this item were reported among the English-language respondents.

In the telephone questionnaire used for this round of testing, item K9 actually appeared as item K12 in a series of six similar items asking about whether respondents felt smoking should be allowed or not in various public gathering places. Each item also had a follow-up forcing those who answered “allowed in some areas” to choose between all or no areas. The item wordings are lengthy and repetitive.

Recommendation: Leave item K9 (formerly item K12) as it is. At NCI’s request, all other items in this series have been removed from the final questionnaire and will be delivered separately from the TUS.

NCI response: Leave item K9 (formerly item K12) as it is.

13.33 Retrospective debriefing questionnaire results for items not coded

Every day and some day smokers who indicated on the TUS that they had attempted to quit, and all former smokers, were asked to describe the methods they used and how well those methods worked. The purpose of asking these questions was to determine how familiar respondents were

with the quit methods listed on the TUS in Section E (items H10a through H10c for former smokers). The 12 (current and former) smokers who were administered the retrospective debriefing questions about quitting mentioned 7 different methods (see Table 13 below)¹⁴. When asked to describe these methods, all seemed to understand what they were, how they functioned, and how well they worked. Note that of the 66 telephone interview respondents, neither current or former smokers reported using the internet or World Wide Web to help them stop smoking.

Table 13. Quit methods cited by current and former smokers in the retrospective debriefing questionnaire

Method	Number of respondents citing method
Nicotine gum	3
Nicotine patch	3
Other (“nicotro,” “sleeping for 14 hours,” “by will”)	3
Help or support from friends and family	2
Switching to light cigarettes	1
Switching to another tobacco product (“Blue,” a Korean cigarette substitute)	1
Cold turkey	1

During the cognitive interview phase of this project, we heard that some respondents who smoked in their native country and while living in the United States thought only of their U.S. smoking experiences when answering the TUS. To determine the extent of this problem, we asked retrospective debriefing respondents who had not lived in the U.S. their entire lives whether they were thinking about their experiences in the U.S., in the country where they’d lived previously, or both. Of the 12 respondents who received this question, 5 said they thought of both places, 6 said they thought only of their experiences in the U.S., and 1 thought of experiences in the previous country. (All 7 of these respondents were smokers in both the U.S. and the countries they’d previously lived in.)

13.34 Recommendations for items not behavior coded

Items H10c(C) and H10c(D). Interviewers reported that the translations of these two items are exactly the same (H10c is the correct one). Revise item H10d.

Items in K9 Supplement. Interviewers reported a mismatch between the question stem and the response options in the K9 item series. Revise the items so the two match.

¹⁴ Interviewers asked about up to three quit methods respondents reported on the TUS as having used.

14. RESULTS OF MANDARIN-LANGUAGE INTERVIEWS

Fifty-seven respondents took the TUS-CPS in Mandarin Chinese. Of those, 56 cases could be behavior coded from tape recordings of the interviews. The tape of the one remaining interview was blank.

Forty-three of the 57 respondents are every day smokers, 8 are some day smokers, and 5 are former smokers (having quit within the past five years).

Eighteen respondents received the retrospective debriefing questionnaire.

Coders and interviewers described overall issues with the questionnaire they felt were relevant to the Mandarin-speaking respondents (and perhaps to other Asian-language speakers). There is a tendency among this population, according to the coders (who were themselves native Mandarin speakers), to take some of the questions personally and worry about how their answers would appear to the interviewer (social desirability bias is, of course, common in many languages and cultures). The coders said respondents sometimes appeared to forget the information is being collected for research purposes, not as part of an investigation of their particular lifestyle choices. Coders also felt that native speakers of Chinese, not wanting to appear weak, may not always answer some of the nicotine dependence items completely truthfully.

One important issue is use of the Chinese word “investigation” to mean “study” or “survey” (there is no word to convey the English-language concept of “survey” in Chinese). Initially, we experienced a significant number of refusals and telephone hang ups when this word was used in the screening and introductory materials. Interviewers told us they thought the word was scaring off some respondents by perhaps bringing the police or immigration authorities to mind. We revised the materials, substituting “interview” for “investigation,” with much more success.

Interviewers also told us they thought the Chinese-language questionnaire (which was used with both Cantonese and Mandarin-speaking respondents) seemed more geared toward Mandarin than Cantonese speakers. For example, they said the translation of “no” in the Chinese-language questionnaire is more often used by Mandarin than Cantonese speakers.

As for interviewers, the coders reported that the Mandarin-speaking interviewers were not as aggressive or insistent as the English-speaking interviewers. The Mandarin-speaking interviewers tended to leave questions incomplete after being interrupted by respondents, fail to insist on an answer that fit the questionnaire response options, or offer the “don’t know” option much more quickly. The interviewers’ main problems, according to the coders, seemed to be navigating through the instrument and use of tobacco-related words and phrases (e.g., one interviewer consistently mispronounced the word for “tar”). It should be noted that the English-speaking interviewers were much more experienced than the Mandarin-speaking interviewers, which may account in large part for the differences between them.

14.1 A1. Have you smoked at least 100 cigarettes in your entire life?

Behavior coding results for A1

	Interviewer behavior (n=56)			Respondent behavior: Problem with the question (n=56)		Respondent behavior: Problem with answering (n=51)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	98.2%	1.8%	0%	17.9%	84.3%	15.7%

Coder debriefing results: Coders reported that respondents were confused by the phrase “entire life” and were not sure what the question was asking. For this reason, some respondents asked for a repeat or clarification of the question. Respondents who misunderstood the intent of the question would sometimes answer it by telling stories of times when they had smoked lots of cigarettes all at once. Coders also indicated that Mandarin speakers are likely to interpret “entire life” as encompassing not just the past up to this point in time but also the future until death.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents’ interpretation of the phrase “entire life” encompasses the past and the future. Most were able to answer with little trouble, however. Interviewers read the question as intended the majority of the time. There were no significant problems with this item among English speakers.

Recommendation: Replace “entire life” (一生) with “從過去至目前為止”, loosely translated as “in the past up to now.”

NCI response: Insert the revised translation of “entire life.”

14.2 A2. How old were you when you first started smoking cigarettes FAIRLY REGULARLY?

Behavior coding results for A2

	Interviewer behavior (n=56)			Respondent behavior: Problem with the question (n=56)		Respondent behavior: Problem with answering (n=54)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	98.2%	1.8%	0%	5.4%	74.1%	25.9%

Coder debriefing results: Coders reported that respondents tended to answer with a time period (e.g., “very young,” “in middle school”) or a range (“17 or 18”) rather than an exact age. (Since

the questionnaire requires an exact age for an answer, coders applied the “problem with the answer” code whenever one was not given.)

Retrospective interview results: Respondents were asked how easy or difficult it was for them to answer the question about the age at which they started smoking. Eighteen people answered the question. Seventeen of them said it was “very” or “somewhat” easy (99.4%). Only one person said it was “very difficult” and his or her response to the follow up question about what made it difficult (“very easy”) indicates perhaps the retrospective question was misunderstood or the answer incorrectly recorded. These results are similar to those for English-speaking respondents.

Interviewer debriefing results: No significant problems noted.

Conclusion: Although respondents often provided a range rather than a single number, they appear to have little trouble understanding and responding to item A2. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

14.3 B1/C1a/H4. On the average, about how many cigarettes do you now smoke each day?

Behavior coding results for B1/C1a/H4

	Interviewer behavior (n=53)			Respondent behavior: Problem with the question (n=52)		Respondent behavior: Problem with answering (n=49)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	5.7%	90.6%	3.8%	0%	0%	61.2%	38.8%

Coder debriefing results: Coders noted that respondents would answer with a range instead of an exact number, and range-type answers would have been coded as “problem with the answer.”

Retrospective interview results: Respondents were asked how easy or difficult it was for them to answer the question about how many cigarettes they smoke (or smoked) each day. Sixteen respondents replied to this question. Fifteen of the sixteen respondents said the question was “very” or “somewhat” easy to answer (15 or 93.8%). One respondent, an every day smoker, said it was “very difficult” to answer. When asked to explain what made it difficult, the respondent explained that he or she was simply “very nervous” about answering the survey questions and “[didn’t] know what to say.” English-language respondents found it similarly easy to answer items B1/C1a/H4.

Interviewer debriefing results: No significant problems noted.

Conclusion: Although respondents tended to answer with a range rather than an exact number, they appeared to have little trouble understanding the purpose of the question or providing an appropriate answer. Interviewers read the item as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

14.4 B2/C2/H7a. Is your usual cigarette brand menthol or non-menthol?

Behavior coding results for B2/C2/H7a

	Interviewer behavior (n=54)			Respondent behavior: Problem with the question (n=55)		Respondent behavior: Problem with answering (n=46)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	94.4%	5.6%	0%	18.2%	84.8%	15.2%

Coder debriefing results: Coders said some respondents didn't know whether their cigarette brands were menthol or not and tried to answer by naming the brand or describing the box their cigarettes come in.

Retrospective interview results: Of the 17 respondents who were asked how sure they were about whether their cigarettes are menthol or non-menthol, 15 (88.2%) were "very" or "somewhat" sure. Only 2 (11.8%) were "not sure at all." (Note that all 17 respondents smoked non-menthol cigarettes.) An open-ended follow-up question was not asked for this item. English-language respondents' answers to the retrospective item were similar.

Interviewer debriefing results: No significant problems noted.

Conclusion: Most respondents appear to have little trouble understanding and responding to the question about whether the cigarettes they smoke are menthol or non-menthol. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

14.5 B3/C3/H7b. What type of cigarette do you now smoke most often -- full flavor, a light, an ultralight, or some other type?

Behavior coding results for B3/C3/H7b

	Interviewer behavior (n=54)			Respondent behavior: Problem with the question (n=54)		Respondent behavior: Problem with answering (n=51)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	1.9%	74.1%	24.1%	1.9%	1.9%	76.5%	23.5%

Coder debriefing results: Coders reported that respondents often interrupted interviewers when they heard the type they smoke, and interviewers tended not to finish reading the question after that. Coders also said that some respondents who smoke Chinese cigarette brands had difficulty classifying their type. (Manufacturers of cigarettes sold outside the U.S. are not always required to disclose ingredients in the same way U.S. brand cigarette makers are.) Another reason for the 23.5 percent of “problem with the answer” codes is that some respondents answered the question by naming the brand they smoke rather than by reciting one of the cigarette types listed in the question.

Retrospective interview results: Respondents were asked to describe what makes a cigarette “regular,” “full flavor” or “light.” Of the 18 respondents who received this question, 12 (66.7%) described “regular” cigarettes as in some way “average,” “common,” “every day,” or “usual.” Some specifically referred to price (e.g., “average price”) or brand (e.g., “something like Marlboro, the popular cigarette”), while others were more general in their definition (e.g., “normal, common type of cigarettes,” or “the type everybody, average people smoke”). One person explained that “to me, the regular smoke is the one I smoke, lights.” Three respondents used the term “lights” to describe regular cigarettes. Two of these respondents smoke light cigarettes (that information is missing for the third respondent), which means they may also be interpreting “regular” in the sense of “usual.” Three respondents could not define the term. In contrast, English-language respondents most often defined regular cigarettes as what they are not (e.g., not menthol, not light cigarettes) or what they consist of (e.g., more nicotine or tar).

In describing “full flavor” cigarettes, 8 (44.4%) of the 18 respondents (some of whom defined the term in more ways than one) referred to a stronger taste, flavor, or smell. Five others (27.8%) described “full flavor” cigarettes as containing different kinds of tobacco (“red-brown color”), higher levels of tar or nicotine, or made from a different process (“not roasted, it is mixed”). Two named a specific brand (Marlboro, in both cases), one said full flavor cigarettes are non-menthol, and one used the word “regular.” Three respondents could not define the term. English-speaking respondents, too, tended to describe full flavor cigarettes mostly in terms of taste or strength.

When asked to describe “light” cigarettes, 6 of the 18 respondents (33.3%) said they are lighter in taste or strength. Five respondents used words such as “menthol,” “lighter,” or “ultralight” to define these kinds of cigarettes. Three said there is less tar or nicotine in light cigarettes, and three indicated light cigarettes are more “suitable for the Asian smokers.” English-speaking

respondents were most likely to define light cigarettes in terms of the amount of tar, nicotine, or tobacco in the cigarette.

Interviewer debriefing results: No significant problems noted.

Conclusion: During cognitive testing of the questionnaire (Kudela et al., 2004) we found that Chinese-speaking respondents often interpreted “regular” (普通) cigarettes to mean “usual” or “ordinary” cigarettes, rather than the strength of the cigarette. As a result, the Chinese-language questionnaire was revised to use the term “full flavor” (instead of “regular,” as is used in the English-language questionnaire) in all questions that asked about cigarette type. From the retrospective debriefing results, it appears that respondents are indeed more likely to associate the term “full flavor” with regular strength cigarettes, while defining “regular” cigarettes in the same way that cognitive interview respondents did. The behavior coding results indicate respondents who smoke non-U.S. brands may have trouble regardless of whether they are asked about “full flavor” or “regular” cigarettes. And some respondents prefer to provide the name of the brand they smoke, perhaps because they are not used to thinking about cigarettes in terms of their strength. (Of the 57 respondents who answered B3, C3 or H7b during the telephone interview, about one-fifth [21.1%] of them answered with “full flavor;” over two-thirds [70.2%] said they smoke or smoked lights or ultralights; and none answered with “don’t know.”)

Recommendation: Leave item as it is, with “full flavor” (濃味煙) used instead of “regular.”

NCI response: Leave item as it is.

14.6 B5a/C5a/H8a. How soon after you wake up do you typically smoke your first cigarette of the day?

Behavior coding results for B5a/C5a/H8a

	Interviewer behavior (n=54)			Respondent behavior: Problem with the question (n=55)		Respondent behavior: Problem with answering (n=49)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	96.3%	3.7%	0%	12.7%	55.1%	44.9%

Coder debriefing results: Respondents often would answer with a description of what they do in the morning (e.g., “as soon as I open my eyes,” “after I brush my teeth,” or “after breakfast”). Since this type of answer did not fit the questionnaire response category, coders would have coded each instance where this happened as a problem with the answer.

Interviewer debriefing results: No significant problems noted, although Cantonese-speaking interviewers reported that the current translation of C5a begins “before you quit.”

Conclusion: As with the English-language questionnaire, respondents to the Chinese version do not consistently infer from the phrase “how soon after you wake up” that the interviewer is seeking an answer in minutes or hours, not a description of their morning routines.

Recommendation: Given that the problem described above is specific to the questionnaire and is not a translation or cultural issue, leave the item as it is. However, fix the translation error in C5a.

NCI response: Fix C5a as recommended and otherwise leave item as it is.

14.7 B5cA/H9A. Please tell me if EACH of the following statements is true for you. You have trouble going more than a few hours without smoking.

Behavior coding results for B5cA/H9A

	Interviewer behavior (n=45)			Respondent behavior: Problem with the question (n=45)		Respondent behavior: Problem with answering (n=41)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	2.2%	68.9%	28.9%	0%	4.4%	46.3%	53.7%

Coder debriefing results: Coders reported that items A and C in this series seemed to evoke from respondents higher percentages of defensive explanations (instead of yes/no or true/false answers) than did items B and D. This may be because B and D are clearly hypothetical scenarios from which respondents could more easily distance themselves. Items A and C, on the other hand, appear to be making behavioral attributions. Coders also noted that interviewers often had to explain what was meant by “have trouble” when reading the question.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents tended to answer the item with defensive explanations of their behavior instead of a yes/no or true/false. Interviewers often had to explain the term “have trouble.” The English-language respondents appeared to have little or no trouble with any of the four items in this series.

Recommendation: Consider replacing “have trouble” with a more commonly understood term such as “feel uneasy.” Consider rewording items A and C in this series to sound more hypothetical (e.g., “If you went for more than a few hours without smoking, you would probably feel uneasy”). Also, for consistency across the translated instruments (and to help respondents who appeared to be confused about how to answer this item series), add a second sentence to the

introductory statement that reads “You may answer with true or false, or with yes or no.” (“你可以說是符合或不符合，或者是或否”)

NCI response: Leave items A and C as they are. Add the second sentence to the introductory statement, as described.

14.8 B5cB/H9B. Even in a bad rainstorm, if you ran out of cigarettes, you would probably go to the store to get some more.

Behavior coding results for B5cB/H9B

	Interviewer behavior (n=45)			Respondent behavior: Problem with the question (n=45)		Respondent behavior: Problem with answering (n=43)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	2.2%	86.7%	11.1%	0%	0%	81.4%	18.6%

Coder debriefing results: Coders noted that respondents would sometimes answer with explanations (such as that they make sure to stock up on cigarettes) rather than a yes/no or true/false. However, the problem is not as prevalent as for items A and C in this series.

Retrospective interview results: Current every day and former smokers who said they would not go out in a bad rainstorm to buy more cigarettes if they ran out were asked whether they answered the way they did because they wouldn’t ever go out in the rain or because they would make sure never to run out of cigarettes. Of the 5 respondents who received this question, none said they would make sure never to run out of cigarettes. In the English-language retrospective debriefing, only 2 out of 9 respondents said they would make sure never to run out of cigarettes.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to this question. Interviewers read the item as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

14.9 B5cC/H9C. When you go without smoking for a few hours, you experience craving.

Behavior coding results for B5cC/H9C

	Interviewer behavior (n=46)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=41)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	2.2%	80.4%	17.4%	0%	6.5%	53.7%	46.3%

Coder debriefing results: As with item A, coders reported that item C in this series seemed to evoke defensive explanations from respondents rather than yes/no or true/false answers. (See Section 14.7 for more details about this problem.)

Interviewer debriefing results: Interviewers reported that the translations of “experienced craving” are different at B5cC and H9C. Specifically, they said H9C is not as strongly worded (translated loosely as “I’d like to have a cigarette”) as B5cC (“I’ve got to have it or I get shaky”).

Conclusion: As with item A, respondents tended to provide explanations of their behavior rather than straightforward yes/no or true/false answers. Interviewers read the item as intended most of the time.

Recommendation: Revise H9C to use the same wording for “experienced craving” as in B5cC. Revise both items to sound more hypothetical (e.g., “If you were to go without smoking for a few hours, you would probably get shaky”).

NCI response: Revise “experienced craving” in H9C to match B5cC. Otherwise, leave B5cC and H9C as they are.

14.10 B5cD/H9D. If you were in a public place where smoking isn’t allowed, you’d probably go outside to smoke a cigarette, even in cold or rainy weather.

Behavior coding results for B5cD/H9D

	Interviewer behavior (n=46)			Respondent behavior: Problem with the question (n=45)		Respondent behavior: Problem with answering (n=42)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	4.4%	82.6%	13.0%	0%	2.2%	71.4%	28.6%

Coder debriefing results: Coders noted that respondents would sometimes answer with explanations for their behavior rather than a yes/no or true/false. However, the problem is not quite as prevalent as for items A and C in this series.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents sometimes provided explanations of their behavior rather than straightforward yes/no or true/false answers. Interviewers read the item as intended most of the time.

Recommendation: Leave item as it is.

NCI response: Leave item and item series (aside from recommended revisions in the introductory sentence and in H9C) as it is.

14.11 B6b/c and C6b/c. What price did you pay for the LAST pack/carton of cigarettes you bought? Please report the cost after using discounts or coupons.

Behavior coding results for B6b/c and C6b/c

	Interviewer behavior (n=50)			Respondent behavior: Problem with the question (n=51)		Respondent behavior: Problem with answering (n=48)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	34.0%	66.0%	0%	3.9%	68.8%	31.3%

Coder debriefing results: Coders reported that respondents who have their cigarettes shipped from China had difficulty converting the price. They went on to explain that, in their experience, coupon use is less common among Chinese populations. Given the translation issue raised by interviewers (that the question is asking for the amount of the coupon discount), many of the “problem with the answer” codes were applied to situations where the respondent indicated he or she doesn’t use coupons. Some of the problem answers were used because respondents would answer with a range rather than an exact price. Coders reported that interviewers very often left off the last sentence, perhaps because they realized the translation was wrong.

Interviewer debriefing results: No significant problems noted, although Cantonese-speaking interviewers reported that the current translation of these items is asking for the amount of the discount, not how much the cigarettes were after the discount or coupon.

Conclusion: There is a translation error in these items, which most likely contributed to the problems noted by the coders. Obviously, no such problem occurred in the English-language interviews.

Recommendation: Correct the translation to more accurately reflect what is being asked in the second sentence (“Please report the cost after using discounts or coupons”).

NCI response: Make the recommended revision.

14.12 B7/C7d/H5. What is the total number of years you have smoked EVERY DAY? Do not include any time you stayed off cigarettes for 6 months or longer.

Behavior coding results for B7/C7d/H5

	Interviewer behavior (n=49)			Respondent behavior: Problem with the question (n=50)		Respondent behavior: Problem with answering (n=44)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	87.8%	12.2%	2.0%	8.0%	54.6%	45.5%

Coder debriefing results: Coders said that respondents were confused by the second part of the question and had trouble making their calculations. However, across all languages (including English), coders reported that respondents would often just tell the interviewer the age at which they’d started smoking and their current age then expect the interviewer to make the calculation.

Interviewer debriefing results: No significant problems noted.

Conclusion: Similar to the English-language respondents, Mandarin-speaking respondents had trouble making the necessary calculations to answer this question, or felt that making such a calculation was burdensome enough that they shifted that task over to the interviewer. Interviewers read the item as intended the majority of the time.

Recommendation: Given that the problem described above is specific to the questionnaire and is not a translation or cultural issue, leave the item as it is.

NCI response: Leave item as it is.

14.13 B9/C9/H12. Have you EVER SWITCHED from a stronger cigarette to a lighter cigarette for at least 6 months?

Behavior coding results for B9/C9/H12

	Interviewer behavior (n=54)			Respondent behavior: Problem with the question (n=54)		Respondent behavior: Problem with answering (n=53)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	1.9%	87.0%	11.1%	0%	0%	66.0%	34.0%

Coder debriefing results: Coders said that respondents who had never switched felt this question did not apply to them and were impatient with it. Others who had previously said they smoke light cigarettes all the time thought the question was redundant. These respondents' answers would often be coded as problems because they would comment on the question itself rather than answering (e.g., by saying they'd already given the information to the interviewer or saying this question doesn't apply to them).

Interviewer debriefing results: No significant problems noted.

Conclusion: Some respondents were impatient with what they felt was an inapplicable question. Interviewers read the item as intended the majority of the time. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

14.14 B11(1)/C11(A). I'm going to read you some statements about how LIGHT cigarettes compare to REGULAR cigarettes. For each one, please tell me whether YOU think it is true, false, or you don't know. Light cigarettes give you less tar or nicotine than regular cigarettes.

Behavior coding results for B11(1)/C11(A)

	Interviewer behavior (n=50)			Respondent behavior: Problem with the question (n=50)		Respondent behavior: Problem with answering (n=48)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	2.0%	82.0%	16.0%	0%	0%	58.3%	41.7%

Coder debriefing results: Most of the “problem with the answer” codes were applied when respondents answered with “don’t know.” (From the telephone interview results, 30.8 percent of respondents answered this item with “don’t know.”) As among the Cantonese-speaking respondents, some Mandarin-speaking respondents may have felt uncomfortable answering questions about topics they are unfamiliar with. Note that in most interviewer-administered questionnaires, the “don’t know” option is not read so as to encourage respondents to provide a useable answer. The fact that the “don’t know” option was read at the beginning of this item series may have reminded respondents that “don’t know” was an option, which means they may have been more likely to use it.

Interviewer debriefing results: Interviewers said those respondents who answered “no” at B9/C9 (“Have you ever switched from a stronger cigarette to a lighter cigarette for at least 6 months?”) thought this item series didn’t apply to them. Interviewers found themselves explaining that the questions are asking about respondents’ opinions, not actual behavior.

Conclusion: Respondents may have been somewhat uncomfortable answering these opinion items when they felt uninformed about the topics in question. Some respondents weren’t sure how to answer these items until the interviewer explained that they are asking for opinions, not reports of behavior. No problems were reported for this item among English-speaking respondents.

Recommendation: Consider revising the second sentence of the introductory statement to read, “For each one, please tell me whether, in your opinion, you think it is true, false, or you don’t know.” (“對於每一項陳述，請用你的意見說出是正確，錯誤，還是不知道”)

NCI response: Revise the introductory statement as recommended.

14.15 Da. During the PAST 12 MONTHS, have you TRIED to QUIT smoking COMPLETELY?

Behavior coding results for Da

	Interviewer behavior (n=6)			Respondent behavior: Problem with the question (n=6)		Respondent behavior: Problem with answering (n=5)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Some day smokers (n=)	0%	100%	0%	0%	16.7%	80.0%	20.0%

Coder debriefing results: No significant problems noted. (Note that the 20.0 percent of “problem with the answer” codes represents only 1 respondent.)

Interviewer debriefing results: No significant problems noted.

Conclusion: Only three people received this item and all answered it adequately. The interviewers read the item as intended every time.

Recommendation: Leave item as it is. (See Section 11.15 in the English-language results for information about revisions to the Da/D1 skip pattern instructions.)

NCI response: Leave item as it is.

14.16 D1. Have you EVER stopped smoking for one day or longer BECAUSE YOU WERE TRYING TO QUIT SMOKING?

Behavior coding results for D1

	Interviewer behavior (n=45)			Respondent behavior: Problem with the question (n=40)		Respondent behavior: Problem with answering (n=36)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	13.3%	82.2%	4.4%	0%	7.5%	88.9%	11.1%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: For the most part, respondents had little trouble understanding and responding to item D1. Interviewers read the item as intended the majority of the time.

Recommendation: Leave item as it is. (See Section 11.15 in the English-language results for information about revisions to the Da/D1 skip pattern instructions.)

NCI response: Leave item as it is.

14.17 F1/H6a. In the PAST 12 MONTHS, have you seen a medical doctor, dentist, nurse, or other health professional (about your own health)?

Behavior coding results for F1/H6a

	Interviewer behavior (n=53)			Respondent behavior: Problem with the question (n=53)		Respondent behavior: Problem with answering (n=50)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	1.9%	90.6%	7.6%	0%	9.4%	82.0%	18.0%

Coder debriefing results: Coders said some respondents requested clarification of the question, wondering whether it is asking specifically about doctor visits for smoking-related reasons.

Retrospective interview results: Respondents were asked whether, when they answered this question, they were thinking only about visits for themselves or if they had included visits for other family members, or some other type of visit. This was asked because during cognitive testing we found that Korean-speaking respondents included in their answers visits for those other than themselves (e.g., accompanying a pregnant wife to the OB/GYN or children to the pediatrician). To address this problem, the phrase “about your own health” was added to items F1 and H6a in all four translations of the TUS (Korean, Chinese, Vietnamese, and Spanish). Among the 18 Mandarin speakers who answered the retrospective debriefing question, only 1 indicated he or she was thinking of visits for other family members as well.

Interviewer debriefing results: No significant problems noted.

Conclusion: Some respondents thought the question was asking specifically about doctor visits for smoking-related reasons. Although this did not seem to interfere with their ability to adequately respond to items F1 and H6a, such an interpretation may have resulted in fewer “yes” answers. Interviewers read the item as intended the majority of the time. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is. Although respondents’ interpretation of the question as being about smoking-related doctor visits is not pervasive, adding “for any reason” may help offset the problem. At the same time, adding this phrase will also further clutter up the question, which has already had “for your own health” added to it.

NCI response: Leave item as it is.

14.18 F5. Which health professional that you saw in the past 12 months spent the MOST time advising you about quitting smoking?

Behavior coding results for F5

	Interviewer behavior (n=27)			Respondent behavior: Problem with the question (n=27)		Respondent behavior: Problem with answering (n=24)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	3.7%	81.5%	14.8%	0%	7.4%	62.5%	37.5%

Coder debriefing results: Coders pointed out that the phrases “in the past 12 months” and “advising you about quitting smoking” are missing from the question. They also said that the response options were included in the question stem (they are not included in the English-language version). The truncated question caused a great deal of confusion among respondents, many of whom asked for the question to be clarified or provided an answer other than one of the response options.

Interviewer debriefing results: Interviewers said that the phrase “advising you about quitting smoking” is missing from the question, but noted no other significant problems.

Conclusion: There are several translation errors in this item. Despite the fact that the response options are not part of the original question, English-language interviewers would also sometimes read them to respondents.

During the cognitive testing phase, we found that for respondents who said “no” at question F4 (“During the past 12 months, did any doctor, dentist, nurse, or other health professional spend any time talking to you about how you should try to quit smoking?”), F5 appears to be contradicting that “no” answer. We made a recommendation to insert an instruction to skip F4 “no” answers to Section G which was approved by NCI. However, that revision was inadvertently omitted during this round of testing.

Recommendation: Put “in the past 12 months” and “advising you about quitting smoking” back into item F5. Remove the response options from the question wording. Insert the skip instruction at item F4 so that those who say “no” at F4 are skipped past F5.

NCI response: Fix the item as recommended and re-insert the F4 skip instruction.

14.19 G3. Overall, on a scale from 1 to 10 where 1 is NOT AT ALL interested and 10 is EXTREMELY interested, how interested are you in quitting smoking?

Behavior coding results for G3

	Interviewer behavior (n=50)			Respondent behavior: Problem with the question (n=51)		Respondent behavior: Problem with answering (n=47)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	96.0%	4.0%	2.0%	11.8%	53.2%	46.8%

Coder debriefing results: Coders said respondents had many problems with the scale, including not understanding that they could pick any number between 1 and 10, thinking that 1 is good and 10 is bad, and using numbers other than the scale to answer (e.g., “50/50,” or “100% interested,” “very interested,” or “not interested at all”). One coder explained that Chinese respondents may have trouble with scales because “we either like something or we don’t,” meaning a 10-point scale offers more choices than respondents are prepared to consider.

Interviewer debriefing results: No significant problems noted, although Cantonese interviewers pointed out that the phrase “where 10 is extremely interested” reads as “where 1 is extremely interested” in the current translation. (This error was caught during interviewer training so interviewers knew to read “where 10 is extremely interested” even though the printed questionnaire was wrong.) Also, interviewers across all languages said they did not at first notice the skip instruction at this item, interpreting it to mean skip everyone except those who answer “don’t know” or “refused” past item G4.

Conclusion: Respondents had trouble using the 1 to 10 scale to answer item G3. Interviewers read the item as intended every time. No problems were reported for this item among English-language respondents.

Recommendation: Revise the translation so it reads “where 10 is extremely interested.” Consider offering a smaller scale (e.g., two or three choices at most) and describing the label for each choice. Alternatively, insert in the question an instruction to the respondent that reads, “Please indicate how interested you are by picking a number from 1 to 10.” (“請選擇由1至10之間的一個號碼來表示你對戒煙的興趣。”) ”

NCI response: Insert the second sentence as recommended.

14.20 G4. If you did try to quit smoking altogether in the next 6 months, how LIKELY do you think you would be to succeed -- not at all, a little likely, somewhat likely or very likely?

Behavior coding results for G4

	Interviewer behavior (n=40)			Respondent behavior: Problem with the question (n=36)		Respondent behavior: Problem with answering (n=32)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	12.5%	62.5%	25.0%	2.8%	0%	75.0%	25.0%

Coder debriefing results: Here, too, coders felt respondents were somewhat overwhelmed by the number of response options. Coders said interviewers often read the “don’t know” response option to respondents (perhaps to provide an easy alternative to the confusing scale). Coders also thought the distinction between “a little” and “somewhat” may be too similar in the current translation. Finally, the high percentage of “question not read” codes is due to the skip pattern problem described in Section 14.19 (interviewers inadvertently skipped G4 because the instruction at G3 was not prominent enough). This was also a problem on the English-language questionnaire.

Interviewer debriefing results: Interviewers also said the translations of “a little” and “somewhat” are too similar to distinguish very well.

Conclusion: Interviewers often skipped G4 because of a skip instruction problem at G3. Respondents had difficulty understanding and answering using the scale provided. The difference between the translations of “a little” and that of “somewhat” was small enough that respondents had trouble distinguishing them. Problems with understanding and responding to the scale were not reported for the English-language questionnaires.

Recommendation: Consider offering a smaller scale (e.g., two or three choices at most) and describing the label for each choice. If the current scale is retained, revise the translations of “a little” and “somewhat” so that the difference between them is more apparent. (See Section 11.19 for more details about revising the skip instruction at G3.)

NCI response: Leave item as it is.

14.21 H7c(2). In the year before you quit smoking, please tell me if each of the following was true for YOU. You smoked (lights/ultralights) as a way to try to quit smoking.

Behavior coding results for H7c(2)

	Interviewer behavior (n=2)			Respondent behavior: Problem with the question (n=3)		Respondent behavior: Problem with answering (n=2)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Former smokers	0%	100%	0%	0%	33.3%	100%	0%

Coder debriefing results: The 33.3 percent of respondents who requested clarification represents only one person. Coders did not note any significant problems with this item.

Interviewer debriefing results: No significant problems noted. However, Cantonese interviewers said that the translation of “in the year” actually reads “right now.”

Conclusion: Although the percentage of request clarification codes is high, the actual number of respondents who had that problem is too low to draw any conclusions from. Interviewers read the item as it was translated every time. There is a translation error in the item. No problems were reported for this item among English-language respondents.

Recommendation: Revise the translation to read “in the year” instead of “right now” at the beginning of the question.

NCI response: Fix the item as recommended.

14.22 J1a. Have you EVER used a pipe, cigar, chewing tobacco or snuff, EVEN ONE TIME?

Behavior coding results for J1a

	Interviewer behavior (n=55)			Respondent behavior: Problem with the question (n=56)		Respondent behavior: Problem with answering (n=52)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	67.3%	32.7%	0%	5.4%	84.6%	15.4%

Coder debriefing results: Coders reported that interviewers had trouble with the translations of “chewing tobacco” and “snuff,” which they said are not commonly used among Chinese-speaking populations.

Retrospective interview results: Respondents were asked whether they had ever heard the word “snuff” before. Those that had heard of snuff were asked to define the term. Ten (55.6%) of the 18 people asked the question said they had heard the word. Seven of those 10 described snuff as “something” that gets put in the nose, whether smoke, a powder, or some kind of tobacco. Two said snuff is a drug such as cocaine or opium, and one couldn’t define the term. English-language respondents could not define the term either. Note that of the 32 Mandarin-speaking telephone interview respondents who indicated they had tried one of the tobacco products listed in J1a, only one said he or she currently uses snuff and most (28 or 87.5%) said they have never used it.

Interviewer debriefing results: No significant problems noted.

Conclusion: The word “snuff” was not recognized by most respondents or interviewers. Otherwise, respondents had little trouble understanding or answering item J1a. Interviewers also had trouble with the word for “chewing tobacco.” No significant problems were reported for this item among English-language respondents.

Recommendation: Consider taking “snuff” out of the question since most if not all respondents do not know what it is and no one reported using it. Or, in the brackets below the question where examples of snuff products are listed, include an explanation of snuff (in Chinese) that reads “Snuff, a finely ground or shredded tobacco, is packaged as dry, moist, or in sachets, which are tea bag-like pouches. Typically, the user places a pinch or dip between the cheek and gum.” (“鼻煙是一種經磨碎或切碎的煙草，弄乾或潤濕後包裝成茶葉包的樣子。用者會捏一小撮放在面頰和牙肉之間。 ”)

NCI response: Leave the item as it is and insert the definition.

14.23 KSCR. Do you currently work for pay?

Behavior coding results for KSCR

	Interviewer behavior (n=55)			Respondent behavior: Problem with the question (n=56)		Respondent behavior: Problem with answering (n=48)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	94.6%	5.5%	0%	25.0%	85.4%	14.6%

Coder debriefing results: Coders reported that a few interviewers omitted the phrase “for pay” (this happened much more often in the Cantonese-language interviews). They speculated that this may have happened because, according to them, “Chinese people always work for pay” and so perhaps the interviewers felt it would sound silly to tack on that phrase. The coders also said that some respondents became a little defensive when they heard the question. They reasoned that respondents who aren’t employed (and therefore ashamed of not having a job) or who aren’t U.S. citizens may have been worried about what kind of work-related questions would follow.

Interviewer debriefing results: One interviewer said the wording of this question does not reflect the way people speak or think about working. She felt that simply asking “Do you work?” or “Do you have a job?” would have been sufficient since, in her view, within the Chinese culture people will not work unless they are paid.

Conclusion: Some respondents were initially reluctant to answer the question about their work status. English-language respondents also sometimes requested clarification of this item, although for different reasons.

Recommendation: Adding a transitional statement that introduces the new section and explains its purpose (as recommended in the English-language results Section 11.23) may alleviate some respondent worries about the kinds of work-related questions that will be asked. Such a statement would read, “My next questions are about the smoking rules at your job and home.” (“以下的問題是與你在工作場所和家中抽煙的規定有關的。”)The recommendation in the Cantonese-language results to drop the phrase “for pay” applies here, too, since only one version of the translation is used for both languages. (“你現在是否有工作?”)

NCI response: Make the revisions as recommended.

14.24 K1. Which of these best describes the area in which you work MOST of the time? Mainly work indoors, mainly work outdoors, travel to different buildings or sites, in a motor vehicle, somewhere else.

Behavior coding results for K1

	Interviewer behavior (n=39)			Respondent behavior: Problem with the question (n=40)		Respondent behavior: Problem with answering (n=38)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	2.6%	59.0%	38.5%	0%	0%	86.8%	13.2%

Coder debriefing results: Coders said interviewers would often read only the first two options in the question (“mainly work indoors” and “mainly work outdoors”). This was a problem in the English-language interviews as well.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers tried to shorten this somewhat lengthy item. Respondents appeared to have little trouble understanding or responding to the question.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

14.25 K1b. Do you mainly work in an office building, in your own home, in someone else’s home, or in another indoor place? [IF NEEDED: You said that you now work indoors.]

Behavior coding results for K1b

	Interviewer behavior (n=29)			Respondent behavior: Problem with the question (n=28)		Respondent behavior: Problem with answering (n=26)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	6.9%	69.0%	24.1%	0%	3.6%	69.2%	30.8%

Coder debriefing results: Coders could not provide an explanation for the high percentages of “question read incorrectly” and “problem with the answer.”

Interviewer debriefing results: No significant problems noted.

Conclusion: There is no clear explanation for the problems coded at this item.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

14.26 K3a. Which of these best describes your place of work's smoking policy for INDOOR PUBLIC OR COMMON AREAS, such as lobbies, rest rooms, and lunch rooms? Not allowed in ANY public areas, allowed in SOME public areas, allowed in ALL public areas.

Behavior coding results for K3a

	Interviewer behavior (n=25)			Respondent behavior: Problem with the question (n=24)		Respondent behavior: Problem with answering (n=22)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	8.0%	80.0%	12.0%	0%	0%	100%	0%

Coder debriefing results: Coders said the phrase “such as lobbies, restrooms, or lunchrooms” is missing from the translation.

Interviewer debriefing results: No significant problems noted.

Conclusion: There is a translation error in these items. Although this did not seem to interfere with respondents’ ability to understand or respond to the question, they were not answering the question as it was originally intended. Obviously, no such problem occurred in the English-language interviews.

Recommendation: Put the translation of “such as lobbies, restrooms, or lunchrooms” back in the question.

NCI response: Fix the item as recommended.

14.27 K4. In a usual week, does ANYONE who lives here, including yourself, smoke cigarettes, cigars, or pipes anywhere inside this home?

Behavior coding results for K4

	Interviewer behavior (n=54)			Respondent behavior: Problem with the question (n=56)		Respondent behavior: Problem with answering (n=52)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	85.2%	14.8%	0%	5.4%	80.8%	19.2%

Coder debriefing results: No significant problems noted.

Retrospective interview results: Respondents were asked to describe who they were including in their answer to item K4. Eight of the 18 (44.4%) said they included anyone who comes to the house. Four (22.2%) said they thought only of the people who live in the home. The rest listed specific family members or simply said “myself.” It was difficult to tell from these answers whether the people they listed comprised all households members or whether those people actually live in the household. These findings are similar to those for the English-language respondents.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers read item K4 as intended the majority of the time. Although respondents had little trouble understanding and responding to the question, they may not be consistent in their interpretation of the item. As in the English-language version, some respondents may not restrict their answers to those who live in the home with them. This issue, however, appears to relate to the construction of the original item, not its Chinese translation.

Recommendation: See Section 14.29 for recommendations about the entire item series.

NCI response: See Section 14.29.

14.28 K5a. In a usual week, how many people WHO LIVE here, including yourself, smoke cigarettes, cigars, or pipes anywhere INSIDE this home?

Behavior coding results for K5a

	Interviewer behavior (n=21)			Respondent behavior: Problem with the question (n=22)		Respondent behavior: Problem with answering (n=21)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	61.9%	38.1%	0%	9.1%	66.7%	33.3%

Coder debriefing results: Coders said that respondents sometimes didn’t understand or hear the phrase “how many days per week” and so would get irritated, thinking the question had already been asked. Interviewers, too, would become confused in their reading of the question, thinking they had just asked it.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers and respondents both felt this question was redundant with K4.

Recommendation: See Section 14.29 for recommendations about the entire item series.

NCI response: See Section 14.29.

14.29 K5b. Usually, about how many days per week do people WHO LIVE here smoke anywhere INSIDE this home?

Behavior coding results for K5b

	Interviewer behavior (n=16)			Respondent behavior: Problem with the question (n=17)		Respondent behavior: Problem with answering (n=14)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	68.8%	31.3%	0%	11.8%	21.4%	78.6%

Coder debriefing results: Coders reported that respondents were confused with the K4/K5a/K5b series of items, thinking the same question was being asked repeatedly and providing inappropriate answers. They said that interviewers also would add their own words to

the question, attempting to explain what “this home” refers to. Cantonese coders noted the translation of K5b seems “clumsy” in its phrasing, particularly the use of “how many days per week.” This problem was not mentioned by the Mandarin coders.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers included explanations of “this home” in their reading of the question. Respondents had some trouble with the item, thinking they had already answered it at K4 or K5a.

Recommendation: Across all target languages, respondents had varying degrees of trouble with this item series. In addition to being inconsistent in whom they included in their answers, respondents often indicated (either explicitly or by their answers) that K5b sounded to them like the same question as K5a. An additional problem with K5b is in interpreting respondents’ answers. For example, is an answer of 5 days per week the total for all household smokers, or is it the number of days for one smoker in the house while others (if there are any) smoke more or fewer days than that? To address the respondent confusion found in this study and the potential analysis problems, replace the current three-item series with the two-item series used in 2003. The two items with their translations appear below.

K4. Does anyone smoke cigarettes, cigars, or pipes anywhere inside your home?
 (“是否有人在你家中抽香煙、雪茄或煙斗”)

K5. On the average, about how many days per week is there smoking anywhere inside your home?
 (“每週平均大約有幾天有人在你家中抽煙?”)

NCI response: Replace the current three-item series with the 2003 two-item series.

14.30 K6. Which statement best describes the rules about smoking INSIDE YOUR HOME? No one is allowed to smoke anywhere INSIDE YOUR HOME, smoking is allowed in some places or at some times INSIDE YOUR HOME, smoking is permitted anywhere INSIDE YOUR HOME.

Behavior coding results K6

	Interviewer behavior (n=53)			Respondent behavior: Problem with the question (n=56)		Respondent behavior: Problem with answering (n=52)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	84.9%	15.1%	0%	7.1%	78.9%	21.2%

Coder debriefing results: Coders said respondents had problems with this item because the response options are too long and difficult for them to distinguish among. Interviewers dealt with

the problem by reciting a number in front of each option, then when the respondent chose a number, reading the option associated with that number again to make sure that was what the respondent had intended to answer.

Retrospective interview results: Respondents were asked to explain to whom the smoking rules in their homes apply. Fourteen of the 18 (77.8%) said the rules apply to anyone who comes into the home. Four of the respondents (22.2%) said the rules apply only to those living there.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers attempted to shorten this lengthy item by numbering the response options. Respondents had trouble distinguishing among the response options. Most, however, are thinking of house smoking rules that apply to everyone, not just those who live in the home. No problems were reported for this item among English-language respondents.

Recommendation: If possible, revise the translation to shorten the response options. Otherwise, leave item as it is.

NCI response: Leave item as it is.

14.31 K7. In your opinion, how easy is it for minors to buy cigarettes and other tobacco products in your community? Very easy, somewhat easy, somewhat difficult, or very difficult.

Behavior coding results K7

	Interviewer behavior (n=53)			Respondent behavior: Problem with the question (n=56)		Respondent behavior: Problem with answering (n=49)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	77.4%	22.6%	1.8%	8.9%	30.6%	69.4%

Coder debriefing results: Coders reported that respondents had similar problems with the response scale at this item as those described for items G3 and G4 (for example difficulty choosing an option; see Sections 14.19 and 14.20 for more details). To help address these problems, interviewers would often just read “easy” and “difficult.” From the telephone interview results, almost half the respondents (26 or 45.6%) ended up answering with “don’t know” (which would have triggered a “problem with the answer” code).

Coders also noted that interviewers sometimes didn’t correctly read the word “minor” (which is very close to the word “adult” in Cantonese). This problem was discovered during cognitive testing and the recommendation was to train interviewers to strongly emphasize the word for “minor.” Apparently, a better solution is required for this problem.

Retrospective interview results: Respondents were asked to describe what age range they felt defined “minor.” Of the 18 respondents, 5 answered with some variation of under (but not including) 18 years old while 4 said 18 and younger. However, 7 respondents defined “minor” as over 18 (e.g., “20-30,” “20 to 24,” “18 to 25”). It could be that these respondents heard the version of the word for “minor” that means “adult.” Two respondents could not define the term.

Respondents were also asked to define the term “your community.” Seven of the 18 respondents defined it as the stores “close to the house” or “nearby” to their homes. Four said it comprises their “neighborhood” and five defined it more widely to include the entire city or county where they live. Three respondents could not define the term.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents and interviewers had several problems with this item. Respondents seemed uncomfortable using the response scale to answer the question. Interviewers attempted to compensate by offering only two choices, “easy” and “difficult.” Interviewers did not always enunciate the word “minor” clearly, which may be one reason why a significant number of retrospective debriefing respondents defined the term as over 18. Similar to the English (although in much higher proportion), a large number of Mandarin respondents (45.6%) simply answered “don’t know” for this item.

Recommendation: Consider offering the two response options used by interviewers, “easy” and “difficult.” Also, replace the word “minor” with a more specific phrase such as “those under age 18” (“十八歲以下的青少年”).

NCI response: Leave response options as they are but revise the translation for “minor” as described.

14.32 K9. In bars and cocktail lounges, do you THINK that smoking should be allowed in all areas, allowed in some areas, or not allowed at all?

Behavior coding results K9

	Interviewer behavior (n=54)			Respondent behavior: Problem with the question (n=55)		Respondent behavior: Problem with answering (n=48)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	1.9%	77.8%	20.4%	0%	5.5%	68.8%	31.3%

Coder debriefing results: Coders noted that the translation of this and similar items in the series is too long and that respondents would get irritated with the repetitiveness of the item series. To alleviate the problem, interviewers often offered their own shortened version of the question (e.g., “What about bars and cocktail lounges, would you say the same thing?”). At the

same time, respondents would answer with discussions of smoking habits in bars or by stating that they wouldn't know because they never go to bars or cocktail lounges.

Retrospective interview results: Respondents were asked how easy or difficult it was to answer this question. Thirteen (72.2%) of the 18 who received the question thought it was “very easy” or “somewhat easy.” Two respondents thought it was “somewhat difficult,” two thought it was “very” difficult and one didn't know. When asked what made it difficult, two of the four simply said it was too hard to decide and the other two gave reasons such as “people in the bar normally love to smoke.”

Interviewer debriefing results: No significant problems noted.

Conclusion: In the telephone questionnaire used for this round of testing, item K9 actually appeared as item K12 in a series of six similar items asking about whether respondents felt smoking should be allowed or not in various public gathering places. Each item also had a follow-up forcing those who answered “allowed in some areas” to choose between all or no areas. The item wordings are lengthy and repetitive, sometimes irritating respondents. Mandarin interviewers tried to alleviate the problem by offering their own shortened versions of the questions.

No problems with this particular item were reported among the English-language respondents.

Recommendation: Leave item K9 (formerly item K12) as it is. At NCI's request, all other items in this series have been removed from the final questionnaire and will be delivered separately from the TUS.

NCI response: Leave item K9 (formerly item K12) as it is.

14.33 Retrospective debriefing questionnaire results for items not coded

Every day and some day smokers who indicated on the TUS that they had attempted to quit, and all former smokers, were asked to describe the methods they used and how well those methods worked. The purpose of asking these questions was to determine how familiar respondents were with the quit methods listed on the TUS in Section E (items H10a through H10c for former smokers). The 17 (current and former) smokers who were administered the retrospective debriefing questions about quitting mentioned 6 different methods (see Table 14 below).¹⁵ When asked to describe these methods, all seemed to understand what they were, how they functioned, and how well they worked. Note that of the 57 telephone interview respondents, no current or former smokers reported using a nicotine nasal spray, a nicotine lozenge, a nicotine tablet, a stop smoking clinic/class/support group, the internet, acupuncture, hypnosis, or switching to other tobacco products (besides light cigarettes).

¹⁵ Interviewers asked about up to three quit methods respondents reported on the TUS as having used.

Table 14. Quit methods cited by current and former smokers in the retrospective debriefing questionnaire

Method	Number of respondents citing method
Cold turkey	4
Cutting back gradually	3
Switch to light cigarettes	2
Help or support from friends and family	1
Nicotine gum	1
Read books	1

During the cognitive interview phase of this project, we heard that some respondents who smoked in their native country and while living in the United States thought only of their U.S. smoking experiences when answering the TUS. To determine the extent of this problem, we asked retrospective debriefing respondents who had not lived in the U.S. their entire lives whether they were thinking about their experiences in the U.S., in the country where they'd lived previously, or both. Of the 18 respondents who received this question, 13 said they thought of both places, four said they thought only of their experiences in the U.S, and one said he or she thought only of experiences in the previous country. (All five of these respondents were smokers in both the U.S. and the countries they'd previously lived in.)

14.34 Recommendations for items not behavior coded

Item K9 in series on attitudes about smoking in public places (delivered separately). According to one interviewer, the translation of “restaurants” in K9 means “bars that sell food.” Replace that translation with one that means “family restaurant” or “dining place” (“餐廳”).

NCI Response: Revise the translation as recommended.

15. RESULTS OF SPANISH-LANGUAGE INTERVIEWS

Fifty-one respondents took the TUS-CPS in Spanish. Of those, 47 cases could be behavior coded from tape recordings of the interviews. The tapes of the 4 remaining interviews malfunctioned in some way (e.g., the tape recorder did not record or the coder could not hear the interviewer or respondent well enough to code their verbal behaviors).

Thirty-four of the 47 respondents are every day smokers, 9 are some day smokers, and 4 are former smokers (having quit within the past five years).

Twenty-five respondents received the retrospective debriefing questionnaire in Spanish.

The coders reported that the Spanish-speaking respondents they listened to were quite talkative, often wanting to share their histories and engage in chit-chat with the interviewer. As a result, coders felt the interviews took longer than if the questions had been answered more straightforwardly. Additionally, coders reported that some of the requests for clarification seem to have occurred because respondents had forgotten the original question after conversing with the interviewer.

15.1 A1. Have you smoked at least 100 cigarettes in your entire life?

Behavior coding results for A1

	Interviewer behavior (n=47)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=43)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	2.1%	93.6%	4.3%	0%	10.9%	90.7%	9.3%

Coder debriefing results: Coders said that pronunciation of the translation for “at least” (“al menos”) sometimes sounded like “less than” (“menos que” or “menos de”). When answering the question, some respondents would say things such as “But I’ve smoked much more than that.”

Interviewer debriefing results: No significant problems noted.

Conclusion: The pronunciation of “at least” is problematic if not enunciated clearly enough to distinguish it from “less than.” Aside from that issue, respondents appear to have little trouble understanding and responding to item A1. Interviewers read the question as intended the majority of the time. This was also true for the English-language interviews.

Recommendation: Leave item as it is. However, train interviewers to clearly enunciate “at least” (“al menos”) when reading the question.

NCI response: Leave item as it is.

15.2 A2. How old were you when you first started smoking cigarettes FAIRLY REGULARLY?

Behavior coding results for A2

	Interviewer behavior (n=47)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=46)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	2.1%	85.1%	12.8%	10.9%	0%	78.3%	21.7%

Coder debriefing results: Coders reported that respondents tended to answer with a range (e.g., 15 to 16) instead of an exact age. This is most likely the reason for the 21.7 percent of respondents coded as having a problem with the answer. (Coders were instructed to use the “problem with the answer” code if the respondent’s answer did not fit the questionnaire response category. This item on the TUS requires an exact age for an answer.)

Retrospective interview results: Respondents were asked how easy or difficult it was for them to answer the question about the age at which they started smoking. Only 2 respondents reported having difficulty (one said it was “somewhat difficult” and the other said it was “very difficult”). When asked what made it difficult, both indicated it was because they were “young” when they started smoking and it was “a long time ago.” English-language respondents said much the same about answering this question.

Interviewer debriefing results: No significant problems noted.

Conclusion: Although respondents often provided a range rather than a single number, they appear to have little trouble understanding and responding to item A2. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

15.3 B1/C1a/H4. On the average, about how many cigarettes do you now smoke each day?

Behavior coding results for B1/C1a/H4

	Interviewer behavior (n=47)			Respondent behavior: Problem with the question (n=47)		Respondent behavior: Problem with answering (n=45)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	83.0%	17.0%	2.1%	6.4%	57.8%	42.2%

Coder debriefing results: Coders said that respondents had no trouble understanding the question, but would often provide a range rather than a precise answer (this problem occurred across all languages). As in A1 above, this likely explains the 42.2 percent of respondents coded as having a problem with the answer.

Retrospective interview results: Respondents were asked how easy or difficult it was for them to answer the question about how many cigarettes they smoke (or smoked) each day. Only three respondents (two every day smokers and one some day smoker) said it was “somewhat difficult” (none answered with “very difficult”). Most respondents reported it was either “very easy (12 or 48.0%) or “somewhat easy” (10 or 40.0%). When asked what made it difficult to answer the question, the respondents could not explain beyond saying they just “don’t remember” how many cigarettes they smoke every day. English-language respondents found it similarly easy to answer items B1/C1a/H4.

Interviewer debriefing results: Interviewers felt the translations used for “on the average” (“en promedio”) and in C1a, “usually” (“sualmente”), are not common terms. Coders disagreed, but noted that “en promedio” may sound like it’s introducing a mathematical problem to some respondents, particularly those with lower educational levels.

Conclusion: Respondents appear to have little trouble understanding the item, although they often preferred to answer with a range rather than an exact number of cigarettes smoked every day.

Recommendation: Leave item as it is. Or, if desired, substitute “más o menos” (“more or less”) for “en promedio” (“on the average”).

NCI response: Leave item as it is.

15.4 B2/C2/H7a. Is your usual cigarette brand menthol or non-menthol?

Behavior coding results for B2/C2/H7a

	Interviewer behavior (n=47)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=45)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	2.1%	91.5%	6.4%	2.2%	4.4%	93.3%	6.7%

Coder debriefing results: No significant problems noted.

Retrospective interview results: Of the 24 respondents who were asked how sure they are that their cigarettes are menthol or non-menthol, 23 (95.8%) are “very” or “somewhat” sure. Only one (4.2%) was “not sure at all.” An open-ended follow-up question was not asked for this item. English-language respondent answers to the retrospective item were similar.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to the question about whether the cigarettes they smoke are menthol or non-menthol. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

15.5 B3/C3/H7b. What type of cigarette do you now smoke most often -- a regular, a light, an ultralight, or some other type?

Behavior coding results for B3/C3/H7b

	Interviewer behavior (n=47)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=44)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	2.1%	89.4%	8.5%	17.4%	0%	86.4%	13.6%

Coder debriefing results: Coders said that respondents often answered this question with the brand of cigarette they smoke. In fact, some respondents answered this question in English, perhaps because they smoke a U.S. brand. Coders also reported that respondents who answered with a non-U.S. brand sometimes weren’t sure whether that brand was regular or light. Note that of the 50 TUS respondents who received one of these items, only one provided an answer that

was coded by the interviewer as “some other type.” Despite initial difficulty for some respondents, almost all were able to categorize their cigarettes into one of the three specific alternatives.

The 17.4 percent of respondents coded as having interrupted the reading of the question probably did so by answering their type of cigarette when it was read rather than waiting for the entire question to be read before responding.

Retrospective interview results: Respondents were asked to describe what makes a cigarette “regular,” “full flavor” or “light.” Nine of the 24 respondents who answered this question described regular cigarettes in terms of their strength. Eight said they are stronger (although they didn’t indicate what regular cigarettes are stronger than) and two said they are “not too strong.” Three of the seven who think regular cigarettes are stronger said they contain more nicotine and one said the flavor is stronger. Nine respondents described regular cigarettes as what they are not – not menthol, not light or ultralight, not kings, not made with a filter. Only three respondents described regular cigarettes in terms of their flavor and no one used the phrase “full flavor.” Four respondents gave some other explanation (e.g., “the ones you usually buy,” or “good quality, the cheaper ones are more harmful”).

The 24 definitions of “full flavor” cigarettes were less cohesive than those for “regular.” Four respondents used the word “regular” to describe “full flavor” cigarettes. Six described full flavor cigarettes in terms of the taste or the way they make people feel (“relaxes me” or “I feel good when I smoke it”). Three respondents thought full flavor cigarettes are “stronger” (although they did not indicate what the cigarettes are stronger than) and one said they are “less strong.” Three respondents thought these type of cigarettes are menthol, and one did not. One person said full flavor cigarettes have “more nicotine” and one said they have “less chemicals.” Two respondents gave some other explanation (e.g., “that it has nicotine”) and four said they didn’t know how to define it.

When asked to describe “light” cigarettes, 9 of the 23 respondents did so in terms of the amount of nicotine or other substances in the cigarette. Four of these explicitly said light cigarettes have less nicotine, the rest simply mentioned the ingredients. Four respondents said light cigarettes have less strength or flavor, 4 said they are “softer” or “easier” on the throat, and 4 said that the existence of a filter (or “more filter”) makes them light. Three respondents gave some other explanation (e.g., “not satisfying” or “waste of your money”) and 3 said they couldn’t define the term.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to the question about whether they smoke regular, light, or ultralight cigarettes. Respondents who smoke cigarette brands from countries that are not required to or do not normally indicate the amount of tar and nicotine in their tobacco products may have problems deciding whether the non-U.S. brands they smoke are regular, light, or something else. For the most part, however, respondents appear to understand the distinction between regular and light cigarettes, and the word “regular” is probably somewhat more familiar to them as a way to describe non-light

cigarettes. Interviewers read the question as intended the majority of the time. Aside from trouble deciding how to categorize non-U.S. brands, these findings hold for the English-language interviews as well.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

15.6 B5a/C5a/H8a. How soon after you wake up do you typically smoke your first cigarette of the day?

Behavior coding results for B5a/C5a/H8a

	Interviewer behavior (n=47)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=44)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	2.1%	97.9%	0%	2.2%	2.2%	31.8%	68.2%

Coder debriefing results: Coders observed that respondents would often answer with descriptions of what they do after waking up rather than the number of minutes or hours (e.g., “as soon as I open my eyes,” “after I brush my teeth,” or “after breakfast”). Describing these rituals rather than answering with minutes or hours would have triggered a “problem with the answer” code.

Interviewer debriefing results: No significant problems noted.

Conclusion: As with the English-language questionnaire, respondents to the Spanish version do not consistently infer from the phrase “how soon after you wake up” that the interviewer is seeking an answer in minutes or hours, not a description of their waking up routines.

Recommendation: Given that the problem described above is specific to the questionnaire and is not a translation or cultural issue, leave the item as it is.

NCI response: Leave the item as it is.

15.7 B5cA/H9A. Please tell me if EACH of the following statements is true for you. You have trouble going more than a few hours without smoking.

Behavior coding results for B5cA/H9A

	Interviewer behavior (n=38)			Respondent behavior: Problem with the question (n=37)		Respondent behavior: Problem with answering (n=31)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	2.6%	73.7%	23.7%	2.7%	18.9%	83.9%	16.1%

Coder debriefing results: Coders said that interviewers tended to preface this item series with an additional reminder (beyond that provided in the introduction) that the answers should be given as true/false or yes/no. (This strategy was not employed among the English-language interviewers.) Interviewers may have started doing this in anticipation of problematic answers after experiencing several interviews where respondents’ answers did not fit the existing response categories (e.g., telling stories or explaining why they do or do not engage in the behavior described in the question). This more than likely accounts for many of the 16.1 percent of respondents who were coded as having a problem with their answers.

Additionally, coders explained that respondents may have requested clarification because “trouble” was translated as “trabajo,” which also means “work.” They suggested that respondents may have more easily understood a word that means it was hard for them or they experienced discomfort going for more than a few hours without smoking (e.g., “difícil”). The coders did not think respondents were offended by this series of items.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers often felt the need to emphasize the type of answer expected for this item series. The translation of “trouble” may have caused some confusion, as it has another meaning (“work”) that doesn’t fit the question context.

The English-language respondents appeared to have little or no trouble with any of the four items in this series.

Recommendation: Consider adding a second sentence to the introductory statement that reads “You may answer with true or false, or with yes or no.” (“Me puede contestar si es cierta o falsa, o me puede contestar sí o no.”). Also, replace “trabajo” with “difícil” to represent the English word “trouble.”

NCI response: Add the second sentence to the introductory statement, as described. Replace the “trabajo” with “difícil.”

15.8 B5cB/H9B. Even in a bad rainstorm, if you ran out of cigarettes, you would probably go to the store to get some more.

Behavior coding results for B5cB/H9B

	Interviewer behavior (n=38)			Respondent behavior: Problem with the question (n=37)		Respondent behavior: Problem with answering (n=37)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	2.6%	92.1%	5.3%	5.4%	2.7%	91.9%	8.1%

Coder debriefing results: No significant problems noted.

Retrospective interview results: Current every day and former smokers who said they would not go out in a bad rainstorm to buy more cigarettes if they ran out were asked whether they answered the way they did because they wouldn't ever go out in the rain or because they would make sure never to run out of cigarettes. Of the 5 respondents who received this question, only 1 said he or she would make sure never to run out of cigarettes. Similar results were reported for the English-language interviews.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to items B5cB and H9B. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

15.9 B5cC/H9C. When you go without smoking for a few hours, you experience craving.

Behavior coding results for B5cC/H9C

	Interviewer behavior (n=38)			Respondent behavior: Problem with the question (n=37)		Respondent behavior: Problem with answering (n=35)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	2.6%	94.7%	2.6%	0%	2.7%	91.4%	8.6%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to items B5cC and H9C. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

15.10 B5cD/H9D. If you were in a public place where smoking isn't allowed, you'd probably go outside to smoke a cigarette, even in cold or rainy weather.

Behavior coding results for B5cD/H9D

	Interviewer behavior (n=38)			Respondent behavior: Problem with the question (n=37)		Respondent behavior: Problem with answering (n=37)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	2.6%	84.2%	13.2%	13.5%	0%	89.2%	10.8%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to items B5cD or H9D. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

15.11 B6b/c and C6b/c. What price did you pay for the LAST pack/carton of cigarettes you bought? Please report the cost after using discounts or coupons.

Behavior coding results for B6b/c and C6b/c

	Interviewer behavior (n=43)			Respondent behavior: Problem with the question (n=43)		Respondent behavior: Problem with answering (n=42)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	2.3%	81.4%	16.3%	11.6%	4.7%	88.1%	11.9%

Coder debriefing results: Coders said respondents had no significant problems with the question but that interviewers sometimes had trouble with the skip pattern when respondents answered both packs and cartons in the previous question.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to item B6b/c or C6b/c. Interviewers read the question as intended the majority of the time. This was also true for the English-language interviews.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

15.12 B7/C7d/H5. What is the total number of years you have smoked EVERY DAY? Do not include any time you stayed off cigarettes for 6 months or longer.

Behavior coding results for B7/C7d/H5

	Interviewer behavior (n=45)			Respondent behavior: Problem with the question (n=45)		Respondent behavior: Problem with answering (n=39)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	80.0%	20.0%	13.3%	24.4%	56.4%	43.6%

Coder debriefing results: Coders reported that respondents had trouble calculating their answers and would often just give interviewers their current age and the age when they started smoking then let the interviewer figure it out. This problem occurred across all languages, including English.

At least some of the “question read incorrectly” codes were assigned because interviewers did not finish the question reading after being interrupted by the respondent (coders were instructed to code such a situation as “question read incorrectly”).

Interviewer debriefing results: No significant problems noted.

Conclusion: Excluding from their answers time they were not smoking for six months or longer is somewhat burdensome for respondents. Interviewers read the item as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

15.13 B9/C9/H12. Have you EVER SWITCHED from a stronger cigarette to a lighter cigarette for at least 6 months?

Behavior coding results for B9/C9/H12

	Interviewer behavior (n=47)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=45)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	2.1%	87.2%	10.6%	15.2%	2.2%	84.4%	15.6%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: Interviewers reported that some respondents had trouble understanding that the question was asking about switching from one thing to a different thing. One interviewer solved the problem by emphasizing the two words “stronger” and “lighter.”

Conclusion: For the most part, respondents understood and responded to the question with little trouble. However, some respondents may have missed that the item was asking about switching from one type of cigarette to another. Interviewers read the question as intended the majority of the time. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is. Consider training interviewers to emphasize the words “stronger” and “lighter.”

NCI response: Leave item as it is.

15.14 B11(1)/C11(A). I’m going to read you some statements about how LIGHT cigarettes compare to REGULAR cigarettes. For each one, please tell me whether YOU think it is true, false, or you don’t know. Light cigarettes give you less tar or nicotine than regular cigarettes.

Behavior coding results for B11(1)/C11(A)

	Interviewer behavior (n=43)			Respondent behavior: Problem with the question (n=43)		Respondent behavior: Problem with answering (n=42)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	60.5%	39.5%	7.0%	4.7%	73.8%	26.2%

Coder debriefing results: Coders said that a few respondents who had never smoked lights said they wouldn’t know the answers to this series of items. The interviewers would then explain that all that was required was their opinion. Note that in most interviewer-administered questionnaires, the “don’t know” option is not read so as to encourage respondents to provide a useable answer. The fact that the “don’t know” option was read at the beginning of this item series likely accounts, in part, for the 26.2 percent of “problem with the answer” codes. That is, respondents were reminded that “don’t know” was an option, and so were more likely to use it, which then triggered a “problem with the answer” code.

Interviewer debriefing results: No significant problems noted.

Conclusion: Some respondents appeared to think this item series was testing their knowledge rather than asking their opinions. Interviewers often had to explain to resistant respondents that their opinion was being sought. No problems were reported for this item among English-language respondents.

Recommendation: Consider revising the second sentence of the introductory statement to read, “For each one, please tell me whether, in your opinion, you think it is true, false, or you don’t know.” (“Para cada declaración, por favor dígame si en su opinión, cree que es cierta, falsa, o si no sabe.”)

NCI response: Revise the introductory statement as recommended.

15.15 Da. During the PAST 12 MONTHS, have you TRIED to QUIT smoking COMPLETELY?

Behavior coding results for Da

	Interviewer behavior (n=6)			Respondent behavior: Problem with the question (n=6)		Respondent behavior: Problem with answering (n=4)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Some day smokers (n=)	0%	66.7%	33.3%	0%	0%	100%	0%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to this item. As in the English version, interviewers sometimes had trouble figuring out whether to ask Da or D1 because Da, not D1, appears first in Section D.

Recommendation: Leave item as it is. (Skip pattern instructions on the paper-and-pencil instrument will be revised to help avoid interviewer errors. See Section 11.15 for more details about this revision.)

NCI response: Leave item as it is.

15.16 D1. Have you EVER stopped smoking for one day or longer BECAUSE YOU WERE TRYING TO QUIT SMOKING?

Behavior coding results for D1

	Interviewer behavior (n=38)			Respondent behavior: Problem with the question (n=34)		Respondent behavior: Problem with answering (n=33)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	10.5%	84.2%	5.3%	2.9%	2.9%	87.9%	12.1%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to this item. Interviewers read the question as intended the majority of the time. Those who failed to read the item when they should have more than likely made the error because of confusion over the order in which Da and D1 appear in Section D.

Recommendation: Leave item as it is. (See Section 11.15 for more details about revisions to the skip pattern instructions.)

NCI response: Leave item as it is.

15.17 F1/H6a. In the PAST 12 MONTHS, have you seen a medical doctor, dentist, nurse, or other health professional (about your own health)?

Behavior coding results for F1/H6a

	Interviewer behavior (n=46)			Respondent behavior: Problem with the question (n=45)		Respondent behavior: Problem with answering (n=42)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	2.2%	91.3%	6.5%	4.4%	8.9%	95.2%	4.8%

Coder debriefing results: No significant problems noted.

Retrospective interview results: Respondents were asked whether, when they answered this question, they were thinking only about visits for themselves or if they had included visits for other family members, or some other type of visit. This was asked because during cognitive testing we found that Korean-speaking respondents included in their answers visits for those other than themselves (e.g., accompanying a pregnant wife to the OB/GYN or children to the pediatrician). To address this problem, the phrase “about your own health” was added to items F1 and H6a in all four translations of the TUS (Korean, Chinese, Vietnamese, and Spanish). Of the 22 who answered this question, only two said they were also thinking about visits for family members. Similar results were reported for the English-language respondents.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to the question about whether they have seen a health professional in the past 12 months. Almost all were thinking of health visits solely for themselves when answering the question. Interviewers read the question as intended the majority of the time. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

15.18 F5. Which health professional that you saw in the past 12 months spent the MOST time advising you about quitting smoking?

Behavior coding results for F5

	Interviewer behavior (n=21)			Respondent behavior: Problem with the question (n=20)		Respondent behavior: Problem with answering (n=18)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	4.8%	57.1%	38.1%	5.0%	10.0%	61.1%	38.9%

Coder debriefing results: Coders said that interviewers often read the answer categories at this item. Coders reported this appeared to confuse respondents, some of whom would answer “none,” perhaps because they thought the question was asking which of those kinds of health professionals they had seen in the past 12 months.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers were inconsistent when it came to not reading the answer categories for item F5. When they did read the answer categories, respondents would sometimes say “none,” a response which does not fit the intent of this question. This problem also occurred in the English-language administration.

A skip pattern problem at F4 was observed during the cognitive testing phase of this project. For respondents who said “no” at question F4 (“During the past 12 months, did any doctor, dentist, nurse, or other health professional spend any time talking to you about how you should try to quit smoking?”), F5 appears to be contradicting that “no” answer. A recommendation to insert an instruction to skip F4 “no” answers to Section G was approved by NCI. However, that revision was inadvertently omitted during this round of testing.

Recommendation: Leave item as it is. Insert the skip instruction at item F4 so that those who say “no” at F4 are skipped past F5.

NCI response: Leave item as it is and re-insert F4 skip instruction.

15.19 G3. Overall, on a scale from 1 to 10 where 1 is NOT AT ALL interested and 10 is EXTREMELY interested, how interested are you in quitting smoking?

Behavior coding results for G3

	Interviewer behavior (n=43)			Respondent behavior: Problem with the question (n=43)		Respondent behavior: Problem with answering (n=40)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	88.4%	11.6%	4.7%	7.0%	70.0%	30.0%

Coder debriefing results: Coders reported that on the whole, respondents seemed comfortable using this scale to answer the question, although they said that some did initially give an answer that did not use the scale (e.g., “I’m really want to quit”) and one respondent thought “1” meant extremely interested and “10” meant not at all interested. Answers that did not use the scale would have been coded as a problem.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding the question although some of them preferred to answer with something other than a number from 1 to 10. Interviews read the question as intended the majority of the time. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is.

NCI response: Leave items as it is.

15.20 G4. If you did try to quit smoking altogether in the next 6 months, how LIKELY do you think you would be to succeed -- not at all, a little likely, somewhat likely or very likely?

Behavior coding results for G4

	Interviewer behavior (n=34)			Respondent behavior: Problem with the question (n=25)		Respondent behavior: Problem with answering (n=24)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	29.4%	64.7%	5.9%	8.0%	4.0%	83.3%	16.7%

Coder debriefing results: As in the English-language questionnaire, interviewers tended to inadvertently skip this item because the skip instruction at G3 was not clearly noticeable.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents who received G4 had little trouble understanding and responding to it. The item was often skipped in error by the interviewers because the skip instruction at G3 was too small. Most interviewers who did read the item, do so correctly.

Recommendation: Leave item as it is. (See Section 11.19 for more details about revising the G3 skip instruction.)

NCI response: Leave item as it is.

15.21 H7c(2). In the year before you quit smoking, please tell me if each of the following was true for YOU. You smoked (lights/ultralights) as a way to try to quit smoking.

Behavior coding results for H7c(2)

	Interviewer behavior (n=1)			Respondent behavior: Problem with the question (n=0)		Respondent behavior: Problem with answering (n=0)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Former smokers	--	--	--	--	--	--	--

Coder debriefing results: No results to report.

Interviewer debriefing results: No results to report.

Conclusion: All Spanish-speaking respondents who were former smokers skipped this question because none smoked lights or ultralights. No significant problems were reported for this item among English-language respondents.

Recommendation: Unable to provide a recommendation.

NCI response: Leave item as it is.

15.22 J1a. Have you EVER used a pipe, cigar, chewing tobacco or snuff, EVEN ONE TIME?

Behavior coding results for J1a

	Interviewer behavior (n=47)			Respondent behavior: Problem with the question (n=47)		Respondent behavior: Problem with answering (n=46)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	74.5%	25.5%	19.2%	4.3%	97.8%	2.2%

Coder debriefing results: Coders observed that interviewers often either skipped or mispronounced the word for “snuff.” They also noted that some respondents interrupted the interviewer before the “even one time” phrase was read. At least some of the “question read incorrectly” codes were applied because interviewers did not finish the question reading after being interrupted.

Retrospective interview results: Respondents were asked whether they had ever heard the word “snuff” before. Those that had heard of “snuff” were asked to define the term. Of 23 respondents asked, only 2 had heard of snuff and none could describe what it was. English-language respondents could not define the term either. Note that of the 12 respondents who said yes to J1a during the telephone interview, none reported having used snuff.

Interviewer debriefing results: Interviewers reported that neither they nor most of the respondents recognized the word for “snuff” (rapé). They said the product had to be described to respondents before they could answer and most just assumed they hadn’t tried it since they’d never heard of it.

Conclusion: The translation for “snuff” was not recognized by most respondents or by the interviewers. Interviewers tended to skip this word, and respondents often asked for clarification of it. Otherwise, respondents had little trouble understanding or answering item J1a. No significant problems were reported for this item among English-language respondents.

Recommendation: Consider taking “snuff” out of the question since most if not all respondents do not know what it is and no one reported using it. Or, in the brackets below the question where examples of snuff products are listed, include an explanation of snuff (in Spanish) that reads “Snuff, a finely ground or shredded tobacco, is packaged as dry, moist, or in sachets, which are tea bag-like pouches. Typically, the user places a pinch or dip between the cheek and gum.” (“Rapé, es tabaco que se ha molido finamente y se empaqueta húmedo o seco en bolsitas semejantes al té. Típicamente el usuario coloca una cantidad de rapé entre su cachete y encía.”)

NCI response: Leave the item as it is and insert the definition.

15.23 KSCR. Do you currently work for pay?

Behavior coding results for KSCR

	Interviewer behavior (n=47)			Respondent behavior: Problem with the question (n=47)		Respondent behavior: Problem with answering (n=40)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	97.9%	2.1%	0%	23.4%	97.5%	2.5%

Coder debriefing results: Coders noted that the high number of requests for clarification may be due, in part, to the abrupt transition from Section JJ (which asks about respondents' familiarity with a series of new tobacco products) and Section K, which begins with this question about employment.

Interviewer debriefing results: One interviewer felt this is not the way you would normally ask people whether they have a job and said he noticed respondents hesitating before answering.

Conclusion: Interviewers read item KSCR as intended the majority of the time. Similar to the English-language results, a notable number of respondents requested clarification to this item, perhaps because of the abrupt transition from the previous section to this one. At the same time, almost all provided an adequate answer.

Recommendation: Consider adding a transitional statement at the beginning of Section K, such as "My next questions are about the smoking rules at your job and home." ("Mis siguientes preguntas son acerca de las normas o reglas de fumar en su lugar de trabajo y en su casa.")

NCI response: Insert the transitional statement.

15.24 K1. Which of these best describes the area in which you work MOST of the time? Mainly work indoors, mainly work outdoors, travel to different buildings or sites, in a motor vehicle, somewhere else.

Behavior coding results for K1

	Interviewer behavior (n=26)			Respondent behavior: Problem with the question (n=25)		Respondent behavior: Problem with answering (n=24)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	3.9%	61.5%	34.6%	24.0%	0%	79.2%	20.8%

Coder debriefing results: Coders noted that interviewers would often shorten this question to read something like, “Do you mainly work indoors, outdoors, or somewhere else?” This would account for the high percentage of “question read incorrectly” codes. At the same time, as with most items that list a series of options, respondents tended to interrupt when they heard the option that applied to them. Some of the “question read incorrectly” codes are due to interviewers not finishing the question reading after being interrupted. Some respondents would also answer “yes” after hearing the option that applied to them, which would account for the high percentage of “problem with the answer” codes, since the response choices are the list of work sites, not yes/no.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers tried to shorten this somewhat lengthy item, and respondents played their part as well by interrupting to answer when they heard their response choice. Respondents didn’t always understand that they were to repeat the work site description rather than simply say “yes” or “no” after hearing the applicable response option. No significant problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

15.25 K1b. Do you mainly work in an office building, in your own home, in someone else’s home, or in another indoor place? [IF NEEDED: You said that you now work indoors.]

Behavior coding results for K1b

	Interviewer behavior (n=14)			Respondent behavior: Problem with the question (n=13)		Respondent behavior: Problem with answering (n=13)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	7.1%	64.3%	28.6%	23.1%	0%	76.9%	23.1%

Coder debriefing results: No significant problems noted. Some of the “question read incorrectly” codes are due to interviewers not finishing the question reading after being interrupted. Note that the 28.6 percent of “question read incorrectly” codes, and 23.1 percent each of “interrupts” and “problem with the answer” codes represent only 4 and 3 cases, respectively.

Interviewer debriefing results: No significant problems noted.

Conclusion: Although the percentages of some problem codes appear high, the actual number of respondents with these problems is too low to draw any conclusions from. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

15.26 K3a. Which of these best describes your place of work’s smoking policy for INDOOR PUBLIC OR COMMON AREAS, such as lobbies, rest rooms, and lunch rooms? Not allowed in ANY public areas, allowed in SOME public areas, allowed in ALL public areas.

Behavior coding results for K3a

	Interviewer behavior (n=9)			Respondent behavior: Problem with the question (n=10)		Respondent behavior: Problem with answering (n=9)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	44.4%	55.6%	30.0%	0%	77.8%	22.2%

Coder debriefing results: Coders said that interviewers tended to omit the word “lobbies,” from this item, although they could not speculate about why. Some of the “question read incorrectly” codes are due to interviewers not finishing the question reading after being interrupted. Note that the 55.6 percent of “question read incorrectly” codes, and 30.0 percent of “interrupts” codes and 22.2 percent of “problem with the answer” codes represent only 5, 3, and 2 cases, respectively.

Interviewer debriefing results: Interviewers felt the translation of “common areas” could be simplified. Currently, there are two adjectives used to modify “areas” in Spanish, “públicas” (public) and “comunales” (communal). The translator felt using the two adjectives together would make the meaning of “common areas” clearer.

Conclusion: Although the percentages of some problem codes appear high, the actual number of respondents with these problems is too low to draw any conclusions from. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is. If desired, delete “comunales” from the question to simplify the translation of “common areas.”

NCI response: Leave item as it is.

15.27 K4. In a usual week, does ANYONE who lives here, including yourself, smoke cigarettes, cigars, or pipes anywhere inside this home?

Behavior coding results for K4

	Interviewer behavior (n=46)			Respondent behavior: Problem with the question (n=47)		Respondent behavior: Problem with answering (n=43)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	91.3%	8.7%	14.9%	10.6%	88.4%	11.6%

Coder debriefing results: Coders said this item was often not read verbatim. Specifically, interviewers often elaborated on the word “here,” using such phrases as “in your home” or “who lives here, with you.” (Adding such words would not have led to a “question read incorrectly” code since that did not change the meaning of the question. Coders were instructed to use that code only if the original intent of the question was altered in the reading.) It should be noted that the original TUS is administered in-person in respondents’ homes, which explains the use of “here” and “this home” when asking about respondents’ home smoking rules. However, this wording can be somewhat confusing when administered over the telephone.

The coders also observed that in some regions (e.g., Mexico), it is common for people to preface their answers to questions with “no” even if their true answer isn’t “no.” This habit posed a particular problem at K4, where “no” answers follow a different path than “yes” answers. For example, some respondents would answer, “No, just me” or “No, just my son” which is really a yes answer to K4. When interviewers got to K6 and heard a contradictory answer to what they had recorded for K4, they would have to go back and ask K4 again.

Retrospective interview results: Respondents were asked to describe who they were including in their answer to item K4. Of the 22 respondents who received this question, it was obvious from only three answers that they were including people who do not live in the home in their answer. And it was obvious from three other answers that the respondents were restricting their answers to those who actually smoke (and not including all who live in the home). The remaining 16 respondents listed specific family members or simply said “myself.” It was difficult to tell from these answers whether the people they listed comprised all household members or (as in the case of such answers as “aunt” or “uncle”) whether those people actually live in the household. These findings are similar to those for English-language respondents.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers read item K4 as intended the majority of the time. Although respondents had little trouble understanding and answering the question, they are inconsistent in their interpretation of the item. As in the English-language version, some Spanish-speaking respondents do not restrict their answers to those who live in the home. (This issue appears to relate to the construction of the original item, not its Spanish translation.) In addition, Spanish-

speakers from certain regions may confuse the interviewer by starting their answer with “no” when really they mean “yes.” Finally, the words “here” and “this home” can be confusing when asking over the telephone about smoking rules in respondents’ homes.

Recommendation: Consider offering “in your home” to replace “here” and “your home” to replace “this home” as an alternative to be used when the questionnaire is not administered in person. (This recommendation applies across all languages.)

During interviewer training on the Spanish instrument, inform interviewers of the possibility that some respondents may use “no” when they mean “yes” at K4 (and any other yes/no branching items) and instruct them to probe a “no” answer to ensure that the respondent really does mean “no.”

See Section 15.29 for recommendations about the entire item series.

NCI response: See Section 15.29.

15.28 K5a. In a usual week, how many people WHO LIVE here, including yourself, smoke cigarettes, cigars, or pipes anywhere INSIDE this home?

Behavior coding results for K5a

	Interviewer behavior (n=26)			Respondent behavior: Problem with the question (n=24)		Respondent behavior: Problem with answering (n=24)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	7.7%	73.1%	19.2%	0%	0%	95.8%	4.2%

Coder debriefing results: Coders reported that at this item, as in K4, interviewers would try to explain to respondents what is meant by “here.” However, many of the 19.2 percent of “question read incorrectly” codes were due to interviewers leaving out key words such as “usual,” “including yourself,” or “who live here.”

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to item K5a. Interviewers would sometimes provide definitions of “who live here” or leave key phrases out.

Recommendation: Offer “in your home” and “your home” as alternatives to “here” and “this home” when the questionnaire is not administered in person. This recommendation applies to K5b as well.

See Section 15.29 for recommendations about the entire item series.

NCI response: See Section 15.29.

15.29 K5b. Usually, about how many days per week do people WHO LIVE here smoke anywhere INSIDE this home?

Behavior coding results for K5b

	Interviewer behavior (n=22)			Respondent behavior: Problem with the question (n=19)		Respondent behavior: Problem with answering (n=17)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	13.6%	72.7%	13.6%	0%	15.8%	70.6%	29.4%

Coder debriefing results: Coders reported that some respondents confused this question with question K5a and again answered the number of people in the home who smoke rather than how many days they smoke.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers read item K5b as intended the majority of the time. Respondents tended to confuse this item with K5a and would give the same answer for both. This problem was not reported for the English-language administration.

Recommendation: Instead of putting emphasis on “who live” and “inside,” put emphasis (by underlining) on “days per week.”

Across all target languages, respondents had varying degrees of trouble with this item series. In addition to being inconsistent in whom they included in their answers, respondents often indicated (either explicitly or by their answers) that K5b sounded to them like the same question as aK5a. An additional problem with K5b is in interpreting respondents’ answers. For example, is an answer of 5 days per week the total for all household smokers, or is it the number of days for one smoker in the house while others (if there are any) smoke more or fewer days than that? To address the respondent confusion found in this study and the potential analysis problems, replace the current three-item series with the two-item series used in 2003. The two items with their translations appear below.

K4. Does anyone smoke cigarettes, cigars, or pipes anywhere inside your home? (“¿Alguien fuma cigarrillos, puros/cigarros o pipas en algún lugar dentro de esta casa, incluyéndose usted?”)

K5. On the average, about how many days per week is there smoking anywhere inside your home? (“En promedio, ¿más o menos cuántos días a la semana se fuma en algún lugar dentro de esta casa?”)

NCI response: Replace the current three-item series with the 2003 two-item series.

15.30 K6. Which statement best describes the rules about smoking INSIDE YOUR HOME? No one is allowed to smoke anywhere INSIDE YOUR HOME, smoking is allowed in some places or at some times INSIDE YOUR HOME, smoking is permitted anywhere INSIDE YOUR HOME.

Behavior coding results K6

	Interviewer behavior (n=47)			Respondent behavior: Problem with the question (n=47)		Respondent behavior: Problem with answering (n=44)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	78.7%	21.3%	21.3%	2.1%	68.2%	31.8%

Coder debriefing results: Coders reported that some interviewers replaced the current translation of home with a different, less formal word (“casa”), most likely out of personal preference. (The word “hogar” used in the Spanish questionnaire is not substantially different in meaning from “casa,” similar to the way that “house” and “home” differ in English.) The 21.3 percent who interrupted the question did so with their answer when they heard a response that matched their situation, rather than wait for the interviewer to finish the entire list. Likewise, some of the 21.3 percent readings that were coded as incorrect were those that were interrupted but not finished after the interruption. As for the 31.8 percent “problem with the answer” codes, interviewers would often have to probe answers such as “When the grandkids come to visit” or “yes” or “it’s allowed or not allowed.”

Retrospective interview results: Respondents were asked to explain to whom the smoking rules in their homes apply. Seventeen (77.3%) of the 22 respondents said the rules apply to anyone who comes into the home. Five said the rules apply only to people who live there.

Interviewer debriefing: No significant problems noted.

Conclusion: Interviewers read the question as intended the majority of the time, although some used a less formal word (“casa”) for home and often when they were interrupted in the question reading they did not finish. Respondents appeared to understand the item, but did not answer it as they were expected to, providing anecdotes and examples of exceptions instead. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

15.31 K7. In your opinion, how easy is it for minors to buy cigarettes and other tobacco products in your community? Very easy, somewhat easy, somewhat difficult, or very difficult.

Behavior coding results K7

	Interviewer behavior (n=47)			Respondent behavior: Problem with the question (n=47)		Respondent behavior: Problem with answering (n=44)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	63.8%	36.2%	6.4%	10.6%	50.0%	50.0%

Coder debriefing results: Coders observed that interviewers tended not to read the answer categories (which would be coded as question read incorrectly). At the same time, respondents would often answer simply with “easy” or “difficult” (which would be coded as a problem with the answer). Coders pointed out that the translations of “very” (muy) and “somewhat” (bastante) mean virtually the same thing.

Retrospective interview results: Respondents were asked to describe what age range they felt defined “minor.” Of the 22 respondents, 10 (45.5%) answered with some variation of under (but not including) 18 years old. Some of them gave very specific responses such as “12” or “14 to 16” while others simply said “under 18.” Twelve (54.5%) said 18 and younger and one respondent said under 21.

Respondents were also asked to define the term “your community.” Fifteen of the 22 respondents asked this question defined it as their “neighborhood” (8), “where I live” (4) or the “area” in general (3). Three respondents thought of the towns they live in and one included the entire state. Two respondents gave some other explanation (e.g., “to protect her community” and “I thought of the kids, the people around me”) and one person couldn’t define the term.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers tended not to read the response options to respondents. Respondents tended to answer with “easy” or “difficult” without adding “very” or “somewhat.” Coders pointed out that the translations of “very” and “somewhat” are virtually the same.

Similar to the English-language results, respondents’ definitions of the words “minor” and “community” vary somewhat in the specifics, but overall most associate the former with teenagers and younger children and the latter with the area they live in. The Spanish-speaking respondents did tend to define “community” as somewhat closer to where they live than did the English-speaking respondents, however.

Recommendation: To better distinguish “very” from “somewhat,” replace “bastante” with “algo.”

NCI response: Fix the item as recommended.

15.32 K9. In bars and cocktail lounges, do you THINK that smoking should be allowed in all areas, allowed in some areas, or not allowed at all?

Behavior coding results K9

	Interviewer behavior (n=47)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=45)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	2.1%	89.4%	8.5%	10.9%	2.2%	77.8%	22.2%

Coder debriefing results: Coders noted that respondents would sometimes answer “it should be allowed” without specifying whether in “all” or “some” areas.

Retrospective interview results: Respondents were asked how easy or difficult it was to answer this question. Most (20 or 90.1%) said it was “very easy” or “somewhat easy” to answer. Only two said it was either “somewhat difficult” or “very difficult.” When asked what made it difficult to answer this question, the two respondents could not explain. These results are similar to those for English-speaking respondents.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appeared to have little trouble understanding the question, although not all answered with a specified response option. Almost all of the retrospective debriefing respondents said it was easy to answer the question. Interviewers read the item as intended the majority of the time. No problems were reported for this item among English-language respondents.

In the telephone questionnaire used for this round of testing, item K9 actually appeared as item K12 in a series of six similar items asking about whether respondents felt smoking should be allowed or not in various public gathering places. Each item also had a follow-up forcing those who answered “allowed in some areas” to choose between all or no areas. The item wordings are lengthy and repetitive.

Recommendation: Leave item K9 (formerly item K12) as it is. At NCI’s request, all other items in this series have been removed from the final questionnaire and will be delivered separately from the TUS.

NCI response: Leave item K9 (formerly item K12) as it is.

15.33 Retrospective debriefing questionnaire results for items not coded

Every day and some day smokers who indicated on the TUS that they had attempted to quit, and all former smokers, were asked to describe the methods they used and how well those methods worked. The purpose of asking these questions was to determine how familiar respondents were with the quit methods listed on the TUS in Section E (items H10a through H10c for former smokers). The 8 (current and former) smokers who were administered the retrospective debriefing questions about quitting mentioned 9 different methods (see Table 15 below)¹⁶. When asked to describe these methods, all seemed to understand what they were, how they functioned, and how well they worked. Interviewers noted that respondents often didn't recognize certain of the products (although they didn't specify which). Note that of the 51 telephone interview respondents, no current and no former smokers reported using a nicotine inhaler, a telephone help line or quit line, or the Word Wide Web/Internet to help them quit smoking.

Interviewers said some respondents didn't understand the translation of "one-on-one counseling" ("Asesoría/consejería personal") and suggested using simply "consejería personal instead.

Table 15. Quit methods cited by current and former smokers in the retrospective debriefing questionnaire

Method	Number of respondents citing method
Cutting back gradually	4
Help or support from friends and family	4
Nicotine gum	2
Cold turkey	2
Stop smoking clinic, class or support group	2
Nicotine tablets	1
One-on-one counseling	1
Nicotine patch	1
Switching to light cigarettes	1

Recommendation: Leave item as it is. Or, if desired, replace "Asesoría/consejería personal" with "consejería personal" as the translation for "one-on-one counseling" in E1b(C) and H10b(C).

NCI response: Leave item as it is.

During the cognitive interview phase of this project, we heard that some respondents who smoked in their native country and while living in the United States thought only of their U.S. smoking experiences when answering the TUS. To determine the extent of this problem, we asked retrospective debriefing respondents who had not lived in the U.S. their entire lives whether they were thinking about their experiences in the U.S., in the country where they'd lived

¹⁶ Interviewers asked about up to three quit methods respondents reported on the TUS as having used.

previously, or both. Of the 14 respondents who received this question, 11 said they thought of both places and 3 (all of whom were smokers in both the U.S. and the country they'd previously lived in) said they thought only of their experiences in the U.S.

15.34 Recommendations for items not behavior coded

There are no problems to report or recommendations to make about items not coded on the Spanish translation of the TUS.

16. RESULTS OF VIETNAMESE-LANGUAGE INTERVIEWS

Fifty-two respondents took the TUS-CPS in Vietnamese. Of those, 46 cases could be behavior coded from tape recordings of the interviews. The tapes of the 6 remaining interviews malfunctioned in some way (e.g., the tape recorder did not record or the coder could not hear the interviewer or respondent well enough to code their verbal behaviors).

Forty of the 46 respondents are every day smokers, 5 are some day smokers, and 1 is a former smoker (having quit within the past five years).

Seven respondents received the retrospective debriefing questionnaire in Vietnamese. None of the retrospective debriefing respondents were former smokers.

The Vietnamese-speaking behavior coders described overall issues with the questionnaire they felt were relevant to the Vietnamese-speaking respondents. For example, the coders explained that within the Vietnamese culture, people tend to be more open about their lives and share more personal information more quickly than in Western cultures. There may be a cultural expectation that the survey questions are intended to elicit more information than in reality they are meant to. Furthermore, the coders pointed out that Vietnamese speakers who are new to the U.S. or who are older may not be as familiar with Western-style survey conventions as younger respondents or those who have lived here longer. These respondents may not understand that a simple and brief answer is required and may tend to provide less straightforward answers, give their "life story", or provide justifications for their answers.

Another reason for longer answers from Vietnamese respondents has to do with the words "yes" and "no." The coders explained that there are several ways of saying "yes" and "no" in the Vietnamese language, and the version the speaker chooses depends on the age and station in life of the person he or she is addressing. Furthermore, use of the words by themselves indicates, in the speaker's mind, subservience or obedience to the person on the other end. To avoid indicating this, the speaker may add an explanation to his or her answer so the "yes" or "no" doesn't stand alone.

At the same time that Vietnamese-speakers may be willing to share personal details about their lives, the coders said they tend to be hesitant to express opinions. One reason for this, according

to the coders, is the desire to avoid conflict or disagreement with what the interviewer’s opinions may be. They felt that this cultural tendency may interfere with the validity of responses to opinion items on the TUS.

16.1 A1. Have you smoked at least 100 cigarettes in your entire life?

Behavior coding results for A1

	Interviewer behavior (n=46)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=34)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	89.1%	10.9%	0%	34.8%	76.5%	23.5%

Coder debriefing results: Coders said that some respondents answered the question by telling interviewers when they started smoking, or by saying something like “more than that” or “a lot more.” The coders thought the phrase “entire life” may have been somewhat confusing for respondents, because it implies the time period from birth until death. According to the coders, the topic of death is a sensitive one among Vietnamese speakers, who tend to be superstitious about contemplating their death.

Interviewer debriefing results: No significant problems noted.

Conclusion: Some respondents answered this question by talking about when they started smoking, and others may have been confused by the phrase “entire life,” not understanding what time period it encompasses. Interviewers read the question as intended the majority of the time. There were no significant problems with this item among English speakers.

Recommendation: As in the Chinese questionnaire, consider replacing the phrase “entire life” with one that is loosely translated as “from the time you first became acquainted with smoking until now.” The revised question in Vietnamese would read “Keã töø khi Anh/Chò baét ñàu bieát huýt thuoác laù cho ñeán baây giø, Anh/Chò cò huýt ít nhaát 100 ñieáu thuoác khoâng?”

NCI response: Revise the item as recommended.

16.2 A2. How old were you when you first started smoking cigarettes FAIRLY REGULARLY?

Behavior coding results for A2

	Interviewer behavior (n=46)			Respondent behavior: Problem with the question (n=44)		Respondent behavior: Problem with answering (n=43)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	4.4%	91.3%	4.4%	0%	2.3%	83.7%	16.3%

Coder debriefing results: Coders reported respondents had little trouble with this item, although some answered with an age range rather than an exact age.

Retrospective interview results: Respondents were asked how easy or difficult it was for them to answer the question about the age at which they started smoking. All seven said it was “very” (6) or “somewhat” (1) easy to answer the question. Most English-speaking respondents also found A2 easy to answer.

Interviewer debriefing results: No significant problems noted.

Conclusion: Although some respondents answered with an age range rather than a single number, they appear to have little trouble understanding and responding to item A2. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

16.3 B1/C1a/H4. On the average, about how many cigarettes do you now smoke each day?

Behavior coding results for B1/C1a/H4

	Interviewer behavior (n=45)			Respondent behavior: Problem with the question (n=43)		Respondent behavior: Problem with answering (n=42)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	4.4%	84.4%	11.1%	0%	4.7%	83.3%	16.7%

Coder debriefing results: Coders reported that a few interviewers omitted the phrase “on the average” and some respondents answered with a range instead of an exact number.

Retrospective interview results: Respondents were asked how easy or difficult it was for them to answer the question about how many cigarettes they smoke each day. All seven said it was “very” (4) or “somewhat” (3) easy to answer the question. English-language respondents found it similarly easy to answer items B1/C1a/H4.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding the item, although occasionally they preferred to answer with a range rather than an exact number of cigarettes smoked every day.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

16.4 B2/C2/H7a. Is your usual cigarette brand menthol or non-menthol?

Behavior coding results for B2/C2/H7a

	Interviewer behavior (n=46)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=45)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	95.7%	4.4%	2.2%	4.4%	84.4%	15.6%

Coder debriefing results: Coders reported that respondents would sometimes answer the question by telling the interviewer what brand of cigarette they smoke. However, they almost always knew whether they smoked menthol or non-menthol cigarettes.

Retrospective interview results: Of the 7 respondents who were asked how sure they were that their cigarettes are menthol or non-menthol, 5 were “very” sure and 2 were “not sure at all.” Note that all 7 respondents smoked non-menthol cigarettes. An open-ended follow-up question was not asked for this item. Most English-language respondents also felt pretty confident about knowing whether their cigarettes were menthol or non-menthol.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to this item, and most are confident they know whether their cigarettes are menthol or non-menthol. Interviewers read the item as intended the majority of the time.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

16.5 B3/C3/H7b. What type of cigarette do you now smoke most often -- a regular, a light, an ultralight, or some other type?

Behavior coding results for B3/C3/H7b

	Interviewer behavior (n=46)			Respondent behavior: Problem with the question (n=44)		Respondent behavior: Problem with answering (n=44)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	4.4%	60.9%	34.8%	38.6%	0%	84.1%	15.9%

Coder debriefing results: Coders said respondents would frequently cut off interviewers’ reading of this question, and interviewers tended not to finish reading it when they did so. (Coders were instructed to code “question read incorrectly” if interviewers did not read the entire question, regardless of whether they were interrupted.)

Retrospective interview results: Respondents were asked to describe what makes a cigarette “regular,” “full flavor” or “light.” Of the 7 respondents who received this question, 1 described regular cigarettes in terms of flavor and 1 in terms of the cigarette’s ingredients (e.g., nicotine). One said they are non-menthol. Two could not define the term and 1 gave some other explanation. English-language respondents were most likely to define regular cigarettes as what they are not (e.g., not menthol, not light cigarettes) or what they consist of (e.g., more nicotine or tar).

In describing “full flavor” cigarettes,” 1 respondent said it depends on the brand name, 1 said it has to do with what is added to the cigarette, 2 used the word “flavor,” and three could not define the term. English-speaking respondents tended to describe full flavor cigarettes mostly in terms of taste or strength.

When asked to describe light cigarettes, two respondents described the cigarette itself (“stuff added to the cigarette,” and “white filter”), 2 described the strength (“smoke not heavy”) or flavor (“menthol flavor”), 2 couldn’t define the term and 1 gave some other explanation (“[when] you smoke for so long you can just tell if it is or isn’t [light]”). English-speaking respondents were most likely to define light cigarettes in terms of the amount of tar, nicotine, or tobacco in the cigarette.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appeared to have little trouble understanding this item, although many of them answered before hearing the entire question. It is difficult to draw conclusions about how respondents are interpreting the phrases “regular,” “full flavor,” and “light” given the small number of retrospective debriefing respondents and their varied definitions of the three terms. Interviewers often would not finish reading the item after being interrupted.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

16.6 B5a/C5a/H8a. How soon after you wake up do you typically smoke your first cigarette of the day?

Behavior coding results for B5a/C5a/H8a

	Interviewer behavior (n=46)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=45)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	97.8%	2.2%	0%	4.4%	40.0%	60.0%

Coder debriefing results: Coders reported that respondents often would answer with descriptions of what they do in the morning (e.g., “as soon as I open my eyes,” “after I brush my teeth,” or “after breakfast”). Since this type of answer did not fit the questionnaire response category, coders would have coded each instance where this happened as a problem with the answer. Further, the coders described interviewers as themselves calculating about how long a particular morning routine might take, then verifying with the respondent that their calculation was correct.

Interviewer debriefing results: One interviewer said that some of her respondents thought this question was asking how long it takes them to smoke a cigarette. She would use her own wording (“From the time you open your eyes until the time you reach for your cigarette, how long is it?”) to elicit the desired response. The other Vietnamese interviewer did not report this problem.

Conclusion: As with the English-language questionnaire, respondents to the Vietnamese version do not consistently infer from the phrase “how soon after you wake up” that the interviewer is seeking an answer in minutes or hours, not a description of their morning routine. Interviewers read this item as intended the majority of the time.

Recommendation: Given that the problem described above is specific to the questionnaire and is not a translation or cultural issue, leave the item as it is.

NCI response: Leave the item as it is.

16.7 B5cA/H9A. Please tell me if EACH of the following statements is true for you. You have trouble going more than a few hours without smoking.

Behavior coding results for B5cA/H9A

	Interviewer behavior (n=41)			Respondent behavior: Problem with the question (n=41)		Respondent behavior: Problem with answering (n=39)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	0%	87.8%	12.2%	0%	7.3%	84.6%	15.4%

Coder debriefing results: The coders felt respondents did not always understand they were to answer “yes” or “no” to the items in this series, since the items are read as statements, not questions. In fact, they noted that one interviewer consistently prefaced this series with an explanation to respondents that they should answer with “yes,” “no,” or “don’t know.” Coders also said respondents would often answer the items with lengthy explanations and justifications for their behavior, although they did not seem particularly offended at being asked about it.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents often failed to understand they should answer this item series with yes/no or true/false and at least one interviewer tried to correct the problem by rewording the series introduction. The English-language respondents appeared to have little or no trouble with any of the four items in this series.

Recommendation: As with the other translations, add a second sentence to the introductory statement that reads, “You may answer with true or false, or with yes or no.” (“Anh/Chò còu theá traû lôøi laø ñuùng hay sai, hoaëc laø còu hay khoâng.”) In addition, consider adding at the end of each statement a Vietnamese word that implies a yes/no answer is expected (this was actually done in the translation of item C). Doing this, however, turns the statement into a question.

NCI response: Leave item as it is. Insert the recommended second sentence into the introductory statement.

16.8 B5cB/H9B. Even in a bad rainstorm, if you ran out of cigarettes, you would probably go to the store to get some more.

Behavior coding results for B5cB/H9B

	Interviewer behavior (n=41)			Respondent behavior: Problem with the question (n=41)		Respondent behavior: Problem with answering (n=39)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	0%	97.6%	2.4%	0%	7.3%	97.4%	2.6%

Coder debriefing results: No significant problems noted, other than those described in Section 16.7.

Retrospective interview results: Current every day smokers who said they would not go out in a bad rainstorm to buy more cigarettes if they ran out were asked whether they answered the way they did because they wouldn't ever go out in the rain or because they would make sure never to run out of cigarettes. Only 2 respondents received this question and both said they wouldn't go out in the rain. In the English-language retrospective debriefing, only 2 out of 9 respondents said they would make sure never to run out of cigarettes.

Interviewer debriefing results: Interviewers reported that respondents would sometimes think items B and D were the same question. (See Section 16.10 for more details.)

Conclusion: Respondents appear to have little trouble understanding and responding to items B5cB and H9B. Interviewers read the question as intended the majority of the time.

Recommendation: See Section 16.7.

NCI response: Leave item as it is.

16.9 B5cC/H9C. When you go without smoking for a few hours, you experience craving.

Behavior coding results for B5cC/H9C

	Interviewer behavior (n=41)			Respondent behavior: Problem with the question (n=41)		Respondent behavior: Problem with answering (n=41)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	0%	95.1%	4.9%	0%	0%	85.4%	14.6%

Coder debriefing results: No significant problems noted other than those described in Section 16.7.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to items B5cC and H9C. Interviewers read the question as intended the majority of the time.

Recommendation: Leave item as it is. As noted in Section 16.7, this item already adds a Vietnamese word that implies a yes/no answer is expected. Such a redundant feature serves as a reminder of what kind of answer is expected for each question in this item series.

NCI response: Leave item as it is.

16.10 B5cD/H9D. If you were in a public place where smoking isn't allowed, you'd probably go outside to smoke a cigarette, even in cold or rainy weather.

Behavior coding results for B5cD/H9D

	Interviewer behavior (n=41)			Respondent behavior: Problem with the question (n=41)		Respondent behavior: Problem with answering (n=41)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and former smokers	0%	97.6%	2.4%	2.4%	0%	90.2%	9.8%

Coder debriefing results: Coders reported that one interviewer always added the word “snow” to this question. Given that the interviewers thought respondents were having trouble distinguishing this item from B5cB/H9B, perhaps the word “snow” was added to differentiate it more clearly from the previous item.

Interviewer debriefing results: Interviewers reported respondents thought this item was the same as B5cB/H9B. They said some would say, “Didn’t you already ask me that?”

Conclusion: Although interviewers said some respondents had difficulty distinguishing this item from B5cB/H9B, for the most part respondents appear to have little trouble understanding and responding to these items. Other than occasional addition of the word “snow” to this item, interviewers read it as intended the majority of the time.

Recommendation: See Section 16.7.

NCI response: Leave item as it is.

16.11 B6b/c and C6b/c. What price did you pay for the LAST pack/carton of cigarettes you bought? Please report the cost after using discounts or coupons.

Behavior coding results for B6b/c and C6b/c

	Interviewer behavior (n=45)			Respondent behavior: Problem with the question (n=45)		Respondent behavior: Problem with answering (n=44)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	28.9%	71.1%	6.7%	0%	81.8%	18.2%

Coder debriefing results: Coders said interviewers would very often omit the exclusionary statement about discounts or coupons. One respondent whose son buys his cigarettes for him in Vietnam couldn't convert the price, but otherwise coders felt respondents generally understood the question and were able to answer it.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appeared to have little trouble understanding and responding to this item. Interviewers often omitted the second sentence. No problems were reported for this item among the English-language respondents.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

16.12 B7/C7d/H5. What is the total number of years you have smoked EVERY DAY? Do not include any time you stayed off cigarettes for 6 months or longer.

Behavior coding results for B7/C7d/H5

	Interviewer behavior (n=42)			Respondent behavior: Problem with the question (n=41)		Respondent behavior: Problem with answering (n=38)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	2.4%	50.0%	47.6%	0%	7.3%	68.4%	31.6%

Coder debriefing results: Coders reported that respondents would often just tell the interviewer the age at which they'd started and their current age then expect the interviewer to make the calculation. They also said interviewers would often leave off the second sentence.

Interviewer debriefing results: No significant problems noted.

Conclusion: Similar to the English-language respondents, Vietnamese-speaking respondents felt that making the calculation required to answer this item was burdensome enough that they shifted that task over to the interviewer. Interviewers frequently did not read the item as intended, omitting the second sentence.

Recommendation: Given that the problem described above is specific to the questionnaire and is not a translation or cultural issue, leave the item as it is.

NCI response: Leave item as it is.

16.13 B9/C9/H12. Have you EVER SWITCHED from a stronger cigarette to a lighter cigarette for at least 6 months?

Behavior coding results for B9/C9/H12

	Interviewer behavior (n=46)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=45)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	93.5%	6.5%	6.5%	2.2%	91.1%	8.9%

Coder debriefing results: Coders reported that respondents would often supplement their answers with the reasons they had switched, perhaps an example of the phenomenon described in the introduction to the results, where Vietnamese-speaking respondents may be reluctant to let a “yes” or “no” stand alone.

Interviewer debriefing results: No significant problems noted.

Conclusion: Although respondents sometimes supplemented their answers with lengthy explanations, they appear to have little trouble understanding or responding to it. Interviewers read the item as intended the majority of the time. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

16.14 B11(1)/C11(A). I’m going to read you some statements about how LIGHT cigarettes compare to REGULAR cigarettes. For each one, please tell me whether YOU think it is true, false, or you don’t know. Light cigarettes give you less tar or nicotine than regular cigarettes.

Behavior coding results for B11(1)/C11(A)

	Interviewer behavior (n=44)			Respondent behavior: Problem with the question (n=44)		Respondent behavior: Problem with answering (n=41)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	2.3%	77.3%	20.5%	0%	4.6%	90.2%	9.7%

Coder debriefing results: Coders indicated that respondents would sometimes act hesitant to answer this item series. The reason, they surmised, is that respondents may have felt as if their knowledge was being tested and didn’t want to “fail.” Coders reported that interviewers would often spend time reinforcing the idea that opinions, not a display of knowledge, is being sought.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents were somewhat hesitant to answer these opinion items, thinking their knowledge was being tested. Interviewers sought to reassure them with additional explanations about the purpose of the item series. No problems were reported for this item among English-speaking respondents.

Recommendation: As with the other translations, revise the second sentence of the introductory statement to read, “For each one, please tell me whether, in your opinion, you think it is true, false, or you don’t know.” (“Sau khi toâi ñoïc xong moãi caâu, xin cho bieát, theo yù kieán cuõa Anh/Chò, thì Anh/Chò nghó caâu ñoù laø ñuùng, sai, hoaëc khoâng bieát.”)

NCI response: Revise the introductory statement as recommended.

16.15 Da. During the PAST 12 MONTHS, have you TRIED to QUIT smoking COMPLETELY?

Behavior coding results for Da

	Interviewer behavior (n=4)			Respondent behavior: Problem with the question (n=4)		Respondent behavior: Problem with answering (n=4)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Some day smokers (n=)	0%	75.0%	25.0%	0%	25.0%	50.0%	50.0%

Coder debriefing results: No significant problems noted. (Note that the 50.0 percent of “problem with the answer” codes represents only 2 respondents.)

Interviewer debriefing results: No significant problems noted.

Conclusion: Although the percentages of some problem codes are high, the actual number of cases reported as having a problem is too low to draw any conclusions from.

Recommendation: Leave the item as it is. (See Section 11.15 in the English-language results for information about revisions to the Da/D1 skip pattern instructions.)

NCI response: Leave item as it is.

16.16 D1. Have you EVER stopped smoking for one day or longer BECAUSE YOU WERE TRYING TO QUIT SMOKING?

Behavior coding results for D1

	Interviewer behavior (n=33)			Respondent behavior: Problem with the question (n=31)		Respondent behavior: Problem with answering (n=30)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	9.1%	87.9%	3.0%	0%	3.2%	86.7%	13.3%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appeared to have little trouble understanding and responding to item D1. Interviewers read the item as intended the majority of the time.

Recommendation: Leave the item as it is. (See Section 11.15 in the English-language results for information about revisions to the Da/D1 skip pattern instructions.)

NCI response: Leave item as it is.

16.17 F1/H6a. In the PAST 12 MONTHS, have you seen a medical doctor, dentist, nurse, or other health professional (about your own health)?

Behavior coding results for F1/H6a

	Interviewer behavior (n=45)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=44)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	84.4%	15.6%	0%	6.5%	95.5%	4.6%

Coder debriefing results: Coders said that some interviewers read only “doctor” of the four health professional types listed in this question, although it is unclear why the other types were left off. Coders also noted that some respondents who answered “yes” added, “but not for smoking-related reasons.”

Retrospective interview results: Respondents were asked whether, when they answered this question, they were thinking only about visits for themselves or if they had included visits for other family members, or some other type of visit. This was asked because during cognitive testing we found that Korean-speaking respondents included in their answers visits for those other than themselves (e.g., accompanying a pregnant wife to the OB/GYN or children to the pediatrician). To address this problem, the phrase “about your own health” was added to items F1 and H6a in all four translations of the TUS (Korean, Chinese, Vietnamese, and Spanish). Of the 4 Vietnamese speakers who answered the retrospective debriefing question, 1 indicated he or she was thinking of other kinds of visits (what other kind of visit, however, was not specified).

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding and responding to this question. Interviewers read the item as intended the majority of the time. No problems were reported for this item among English-language respondents.

Recommendation: Leave item as it is.

NCI response: Leave item as it is.

16.18 F5. Which health professional that you saw in the past 12 months spent the MOST time advising you about quitting smoking?

Behavior coding results for F5

	Interviewer behavior (n=29)			Respondent behavior: Problem with the question (n=29)		Respondent behavior: Problem with answering (n=28)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	3.5%	65.5%	31.0%	0%	0%	57.1%	42.9%

Coder debriefing results: Coders said that interviewers would often read the answer categories at this item. Coders reported this appeared to confuse respondents, who would then answer “none,” perhaps because they thought the question was asking which of those kinds of health professional they had seen in the past 12 months. At the same time, the coders explained that the concept of “health professional” as a general term for those who work in the medical field is not a common one in the Vietnamese language. Some respondents may not have recognized the term or realized they should name a specific health professional when answering the question.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers tended to read the answer categories at F5. When this happened, respondents would sometimes say “none,” a response which does not fit the intent of this question. Furthermore, some respondents may have been confused by the word “health professional,” which is not commonly used in Vietnamese.

A skip pattern problem at F4 was observed during the cognitive testing phase of this project. For respondents who said “no” at question F4 (“During the past 12 months, did any doctor, dentist, nurse, or other health professional spend any time talking to you about how you should try to quit smoking?”), F5 appears to be contradicting that “no” answer. A recommendation to insert an instruction to skip F4 “no” answers to Section G was approved by NCI. However, that revision was inadvertently omitted during this round of testing.

Recommendation: Revise the translation of F5 slightly so that the meaning of “health professional” is a little clearer for those unfamiliar with the term. (“Trong những người chuyên viên y tế mà Anh/Chị đã gặp trong 12 tháng qua, người nào mà đã dành nhiều thời giờ NHẤT để cố vấn Anh/Chị về việc bỏ hút thuốc lá?”)

Insert the skip instruction at item F4 so that those who say “no” at F4 are skipped past F5.

NCI response: Make the revised revision and insert the F4 skip instruction.

16.19 G3. Overall, on a scale from 1 to 10 where 1 is NOT AT ALL interested and 10 is EXTREMELY interested, how interested are you in quitting smoking?

Behavior coding results for G3

	Interviewer behavior (n=44)			Respondent behavior: Problem with the question (n=45)		Respondent behavior: Problem with answering (n=42)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	0%	93.2%	6.8%	4.4%	15.6%	81.0%	19.1%

Coder debriefing results: Coders reported respondents had a variety of problems with this item, including answering with explanations instead of a scale number, not realizing they could pick a number between 1 and 10 (instead of either 1 or 10), and thinking the scale values were reversed (1 being “extremely interested” and 10 being “not at all interested”).

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents had trouble using the 1 to 10 scale to answer item G3. Interviewers read the item as intended every time. No problems were reported for this item among English-language respondents.

Recommendation: Consider offering a smaller scale (e.g., two or three choices at most) and describing the label for each choice. Alternatively, insert in the question an instruction to the respondent that reads, “Please indicate how interested you are in quitting by picking a number from 1 to 10.” (“Xin hãy chọn một con số từ 1 đến 10 để diễn tả mức độ muốn cai thuốc lá của Anh/Chò.”)

NCI response: Insert the second sentence as recommended.

16.20 G4. If you did try to quit smoking altogether in the next 6 months, how LIKELY do you think you would be to succeed -- not at all, a little likely, somewhat likely or very likely?

Behavior coding results for G4

	Interviewer behavior (n=38)			Respondent behavior: Problem with the question (n=31)		Respondent behavior: Problem with answering (n=30)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Every day and some day smokers	21.1%	71.1%	7.9%	6.5%	0%	70.0%	30.0%

Coder debriefing results: Similar to item G3, coders said respondents tended to provide answers other than those listed in the question. The 21.1 percent of cases where the question was not read is likely because the skip instruction at G3 was not prominently displayed.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers often skipped G4 because of a skip instruction problem at G3. Respondents had difficulty understanding and answering using the scale provided. Problems with understanding and responding to the scale were not reported for the English-language questionnaires.

Recommendation: Consider offering a smaller scale (e.g., two or three choices at most) and describing the label for each choice. (See Section 11.19 for more details about revising the skip instruction at G3.)

NCI response: Leave item as it is.

16.21 H7c(2). In the year before you quit smoking, please tell me if each of the following was true for YOU. You smoked (lights/ultralights) as a way to try to quit smoking.

Behavior coding results for H7c(2)

	Interviewer behavior (n=1)			Respondent behavior: Problem with the question (n=1)		Respondent behavior: Problem with answering (n=1)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
Former smokers	0%	100.0%	0%	0%	0%	100.0%	0%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: The one respondent who received this item had no trouble understanding or responding to it. The interviewer read the item correctly that time.

Recommendation: Leave the item as it is. (This recommendation is based on the response of one person.)

NCI response: Leave item as it is.

16.22 J1a. Have you EVER used a pipe, cigar, chewing tobacco or snuff, EVEN ONE TIME?

Behavior coding results for J1a

	Interviewer behavior (n=45)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=44)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	80.0%	20.0%	6.5%	4.4%	93.2%	6.8%

Coder debriefing results: Coders reported that some respondents did not know what snuff is and that interviewers would sometimes omit words (e.g., “chewing tobacco”) when reading the question.

Retrospective interview results: Respondents were asked whether they had ever heard the word “snuff” before. Those that had were asked to define the term. Of the 7 who answered this question, 5 had never heard the term and 1 said he or she didn’t know. The one person who had heard the term was unable to define it. English-language respondents could not define the term either. Note that of the 18 respondents who said yes to J1a during the telephone interview, none reported having used snuff.

Interviewer debriefing results: Interviewers said respondents didn’t know what “snuff” is.

Conclusion: The word “snuff” was not recognized by most respondents. Otherwise, respondents had little trouble understanding or answering item J1a. Interviewers were somewhat inconsistent in their reading of the item. No significant problems were reported for this item among English-language respondents.

Recommendation: Consider taking “snuff” out of the question since most if not all respondents do not know what it is and no one reported using it. Or, in the brackets below the question where examples of snuff products are listed, include an explanation of snuff (in Vietnamese) that reads “Snuff, a finely ground or shredded tobacco, is packaged as dry, moist, or in sachets, which are

tea bag-like pouches. Typically, the user places a pinch or dip between the cheek and gum.” (“Thuốc láu hít, coøn goii laø thuoc láu boät, töuc laø thuoc láu ñaõ ñöôic xay nhieãn thaøn nh boät hoaëc ñöôic caét vuïn. Thuoc láu naøy ñöôic goùi döüi daing khoã vaø aãm trong möät tuüi ñöing kín gioáng nhö caüi tuüi traø. Thoang thöðong thì ngöðøi duøng thuoc nhuüm láy chuüt ít thuoc vuïn, hoaëc duøng ngoùn tay chaám láy chuüt ít thuoc láu boät roài nheüt vaøo giöða beãn trong maü vaø nöüu raêng.”)

NCI response: Leave the item as it is and insert the definition.

16.23 KSCR. Do you currently work for pay?

Behavior coding results for KSCR

	Interviewer behavior (n=45)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=41)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	97.8%	2.2%	0%	13.0%	92.7%	7.3%

Coder debriefing results: No significant problems noted.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents appear to have little trouble understanding or responding to this item. Interviewers read it as intended the majority of the time.

Recommendation: Leave item as it is. Although Vietnamese-speaking respondents did not express the same concerns about responding to this question as did respondents in some of the other languages, for consistency, consider adding a transitional statement at the beginning of Section K, such as “My next questions are about the smoking rules at your job and home.” (“Caüc caäu hoüi keá tieáp cuüøa toái seõ lieãn quan ñeãn luaät leã huüt thuoc ôu cô sôu laøm vieác vaø ôu nhaø Anh/Chò.”) (See Section 11.23 for more details.)

NCI response: Add the transitional statement as recommended.

16.24 K1. Which of these best describes the area in which you work MOST of the time? Mainly work indoors, mainly work outdoors, travel to different buildings or sites, in a motor vehicle, somewhere else.

Behavior coding results for K1

	Interviewer behavior (n=29)			Respondent behavior: Problem with the question (n=30)		Respondent behavior: Problem with answering (n=28)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	86.2%	13.8%	6.7%	3.3%	92.9%	7.1%

Coder debriefing results: Coders did not report significant problems for interviewers or respondents. However, they did note that the translation of “indoors” is quite problematic here and in subsequent items. The concept of working indoors is not a common one in the Vietnamese language. Additionally, the current translation conveys something like “inside their own homes.” Although respondents didn’t seem to have trouble answering, we’re not entirely sure what they thought they were answering about.

Interviewer debriefing results: No significant problems noted.

Conclusion: The translation of the concept of “indoors” may be problematic when interpreting the data of Vietnamese-language respondents.

Recommendation: Revise the translation of “indoors” and use it consistently in K1, K1b, and K3a. The revised translation of K1 would read “Choã laøm vieäc naøo maø toái seõ ñoïc sau ñaây, mô taû ñuùng vôi choã maø Anh/Chò laøm vieäc nhieàu nhaát. Phaàn nhieàu laøm vieäc bên trong nhà, phaàn nhieàu laøm vieäc ôû ngoaøi trôøi, laøm vieäc löu ñoäng ôû nhieàu toà nhà hoaëc ñòa ñiếm khàuc nhau, laøm vieäc trong xe cò ñoäng cô, hoaëc laøm ôû choã khàuc.” The term “indoors” now reads something like “inside the house,” the closest Vietnamese can come to “indoors” but more equivalent than “inside their own homes.”

NCI response: Made the revision as recommended.

16.25 K1b. Do you mainly work in an office building, in your own home, in someone else’s home, or in another indoor place? [IF NEEDED: You said that you now work indoors.]

Behavior coding results for K1b

	Interviewer behavior (n=21)			Respondent behavior: Problem with the question (n=22)		Respondent behavior: Problem with answering (n=20)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	81.0%	19.1%	22.7%	0%	75.0%	25.0%

Coder debriefing results: Coders said that respondents frequently just described where they worked (and likely were interrupting the reading of the question to do so), expecting the interviewer to find the right response option for them. In K1b, the translation of “indoor place” is something like “tall building,” although it could also be understood as “a big house.”

Interviewer debriefing results: No significant problems noted.

Conclusion: The translation of “indoor place” is problematic. This may be part of the reason respondents would interrupt interviewers’ reading of the question to describe where they work, expecting the interviewer to find the right response option for them.

Recommendation: See Section 16.24. The revised translation of K1b would read, “Anh/Chò phàn nhiều lào làm việc trong tòa nhà văn phòng, trong nhà mình, trong nhà người ta, hay bên trong nhà cửa một chỗ nào khác? (IF NEEDED: Anh/Chò có cho biết là Anh/Chò bây giờ làm việc ở đâu trong nhà?)”

NCI response: Make the revision as recommended.

16.26 K3a. Which of these best describes your place of work’s smoking policy for INDOOR PUBLIC OR COMMON AREAS, such as lobbies, rest rooms, and lunch rooms? Not allowed in ANY public areas, allowed in SOME public areas, allowed in ALL public areas.

Behavior coding results for K3a

	Interviewer behavior (n=13)			Respondent behavior: Problem with the question (n=14)		Respondent behavior: Problem with answering (n=12)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	30.8%	69.2%	14.3%	7.1%	75.0%	25.0%

Coder debriefing results: Many respondents were skipped past this item after answering “no” at K2a (“Does your place of work have an official policy that restricts smoking in any way?”). Coders speculated that the words “official” and “policy” are “too sophisticated,” implying something maybe more formal than is actually meant. Hence respondents figure this is something they aren’t aware of.

The translation of “indoor” in this item conflicts with that of “public,” which in Vietnamese implies an area that is outdoors. Furthermore, the translation of indoors implies “in the house” or “in the home” of the respondent. In fact, interviewers often didn’t say the word “indoor” in this item, perhaps because of the confusing translation. In addition, respondents struggled with differentiating among the lengthy answer choices.

Interviewer debriefing results: Interviewers reported that respondents didn’t understand the translation of “common areas.”

Conclusion: There are several translation problems with this item. The translations of “indoor” and “common areas” are not readily understood by respondents. The concept of “indoor” conflicts with the translation of the word “public,” which implies an outdoor area. Obviously, no such problem occurred in the English-language interviews.

Recommendation: If possible, revise the translation so that “common areas” is made clearer and the words “indoor” and “public area” don’t conflict. See Section 16.24 for more detail about revising “indoor.” The revised translation of K3a would read, “Nieàu naø sau ñaây môa taũ ñuøng nhaát veà luaát læ huýt thuoác daønh cho ñhõøng khu vöic công công bên trong nhaø, ñhõø khu tieáp taãn, phoøng veà sinh, vaø phoøng aên trong cô sôu læøm vieäc của Anh/Chò? Khoâng ñhõic pheùp huýt thuoác ôu baát cõu khu vöic công công, ñhõic pheùp huýt thuoác ôu moät vaøi khu vöic công công, ñhõic pheùp huýt thuoác ôu taát caũ khu vöic công công.”

NCI response: Make the revision as recommended.

16.27 K4. In a usual week, does ANYONE who lives here, including yourself, smoke cigarettes, cigars, or pipes anywhere inside this home?

Behavior coding results for K4

	Interviewer behavior (n=45)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=42)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	100.0%	0%	4.4%	15.2%	88.1%	11.9%

Coder debriefing results: Coders said respondents frequently had to ask interviewers to clarify where “here” is. They also pointed out that “including yourself” is not a common phrase in Vietnamese. Respondents would answer “only me,” but interviewers wouldn’t clarify whether they meant “only I” live there or “only I” smoke, which caused confusion with the skip patterns later, and backtracking.

Retrospective interview results: Respondents were asked to describe who they were including in their answer to item K4. Three of the 7 said they included others besides just those who live in the home. The rest listed specific family members or simply said “myself.” It was difficult to tell from these answers whether the people they listed comprised all household members or whether those people actually live in the household. These findings are similar to those for the English-language respondents.

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers read item K4 as intended the majority of the time. Although respondents had little trouble understanding and responding to the question, they may not be consistent in their interpretation of the item. As in the English-language version, some respondents may not restrict their answers to those who live in the home with them. This issue, however, appears to relate to the construction of the original item, not its Vietnamese translation.

Recommendation: See Section 16.29 for recommendations about the entire item series.

NCI response: See Section 16.29.

16.28 K5a. In a usual week, how many people WHO LIVE here, including yourself, smoke cigarettes, cigars, or pipes anywhere INSIDE this home?

Behavior coding results for K5a

	Interviewer behavior (n=7)			Respondent behavior: Problem with the question (n=7)		Respondent behavior: Problem with answering (n=6)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	14.3%	42.9%	42.9%	0%	14.3%	66.7%	33.3%

Coder debriefing results: Coders reported respondents had the same problems with “here” and “this home” as in K4. They also said respondents tended to answer this item by listing the people who smoke (without saying whether they live with the respondents) or the people who live with them (without saying whether they smoke). Interviewers tried to help respondents by rewording the item in different ways that they thought would be more easily understood. Also, they tended to omit key words or phrases, such as “inside this home.”

Interviewer debriefing results: No significant problems noted.

Conclusion: Although the percentages of problem reading and problem answer codes seems high, they actually represent only 3 and 2 respondents, respectively. However, some respondents did seem to misunderstand the question and answer by listing either the people who smoke or the people who live with them.

Recommendation: See Section 16.29 for recommendations about the entire item series.

NCI response: See Section 16.29.

16.29 K5b. Usually, about how many days per week do people WHO LIVE here smoke anywhere INSIDE this home?

Behavior coding results for K5b

	Interviewer behavior (n=4)			Respondent behavior: Problem with the question (n=5)		Respondent behavior: Problem with answering (n=4)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	100.0%	0%	0%	0%	0%	100.0%

Coder debriefing results: The four respondents who received this item all had trouble. One was reported as answering, “My son smokes in the morning and leaves for work” and another said, “No one.”

Interviewer debriefing results: No significant problems noted.

Conclusion: Although all respondents who received this item had problems answering, there are too few of them to draw any conclusion from that result. Interviewers read the item as intended every time.

Recommendation: Across all target languages, respondents had varying degrees of trouble with this item series. In addition to being inconsistent in whom they included in their answers, respondents often indicated (either explicitly or by their answers) that K5b sounded to them like the same question as K5a. An additional problem with K5b is in interpreting respondents’ answers. For example, is an answer of 5 days per week the total for all household smokers, or is it the number of days for one smoker in the house while others (if there are any) smoke more or fewer days than that? To address the respondent confusion found in this study and the potential analysis problems, replace the current three-item series with the two-item series used in 2003. The two items with their translations appear below.

K4. Does anyone smoke cigarettes, cigars, or pipes anywhere inside your home? (“Keả luồn caừ Anh/Chò, còu ai huừt thuỏc lủ, xừ gỏ, hay óng ñieủu ỏu bảỏt còu ñủi nỏo beỏn trong nhaỏ cuủa Anh/Chò khỏng?”)

K5. On the average, about how many days per week is there smoking anywhere inside your home? (“Tính trung bình, khoaừng bao nhieủu ngỏy mỏt tuaỏn, còu ngỏoừi huừt thuỏc ỏu bảỏt còu ñủi nỏo beỏn trong nhaỏ cuủa Anh/Chò?”)

NCI response: Replace the current three-item series with the 2003 two-item series.

16.30 K6. Which statement best describes the rules about smoking INSIDE YOUR HOME? No one is allowed to smoke anywhere INSIDE YOUR HOME, smoking is allowed in some places or at some times INSIDE YOUR HOME, smoking is permitted anywhere INSIDE YOUR HOME.

Behavior coding results K6

	Interviewer behavior (n=45)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=45)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	46.7%	53.3%	4.4%	6.5%	82.2%	17.8%

Coder debriefing results: Coders said respondents would sometimes answer this item in their own words, rather than by using the response options provided. Also, interviewers tried to shorten the response options in their reading of the question.

Retrospective interview results: Respondents were asked to explain to whom the smoking rules in their homes apply. Five of the 7 respondents said the rules apply to anyone who comes into the home.

Interviewer debriefing results: No significant problems noted.

Conclusion: Respondents tended not to use the response options to answer the question, and interviewers reworded the response options in an effort to shorten them. No problems were reported for this item among English-language respondents.

Recommendation: If possible, revise the translation to shorten the response options. Otherwise, leave item as it is.

NCI response: Leave item as it is.

16.31 K7. In your opinion, how easy is it for minors to buy cigarettes and other tobacco products in your community? Very easy, somewhat easy, somewhat difficult, or very difficult.

Behavior coding results K7

	Interviewer behavior (n=45)			Respondent behavior: Problem with the question (n=45)		Respondent behavior: Problem with answering (n=42)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	2.2%	71.1%	26.7%	13.3%	6.7%	40.5%	59.5%

Coder debriefing results: Coders said respondents seemed to think this item was asking them about the U.S. laws regarding the age at which one can legally purchase cigarettes. For example, one person answered, “You can’t buy cigarettes in the U.S. if you’re under 18” and another said, “I don’t know about [laws] in the U.S.” Coders also reported that interviewers would sometimes fail to read the response options (which would be coded as “question read incorrectly”).

Retrospective interview results: Respondents were asked to describe what age range they felt defined “minor.” Of the 7 respondents, 5 answered with some variation of under (but not including) 18 years old and the other 2 answered with ages over 18 (“19 to 20” and “21 and older”).

Respondents were also asked to define the term “your community.” Two of the 7 respondents defined it as the neighborhood or nearby area, while one other said it encompasses the whole state. One person defined it as the “Vietnamese club” while three couldn’t define the term. During the cognitive interviewing phase of this project, we found that the current translation of “community” carries a political connotation and suggested a revision that reads something like “In your opinion, how easy is it for a minor to buy cigarettes or cigarette products in the area where you are now living.” This revision was not carried over to the telephone interview questionnaire, which may be one reason at least one respondent interpreted it as referring to a “Vietnamese club.”

Interviewer debriefing results: No significant problems noted.

Conclusion: Interviewers often failed to read the response options and respondents misinterpreted the question as testing their knowledge of U.S. laws about underage smoking. The small number of retrospective debriefing respondents seemed to interpret the words “minor” and “community” fairly consistently, although at least one respondent defined the latter as specific to Vietnamese people.

Recommendation: Revise the question as suggested in the cognitive interviewing report by rephrasing the question to read, “In your opinion, how easy is it for a minor to buy cigarettes or cigarette products in the area where you are now living?” (Theo yù kieán Anh/Chò, caùc treù

em vò thaønnh nieãn còu theỏ mua ñõõic thuỏac laũ hay caũc saũn phaỏm thuỏac laũ moỏt caũch deỏ daøng nhõ theỏ naøo trong khu võic maø Anh/Chò ñang ôu?)

NCI response: Make the revision as recommended.

16.32 K9. In bars and cocktail lounges, do you THINK that smoking should be allowed in all areas, allowed in some areas, or not allowed at all?

Behavior coding results K12

	Interviewer behavior (n=44)			Respondent behavior: Problem with the question (n=46)		Respondent behavior: Problem with answering (n=43)	
	Q not read	Q read correctly	Q read incorrectly	Interrupts	Requests clarification	Adequate answer	Problem with the answer
All smoker types	0%	93.2%	6.8%	0%	4.4%	79.1%	20.9%

Coder debriefing results: Coders said some respondents misinterpreted this item, thinking it was asking them to speculate about bar owners’ preferences or testing their knowledge of U.S. laws about smoking in public places. For example, one respondent said, “It’s up to the restaurant whether they want to allow it or not” and another said, “it’s against the law to smoke inside here [in the U.S].”

Retrospective interview results: Respondents were asked how easy or difficult it was to answer this question. Of the 7 who received this question, 5 thought it was very easy to answer and two thought it was “very” or “somewhat” difficult. The two respondents did not explain what it was that made answering K9 difficult.

Interviewer debriefing results: No significant problems noted.

Conclusion: As with K7 (or perhaps because of the misinterpretation of K7), respondents again thought this item was testing their knowledge of U.S. laws. Interviewers read the item as intended the majority of the time. No problems were reported among the English-language respondents.

In the telephone questionnaire used for this round of testing, item K9 actually appeared as item K12 in a series of six similar items asking about whether respondents felt smoking should be allowed or not in various public gathering places. Each item also had a follow-up forcing those who answered “allowed in some areas” to choose between all or no areas. The item wordings are lengthy and repetitive.

Recommendation: Leave item K9 (formerly item K12) as it is. At NCI’s request, all other items in this series have been removed from the final questionnaire and will be delivered separately from the TUS.

NCI response: Leave item K9 (formerly item K12) as it is.

16.33 Retrospective debriefing questionnaire results for items not coded

Every day and some day smokers who indicated on the TUS that they had attempted to quit, and all former smokers, were asked to describe the methods they used and how well those methods worked. The purpose of asking these questions was to determine how familiar respondents were with the quit methods listed on the TUS in Section E (items H10a through H10c for former smokers). None of the Vietnamese-language retrospective debriefing respondents who were current smokers had tried to quit, so these retrospective questions did not apply to them. The other retrospective respondent was a some day smoker, and so would not have received any questions about quitting.

During the cognitive interview phase of this project, we heard that some respondents who smoked in their native country and while living in the United States thought only of their U.S. smoking experiences when answering the TUS. To determine the extent of this problem, we asked retrospective debriefing respondents who had not lived in the U.S. their entire lives whether they were thinking about their experiences in the U.S., in the country where they'd lived previously, or both. Of the 7 respondents who received this question, 6 said they thought of both places and 1 said he or she thought only of experiences in the previous country (and this respondent was a smoker in both the U.S. and the previous country).

REFERENCES

- Cannell, C.F., Fowler, Jr., F.J., and Marquis, K.H. (1968). The influence of interviewer and respondent psychological and behavior variables on the reporting in household interviews. *Vital and Health Statistics: Data Evaluation and Methods Research*, Series 2, no. 26. Washington, DC: National Center for Health Statistics.
- Edwards, W.S., Fry, S., Zahnd, E., Lordi, N., Willis, G., and Grant, D. (In press). *Behavior coding across multiple languages: The 2003 California Health Interview Survey as a case study*. Proceedings of the Section on Survey Research Methods of the American Statistical Association.
- Edwards, S. (2005). Behavior coding. In S.J. Best and B. Radcliff (Eds.), *Polling America: An Encyclopedia of Public Opinion, Volume I (A-O)* (pp. 31-35). Westport, CT: Greenwood Press.
- Fowler, F.J., Jr., and Cannell, C.F. (1996). Using behavioral coding to identify cognitive problems with survey questions. In N. Schwarz and S. Seymour (Eds.), *Answering Questions: Methodology for Determining Cognitive and Communicative Processes in Survey Research* (Chapter 2, pp. 15-36). San Francisco: Jossey-Bass Publishers.
- Johnson, T.P. (1998). Approaches to equivalence in cross-cultural and cross-national survey research. In J.A. Harkness (Ed.), *ZUMA-Nachrichten Spezial No. 3. Cross-Cultural Survey Equivalence*. Mannheim: ZUMA.
- Kudela, M.S., Levin, K., Tseng, M., Hum, M., Lee, S., Wong, C., McNutt, S., and Lawrence, D. (2004). *Tobacco Use Supplement to the Current Population Survey Chinese, Korean, and Vietnamese translations: Results of cognitive testing (final report)*. (Prepared under contract to the National Cancer Institute). Rockville, MD: Westat.
- Ponce, N.A., Lavarreda, S.A., Yen, W., Brown, E.R., DiSogra, C., and Satter, D.E. (2004, July/August). The California Health Interview Survey 2001: Translation of a major survey for California's multiethnic population. *Public Health Reports*, 119, 388-395.
- U.S. Census Bureau. (April 4, 2004). "Census Bureau Guideline: Language Translation of Data Collection Instruments and Supporting Materials." Available at [www.census.gov/cac/www/Paper\(3\)-LanguageWG_Spring2004.html](http://www.census.gov/cac/www/Paper(3)-LanguageWG_Spring2004.html).
- Van de Vijver, F.J.R. (1998). Towards a theory of bias and equivalence. In J.A. Harkness (Ed.), *ZUMA-Nachrichten Spezial No. 3. Cross-Cultural Survey Equivalence*. Mannheim: ZUMA.
- Weidmer, B. (1994, May). Issues and guidelines for translation in cross-cultural research. Paper presented at the Annual Meeting of American Association for Public Opinion Research, Danvers, MA.

Westat. *Summary Report: Current Population Survey (CPS) Tobacco Cessation Supplement Task Order #36, Contract No. 282-98-0015*. Memo to NCI describing cognitive testing results of the TUS Spanish translation, dated April 18, 2002.