## Appendix F

## Significant Modifications of MATS 2003 Questionnaire Items for MATS 2007

Question numbers refer to the MATS 2007 questionnaire attached as Appendix A.

B7 (average drinks per day) was specifically limited to the last 30 days in MATS 2007.

B8 (binge drinking) was changed from 2 weeks in MATS 2003 to last 30 days in MATS 2007 for consistency with other alcohol questions. Binge drinking is not comparable across rounds.

D22 and D23 (use of smokeless tobacco and days used in last 30) was changed from snuff and chewing tobacco in MATS 2003 to any type of smokeless tobacco in MATS 2007. This might slightly increase the reported percentage of positive responses in MATS 2007, but the difference due to the expanded wording is not deemed large enough to affect the usefulness of trend comparisons.

E4a-E4f (use of specific stop-smoking medications during most recent quit attempt) were explicitly asked of everyone with an applicable quit attempt in MATS 2007. In MATS 2003, a gateway question first asked generally if the quitter had used any medications, then asked about specific medications only to those who responded positively. This structural change could have resulted in some additional positive, valid responses to the specific medications when they were presented individually, since respondents may not have been aware of all possibilities when answering the gateway question negatively in MATS 2003 or would not have thought of the medication until prompted about it by the specific question. Alternately, a MATS 2003 respondent could have self-defined medications in ways other than the commonly accepted medications intended by the survey designers. If so, this could have slightly inflated the MATS 2003 estimates of those who used any medication, compared to MATS 2007.

E11-E15 (use of various forms of behavioral counseling during most recent quit attempt). Same issues as for medications in E4a-E4f.

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G1 (visits to specific types of health care providers in the past 12 months) were explicitly and immediately asked of everyone in MATS 2007. In MATS 2003, a gateway question first asked generally if the individual had "seen a doctor or other health professional" in the past 12 months. Those who responded positively were asked about each type in turn; those who responded negatively were likewise asked confirmatory questions about each one in turn. The MATS 2003 gateway question did not eliminate any subsequent specific provider questions, which is the function of a gateway question, so MATS 2007 eliminated the extra gateway step. While seemingly different on the surface, the respondents in MATS 2003 eventually were asked explicitly about each provider type that they did not volunteer without prompting, so there should have no effect on comparability.

G2 (health care provider types who asked if the respondent smoked) and G3 (health care provider types who advised smoker respondents not to smoke) were explicitly asked for each type of provider reported in G1 as having been visited. In MATS 2003, gateway questions first asked generally if any provider had asked if the respondent smoked / advised the smoker not to smoke. Those who responded positively were explicitly asked about each provider type in turn; however, unlike those who responded negatively to the MATS 2003 gateway question about visiting a provider, MATS 2003 respondents who answered in the negative to these gateway questions were not asked confirmatory questions about each type in turn. Given the use of a gateway in MATS 2003, the same two opposite effects on the proportion of positive or negative MATS 2003 responses as were described for the MATS 2003 gateway-equivalent of MATS 2007 E4a – E4f would also apply here.

G4a, G4b (health care provider types who recommended medication, quit smoking program) were rephrased in MATS 2007 to make the questions more general. MATS 2003 question phraseology tended to focus on specific examples of the general categories, perhaps causing the respondent to unconsciously exclude recommendations received from a provider that were not among those listed in the question. Given the more general phrasing the same two opposite effects on the proportion of positive or negative MATS 2003 responses as were described for the MATS 2003 gateway-equivalent of MATS 2007 E4a – E4f would also apply here to MATS 2007.

G4c (health care provider types who offered the respondent a return visit or call to help quit smoking) was explicitly asked for each type of provider reported in G1 as

having been visited. In MATS 2003, a gateway question first asked generally if any provider offered a return visit. Those who responded positively were explicitly asked about each provider type in turn; however, unlike those who responded negatively to the MATS 2003 gateway question about visiting a provider, MATS 2003 respondents who answered in the negative to these gateway questions were not asked confirmatory questions about each type in turn. Given the use of a gateway in MATS 2003, the same two opposite effects on the proportion of positive or negative MATS 2003 responses as were described for the MATS 2003 gateway-equivalent of MATS 2007 E4a – E4f would also apply here.

For the entire MATS 2007 G2 – G4c sequence, MATS 2003 had complex rules based on age, smoking status, and other smoking activity to determine which respondents were asked the equivalent questions. MATS 2007 broadened and simplified these rules by asking the questions of all current smokers and of former smokers who had smoked within the past 12 months (the reference period for these questions), subject to specific logical skip rules (e.g., never smokers were asked only G2; G3- G4c were asked only in relation to provider types actually seen in the past 12 months, etc.). This broadening means more data is available to analyze in MATS 2007, but it is always possible to subset the MATS 2007 cases to any group that received the MATS 2003 questions, in order to do trend analysis.

H1 (employment status) categories were reduced in MATS 2007 to only the ones that MATS needs to control skip patterns and that are being analyzed. MATS is interested only in whether or not people are employed for wages, not if they are students, homemakers, etc. Since the finer non-employed categories available MATS 2003 were always reduced to a non-employed category for skip patterns and analysis, this should have no effect on comparability.

H14 –H15 (work setting) was a single question in MATS 2003 and split into two questions for MATS 2007, one with indoor work setting categories and one with outdoor work setting categories, asked as appropriate based on the response to H13 (work indoors or outdoors). The MATS 2003 categories did not include outdoor settings, which had to be captured in an Other – Specify field. Separating the categories and providing the commonest outdoor settings reported in MATS 2003 as explicit categories in MATS 2007 made it easier for the respondent to answer and the interviewer to record the response and probably elicited better information from outdoor workers. This should have no effect on comparability.

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H23 (did someone smoke near the respondent other than home, workplace, or car) expanded the question text to exclude car in MATS 2007, since car is asked about as a separate question. MATS 2003 also asked about cars separately, but did not exclude them in the text for this question. Consequently, it is possible that a positive response in MATS 2003 actually reflects the previously reported exposure in a car. If so, this would mean that the proportion of positive responses to this question in MATS 2003 may be higher than it should be if the respondents understood the question as intended.

I4d (awareness that secondhand smoke causes sudden infant death syndrome) added the commonly used SIDS acronym to the MATS 2007 question text. This may have improved comprehension of the question, but whether it would tend to increase or decrease positive responses depends on respondent's belief about this effect, given that they understand what condition the question addresses.

I7 (do people close to the respondent smoke) was broadened in its MATS 2007 wording to add children and relatives to the MATS 2003 examples (parents, spouse, friends). This may have elicited more positive responses, all other things being equal.

I8 (how many people close to the respondent smoke) eliminated the examples of such people in MATS 2007, since the immediately preceding question had just established the types of people being referenced. MATS 2003 repeated the more limited set of examples from the preceding question. As with I7, this change may have elicited more positive responses, all other things being equal.

I13 (covered by health insurance in past 12 months) added to the question a specific list of all the types of health care coverage that are considered insurance. While examples may tend to limit people's thinking and therefore tend to reduce the proportion of positive responses, in the case of topics that involve complex or technical definitions (e.g., insurance, income) experience has shown that it is advisable to inform or remind respondents of the major items that are to be considered in answering the general question. For example, health insurance may be thought of as only that which an employer provides or is purchased privately; those who receive publicly funded or provided health care may not think of this as insurance. Adding the list of major types of insurance to I3 was likely to have obtained more valid data and to have resulted in a higher proportion of positive responses, all other things being equal.

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J10 (household income) is not comparable with MATS 2003. MATS 2007 asked this in the standard fashion used in most surveys, that is, the total income, considering all wage earners and other sources, of the household to which the respondent belong. MATS 2003 asked it only of 18-24 year-years olds and asked different questions for those who reported being self-supporting and being supported by parents – the reported household income is that of the respondent in the former case and the parental household income in the latter. MATS 2003 had a specific purpose for this distinction that is no longer of interest. Trend analysis of income groups is not possible at this point in the MATS series, but will be in the future, starting with MATS 2007.

J11 (highest level of school completed) eliminated an additional phrase in the MATS 2003 question ("... or the highest degree you received") since the extra phrase really combines two questions in one and it is not known which the respondent is answering. For example, someone who has a bachelor's degree and no graduate school and someone who has a bachelor's degree and some graduate school have both received a bachelor's as the highest degree, but they fall into two different categories for this question. The MATS 2007 version eliminates this ambiguity. The effect on comparability is not knowable. MATS 2007 has slightly different categories than MATS 2003, and MATS 2007 simplified and clarified the categories; since they were not offered to the respondent, this was done to make the coding process easier and more accurate for the interviews. MATS 2003 and MATS 2007 categories, while slightly different, are collapsible into consistent groupings for trend analysis.