



**GATS** > Indicator Guidelines: Definition & Syntax



**Global Adult Tobacco Survey  
(GATS)  
Indicator Guidelines:  
Definition and Syntax**

**Final Edition July 2009**

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### **Partner Organizations**

- Centers for Disease Control and Prevention (CDC)
- CDC Foundation
- Johns Hopkins Bloomberg School of Public Health (JHSPH)
- RTI International
- World Health Organization (WHO)

### **Acknowledgments**

This work was conducted through guidance from the GATS analysis plan/indicators committee.

### **Financial Support**

Financial support is provided by the Bloomberg Initiative to Reduce Tobacco Use, a program of Bloomberg Philanthropies.

### **Suggested Citation**

Global Tobacco Surveillance System (GTSS), *Global Adult Tobacco Survey (GATS): Indicator Guidelines: Definition and Syntax*. 2009.

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# I. Introduction

This document describes the derivation of tobacco control indicators from the Global Adult Tobacco Survey (GATS) to be used to track progress towards curbing the tobacco epidemic. The indicators, developed through consultation with a committee of tobacco surveillance experts, are separated into two categories: (1) indicators recommended for reporting in the GATS country-specific fact sheet and (2) indicators recommended for reporting in the GATS country report. The derivations of these indicators are described in Chapters II and III of this document. Within each chapter, the indicators are ordered as they appear in the guidance materials provided for reporting GATS findings, entitled *Global Adult Tobacco Survey (GATS) Core Fact Sheet version July 2009* and *Global Adult Tobacco Survey (GATS) Country Report: Tabulation Plan and Guidelines version July 2009*.

Standardized approaches to estimation and reporting are essential to ensure comparability of results across the countries participating in GATS. The fact sheet is intended to provide an overview of the key findings and highlights of the survey for a broad audience. The country report provides an opportunity to examine these and other findings in more detail, and describe the results in the context of each country's unique tobacco control environment. Numerous indicators can be generated from GATS and the reporting of the indicators described here does not preclude the reporting of additional indicators as relevant to participating countries. Countries may want to include additional indicators generated from adapted country-specific questions included in their own surveys. For example, the country report indicators described in Chapter III focus only on smoked tobacco, but analogous indicators should be generated and reported for smokeless tobacco, if applicable. In addition, not all indicators reported here are relevant for all countries. This document describes a minimum set of indicators to be reported in the GATS fact sheet and country report, presuming the relevant data has been collected in the adapted country-specific questionnaire.

In Chapters II and III, the fact sheet and country report indicators are described in detail. For each indicator, a title and description of each indicator is presented, followed by a description of the numerator and denominator and guidance on how to treat missing values. In addition, comments on the construction of these indicators and guidance for reporting have been provided. Appendix A provides a rationale for the recommended indicators to be reported in the GATS fact sheet. Appendices B and C provide statistical software syntax that can be used to generate estimates for fact sheet and country report indicators, respectively. The GATS complex survey design dictates that the statistical software packages used for data analysis be able to account for multiple stages of sampling, stratification, and clustering. Three statistical software systems are recommended for GATS data management and analysis: SAS® (with or without SUDAAN®), SPSS®, and STATA®<sup>1</sup>. Further, the syntax provided in this document is based on the format of the GATS core questionnaire and may need to be modified to reflect country-specific adaptations of the GATS core questionnaire.

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<sup>1</sup> Use of trade names is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

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## 1. Tobacco Use

All measures of tobacco use prevalence in GATS should be generated using a 6-level tobacco smoking (or comparable smokeless) composite variable. The *composite variable* for tobacco smoking is generated from the responses to questions B01-B03 and shown in Table II-1. An analogous composite variable for smokeless tobacco use is generated from the responses to questions C01-C03 (Table II-2). The categories from these composite variables can be collapsed to generate the key indicators of tobacco (smoking or smokeless tobacco) described below.

**Table II-1. Generation of the 6-level tobacco smoking composite variable in GATS.**

Category	Value	Definition
<b><u>Current tobacco smoker</u></b>		
Daily tobacco smoker	1	B01= [1]
Occasional (less than daily) tobacco smoker, formerly daily	2	B01= [2] AND B02= [1]
Occasional (less than daily) tobacco smoker, never daily	3	B01= [2] AND B02= [2]
<b><u>Non-smoker of tobacco</u></b>		
Former (ex-) daily tobacco smoker	4	B01= [3] AND B03= [1]
Former (ex-) occasional (less than daily) tobacco smoker	5	B01= [3] AND B03= [2]
Never smoker of tobacco	6	B01= [3] AND B03= [3]

**Table II-2. Generation of the 6-level smokeless tobacco composite variable in GATS.**

Category	Value	Definition
<b><u>Current smokeless tobacco user</u></b>		
Daily smokeless tobacco user	1	C01= [1]
Occasional (less than daily) smokeless tobacco user, formerly daily	2	C01= [2] AND C02= [1]
Occasional (less than daily) smokeless tobacco user, never daily	3	C01= [2] AND C02= [2]
<b><u>Non-user of smokeless tobacco</u></b>		
Former (ex-) daily smokeless tobacco user	4	C01= [3] AND C03= [1]
Former (ex-) occasional (less than daily) smokeless tobacco user	5	C01= [3] AND C03= [2]
Never user of smokeless tobacco	6	C01= [3] AND C03= [3]

**Note About Missing Values for All Indicators:** Because the focus of GATS is on tobacco use and tobacco control indicators and many of the questions depend on the ability to classify individuals by tobacco smoking and smokeless tobacco use status, any respondents who are unable (“Don’t Know”) or unwilling (“Refused”) to provide an answer to B01, B02, or B03 or C01, C02, or C03 should be excluded from the calculation of the indicators below. Also, any respondents who break off the interview prior to reaching E02 (so if E01 is equal to blank then the interview was broken off too soon to be included in the indicator calculation) should be excluded from the calculation of the indicators below. These observations should be excluded during the production of an analytical data set.

---

### 1. 1. Current Tobacco Smokers

**Indicator:** Percentage of adults who currently smoke tobacco

**Numerator:** Number of current daily and less than daily tobacco smokers

**Denominator:** Total number of respondents<sup>2</sup>

**Missing Values:** See note below Table II-2.

**Comments:**

- (1) This indicator is generated by combining categories 1, 2, and 3 from the 6-level tobacco smoking composite variable.
  - (2) It is the most important indicator to report on and, in some cases, the only real point for international comparison.
- 

### 1. 2. Daily Tobacco Smokers

**Indicator:** Percentage of adults who currently smoke tobacco daily

**Numerator:** Number of current daily tobacco smokers

**Denominator:** Total number of respondents

**Missing Values:** See note below Table II-2.

---

<sup>2</sup> It is implied that the denominator includes those with “valid” responses only. Those responses that are “not valid” are described for each indicator under “missing values” and are further incorporated in the syntax described in Appendix B.

**Comments:**

- (1) This indicator is category 1 of the 6-level tobacco smoking composite variable. It should be used as a sub-category of indicator 1.1 and rarely used alone.
  - (2) The prevalence of daily tobacco smoking should be less than or equal to the prevalence of current tobacco smoking.
- 

**1. 3. Current Cigarette Smokers**

**Indicator:** Percentage of adults who currently smoke cigarettes

**Numerator:** Number of current daily and less than daily cigarette smokers

**Denominator:** Total number of respondents

**Missing Values:** See note below Table II-2.

**Comments:**

- (1) Cigarette smoking prevalence includes manufactured cigarettes, hand-rolled cigarettes, and kreteks.
  - (2) Current cigarette smoking prevalence can be reported separately where cigarettes are of focal interest. An optional category for reporting would be the prevalence of manufactured cigarette smoking.
- 

**1. 4. Daily Cigarette Smokers**

**Indicator:** Percentage of adults who smoke cigarettes daily

**Numerator:** Number of current daily cigarette smokers

**Denominator:** Total number of respondents

**Missing Values:** See note below Table II-2.

**Comments:**

- (1) Cigarette smoking prevalence includes manufactured cigarettes, hand-rolled cigarettes, and kreteks.
- (2) Daily cigarette smoking prevalence can be used as a subcategory of indicator 1.3.

- (3) Daily tobacco smokers who report less than daily use of at least two of the following: manufactured cigarettes, hand-rolled cigarettes, or kreteks, and no use of any other smoked tobacco product are considered daily cigarette smokers.
  - (4) The prevalence of daily cigarette smoking should be less than or equal to the prevalence of current cigarette smoking.
- 

### **1. 5. Former Daily Tobacco Smokers (Among All Adults)**

**Indicator:** Percentage of adults who are ever daily tobacco smokers and currently do not smoke tobacco

**Numerator:** Number of ever daily tobacco smokers who currently do not smoke tobacco

**Denominator:** Total number of respondents

**Missing Values:** See note below Table II-2.

**Comments:**

- (1) This indicator is category 4 of the 6-level tobacco smoking composite variable.
  - (2) The numerator includes only current non-smokers, not current less than daily smokers.
  - (3) This indicator will help contextualize the quit ratio below.
- 

### **1. 6. Former Daily Tobacco Smokers (Among Ever Daily Smokers)**

**Indicator:** Percentage of ever daily tobacco smokers who currently do not smoke tobacco

**Numerator:** Number of ever daily tobacco smokers who currently do not smoke tobacco

**Denominator:** Number of ever daily tobacco smokers

**Missing Values:** See note below Table II-2.

**Comments:**

- (1) This is a critical indicator of the success of efforts to encourage cessation among established tobacco smokers. This indicator is also known as the quit ratio for daily smoking.
- (2) The numerator includes only current non-smokers, not current less than daily smokers.
- (3) This is similar to 1.5, except that the denominator is ever daily tobacco smokers, rather than all respondents. Therefore, the estimate for this indicator should be higher than the estimate for indicator 1.5.

- (4) Other optional indicators that can be reported include ever tobacco smoker [tobacco smoking composite = 1-5] and never regular tobacco smoker (non-smoker) [tobacco smoking composite = 5-6].
- 

### **1. 7. Current Smokeless Tobacco Users**

**Indicator:** Percentage of adults who currently use smokeless tobacco

**Numerator:** Number of current daily and less than daily smokeless tobacco users

**Denominator:** Total number of respondents

**Missing Values:** See note below Table II-2.

**Comments:**

- (1) This indicator is generated by combining categories 1, 2, and 3 from the 6-level smokeless tobacco composite variable.
- 

### **1. 8. Daily Smokeless Tobacco Users**

**Indicator:** Percentage of adults who currently use smokeless tobacco daily

**Numerator:** Number of current daily smokeless tobacco users.

**Denominator:** Total number of respondents.

**Missing Values:** See note below Table II-2.

**Comments:**

- (1) This indicator is category 1 of the 6-level smokeless tobacco composite variable. It should be used as a subcategory of indicator 1.7.
- (2) The prevalence of daily smokeless tobacco use should be less than or equal to the prevalence of current smokeless tobacco use.
- 

### **1. 9. Former Daily Smokeless Tobacco Users (Among All Adults)**

**Indicator:** Percentage of adults who are ever daily smokeless tobacco users and currently do not use smokeless tobacco

**Numerator:** Number of ever daily smokeless tobacco users who currently do not use smokeless tobacco

**Denominator:** Total number of respondents

**Missing Values:** See note below Table II-2.

**Comments:**

- (1) This indicator is category 4 of the 6-level smokeless tobacco composite variable. It should be used as a subcategory of indicator 1.7.
  - (2) The numerator includes only current non-users of smokeless tobacco, not current less than daily users.
  - (3) This indicator will help contextualize the quit ratio below.
- 

**1. 10. Former Daily Smokeless Tobacco Users (Among Ever Daily Users)**

**Indicator:** Percentage of ever daily smokeless tobacco users who currently do not use smokeless tobacco

**Numerator:** Number of ever daily smokeless tobacco users who currently do not use smokeless tobacco

**Denominator:** Number of ever daily smokeless tobacco users

**Missing Values:** See note below Table II-2.

**Comments:**

- (1) This is a critical indicator of the success of efforts to encourage cessation among established smokeless tobacco users. This indicator is also known as the quit ratio for daily smokeless use.
- (2) The numerator includes only current non-users of smokeless tobacco, not current less than daily users.
- (3) This is similar to 1.9, except that the denominator is ever daily smokeless tobacco users, rather than all respondents. Therefore, the estimate for this indicator should be higher than the estimate for 1.9.
- (4) Other optional indicators that can be reported include ever smokeless tobacco user [smokeless tobacco composite = 1-5] and never regular smokeless tobacco user (non-user) [smokeless tobacco composite = 5-6].

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## 1. 11. Current Tobacco Users

**Indicator:** Percentage of respondents who currently use tobacco

**Numerator:** Number of current daily and less than daily tobacco smokers and/or smokeless tobacco users

**Denominator:** Total number of respondents

**Missing Values:** See note below Table II-2.

**Comments:**

- (1) This estimate is generated by combining categories 1, 2 and 3 from the 6-level tobacco smoking and the 6-level smokeless tobacco composite variable.
- (2) The prevalence of current tobacco use should be less than or equal to the total of current tobacco smoking and current smokeless tobacco use prevalence.
- (3) If data were not collected on the prevalence of smokeless tobacco use, then the prevalence of current tobacco use should be equal to the prevalence of current tobacco smoking (indicator 1.1)

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## 2. Cessation

### 2. 1. Smoking Quit Attempt in the Past 12 Months

**Indicator:** Percentage of adults who smoked tobacco during the past 12 months who tried to quit during the past 12 months

**Numerator:** Number of current tobacco smokers who tried to quit during the past 12 months and former tobacco smokers who have been abstinent for <12 months

**Denominator:** Total number of current tobacco smokers and former tobacco smokers who have been abstinent for <12 months

**Missing Values:** Respondents with “refused” responses for the following question should be excluded from the denominator: “During the past 12 months, have you tried to stop smoking?” (D01).

**Comments:**

- (1) This indicator is a composite of separate questions asked of current and former tobacco smokers. The denominator is defined as all respondents who were tobacco smokers during the previous year (i.e., current tobacco smokers and former tobacco smokers abstinent < 12

months). Calculating this indicator only among current tobacco smokers will underestimate the rate of quit attempts in the past year.

---

## 2. 2. Health Care Provider's Advice to Quit Smoking Tobacco

**Indicator:** Percentage of current tobacco smokers and recent quitters (<12 months) who visited a doctor or health care provider (HCP) during the past 12 months and were advised to quit smoking tobacco

**Numerator:** Number of current tobacco smokers and former tobacco smokers who have been abstinent for <12 months who report being advised to quit smoking during a visit to a HCP within the past 12 months

**Denominator:** Number of current tobacco smokers and former tobacco smokers who have been abstinent for <12 months who visited a HCP in the past 12 months

**Missing values:** Respondents with “don’t know” or “refused” responses to “How long has it been since you stopped smoking?” (B13) or respondents with “refused” values for any of the following questions should be excluded from the denominator: “During any visit to a doctor or health care provider in the past 12 months, were you asked if you smoked tobacco?” (B16 if former tobacco smoker, D06 if current tobacco smoker), or “During any visit to a doctor or health care provider in the past 12 months, were you advised to quit smoking tobacco?” (B17 if former tobacco smoker, D07 if current tobacco smoker).

### Comments:

- (1) This indicator is a composite of separate questions asked of current and former tobacco smokers. The denominator is defined as all respondents who were tobacco smokers during the previous year (i.e., current tobacco smokers and former tobacco smokers abstinent < 12 months) who visited a HCP during the previous year.
  - (2) It is recommended that this indicator be reported with information on the percentage of individuals that visited a doctor or a HCP in the past 12 months (e.g., Of the X% of current tobacco smokers and recent quitters who visited a HCP during the previous 12 months, X% were advised to quit smoking tobacco).
  - (3) Alternatively, one may want to report the percentage of all current tobacco smokers and recent quitters who were advised to quit by a HCP in the past 12 months. This could be referred to as the “population impact of health care provider advice.”
- 

## 2. 3. Interest in Quitting Smoking

**Indicator:** Percentage of current tobacco smokers who are planning to quit or thinking about quitting smoking

**Numerator:** Number of current tobacco smokers who are planning or thinking about quitting smoking within the next month, 12 months, or someday

**Denominator:** Number of current tobacco smokers

**Missing Values:** Respondents with “refused” responses for the question “Which of the following best describes your thinking about quitting smoking?...” (D08) should be excluded from the denominator.

**Comments:**

- (1) “Don’t know” responses are included in the denominator.
- 

## 2. 4. Smokeless Tobacco Quit Attempt in the Past 12 Months

**Indicator:** Percentage of adults who used smokeless tobacco during the past 12 months who tried to quit during the past 12 months

**Numerator:** Number of current smokeless tobacco users who tried to quit during the past 12 months and former smokeless tobacco users who have been abstinent for <12 months

**Denominator:** Total number of current smokeless tobacco users and former smokeless tobacco users who have been abstinent for <12 months

**Missing Values:** Respondents with “refused” responses for the following question should be excluded from the denominator: “During the past 12 months, have you tried to stop using smokeless tobacco?” (D09).

**Comments:**

- (1) This indicator is a composite of separate questions asked of current and former smokeless tobacco users. The denominator is defined as all respondents who were smokeless tobacco users during the previous year (i.e., current smokeless tobacco users and former smokeless tobacco users abstinent < 12 months). Calculating this indicator only among current smokeless tobacco users will underestimate the rate of quit attempts in the past year.
- 

## 2. 5. Health Care Provider’s Advice to Quit Smokeless Tobacco Use

**Indicator:** Percentage of current smokeless tobacco users and recent quitters (<12 months) who visited a doctor or health care provider (HCP) during the past 12 months and were advised to stop using smokeless tobacco

**Numerator:** Number of current smokeless tobacco users and former smokeless tobacco users who have been abstinent for <12 months who report being advised to quit smokeless tobacco during a visit to a HCP within the past 12 months

**Denominator:** Number of current smokeless tobacco users and former smokeless tobacco users who have been abstinent for <12 months who visited a HCP in the past 12 months

**Missing Values:** Respondents with “don’t know” or “refused” responses to “How long has it been since you stopped using smokeless tobacco?” (C13) or respondents with “refused” values for either of the following questions should be excluded from the denominator: “During any visit to a doctor or health care provider in the past 12 months, were you asked if you used smokeless tobacco?” (C16 for former smokeless tobacco users, D14 for current smokeless tobacco users), or “During any visit to a doctor or health care provider in the past 12 months, were you advised to stop using smokeless tobacco?” (C17 for former smokeless tobacco users, D15 for current smokeless tobacco users).

**Comments:**

- (1) This indicator is a composite of separate questions asked of current and former smokeless tobacco users. The denominator is defined as all respondents who were smokeless tobacco users during the previous year (i.e., current smokeless tobacco users and former smokeless tobacco users abstinent < 12 months) who visited a HCP during the previous year.
- (2) It is recommended that this indicator be reported with information on the percentage of individuals that visited a doctor or a HCP in the past 12 months (e.g., Of the X% of smokeless tobacco users and recent quitters who visited a HCP during the previous 12 months, X% were advised to stop using smokeless tobacco).
- (3) Alternatively, one may want to report the percentage of all current smokeless tobacco users and recent quitters who were advised to quit by a HCP in the past 12 months. This could be referred to as the “population impact of health care provider advice.”

---

## 2. 6. Interest in Quitting Smokeless Tobacco

**Indicator:** Percentage of current smokeless tobacco users who are planning to quit or thinking about quitting smokeless tobacco

**Numerator:** Number of current smokeless tobacco users who are planning or thinking about quitting within the next month, 12 months, or someday.

**Denominator:** Number of current smokeless tobacco users.

**Missing Values:** Respondents with “refused” responses for the question “Which of the following best describes your thinking about quitting smokeless tobacco?...” (D16) should be excluded from the denominator.

**Comments:**

- (1) "Don't know" responses are included in the denominator.
- 

**3. Secondhand Smoke**

**3. 1. Exposure to Secondhand Smoke at Work**

**Indicator:** Percentage of indoor workers who were exposed to tobacco smoke at work in the past 30 days

**Numerator:** Number of respondents who reported being exposed to smoke in indoor areas at work during the past 30 days

**Denominator:** Number of respondents who work outside of the home who usually work indoors or both indoors and outdoors

**Missing Values:** Respondents with "don't know" or "refused" responses to the question "During the past 30 days, did anyone smoke in indoor areas where you work?" (E08) should be excluded from the denominator.

**Comments:**

- (1) Note that individuals who usually work outdoors, even though they might have indoor areas in their work place are excluded from this calculation, as are individuals who work from their own homes.
  - (2) Some countries may choose to report this as the percentage of the entire population as well.
- 

**4. Economics**

**4. 1. Average Price of a Pack of Manufactured Cigarettes**

**Indicator:** Average price of a pack of manufactured cigarettes (*in local currency*)

**Missing Values:** Respondents who never bought manufactured cigarettes or those with "refused" responses to "The last time you bought cigarettes, how many cigarettes did you buy?" (F01) or "don't know" or "refused" responses to "In total, how much money did you pay for this purchase?" (F02) should be excluded. In addition, less than daily tobacco smokers who report smoking manufactured cigarettes less than once per week should be excluded from the calculation of this indicator.

**Calculation:**

- (1) Using information on the number and unit of last purchase (e.g., 2 packs) and the # of cigarettes per unit (e.g., 20 cigarettes per pack), calculate the number of manufactured cigarettes bought at last purchase (2 packs x 20 cigarettes per pack = 40 cigarettes).
- (2) Divide the price paid for the last purchase of manufactured cigarettes by the number of manufactured cigarettes bought at the last purchase to calculate the price paid per cigarette (e.g., \$10/40 cigarettes = \$.25 per cigarette).
- (3) Multiply the price paid per cigarette by 20 cigarettes/pack to calculate the price paid per pack of manufactured cigarettes (e.g., \$.25 \* 20 cigarettes/pack = \$5).
- (4) Calculate the number of manufactured cigarettes smoked per day for each individual.
- (5) Generate a new “manufactured cigarette weight”, equal to the product of the sample weight and the number of manufactured cigarettes smoked per day.
- (6) Calculate the average price paid per pack of manufactured cigarettes across all respondents, weighted by the new “manufactured cigarette weight”.

**Example:**

(1) Respondent	(2) Price paid per pack of 20 manufactured cigarettes (\$)*	(3) Manufactured cigarettes smoked per day	(4) Individual weight	(3 x 4) Manufactured cigarette weight
1	2.30	15	6340	95100
2	6.00	10	3170	31700
3	4.50	5	5072	25360
4	1.00	3	1902	5706
5	7.00	10	2536	25360
6	2.10	20	5706	114120
7	1.65	2	3804	7608
8	3.80	30	4438	133140
9	4.40	18	3170	57060
10	2.60	4	2219	8876

\* Estimated from questions F01 and F02.

Note: The values in each column of the table, including weights, are purely hypothetical and are presented only for illustrative purposes. These values have no bearing on country-specific data.

Weighted average price per pack:

$$= \frac{\sum_{i=1}^n w_i x_i}{\sum_{i=1}^n w_i}$$

$$= \frac{2.30 \cdot 95100 + 6.00 \cdot 31700 + 4.50 \cdot 25360 + 1.00 \cdot 5706 + 7.00 \cdot 25360 + 2.10 \cdot 114120 + 1.65 \cdot 7608 + 3.80 \cdot 133140 + 4.40 \cdot 57060 + 2.60 \cdot 8876}{95100 + 31700 + 25360 + 5706 + 25360 + 114120 + 7608 + 133140 + 57060 + 8876}$$

■ **\$3.45**

where  $n$  = number of manufactured cigarette smokers  
 $w_i$  = manufactured cigarette weight for  $i^{\text{th}}$  respondent  
 $x_i$  = price paid per pack of 20 cigarettes for  $i^{\text{th}}$  respondent

**Comments:**

- (1) This economic indicator is calculated only among manufactured cigarette smokers who smoke manufactured cigarettes at least once per week. An analogous indicator can be generated for all products in the survey for which price information and consumption is collected.
- (2) One pack is assumed to be equal to 20 cigarettes.
- (3) This weighted average price per pack is equivalent to the total expenditures of manufactured cigarettes per day across the target population divided by the total daily consumption of manufactured cigarettes in packs.

**4. 2. Cigarette Affordability**

**Indicator:** Average price of 100 packs of manufactured cigarettes as a percentage of Gross Domestic Product (GDP) per capita

**Numerator:** Consumption-weighted price of 100 packs of manufactured cigarettes

**Denominator:** Per capita GDP in the country

**Missing Values:** Respondents who never bought manufactured cigarettes or those with “refused” responses to “The last time you bought cigarettes, how many cigarettes did you buy?” (F01) or “don’t know” or “refused” responses to “In total, how much money did you pay for this purchase?” (F02) should be excluded. In addition, less than daily tobacco smokers who report smoking manufactured cigarettes less than once per week should be excluded from the calculation of this indicator.

**Calculation:**

- (1) Use the same approach as described above to calculate consumption-weighted average price per pack of 20 manufactured cigarettes.
- (2) Multiply the average price per pack by 100 to estimate the average price of 100 packs.

(3) Divide the average price of 100 packs by the per capita GDP and multiply by 100.

**Comments:**

- (1) This economic indicator is calculated only among manufactured cigarette smokers who smoke manufactured cigarettes at least once per week. An analogous indicator can be generated for all products in the survey for which price information and consumption is collected.
  - (2) One pack is assumed to be equal to 20 cigarettes.
  - (3) The average price of 100 packs of manufactured cigarettes is weighted by the number of manufactured cigarettes smoked per day.
  - (4) GDP per capita should be obtained from the most recent World Economic Outlook published by the International Monetary Fund, using projections for the year of the survey. The source of the GDP estimate should be referenced.
- 

## 5. Media

### 5.1. Awareness of Anti-Cigarette Smoking Information on Television (TV) or the Radio

**Indicator:** Percentage of respondents who have noticed information about the dangers of smoking cigarettes or that encourages quitting on TV or radio in the last 30 days.

**Numerator:** Number of respondents who have noticed information about the dangers of smoking cigarettes or that encourages quitting on TV or radio in the last 30 days.

**Denominator:** Total number of respondents

**Missing Values:** Respondents with a “refused” response for either of the questions that make up this indicator and a “no”, “not applicable”, or “don’t know” response for the other question should be excluded from the denominator: “In the last 30 days, have you noticed information about the dangers of smoking cigarettes or that encourages quitting in any of the following places? b. On television? c. On the radio?” (G01b and G01c, or the similar questions G01b1 and G01c1)\*. If an individual responded “yes” to one of the questions, they should be included in the indicator, regardless of their response to the other question.

**Comment:**

- (1) This indicator includes those who did not watch TV or listen to the radio in the past 30 days (“not applicable” responses).

---

\* This numbering is based on the GATS core questionnaire. The numbering may vary in the country-specific questionnaire.

- (2) It is recommended that this indicator be reported for the overall population and separately among current tobacco smokers and non-smokers.
- 

## 5. 2. Thinking of Quitting Because of Health Warning Labels on Cigarette Packages

**Indicator:** Percentage of current tobacco smokers who reported thinking about quitting smoking in the last 30 days because of the warning labels on cigarette packages.

**Numerator:** Number of current smokers who thought about quitting smoking in the last 30 days because of the warning labels on cigarette packages.

**Denominator:** Number of current smokers

**Missing Values:** Respondents with “refused” responses for either of the following questions should be excluded from the denominator: “In the last 30 days did you notice any health warnings on cigarette packages?” (G02) and “In the last 30 days, have warning labels on cigarette packages led you to think about quitting?” (G03).

**Comment:**

- (1) Those who did not see any cigarette packages and “Don’t know” responses are included in the denominator.
- 

## 5. 3. Awareness of In-Store Cigarette Advertising and Promotion

**Indicator:** Percentage of respondents who have noticed cigarettes at sale prices, free gifts or discount offers on other products when buying cigarettes, or any advertisements or signs promoting cigarettes in stores where cigarettes are sold in the last 30 days.

**Numerator:** Number of respondents who have noticed cigarettes at sale prices, free gifts or discount offers on other products when buying cigarettes, or any advertisements or signs promoting cigarettes in stores where cigarettes are sold in the last 30 days.

**Denominator:** Total number of respondents

**Missing Values:** Respondents with “refused” responses for any of the questions that make up this indicator and “no”, “not applicable”, or “don’t know” responses for the remaining questions should be excluded from the denominator. These questions are: “In the last 30 days, have you noticed any advertisements or signs promoting cigarettes in the following places? a. In stores where cigarettes are sold?” (G04a, or similar question G04a1)\* and “In the last 30 days, have you noticed any of the following

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\* This numbering is based on the GATS core questionnaire. The numbering may vary in the country-specific questionnaire.

types of cigarette promotions? b. Cigarettes at sale prices? d. Free gifts or special discount offers on other products when buying cigarettes?" (G06b and G06d, or similar questions G06b1, G06d1)\*. If an individual responded "yes" to at least one of the questions, they should be included in the indicator, regardless of the degree of missing responses to the remaining questions.

**Comments:**

- (1) Those with "don't know" and "not applicable" responses should be included.
  - (2) It is recommended that this indicator be reported for the overall population and separately among current tobacco smokers and non-smokers.
- 

#### **5. 4. Awareness of Cigarette Advertising and Promotion in Other Channels**

**Indicator:** Percentage of respondents who have noticed any advertisements or signs promoting cigarettes, cigarette company sponsorship of sporting events, or cigarette promotions in the last 30 days other than in stores where cigarettes are sold.

**Numerator:** Number of respondents who have noticed any advertisements or signs promoting cigarettes, cigarette company sponsorship of sporting events, or cigarette promotions in the last 30 days other than in stores where cigarettes are sold.

**Denominator:** Total number of respondents

**Missing Values:** Respondents with "refused" responses for any of the questions that make up this indicator and "no", "not applicable", or "don't know" responses for the remaining questions should be excluded from the denominator. If an individual responded "yes" to at least one of the questions, they should be included in the indicator, regardless of the degree of missing responses to the remaining questions.

**Comments:**

- (1) This indicator combines awareness of cigarette advertising and promotion (other than in stores) and sporting event sponsorship.
- (2) This indicator is based on any affirmative response to the categories in the questions on cigarette advertising, sponsorship, and promotion (G04\_, G05\_, G06\_) with the exception of the categories used in indicator 5.3. See syntax for more detail.
- (3) Those with "don't know" and "not applicable" responses should be included.
- (4) It is recommended that this indicator be reported for the overall population and separately among current tobacco smokers and non-smokers.

- (5) Caution should be used in comparing this indicator across countries, because the response options may vary from country to country.
- 

### 5. 5. Awareness of Anti-Smokeless Tobacco Information on TV or the Radio

**Indicator:** Percentage of respondents who have noticed information about the dangers of smokeless tobacco or that encourages quitting on TV or radio in the last 30 days.

**Numerator:** Number of respondents who have noticed information about the dangers of smokeless tobacco or that encourages quitting on TV or radio in the last 30 days.

**Denominator:** Total number of respondents

**Missing Values:** Respondents with a “refused” response for either of the questions that make up this indicator and a “no”, “not applicable”, or “don’t know” response for the other question should be excluded from the denominator: “In the last 30 days, have you seen any information on television about the dangers of use or that encourages quitting of the following tobacco products? 2. Smokeless tobacco?” (G01b2)\* and “In the last 30 days, have you heard any information on the radio about the dangers or that encourages quitting of the following tobacco products? 2. Smokeless tobacco?” (G01c2)\*. If an individual responded “yes” to one of the questions, they should be included in the indicator, regardless of their response to the other question.

**Comments:**

- (1) This indicator includes those who did not watch TV or listen to the radio in the past 30 days (“not applicable” responses).
  - (2) It is recommended that this indicator be reported for the overall population and separately among current smokeless tobacco users and non-users.
- 

### 5. 6. Thinking of Quitting Because of Health Warning Labels on Smokeless Tobacco Products

**Indicator:** Percentage of current smokeless tobacco users who thought about quitting in the last 30 days because of the warning labels on smokeless tobacco products.

**Numerator:** Number of current smokeless tobacco users who thought about quitting in the last 30 days because of the warning labels on smokeless tobacco products.

**Denominator:** Number of current smokeless tobacco users

---

\* This numbering is based on the GATS core questionnaire. The numbering may vary in the country-specific questionnaire.

**Missing Values:** Respondents with “refused” responses for either of the following questions should be excluded from the denominator: “In the last 30 days did you notice any health warnings on smokeless tobacco products?” (G02a)\* and “In the last 30 days, have warning labels on smokeless tobacco products led you to think about quitting?” (G03a)\*.

**Comments:**

- (1) Those who did not see any smokeless products and “Don’t know” responses are included in the denominator.

---

## 5. 7. Awareness of In-Store Smokeless Tobacco Advertising and Promotion

**Indicator:** Percentage of respondents who have noticed smokeless tobacco products at sale prices, free gifts or discount offers on other products when buying smokeless tobacco, or any advertisements or signs promoting smokeless tobacco in stores where smokeless tobacco is sold in the last 30 days.

**Numerator:** Number of respondents who have noticed smokeless tobacco products at sale prices, free gifts or discount offers on other products when buying smokeless tobacco, or any advertisements or signs promoting smokeless tobacco in stores where smokeless tobacco is sold in the last 30 days.

**Denominator:** Total number of respondents

**Missing Values:** Respondents with “refused” responses for any of the questions that make up this indicator and “no”, “not applicable”, or “don’t know” responses for the remaining questions should be excluded from the denominator. These questions are: “In the last 30 days, have you noticed any advertisements or signs promoting the following tobacco products in stores where the products are sold? 2. Smokeless tobacco?” (G04a2)\*, “In the last 30 days, have you noticed any of the following tobacco products sold at sale prices? 2. Smokeless tobacco?” (G06b2)\*, and “In the last 30 days, have you noticed any free gifts or special discount offers on other products when buying any of the following tobacco products? 2. Smokeless tobacco?” (G06d2)\*. If an individual responded “yes” to at least one of the questions, they should be included in the indicator, regardless of the degree of missing responses to the remaining questions.

**Comment:**

- (1) Those with “don’t know” and “not applicable” responses should be included.
- (2) It is recommended that this indicator be reported for the overall population and separately among current smokeless tobacco users and non-users.

---

\* This numbering is based on the GATS core questionnaire. The numbering may vary in the country-specific questionnaire.

---

## 5. 8. Awareness of Smokeless Tobacco Advertising and Promotion in Other Channels

**Indicator:** Percentage of respondents who have noticed any advertisements or signs promoting smokeless tobacco products, smokeless tobacco company sponsorship of sporting events, or smokeless tobacco promotions in the last 30 days other than in stores where smokeless tobacco is sold.

**Numerator:** Number of respondents who have noticed any advertisements or signs promoting smokeless tobacco products, smokeless tobacco company sponsorship of sporting events, or smokeless tobacco promotions in the last 30 days in channels other than in stores where smokeless tobacco is sold.

**Denominator:** Total number of respondents

**Missing Values:** Respondents with “refused” responses for any of the questions that make up this indicator and “no”, “not applicable”, or “don’t know” responses for the remaining questions should be excluded from the denominator. If an individual responded “yes” to at least one of the questions, they should be included in the indicator, regardless of the degree of missing responses to the remaining questions.

### Comments:

- (1) This indicator combines awareness of smokeless tobacco advertising and promotion (other than in stores) and sporting event sponsorship.
- (2) This indicator is based on any affirmative response to the categories in the questions on cigarette advertising, sponsorship, and promotion (G04\_, G05\_, G06\_) with the exception of the categories used in indicator 5.7. See syntax for more detail.
- (3) Those with “don’t know” and “not applicable” responses should be included.
- (4) It is recommended that this indicator be reported for the overall population and separately among current smokeless tobacco users and non-users.
- (5) Caution should be used in comparing this indicator across countries, because the response options may vary from country to country.

---

## 6. Knowledge, Attitudes, & Perceptions

### 6. 1. Beliefs about the Dangers of Tobacco Smoking

**Indicator:** Percentage of respondents who believe that smoking tobacco causes serious illness

**Numerator:** Number of respondents who believe that smoking tobacco causes serious illness.

**Denominator:** Total number of respondents.

**Missing Values:** Respondents with “refused” responses for the question “Based on what you know or believe, does smoking tobacco cause serious illness?” (H01) should be excluded from the denominator.

**Comments:**

- (1) “Don’t know” responses are included in the denominator.
  - (2) It is recommended that this indicator be reported for the overall population and separately among current tobacco smokers and non-smokers.
- 

## 6. 2. Beliefs about the Dangers of Secondhand Smoke

**Indicator:** Percentage of adults who believe that breathing other people’s smoke causes serious illness in non-smokers

**Numerator:** Number of respondents who believe that breathing other people’s smoke causes serious illness in non-smokers

**Denominator:** Total number of respondents

**Missing Values:** Respondents with “refused” responses for the question “Based on what you know or believe, does breathing other people’s smoke cause serious illness in non-smokers?” (E17) should be excluded from the denominator.

**Comments:**

- (1) “Don’t know” responses are included in the denominator.
  - (2) It is recommended that this indicator be reported for the overall population and separately among current tobacco smokers and non-smokers.
- 

## 6. 3. Beliefs about the Dangers of Smokeless Tobacco Use

**Indicator:** Percentage of respondents who believe that smokeless tobacco use causes serious illness

**Numerator:** Number of respondents who believe that smokeless tobacco use causes serious illness.

**Denominator:** Total number of respondents.

**Missing Values:** Respondents with “refused” responses for the question “Based on what you know or believe, does using smokeless tobacco cause serious illness?” (H03) should be excluded from the denominator.

**Comments:**

- (1) “Don’t know” responses are included in the denominator.
  - (2) It is recommended that this indicator be reported for the overall population and separately among current smokeless tobacco users and non-users.
-

### **III. Country Report Indicators**

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### Tobacco Use (Country Report Chapter 4)

All measures of tobacco use prevalence in GATS should be generated using a 6-level tobacco smoking (or comparable smokeless) composite variable. The *composite variable* for tobacco smoking is generated from the responses to questions B01-B03 and shown in Table III-1. This should be reported in Tables 4.1 and 4.2 of the GATS country report. An analogous composite variable for smokeless tobacco use is generated from the responses to questions C01-C03 (Table III-2). The categories from these composite variables can be collapsed to generate the indicators of tobacco smoking and smokeless tobacco use. The country report indicators described in this and subsequent sections focus on smoked tobacco, but analogous indicators should be generated and reported for smokeless tobacco, if applicable.

**Table III-1. Generation of the 6-level tobacco smoking composite variable in GATS** (Country Report – Table 4.1 and 4.2).

Category	Value	Definition
<b><u>Current tobacco smoker</u></b>		
Daily tobacco smoker	1	B01= [1]
Occasional (less than daily) tobacco smoker, formerly daily	2	B01= [2] AND B02= [1]
Occasional (less than daily) tobacco smoker, never daily	3	B01= [2] AND B02= [2]
<b><u>Non-smoker of tobacco</u></b>		
Former (ex-) daily tobacco smoker	4	B01= [3] AND B03= [1]
Former (ex-) occasional (less than daily) tobacco smoker	5	B01= [3] AND B03= [2]
Never smoker of tobacco	6	B01= [3] AND B03= [3]

**Table III-2. Generation of the 6-level smokeless tobacco composite variable in GATS.**

Category	Value	Definition
<b><u>Current smokeless tobacco user</u></b>		
Daily smokeless tobacco user	1	C01= [1]
Occasional (less than daily) smokeless tobacco user, formerly daily	2	C01= [2] AND C02= [1]
Occasional (less than daily) smokeless tobacco user, never daily	3	C01= [2] AND C02= [2]
<b><u>Non-user of smokeless tobacco</u></b>		
Former (ex-) daily smokeless tobacco user	4	C01= [3] AND C03= [1]
Former (ex-) occasional (less than daily) smokeless tobacco	5	C01= [3] AND C03= [2]

user		
Never user of smokeless tobacco	6	C01= [3] AND C03= [3]

**Note About Missing Values for All Indicators:** Because the focus of GATS is on tobacco use and tobacco control indicators and many of the questions depend on the ability to classify individuals by tobacco smoking and smokeless tobacco use status, any respondents who are unable (“Don’t Know”) or unwilling (“Refused”) to provide an answer to B01, B02, or B03 or C01, C02, or C03 should be excluded from the calculation of the indicators below. Also, any respondents who break off the interview prior to reaching E02 (so if E01 is equal to blank then the interview was broken off too soon to be included in the indicator calculation) should be excluded from the calculation of the indicators below. These observations should be excluded during the production of an analytical data set.

---

### Current Tobacco Smokers (Country report table 4.3 and 4.4)

**Indicator:** Percentage of adults who currently smoke tobacco

**Numerator:** Number of current daily and less than daily tobacco smokers

**Denominator:** Total number of respondents<sup>3</sup>

**Missing Values:** See note below Table III-2.

**Comments:**

- (1) This indicator is generated by combining categories 1, 2, and 3 from the 6-level tobacco smoking composite variable.
- (2) It is the most important indicator to report on and, in some cases, the only real point for international comparison.

---

### Current Cigarette Smokers (Country report table 4.3 and 4.4)

**Indicator:** Percentage of adults who currently smoke cigarettes

**Numerator:** Number of current daily and less than daily cigarette smokers

**Denominator:** Total number of respondents

---

<sup>3</sup> It is implied that the denominator includes those with “valid” responses only. Those responses that are “not valid” are described for each indicator under “missing values” and are further incorporated in the syntax described in Appendix C.

**Missing Values:** See note below Table III-2.

**Comments:**

- (1) Cigarette smoking prevalence includes manufactured cigarettes, hand-rolled cigarettes, and kreteks.
  - (2) Current cigarette smoking prevalence can be reported separately where cigarettes are of focal interest. An optional category for reporting would be the prevalence of manufactured cigarette smoking.
- 

**Current [Product] Smokers (Country report table 4.3 and 4.4)**

**Indicator:** Percentage of respondents who currently smoke [product]

**Numerator:** Number of current daily and less than daily [product] smokers

**Denominator:** Total number of respondents

**Missing Values:** Respondents with a “refused” value for either of the following questions for the product of interest should be excluded: “On average, how many of the following products do you currently smoke each day?” (B06) and “How many of the following do you currently smoke during a usual week?” (B10).

**Comments:**

- (1) This indicator can be generated for specific tobacco products of interest, e.g. manufactured cigarettes, hand-rolled cigarettes, kreteks, bidis, etc.
- 

**Daily Tobacco Smokers (Country report table 4.5)**

**Indicator:** Percentage of adults who currently smoke tobacco daily

**Numerator:** Number of current daily tobacco smokers

**Denominator:** Total number of respondents

**Missing Values:** See note below Table III-2.

**Comments:**

- (1) This indicator is category 1 of the 6-level tobacco smoking composite variable.
- (2) The prevalence of daily tobacco smoking should be less than or equal to the prevalence of current tobacco smoking.

- (3) Country report table 4.5 includes prevalence of occasional (less than daily) smokers and non-smokers. Prevalence of occasional smokers should be generated by combining categories 2 and 3 of the 6-level tobacco smoking composite variable. Prevalence of non-smokers should be generated by combining categories 4, 5, and 6 of the 6-level tobacco smoking composite variable.

---

### Number of Cigarettes Smoked Per Day (Country report table 4.6)

**Indicator:** Percentage of daily cigarette smokers who report smoking an average of [*less than 5; 5-9; 10-14; 15-24; and 25+*] cigarettes per day.

**Numerator:** Daily cigarette smokers reporting an average of [*less than 5; 5-9; 10-14; 15-24; and 25+*] cigarettes per day.

**Denominator:** Daily cigarette smokers

**Missing Values:** Respondents with a “refused” value for any of the following questions should be excluded: “On average, how many of the following products do you currently smoke each day?” Manufactured cigarettes? (B06a); Hand-rolled cigarettes? (B06b); Kreteks? (B06c)\*.

**Comments:**

- (1) Cigarettes include manufactured, hand-rolled, and kreteks.
- (2) See *Chapter II – Fact Sheet Indicators* for the definition of daily cigarette smokers.

---

### Age at Smoking Initiation (Country report table 4.7)

**Indicator:** Percentage of ever daily smokers ages 20-34 years old who started smoking daily at [*<15; 15-16; 17-19 and 20+*] years of age.

**Numerator:** Number of ever daily smokers ages 20-34 years old who started smoking daily at [*<15; 15-16; 17-19 and 20+*] years of age

**Denominator:** Number of ever daily smokers ages 20-34 years old

**Missing Values:** Respondents with “don’t know” or “refused” responses to “How old were you when you first started smoking tobacco daily?” (B04/B08/B11) and “refused” responses to “How many years ago did you first start smoking tobacco daily?” (B05/B09/B12) should be excluded.

---

\* This numbering is based on the GATS core questionnaire. The numbering may vary in the adapted country-specific questionnaire.

**Comments:**

- (1) Age of initiation should be calculated among young adult ever daily smokers (ages 20-34) to reflect more recent patterns of initiation. Age of initiation among older populations reflects historical patterns of initiation. An analysis of birth cohort patterns in age of initiation (by current age) can provide additional information on trends.

---

**Former Daily Tobacco Smokers (Among All Adults) (Country report table 4.8)**

**Indicator:** Percentage of adults who are ever daily tobacco smokers and currently do not smoke tobacco

**Numerator:** Number of ever daily tobacco smokers who currently do not smoke tobacco

**Denominator:** Total number of respondents

**Missing Values:** See note below Table III-2.

**Comments:**

- (1) This indicator is category 4 of the 6-level tobacco smoking composite variable.
- (2) The numerator includes only current non-smokers, not current less than daily smokers.
- (3) This indicator will help contextualize the quit ratio below.

---

**Former Daily Tobacco Smokers (Among Ever Daily Smokers) (Country report table 4.8)**

**Indicator:** Percentage of ever daily tobacco smokers who currently do not smoke tobacco

**Numerator:** Number of ever daily tobacco smokers who currently do not smoke tobacco

**Denominator:** Number of ever daily tobacco smokers

**Missing Values:** See note below Table III-2.

**Comments:**

- (1) This is a critical indicator of the success of efforts to encourage cessation among established tobacco smokers. This indicator is also known as the quit ratio for daily smoking.
- (2) The numerator includes only current non-smokers, not current less than daily smokers.
- (3) This is similar to the indicator above, except that the denominator is ever daily tobacco smokers, rather than all respondents. Therefore, the estimate for this indicator should be higher.

- (4) Other optional indicators that can be reported include ever tobacco smoker [tobacco smoking composite = 1-5] and never regular tobacco smoker (non-smoker) [tobacco smoking composite = 5-6].

---

#### **Time since Quitting Smoking (Country report table 4.9)**

**Indicator:** Percentage of former daily smokers who quit smoking [*<1 year ago, 1 to <5 years ago, 5 to <10 years ago, 10+ years ago*].

**Numerator:** Number of former daily smokers who quit smoking [*<1 year ago, 1 to <5 years ago, 5 to <10 years ago, 10+ years ago*].

**Denominator:** Number of former daily smokers who do not smoke tobacco.

**Missing Values:** Respondents with “don’t know” or “refused” responses for the following question should be excluded: “How long has it been since you stopped smoking?” (B13).

#### **Comments:**

- (1) This indicator is calculated among former daily smokers who do not currently smoke.
- (2) Reporting on time since quitting can provide information on the impact of recent programs and policies, by showing the percentage of recent quitters compared with longer-term quitters. Smokers who have quit for a longer period of time are more likely to remain former smokers.

---

#### **Patterns of Current Tobacco Use (Country report table 4.10)**

**Indicator:** Percentage of respondents who currently [*only smoke tobacco; smoke tobacco and use smokeless tobacco; only use smokeless tobacco; do not use tobacco*].

**Numerator:** Number of respondents who currently [*only smoke tobacco; smoke tobacco and use smokeless tobacco; only use smokeless tobacco; do not use tobacco*].

**Denominator:** Total number of respondents

**Missing Values:** Respondents with “don’t know” or “refused” responses to B01, B02, or B03 or C01, C02, or C03 should already be excluded from the analytical data set prior to data analysis.

#### **Comments:**

- (1) This indicator should only be reported if questions on smokeless tobacco use are included in the questionnaire
- (2) “Only smoke tobacco” reflects the percentage of respondents who currently smoke tobacco only (daily or less than daily). “Only use smokeless tobacco” reflects the percentage of

respondents who currently use smokeless tobacco only (daily or less than daily). “Smoke tobacco and use smokeless tobacco” reflects the percentage of respondents who currently smoke tobacco and use smokeless tobacco products on either a daily or less than daily basis. “Do not use tobacco” reflects the percentage of respondents who currently do not smoke tobacco or use smokeless tobacco products.

---

### **Time to First Tobacco Use (Country report table 4.11)**

**Indicator:** Percentage of daily smokers or smokeless tobacco users who report first tobacco use [ $\leq 5$  minutes; 6-30 minutes; 31-60 minutes; >60 minutes] after waking.

**Numerator:** Number of daily smokers or smokeless tobacco users who report first tobacco use [ $\leq 5$  minutes; 6-30 minutes; 31-60 minutes; >60 minutes] after waking.

**Denominator:** Total number of daily smokers or smokeless tobacco users.

**Missing Values:** Respondents with “refused” values for both of the following questions should be excluded: “How soon after you wake up do you usually have your first smoke?...” (B07) and “How soon after you wake up do you usually use smokeless tobacco for the first time?...” (C07).

#### **Comments:**

- (1) If the respondent is both a daily smoker and smokeless tobacco user, the earliest time to first tobacco use should be used.
  - (2) This indicator is a measure of nicotine dependence.
- 

## **Cessation (Country Report Chapter 5)**

### **Smoking Quit Attempt in the Past 12 Months (Country report table 5.1)**

**Indicator:** Percentage of adults who smoked tobacco during the past 12 months who tried to quit during the past 12 months

**Numerator:** Number of current tobacco smokers who tried to quit during the past 12 months and former tobacco smokers who have been abstinent for <12 months

**Denominator:** Total number of current tobacco smokers and former tobacco smokers who have been abstinent for <12 months

**Missing Values:** Respondents with “refused” responses for the following question should be excluded from the denominator: “During the past 12 months, have you tried to stop smoking?” (D01).

**Comments:**

- (1) This indicator is a composite of separate questions asked of current and former tobacco smokers. The denominator is defined as all respondents who were tobacco smokers during the previous year (i.e., current tobacco smokers and former tobacco smokers abstinent < 12 months). Calculating this indicator only among current tobacco smokers will underestimate the rate of quit attempts in the past year.

---

**Health Care Provider Asking about Smoking (Country report table 5.1)**

**Indicator:** Percentage of current smokers and recent quitters (<12 months) who visited a doctor or health care provider (HCP) during the past 12 months and were asked if they were a smoker

**Numerator:** Number of current smokers and recent quitters (<12 months) who visited a doctor or HCP during the past 12 months and were asked if they were a smoker

**Denominator:** Number of current smokers and recent quitters (<12 months) who visited a doctor or HCP during the past 12 months

**Missing Values:** Respondents with “don’t know” or “refused” responses to “How long has it been since you stopped smoking?” (B13) or “refused” responses to “During any visit to a doctor or health care provider in the past 12 months, were you asked if you smoked tobacco?” (B16 if former tobacco smoker, D06 if current tobacco smoker) should be excluded.

**Comments:**

- (1) This indicator is a composite of separate questions asked of current and former tobacco smokers. The denominator is defined as all respondents who were tobacco smokers during the previous year (i.e., current tobacco smokers and former tobacco smokers abstinent < 12 months) who visited a HCP during the previous year.
- (2) It is suggested that this indicator be reported with information on the percentage of individuals that visited a doctor or a HCP in the past 12 months (e.g., Of the X% of current tobacco smokers and recent quitters who visited a HCP during the previous 12 months, X% were asked if they smoked tobacco).

---

**Health Care Provider’s Advice to Quit Smoking Tobacco (Country report table 5.1)**

**Indicator:** Percentage of current tobacco smokers and recent quitters (<12 months) who visited a doctor or health care provider (HCP) during the past 12 months and were advised to quit smoking tobacco

**Numerator:** Number of current tobacco smokers and former tobacco smokers who have been abstinent for <12 months who report being advised to quit smoking during a visit to a HCP in the past 12 months

**Denominator:** Number of current tobacco smokers and former tobacco smokers who have been abstinent for <12 months who visited a HCP in the past 12 months

**Missing values:** Respondents with “don’t know” or “refused” responses to “How long has it been since you stopped smoking?” (B13) or respondents with “refused” values for any of the following questions should be excluded from the denominator: “During any visit to a doctor or health care provider in the past 12 months, were you asked if you smoked tobacco?” (B16 if former tobacco smoker, D06 if current tobacco smoker), or “During any visit to a doctor or health care provider in the past 12 months, were you advised to quit smoking tobacco?” (B17 if former tobacco smoker, D07 if current tobacco smoker).

**Comments:**

- (1) This indicator is a composite of separate questions asked of current and former tobacco smokers. The denominator is defined as all respondents who were tobacco smokers during the previous year (i.e., current tobacco smokers and former tobacco smokers abstinent < 12 months) who visited a HCP during the previous year.
- (2) It is suggested that this indicator be reported with information on the percentage of individuals that visited a doctor or a HCP in the past 12 months (e.g., Of the X% of current tobacco smokers and recent quitters who visited a HCP during the previous 12 months, X% were asked if they smoked tobacco). This is presented in country report table 5.1.
- (3) Alternatively, one may want to report the percentage of all current tobacco smokers and recent quitters who were advised to quit by a HCP in the past 12 months. This could be referred to as the “population impact of health care provider advice.”

---

**Use of Cessation Aides by Smokers (Country report table 5.2)**

**Indicator:** Percentage of current smokers who made a quit attempt during the past 12 months and recent quitters (<12 months) who used [*pharmacotherapy; counseling/advice; other cessation methods*] during their last quit attempt

**Numerator:** Number of current smokers who made a quit attempt during the past 12 months and recent quitters (<12 months) who used [*pharmacotherapy; counseling/advice; other cessation methods*] during their last quit attempt

**Denominator:** Number of current smokers who made a quit attempt during the past 12 months and recent quitters (<12 months)

**Missing Values:** Respondents with “refused” responses for any of the questions that make up this indicator and “no” responses for the remaining questions in the cessation aide grouping should be excluded from the denominator (e.g., pharmacotherapy = nicotine replacement therapy [B18b/D03b]\*)

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\* This numbering is based on the GATS core questionnaire. The numbering may vary in the adapted country-specific questionnaire.

and other prescription medications [B18c/D03c]\*). If an individual responded “yes” to at least one of the questions, they should be included in the indicator, regardless of the degree of missing responses to the remaining questions.

**Comments:**

- (1) This indicator is calculated among all respondents who made a smoking quit attempt in the past 12 months.
- (2) Based on the core GATS questionnaire, the following groupings are suggested for reporting:
  - a. Pharmacotherapy – nicotine replacement therapy; other prescription medications
  - b. Counseling/advice – counseling, including at a smoking cessation clinic; a quit line or smoking telephone support line
  - c. Other methods – traditional medicines; switching to smokeless tobacco; anything else.
- (3) The groupings may change depending on the item list included in the adapted country-specific questionnaire.
- (4) The indicator groupings may add to over 100% because multiple methods can be used for a quit attempt.

---

**Level of Interest in Quitting Smoking (Country report table 5.3)**

**Indicator:** Percentage of current smokers [*who are planning to quit within the next month, who are thinking about quitting within the next 12 months, who will quit someday but not in the next 12 months, who are not interested in quitting, or who don't know if they are interested in quitting*].

**Numerator:** Number of current smokers [*planning to quit within the next month, thinking about quitting within the next 12 months, who will quit someday but not in the next 12 months, who are not interested in quitting, or who don't know if they are interested in quitting*].

**Denominator:** Number of current smokers

**Missing Values:** Respondents with “refused” values for the question “Which of the following best describes your thinking about quitting smoking?...” (D08) should be excluded.

**Comments:**

- (1) “Don't know” responses should be treated as a separate category.

## Secondhand Smoke (Country Report Chapter 6)

### **Exposure to Secondhand Smoke at Work (Country report table 6.1)**

**Indicator:** Percentage of indoor workers who were exposed to tobacco smoke at work in the past 30 days

**Numerator:** Number of respondents who reported being exposed to smoke in indoor areas at work during the past 30 days

**Denominator:** Number of respondents who work outside of the home who usually work indoors or both indoors and outdoors

**Missing Values:** Respondents with “don’t know” or “refused” responses to the question “During the past 30 days, did anyone smoke in indoor areas where you work?” (E08) should be excluded from the denominator.

#### **Comments:**

- (1) Note that individuals who usually work outdoors, even though they might have indoor areas in their work place are excluded from this calculation, as are individuals who work from their own homes.
- (2) It is recommended that this indicator be calculated among both of the following: (a) All respondents, (b) Non-smokers.
- (3) Some countries may choose to report this as the percentage of the entire population as well.

---

### **Exposure to Secondhand Smoke in Public Places (Country report table 6.2)**

**Indicator:** Percentage of *[respondents/non-smokers]* who were exposed to tobacco smoke in *[places]* in the past 30 days

**Numerator:** Number of *[respondents/non-smokers]* who reported being exposed to smoke in *[location]* in the past 30 days

**Denominator:** Total number of *[respondents/non-smokers]*.

**Missing Values:** For each location, respondents with “don’t know” or “refused” values to “During the past 30 days, did you visit any *[place]*?” and “refused” values to “Did anyone smoke inside of any *[location]* that you visited in the past 30 days?” should be excluded.

**Comments:**

- (1) It is recommended that this indicator be calculated among both of the following: (a) All respondents, (b) Non-smokers.
  - (2) “Don’t know” responses for the question “Did anyone smoke inside of any *[location]* that you visited in the past 30 days?” should be included in the denominator of this indicator. It is assumed that these respondents reported “don’t know” because they did not visit parts of the building and therefore were not exposed.
  - (3) Separate indicators can be generated for each of the locations included in section E of the questionnaire.
  - (4) This indicator provides a measure of exposure to tobacco smoke across the entire population. If evaluating the effectiveness or need for policies in different settings, it would also be useful to report exposure to tobacco smoke only among individuals who visited the location in the past 30 days.
- 

**Economics (Country Report Chapter 7)****Average Price of a Pack of Manufactured Cigarettes (Describe in country report)**

**Indicator:** Average price of a pack of manufactured cigarettes (*in local currency*)

**Missing Values:** Respondents who never bought manufactured cigarettes or those with “refused” responses to “The last time you bought cigarettes, how many cigarettes did you buy?” (F01) or “don’t know” or “refused” responses to “In total, how much money did you pay for this purchase?” (F02) should be excluded. In addition, less than daily tobacco smokers who report smoking manufactured cigarettes less than once per week should be excluded from the calculation of this indicator.

**Calculation:**

- (1) Using information on the number and unit of last purchase (e.g., 2 packs) and the # of cigarettes per unit (e.g., 20 cigarettes per pack), calculate the number of manufactured cigarettes bought at last purchase (2 packs x 20 cigarettes per pack = 40 cigarettes).
- (2) Divide the price paid for the last purchase of manufactured cigarettes by the number of manufactured cigarettes bought at the last purchase to calculate the price paid per cigarette (e.g., \$10/40 cigarettes = \$.25 per cigarette).
- (3) Multiply the price paid per cigarette by 20 cigarettes/pack to calculate the price paid per pack of manufactured cigarettes (e.g., \$.25 \* 20 cigarettes/pack = \$5).
- (4) Calculate the number of manufactured cigarettes smoked per day for each individual.

- (5) Generate a new “manufactured cigarette weight”, equal to the product of the individual sampling weight and the number of manufactured cigarettes smoked per day.
- (6) Calculate the average price paid per pack of manufactured cigarettes across all respondents, weighted by the new “manufactured cigarette weight”.

**Example:**

(1) Respondent	(2) Price paid per pack of 20 manufactured cigarettes (\$)*	(3) Manufactured cigarettes smoked per day	(4) Individual weight	(3 x 4) Manufactured cigarette weight
1	2.30	15	6340	95100
2	6.00	10	3170	31700
3	4.50	5	5072	25360
4	1.00	3	1902	5706
5	7.00	10	2536	25360
6	2.10	20	5706	114120
7	1.65	2	3804	7608
8	3.80	30	4438	133140
9	4.40	18	3170	57060
10	2.60	4	2219	8876

\* Estimated from questions F01 and F02.

Note: The values in each column of the table, including weights, are purely hypothetical and are presented only for illustrative purposes. These values have no bearing on country-specific data.

Weighted average price per pack:

$$= \frac{\sum_{i=1}^n W_i \cdot X_i}{\sum_{i=1}^n W_i}$$

$$= \frac{2.30 \cdot 95100 + 6.00 \cdot 31700 + 4.50 \cdot 25360 + 1.00 \cdot 5706 + 7.00 \cdot 25360 + 2.10 \cdot 114120 + 1.65 \cdot 7608 + 3.80 \cdot 133140 + 4.40 \cdot 57060 + 2.60 \cdot 8876}{95100 + 31700 + 25360 + 5706 + 25360 + 114120 + 7608 + 133140 + 57060 + 8876}$$

■ **\$3.45**

where  $n$  = number of manufactured cigarette smokers  
 $W_i$  = manufactured cigarette weight for  $i^{\text{th}}$  respondent  
 $X_i$  = price paid per pack of 20 cigarettes for  $i^{\text{th}}$  respondent

**Comments:**

- (1) This economic indicator is calculated only among manufactured cigarette smokers who smoke manufactured cigarettes at least once per week. An analogous indicator can be generated for all products in the survey for which price information and consumption is collected.
- (2) One pack is assumed to be equal to 20 cigarettes.
- (3) This weighted average price per pack is equivalent to the total expenditures of manufactured cigarettes per day across the target population divided by the total daily consumption of manufactured cigarettes in packs.

---

**Cigarette Affordability (Describe in country report)**

**Indicator:** Average price of 100 packs of manufactured cigarettes as a percentage of Gross Domestic Product (GDP) per capita

**Numerator:** Consumption-weighted price of 100 packs of manufactured cigarettes

**Denominator:** Per capita GDP in the country

**Missing Values:** Respondents who never bought manufactured cigarettes or those with “refused” responses to “The last time you bought cigarettes, how many cigarettes did you buy?” (F01) or “don’t know” or “refused” responses to “In total, how much money did you pay for this purchase?” (F02) should be excluded. In addition, less than daily tobacco smokers who report smoking manufactured cigarettes less than once per week should be excluded from the calculation of this indicator.

**Calculation:**

- (1) Use the same approach as described above to calculate consumption-weighted average price per pack of 20 manufactured cigarettes.
- (2) Multiply the average price per pack by 100 to estimate the average price of 100 packs.
- (3) Divide the average price of 100 packs by the per capita GDP and multiply by 100.

**Comments:**

- (1) This economic indicator is calculated only among manufactured cigarette smokers who smoke manufactured cigarettes at least once per week. An analogous indicator can be generated for all products in the survey for which price information and consumption is collected.
- (2) One pack is assumed to be equal to 20 cigarettes.
- (3) The average price of 100 packs of manufactured cigarettes is weighted by the number of manufactured cigarettes smoked per day.

- (4) GDP per capita should be obtained from the most recent World Economic Outlook published by the International Monetary Fund, using projections for the year of the survey. The source of the GDP estimate should be referenced.

---

### **Brand of Cigarettes Last Purchased (Country report table 7.1)**

**Indicator:** Percentage of manufactured cigarette smokers whose last purchase was *[Brand X]*.

**Numerator:** Number of manufactured cigarette smokers whose last purchase was *[Brand X]*.

**Denominator:** Number of manufactured cigarette smokers

**Missing Values:** Respondents with “refused” values for the following question should be excluded: “What brand did you buy the last time you purchased cigarettes for yourself?” (F03)

**Comments:**

- (1) It is recommended that the top five brands purchased overall be reported.

---

### **Source of Cigarette Last Purchase (Country report table 7.2)**

**Indicator:** Percentage of manufactured cigarette smokers whose last cigarette purchase was from a *[vending machine, store, street vendor,...]*.

**Numerator:** Number of manufactured cigarette smokers whose last cigarette purchase was from a *[vending machine, store, street vendor,...]*.

**Denominator:** Number of manufactured cigarette smokers

**Missing Values:** Respondents with “refused” or “don’t remember” responses for the following question should be excluded: “The last time you purchased cigarettes for yourself, where did you buy them?” (F04).

**Comments:**

- (1) The specific categories should be adjusted to reflect the item list used in the adapted country-specific questionnaire.

---

### **Cigarette Expenditure per Month (Country report table 7.3)**

**Indicator:** Average manufactured cigarette expenditures per month (*[local currency]*/month)

**Missing Values:** Respondents who “never bought cigarettes” or those with “refused” values for either of the following questions should be excluded: “The last time you bought cigarettes, how many cigarettes did you buy?” (F01) or “In total, how much money did you pay for this purchase?” (F02). In addition, less than daily tobacco smokers who report smoking manufactured cigarettes less than once per week should be excluded from the calculation of this indicator.

**Calculation:**

- (1) Using information on the number and unit of last purchase (e.g., 2 packs) and the # of cigarettes per unit (e.g., 20 cigarettes per pack), calculate the number of manufactured cigarettes bought at last purchase (2 packs x 20 cigarettes per pack = 40 cigarettes).
- (2) Divide the price paid for the last purchase of manufactured cigarettes by the number of manufactured cigarettes bought at the last purchase to calculate the price paid per cigarette (e.g., \$10/40 cigarettes = \$.25 per cigarette).
- (3) Calculate the number of manufactured cigarettes smoked per day for each individual (e.g., 10 cigarettes per day).
- (4) Multiply the number of manufactured cigarettes smoked per day by the price paid per cigarette and then multiply by 365 days and divide by 12 months (e.g., 10 cigarettes per day x \$.25 per cigarette x 365 days/12 months = \$76 per month).

**Comments:**

- (1) This economic indicator is calculated only among manufactured cigarette smokers who smoke manufactured cigarettes at least once per week. An analogous indicator can be generated for all products in the survey for which price information and consumption is collected.

---

**Media (Country Report Chapter 8)**

**Awareness of Anti-Cigarette Smoking Information in Specific Channels (Country report table 8.1)**

**Indicator:** Percentage of respondents who have noticed information about the dangers of smoking cigarettes or that encourages quitting [*in newspapers or magazines, on TV, on the radio, on billboards, somewhere else*] in the last 30 days.

**Numerator:** Number of respondents who have noticed information about the dangers of smoking cigarettes or that encourages quitting [*in newspapers or magazines, on TV, on the radio, on billboards, somewhere else*] in the last 30 days.

**Denominator:** Total number of respondents

**Missing Values:** Respondents with “refused” values for any of the questions about anti-cigarette information should be excluded from the calculation of the relevant indicator. For example, those with missing values for the question “In the last 30 days, have you noticed any information about the dangers of smoking cigarettes or that encourages quitting in any of the following places? In newspapers or in magazines?” (G01a or similar question G01a1)\* should be excluded from the indicator – “Awareness of anti-cigarette information in newspapers or magazines”.

**Comments:**

- (1) An indicator can be reported for each of the channels asked about in the questionnaire.
- (2) This indicator includes “not applicable” responses.
- (3) It is recommended that this indicator be reported for the overall population and separately among current tobacco smokers and non-smokers.

---

**Awareness of Anti-Cigarette Smoking Information on TV or the Radio (Country report table 8.1)**

**Indicator:** Percentage of respondents who have noticed information about the dangers of smoking cigarettes or that encourages quitting on TV or radio in the last 30 days.

**Numerator:** Number of respondents who have noticed information about the dangers of smoking cigarettes or that encourages quitting on TV or radio in the last 30 days.

**Denominator:** Total number of respondents

**Missing Values:** Respondents with a “refused” response for either of the questions that make up this indicator and a “no”, “not applicable”, or “don’t know” response for the other question should be excluded from the denominator: “In the last 30 days, have you noticed information about the dangers of smoking cigarettes or that encourages quitting in any of the following places? b. On television? c. On the radio?” (G01b and G01c, or the similar questions G01b1 and G01c1)\*. If an individual responded “yes” to one of the questions, they should be included in the indicator, regardless of their response to the other question.

**Comment:**

- (1) This indicator includes those who did not watch TV or listen to the radio in the past 30 days (“not applicable” responses).

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\* This numbering is based on the GATS core questionnaire. The numbering may vary in the adapted country-specific questionnaire.

- (2) It is recommended that this indicator be reported for the overall population and separately among current tobacco smokers and non-smokers.

---

### **Noticing Health Warning Labels on Cigarette Packages (Country report table 8.2)**

**Indicator:** Percentage of current smokers who noticed health warnings on cigarette packages in the last 30 days.

**Numerator:** Number of current smokers who noticed health warnings on cigarette packages in the last 30 days.

**Denominator:** Number of current smokers

**Missing Values:** Respondents with “refused” values for the following question should be excluded: “In the last 30 days did you notice any health warnings on cigarette packages?” (G02).

**Comment:** None.

---

### **Thinking of Quitting Because of Health Warning Labels on Cigarette Packages (Country report table 8.2)**

**Indicator:** Percentage of current tobacco smokers who reported thinking about quitting smoking in the last 30 days because of the warning labels on cigarette packages.

**Numerator:** Number of current smokers who thought about quitting smoking in the last 30 days because of the warning labels on cigarette packages.

**Denominator:** Number of current smokers

**Missing Values:** Respondents with “refused” responses for either of the following questions should be excluded from the denominator: “In the last 30 days did you notice any health warnings on cigarette packages?” (G02) and “In the last 30 days, have warning labels on cigarette packages led you to think about quitting?” (G03).

**Comment:**

- (1) Those who did not see any cigarette packages and “Don’t know” responses are included in the denominator.

---

### **Awareness of Cigarette Advertising in Specific Channels (Country report tables 8.3, 8.4, and 8.5)**

**Indicator:** Percentage of respondents who have noticed any advertisements or signs promoting cigarettes [*in stores, on television, on the radio, on billboards,...*] in the last 30 days.

**Numerator:** Number of respondents who have noticed any advertisements or signs promoting cigarettes [*in stores, on television, on the radio, on billboards,...*] in the last 30 days.

**Denominator:** Total number of respondents

**Missing Values:** Respondents with “refused” values for any of the questions about cigarette advertising should be excluded from the calculation of the relevant indicator. For example, those with missing values for the question “In the last 30 days, have you noticed any advertisements or signs promoting cigarettes in the following places? In stores where the products are sold?” (G04a or similar question G04a1)\* should be excluded from the indicator – “Awareness of cigarette advertising in stores where cigarettes are sold”.

**Comments:**

- (1) An indicator can be reported for each of the channels asked about in the questionnaire.
- (2) Those with “not applicable” responses should be included.
- (3) It is recommended that this indicator be reported for the overall population (country report table 8.3) and separately among current tobacco smokers (table 8.4) and non-smokers (table 8.5).

---

### **Awareness of Cigarette Company Sponsored Sporting Event (Country report tables 8.3, 8.4, and 8.5)**

**Indicator:** Percentage of respondents who have noticed any sport or sporting event associated with cigarette brands or companies in the last 30 days.

**Numerator:** Number of respondents who have noticed any sport or sporting event associated with cigarette brands or companies in the last 30 days.

**Denominator:** Total number of respondents

---

\* This numbering is based on the GATS core questionnaire. The numbering may vary in the adapted country-specific questionnaire.

**Missing Values:** Respondents with “refused” values for the following question should be excluded: “In the last 30 days, have you noticed any sport or sporting event that is associated with cigarette brands or cigarette companies?” (G05).

**Comments:**

- (1) Those with “don’t know” responses should be included.
- (2) It is recommended that this indicator be reported for the overall population (country report table 8.3) and separately among current tobacco smokers (table 8.4) and non-smokers (table 8.5).

---

**Awareness of Specific Types of Cigarette Promotions (Country report tables 8.3, 8.4, and 8.5)**

**Indicator:** Percentage of respondents who noticed [*free samples of cigarettes, cigarettes at sales prices, coupons for cigarettes, free gifts or discounts on other products when buying cigarettes, clothing or other items with a cigarette brand name or logo, cigarette promotions in the mail*] in the last 30 days

**Numerator:** Number of respondents who noticed [*free samples of cigarettes, cigarettes at sales prices, coupons for cigarettes, free gifts or discounts on other products when buying cigarettes, clothing or other items with a cigarette brand name or logo, cigarette promotions in the mail*] in the last 30 days

**Denominator:** Total number of respondents

**Missing Values:** Respondents with “refused” values for any of the questions about cigarette promotion should be excluded from the calculation of the relevant indicator. For example, those with missing values for the question “In the last 30 days, have you noticed any of the following types of cigarette promotions? Free samples of cigarettes?” (G06a or similar question G06a1)\* should be excluded from the indicator – “Awareness of free samples of cigarettes”.

**Comments:**

- (1) An indicator can be reported for each of the specific types of promotions asked about in the questionnaire.
- (2) Those with “don’t know” responses should be included.
- (3) It is recommended that this indicator be reported for the overall population (country report table 8.3) and separately among current tobacco smokers (table 8.4) and non-smokers (table 8.5).

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\* This numbering is based on the GATS core questionnaire. The numbering may vary in the adapted country-specific questionnaire.

---

### **Awareness of Any Cigarette Advertising and Promotion (Country report tables 8.3, 8.4, and 8.5)**

**Indicator:** Percentage of respondents who have noticed any advertisements or signs promoting cigarettes, cigarette company sponsorship of sporting events, or cigarette promotions in the last 30 days

**Numerator:** Number of respondents who have noticed any cigarette advertisements, promotions or sponsorships in the last 30 days

**Denominator:** Total number of respondents

**Missing Values:** Respondents with “refused” values for any of the items that make up this indicator and “no”, “not applicable”, or “don’t know” responses for the remaining items should be excluded. If an individual responded “yes” to at least one of the items, they should be included in the indicator, regardless of the degree of “refused” responses to the remaining items.

**Comments:**

- (1) This indicator is based on responses to the items asked about in the questions on cigarette advertising, sponsorship, and promotion (G04, G05, G06). See syntax for more detail.
- (2) Those with “don’t know” and “not applicable” responses should be included.
- (3) It is recommended that this indicator be reported for the overall population (country report table 8.3) and separately among current tobacco smokers (table 8.4) and non-smokers (table 8.5).
- (4) Caution should be used in comparing this indicator across countries, because the items asked about in the questionnaire may vary from country to country.

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### **Knowledge, Attitudes & Perceptions (Country Report Chapter 9)**

#### **Beliefs about the Dangers of Tobacco Smoking (Country report table 9.1)**

**Indicator:** Percentage of respondents who believe that smoking tobacco causes serious illness

**Numerator:** Number of respondents who believe that smoking tobacco causes serious illness.

**Denominator:** Total number of respondents.

**Missing Values:** Respondents with “refused” responses for the question “Based on what you know or believe, does smoking tobacco cause serious illness?” (H01) should be excluded from the denominator.

**Comments:**

- (1) “Don’t know” responses are included in the denominator.
- (2) It is recommended that this indicator be reported for the overall population and separately among current tobacco smokers and non-smokers.

---

**Beliefs about Diseases Caused by Smoking (Country report table 9.1)**

**Indicator:** Percentage of respondents who believe that smoking causes [*stroke, heart attack, and lung cancer*].

**Numerator:** Number of respondents who believe that smoking causes [*stroke, heart attack, and lung cancer*].

**Denominator:** Total number of respondents

**Missing Values:** Respondents with “refused” values for any of the questions about specific diseases caused by smoking should be excluded from the relevant indicator: “Based on what you know or believe, does smoking tobacco cause the following...a. Stroke? b. Heart attack? c. Lung cancer?” (H02a/b/c).

**Comments:**

- (1) “Don’t know” responses are included in the denominator.
- (2) It is recommended that this indicator be reported for the overall population and separately among current tobacco smokers and non-smokers.
- (3) Analogous indicators can be generated for beliefs about the diseases caused by smokeless tobacco use and other tobacco products for which these questions are asked.

---

**Beliefs about the Dangers of Secondhand Smoke (Country report table 9.2)**

**Indicator:** Percentage of adults who believe that breathing other people’s smoke causes serious illness in non-smokers

**Numerator:** Number of respondents who believe that breathing other people’s smoke causes serious illness in non-smokers

**Denominator:** Total number of respondents

**Missing Values:** Respondents with “refused” responses for the question “Based on what you know or believe, does breathing other people’s smoke cause serious illness in non-smokers?” (E17) should be excluded from the denominator.

**Comments:**

- (1) "Don't know" responses are included in the denominator.
  - (2) It is recommended that this indicator be reported for the overall population and separately among current tobacco smokers and non-smokers.
-

**APPENDIX A**

**DISCUSSION PAPER:**

**Recommendations for the Reporting of Fact  
Sheet Indicators from the Global Adult  
Tobacco Survey**

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## Introduction

This document contains options and recommendations for reporting the key tobacco control indicators from GATS. There are a wide range of topic areas in GATS, including smoking and smokeless tobacco use, cessation, secondhand smoke, economics, media, and knowledge, attitudes, and perceptions. Each section contains numerous questions that can be used to generate many different estimates and indicators. In this paper we focus on the primary estimates to be reported from GATS. This document is aimed to help those who need to use such indicators to in the decision process as to which indicators to use. It is not designed to prevent the use of other indicators for specialist purposes, but to provide some consistency in the headline indicators used across the countries participating in GATS.

These headline indicators would be likely to be used by the news media and in presentations to and by key decision makers in each country, and by WHO and other international organizations. The general principle is to keep the headlines as simple as possible, while not combining aspects of tobacco use or tobacco control that people would expect to be kept separate. Additionally, consideration is given to comparability across other surveys and data collection systems.

### 1. Tobacco Use Indicators

A summary of the preliminary recommendations for primary (“headline”) reporting of tobacco use indicators is shown in Table A-1 and described in detail below. The rationale for the key questions around the reporting of tobacco use indicators is described below.

**Table A-1.** Summary of recommendations for primary reporting of smoking/tobacco use prevalence estimates from GATS.

Category	Primary (“headline”) reporting*	Secondary
Type of tobacco	Tobacco smoking and Smokeless use separately	Any tobacco use
Type of smoked tobacco	All smoked tobacco	Cigarettes (manufactured, hand-rolled, and kreteks) and other (if relevant)
Frequency of use	Current use (daily and non-daily combined)	Daily use
Cessation	Point prevalence of former daily users	Point prevalence of past daily and non-daily use of tobacco

\* Primary reporting should include estimates by gender. Additional subgroups for secondary reporting may include age group, urban/rural area, and SES, as relevant.

#### a. Do we report smoking separately from smokeless as the headline measure?

**Recommendation:** Tobacco smoking and smokeless tobacco use should be kept separate for the main reporting. This does not preclude reporting measures of total tobacco use, but merely that the headline figures should be smoked (and a second of smokeless where it is relevant).

**Rationale:** These two kinds of tobacco use are quite different and thus they need to be treated as two different forms of behavior. The type and degree of harm due to smoked and smokeless use is markedly different. For example, only smoked tobacco has the potential to cause SHS exposure, and it accounts for almost all the lung disease. As smoke free policies grow, it will be useful to track whether substitution behavior with smokeless products may be occurring. Additionally, GATS has been designed to collect detailed information on these two categories separately. Finally, most studies report smoking and smokeless (where measured) separately, thus for comparability, they should be kept separate. In the WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER Package, a principal source for tracking tobacco use and control efforts around the world, smoking is the focus of the reported prevalence estimates (Table A-2). In countries where the proportion of tobacco use made up by smokeless users is substantial, it is suggested that both estimates be reported. An aggregate of total tobacco use can easily be obtained by adding together the prevalence of each, controlling for joint use.

**Table A-2.** Adult Tobacco Use Estimates Reported in WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER Package.

<b>Location</b>	<b>Data reported</b>
Appendix I – Country Profiles	Country-reported estimates are presented and vary in definition
Appendix II – Policy Data	Age-standardized prevalence of adult daily smoking (both genders combined)
Appendix III – Internationally Comparable Estimates	Adjusted and age-standardized prevalence a. Smoking any tobacco product (including cigarettes, cigars, pipes, bidis, kreteks, etc. b. Smoking cigarettes (manufactured) c. Current smoking (daily + non-daily) d. Daily smoking
Appendix IV – Country-Provided Prevalence Data	Country-reported estimates are presented and vary in definition (e.g., current tobacco smoking, daily tobacco smoking, daily tobacco smoking, current cigarette use, daily cigarette use, current any tobacco use.)

**b. Do we report cigarette use as the main indicator or do we combine all smoked tobacco?**

**Recommendation:** All smoked tobacco should be reported as the primary indicator. Prevalence of cigarette use (including manufactured, hand-rolled, and kreteks) should be a secondary indicator.

**Rationale:** GATS has been design to collect all of the different types of smoked tobacco in one section. It is possible to disaggregate the prevalence to cigarettes, but this would limit the utility of international comparisons. In many countries, manufactured cigarettes are the main source of smoked tobacco. However, other smoked products such as hand-rolled cigarettes, bidis, kreteks, and shisha are more prevalent than manufactured cigarettes in some countries. They are all harmful to users and those exposed to tobacco smoke generated from their use. Where cigarette use is reported for international

comparisons, it is recommended that manufactured cigarettes, hand-rolled cigarettes, and kreteks be combined, given the similarities of these products. However, for special purposes it may be important to separate them out, and where there is an identified use, this should be done. In many countries it will be useful to report cigarette smoking separately as an additional indicator. Depending on the purpose this might just be manufactured cigarettes or also include hand-rolled and/or kreteks, bidis, etc. It can be useful to align this indicator with any indicator of estimated daily consumption.

Other products like large cigars and water pipes are smoked quite differently, and are more difficult to combine, especially when it comes to assessing levels of use. In the WHO report, tobacco smoking is presented in Appendix II: Policy Data, while modeled estimates of tobacco smoking and cigarette smoking are presented in Appendix III: Internationally Comparable Estimates.

**c. Do we primarily report daily use or any regular current use?**

Recommendation: Current use (daily and non-daily) should be the headline measure. Daily use will be a secondary indicator.

Rationale: Combining daily and non-daily use results in cleaner categories (current smoker, former smoker, never smoker), which are easier for simple reporting. It does not leave a messy small group (less than daily users) who do not fit into any of the main categories. Reporting only daily users will underestimate the total number of tobacco users in the country. All tobacco use incurs some harm and should be targeted for intervention. A substantial fraction of non-daily users may smoke more than 20 cigarettes per month, so some are more like dailies and others report difficulty quitting, so the non-dailies cannot be considered uniformly non-dependent. The main pattern of smoking behavior is daily smoking and including less-than-daily smokers will not have a big impact on the estimate. However, it is important not to give the impression that occasional smoking is acceptable or harmless.

**d. What should be the primary indicator for cessation (of smoked or smokeless tobacco)?**

Recommendation: Point prevalence of ex-daily users should be reported.

There are two issues embedded in this recommendation. These are discussed separately.

Recommendation: The measure should relate to past daily use.

Rationale: Previous daily use is the most reliable indicator of past use and a more valid indicator of true quitting. It is more memorable than at least the lower levels of occasional use, which may be discounted, particularly by older respondents. If never-daily users are included it exaggerates the impact of efforts to get tobacco users to quit, and the extent of genuine quitting is a critical indicator to be monitoring.

Recommendation: It should use point prevalence.

Rationale: The use of point prevalence does not require complex computation and is easier to explain. It is a valid indicator for population studies, where there is no incentive to quit just before the survey (unlike some clinical settings). If it is not used, there are a small group of non-classifiable individuals (i.e., those who have quit but not for the required period of time). The benefits of requiring a period of abstinence are not strong and do not justify the extra complexity doing so produces.

## 2. Tobacco Control Indicators

### a. What other key indicators should receive prominence in reporting (e.g., in fact sheets and country reports)?

Other key headline measures to be reported include indicators that can be used to track progress on achieving the objectives of the WHO Framework Convention on Tobacco Control (FCTC) which have been embodied in indicators in WHO’s MPOWER package, a series of policies aimed at reversing the global tobacco epidemic. These policies include: protect people from tobacco smoke; offer help to quit tobacco use; warn about the dangers of tobacco; enforce bans on tobacco advertising, promotion, and sponsorship; and raise taxes on tobacco. A summary of the recommendations is provided in Table A-3, followed by the rationale and justification for these indicators.

**Table A-3.** Summary of recommendations for primary reporting of other tobacco control indicators from GATS.

Category	Primary (“headline”) reporting
<b>Cessation</b>	
HCP advice	HCP advice to quit in the past 12 months
Attempt to quit	Attempt to quit in the past 12 months
Intent to quit	Planning to quit or thinking about quitting someday
<b>Secondhand Smoke</b>	
SHS at work	Exposure to SHS at work in the past 30 days
Beliefs about SHS	Belief that SHS causes serious illness in non-smokers*
<b>Economics</b>	
Cigarette affordability	Consumption-weighted price of 100 packs of cigarettes as a percentage of Gross Domestic Product (GDP) per capita
<b>Media</b>	
Awareness of anti-tobacco messages	Notice anti-tobacco messages on TV or radio in the last 30 days*
Health warning labels	Thought about quitting in the last 30 days because of warning labels
In-store marketing	Noticed tobacco advertising in stores where tobacco is sold in last 30 days*

Marketing through other channels	Noticed tobacco marketing in at least one channel (other than in stores) in the last 30 days*
<b>Knowledge, Attitudes, &amp; Perceptions</b>	
Beliefs about dangers of tobacco	Belief that smoking [or smokeless tobacco use] causes serious illness*

\* Report overall for primary reporting and by smoking status for secondary reporting.

#### **Health care provider's advice to quit <sup>4</sup>**

**Recommendation:** Report the percentage of adults who smoked during the past 12 months and visited a doctor or health care provider (HCP) during the past 12 months who were advised to quit smoking tobacco

**Rationale:** Even brief advice to quit smoking from a HCP has been shown to increase the chances that a smoker will successfully quit and remain abstinent. One of the MPOWER package recommendations includes the incorporation of tobacco cessation advice into primary health care services. This indicator should be generated using a composite of separate questions asked of current and former smokers. The denominator should include all respondents who were smokers during the previous year (i.e., current smokers and former smokers abstinent < 12 months) who visited a HCP during the previous year. If former smokers quit within the last year, the HCP should still be talking with them about quitting. It is recommended that this indicator be reported with information on the proportion of individuals that visited a doctor or a HCP in the past 12 months (e.g., Of the X% of smokers and recent quitters who visited a HCP during the previous 12 months, X% were advised to quit smoking).

#### **Quit attempt in the past 12 months<sup>1</sup>**

**Recommendation:** Report the percentage of adults who smoked during the past 12 months who tried to quit during the past 12 months

**Rationale:** The quit attempt rate is a strong indicator of the progress of tobacco control efforts to curb tobacco use. It is a more sensitive indicator to tobacco control efforts than tobacco use prevalence, which will take more time to change. However, respondents tend to over-report this, specifically as tobacco use becomes looked upon less favorably by the general public. It is recommended that all quit attempts be included in the calculation of this indicator, i.e., all who assert they have made an attempt, rather than restricting quit attempts to some arbitrary duration, e.g., those which last at least 24 hours

---

1. Indicators are analogous for smoking and smokeless tobacco use. The recommendation and rationale utilizes smoking as an example.

or some other time frame. Similar to the indicator above, the denominator should be defined as all respondents who were current smokers during the previous year (i.e., current smokers and former smokers abstinent < 12 months). Calculating this indicator only among current smokers will underestimate the rate of quit attempts in the past year as it would exclude attempts that are currently successful.

### **Interest in quitting<sup>1</sup>**

**Recommendation:** Report the percentage of current smokers who are planning to quit or thinking about quitting someday.

**Rationale:** Intent to quit is a more responsive short-term indicator to tobacco control efforts than quit attempt and both are more sensitive than prevalence. Smokers often start thinking about quitting well before making a quit attempt. It is recommended that the primary indicator include all of those who are planning to quit or thinking about quitting someday. This will reflect the most optimistic scenario of quitting behavior and captures the overall mindset of smokers by including anyone who thinks that they should quit, whether action is taken immediately or not. This is particularly important for countries where there has been little or no systematic public education about the harms of smoking. This means a broader definition of intention to quit that includes some who would be treated as pre-contemplators in the Prochaska Transtheoretical Model stages (Prochaska, et al. 1997). In some countries, this may capture a substantial fraction of smokers, while in others the percent of smokers with an interest in quitting may still be quite low. The shorter the estimated time frame to quit, the more likely an attempt will be made in the next year (at least in western countries), but the effect is ordinal, so the actual time frame used does not matter much, it merely affects the baseline percentages, which will be very low for 1 month and under 15% for 6 months in many countries. This indicator can be combined with reports of quit attempts in the last year as an overall index of quitting interest. Where the percentage reporting some interest in quitting is high, it may also be useful to report levels of planning in the next month and/or next 6 months as well.

### **Exposure to SHS at work**

**Recommendation:** Report the percentage of adults who were exposed to SHS in indoor areas at work in the past 30 days

**Rationale:** In GATS, there are two key questions that address the potential for SHS in the workplace. One question refers to the presence of a workplace smoking restriction policy and the other refers to whether anyone smoked in indoor areas in the workplace in the past 30 days. Similar to the recommendation for SHS in the home, an indicator of exposure is preferred to an indicator of policy. The policy is a mechanism used to achieve the goal of reducing exposure to SHS. One may want to

compare the policy and exposure to determine how effective it is, but it is not recommended to report the policy independently. There may be a smoking restriction policy with little or no compliance.

In constructing the indicator, the denominator should include only those individuals who work primarily indoors or both indoors and outdoors. Individuals who usually work outside but have indoor areas in their workplace should be excluded from the calculation. Individuals who smoke predominantly or completely outside cannot be exposed to extended indoor exposure at work, and including them with indoor workers could be misleading.

### **Beliefs about the dangers of SHS**

Recommendation: Report the percentage of adults who believe that breathing other people's smoke causes serious illness in non-smokers

Rationale: Belief that SHS is dangerous is a strong indicator of education and support for tobacco control policies. This indicator provides information on the success of existing public education campaigns, while identifying subgroups of the population who still need to be reached. Education of the general public about the harms of tobacco use and SHS exposure is an important step to garnering public support for tobacco control programs and policies. Belief about the dangers of SHS is a relatively sensitive indicator that tends to rise before strong support for policies to control SHS exposure. It is important to track during the early stages of tobacco control initiatives as SHS exposure needs to be accepted as a problem (by policy makers) before policies are enacted to control it, and if the population do not believe it, they may be less inclined to comply with smoke-free rules. In the construction of this indicator, respondents who state that they "don't know" whether SHS causes serious illness in non-smokers should be included in the denominator (so that they can be treated as part of the population who do not know).

### **Cigarette affordability**

Recommendation: Consumption-weighted price of 100 packs of cigarettes as a percentage of Gross Domestic Product (GDP) per capita

Rationale: Increasing tobacco taxes will increase unit price. Higher prices prevent initiation and promote quitting. They also lead to fewer cigarettes smoked each day among current smokers. For every 10% increase in the price of a pack of cigarettes, consumption has been shown to decline by 4-8%, depending on the economic development of the country (Blecher et al. 2004) In GATS, information will be available from respondents on the price paid for their last cigarette purchase. This information is not particularly useful on its own, even if standardized to a common currency, as the cost of living can vary dramatically between countries. The price per pack is most useful when combined with information on income to describe cigarette affordability. Some options for anchoring cigarette prices to a measure of income include disposable income, average wage, minimum wage, and per capita gross domestic

product (GDP). It is important that the same metric be used in all countries in order to facilitate comparisons. Blecher et al., (2004) used GDP in a recent international comparison of cigarette affordability. Numerous other tobacco economics' indicators will be useful for in-country analyses, such as the major unit of purchase, location of purchase as a measure of tax avoidance, and brand as a measure of the penetration of multinational corporations.

### **Awareness of anti-tobacco messages<sup>1</sup>**

Recommendation: The headline measure should be the percentage of respondents who have noticed information about the dangers of smoking cigarettes or that encourages quitting on TV or radio in the last 30 days.

Rationale: Warnings about the dangers of tobacco is a critical component of a comprehensive tobacco control strategy. The core GATS questionnaire includes the following channels through which respondents are asked about noticing anti-tobacco messages: newspapers/magazines, television, radio, billboards, and "somewhere else." Countries are free to add other channels to the questionnaire as relevant. For a headline indicator, it would be necessary to combine channels into a single estimate of exposure to anti-tobacco messaging. Experience tends to show that the more categories asked about the higher the responding, as cued recall is generally superior to uncued. In addition, the challenge of combining all channels into one indicator is that different countries may specify different channels in the questionnaire. If a channel is included in the options because a country is specifically using that media or a channel is excluded because no campaigns are in place, then this could overestimate or underestimate the prevalence of this indicator for global comparisons. For these reasons, it is not recommended to aggregate exposure across all channels asked about for cross-country comparisons. We also recommend against just combining the common items as it has no clear referent meaning (i.e., it doesn't refer to any meaningful category, as mass electronic media – radio and TV does) and may be confused for overall awareness. Overall awareness may vary considerably from any estimate from a subset of channels depending on the relationship between targeting of the channels and their presence on the core list.

In order to ensure comparability across countries, it is recommended that the headline indicator be restricted to noticing information on TV or radio, as this can be referred to as mass electronic media. For country-specific analyses, the specific channels will be important to track the impact of public education campaigns and assess the relative utility of different media. It is critical that countries include any media in/on which they are expending resources (e.g., in India, painting on the walls is one approach to providing information and should be listed). When reporting exposures, it should be made clear what channels are included and that channels are omitted. Although comparisons have their limitations, a headline indicator is useful to focus attention on the extent to which these critical messages are reaching the public.

## **Health warning labels on tobacco products<sup>1</sup>**

Recommendation: Report the percentage of current smokers who thought about quitting smoking in the last 30 days because of the warning labels on cigarette packages.

Rationale: The labeling of tobacco products with health warnings are a key provision of the WHO FCTC and are reflected in the WHO MPOWER package. They provide a cue to help smokers quit and to counteract the marketing of tobacco products. It is important to track the impact of these warnings on smokers' behavior because factors such as size, language, and use of graphics may have differential effects on the smoker. Although an indicator of noticing health warning labels would provide information on the extent to which smokers are exposed to these messages, it is less likely to correlate with subsequent action to reduce or quit smoking (Yong et al. 2008). The indicator recommended for awareness of warning labels incorporates the likelihood of a health-promoting response to the messages on these labels. This measure also has the value of standing alone as it has high face validity.

## **Exposure to tobacco marketing<sup>1</sup>**

Recommendation:

- Report the percentage of respondents who have noticed advertisements or signs promoting cigarettes in stores where cigarettes are sold in the last 30 days.
- Report the percentage of respondents who have noticed any advertisements or signs promoting cigarettes, cigarette company sponsorship of sporting events, or cigarette promotions (other than in stores where cigarettes are sold) in the last 30 days.

Rationale: Advertising and promotional strategies promote tobacco use. Advertising bans reduce awareness of pro-tobacco marketing and reduce tobacco consumption. Not all bans are created equal – various channels remain open in countries with bans. Companies can increase marketing in remaining channels and/or exploit loopholes whenever possible in order to reach smokers and potential customers. Comprehensive bans on tobacco advertising, sponsorship, and promotion are a key provision of the WHO FCTC and policy in the WHO MPOWER package. Indicators of advertising and promotional strategies would provide information on respondents' noticing pro-tobacco marketing strategies.

It is recommended that two indicators be reported to reflect exposure to tobacco advertising, sponsorship, and promotion: (1) in stores and (2) all other channels. Point of sale advertising is a critical channel and is likely to be one of the last places where advertising and promotion will disappear. Even in countries with advanced tobacco control policies, such as Australia, exposure to point of sale advertising is greater than 50% (Harris et al., 2006). Ideally, all marketing cues would be eliminated and tobacco products would be hidden from plain view in a store with a sign stating "cigarettes sold here."

In the GATS core questionnaire, 16 other specific channels of advertising, sponsorship, and promotion are specified. For a headline indicator, it is preferable to combine these channels into one indicator of exposure to tobacco marketing. One option is to report the mean number of channels through which respondents are exposed, which has been shown to correlate with the strength of tobacco marketing restrictions (Harris et al., 2006). However, this is not likely to be easily interpretable by key decision-makers/stakeholders and comparability will be limited if the number of channels included in the survey differs by country. Instead, it is recommended that a simpler composite indicator of exposure to tobacco marketing from any the channels specified in the GATS core questionnaire be used. These core channels should be common to all country-specific questionnaires, ensuring comparability of the indicator. It is anticipated that this indicator will still be sensitive enough to detect key differences between countries. For example, a recent study in Malaysia and Thailand showed a large difference in the extent of exposure to tobacco advertising/sponsorship/promotion using a similar indicator (Yong et al., 2008).

It is recommended that these indicators be reported among all respondents for primary reporting and by smokers and non-smokers for secondary reporting. This is primarily for simplicity and to minimize the number of headline indicators. Tobacco marketing is intended both to provide cues to smokers as well as non-smokers (particularly, young non-smokers), so assessing overall population exposure is useful. That said, smokers will be more sensitized to tobacco marketing and more likely to report awareness than non-smokers. Thus, there would be expected to be a correlation between the extent of smoking and the amount of advertising noticed. In countries with a lower smoking prevalence, the overall estimate among the full population may be biased downward. As a result, we may slightly exaggerate the difference between countries when assessing overall awareness, but this will not affect the overall rankings. Reporting the indicator separately for smokers and non-smokers can provide additional information on the extent to which exposure to marketing cues are targeted at smokers.

These indicators are intended to highlight the situation in different countries for the purposes of making international comparisons. Each country should undertake more detailed analyses to help inform policy decisions, such as the level of exposure to each of these channels and the relative importance among subpopulations. In particular, subgroups defined by urban/rural area and age group may be particularly interesting. For example, young non-smokers are particularly at risk from tobacco marketing since this is the time during which initiation is most likely to occur. The level of detail to which estimates can be generated by age group will depend on sample size considerations.

### **Beliefs about the dangers of tobacco use<sup>1</sup>**

Recommendation: Proportion of smokers/non-smokers who believe that smoking causes serious illness

Rationale: The proportion of adults that believes smoking causes serious illness reflects the level of knowledge and awareness about the dangers of smoking. This indicator provides information on the success of existing public education campaigns, and can be useful for identifying any subgroups of the population who still need to be reached. Education of the general public about the harms of tobacco

use and SHS exposure is an important step to garnering public support for tobacco control programs and policies. This indicator reflects the early stages of the tobacco epidemic – awareness of tobacco as a public health problem. With time, this indicator will reach very high levels, but it is still likely to be low in some countries at present.

### **3. Subgroup Analysis and Adjustment**

#### **a. What subgroups should be reported for the primary prevalence estimates?**

##### **Gender**

Recommendation: We recommend that all headline reporting of tobacco use and cessation measures present male and female rates separately. If the overall rate is presented, gender-specific rates should be presented alongside. Only where the difference between the two is small (e.g. less than 10%) would it be acceptable to focus on the overall rate.

Rationale: In most countries, the gender difference in tobacco use is large, in some cases more than 50% absolute value. Recognizing this, GATS was designed to produce reliable estimates by gender. Reporting a combined, overall estimate is misleading and overlooks this important information. In some countries, an increase in female tobacco use has been observed long after male use became common. In some Asian countries, there is no evidence of recent increases in female tobacco use, even though prevalence is very low. It is critical to track the rates of smoking among women, as in some countries it is primarily a prevention challenge (to prevent tobacco industry marketing to women or to counter its influence). By contrast in most countries, the main challenge for men is to reduce prevalence.

##### **Age group**

Recommendation: Reporting estimates by age group is not necessary for headline reporting, but should be considered for secondary presentation. It is recommended that no more than 3-4 age groups be used for reporting. One possible option for age groups is:

- 15-24 years old (onset of tobacco use)
- 25-44 years old (pre-disease)
- 45-64 years old (tobacco-related disease onset)
- 65+ years old

Rationale: Age-specific estimates provide useful information on the scope of the epidemic and are particularly useful when reported in just a few groups. Prevalence among young adults provides insight into the effectiveness of prevention programs and is an indicator of the future burden of disease in the population, while prevalence among middle- and old-age reflects past failures, although it is a better

indicator of the current burden of disease. The age groups typically reported vary between surveys and it would be useful to have consistent age groupings to facilitate cross-country comparisons, when applicable. Because age-specific estimates were not considered in the calculation of sample size, the age groups should be large enough to ensure an acceptable margin of error.

### **Urban/rural area**

Recommendation: Reporting estimates by urban/rural area is not necessary for headline reporting, but should be considered for secondary presentation, where relevant. The criterion used for defining urban/rural should be the definition used in the survey design.

Rationale: In many countries, substantial differences in tobacco use/smoking are observed in urban and rural locations. These differences may be due to a number of factors, including education, promotion of tobacco, poverty, media reach, and policy enforcement. Tobacco control programs and policies may not be equally effective in all groups and separate monitoring and reporting can provide information on whether certain subgroups should be targeted. In recognition of these differences, GATS has been designed to provide reliable estimates by urban/rural area.

### **Socioeconomic status (SES)**

Recommendation: Reporting estimates by SES is not necessary for headline reporting, but should be considered for secondary presentation. Education should be grouped into tertiles as the primary measure of SES, based on country-specific categories and distributions.

Rationale: Reporting of prevalence by SES provides key information about the relationship between tobacco use and poverty in order to target interventions and explore the impact of policies on income subgroups. This relationship may change over time. Similar to urban/rural area, policies and programs to reduce tobacco use may have differential effects on the population based on the level of SES. Because this measure is relative to country, it is problematic to use for cross-country comparisons. Thus it should not be routinely used for international comparisons.

#### **b. What are recommendations for control for sociodemographic characteristics when making comparisons?**

Recommendation: Fact sheets and country reports should report the prevalence, weighted to be representative of the general adult population. Age- and gender- standardization to the standard world population should be used only for cross-country reports and comparisons, not for individual country reports or fact sheets. Because age and gender are strong determinants of smoking behavior and the age and gender distribution will differ by country, it is recommended that cross-country reports of overall prevalence use age- and gender-standardized estimates, based on the WHO World Standard population. This will remove age structure and gender as a source of differing rates. Direct standardization should use stable age-specific rates; otherwise this method can be inappropriate. It is

suggested to use a small number of age categories (3-4) in GATS and collapse the standard WHO population to match these categories.

When reporting subgroup estimates in the country report, the prevalence weighted to population weights should be reported. This reflects the actual burden in the population. Researchers may choose to investigate observed differences between subgroups in more detail by controlling for sociodemographic factors.

Rationale: For a given country, the prevalence of tobacco use or other tobacco control indicators (weighted to the general population) is the most appropriate indicator, as it reflects the actual burden in the country. For cross-country comparisons, the crude prevalence may not be directly comparable due to differing age structures or distributions of other sociodemographic factors.

Similarly, the crude prevalence is the most appropriate metric for reporting indicators within a country across subpopulations defined by sociodemographic factors (e.g., gender, urban/rural area). Reporting prevalence estimates by subgroups provides useful information on how tobacco use and other key indicators vary across the population. However, one might be interested in asking the question of whether differences between the prevalence in men and women or urban and rural areas can be partially (or fully) accounted for by differing age structures or distributions of other sociodemographic factors.

In epidemiologic terms, the control of age or other factors can be conducted through stratification or adjustment. For example, an investigator may want to examine differences in prevalence between urban and rural areas. If the age distributions vary between these groups (e.g., if younger people tend to live in urban areas compared to rural areas), then it is unclear whether the differences observed are due to age, a strong determinant of smoking behavior, or other characteristics of the urban or rural environment. A simple approach to dealing with confounding by age is to present urban and rural estimates separately by age group. Then the estimates of prevalence can be compared across urban and rural area, within each age group. The limitation of stratification is that it becomes difficult to display estimates across more than a few variables at a time and the sample size in each cell can become small, resulting in estimates that are unstable or non-informative. Another approach is the standardization of the urban and rural prevalence to a common age structure. The limitation of this approach is that although inferences can be made with respect to differences between estimates, the estimates themselves have no intuitive meaning because they are standardized to a population that does not reflect reality. Numerous texts discuss the issues of stratification and adjustment as a means of controlling for confounding in epidemiologic studies (e.g., Koepsell et al., 2003).

## References

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**APPENDIX B:**  
**Global Adult Tobacco Survey (GATS)**  
**Fact Sheet Indicator**  
**Statistical Software Syntax**

## GATS Fact Sheet Indicator Syntax (SAS programming language)

```
*****  
,*  
*SAS code to produce estimates for the Fact Sheet;  
*****  
,*  
/*
```

The following statistical code is provided for the SAS programming language. This code should be run after the creation of a complete analytical dataset. The code includes calculation of indicators, labeling of variables and their values, and calculations for weighted percentages and frequencies to fill in the Fact Sheet. Please note that a description of all indicators can be found in the Indicators Guidelines manual.

In order to best view the output in the tables the 'explorer window' in SAS (on the left) should be closed.

Prior to running the code below, replace the library path and data set names. Also replace below the names of the stratum variable, cluster variable, rural/urban variable and weight variable;

```
*/
```

```
OPTIONS NODATE ls=120;
```

```
*****  
,*  
*****USER NEEDS TO MODIFY*****  
,*
```

```
libname GATS "Write path name here"; *Change the path where the data file is located. For example:  
libname GATS "c:\GATS data";
```

```
%let sasdataname= Name_of_SAS_datafile; *Change Name_of_SAS_datafile TO the name of the SAS  
analytic data file (e.g., analytic_data);
```

```
%let stratumvar= Name_of_stratum_variable; *Change Name_of_stratum_variable to the name of the  
stratum variable in SAS dataset;
```

```
%let clustervar= Name_of_cluster_variable; *Change Name_of_cluster_variable to the name of the  
cluster variable in SAS dataset;
```

```
%let weightvar= Name_of_weight_variable; *Change Name_of_weight_variable to the name of the weight  
variable in SAS dataset;
```

`%let rural_urbanvar= Name_of_rural_urban_variable; *Change Name_of_rural_urban_variable to the name of the rural/urban variable in SAS dataset.`

Note that if the data were only stratified on rural/urban then Name\_of\_rural\_urban\_variable and Name\_of\_stratum\_variable will be the same;

```
*****  
;  
*****  
;
```

\* This creates formats for the variables for the output;

\* A format may also be created for the rural/urban variable if necessary;

**PROC FORMAT;**

```
VALUE SMOKERF          1="Daily tobacco smoker"  
                       2="Occasional tobacco smoker, formerly daily"  
                       3="Occasional tobacco smoker, never daily"  
                       4="Former daily tobacco smoker"  
                       5="Former occasional tobacco smoker"  
                       6="Never smoker of tobacco";
```

```
VALUE SLTF             1="Daily smokeless tobacco user"  
                       2="Occasional smokeless tobacco user, formerly daily"  
                       3="Occasional smokeless tobacco user, never daily"  
                       4="Former daily smokeless tobacco user"  
                       5="Former occasional smokeless tobacco user"  
                       6="Never user of smokeless tobacco";
```

```
VALUE YESNOF          1="Yes"  
                       2="No";
```

```
VALUE CURRENTSF       1="Current tobacco smoker"  
                       2="Non-smoker";
```

```
VALUE GENDERF         1="Male"  
                       2="Female";
```

**RUN;**

\*\*\*\*\*,

\*Master data file used with all subsequent data steps;

**DATA** GATS.factsheet; **SET** GATS.&sasdataname;

RESIDENCE=&rural\_urbanvar;

\* Drop cases where response to B01, B02, B03, C01, C02, or C03 is “don’t know”;

\* Also drop cases where the respondent broke off the survey at question E01 or before;

**IF** B01>=7 **OR** B02>=7 **OR** B03>=7 **OR** C01>=7 **OR** C02>=7 **OR** C03>=7 **OR** E01=. **THEN DELETE**;

\*\*\*\* Used in many calculations for the Fact Sheet;

\* Six-Level Tobacco Smoking Composite Variable;

**IF** B01=1 **THEN** SMOKER=1;

**ELSE IF** B01=2 **AND** B02=1 **THEN** SMOKER=2;

**ELSE IF** B01=2 **AND** B02=2 **THEN** SMOKER=3;

**ELSE IF** B01=3 **AND** B03=1 **THEN** SMOKER=4;

**ELSE IF** B01=3 **AND** B03=2 **THEN** SMOKER=5;

**ELSE IF** B01=3 **AND** B03=3 **THEN** SMOKER=6;

\* Six-Level Smokeless Tobacco Composite Variable;

**IF** C01=1 **THEN** SMKLESS=1;

**ELSE IF** C01=2 **and** C02=1 **THEN** SMKLESS=2;

**ELSE IF** C01=2 **and** C02=2 **THEN** SMKLESS=3;

**ELSE IF** C01=3 **and** C03=1 **THEN** SMKLESS=4;

**ELSE IF** C01=3 **and** C03=2 **THEN** SMKLESS=5;

**ELSE IF** C01=3 **and** C03=3 **THEN** SMKLESS=6;

FORMAT SMOKER SMOKERF. A01 GENDERF. SMKLESS SLTF. ;

LABEL SMOKER="Detailed Tobacco Smoking Status";

LABEL SMKLESS= "Detailed Smokeless Tobacco Use Status";

LABEL A01="Gender";

run;

\*\*\*\*\*

\*FRONT PAGE;

\*\*\*\*\*

\*\*\*\*\*TOBACCO USE BOX\*\*\*\*\*;

DATA TOBUSE; SET GATS.FACTSHEET;

\*1.1 Current Tobacco Smokers;

IF SMOKER IN (1,2,3) THEN CTSMK=1;

ELSE IF SMOKER IN (4,5,6) THEN CTSMK=2;

\*1.7 Current Smokeless Tobacco Users;

IF SMKLESS IN (1,2,3) THEN CTSMKLESS=1;

ELSE IF SMKLESS IN (4,5,6) THEN CTSMKLESS=2;

FORMAT CTSMK CURRENTSF. CTSMKLESS YESNOF.;

LABEL CTSMK="Current Tobacco Smokers";

LABEL CTSMKLESS="Current Smokeless Tobacco Users";

run;

TITLE1 "\*\*\*\*FRONT PAGE: TOBACCO USE BOX\*\*\*\*\*";

TITLE2 "\*\*\*\* NOTE: Use row percents for gender estimates\*\*\*\*";

```
Proc surveyfreq DATA=TOBUSE NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table CTSMK CTSMKLESS ;

table A01 * (CTSMK CTSMKLESS) / ROW NOCELLPERCENT ;

run;
```

\*\*\*\*\*CESSATION BOX\*\*\*\*\*;

```
DATA CESSATION; SET GATS.FACTSHEET;
```

\*2.3 Interest in Quitting Smoking ;

```
IF D08 IN (1,2,3) THEN INQSMK2=1;
```

```
ELSE IF D08 IN (4,7) THEN INQSMK2=2;
```

```
FORMAT INQSMK2 YESNOF.;
```

```
LABEL INQSMK2="Planning to Quit or Thinking About Quitting Smoking";
```

```
run;
```

TITLE1 "\*\*\*\*FRONT PAGE: CESSATION BOX\*\*\*\*";

```
Proc surveyfreq DATA=CESSATION NOSUMMARY;
```

```
stratum &stratumvar;
```

```
cluster &clustervar;
```

```
weight &weightvar;
```

```
table INQSMK2 ;
```

```
run;
```

```
*****SECOND-HAND SMOKE BOX*****;
```

```
DATA SHS; SET GATS.FACTSHEET;
```

```
*3.1 Exposure to Secondhand Smoke at Work;
```

```
IF E05 IN (1,3) AND E08=1 THEN SHSWORK=1;
```

```
ELSE IF E05 IN (1,3) AND E08=2 THEN SHSWORK=2;
```

```
FORMAT SHSWORK YESNOF.;
```

```
LABEL SHSWORK="Exposure to Secondhand Smoke at Work";
```

```
run;
```

```
TITLE1 "****FRONT PAGE: SECOND-HAND SMOKE BOX****";
```

```
Proc surveyfreq DATA=SHS NOSUMMARY;
```

```
stratum &stratumvar;
```

```
cluster &clustervar;
```

```
weight &weightvar;
```

```
table SHSWORK ;
```

```
run;
```

```
*****MEDIA BOX*****;
```

```
DATA MEDIA; SET GATS.FACTSHEET;
```

\* The calculations below are based on the response options from the GATS core questionnaire. Country-specific questionnaires may vary in the number and order of response options and the calculations should be adjusted accordingly (e.g., g04a or g04a1).

\*5.1 Awareness of Anti-Smoking Information on TV or the Radio;

IF G01B=1 OR G01C=1 THEN AWSMKMG=1;

ELSE IF G01B IN (2,7) AND G01C IN (2,7) THEN AWSMKMG=2;

\*5.3 Awareness of In-Store Cigarette Advertising and Promotion;

IF G04A=1 OR G06B=1 OR G06D=1 THEN INSTORE =1;

ELSE IF G04A IN (2,7) AND G06B IN (2,7) AND G06D IN (2,7) THEN INSTORE=2;

\*5.4 \*Awareness of Cigarette Advertising and Promotion on television, radio, billboards, posters, newspapers or magazines, cinemas, internet, public transportation vehicles or stations, public walls, somewhere else, through cigarette sporting event sponsorship, free cigarettes, cigarette coupons, cigarette clothing, mail promotions;

\*Noticed cigarette marketing (other than in stores) or sporting event sponsorship;

IF G04B=1 OR G04C=1 OR G04D=1 OR G04E=1 OR G04F=1 OR G04G=1 OR G04H=1 OR G04I=1 OR G04J=1 OR G04K=1 OR G05=1 OR G06A=1 OR G06C=1 OR G06E=1 OR G06F=1 THEN marketing =1;

ELSE IF G04B IN (2,7) AND G04C IN (2,7) AND G04D IN (2,7) AND G04E IN (2,7) AND G04F IN (2,7) AND G04G IN (2,7) AND G04H IN (2,7) AND G04I IN (2,7) AND G04J IN (2,7) AND G04K IN (2,7) AND G05 IN (2,7) AND G06A IN (2,7) AND G06C IN (2,7) AND G06E IN (2,7) AND G06F IN (2,7) THEN marketing=2;

Format AWSMKMG INSTORE marketing yesnof.;

LABEL AWSMKMG="Noticed Anti-Smoking Information on TV or the Radio";

label INSTORE="Noticing Cigarette Advertisements in Stores ";

label marketing="Noticing cigarette marketing (other than in stores) or sporting event sponsorship";

run;

TITLE1 "\*\*\*\*FRONT PAGE: MEDIA BOX\*\*\*\*\*";

```
Proc surveyfreq DATA=MEDIA NOSUMMARY;
```

```
stratum &stratumvar;
```

```
cluster &clustervar;
```

```
weight &weightvar;
```

```
table AWSMKMG INSTORE marketing ;
```

```
run;
```

```
*****KNOWLEDGE, ATTITUDES, AND PERCEPTIONS BOX*****;
```

```
DATA KAP; SET GATS.FACTSHEET;
```

```
*6.1 Beliefs about the Dangers of Tobacco Smoking: Believe smoking causes serious illness;
```

```
IF H01=1 THEN SMKDANGER=1;
```

```
ELSE IF H01 IN (2,7) THEN SMKDANGER=2;
```

```
FORMAT SMKDANGER YESNOF.;
```

```
LABEL SMKDANGER= "Believe smoking causes serious illness";
```

```
run;
```

```
TITLE1 "****FRONT PAGE: KNOWLEDGE, ATTITUDES, AND PERCEPTIONS BOX*****";
```

```
Proc surveyfreq DATA=KAP NOSUMMARY;
```

```
stratum &stratumvar;
```

```
cluster &clustervar;
```

```
weight &weightvar;
```

```
table SMKDANGER ;
```

```
run;
```

```
*****
*BACK PAGE;
*****;
```

```
*****TOBACCO USE BOX*****;
```

```
DATA TOBUSE_BACK; SET GATS.FACTSHEET;
```

```
*****Tobacco Smokers*****;
```

```
*1.1 Current Tobacco Smokers;
```

```
IF SMOKER IN (1,2,3) THEN CTSMK=1;
```

```
ELSE IF SMOKER IN (4,5,6) THEN CTSMK=2;
```

```
*1.2 Daily Tobacco Smokers;
```

```
IF SMOKER=1 THEN DTSMK=1;
```

```
ELSE IF SMOKER IN (2,3,4,5,6) THEN DTSMK=2;
```

```
*1.3 Current Cigarette Smokers;
```

```
IF (B06A>0 AND B06A<=888) OR /* Manuf cigs daily */
```

```
(B06B>0 AND B06B<=888) OR /* Handrolled daily */
```

```
(B06C>0 AND B06C<=888) OR /* Kreteks daily */
```

```
(B10A>0 AND B10A<=888) OR /* Manuf cigs weekly */
```

```
(B10B>0 AND B10B<=888) OR /* Handrolled weekly */
```

```
(B10C>0 AND B10C<=888) /* Kreteks weekly */
```

```
THEN CCSMK=1;
```

ELSE CCSMK=2;

\*1.4 Daily Cigarette Smokers;

IF (0<B06A<888 OR 0<B06B<888 OR 0<B06C<888) OR ((B06A=888 AND B06B=888)  
OR (B06B=888 AND B06C=888) OR (B06A=888 AND B06C=888) AND ((B06D=0 OR B06D=999) AND  
(B06E=0 OR B06E=999) AND (B06F=0 OR B06F=999) AND (B06G=0 OR B06G=999))) THEN  
DCSMK=1;

ELSE DCSMK=2;

\*1.5 Former Daily Tobacco Smokers (Among All Adults);

IF SMOKER=4 THEN FDSMK=1;

ELSE FDSMK=2;

\*1.6 Former Daily Tobacco Smokers (Among Ever Daily Smokers);

\* Also known as Quit Ratio for Daily Smoking;

IF SMOKER=4 THEN EDSMKF=1;

ELSE IF SMOKER IN (1,2) THEN EDSMKF=2;

\*\*\*\*\*Smokeless Tobacco Users\*\*\*\*\*;

\*1.7 Current Smokeless Tobacco Users;

IF SMKLESS IN (1,2,3) THEN CTSMKLESS=1;

ELSE IF SMKLESS IN (4,5,6) THEN CTSMKLESS=2;

\*1.8 Daily Smokeless Tobacco Users;

IF SMKLESS=1 THEN DSMKLESS=1;

ELSE IF SMKLESS IN (2,3,4,5,6) THEN DSMKLESS=2;

\*1.9 Former Daily Smokeless Tobacco Users Among All Adults;

IF SMKLESS=4 THEN FDSMKLESS=1;

ELSE IF SMKLESS IN(1,2,3,5,6) THEN FDSMKLESS=2;

\*1.10 Former Daily Smokeless Tobacco Users Among Ever Daily Users (Quit Ratio for Daily Smokeless use);

IF SMKLESS=4 THEN EDSMKLESS=1;

ELSE IF SMKLESS IN(1,2) THEN EDSMKLESS=2;

\*1.11 Current Tobacco Users;

IF SMOKER IN (1,2,3) OR SMKLESS IN (1,2,3) THEN CTOBACCO=1;

ELSE IF SMOKER IN (4,5,6) AND SMKLESS IN (4,5,6) THEN CTOBACCO=2;

FORMAT CTSMK CURRENTSF. DTSMK CCSMK DCSMK FDSMK EDSMKF CTSMKLESS DSMKLESS  
FDSMKLESS EDSMKLESS CTOBACCO yesnof.;

LABEL CTSMK="Current Tobacco Smokers";

LABEL DTSMK="Daily Tobacco Smokers";

LABEL CCSMK="Current Cigarette Smokers";

LABEL DCSMK="Daily Cigarette Smokers";

LABEL FDSMK="Former Daily Tobacco Smokers (Among All Adults)";

LABEL EDSMKF="Former Daily Tobacco Smokers (Among Ever Daily Smokers)";

LABEL CTSMKLESS="Current Smokeless Tobacco Users";

LABEL DSMKLESS="Daily Smokeless Tobacco Users";

LABEL FDSMKLESS="Former Daily Smokeless Tobacco Users Among All Adults";

LABEL EDSMKLESS="Former Daily Smokeless Tobacco Users Among Ever Daily Users";

LABEL ctobacco= "Current Tobacco Users";

run;

TITLE1 "\*\*\*\*BACK PAGE: TOBACCO USE\*\*\*\*";

TITLE2 "\*\*\*\* NOTE: Use row percents for gender estimates\*\*\*\*";

Proc surveyfreq DATA=TOBUSE\_BACK NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table CTSMK DTSMK CCSMK DCSMK FDSMK EDSMKF CTSMKLESS DSMKLESS FDSMKLESS  
EDSMKLESS CTOBACCO;

table A01 \* (CTSMK DTSMK CCSMK DCSMK FDSMK EDSMKF CTSMKLESS DSMKLESS  
FDSMKLESS EDSMKLESS CTOBACCO) / ROW NOCELLPERCENT ;

run;

\*\*\*\*\*CESSATION\*\*\*\*\*;

DATA CESSATION\_BACK; SET GATS.FACTSHEET;

\*2.1 Smoking Quit Attempt in the Past 12 Months;

IF D01=1 OR (B13A=2 AND B13B<12) OR (B13A=3 AND B13B<52) OR (B13A=4 AND B13B<365) OR  
B13A=5 THEN QTSMK12=1;

ELSE IF D01=2 THEN QTSMK12=2;

\*2.3 Interest in Quitting Smoking ;

IF D08 IN (1,2,3) THEN INQSMK2=1;

ELSE IF D08 IN (4,7) THEN INQSMK2=2;

\*2.2 Health Care Provider's Advice to Quit Smoking Tobacco;

IF D07=1 OR (B17=1 AND B13A IN (2,3,4,5)) THEN ADQTSMK=1;

ELSE IF (D07=2 OR D06=2) OR ((B17=2 OR B16=2) AND B13A IN (2,3,4,5)) THEN ADQTSMK=2;

\*2.4 Smokeless Users Who Made Quit Attempt in the Past 12 Months;

IF D09=1 OR (C13A=2 AND C13B<12) OR (C13A=3 AND C13B<52) OR (C13A=4 AND C13B<365) OR C13A=5 THEN QTSMKLESS12=1;

ELSE IF D09=2 THEN QTSMKLESS12=2;

\*2.6 Interest in Quitting Smokeless Tobacco ;

IF D16 IN (1,2,3) THEN INQSMKLESS2=1;

ELSE IF D16 IN (4,7) THEN INQSMKLESS2=2;

\*2.5 Health Care Provider's Advice to Quit Smokeless Tobacco;

IF D15=1 OR (C17=1 AND C13A IN (2,3,4,5)) THEN ADQTSMKLESS=1;

ELSE IF (D15=2 OR D14=2) OR ((C17=2 OR C16=2) AND C13A IN (2,3,4,5)) THEN ADQTSMKLESS=2;

FORMAT QTSMK12 INQSMK2 ADQTSMK QTSMKLESS12 INQSMKLESS2 ADQTSMKLESS YESNOF.;

LABEL QTSMK12="Smoking Quit Attempt in the Past 12 Months";

LABEL INQSMK2="Planning to Quit or Thinking About Quitting Smoking";

LABEL ADQTSMK="Health Care Provider's Advice to Quit Tobacco Smoking";

LABEL QTSMKLESS12="Smokeless Quit Attempt in the Past 12 Months";

LABEL INQSMKLESS2="Planning to Quit or Thinking About Quitting Smokeless Tobacco Use";

LABEL ADQTSMKLESS="Health Care Provider's Advice to Quit Smokeless Tobacco Use";

run;

TITLE1 "\*\*\*\*BACK PAGE: CESSATION BOX\*\*\*\*";

TITLE2 "\*\*\*\* NOTE: Use row percents for gender estimates\*\*\*\*";

Proc surveyfreq DATA=CESSATION\_BACK NOSUMMARY;

stratum &stratumvar;

```

cluster &clustervar;

weight &weightvar;

table QTSMK12 INQSMK2 ADQTSMK QTSMKLESS12 INQSMKLESS2 ADQTSMKLESS;

table A01 * (QTSMK12 INQSMK2 ADQTSMK QTSMKLESS12 INQSMKLESS2 ADQTSMKLESS)/ ROW
NOCELLPERCENT ;

run;

```

```

*****SECOND-HAND SMOKE BOX*****;

```

```

DATA SHS_BACK; SET GATS.FACTSHEET;

```

```

*3.1 Exposure to Secondhand Smoke at Work;

```

```

IF E05 IN (1,3) AND E08=1 THEN SHSWORK=1;

```

```

ELSE IF E05 IN (1,3) AND E08=2 THEN SHSWORK=2;

```

```

FORMAT SHSWORK YESNOF.;

```

```

LABEL SHSWORK="Exposure to Secondhand Smoke at Work";

```

```

run;

```

```

TITLE1 "****BACK PAGE: SECOND-HAND SMOKE BOX****";

```

```

TITLE2 "**** NOTE: Use row percents for gender estimates****";

```

```

Proc surveyfreq DATA=SHS_BACK NOSUMMARY;

```

```

stratum &stratumvar;

```

```

cluster &clustervar;

```

```

weight &weightvar;

```

```

TABLE SHSWORK ;

```

```

TABLE A01 * SHSWORK / ROW NOCELLPERCENT ;

```

run;

\*\*\*\*\*ECONOMICS BOX\*\*\*\*\*;

DATA ECONOMICS; SET GATS.FACTSHEET;

\*4.1 Average Price of a Pack of Manufactured Cigarettes;

\* Number of manufactured cigarettes bought at last purchase;

IF F01A = 1 THEN NUMCIG = F01B;

ELSE IF F01A IN (2,3,4) THEN NUMCIG = F01B\*F01D;

\* Price per pack of manufactured cigarettes;

IF F02<999 THEN PAYPAK=F02/NUMCIG \* 20;

\* Manufactured cigarette weight;

CIGWEIGHT=&WEIGHTVAR \* NUMCIG;

\*4.2 Note that the Price of 100 packs of manufactured cigarettes as a percentage of per capita Gross Domestic Product (GDP) will also need to be calculated. This can be done by taking the weighted mean of paypak from Proc surveymeans and multiplying it by 100 and then divide by GDP;

LABEL NUMCIG= "Number of manufactured cigarettes bought at last purchase";

LABEL PAYPAK="Price paid per pack of manufactured cigarettes (20 per pack)";

run;

TITLE1 "\*\*\*\*BACK PAGE: ECONOMICS BOX\*\*\*\*\*";

TITLE2 "Indicator 4.2 can be calculated from this weighted mean:";

TITLE3 "Multiply mean by 100 and then divide by GDP";

**Proc surveymeans DATA=ECONOMICS;**

**stratum &stratumvar;**

**cluster &clustervar;**

**weight CIGWEIGHT;**

**var PAYPAK ;**

**run;**

\*\*\*\*\***MEDIA BOX**\*\*\*\*\*;

**DATA MEDIA\_BACK; SET GATS.FACTSHEET;**

\* The calculations below are based on the response options from the GATS core questionnaire. Country-specific questionnaires may vary in the number and order of response options and the calculations should be adjusted accordingly (e.g., g04a or g04a1).

\*\*\*\***TOBACCO INDUSTRY ADVERTISING**\*\*\*\*;

\*1.1 Current Tobacco Smokers;

**IF SMOKER IN (1,2,3) THEN CTSMK=1;**

**ELSE IF SMOKER IN (4,5,6) THEN CTSMK=2;**

\*1.7 Current Smokeless Tobacco Users;

**IF SMKLESS IN (1,2,3) THEN CTSMKLESS=1;**

**ELSE IF SMKLESS IN (4,5,6) THEN CTSMKLESS=2;**

\*5.3 Awareness of In-Store Cigarette Advertising and Promotion;

**IF G04A=1 OR G06B=1 OR G06D=1 THEN INSTORE =1;**

**ELSE IF G04A IN (2,7) AND G06B IN (2,7) AND G06D IN (2,7) THEN INSTORE=2;**

\*5.4 \*Awareness of Cigarette Advertising and Promotion on television, radio, billboards, posters, newspapers or magazines, cinemas, internet, public transportation vehicles or stations, public walls, somewhere else, through cigarette sporting event sponsorship, free cigarettes, cigarette coupons, cigarette clothing, mail promotions;

\*Noticed cigarette marketing (other than in stores) or sporting event sponsorship;

IF G04B=1 OR G04C=1 OR G04D=1 OR G04E=1 OR G04F=1 OR G04G=1 OR G04H=1 OR G04I=1 OR G04J=1 OR G04K=1 OR G05=1 OR G06A=1 OR G06C=1 OR G06E=1 OR G06F=1 THEN marketing =1;

ELSE IF G04B IN (2,7) AND G04C IN (2,7) AND G04D IN (2,7) AND G04E IN (2,7) AND G04F IN (2,7) AND G04G IN (2,7) AND G04H IN (2,7) AND G04I IN (2,7) AND G04J IN (2,7) AND G04K IN (2,7) AND G05 IN (2,7) AND G06A IN (2,7) AND G06C IN (2,7) AND G06E IN (2,7) AND G06F IN (2,7) THEN marketing=2;

\*5.7 Awareness of In-Store Smokeless Tobacco Advertising and Promotion;

IF G04a2=1 OR G06b2=1 OR G06d2=1 THEN INSTORE\_SL =1;

ELSE IF G04A2 IN (2,7) AND G06B2 IN (2,7) AND G06D2 IN (2,7) THEN INSTORE\_SL=2;

\*5.8 \*Awareness of Smokeless Tobacco Advertising and Promotion on television, radio, billboards, posters, newspapers or magazines, cinemas, internet, public transportation vehicles or stations, public walls, somewhere else, through smokeless tobacco sporting event sponsorship, free smokeless tobacco, smokeless tobacco coupons, smokeless tobacco clothing, mail promotions;

\*Noticed smokeless tobacco marketing (other than in stores) or sporting event sponsorship;

IF G04B2=1 OR G04C2=1 OR G04D2=1 OR G04E2=1 OR G04F2=1 OR G04G2=1 OR G04H2=1 OR G04I2=1 OR G04J2=1 OR G04K2=1 OR G05A=1 OR G06A2=1 OR G06C2=1 OR G06E2=1 OR G06F2=1 THEN marketing\_SL =1;

ELSE IF G04B2 IN (2,7) AND G04C2 IN (2,7) AND G04D2 IN (2,7) AND G04E2 IN (2,7) AND G04F2 IN (2,7) AND G04G2 IN (2,7) AND G04H2 IN (2,7) AND G04I2 IN (2,7) AND G04J2 IN (2,7) AND G04K2 IN (2,7) AND G05A IN (2,7) AND G06A2 IN (2,7) AND G06C2 IN (2,7) AND G06E2 IN (2,7) AND G06F2 IN (2,7) THEN marketing\_SL=2;

\*\*\*\*COUNTER ADVERTISING\*\*\*\*;

\*5.2 Thinking of Quitting Because of Health Warning Labels on Cigarette Packages;

IF G03=1 THEN LBLCIGPK=1;

ELSE IF SMOKER IN (1,2,3) AND ((G02 IN(2,3) AND G03 NE .) OR G03 IN(2,7)) THEN LBLCIGPK=2;

\*5.1 Awareness of Anti-Smoking Information on TV or the Radio;

IF G01B=1 OR G01C=1 THEN AWSMKMG=1;

ELSE IF G01B IN (2,7) AND G01C IN (2,7) THEN AWSMKMG=2;

\*5.6 Thinking of Quitting Because of Health Warning Labels on Smokeless Packages;

IF G03A=1 THEN LBL\_SL=1;

ELSE IF SMKLESS IN (1,2,3) AND (G02A IN(2,3) OR G03A IN(2,7)) THEN LBL\_SL=2;

\*5.1 Awareness of Anti-Smokeless Information on TV or the Radio;

IF G01B2=1 OR G01C2=1 THEN AWSMK\_SL=1;

ELSE IF G01B2 IN (2,7) AND G01C2 IN (2,7) THEN AWSMK\_SL=2;

Format ctsmk currentsf. CTSMKLESS INSTORE marketing INSTORE\_SL marketing\_SL LBLCIGPK  
AWSMKMG LBL\_SL AWSMK\_SL yesnof.;

LABEL CTSMK="Current Tobacco Smokers";

LABEL CTSMKLESS="Current Smokeless Tobacco Users";

label INSTORE="Noticing Cigarette Advertisements in Stores ";

label marketing="Noticing cigarette marketing (other than in stores) or sporting event sponsorship";

label INSTORE\_SL="Noticing Smokeless Tobacco Advertisements in Stores";

label marketing\_SL="Noticing smokeless tobacco marketing (other than in stores) or sporting event  
sponsorship";

LABEL LBLCIGPK="Thinking of Quitting Because of Health Warning Labels on Cigarette Packages";

LABEL AWSMKMG="Noticed Anti-Smoking Information on TV or the Radio";

LABEL LBL\_SL="Thinking of Quitting Because of Health Warning Labels on Smokeless Tobacco  
Packages";

LABEL AWSMK\_SL="Noticed Anti-Smokeless Information on TV or the Radio";

run;

TITLE1 "\*\*\*\*BACK PAGE: MEDIA BOX\*\*\*\*\*";

TITLE2 "\*\*\*\* NOTE: Use row percents for smoking status estimates\*\*\*\*";

**Proc surveyfreq DATA=**MEDIA\_BACK **NOSUMMARY**;

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** INSTORE marketing AWSMKMG;

**table** CTSMK \* (INSTORE marketing AWSMKMG)/ **ROW NOCELLPERCENT**;

**run**;

TITLE1 "\*\*\*\*BACK PAGE: MEDIA BOX\*\*\*\*\*";

TITLE2 "\*\*\*\* NOTE: Use row percents for smokeless status estimates\*\*\*\*";

**Proc surveyfreq DATA=**MEDIA\_BACK **NOSUMMARY**;

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** INSTORE\_sl marketing\_sl AWSMK\_sl;

**table** CTSMKLESS \* (INSTORE\_sl marketing\_sl AWSMK\_sl)/ **ROW NOCELLPERCENT**;

**run**;

TITLE1 "\*\*\*\*BACK PAGE: MEDIA BOX\*\*\*\*\*";

TITLE2 "\*\*\*\* NOTE: Use row percents for gender estimates\*\*\*\*";

**Proc surveyfreq DATA=**MEDIA\_BACK **NOSUMMARY**;

**stratum** &stratumvar;

```
cluster &clustervar;  
weight &weightvar;  
table LBLCIGPK LBL_SL;  
table A01 * (LBLCIGPK LBL_SL)/ ROW NOCELLPERCENT;  
run;
```

```
*****KNOWLEDGE, ATTITUDES, AND PERCEPTIONS BOX*****;
```

```
DATA KAP_BACK; SET GATS.FACTSHEET;
```

```
*1.1 Current Tobacco Smokers;
```

```
IF SMOKER IN (1,2,3) THEN CTSMK=1;
```

```
ELSE IF SMOKER IN (4,5,6) THEN CTSMK=2;
```

```
*1.7 Current Smokeless Tobacco Users;
```

```
IF SMKLESS IN (1,2,3) THEN CTSMKLESS=1;
```

```
ELSE IF SMKLESS IN (4,5,6) THEN CTSMKLESS=2;
```

```
*6.1 Beliefs about the Dangers of Tobacco Smoking: Believe smoking causes serious illness;
```

```
IF H01=1 THEN SMKDANGER=1;
```

```
ELSE IF H01 IN (2,7) THEN SMKDANGER=2;
```

```
*6.2 Beliefs about the Dangers of Secondhand Smoke;
```

```
IF E17=1 THEN SHSDANGER=1;
```

```
ELSE IF E17 IN (2,7) THEN SHSDANGER=2;
```

```
*6.3 Belief that smokeless tobacco causes serious illness;
```

```
IF H03=1 THEN SMKLESSDANGER=1;
```

```
ELSE IF H03 IN (2,7) THEN SMKLESSDANGER=2;
```

```
FORMAT CTSMK CURRENTSF. CTSMKLESS SMKDANGER SHSDANGER SMKLESSDANGER  
YESNOF.;
```

```
LABEL CTSMK="Current Tobacco Smokers";
```

```
LABEL CTSMKLESS="Current Smokeless Tobacco Users";
```

```
LABEL SMKDANGER= "Believe smoking causes serious illness";
```

```
LABEL SHSDANGER="Beliefs about the Dangers of Secondhand Smoke";
```

```
LABEL SMKLESSDANGER= "Believe smokeless tobacco causes serious illness";
```

```
RUN;
```

```
TITLE1 "****BACK PAGE: KNOWLEDGE, ATTITUDES, AND PERCEPTIONS BOX****";
```

```
TITLE2 "**** NOTE: Use row percents for smoking status estimates****";
```

```
Proc surveyfreq DATA=KAP_BACK NOSUMMARY;
```

```
stratum &stratumvar;
```

```
cluster &clustervar;
```

```
weight &weightvar;
```

```
table SMKDANGER SHSDANGER;
```

```
table CTSMK * (SMKDANGER SHSDANGER)/ ROW NOCELLPERCENT;
```

```
run;
```

```
TITLE1 "****BACK PAGE: KNOWLEDGE, ATTITUDES, AND PERCEPTIONS BOX****";
```

```
TITLE2 "**** NOTE: Use row percents for smokeless status estimates****";
```

```
Proc surveyfreq DATA=KAP_BACK NOSUMMARY;
```

```
stratum &stratumvar;
```

```
cluster &clustervar;
```

```
weight &weightvar;  
table SMKLESSDANGER;  
table CTSMKLESS * SMKLESSDANGER/ ROW NOCELLPERCENT;  
run;
```

## GATS Fact Sheet Indicator Syntax (SPSS programming language)

The following statistical code is provided for the SPSS programming language. This code should be run after the creation of a complete analytical dataset. The analytic data set will contain the cleaned data, sample weights and respondents with complete individual questionnaires. Because the focus of GATS is on tobacco use and tobacco control indicators and many of the questions depend on the ability to classify individuals by smoking status, any respondents who are unable (“Don’t Know”) or unwilling (“Refused”) to provide an answer to B01, B02, or B03 or C01, C02, C03 should be excluded from the calculation of the indicators below. These observations should be excluded during the production of an analytical data set and prior to data analysis.

The SPSS code below is used to generate the tobacco control indicators defined above for the GATS Fact Sheet. The code includes construction of new variables, labeling of variables and their values, and for generating percentages and frequencies.

Prior to running the code below, the following modifications should be made:

1. Replace the path and data set names.
2. Remove indicators for which data have not been collected in the country-specific questionnaire (e.g., not all questionnaires include information on smokeless tobacco media – indicators 5.4-5.8)
3. Check code for indicators which use questions with multiple categories. These indicators have been constructed using the format of the GATS core questionnaire. The number and ordering of these categories may vary in the country-specific questionnaire. Indicators for which response categories may need to be changed are commented out.
4. In Section G – “Media” of the questionnaire, there are two different structures in the core questionnaire, one based on questions about one tobacco product (Structure 1) and the other based on questions about two or more products (Structure 2). The structure that is not included in the country-specific questionnaire should be deleted from the code. Additionally, the number and order of products in Structure 2 may vary from the core questionnaire. The code below assumes that smokeless tobacco is the second product asked about in Section G. This should be modified based on the country-specific questionnaire.

```
*****
**** SPSS custom code to produce estimates for the standard GATS FACT SHEET ****
*****
**** THE FOLLOWING EDITS TO THE PROGRAM ARE REQUIRED ****
```

\* Specify the drive and pathnames for storing the SPSS formatted data file. The  
\* analysis plan file will be saved to the same folder. Search and replace this text

\* < c:\GATS\_data >  
\* with the correct path location for your system. In addition, put the correct name for the  
\* data file into the "get file" command.

\* Sampling variables must be specified. The SPSS code uses variables named gatsstrata,  
\* gatscluster and gatsweight. Insert your variable names in the compute statements under  
\* the comment "Identify sampling variables" below.

```
*****  
***** NOTE *****  
* Tables in the output from Complex Samples commands will be easier to read when printed  
* in LANDSCAPE format.  
*****  
*****
```

\* Open the SPSS-format Analytic Data file.  
get file = 'c:\GATS\_data\test\_data.sav' .

\* Identify sampling variables.  
compute gatsstrata = [name\_of\_strata\_variable].  
\* For GATS this variable should indicate all levels of sample stratification..  
compute gatscluster = [name\_of\_cluster\_variable].  
\* This variable should be the Primary Sampling Unit identifier.  
compute gatsweight = [name\_of\_weight\_variable].  
\* Calculated sample weight for individuals.

\* Create analysis plan.  
csplan analysis  
/ plan file = 'c:\GATS\_data\gatsplan.csaplan'  
/ planvars analysisweight = gatsweight  
/ design strata = gatsstrata cluster = gatscluster  
/ estimator type = wr

\* Label an existing variable from data set.  
variable labels A01 "Gender".  
value labels A01 1 "Male" 2 "Female".

```
*****  
***** FRONT PAGE *****  
*****  
***** TOBACCO USE BOX *****
```

\* Six-level Tobacco Smoking Composite Variable.  
\* Note this variable is used in the calculations for many other indicators as well.  
do if B01=1.  
    compute smoker=1.  
else if B01=2.  
    if B02=1 smoker=2.  
    if B02=2 smoker=3.  
else if B01=3.  
    if B03=1 smoker=4.  
    if B03=2 smoker=5.  
    if B03=3 smoker=6.  
end if.

\* 1.1 Current Tobacco smokers.  
recode smoker (1 thru 3 = 1) (4 thru 6 = 2) (else=sysmis) into ctsmk.

\* Six-level Smokeless Tobacco Composite Variable.  
do if C01=1.

```
    compute smkless=1.  
else if C01=2.  
    if C02=1 smkless=2.  
    if C02=2 smkless=3.  
else if C01=3.  
    if C03=1 smkless=4.  
    if C03=2 smkless=5.  
    if C03=3 smkless=6.  
end if.
```

\* 1.7 Current smokeless tobacco users.  
recode smkless (1,2,3 = 1) (4,5,6 = 2) (else=sysmis) into csmkless.

variable labels

```
    smoker "Detailed Tobacco Smoking Status" /  
    ctsmk "Current Tobacco Smokers" /  
    smkless "Detailed Smokeless Tobacco Status" /  
    csmkless "Current Smokeless Tobacco Users"
```

add value labels

```
    smoker      1 "Daily tobacco smoker"  
                2 "Occasional tobacco smoker, formerly daily"  
                3 "Occasional tobacco smoker, never daily"  
                4 "Former daily tobacco smoker"  
                5 "Former occasional tobacco smoker"  
                6 "Never smoker of tobacco"  
    / smkless   1 "Daily smokeless tobacco user"  
                2 "Occasional smokeless tobacco user, formerly daily"  
                3 "Occasional smokeless tobacco user, never daily"  
                4 "Former daily smokeless tobacco user"  
                5 "Former occasional smokeless tobacco user"  
                6 "Never user of smokeless tobacco"
```

add value labels ctsmk csmkless 1 "Yes" 2 "No".

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*.

title 'TOBACCO USE: Current Smokers and Smokeless Users'.

use all.

cstabulate

```
    / plan file = ' c:\GATS_data\gatsplan.csaplan'  
    / tables variables = ctsmk csmkless  
    / subpop table = a01  
    / cells tablepct popsize
```

\*\*\*\*\*

\*\*\*\*\* CESSATION BOX \*\*\*\*\*.

\* 2.3 Interest in Quitting Smoking.

recode d08 (1,2,3 = 1) (4,7=2) (else = sysmis) into inqsmk2.

var label inqsmk2 "Planning to Quit or Thinking About Quitting Smoking".  
add value labels inqsmk2 1 "Yes" 2 "No".

```
***** PRODUCE TABLE ESTIMATES *****  
title 'CESSATION: Interest in Quitting Smoking'.  
use all.  
cstabulate  
    / plan file = ' c:\GATS_data\gatsplan.csaplan'  
    / tables variables = inqsmk2  
/ cells tablepct
```

.  
\*\*\*\*\*

```
***** SECOND-HAND SMOKE BOX *****  
* 3.1 Exposure to Secondhand Smoke at Work.  
* Works indoors or both.  
do if (e05 =1) or (e05=3).  
* Does anyone smoke there.  
    if e08=1 shswork=1.  
    if e08=2 shswork=2.  
end if.
```

variable labels shswork "Exposure to Secondhand Smoke at Work".  
add value labels shswork 1 "Yes" 2 "No".

```
***** PRODUCE TABLE ESTIMATES *****  
title 'SECOND-HAND SMOKE: Exposure at Work'.  
subtitle ' '.  
use all.  
cstabulate  
    / plan file = ' c:\GATS_data\gatsplan.csaplan'  
    / tables variables = shswork  
/ cells tablepct
```

.  
\*\*\*\*\*

```
***** MEDIA BOX *****  
* 5.1 Awareness of Anti-Smoking Information in Specific Channels.  
* On local TV.  
recode g01b (1=1) (2,7 = 2) (else=sysmis) into antitv.
```

```
* On the radio.  
recode g01c (1=1) (2,7 = 2) (else=sysmis) into antiradio.
```

```
* On television or the radio.  
do if antitv = 1 or antiradio = 1.  
    compute antitv_radio = 1.  
else if antitv = 2 and antiradio = 2.  
    compute antitv_radio = 2.  
else.  
    compute antitv_radio = $sysmis.  
end if.
```

```
* 5.3 & 5.4 Noticed Cigarette Marketing in Specific Channels.
```

\* Select questions (ie. g04a or g04a1, etc.) depending on structure used by country.

\* In stores.

recode g04a (1=1) (2,7 = 2) into adstores.

\* On local TV.

recode g04b (1=1) (2,7 = 2) into advt.

\* On the radio.

recode g04c (1=1) (2,7 = 2) into adradio.

\* On billboards.

recode g04d (1=1) (2,7 = 2) into adbillb.

\* On posters.

recode g04e (1=1) (2,7 = 2) into adpost.

\* In newspapers/magazines.

recode g04f (1=1) (2,7 = 2) into adnews.

\* In cinemas.

recode g04g (1=1) (2,7 = 2) into adfilm.

\* On the Internet.

recode g04h (1=1) (2,7 = 2) into adnet.

\* On the public transportation vehicles or stations.

recode g04i (1=1) (2,7 = 2) into adtrans.

\* On the public walls.

recode g04j(1=1) (2,7 = 2) into adwalls.

\* Anywhere else.

recode g04k (1=1) (2,7 = 2) into adelse.

\* Sponsorship of sport or sporting event.

recode g05 (1=1) (2,7 = 2) into sport.

\* Cigarette promotions.

recode g06a (1=1) (2,7 = 2) into freesamp.

recode g06b (1=1) (2,7 = 2) into sales.

recode g06c (1=1) (2,7 = 2) into coupons.

recode g06d (1=1) (2,7 = 2) into freegift.

recode g06e (1=1) (2,7 = 2) into logo.

recode g06f (1=1) (2,7 = 2) into mail.

\* 5.3 Noticed ads or promos in stores.

do if (adstores = 1 or sales = 1 or freegift = 1).

    compute anystores = 1.

else if (adstores = 2 and sales = 2 and freegift = 2).

    compute anystores = 2.

else.

    compute anystores = \$sysmis.

end if.

\* 5.4 Noticed in any of the above locations other than those included in stores.

do if (adtv = 1 or adradio = 1 or adbillb = 1 or adpost = 1 or adnews = 1 or adfilm = 1 or  
adnet = 1 or adtrans = 1 or adwalls = 1 or adelse = 1 or sport = 1 or freesamp = 1  
or coupons = 1 or logo = 1 or mail = 1 ).

    compute anyads = 1.

else if (adtv = 2 and adradio = 2 and adbillb = 2 and adpost = 2 and adnews = 2 and  
adfilm = 2 and adnet = 2 and adtrans = 2 and adwalls = 2 and adelse = 2 and sport = 2  
and freesamp = 2 and coupons = 2 and logo = 2 and mail = 2 ).

    compute anyads = 2.

else.

    compute anyads = \$sysmis.

end if.

```

var labels
    antitv_radio "Noticed Anti-Smoking Information on TV or Radio" /
    anystores "Noticed Any Advertisement or Promotion in Stores"
    anyads "Noticed Any Advertisement, Sponsorship or Promotion not in Stores"
.
add value labels antitv_radio adstores anyads 1 "Yes" 2 "No".

```

```

***** PRODUCE TABLE ESTIMATES *****
title 'MEDIA: Anti-Smoking Information'.
cstabulate
    / plan file = 'c:\GATS_data\gatsplan.csaplan'
    / tables variables = antitv_radio anystores anyads
/ cells tablepct
.

```

```

***** Knowledge, Attitudes, and Perceptions BOX *****
* 6.1 Belief that Tobacco Smoking Causes Serious Illness.
recode h01 (1 = 1) (2,7 = 2) (else=sysmis) into smkdanger.
var label smkdanger "Believes that Tobacco Smoking Causes Serious Illness".
add value labels smkdanger 1 "Yes" 2 "No".

```

```

***** PRODUCE TABLE ESTIMATES *****
title 'KNOWLEDGE: Smoking Causes Serious Illness'.

use all.
cstabulate
    / plan file = 'K:\OSH-Global\GATS\GATS Data Management\Countries\gatsplan.csaplan'
    / tables variables = smkdanger
/ cells tablepct
.

```

```

***** BACK PAGE *****

```

```

***** TOBACCO USE BOX *****

```

```

*** Tobacco Smokers ***
* 1.1 Current Tobacco Smokers.
* Same variable as used on the FRONT PAGE = ctsmk.

```

```

* 1.2 Daily Tobacco Smokers.
recode smoker (1=1) (2 thru 6=2) (else=sysmis) into dtsmk.

```

```

* 1.3 Current Cigarette smokers.
* "Cigarettes" can be manufactured or hand-rolled.
if range(smoker,1,6) ccsmk = 2.
if ((b06a>0 and b06a<=888) or (b06b>0 and b06b<=888) or
    (b06c>0 and b06c<=888) or (b10a>0 and b10a<=888) or
    (b10b>0 and b10b<=888) or (b10c>0 and b10c<=888)) ccsmk=1.

```

```

* 1.4 Daily Cigarette Smokers.

```

\* Respondents are defined to be a daily cigarette smoker if they meet one of two conditional criteria.  
\* The following code checks each condition separately and sets flags indicating whether they meet the  
\* criteria or not. If either condition is flagged then R is a daily cigarette smoker.

\* Initialize as NOT current daily cig smokers.  
if any(smoker, 1,2,3,4,5,6) dcsmk=2.

\*\* First condition for daily cigarette smoking \*\*.  
compute flag1 = 0.

\* Initialize as not current daily cig smoker.  
if (b06a gt 0 and b06a lt 888) or (b06b gt 0 and b06b lt 888) or  
    (b06c gt 0 and b06c lt 888) flag1 = 1.  
\* flag1 = 1 Yes if R smokes cigs daily.

\*\* Second condition for daily cigarette smoking.  
compute flag2 = 0.

\* Initialize as not current daily cig smoker.  
\* count how many types of cigs are smoked less than daily \*.  
count countA = b06a b06b b06c (888).  
\* count how many other smoked products are NOT used daily \*.  
count countB = b06d b06e b06f b06g (0,999).  
if (countA ge 2 and countB = 4 and dtsmk = 1) flag2 = 1.  
\* flag2 = 1 (Yes) if R smokes more than 2 kinds of cigs less than daily, does not smoke any other  
tobacco products (D,E,F,G) and has reported smoking tobacco daily.

if (flag1 = 1 OR flag2 = 1) dcsmk = 1.  
\* If either flag1 or flag2 is a yes (1) then R is a daily cig smoker.

\* 1.5 Former Daily Tobacco Smokers (Current Non-Smokers) Among All Adults.  
recode smoker (4 = 1) (1,2, 3, 5, 6 = 2) (else = sysmis) into fdsmk.

\* 1.6 Former Tobacco Smokers Among Ever Daily Smokers (Quit ratio for Daily Smoking).  
recode smoker (4 = 1) (1,2 = 2) (else=sysmis) into edsmkf.

var labels

ctsmk "Current Tobacco Smokers" /  
dtsmk "Daily Tobacco Smoker" /  
ccsmk "Current Cigarette Smokers" /  
    dcsmk "Daily Cigarette Smokers" /  
    fdsmk "Former Daily Tobacco Smokers Among All Adults" /  
    edsmkf "Former Tobacco Smokers Among Ever Daily Smokers"

add value labels ctsmk dtsmk ccsmk dcsmk fdsmk edsmkf 1 "Yes" 2 "No".

\*\*\* Smokeless Tobacco Users \*\*\*.

\* 1.7 Current Smokeless Users.  
\* Same variable as used on the FRONT PAGE = csmkless.

\* 1.8 Daily Smokeless Users.  
recode smkless (1=1) (2 thru 6=2) (else=sysmis) into dsmkless.

\* 1.9 Former Daily Smokeless Users (Current Non-Users) Among All Adults.  
recode smkless (4 = 1) (1,2, 3, 5, 6 = 2) (else = sysmis) into fdsmkless.

\* 1.10 Former Daily Smokeless Users Among Ever Daily Users (Quit ratio for Daily Smokeless Use).  
recode smkless (4 = 1) (1,2 = 2) (else=sysmis) into edsmkless.

```

* 1.11 Current Tobacco Users.
if any(smoker, 1,2,3) or any(smklless, 1,2,3) ctobacco = 1.
if any(smoker,4,5,6) and any(smklless,4,5,6) ctobacco = 2.

var labels
csmklless "Current Smokeless Users" /
dsmklless "Daily Smokeless Users" /
fdsmklless "Former Daily Smokeless Users Among All Adults" /
edsmklless "Former Smokeless Users Among Ever Daily Smokeless Users" /
ctobacco "Current Tobacco Users"

.
add val labels csmklless dsmklless fdsmklless edsmklless 1 "Yes" 2 "No".

***** PRODUCE TABLE ESTIMATES *****
title 'TOBACCO USE: Tobacco Smokers'.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = ctsmk dtsmk ccsmk dcsmk fdsmk edsmkf
    / subpop table = a01
    / cells tablepct

.
title 'TOBACCO USE: Smokeless Tobacco Users'.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = csmklless dsmklless fdsmklless edsmklless ctobacco
    / subpop table = a01
    / cells tablepct

.
*****

***** CESSATION BOX *****
* 2.1 Smoking Quit attempt in last 12 months.
if d01=2 qtsmk12 = 2 .
if d01=1 or
    (b13a=2 and b13b<12) or /* Current smokers tried to quit in last 12 months */
    (b13a=3 and b13b<52) or /* Former smokers who quit in last 12 months */
    (b13a=4 and b13b<365) or B13A=5 qtsmk12=1.

* 2.3 Interest in Quitting Smoking.
* Same variable as used on the FRONT PAGE = inqsmk2.

* 2.2 Health Care Provider Advised to Quit Smoking Tobacco.
if (d07=2 or d06=2) or
    ((b17=2 or b16=2) and any(b13a,2,3,4,5)) adqtsmk = 2.
if d07=1 or ((b17=1) and any(b13a,2,3,4,5)) adqtsmk = 1.

* 2.4 Smokeless users who made quit attempt in last 12 months.
if d09=2 qtsmklless12 = 2 .
if d09=1 or
    (c13a=2 and c13b<12) or /* Current smokers tried to quit in last 12 months */
    (c13a=3 and c13b<52) or /* Former smokers who quit in last 12 months */
    (c13a=4 and c13b<365) or c13a=5 qtsmklless12=1.

* 2.6 Interest in Quitting Smokess Tobacco.

```

recode d16 (1,2,3 = 1) (4,7 = 2) (else=sysmis) into inqsmkless2.

\* 2.5 Health Care Provider Advised to Quit Smokeless Tobacco.

if (d15=2 or d14=2) or

((c17=2 or c16=2) and any(c13a,2,3,4,5)) adqtsmkless = 2.

if d15=1 or ((c17=1) and any(c13a,2,3,4,5)) adqtsmkless = 1.

var labels

adqtsmk "Health Care Provider Advised Quitting Smoking" /  
inqsmk2 "Interest in Quitting Smoking" /  
qtsmkless12 "Smokeless Quit Attempt in the Past 12 Months" /  
adqtsmkless "Health Care Provider Advised Quitting Smokeless Tobacco Use" /  
inqsmkless2 "Interest in Quitting Smokeless Tobacco Use"

add value labels inqsmk2 adqtsmk qtsmkless12 inqsmkless2 adqtsmkless 1 "Yes" 2 "No".

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*.

title 'CESSATION'.

use all.

cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'

/ tables variables = qtsmk12 inqsmk2 adqtsmk qtsmkless12 inqsmkless2 adqtsmkless

/ subpop table = a01

/ cells tablepct

\*\*\*\*\*

\*\*\*\*\* SECOND-HAND SMOKE BOX \*\*\*\*\*.

\* 3.1 Same variable as is on the FRONT PAGE = shswork \*.

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*.

title 'SECOND-HAND SMOKE'.

use all.

cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'

/ tables variables = shswork

/ subpop table = a01

/ cells tablepct

\*\*\*\*\*

\*\*\*\*\* ECONOMICS BOX \*\*\*\*\*.

\* 4.1. Average Price of a Pack of Manufactured Cigarettes.

\* Number of manufactured cigarettes bought at last purchase.

\* A is unit, B is number of cigarettes.

if f01a = 1 numcig = f01b.

if any(f01a,2,3,4) numcig = f01b\*f01d.

\* Price paid per pack of manufactured cigarettes (assuming 20 cigarettes per pack).

if f02 < 999 paypk = F02 / numcig \* 20.

var labels paypk "Price paid per pack of manufactured cigarettes".

\* Now create a new manufactured cigarette weight and create a new analysis plan

```

to get the consumption-weighted average.
compute cigweight = wf * numcig.
csplan analysis
  / plan file = ' c:\GATS_data\cigweight.csaplan'
  / planvars analysisweight = cigweight
  / design strata = gatsstrata cluster = gatscluster
  / estimator type = wr

```

```

***** PRODUCE TABLE ESTIMATES *****
title 'ECONOMICS'.
use all.
csdescriptives
  / plan file = ' c:\GATS_data\cigweight.csaplan'
  / summary variables = paypk
  / mean

```

```

*****
* 4.2 The second indicator in the Economics box is calculated as:
* Cigarette affordability = ( the weighted mean of paypk * 100 ) / GDP.
*****

```

```

***** MEDIA BOX *****

```

```

*** Tobacco Industry Advertising ***
* 5.3 Noticed cigarette marketing in stores.
* Same variable as on FRONT PAGE = anystores.

```

```

* 5.4 Noticed cigarette marketing anywhere else.
* Same variable as on FRONT PAGE = anyads.

```

```

* 5.7 & 5.8 Noticed smokeless tobacco marketing
* In stores.

```

```

recode g04a2 (1=1) (2,7 = 2) into adstores2.

```

```

* On local TV.

```

```

recode g04b2 (1=1) (2,7 = 2) into advt2.

```

```

* On the radio.

```

```

recode g04c2 (1=1) (2,7 = 2) into adradio2.

```

```

* On billboards.

```

```

recode g04d2 (1=1) (2,7 = 2) into adbillb2.

```

```

* On posters.

```

```

recode g04e2 (1=1) (2,7 = 2) into adpost2.

```

```

* In newspapers/magazines.

```

```

recode g04f2 (1=1) (2,7 = 2) into adnews2.

```

```

* In cinemas.

```

```

recode g04g2 (1=1) (2,7 = 2) into adfilm2.

```

```

* On the Internet.

```

```

recode g04h2 (1=1) (2,7 = 2) into adnet2.

```

```

* On the public transportation vehicles or stations.

```

```

recode g04i2 (1=1) (2,7 = 2) into adtrans2.

```

```

* On the public walls.

```

```

recode g04j2 (1=1) (2,7 = 2) into adwalls2.

```

```

* Anywhere else.

```

```

recode g04k2 (1=1) (2,7 = 2) into adelse2.

```

```

* Sponsorship of sport or sporting event.

```

```

recode g05 (1=1) (2,7 = 2) into sport2.

```

\* Smokeless promotions.  
recode g06a2 (1=1) (2,7 = 2) into freesamp2.  
recode g06b2 (1=1) (2,7 = 2) into sales2.  
recode g06c2 (1=1) (2,7 = 2) into coupons2.  
recode g06d2 (1=1) (2,7 = 2) into freegift2.  
recode g06e2 (1=1) (2,7 = 2) into logo2.  
recode g06f2 (1=1) (2,7 = 2) into mail2.

\* 5.7 Noticed ads or promos in stores.  
do if (adstores2 = 1 or sales2 = 1 or freegift2 = 1).  
    compute anystores2 = 1.  
else if (adstores2 = 2 and sales2 = 2 and freegift2 = 2).  
    compute anystores2 = 2.  
else.  
    compute anystores2 = \$sysmis.  
end if.

\* Noticed in any of the above locations other than stores.  
do if (adtv2 = 1 or adradio2 = 1 or adbillb2 = 1 or adpost2 = 1 or adnews2 = 1 or  
adfilm2 = 1 or adnet2 = 1 or adtrans2 = 1 or adwalls2 = 1 or adelse2 = 1 or sport2 = 1  
or freesamp2 = 1 or coupons2 = 1 or logo2 = 1 or mail2 = 1 ).  
    compute anyads2 = 1.  
else if (adtv2 = 2 and adradio2 = 2 and adbillb2 = 2 and adpost2 = 2 and adnews2 = 2  
and adfilm2 = 2 and adnet2 = 2 and adtrans2 = 2 and adwalls2 = 2 and adelse2 = 2  
and sport2 = 2 and freesamp2 = 2 and coupons2 = 2 and logo2 = 2 and mail2 = 2).  
    compute anyads2 = 2.  
else.  
    compute anyads2 = \$sysmis.  
end if.

compute lablcigpk = \$sysmis.  
compute lablpk2 = \$sysmis.

\*\*\* Counter Advertising \*\*\*.

\* 5.2 Thinking of Quitting Because of Health Warning Labels on Cigarette Packages.  
do if g03=1.  
    compute lablcigpk = 1.  
else if (smoker = 1 or smoker = 2 or smoker = 3) and  
(g02 = 2 or g02 = 3 or g03 = 2 or g03 = 7).  
    compute lablcigpk = 2.  
else.  
    compute lablcigpk = \$sysmis.  
end if.

\* 5.1 Noticed anti-smoking information on tv or radio.  
\* Same variable as on FRONT PAGE = antityv\_radio.

\* 5.6 Thinking of Quitting Because of Health Warning Labels on Smokeless Packages.  
do if g03a=1.  
    compute lablpk2 = 1.  
else if (smokeless = 1 or smokeless = 2 or smokeless = 3) and  
(g02a = 2 or g02a = 3 or g03a = 2 or g03a = 7).  
    compute lablpk2 = 2.  
else.  
    compute lablpk2 = \$sysmis.

end if.

\* 5. 5 Noticed anti-smokeless information on tv or radio.

\* On local TV.

recode g01b2 (1=1) (2,7 = 2) (else=sysmis) into antitv2.

\* On the radio.

recode g01c2 (1=1) (2,7 = 2) (else=sysmis) into antiradio2.

\* On television or the radio.

do if antitv2 = 1 or antiradio2 = 1.

compute antitv\_radio2 = 1.

else if antitv2 = 2 and antiradio2 = 2.

compute antitv\_radio2 = 2.

else.

compute antitv\_radio2 = \$sysmis.

end if.

```
var labels lablcigpk "Thinking of Quitting Because of Health Warning Labels on Cigarette Packages" /
    antitv_radio2 "Noticed Anti-Smokeless Information on TV or Radio" /
    anystores2 "Noticed Smokeless Advertisement or Promotion in Stores" /
    anyads2 "Noticed Any Smokeless Advertisement, Sponsorship or Promotion not in Stores" /
    lablpk2 "Thinking of Quitting Because of Health Warning Labels on Smokeless Packages"
```

add value labels lablcigpk antitv\_radio2 anystores2 anyads2 lablpk2 1 "Yes" 2 "No" .

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*.

title 'MEDIA'.

cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'

/ tables variables = anystores anyads antitv\_radio

/ subpop table = ctsmk

/ cells tablepct

cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'

/ tables variables = anystores2 anyads2 antitv\_radio2

/ subpop table = csmkless

/ cells tablepct

cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'

/ tables variables = lablcigpk lablpk2

/ subpop table = a01

/ cells tablepct

\*\*\*\*\*

\*\*\*\*\* Knowledge, Attitudes, and Perceptions BOX \*\*\*\*\*.

\* 6.1 Belief that Tobacco Smoking Causes Serious Illness.

\* Same variable as on the FRONT PAGE = smkdanger.

\* 6.2 Belief that Second-hand Smoke Causes Serious Illness.

recode e17 (1 = 1) (2,7 = 2) (else=sysmis) into shsdanger.

\* 6.3 Belief that Smokeless Tobacco Causes Serious Illness.  
recode h03 (1 = 1) (2,7 = 2) (else=sysmis) into smklessdanger.

var label shsdanger "Believes that Secondhand Smoke Causes Serious Illness in Non-Smokers" /  
smklessdanger "Believes that Smokeless Tobacco Use Causes Serious Illness"  
add value labels shsdanger smklessdanger 1 "Yes" 2 "No".

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*.  
title 'KNOWLEDGE, ETC'.

cstabulate  
    / plan file = 'c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = smkdanger shsdanger  
    / subpop table = ctsmk  
/ cells tablepct

.  
cstabulate  
    / plan file = 'c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = smklessdanger  
    / subpop table = csmkless  
/ cells tablepct

\*\*\*\*\*  
\*\*\*\*\*

\* DON'T FORGET TO SAVE YOUR NEW DATA FILE !!!.  
save outfile = 'c:\GATS\_data\Fact\_Sheet.sav'  
    /compressed.

\*\*\*\*\*  
\* END.  
\*\*\*\*\*

**APPENDIX C:**  
**Global Adult Tobacco Survey (GATS)**  
**Country Report Indicator**  
**Statistical Software Syntax**

## GATS Country Report Indicator Syntax (SAS programming language)

```
*****.
,
*SAS code to produce estimates for the Country Report;
*****.
,
```

/\*

The following statistical code is provided for the SAS programming language. This code should be run after the creation of a complete analytical dataset.

The code includes calculation of indicators, labeling of variables and their values, and calculations for weighted percentages and frequencies to fill in the tables in the country report. Please note that a description of all indicators can be found in the Indicators Guidelines manual.

Because of the way that SAS PROC SURVEYFREQ handles domain variables, there will be some information in the output that is not necessary for the tables in the country report. The titles that go along with the output are informative as to what values should be taken from the output in order to populate the tables.

In order to best view the output in the tables the 'explorer window' in SAS (on the left) should be closed.

SAS does not provide an option for removing the cell 95% confidence interval if a row or column percent (and its accompanying 95% CI) is programmed. Where row or column percents are used to populate a table then the accompanying row or column 95% confidence intervals should be used as well. Care should be taken to ensure that the correct CI is reported in the tables.

Note that when estimates are required by education that the only results that should be reported are for those who are 25 or older. The titles specify which output to use in order to obtain these results.

Note that an age variable will need to be calculated from either birth month and year (a02a, a02b) or from estimated age (a03) prior to running this program;

Prior to running the code below, replace the library path and data set names. Also replace below the names of the stratum variable, cluster variable, weight variable, rural/urban variable and age variable;

\*/

OPTIONS NODATE ls=120;

```
*****  
*****USER NEEDS TO MODIFY*****
```

libname GATS "Write path name here"; \*Change the path where the data file is located. For example:  
libname GATS "c:\GATS data";

%let sasdataname= Name\_of\_SAS\_datafile; \*Change Name\_of\_SAS\_datafile to the name of the SAS  
analytic data file (e.g., analytic\_data);

%let stratumvar= Name\_of\_stratum\_variable; \*Change Name\_of\_stratum\_variable to the name of the  
stratum variable in SAS dataset;

%let clustervar= Name\_of\_cluster\_variable; \*Change Name\_of\_cluster\_variable to the name of the  
cluster variable in SAS dataset;

%let weightvar= Name\_of\_weight\_variable; \*Change Name\_of\_weight\_variable to the name of the weight  
variable in SAS dataset;

%let age\_var= Name\_of\_age\_in\_years\_variable; \*Change Name\_of\_age\_in\_years\_variable to the name  
of the age variable in SAS dataset;

%let rural\_urbanvar= Name\_of\_rural\_urban\_variable; \*Change Name\_of\_rural\_urban\_variable to the  
name of the rural/urban variable in SAS dataset.

Note that if the data were only stratified on rural/urban then Name\_of\_rural\_urban\_variable and  
Name\_of\_stratum\_variable will be the same;

```
*****  
*****
```

\* This creates formats for the variables for the output;

\* Note that the format for the education variable (EDUCF) may need to be modified per the country's  
response options;

\* A format may also be created here for the rural/urban variable if necessary;

**PROC FORMAT;**

VALUE EDUCF                   1= "Not graduated, Literate"  
                                 2= "Elementary + Primary"

	3= "Secondary or Vocational"
	4= "High School"
	5= "College +"
	8= "Not graduated, Illiterate";
VALUE SMOKERF	1="Daily tobacco smoker"
	2="Occasional tobacco smoker, formerly daily"
	3="Occasional tobacco smoker, never daily"
	4="Former daily tobacco smoker"
	5="Former occasional tobacco smoker"
	6="Never smoker of tobacco";
VALUE SLTF	1="Daily smokeless tobacco user"
	2="Occasional smokeless tobacco user, formerly daily"
	3="Occasional smokeless tobacco user, never daily"
	4="Former daily smokeless tobacco user"
	5="Former occasional smokeless tobacco user"
	6="Never user of smokeless tobacco";
VALUE YESNOF	1="Yes"
	2="No";
VALUE SMKDEGREEF	1="Occasional smoker"
	2="Never daily smoker"
	3="Other";
VALUE CURRENTSF	1="Current tobacco smoker"
	2="Non-smoker";
VALUE GENDERF	1="Male"
	2="Female";
VALUE SMKDONF	1="Daily"
	2="Occasional"
	3="Non-smoker";

VALUE CIGDAY5F	<p>1=" &lt;5"</p> <p>2="5 TO 9"</p> <p>3="10 TO 14"</p> <p>4="15 TO 24"</p> <p>5="25 OR MORE";</p>
VALUE TIMEF	<p>1= "WITHIN 5 MINUTES OF WAKING"</p> <p>2= "WITHIN 6-30 MINUTES OF WAKING"</p> <p>3= "WITHIN 31-60 MINUTES OF WAKING"</p> <p>4= "MORE THAN 60 MINUTES OF WAKING";</p>
VALUE TIMEQ	<p>1= "LESS THAN 1 YEAR"</p> <p>2= "1-4 YEARS"</p> <p>3= "5-9 YEARS"</p> <p>4= "10+ YEARS";</p>
VALUE WHEN	<p>1= "NEXT MONTH"</p> <p>2= "WITHIN 12 MONTHS"</p> <p>3= "SOMEDAY"</p> <p>4= "NOT INTERESTED"</p> <p>5= "DON'T KNOW";</p>
VALUE SHS	<p>1= "YES"</p> <p>2= "NO/DID NOT VISIT";</p>
VALUE AGEGRP25F	<p>1= "Age 25+"</p> <p>2= "Age &lt;25";</p>
VALUE AGEGRPF	<p>1= "15-24"</p> <p>2= "25-44"</p> <p>3= "45-64"</p> <p>4= "65+";</p>
VALUE age20t34F	<p>1= "Age 20-34"</p> <p>2= "Age not in 20-34 range";</p>

VALUE AGEST                   1= "LESS THAN 15"  
                                  2=" 15-16 YEARS OF AGE"  
                                  3= "17-19 YEARS OF AGE"  
                                  4= "20 YEARS OF AGE OR OLDER";

VALUE LOCF                   1="VENDING MACHINE"  
                                  2="STORE"  
                                  3="STREET VENDOR"  
                                  4="MILITARY STORE"  
                                  5="DUTY-FREE SHOP"  
                                  6="OUTSIDE THE COUNTRY"  
                                  7="KIOSKS"  
                                  8="INTERNET"  
                                  9="FROM ANOTHER PERSON"  
                                  10="OTHER";

VALUE CCTYPEF               1= "Smoked only"  
                                  2= "Both smoked and smokeless"  
                                  3= "Smokeless only";

**RUN;**

\*\*\*\*\*,

\*Master data file used with all subsequent data steps;

**DATA** GATS.FINAL; **SET** GATS.&sasdataname;

RESIDENCE=&rural\_urbanvar;

\* Drop cases where response to B01, B02, B03, C01, C02, or C03 is "don't know";

\* Also drop cases where the respondent broke off the survey at question E01 or before;

**IF** B01>=7 OR B02>=7 OR B03>=7 OR C01>=7 OR C02>=7 OR C03>=7 OR E01=. **THEN DELETE;**

\*Education level; \*NOTE: if an education variable has already been created then comment out these lines and rename the variable EDUCATION;

if a04 in (77,99,.) then education=.;

else education=a04;

\* Six-Level Tobacco Smoking Composite Variable;

IF B01=1 THEN SMOKER=1;

ELSE IF B01=2 AND B02=1 THEN SMOKER=2;

ELSE IF B01=2 AND B02=2 THEN SMOKER=3;

ELSE IF B01=3 AND B03=1 THEN SMOKER=4;

ELSE IF B01=3 AND B03=2 THEN SMOKER=5;

ELSE IF B01=3 AND B03=3 THEN SMOKER=6;

\*This calculates age according to those less than 25 and then those 25 and greater. ;

if &age\_var >= 25 then agegrp25=1;

else if (15 <= &age\_var < 25) then agegrp25=2;

\*This calculates age according to those 15-24, 25-44, 45-64, 65+ ;

if (15 <= &age\_var < 25) then agegrp=1;

else if (25 <= &age\_var < 45) then agegrp=2;

else if (45 <= &age\_var < 65) then agegrp=3;

else if &age\_var >=65 then agegrp=4;

FORMAT SMOKER SMOKERF. A01 GENDERF. education EDUCF. agegrp25 agegrp25f. agegrp agegrpf. ;

LABEL SMOKER="Detailed Tobacco Smoking Status";

LABEL A01="Gender";

LABEL education="Education level";

**run;**

```
*****  
*CALCULATIONS FOR TABLE 3.2*****  
*****,
```

**TITLE1** "Table 3.2: Unweighted counts and weighted counts, percents, and 95% CIs ";

**TITLE2** "\*\*\*\* NOTE: Use row percents and row 95% CIs for education level\*\*\*\*";

**TITLE3** "\*\*\*\* NOTE: Only report values where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. \*\*\*\*";

**Proc surveyfreq** DATA=GATS.FINAL NOSUMMARY;

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** agegrp A01 RESIDENCE/ CL ;

**table** AGEGRP25 \* education/ CL ROW NOCELLPERCENT ;

**run;**

```
*****  
*CALCULATIONS FOR TABLES 4.1 AND 4.2*****  
*****,
```

**DATA** TABLES41\_42; **SET** GATS.FINAL;

\* Current Tobacco Smokers;

**IF** SMOKER IN (1,2,3) **THEN** CTSMK=1;

**ELSE IF** SMOKER IN (4,5,6) **THEN** CTSMK=2;

\*Measures 'Occasional smoker' and 'Never daily smoker';

```
IF SMOKER IN (2,3) THEN SMKDEGREE=1;  
ELSE IF SMOKER IN (5,6) THEN SMKDEGREE=2;  
ELSE IF SMOKER IN (1,4) THEN SMKDEGREE=3;
```

```
LABEL CTSMK="Current Tobacco Smokers";  
LABEL SMKDEGREE="Occasional and Never daily smokers";  
FORMAT CTSMK CURRENTSF. SMKDEGREE SMKDEGREEF.;  
RUN;
```

```
***** CALCULATE ESTIMATES *****;
```

```
TITLE1 "Tables 4.1 and 4.2: Weighted percentages, N's and 95% CIs for overall column";  
TITLE2 "**** NOTE: Estimates where SMKDEGREE = 'Other' should not be reported ****";
```

```
Proc surveyfreq DATA=TABLES41_42 NOSUMMARY;  
stratum &stratumvar;  
cluster &clustervar;  
weight &weightvar;  
table CTSMK SMOKER SMKDEGREE/CL ;  
run;
```

```
TITLE1 "Tables 4.1 and 4.2: Weighted percentages, N's and 95% CIs for Male and Female columns";  
TITLE2 "**** NOTE: Estimates where SMKDEGREE = 'Other' should not be reported ****";  
TITLE3 "**** NOTE: Use column percentages and column 95% CIs**** ";
```

```
Proc surveyfreq DATA=TABLES41_42 NOSUMMARY ;  
stratum &stratumvar;
```

```

cluster &clustervar;

weight &weightvar;

table (CTSMK SMOKER SMKDEGREE) * A01 /COL NOCELLPERCENT CL ;

run;

```

```

*****
*CALCULATIONS FOR TABLES 4.3 AND 4.4*****
*****

```

```

DATA TABLES43_44; SET GATS.FINAL;

```

```

* Current Tobacco Smokers;

```

```

IF SMOKER IN (1,2,3) THEN CTSMK=1;
ELSE IF SMOKER IN (4,5,6) THEN CTSMK=2;

```

```

*****

```

```

*The calculations below are based on the response options from the GATS core questionnaire. Country-specific questionnaires may vary in the number and order of response options and the calculations should be adjusted accordingly. Cigarettes are defined as any of the following: manufactured, hand-rolled, or kreteks. If kretek use is not measured then variable names ending in C should be removed;

```

```

*****

```

```

* Current Cigarette Smokers;

```

```

IF (B06A>0 AND B06A<=888) OR /* Manuf cigs daily */
   (B06B>0 AND B06B<=888) OR /* Handrolled daily */
   (B06C>0 AND B06C<=888) OR /* Kreteks daily */
   (B10A>0 AND B10A<=888) OR /* Manuf cigs weekly */
   (B10B>0 AND B10B<=888) OR /* Handrolled weekly */
   (B10C>0 AND B10C<=888) /* Kreteks weekly */

```

```

THEN CCSMK=1;

```

ELSE CCSMK=2;

\*Calculates manufactured cigarettes use;

IF (B06A>0 AND B06A<=888) OR (B10A>0 AND B10A<=888) THEN CCMANSMK=1;

ELSE CCMANSMK=2;

\*Calculates hand-rolled cigarettes use;

IF (B06B>0 AND B06B<=888) OR (B10B>0 AND B10B<=888) THEN CCHANDSMK=1;

ELSE CCHANDSMK=2;

\* Current Smoker of Kreteks;

IF (B06C>0 AND B06C<=888) OR (B10C>0 and B10C<=888) THEN ckcsmk = 1;

ELSE ckcsmk = 2;

\* Calculates other tobacco use;

IF (B06D>0 AND B06D<=888) OR (B10D>0 AND B10D<=888) OR /\* Daily or weekly pipe smoking \*/

(B06E>0 AND B06E<=888) OR (B10E>0 AND B10E<=888) OR /\* Daily or weekly cigars smoking \*/

(B06F>0 AND B06F<=888) or (B10F>0 AND B10F<=888) OR /\* Daily or weekly water pipe smoking \*/

(B06G>0 AND B06G<=888) OR (B10G>0 AND B10G<=888) THEN COTHER=1; /\* Daily or weekly other smoking \*/

ELSE COTHER=2;

\*\*\*\*\*,

LABEL CTSMK="Current Tobacco Smokers";

LABEL CCSMK="Current Cigarette Smokers";

LABEL CCMANSMK="Current Manufactured Cigarette Smoker";

LABEL CCHANDSMK="Current Handrolled Cigarette Smoker";

LABEL ckcsmk="Current Kretek Smokers";

LABEL COTHER="Current Other Tobacco Smokers";

FORMAT CTSMK CURRENTSF.

CCSMK CCMANSMK CCHANDSMK ckcsmk COTHER YESNOF.;

run;

\*\*\*\*\* CALCULATE ESTIMATES \*\*\*\*\*;

TITLE1 "Tables 4.3 & 4.4: Weighted percents, 95% CIs, & N's for column 'Any Smoked Tobacco Product'";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups. \*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where CTSMK = 'Current tobacco smoker'.\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.\*\*\*\*";

Proc surveyfreq DATA=TABLES43\_44 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table CTSMK /CL ;

table (AGEGRP RESIDENCE A01) \* ctsmk

AGEGRP25 \* education \* ctsmk

A01 \* (AGEGRP RESIDENCE) \* ctsmk

AGEGRP25 \* A01 \* education \* ctsmk / ROW NOCELLPERCENT CL ;

run;

TITLE1 "Tables 4.3 and 4.4: Weighted percents, 95% CIs, and N's for column 'Any Cigarette'";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups.\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where CCSMK = 'Yes'. Do not report for 'No'.\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.\*\*\*\*";

**Proc surveyfreq DATA=TABLES43\_44 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** ccsmk /CL ;

**table** (AGEGRP RESIDENCE A01) \* ccsmk

AGEGRP25 \* education \* ccsmk

A01 \* (AGEGRP RESIDENCE) \* ccsmk

AGEGRP25 \* A01 \* education \* ccsmk / **ROW NOCELLPERCENT CL** ;

**run;**

TITLE1 "Tables 4.3 and 4.4: Weighted percents, 95% CIs, and N's for column 'Manufactured'";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups.\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where CCMANSMK = 'Yes'. Do not report for 'No'.\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.\*\*\*\*";

**Proc surveyfreq DATA=TABLES43\_44 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** ccmansmk /CL ;

**table** (AGEGRP RESIDENCE A01) \* ccmansmk

AGEGRP25 \* education \* ccmansmk

A01 \* (AGEGRP RESIDENCE) \* ccmansmk

AGEGRP25 \* A01 \* education \* ccmansmk / **ROW NOCELLPERCENT CL** ;

**run;**

TITLE1 "Tables 4.3 and 4.4: Weighted percents, 95% CIs, and N's for column 'Hand-rolled'";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups.\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where CCHANDSMK = 'Yes'. Do not report for 'No'.\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.\*\*\*\*";

**Proc surveyfreq DATA=TABLES43\_44 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** cchandsmk /CL ;

**table** (AGEGRP RESIDENCE A01) \* cchandsmk

AGEGRP25 \* education \* cchandsmk

A01 \* (AGEGRP RESIDENCE) \* cchandsmk

AGEGRP25 \* A01 \* education \* cchandsmk / **ROW NOCELLPERCENT CL** ;

**run;**

TITLE1 "Tables 4.3 and 4.4: Weighted percents, 95% CIs, and N's for column 'Kreteks'";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups.\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where ckcsmk = 'Yes'. Do not report for 'No'.\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.\*\*\*\*";

**Proc surveyfreq DATA=TABLES43\_44 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

```

table ckcsmk /CL ;

table (AGEGRP RESIDENCE A01) * ckcsmk

    AGEGRP25 * education * ckcsmk

    A01 * (AGEGRP RESIDENCE) * ckcsmk

    AGEGRP25 * A01 * education * ckcsmk / ROW NOCELLPERCENT CL ;

run;

TITLE1 "Tables 4.3 and 4.4: Weighted percents, 95% CIs, and N's for column 'Other smoked tobacco'";
TITLE2 "**** NOTE: Use row percentages and row 95% CIs for subgroups.****";
TITLE3 "**** NOTE: Only report estimates where COTHER = 'Yes'. Do not report for 'No'.****";
TITLE4 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age
<25'.****";

```

```

Proc surveyfreq DATA=TABLES43_44 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table COTHER /CL ;

table (AGEGRP RESIDENCE A01) * COTHER

    AGEGRP25 * education * COTHER

    A01 * (AGEGRP RESIDENCE) * COTHER

    AGEGRP25 * A01 * education * COTHER/ ROW NOCELLPERCENT CL ;

run;

```

```

*****
*CALCULATIONS FOR TABLE 4.5*****
*****

```

```
DATA TABLE45; SET GATS.FINAL;
```

```
*Calculates smoking frequency according to Table 4.5 specifications;
```

```
IF SMOKER=1 THEN SMKDON=1;
```

```
ELSE IF SMOKER IN (2,3) THEN SMKDON=2;
```

```
ELSE IF SMOKER IN (4,5,6) THEN SMKDON=3;
```

```
LABEL SMKDON="Smoking frequency";
```

```
FORMAT SMKDON SMKDONF.;
```

```
run;
```

```
***** CALCULATE ESTIMATES *****;
```

```
TITLE1 "Table 4.5: Weighted percents and 95% CIs for 'Daily', 'Occasional', and 'Non-smoker'";
```

```
TITLE2 "**** NOTE: Use row percentages and row 95% CIs for subgroups.****";
```

```
TITLE3 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.****";
```

```
Proc surveyfreq DATA=TABLE45 NOSUMMARY;
```

```
stratum &stratumvar;
```

```
cluster &clustervar;
```

```
weight &weightvar;
```

```
table SMKDON / CL ;
```

```
table (AGEGRP RESIDENCE A01) * SMKDON
```

```
    agegrp25 * education * smkdon
```

```
        A01 * (AGEGRP RESIDENCE) * SMKDON
```

```
            agegrp25 * A01 * education * SMKDON/ROW NOCELLPERCENT CL ;
```

```
run;
```

\*\*\*\*\*  
 \*\*\*\*\*CALCULATIONS FOR TABLE 4.6\*\*\*\*\*  
 \*\*\*\*\*.

**DATA** TABLE46; **SET** GATS.FINAL;

\*\*\*\*\*.

\*The calculations below are based on the response options from the GATS core questionnaire. Country-specific questionnaires may vary in the number and order of response options and the calculations should be adjusted accordingly. Cigarettes are defined as any of the following: manufactured, hand-rolled, or kreteks. Most countries do not measure kretek use and so the calculation of number of kreteks smoked per day could be removed for those countries. Kretek use would also then need to be removed from the calculation of CIGDAY;

\*\*\*\*\*.

\*Daily Cigarette Smokers;

**IF** (0<B06A<888 OR 0<B06B<888 OR 0<B06C<888) OR ((B06A=888 AND B06B=888)  
 OR (B06B=888 AND B06C=888) OR (B06A=888 AND B06C=888) AND ((B06D=0 OR B06D=999) AND  
 (B06E=0 OR B06E=999) AND (B06F=0 OR B06F=999) AND (B06G=0 OR B06G=999))) **THEN**  
 DCSMK=1;  
**ELSE** DCSMK=2;

\*\*\*Number of Cigarettes Smoked Per Day;

\* Number of manufactured cigarettes smoked per day (among daily smokers);

**IF** B06A>0 AND B06A<888 **THEN** MANUFDAY=B06A;  
**ELSE IF** B06A=888 AND B06A1<999 **THEN** MANUFDAY = B06A1/7;

\* Number of hand-rolled cigarettes smoked per day (among daily smokers);

```
If B06B>0 AND B06B<888 THEN HROLLDAY=B06B;
ELSE If B06B=888 AND B06B1<999 THEN HROLLDAY = B06B1/7;
```

\* Number of kreteks smoked per day (among daily smokers);

```
If B06C>0 AND B06C<888 THEN KRETDAY=B06C;
ELSE If B06C=888 AND B06C1<999 THEN KRETDAY = B06C1/7;
```

\* Number of cigarettes smoked per day (includes manufactured and hand-rolled – among daily smokers);

```
CIGDAY = SUM (OF MANUFDAY, HROLLDAY, KRETDAY) ;
```

```
*****
;
```

\* Group cigarettes per day into 5 categories;

```
IF 0<CIGDAY<5 THEN CIGDAY5=1;
ELSE IF 5<=CIGDAY <10 THEN CIGDAY5=2;
ELSE IF 10<= CIGDAY <15 THEN CIGDAY5=3;
ELSE IF 15<= CIGDAY <25 THEN CIGDAY5=4;
ELSE IF 25<= CIGDAY THEN CIGDAY5=5;
```

```
LABEL DCSMK="Daily Cigarette Smokers";
```

```
LABEL CIGDAY5="Number of cigarettes smoked on average per day";
```

```
FORMAT DCSMK YESNOF. CIGDAY5 CIGDAY5F.;
```

```
RUN;
```

```
***** CALCULATE ESTIMATES *****;
```

```
TITLE1 "Table 4.6: Weighted percents and 95% CIs overall and then by gender"; ;
```

```
TITLE2 "**** NOTE: Use row percentages and row 95% CIs for subgroups.****";
```

```
TITLE3 "**** NOTE: Only report estimates where DCSMK = 'Yes'. Do not report for 'No'.****";
```

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.\*\*\*\*";

Proc surveyfreq DATA=TABLE46 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table DCSMK \* cigday5

DCSMK \* (AGEGRP RESIDENCE A01) \* CIGDAY5

DCSMK \* AGEGRP25 \* education \* CIGDAY5

DCSMK \* A01 \* (AGEGRP RESIDENCE) \* CIGDAY5

DCSMK \* AGEGRP25 \* A01 \* education \* CIGDAY5/ROW NOCELLPERCENT CL ;

run;

\*\*\*\*\*

\*CALCULATIONS FOR TABLE 4.7\*\*\*\*\*

\*\*\*\*\*

DATA TABLE47; SET GATS.FINAL;

\* Age at Smoking Initiation;

IF B04<99 THEN AGESMK=B04;

ELSE IF B08<99 THEN AGESMK=B08;

ELSE IF B11<99 THEN AGESMK=B11;

ELSE IF B04=99 AND B05~=99 THEN AGESMK= &age\_var - B05;

ELSE IF B08=99 AND B09~=99 THEN AGESMK= &age\_var - B09;

ELSE IF B11=99 AND B12~=99 THEN AGESMK= &age\_var - B12;

```

* Create 4 categories for age at smoking initiation;
IF AGESMK ~= . AND AGESMK<15 THEN AGESMK4=1;
ELSE IF 15<=AGESMK<17 THEN AGESMK4=2;
ELSE IF 17<=AGESMK<20 THEN AGESMK4=3;
ELSE IF AGESMK>=20 THEN AGESMK4=4;

*Creating a variable that defines whether a person is 20-34 or not;
if 20<=&age_var<35 then age20t34=1;
else if &age_var ne . then age20t34=2;

LABEL AGESMK4="Age at Smoking Initiation (categories)";
LABEL age20t34= "Between ages of 20-34 or not";
FORMAT AGESMK4 AGEST. age20t34 age20t34F.;
RUN;

***** CALCULATE ESTIMATES *****;

TITLE1 "Table 4.7: Weighted percentages and 95% CIs";
TITLE2 "**** NOTE: Use row percentages and row 95% CIs. ****";
TITLE3 "**** NOTE: Only report estimates where age20t34 = 'Age 20-34'.****";

Proc surveyfreq DATA=TABLE47 NOSUMMARY;
stratum &stratumvar;
cluster &clustervar;
weight &weightvar;
table age20t34 * agesmk4
      age20t34 * (A01 RESIDENCE) * agesmk4/ROW NOCELLPERCENT CL ;
run;

```

\*\*\*\*\*

\*CALCULATIONS FOR TABLE 4.8\*\*\*\*\*

\*\*\*\*\*,

**DATA** TABLE48; **SET** GATS.FINAL;

\* Former Daily Tobacco Smokers (Among All Adults);

**IF** SMOKER=4 **THEN** FDSMK=1;

**ELSE** FDSMK=2;

\* Former Daily Tobacco Smokers (Among Ever Daily Smokers);

\* Also known as Quit Ratio for Daily Smoking;

**IF** SMOKER=4 **THEN** EDSMKF=1;

**ELSE IF** SMOKER IN (1,2) **THEN** EDSMKF=2;

**LABEL** FDSMK="Former Daily Tobacco Smokers (Among All Adults)";

**LABEL** EDSMKF="Former Daily Tobacco Smokers (Among Ever Daily Smokers)";

**FORMAT** FDSMK EDSMKF YESNOF.;

**RUN**;

\*\*\*\*\* **CALCULATE ESTIMATES** \*\*\*\*\*;

**TITLE1** "Table 4.8: Weighted percentages and 95% CIs among all adults";

**TITLE2** "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups. \*\*\*\*";

**TITLE3** "\*\*\*\* NOTE: Only report estimates where FDSMK = 'Yes'. Do not report for 'No'. \*\*\*\*";

**TITLE4** "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. \*\*\*\*";

**Proc surveyfreq** **DATA**=TABLE48 **NOSUMMARY**;

```

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table FDSMK /CL ;

table (a01 AGEGRP RESIDENCE) * FDSMK
      AGEGRP25 * education * FDSMK/ROW NOCELLPERCENT CL ;

run;

TITLE1 "Table 4.8: Weighted percentages and 95% CIs among ever daily smokers";
TITLE2 "**** NOTE: Use row percentages and row 95% CIs for subgroups.****";
TITLE3 "**** NOTE: Only report estimates where EDSMKF = 'Yes'. Do not report for 'No'.****";
TITLE4 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age
<25'.****";

```

```

Proc surveyfreq DATA=TABLE48 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table EDSMKF /CL ;

table (a01 AGEGRP RESIDENCE) * EDSMKF
      AGEGRP25 * education * EDSMKF/ROW NOCELLPERCENT CL ;

run;

```

```

*****
*CALCULATIONS FOR TABLE 4.9*****
*****
,

```

```

DATA TABLE49; SET GATS.FINAL;

```

\*\*\* Time since Quitting Smoking;

\* Years since quitting smoking;

```
IF B13A=1 THEN YRSQTSMK=B13B;
ELSE IF B13A=2 THEN YRSQTSMK=B13B/12;
ELSE IF B13A=3 THEN YRSQTSMK=B13B/52;
ELSE IF B13A=4 THEN YRSQTSMK=B13B/365;
ELSE IF B13A=5 THEN YRSQTSMK=1/365;
```

\* Years since quitting smoking (in 4 categories);

```
IF YRSQTSMK ~= . AND YRSQTSMK <1 THEN YRSQTSMK4=1;
ELSE IF 1<=YRSQTSMK<5 THEN YRSQTSMK4=2;
ELSE IF 5<=YRSQTSMK<10 THEN YRSQTSMK4=3;
ELSE IF YRSQTSMK>=10 THEN YRSQTSMK4=4;
```

\* Former Daily Tobacco Smokers (Among All Adults);

```
IF SMOKER=4 THEN FDSMK=1;
ELSE FDSMK=2;
```

LABEL YRSQTSMK4= "Time Since Quitting Smoking (in 4 categories)";

LABEL FDSMK= "Former Daily Tobacco Smokers (Among All Adults)";

FORMAT YRSQTSMK4 TIMEQ. FDSMK YESNOF.;

**RUN;**

\*\*\*\*\* CALCULATE ESTIMATES \*\*\*\*\*;

TITLE1 "Table 4.9: Weighted percentages and 95% CIs for time since quitting";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where FDSMK = 'Yes'. Do not report for 'No'. \*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. \*\*\*\*";

Proc surveyfreq DATA=TABLE49 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table FDSMK \* yrsqtsmk4

FDSMK \* (a01 AGEGRP RESIDENCE) \* yrsqtsmk4

FDSMK \* AGEGRP25 \* education \* yrsqtsmk4/ROW NOCELLPERCENT CL ;

run;

\*\*\*\*\*  
\*CALCULATIONS FOR TABLE 4.10\*\*\*\*\*  
\*\*\*\*\*;

DATA TABLE410; SET GATS.FINAL;

\* Six-Level Smokeless Tobacco Composite Variable;

IF C01=1 THEN SMKLESS=1;

ELSE IF C01=2 and C02=1 THEN SMKLESS=2;

ELSE IF C01=2 and C02=2 THEN SMKLESS=3;

ELSE IF C01=3 and C03=1 THEN SMKLESS=4;

ELSE IF C01=3 and C03=2 THEN SMKLESS=5;

ELSE IF C01=3 and C03=3 THEN SMKLESS=6;

\* Current Tobacco Users;

IF SMOKER IN (1,2,3) OR SMKLESS IN (1,2,3) THEN CTOBACCO=1;

ELSE IF SMOKER IN (4,5,6) AND SMKLESS IN (4,5,6) THEN CTOBACCO=2;

\* Type of Tobacco Used;

if ctobacco = 1 then do;

    if smoker in (1,2,3) and smkless in (4,5,6) then ctype = 1;

    if smoker in (1,2,3) and smkless in (1,2,3) then ctype = 2;

    if smoker in (4,5,6) and smkless in (1,2,3) then ctype = 3;

end;

LABEL SMKLESS= "Detailed Smokeless Tobacco Use Status";

LABEL ctobacco= "Current Tobacco Users";

LABEL ctype= "Type of Current Tobacco Use";

FORMAT SMKLESS SLTF. ctobacco YESNOF. ctype CCTYPEF.;

**RUN;**

\*\*\*\*\* CALCULATE ESTIMATES \*\*\*\*\*;

TITLE1 "Table 4.10: Weighted percentages and 95% CIs for Current Tobacco Users column";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.\*\*\*\*";

**Proc surveyfreq DATA=TABLE410 NOSUMMARY;**

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

```

table CTOBACCO /CL ;

table (a01 AGEGRP RESIDENCE) * CTOBACCO
      AGEGRP25 * education * CTOBACCO /ROW NOCELLPERCENT CL ;

run;

***** CALCULATE ESTIMATES *****;

TITLE1 "Table 4.10: Weighted percentages and 95% CIs for Type of Current Tobacco Use";
TITLE2 "**** NOTE: Use row percentages and row 95% CIs****";
TITLE3 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age
<25'. ****";

```

```

Proc surveyfreq DATA=TABLE410 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table cctype /CL ;

table (a01 AGEGRP RESIDENCE) * cctype
      AGEGRP25 * education * cctype /ROW NOCELLPERCENT CL ;

run;

```

```

*****
*CALCULATIONS FOR TABLE 4.11*****
*****;

```

```

DATA TABLE411; SET GATS.FINAL;

```

```

* Time to First Tobacco Use;

```

\*This includes a measure of smokeless tobacco (C07) and C07 would need to be removed if smokeless use not measured;

```
IF (B07=1 OR C07=1) THEN FTOBUSE=1;
ELSE IF (B07=2 OR C07=2) THEN FTOBUSE=2;
ELSE IF (B07=3 OR C07=3) THEN FTOBUSE=3;
ELSE IF (B07=4 OR C07=4) THEN FTOBUSE=4;
```

```
LABEL FTOBUSE = "Time to First Tobacco Use";
```

```
FORMAT FTOBUSE TIMEF.;
```

```
RUN;
```

```
***** CALCULATE ESTIMATES *****;
```

```
TITLE1 "Table 4.11: Weighted percentages and 95% CIs for time to first tobacco use";
```

```
TITLE2 "**** NOTE: Use row percentages and row 95% CIs for subgroups****";
```

```
TITLE3 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. ****";
```

```
Proc surveyfreq DATA=TABLE411 NOSUMMARY;
```

```
stratum &stratumvar;
```

```
cluster &clustervar;
```

```
weight &weightvar;
```

```
table ftobuse/CL ;
```

```
table (a01 AGEGRP RESIDENCE) * ftobuse
```

```
agegrp25 * education * ftobuse/ROW NOCELLPERCENT CL ;
```

```
run;
```

```
*****
```

```
*CALCULATIONS FOR TABLE 5.1*****
```

\*\*\*\*\*,

**DATA** TABLE51; **SET** GATS.FINAL;

\* Smoking Quit Attempt in the Past 12 Months;

**IF** D01=1 **OR** (B13A=2 **AND** B13B<12) **OR** (B13A=3 **AND** B13B<52) **OR** (B13A=4 **AND** B13B<365) **OR** B13A=5 **THEN** QTSMK12=1;

**ELSE IF** D01=2 **THEN** QTSMK12=2;

\*Visited a HCP;

**if** d04 = 1 **or** (b14 = 1 **AND** B13A **IN** (2,3,4,5)) **then** HCPvisit = 1;

**else if** d04 = 2 **or** (b14 = 2 **AND** B13A **IN** (2,3,4,5)) **then** HCPvisit = 2;

\* Health Care Provider Asking about Smoking;

**IF** D06=1 **OR** (B16=1 **AND** B13A **IN** (2,3,4,5)) **THEN** ASKSMK=1;

**ELSE IF** D06=2 **OR** (B16=2 **AND** B13A **IN** (2,3,4,5)) **THEN** ASKSMK=2;

\* Health Care Provider's Advice to Quit Smoking Tobacco;

**IF** D07=1 **OR** (B17=1 **AND** B13A **IN** (2,3,4,5)) **THEN** ADQTSMK=1;

**ELSE IF** (D07=2 **OR** D06=2) **OR** ((B17=2 **OR** B16=2) **AND** B13A **IN** (2,3,4,5)) **THEN** ADQTSMK=2;

**LABEL** QTSMK12="Smoking Quit Attempt in the Past 12 Months";

**LABEL** HCPVISIT= "Visited a Health Care Provider";

**LABEL** ASKSMK= "Health Care Provider Asking about Smoking";

**LABEL** ADQTSMK="Health Care Provider's Advice to Quit Tobacco Smoking";

**FORMAT** QTSMK12 HCPvisit ASKSMK ADQTSMK YESNOF.;

**RUN**;

\*\*\*\*\* CALCULATE ESTIMATES \*\*\*\*\*;

TITLE1 "Table 5.1: Weighted percentages and 95% CIs for 'Made quit attempt' column";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where QTSMK12 = 'Yes'. Do not report for 'No'. \*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. \*\*\*\*";

**Proc surveyfreq DATA=TABLE51 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**TABLE** QTSMK12/CL ;

**table** (a01 AGEGRP RESIDENCE) \* QTSMK12

agegrp25 \* education \* qtsmk12/ROW NOCELLPERCENT CL ;

**run;**

TITLE1 "Table 5.1: Weighted percentages and 95% CIs for 'Visited a HCP' column";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where HCPVISIT = 'Yes'. Do not report for 'No'. \*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. \*\*\*\*";

**Proc surveyfreq DATA=TABLE51 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**TABLE** HCPvisit/CL ;

**table** (a01 AGEGRP RESIDENCE) \* HCPvisit

agegrp25 \* education \* hcpvisit/ROW NOCELLPERCENT CL ;

**run;**

TITLE1 "Table 5.1: Weighted percentages and 95% CIs for 'Asked by HCP if a smoker' column";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where ASKSMK = 'Yes'. Do not report for 'No'.\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.\*\*\*\*";

**Proc surveyfreq DATA=TABLE51 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**TABLE** ASKSMK/CL ;

**table** (a01 AGEGRP RESIDENCE) \* ASKSMK

agegrp25 \* education \* asksmk/ROW NOCELLPERCENT CL ;

**run;**

TITLE1 "Table 5.1: Weighted percentages and 95% CIs for 'Advised to quit by HCP' column";

TITLE2 "\*\*\*\*NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where ADQTSMK = 'Yes'. Do not report for 'No'.\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.\*\*\*\*";

**Proc surveyfreq DATA=TABLE51 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**TABLE** ADQTSMK/CL ;

**table** (a01 AGEGRP RESIDENCE) \* ADQTSMK

agegrp25 \* education \* adqtsmk/ROW NOCELLPERCENT CL ;

run;

\*\*\*\*\*  
\*CALCULATIONS FOR TABLE 5.2 \*\*\*\*\*  
\*\*\*\*\*,

DATA TABLE52; SET GATS.FINAL;

\*\*\*\*\*,

\*The calculations below are based on the response options from the GATS core questionnaire. Country-specific questionnaires may vary in the number and order of response options and the calculations should be adjusted accordingly. For example, D03F and B18F would need to be removed from calculation of OTHERSMK if smokeless tobacco use not measured;

\*\*\*\*\*,

\*\*\* Use of Cessation Aides by Smokers;

\* Pharmacotherapy (nicotine replacement therapy, other prescription medications);

IF ((D03B=1 OR D03C=1) OR ((B18B=1 OR B18C=1) AND (B13A IN (2,3,4,5)))) THEN PHARMSMK=1;

ELSE IF ((D03B=2 AND D03C=2) OR ((B18B=2 AND B18C=2) AND (B13A IN (2,3,4,5)))) THEN PHARMSMK=2;

\* Counseling/advice (counseling, including at a smoking cessation clinic, a quit line or smoking telephone support line);

IF ((D03A=1 OR D03E=1) OR ((B18A=1 OR B18E=1) AND (B13A IN (2,3,4,5)))) THEN COUNSELSMK=1;

ELSE IF ((D03A=2 and D03E=2) OR ((B18A=2 and B18E=2) AND (B13A IN (2,3,4,5)))) THEN COUNSELSMK=2;

\* Other methods (traditional medicines, switching to smokeless tobacco, anything else);

```
IF ((D03D=1 OR D03F=1 OR D03G=1) OR ((B18D=1 OR B18F=1 OR B18G=1) AND (B13A IN (2,3,4,5)))) THEN OTHERSMK =1;
```

```
ELSE IF ((D03D=2 AND D03F=2 AND D03G=2) OR ((B18D=2 AND B18F=2 AND B18G=2) AND (B13A IN (2,3,4,5)))) THEN OTHERSMK=2;
```

```
*****;
```

```
LABEL PHARMSMK= "Use of Pharmacotherapy for Smoking Cessation";
```

```
LABEL COUNSELSMK= "Use of Counseling or Advice for Smoking Cessation";
```

```
LABEL OTHERSMK= "Use of Other Methods for Smoking Cessation";
```

```
FORMAT PHARMSMK COUNSELSMK OTHERSMK YESNOF.;
```

```
run;
```

```
***** CALCULATE ESTIMATES *****;
```

```
TITLE1 "Table 5.2: Weighted percentages and 95% CIs for 'Pharmacotherapy' column";
```

```
TITLE2 "**** NOTE: Use row percentages and row 95% CIs for subgroups****";
```

```
TITLE3 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. ****";
```

```
Proc surveyfreq DATA=TABLE52 NOSUMMARY;
```

```
stratum &stratumvar;
```

```
cluster &clustervar;
```

```
weight &weightvar;
```

```
table PHARMSMK /CL ;
```

```
TABLE (a01 AGEGRP RESIDENCE) * PHARMSMK
```

```
AGEGRP25 * education * PHARMSMK/ROW NOCELLPERCENT CL ;
```

```
run;
```

```
TITLE1 "Table 5.2: Weighted percentages and 95% CIs for 'Counseling/Advice' column";
```

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. \*\*\*\*";

**Proc surveyfreq** DATA=TABLE52 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table COUNSELSMK /CL ;

TABLE (a01 AGEGRP RESIDENCE) \* COUNSELSMK

AGEGRP25 \* education \* COUNSELSMK/ROW NOCELLPERCENT CL ;

run;

TITLE1 "Table 5.2: Weighted percentages and 95% CIs for 'Other' column";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. \*\*\*\*";

**Proc surveyfreq** DATA=TABLE52 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table OTHERSMK /CL ;

TABLE (a01 AGEGRP RESIDENCE) \* OTHERSMK

AGEGRP25 \* education \* OTHERSMK/ROW NOCELLPERCENT CL ;

run;

\*\*\*\*\*

\*CALCULATIONS FOR TABLE 5.3\*\*\*\*\*

\*\*\*\*\*

DATA TABLE53; SET GATS.FINAL;

\* Interest in Quitting Smoking ;

IF D08=1 THEN INQSMK4=1;

ELSE IF D08=2 THEN INQSMK4=2;

ELSE IF D08=3 THEN INQSMK4=3;

ELSE IF D08=4 THEN INQSMK4=4;

else if d08=7 then inqsmk4=5;

LABEL INQSMK4= "Interest in Quitting Smoking";

FORMAT INQSMK4 WHEN.;

RUN;

\*\*\*\*\* CALCULATE ESTIMATES \*\*\*\*\*;

TITLE1 "Table 5.3: Weighted percentages and 95% CIs for interest in quitting smoking categories";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. \*\*\*\*";

Proc surveyfreq DATA=TABLE53 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table INQSMK4 /CL ;

table (a01 AGEGRP RESIDENCE) \* INQSMK4

agegrp25 \* education \* inqsmk4/ROW NOCELLPERCENT CL ;

**run;**

```
*****  
*CALCULATIONS FOR TABLE 6.1*****  
*****;
```

**DATA** TABLE61; **SET** GATS.FINAL;

\* Exposure to Secondhand Smoke at Work;

**IF** E05 **IN** (1,3) **AND** E08=1 **THEN** SHSWORK=1;

**ELSE IF** E05 **IN** (1,3) **AND** E08=2 **THEN** SHSWORK=2;

\* Current Tobacco Smokers;

**IF** SMOKER **IN** (1,2,3) **THEN** CTSMK=1;

**ELSE IF** SMOKER **IN** (4,5,6) **THEN** CTSMK=2;

**LABEL** CTSMK="Current Tobacco Smokers";

**LABEL** SHSWORK="Exposure to Secondhand Smoke at Work";

**FORMAT** SHSWORK YESNOF. CTSMK CURRENTSF.;

**RUN;**

```
***** CALCULATE ESTIMATES *****;
```

**TITLE1** "Table 6.1: Weighted percentages and 95% CIs for Overall column";

**TITLE2** "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

**TITLE3** "\*\*\*\* NOTE: Only report estimates where SHSWORK = 'Yes'. Do not report for 'No'. \*\*\*\*";

**TITLE4** "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. \*\*\*\*";

```

Proc surveyfreq DATA=TABLE61 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table SHSWORK /CL ;

TABLE (a01 AGEGRP RESIDENCE) * SHSWORK

      agegrp25 * education * shswork/CL ROW NOCELLPERCENT ;

run;

TITLE1 "Table 6.1: Weighted percentages and 95% CIs for Non-smokers column";
TITLE2 "****NOTE: Use row percentages and row 95% CIs for subgroups****";
TITLE3 "**** NOTE: Only report estimates where CTSMK = 'Non-smoker'. ****";
TITLE4 "**** NOTE: Only report estimates where SHSWORK = 'Yes'. Do not report for 'No'.****";
TITLE5 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age
<25'. ****";

```

```

Proc surveyfreq DATA=TABLE61 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table CTSMK * SHSWORK

      CTSMK * (a01 AGEGRP RESIDENCE) * SHSWORK

      CTSMK * agegrp25 * education * shswork/CL ROW NOCELLPERCENT ;

run;

```

```

*****
*CALCULATIONS FOR TABLE 6.2*****

```

\*\*\*\*\*,  
;

DATA TABLE62; SET GATS.FINAL;

\*\*\* Exposure to Secondhand Smoke (SHS) in Public Places;

\* Government buildings;

IF E10=1 THEN SHSGOV=1;

ELSE IF E10=2 OR E10=7 OR E09=2 THEN SHSGOV=2;

\* HEALTH CARE FACILITIES;

IF E12=1 THEN SHSHEALTH=1;

ELSE IF E12=2 OR E12=7 OR E11=2 THEN SHSHEALTH=2;

\* RESTAURANTS;

IF E14=1 THEN SHSRESTAURANTS=1;

ELSE IF E14=2 OR E14=7 OR E13=2 THEN SHSRESTAURANTS=2;

\* PUBLIC TRANSPORTATION;

IF E16=1 THEN SHSPUBTRANSPORT=1;

ELSE IF E16=2 OR E16=7 OR E15=2 THEN SHSPUBTRANSPORT=2;

\* Current Tobacco Smokers;

IF SMOKER IN (1,2,3) THEN CTSMK=1;

ELSE IF SMOKER IN (4,5,6) THEN CTSMK=2;

LABEL SHSGOV= "Exposure to SHS in Government Buildings";

LABEL SHSHEALTH= "Exposure to SHS in Health Care Facilities";

```

LABEL SHSRESTAURANTS= "Exposure to SHS in Restaurants";
LABEL SHSPUBTRANSPORT= "Exposure to SHS on Public Transportation";
LABEL CTSMK="Current Tobacco Smokers";
FORMAT SHSGOV SHSHEALTH SHSRESTAURANTS SHSPUBTRANSPORT SHS. CTSMK
CURRENTSF.;
RUN;

```

```

***** CALCULATE ESTIMATES *****;

```

```

TITLE1 "Table 6.2: Weighted percents and 95% CIs for Government Buildings for Overall rows";
TITLE2 "****NOTE: Use row percentages and row 95% CIs for subgroups****";
TITLE3 "**** NOTE: Only report estimates where SHSGOV = 'Yes'. Do not report for 'No'.****";
TITLE4 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age
<25'.****";

```

```

Proc surveyfreq DATA=TABLE62 NOSUMMARY;

```

```

stratum &stratumvar;

```

```

cluster &clustervar;

```

```

weight &weightvar;

```

```

table SHSGOV /CL ;

```

```

table (a01 AGEGRP RESIDENCE) * SHSGOV

```

```

      AGEGRP25 * education * SHSGOV/CL ROW NOCELLPERCENT ;

```

```

run;

```

```

TITLE1 "Table 6.2: Weighted percents and 95% CIs for Government Buildings for Non-smokers rows";
TITLE2 "**** NOTE: Use row percentages and row 95% CIs for subgroups****";
TITLE3 "**** NOTE: Only report estimates where SHSGOV = 'Yes'. Do not report for 'No'.****";
TITLE4 "**** NOTE: Only report estimates where CTSMK = 'Non-smoker'.****";
TITLE5 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age
<25'.****";

```

```
Proc surveyfreq DATA=TABLE62 NOSUMMARY;
```

```
stratum &stratumvar;
```

```
cluster &clustervar;
```

```
weight &weightvar;
```

```
table CTSMK * SHSGOV
```

```
CTSMK * (a01 AGEGRP RESIDENCE) * SHSGOV
```

```
CTSMK * AGEGRP25 * education * SHSGOV/CL ROW NOCELLPERCENT ;
```

```
run;
```

```
TITLE1 "Table 6.2: Weighted percents and 95% CIs for Health Care Facilities for Overall rows";
```

```
TITLE2 "**** NOTE: Use row percentages and row 95% CIs for subgroups****";
```

```
TITLE3 "**** NOTE: Only report estimates where SHSHEALTH = 'Yes'. Do not report for 'No'.****";
```

```
TITLE4 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.****";
```

```
Proc surveyfreq DATA=TABLE62 NOSUMMARY;
```

```
stratum &stratumvar;
```

```
cluster &clustervar;
```

```
weight &weightvar;
```

```
table SHSHEALTH /CL ;
```

```
table (a01 AGEGRP RESIDENCE) * SHSHEALTH
```

```
AGEGRP25 * education * SHSHEALTH/CL ROW NOCELLPERCENT ;
```

```
run;
```

```
TITLE1 "Table 6.2: Weighted percents and 95% CIs for Health Care Facilities for Non-smokers rows";
```

```
TITLE2 "**** NOTE: Use row percentages and row 95% CIs for subgroups****";
```

```
TITLE3 "**** NOTE: Only report estimates where SHSHEALTH = 'Yes'. Do not report for 'No'.****";
```

TITLE4 "\*\*\*\* NOTE: Only report estimates where CTSMK = 'Non-smoker'. \*\*\*\*";

TITLE5 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. \*\*\*\*";

**Proc surveyfreq DATA=TABLE62 NOSUMMARY;**

**stratum &stratumvar;**

**cluster &clustervar;**

**weight &weightvar;**

**table CTSMK \* SHSHEALTH**

CTSMK \* (a01 AGEGRP RESIDENCE) \* SHSHEALTH

CTSMK \* AGEGRP25 \* education \* SHSHEALTH/CL ROW NOCELLPERCENT ;

**run;**

TITLE1 "Table 6.2: Weighted percents and 95% CIs for Restaurants for Overall rows";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where SHSRESTAURANTS = 'Yes'. Do not report for 'No'. \*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. \*\*\*\*";

**Proc surveyfreq DATA=TABLE62 NOSUMMARY;**

**stratum &stratumvar;**

**cluster &clustervar;**

**weight &weightvar;**

**table SHSRESTAURANTS /CL ;**

**table (a01 AGEGRP RESIDENCE) \* SHSRESTAURANTS**

AGEGRP25 \* education \* SHSRESTAURANTS/CL ROW NOCELLPERCENT ;

**run;**

TITLE1 "Table 6.2: Weighted percents and 95% CIs for Restaurants for Non-smokers rows";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where SHSRESTAURANTS = 'Yes'. Do not report for 'No'.\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where CTSMK = 'Non-smoker'.\*\*\*\*";

TITLE5 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.\*\*\*\*";

```
Proc surveyfreq DATA=TABLE62 NOSUMMARY;
stratum &stratumvar;
cluster &clustervar;
weight &weightvar;
table CTSMK * SHSRESTAURANTS
      CTSMK * (a01 AGEGRP RESIDENCE) * SHSRESTAURANTS
      CTSMK * AGEGRP25 * education * SHSRESTAURANTS/CL ROW NOCELLPERCENT ;
run;
```

TITLE1 "Table 6.2: Weighted percents and 95% CIs for Public Transportation for Overall rows";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where SHSPUBTRANSPORT = 'Yes'. Do not report for 'No'.\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.\*\*\*\*";

```
Proc surveyfreq DATA=TABLE62 NOSUMMARY;
stratum &stratumvar;
cluster &clustervar;
weight &weightvar;
table SHSPUBTRANSPORT /CL ;
table (a01 AGEGRP RESIDENCE) * SHSPUBTRANSPORT
```

```

    AGEGRP25 * education * SHSPUBTRANSPORT/CL ROW NOCELLPERCENT ;

run;

TITLE1 "Table 6.2: Weighted percents and 95% CIs for Public Transportation for Non-smokers rows";
TITLE2 "****NOTE: Use row percentages and row 95% CIs for subgroups****";
TITLE3 "**** NOTE: Only report estimates where SHSPUBTRANSPORT = 'Yes'. Do not report for 'No'.****";
TITLE4 "**** NOTE: Only report estimates where CTSMK = 'Non-smoker'.****";
TITLE5 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.****";

```

```

Proc surveyfreq DATA=TABLE62 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table CTSMK * SHSPUBTRANSPORT
      CTSMK * (a01 AGEGRP RESIDENCE) * SHSPUBTRANSPORT
      CTSMK * AGEGRP25 * education * SHSPUBTRANSPORT/CL ROW NOCELLPERCENT ;

run;

```

```

*****
*CALCULATIONS FOR TABLE 7.1*****
*****

```

```

DATA TABLE71; SET GATS.FINAL;

```

- \* Brand of Last Cigarette Purchase;
- \* Response categories will need to be formatted per the country specific brands;

```
IF F03~=9 THEN BRAND=F03;
```

```
LABEL BRAND= "Last Brand Purchased";
```

```
RUN;
```

```
***** CALCULATE ESTIMATES *****;
```

```
TITLE1 "Table 7.1: Weighted percentages and 95% CIs";
```

```
TITLE2 "Presented overall, by gender, by age, residence, and then by education level";
```

```
TITLE3 "****NOTE: Use row percentages and row CIs for subgroups****";
```

```
TITLE4 "****NOTE: Use the top five brands to fill in the country report****";
```

```
TITLE5 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age  
<25'. ****";
```

```
Proc surveyfreq DATA=TABLE71 NOSUMMARY;
```

```
stratum &stratumvar;
```

```
cluster &clustervar;
```

```
weight &weightvar;
```

```
table BRAND /CL ;
```

```
table (a01 AGEGRP RESIDENCE) * BRAND
```

```
AGEGRP25 * education * BRAND/CL ROW NOCELLPERCENT ;
```

```
run;
```

```
*****
```

```
*CALCULATIONS FOR TABLE 7.2*****
```

```
*****
```

```
DATA TABLE72; SET GATS.FINAL;
```

\* Location of Last Cigarette Purchase;

\* Response categories will need to be formatted in the PROC FORMAT per the country specific locations;

if F04 <77 then LOCATION=F04;

LABEL LOCATION= "Location of Last Cigarette Purchase";

FORMAT LOCATION LOCF.;

run;

\*\*\*\*\* CALCULATE ESTIMATES \*\*\*\*\*;

TITLE1 "Table 7.2: Weighted percentages and 95% CIs";

TITLE2 "Presented overall, by gender, by age, and then by residence";

TITLE3 "\*\*\*\*NOTE: Use column percentages for subgroups\*\*\*\*";

Proc surveyfreq DATA=TABLE72 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table LOCATION/CL ;

table LOCATION \* (A01 AGEGRP25 RESIDENCE)/CL COL NOCELLPERCENT ;

run;

\*\*\*\*\*

\*CALCULATIONS FOR TABLE 7.3\*\*\*\*\*

\*\*\*\*\*

DATA TABLE73; SET GATS.FINAL;

\* Number of manufactured cigarettes smoked per day (among daily smokers);

IF B06A>0 AND B06A<888 THEN MANUFDAY=B06A;

ELSE IF B06A=888 AND B06A1<999 THEN MANUFDAY = B06A1/7;

\*\*\* Monthly Individual Cigarette Expenditures;

\* Number of manufactured cigarettes bought at last purchase;

IF F01A = 1 THEN NUMCIG = F01B;

ELSE IF F01A IN (2,3,4) THEN NUMCIG = F01B\*F01D;

\* Price paid per manufactured cigarette;

IF F02<999 THEN PAYCIG=F02/NUMCIG;

\*Cigarette Expenditures Per Month;

MONTHCOST=(PAYCIG\*MANUFDAY)\*365/12;

LABEL NUMCIG= "Number of manufactured cigarettes bought at last purchase";

LABEL PAYCIG= "Price paid per manufactured cigarette";

LABEL monthcost= "Total monthly expenditures on manufactured cigarettes";

**RUN;**

\*\*\*\*\* CALCULATE ESTIMATES \*\*\*\*\*;

TITLE1 "Table 7.3: Weighted averages and 95% CIs for Cigarette expenditures per month";

TITLE2 "Presented overall, by gender, by age, and then by residence";

**Proc surveymeans DATA=TABLE73 ;**

**stratum** &stratumvar;

**cluster** &clustervar;

weight &weightvar;

Var monthcost;

domain A01 AGEGRP RESIDENCE;

Run;

TITLE1 "Table 7.3: Weighted averages and 95% CIs";

TITLE2 "By education level";

TITLE3 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.\*\*\*\*";

Proc surveymeans DATA=TABLE73;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

Var monthcost;

domain AGEGRP25\*education;

Run;

\*\*\*\*\*

\*CALCULATIONS FOR TABLE 8.1\*\*\*\*\*

\*\*\*\*\*

DATA TABLE81; SET GATS.FINAL;

\* Awareness of Anti-Smoking Information in Specific Channels;

\* The calculations below are based on the response options from the GATS core questionnaire.

Country-specific questionnaires may vary in the number and order of response options and the

calculations should be adjusted accordingly.

Notice that there are two possible structures for these questions--Structure 1 (asking media questions about only one product – e.g., cigarettes) and Structure 2 (asking about two or more products – e.g., cigarettes, smokeless tobacco). Identify which structure is used in the country's questionnaire and use only that structure in the code;

\*\*\*\*\* ,

\* Structure 1 (asking media questions about only one product – e.g., cigarettes);

\*\*\*\*\* ,

\* In newspapers/magazines;

IF G01A=1 THEN AWSMKNEWS=1;

ELSE IF G01A IN (2,7) THEN AWSMKNEWS=2;

\* Awareness of Anti-Smoking Information on TV or the Radio;

IF G01B=1 OR G01C=1 THEN AWSMKMG=1;

ELSE IF G01B IN (2,7) AND G01C IN (2,7) THEN AWSMKMG=2;

\* On TV;

IF G01B=1 THEN AWSMKTV=1;

ELSE IF G01B IN (2,7) THEN AWSMKTV=2;

\* On the radio;

IF G01C=1 THEN AWSMKRAD=1;

ELSE IF G01C IN (2,7) THEN AWSMKRAD=2;

\* On billboards;

IF G01D=1 THEN AWSMKBB=1;

ELSE IF G01D IN (2,7) THEN AWSMKBB=2;

\* Elsewhere;

if G01E=1 then AWSMKELSE=1;

else if G01E in (2,7) then AWSMKELSE=2;

\*\*\*\*\* ;

\* Structure 2 (asking about two or more products – e.g., cigarettes, smokeless tobacco);

\*\*\*\*\* ;

\* In newspapers/magazines;

IF G01A1=1 THEN AWSMKNEWS=1;

ELSE IF G01A1 IN (2,7) THEN AWSMKNEWS=2;

\* Awareness of Anti-Smoking Information on TV or the Radio;

IF G01B1=1 OR G01C1=1 THEN AWSMKMG=1;

ELSE IF G01B1 IN (2,7) AND G01C1 IN (2,7) THEN AWSMKMG=2;

\* On TV;

IF G01B1=1 THEN AWSMKTV=1;

ELSE IF G01B1 IN (2,7) THEN AWSMKTV=2;

\* On the radio;

IF G01C1=1 THEN AWSMKRAD=1;

ELSE IF G01C1 IN (2,7) THEN AWSMKRAD=2;

\* On billboards;

IF G01D1=1 THEN AWSMKBB=1;

ELSE IF G01D1 IN (2,7) THEN AWSMKBB=2;

\* Elsewhere;

if GO1E1=1 then AWSMKELSE=1;

else if GO1E1 IN (2,7) then AWSMKELSE=2;

\*\*\*\*\* ;

\*Any location;

if AWSMKNEWS=1|AWSMKTV=1|AWSMKRAD=1|AWSMKBB=1|AWSMKELSE=1 then Anylocation=1;

else if AWSMKNEWS=2 and AWSMKTV=2 and AWSMKRAD=2 and AWSMKBB=2 and AWSMKELSE=2  
then Anylocation=2;

\* Current Tobacco Smokers;

IF SMOKER IN (1,2,3) THEN CTSMK=1;

ELSE IF SMOKER IN (4,5,6) THEN CTSMK=2;

label CTSMK="Current Tobacco Smokers";

label AWSMKNEWS="Awareness of Anti-Smoking Information in Newspapers or in Magazines";

label AWSMKMG="Awareness of Anti-Smoking Information on TV or the Radio";

label AWSMKTV="Awareness of Anti-Smoking Information on TV";

label AWSMKRAD="Awareness of Anti-Smoking Information on Radio";

label AWSMKBB="Awareness of Anti-Smoking Information on Billboards";

label AWSMKELSE="Awareness of Anti-Smoking Information Somewhere else";

label Anylocation="Awareness of Anti-Smoking Information at any location";

Format AWSMKNEWS AWSMKTV AWSMKRAD AWSMKBB AWSMKELSE Anylocation AWSMKMG

yesnof. CTSMK CURRENTSF.;

run;

\*\*\*\*\* CALCULATE ESTIMATES \*\*\*\*\*;

TITLE1 "Table 8.1: Weighted percents and 95% CIs for Overall columns and rows";

**Proc surveyfreq** DATA=TABLE81 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table AWSMKNEWS AWSMKMG AWSMKTV AWSMKRAD AWSMKBB AWSMKELSE Anylocation /CL ;

run;

TITLE1 "Table 8.1: Weighted percents and 95% CIs for smoking status rows in Overall column";

TITLE2 "\*\*\*\*NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

**Proc surveyfreq** DATA=TABLE81 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table CTSMK \* (AWSMKNEWS AWSMKMG AWSMKTV AWSMKRAD AWSMKBB AWSMKELSE  
Anylocation)/CL ROW NOCELLPERCENT ;

run;

TITLE1 "Table 8.1: Weighted percents and 95% CIs for gender columns for Overall rows ";

TITLE2 "\*\*\*\*NOTE: Use row percentages and row 95% CIs \*\*\*\*";

**Proc surveyfreq** DATA=TABLE81 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table A01 \* (AWSMKNEWS AWSMKMG AWSMKTV AWSMKRAD AWSMKBB AWSMKELSE  
Anylocation)/CL ROW NOCELLPERCENT ;

**run;**

TITLE1 "Table 8.1: Weighted percents and 95% CIs for gender columns for smoking status rows";

TITLE2 "\*\*\*\*NOTE: Use row percentages and row 95% CIs \*\*\*\*";

**Proc surveyfreq DATA=TABLE81 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** A01 \* CTSMK \* (AWSMKNEWS AWSMKMG AWSMKTV AWSMKRAD AWSMKBB AWSMKELSE  
Anylocation)/**CL ROW NOCELLPERCENT** ;

**run;**

TITLE1 "Table 8.1: Weighted percents and 95% CIs by for age columns for Overall rows";

TITLE2 "\*\*\*\*NOTE: Use row percentages and row 95% CIs \*\*\*\*";

**Proc surveyfreq DATA=TABLE81 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** agegrp25 \* (AWSMKNEWS AWSMKMG AWSMKTV AWSMKRAD AWSMKBB AWSMKELSE  
Anylocation)/**CL ROW NOCELLPERCENT** ;

**run;**

TITLE1 "Table 8.1: Weighted percents and 95% CIs for age columns for smoking status rows";

TITLE2 "\*\*\*\*NOTE: Use row percentages and row 95% CIs \*\*\*\*";

**Proc surveyfreq DATA=TABLE81 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** agegrp25 \* CTSMK \* (AWSMKNEWS AWSMKMG AWSMKTV AWSMKRAD AWSMKBB  
AWSMKELSE Anylocation)/**CL ROW NOCELLPERCENT** ;

**run;**

**TITLE1** "Table 8.1: Weighted percents and 95% CIs for residence columns for overall rows";

**TITLE2** "\*\*\*\*NOTE: Use row percentages and row 95% CIs \*\*\*\*";

**Proc surveyfreq DATA=TABLE81 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** Residence \* (AWSMKNEWS AWSMKMG AWSMKTV AWSMKRAD AWSMKBB AWSMKELSE  
Anylocation)/**CL ROW NOCELLPERCENT** ;

**run;**

**TITLE1** "Table 8.1: Weighted percents and 95% CIs for residence columns for smoking status rows";

**TITLE2** "\*\*\*\*NOTE: Use row percentages and row 95% CIs \*\*\*\*";

**Proc surveyfreq DATA=TABLE81 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** Residence \* CTSMK \* (AWSMKNEWS AWSMKMG AWSMKTV AWSMKRAD AWSMKBB  
AWSMKELSE Anylocation)/**CL ROW NOCELLPERCENT** ;

**run;**

```
*****
*CALCULATIONS FOR TABLE 8.2*****
*****,
```

```
DATA TABLE82; SET GATS.FINAL;
```

```
* Noticing Health Warning Labels on Cigarette Packages;
```

```
if G02=1 then SAWCIGLABEL=1;
```

```
else if G02 in (2,3) then SAWCIGLABEL=2;
```

```
* Thinking of Quitting Because of Health Warning Labels on Cigarette Packages;
```

```
IF G03=1 THEN LBLCIGPK=1;
```

```
ELSE IF SMOKER IN (1,2,3) AND ((G02 IN(2,3) AND G03 NE .) OR G03 IN(2,7)) THEN LBLCIGPK=2;
```

```
* Current Tobacco Smokers;
```

```
IF SMOKER IN (1,2,3) THEN CTSMK=1;
```

```
ELSE IF SMOKER IN (4,5,6) THEN CTSMK=2;
```

```
LABEL CTSMK="Current Tobacco Smokers";
```

```
label SAWCIGLABEL="Noticing Health Warnings Labels on Cigarette Packages";
```

```
LABEL LBLCIGPK="Thinking of Quitting Because of Health Warning Labels on Cigarette Packages";
```

```
Format SAWCIGLABEL LBLCIGPK yesnof. CTSMK CURRENTSF.;
```

```
run;
```

```
***** CALCULATE ESTIMATES *****;
```

```
TITLE1 "Table 8.2: Weighted percents and 95% CIs for 'noticed health warnings' column";
```

```
TITLE2 "**** NOTE: Use row percentages and row 95% CIs for subgroups****";
```

TITLE3 "\*\*\*\* NOTE: Only report estimates where CTSMK = 'Current tobacco smoker'.\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.\*\*\*\*";

**Proc surveyfreq DATA=TABLE82 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** CTSMK \* SAWCIGLABEL

CTSMK \* (a01 AGEGRP RESIDENCE) \* SAWCIGLABEL

CTSMK \* AGEGRP25 \* education \* SAWCIGLABEL/CL ROW NOCELLPERCENT ;

**run;**

TITLE1 "Table 8.2: Weighted percents and 95% CIs for 'thought about quitting' column";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where CTSMK = 'Current tobacco smoker'.\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'.\*\*\*\*";

**Proc surveyfreq DATA=TABLE82 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** CTSMK \* LBLCIGPK

CTSMK \* (a01 AGEGRP RESIDENCE) \* LBLCIGPK

CTSMK \* AGEGRP25 \* education \* LBLCIGPK/CL ROW NOCELLPERCENT ;

**run;**

\*\*\*\*\*  
 \*CALCULATIONS FOR TABLES 8.3, 8.4, and 8.5\*\*\*\*\*  
 \*\*\*\*\*

**DATA** TABLES\_83\_84\_85; **SET** GATS.FINAL;

\* Awareness of Cigarette Advertising in Specific Channels;

\* The calculations below are based on the response options from the GATS core questionnaire. Country-specific questionnaires may vary in the number and order of response options and the calculations should be adjusted accordingly.

Notice that there are two possible structures for these questions--Structure 1 (asking media questions about only one product – e.g., cigarettes) and Structure 2 (asking about two or more products – e.g., cigarettes, smokeless tobacco). Identify which structure is used in the country's questionnaire and use only that structure in the code;

\*\*\*\*\*

\* Structure 1 (asking media questions about only one product – e.g., cigarettes);

\*\*\*\*\*

\*In stores;

**IF** G04A=1 **THEN** CIGADVST =1;

**ELSE IF** G04A IN (2,7) **THEN** CIGADVST=2;

\*On television;

**IF** G04B=1 **THEN** CIGADVTV =1;

**ELSE IF** G04B IN (2,7) **THEN** CIGADVTV=2;

\*On the radio;

IF G04C=1 THEN CIGADV RD =1;  
ELSE IF G04C IN (2,7) THEN CIGADV RD=2;

\*On billboards;

IF G04D=1 THEN CIGADV BB =1;  
ELSE IF G04D IN (2,7) THEN CIGADV BB=2;

\*On posters;

IF G04E=1 THEN CIGADV POS =1;  
ELSE IF G04E IN (2,7) THEN CIGADV POS=2;

\*In newspapers or magazines;

IF G04F=1 THEN CIGADV NEWS =1;  
ELSE IF G04F IN (2,7) THEN CIGADV NEWS=2;

\*In cinemas;

IF G04G=1 THEN CIGADV CIN =1;  
ELSE IF G04G IN (2,7) THEN CIGADV CIN=2;

\*On the internet;

IF G04H=1 THEN CIGADV INT =1;  
ELSE IF G04H IN (2,7) THEN CIGADV INT=2;

\*On public transportation vehicles or stations;

IF G04I=1 THEN CIGADV PT =1;  
ELSE IF G04I IN (2,7) THEN CIGADV PT=2;

\*On public walls;

IF G04J=1 THEN CIGADVPW =1;  
ELSE IF G04J IN (2,7) THEN CIGADVPW =2;

\*Somewhere else;

IF G04K=1 THEN CIGADVELSE =1;  
ELSE IF G04K IN (2,7) THEN CIGADVELSE =2;

\* Awareness of Cigarette Sporting Event Sponsorship;

if G05=1 then CIGSPORT=1;  
else if G05 in (2,7) then CIGSPORT=2;

\*\*\* Awareness of Specific Types of Cigarette Promotions;

\* Free cigarettes;

IF G06A=1 THEN CIGFREE =1;  
ELSE IF G06A IN (2,7) THEN CIGFREE=2;

\*Cigarettes on sale;

IF G06B=1 THEN CIGSALE =1;  
ELSE IF G06B IN (2,7) THEN CIGSALE =2;

\* Cigarette coupons;

IF G06C=1 THEN CIGCOUPON =1;  
ELSE IF G06C IN (2,7) THEN CIGCOUPON =2;

\* Free gifts/ discounts;

IF G06D=1 THEN CIGGIFTS=1;  
ELSE IF G06D IN (2,7) THEN CIGGIFTS=2;

\* Cigarette clothing;

IF G06E=1 THEN CIGCLOTHING =1;  
ELSE IF G06E IN (2,7) THEN CIGCLOTHING=2;

\* Mail promotions;

IF G06F=1 THEN CIGMPROMO=1;  
ELSE IF G06F IN (2,7) THEN CIGMPROMO =2;

\*\*\*\*\* ,

\* Structure 2 (asking about two or more products – e.g., cigarettes, smokeless tobacco);

\*\*\*\*\* ,

\*In stores;

IF G04A1=1 THEN CIGADVST =1;  
ELSE IF G04A1 IN (2,7) THEN CIGADVST=2;

\*On television;

IF G04B1=1 THEN CIGADVTV =1;  
ELSE IF G04B1 IN (2,7) THEN CIGADVTV=2;

\*On the radio;

IF G04C1=1 THEN CIGADVVRD =1;  
ELSE IF G04C1 IN (2,7) THEN CIGADVVRD=2;

\*On billboards;

IF G04D1=1 THEN CIGADVBB =1;  
ELSE IF G04D1 IN (2,7) THEN CIGADVBB=2;

\*On posters;

IF G04E1=1 THEN CIGADVPOS =1;

ELSE IF G04E1 IN (2,7) THEN CIGADVPOS=2;

\*In newspapers or magazines;

IF G04F1=1 THEN CIGADVNEWS =1;

ELSE IF G04F1 IN (2,7) THEN CIGADVNEWS=2;

\*In cinemas;

IF G04G1=1 THEN CIGADVCIN =1;

ELSE IF G04G1 IN (2,7) THEN CIGADVCIN=2;

\*On the internet;

IF G04H1=1 THEN CIGADVINT =1;

ELSE IF G04H1 IN (2,7) THEN CIGADVINT=2;

\*On public transportation vehicles or stations;

IF G04I1=1 THEN CIGADVPT =1;

ELSE IF G04I1 IN (2,7) THEN CIGADVPT=2;

\*On public walls;

IF G04J1=1 THEN CIGADVPW =1;

ELSE IF G04J1 IN (2,7) THEN CIGADVPW =2;

\*Somewhere else;

IF G04K1=1 THEN CIGADVELSE =1;

ELSE IF G04K1 IN (2,7) THEN CIGADVELSE =2;

\* Awareness of Cigarette Sporting Event Sponsorship;

if G051=1 then CIGSPORT=1;

else if G051 in (2,7) then CIGSPORT=2;

\*\*\* Awareness of Specific Types of Cigarette Promotions;

\* Free cigarettes;

IF G06A1=1 THEN CIGFREE =1;

ELSE IF G06A1 IN (2,7) THEN CIGFREE=2;

\*Cigarettes on sale;

IF G06B1=1 THEN CIGSALE =1;

ELSE IF G06B1 IN (2,7) THEN CIGSALE =2;

\* Cigarette coupons;

IF G06C1=1 THEN CIGCOUPON =1;

ELSE IF G06C1 IN (2,7) THEN CIGCOUPON =2;

\* Free gifts/ discounts;

IF G06D1=1 THEN CIGGIFTS=1;

ELSE IF G06D1 IN (2,7) THEN CIGGIFTS=2;

\* Cigarette clothing;

IF G06E1=1 THEN CIGCLOTHING =1;

ELSE IF G06E1 IN (2,7) THEN CIGCLOTHING=2;

\* Mail promotions;

IF G06F1=1 THEN CIGMPROMO=1;

ELSE IF G06F1 IN (2,7) THEN CIGMPROMO =2;

\*\*\*\*\* ,

\*Noticed any advertisement, sponsorship, or promotion;

If CIGADVST=1| CIGADVTV=1| CIGADVVD=1| CIGADVBB=1| CIGADVPOS=1| CIGADVNEWS=1|  
CIGADVCIN=1| CIGADVINT=1| CIGADVPT=1| CIGADVVPW=1| CIGADVELSE=1| CIGSPORT=1|  
CIGFREE=1| CIGSALE=1| CIGCOUPON =1| CIGGIFTS=1| CIGCLOTHING=1| CIGMPROMO=1 then  
marketing=1;

else if CIGADVST=2 and CIGADVTV=2 and CIGADVVD=2 and CIGADVBB=2 and CIGADVPOS=2 and  
CIGADVNEWS=2 and CIGADVCIN=2 and CIGADVINT=2 and CIGADVPT=2 and CIGADVVPW=2 and  
CIGADVELSE=2 and CIGSPORT=2 and CIGFREE=2 and CIGSALE =2 and CIGCOUPON =2 and  
CIGGIFTS=2 and CIGCLOTHING=2 and CIGMPROMO =2 then marketing=2;

\* Current Tobacco Smokers;

IF SMOKER IN (1,2,3) THEN CTSMK=1;

ELSE IF SMOKER IN (4,5,6) THEN CTSMK=2;

Format CIGADVST CIGADVTV CIGADVVD CIGADVBB CIGADVPOS CIGADVNEWS CIGADVCIN  
CIGADVINT CIGADVPT CIGADVVPW CIGADVELSE CIGSPORT CIGFREE CIGSALE CIGCOUPON  
CIGGIFTS CIGCLOTHING CIGMPROMO marketing yesnof. CTSMK CURRENTSF.;

label CTSMK="Current Tobacco Smokers";

label CIGADVST="Noticing Cigarette Advertisements in Stores ";

label CIGADVTV="Noticing Cigarette Advertisements on TV";

label CIGADVVD="Noticing Cigarette Advertisements on the Radio";

label CIGADVBB="Noticing Cigarette Advertisements on Billboards";

label CIGADVPOS="Noticing Cigarette Advertisements on Posters";

label CIGADVNEWS="Noticing Cigarette Advertisements in Newspapers or in Magazines";

label CIGADVCIN="Noticing Cigarette Advertisements in Cinemas";

label CIGADVINT="Noticing Cigarette Advertisements on the Internet";

```

label CIGADVPT= "Awareness of Cigarette Advertising on Public Transportation Vehicles or Stations";
label CIGADVPW= "Awareness of Cigarette Advertising on Public Walls";
label CIGADVELSE= "Awareness of Cigarette Advertising Somewhere Else";
label CIGSPORT="Noticing Sports Sponsorship";
label CIGFREE="Noticing Cigarette Promotions - Free Samples of Cigarettes";
label CIGSALE= "Noticing Cigarette Promotions - Cigarettes on Sale";
label CIGCOUPON= "Noticing Cigarette Promotions - Cigarette Coupons";
label CIGGIFTS="Noticing Cigarette Promotions - Free gifts/discounts on other products";
label CIGCLOTHING="Noticing Cigarette Promotions - Clothing/item with brand name or logo";
label CIGMPROMO= "Noticing Cigarette Promotions - Mail Promotions for Cigarettes";
label marketing="Noticing any Advertisement, Sponsorship, or Promotion";
run;

```

```

***** CALCULATE ESTIMATES *****;

```

```

TITLE2 "Table 8.3: Weighted percents and 95% CIs for Overall column";

```

```

Proc surveyfreq DATA=TABLES_83_84_85 NOSUMMARY;

```

```

stratum &stratumvar;

```

```

cluster &clustervar;

```

```

weight &weightvar;

```

```

table CIGADVST CIGADVTV CIGADVVD CIGADVBB CIGADVPOS CIGADVNEWS CIGADVNCIN
CIGADVINT CIGADVPT CIGADVPW CIGADVELSE CIGSPORT CIGFREE CIGSALE CIGCOUPON
CIGGIFTS CIGCLOTHING CIGMPROMO marketing/CL ;

```

```

run;

```

```

TITLE2 "Table 8.3: Weighted percents and 95% CIs for gender columns";

```

```

TITLE3 "****NOTE: Use row percentages and row 95% CIs ****";

```

```

Proc surveyfreq DATA=TABLES_83_84_85 NOSUMMARY;

```

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** A01 \* (CIGADVST CIGADVTV CIGADVRD CIGADVBB CIGADVPOS CIGADVNEWS CIGADVCIN CIGADVINT CIGADVPT CIGADVPW CIGADVELSE CIGSPORT CIGFREE CIGSALE CIGCOUPON CIGGIFTS CIGCLOTHING CIGMPROMO marketing)/**CL ROW NOCELLPERCENT** ;

**run;**

**TITLE2** "Table 8.3: Weighted percents and 95% CIs for age columns";

**TITLE3** "\*\*\*\*NOTE: Use row percentages and row 95% CIs \*\*\*\*";

**Proc surveyfreq** DATA=TABLES\_83\_84\_85 **NOSUMMARY**;

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** agegrp25 \* (CIGADVST CIGADVTV CIGADVRD CIGADVBB CIGADVPOS CIGADVNEWS CIGADVCIN CIGADVINT CIGADVPT CIGADVPW CIGADVELSE CIGSPORT CIGFREE CIGSALE CIGCOUPON CIGGIFTS CIGCLOTHING CIGMPROMO marketing)/**CL ROW NOCELLPERCENT** ;

**run;**

**TITLE2** "Table 8.3: Weighted percents and 95% CIs for residence columns";

**TITLE3** "\*\*\*\*NOTE: Use row percentages and row 95% CIs \*\*\*\*";

**Proc surveyfreq** DATA=TABLES\_83\_84\_85 **NOSUMMARY**;

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** Residence \* (CIGADVST CIGADVTV CIGADVRD CIGADVBB CIGADVPOS CIGADVNEWS CIGADVCIN CIGADVINT CIGADVPT CIGADVPW CIGADVELSE CIGSPORT CIGFREE CIGSALE CIGCOUPON CIGGIFTS CIGCLOTHING CIGMPROMO marketing)/**CL ROW NOCELLPERCENT** ;

**run;**

TITLE2 "Tables 8.4 and 8.5: Weighted percents and 95% CIs for Overall column";

TITLE3 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where CTSMK = 'Current tobacco smoker' for Table 8.4.\*\*\*\*";

TITLE5 "\*\*\*\* NOTE: Only report estimates where CTSMK = 'Non-smoker' for Table 8.5.\*\*\*\*";

**Proc surveyfreq DATA=TABLES\_83\_84\_85 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** CTSMK \* (CIGADVST CIGADVTV CIGADVVD CIGADVBB CIGADVPOS CIGADVNEWS  
CIGADVCIN CIGADVINT CIGADVPT CIGADVPW CIGADVELSE CIGSPORT CIGFREE CIGSALE  
CIGCOUPON CIGGIFTS CIGCLOTHING CIGMPROMO marketing)/**CL ROW NOCELLPERCENT** ;

**run;**

TITLE2 "Tables 8.4 and 8.5: Weighted percents and 95% CIs for Gender columns";

TITLE3 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where CTSMK = 'Current tobacco smoker' for Table 8.4.\*\*\*\*";

TITLE5 "\*\*\*\* NOTE: Only report estimates where CTSMK = 'Non-smoker' for Table 8.5.\*\*\*\*";

**Proc surveyfreq DATA=TABLES\_83\_84\_85 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** CTSMK \* A01 \* (CIGADVST CIGADVTV CIGADVVD CIGADVBB CIGADVPOS CIGADVNEWS  
CIGADVCIN CIGADVINT CIGADVPT CIGADVPW CIGADVELSE CIGSPORT CIGFREE CIGSALE  
CIGCOUPON CIGGIFTS CIGCLOTHING CIGMPROMO marketing)/**CL ROW NOCELLPERCENT** ;

**run;**

TITLE2 "Tables 8.4 and 8.5: Weighted percents and 95% CIs for Age columns";  
TITLE3 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";  
TITLE4 "\*\*\*\* NOTE: Only report estimates where CTSMK = 'Current tobacco smoker' for Table 8.4.\*\*\*\*";  
TITLE5 "\*\*\*\* NOTE: Only report estimates where CTSMK = 'Non-smoker' for Table 8.5.\*\*\*\*";

**Proc surveyfreq DATA=TABLES\_83\_84\_85 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** CTSMK \* agegrp25 \* (CIGADVST CIGADVTV CIGADVVD CIGADVBB CIGADVPOS  
CIGADVNEWS CIGADVCIN CIGADVINT CIGADVPT CIGADVPW CIGADVELSE CIGSPORT CIGFREE  
CIGSALE CIGCOUPON CIGGIFTS CIGCLOTHING CIGMPROMO marketing)/**CL ROW**  
**NOCELLPERCENT** ;

**run;**

TITLE2 "Tables 8.4 and 8.5: Weighted percents and 95% CIs for Residence columns";  
TITLE3 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";  
TITLE4 "\*\*\*\* NOTE: Only report estimates where CTSMK = 'Current tobacco smoker' for Table 8.4.\*\*\*\*";  
TITLE5 "\*\*\*\* NOTE: Only report estimates where CTSMK = 'Non-smoker' for Table 8.5.\*\*\*\*";

**Proc surveyfreq DATA=TABLES\_83\_84\_85 NOSUMMARY;**

**stratum** &stratumvar;

**cluster** &clustervar;

**weight** &weightvar;

**table** CTSMK \* Residence \* (CIGADVST CIGADVTV CIGADVVD CIGADVBB CIGADVPOS  
CIGADVNEWS CIGADVCIN CIGADVINT CIGADVPT CIGADVPW CIGADVELSE CIGSPORT CIGFREE  
CIGSALE CIGCOUPON CIGGIFTS CIGCLOTHING CIGMPROMO marketing)/**CL ROW**  
**NOCELLPERCENT** ;

**run;**

\*\*\*\*\*

\*CALCULATIONS FOR TABLE 9.1\*\*\*\*\*

\*\*\*\*\*,

**DATA** TABLE91; **SET** GATS.FINAL;

\* Beliefs about the Dangers of Tobacco Smoking: Believe smoking causes serious illness;

**IF** H01=1 **THEN** SMKDANGER=1;

**ELSE IF** H01 IN (2,7) **THEN** SMKDANGER=2;

\* Believe smoking causes strokes;

**IF** H02A=1 **THEN** SMKSTROKE=1;

**ELSE IF** H02A IN (2,7) **OR** H01=2 **THEN** SMKSTROKE=2;

\* Believe smoking causes heart attacks;

**IF** H02B=1 **THEN** SMKATTACK=1;

**ELSE IF** H02B IN (2,7) **OR** H01=2 **THEN** SMKATTACK=2;

\* Believe smoking causes lung cancer;

**IF** H02C=1 **THEN** SMKANCER=1;

**ELSE IF** H02C IN (2,7) **OR** H01=2 **THEN** SMKANCER=2;

\* Current Tobacco Smokers;

**IF** SMOKER IN (1,2,3) **THEN** CTSMK=1;

**ELSE IF** SMOKER IN (4,5,6) **THEN** CTSMK=2;

**LABEL** SMKDANGER= "Believe smoking causes serious illness";

```

LABEL SMKSTROKE= "Believe smoking causes strokes";
LABEL SMKATTACK= "Believe smoking causes heart attacks";
LABEL SMKNCANCER= "Believe smoking causes lung cancer";
LABEL CTSMK="Current Tobacco Smokers";
FORMAT SMKDANGER SMKSTROKE SMKATTACK SMKNCANCER YESNOF. CTSMK CURRENTSF.;
RUN;

```

```

***** CALCULATE ESTIMATES *****;

```

```

TITLE1 "Table 9.1: Weighted percents and 95% CIs for Serious illness column";

```

```

TITLE2 "**** NOTE: Use row percentages and row 95% CIs for subgroups****";

```

```

TITLE3 "**** NOTE: Only report estimates where CTSMK= 'Current tobacco smoker' for Current smokers
rows****";

```

```

TITLE4 "**** NOTE: Only report estimates where CTSMK= 'Non-smoker' for Non-smoker rows****";

```

```

TITLE5 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age
<25'. ****";

```

```

Proc surveyfreq DATA=TABLE91 NOSUMMARY;

```

```

stratum &stratumvar;

```

```

cluster &clustervar;

```

```

weight &weightvar;

```

```

table SMKDANGER /CL ;

```

```

TABLE (a01 AGEGRP RESIDENCE) * SMKDANGER

```

```

    AGEGRP25 * education * SMKDANGER

```

```

    CTSMK * SMKDANGER

```

```

    CTSMK * (a01 AGEGRP RESIDENCE) * SMKDANGER

```

```

    CTSMK * AGEGRP25 * education * SMKDANGER/CL ROW NOCELLPERCENT ;

```

```

run;

```

```

TITLE1 "Table 9.1: Weighted percents and 95% CIs for Stroke column";

```

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where CTSMK= 'Current tobacco smoker' for Current smokers rows\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where CTSMK= 'Non-smoker' for Non-smoker rows\*\*\*\*";

TITLE5 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. \*\*\*\*";

**Proc surveyfreq DATA=TABLE91 NOSUMMARY;**

**stratum &stratumvar;**

**cluster &clustervar;**

**weight &weightvar;**

**table SMKSTROKE /CL ;**

**TABLE (a01 AGEGRP RESIDENCE) \* SMKSTROKE**

AGEGRP25 \* education \* SMKSTROKE

CTSMK \* SMKSTROKE

CTSMK \* (a01 AGEGRP RESIDENCE) \* SMKSTROKE

CTSMK \* AGEGRP25 \* education \* SMKSTROKE/CL ROW NOCELLPERCENT ;

**run;**

TITLE1 "Table 9.1: Weighted percents and 95% CIs for Heart attack column";

TITLE2 "\*\*\*\* NOTE: Use row percentages and row 95% CIs for subgroups\*\*\*\*";

TITLE3 "\*\*\*\* NOTE: Only report estimates where CTSMK= 'Current tobacco smoker' for Current smokers rows\*\*\*\*";

TITLE4 "\*\*\*\* NOTE: Only report estimates where CTSMK= 'Non-smoker' for Non-smoker rows\*\*\*\*";

TITLE5 "\*\*\*\* NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. \*\*\*\*";

**Proc surveyfreq DATA=TABLE91 NOSUMMARY;**

**stratum &stratumvar;**

**cluster &clustervar;**

```

weight &weightvar;

table SMKATTACK /CL ;

TABLE (a01 AGEGRP RESIDENCE) * SMKATTACK

    AGEGRP25 * education * SMKATTACK

    CTSMK * SMKATTACK

    CTSMK * (a01 AGEGRP RESIDENCE) * SMKATTACK

    CTSMK * AGEGRP25 * education * SMKATTACK/CL ROW NOCELLPERCENT ;

run;

TITLE1 "Table 9.1: Weighted percents and 95% CIs for Lung cancer column";
TITLE2 "**** NOTE: Use row percentages and row 95% CIs for subgroups****";
TITLE3 "**** NOTE: Only report estimates where CTSMK= 'Current tobacco smoker' for Current smokers rows****";
TITLE4 "**** NOTE: Only report estimates where CTSMK= 'Non-smoker' for Non-smoker rows****";
TITLE5 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. ****";

Proc surveyfreq DATA=TABLE91 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

table SMKCANCER /CL ;

TABLE (a01 AGEGRP RESIDENCE) * SMKCANCER

    AGEGRP25 * education * SMKCANCER

    CTSMK * SMKCANCER

    CTSMK * (a01 AGEGRP RESIDENCE) * SMKCANCER

    CTSMK * AGEGRP25 * education * SMKCANCER/CL ROW NOCELLPERCENT ;

run;

```

```
*****
*CALCULATIONS FOR TABLE 9.2*****
*****;
```

```
DATA TABLE92; SET GATS.FINAL;
```

```
* Beliefs about the Dangers of Secondhand Smoke;
```

```
IF E17=1 THEN SHSDANGER=1;
```

```
ELSE IF E17 IN (2,7) THEN SHSDANGER=2;
```

```
* Current Tobacco Smokers;
```

```
IF SMOKER IN (1,2,3) THEN CTSMK=1;
```

```
ELSE IF SMOKER IN (4,5,6) THEN CTSMK=2;
```

```
LABEL SHSDANGER="Believe that second-hand smoke causes illness in non-smokers";
```

```
LABEL CTSMK="Current Tobacco Smokers";
```

```
FORMAT CTSMK CURRENTSF. SHSDANGER YESNOF.;
```

```
RUN;
```

```
***** CALCULATE ESTIMATES *****;
```

```
TITLE1 "Table 9.2: Weighted percents and 95% CIs for Overall column";
```

```
TITLE2 "**** NOTE: Use row percentages and row 95% CIs for subgroups****";
```

```
TITLE3 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age <25'. ****";
```

```
Proc surveyfreq DATA=TABLE92 NOSUMMARY;
```

```
stratum &stratumvar;
```

```

cluster &clustervar;

weight &weightvar;

table SHSDANGER /CL ;

TABLE (a01 AGEGRP RESIDENCE) * SHSDANGER

      agegrp25 * education * SHSDANGER/CL ROW NOCELLPERCENT ;

run;

TITLE1 "Table 9.2: Weighted percents and 95% CIs for current smokers and non-smokers columns";
TITLE2 "**** NOTE: Use row percentages and row 95% CIs****";
TITLE3 "****NOTE: Only report estimates where CTSMK='Current tobacco smoker' for Current smokers
column**";
TITLE4 "**** NOTE: Only report estimates where CTSMK = 'Non-smoker' for Non-smoker column****";
TITLE5 "**** NOTE: Only report estimates where AGEGRP25 = 'Age 25+'. Do not report for 'Age
<25'. ****";

Proc surveyfreq DATA=TABLE92 NOSUMMARY;

stratum &stratumvar;

cluster &clustervar;

weight &weightvar;

TABLE CTSMK * SHSDANGER

      CTSMK *(a01 AGEGRP RESIDENCE) * SHSDANGER

      CTSMK * agegrp25 * education * SHSDANGER/CL ROW NOCELLPERCENT ;

run;

```



```

variable labels
    A01 "Gender" /
    A04 "Education level" /
    residence "Residence" /
    age "Age in years".
* age should already be calculated in the analysis data file.

```

```

value labels
    A01 1 "Male" 2 "Female" /
*    A04 1 "Value1" 2 "Value2" 3 "Value3" 4 "Value4" /
.

```

```

* Use the following command to identify missing values for particular variables.
* missing values a04 (77,99).

```

```

*Calculate various grouped age variables.

```

```

recode age (65 thru hi = 4) (45 thru 65 = 3) (25 thru 45 = 2) (15 thru 25 = 1) into agegrp4.
variable labels agegrp4 "Age in Four Categories" age "Age in Years".
add value labels
    agegrp4      1 "15-24 years"
                 2 "25-44 years"
                 3 "45-64 years"
                 4 "65 or older"
.

```

```

recode age (25 thru hi = 1) (15 thru 25 = 0) into over25.
variable labels over25 "Age 25 yrs or older".
add value labels
    over25      0 "15-24 years"
                1 "25 or older"
.

```

```

***** TABLE 3.2 *****
* NO NEW CALCULATED VARIABLES NECESSARY *.

```

```

***** PRODUCE TABLE ESTIMATES *****
title 'TABLE 3.2 Unweighted Counts & Population Estimates'.
use all.

```

```

cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = agegrp4 a01 residence
    / cells popsize tablepct
    / statistics se cin(95) count
.

```

```

filter by over25.                                /* Education estimates for over 25 years old only */
cstabulate
    / plan file = 'K:\OSH-Global\GATS\GATS Data Management\Countries\gatsplan.csaplan'
    / tables variables = a04
    / cells popsize tablepct
    / statistics se cin(95) count
.

```

```

use all.

```

```

*****

```

```

***** TABLES 4.1 & 4.2 *****

```

\* Six-level Tobacco Smoking Composite Variable.  
 \* Note this variable is used in the calculations for many other indicators as well.  
 do if B01=1.

```

    compute smoker=1.
  else if B01=2.
    if B02=1 smoker=2.
    if B02=2 smoker=3.
  else if B01=3.
    if B03=1 smoker=4.
    if B03=2 smoker=5.
    if B03=3 smoker=6.
  end if.

```

variable labels smoker "Detailed Tobacco Smoking Status".

add value labels

```

    smoker          1 "Daily tobacco smoker"
                   2 "Occasional tobacco smoker, formerly daily"
                   3 "Occasional tobacco smoker, never daily"
                   4 "Former daily tobacco smoker"
                   5 "Former occasional tobacco smoker"
                   6 "Never smoker of tobacco"

```

.

\* Current Tobacco smokers.

recode smoker (1 thru 3 = 1) (4 thru 6 = 2) (else=sysmis) into ctsmk.

var labels ctsmk "Current Tobacco Smokers".

add val labels ctsmk 1 "Yes" 2 "No".

\* Occasional smokers and never daily smokers.

recode smoker (2,3 = 1) (5,6 = 2) (1,4 = 3) (else = sysmis) into smkdegree.

var labels smkdegree "Occasional smokers and never daily smokers".

```

add val labels smkdegree      1 "Occasional smoker"
                              2 "Never daily smoker"
                              3 "Other"

```

.

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*.

title 'TABLE 4.1 & 4.2: Detailed Smoking Status'.

subtitle 'For 4.1: % Within Category; 4.2: Population Size'.

use all.

cstabulate

```

    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = smoker ctsmk smkdegree
    / subpop table = a01
    / cells popsize tablepct
    / statistics se cin(95) count

```

.

filter by over25.

cstabulate

```

    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = smoker ctsmk smkdegree
    / subpop table = a01
    / cells popsize tablepct
    / statistics se cin(95) count

```

.

use all.

\*\*\*\*\*

\*\*\*\*\* TABLES 4.3 & 4.4 \*\*\*\*\*.

\*\*\*\*\* COLUMN 1 \*\*\*\*\*.

\* NO NEW CALCULATED VARIABLES NECESSARY \*.

\*\*\*\*\* COLUMN 2 \*\*\*\*\*.

\* Current Cigarette smokers.

\* Cigarettes are manufactured, hand-rolled, or kreteks.

if range(smoker,1,6) ccsmk = 2.

/\* All non-missing respondents \*/

if (B06A>0 and B06A<=888) or

/\* Manuf cigs daily \*/

(B06B>0 and B06B<=888) or

/\* Handrolled daily \*/

(B06C>0 and B06C<=888) or

/\* Kreteks daily \*/

(B10A>0 and B10A<=888) or

/\* Manuf cigs weekly \*/

(B10B>0 and B10B<=888) or

/\* Handrolled weekly \*/

(B10C>0 and B10C<=888)

/\* Kreteks weekly \*/

ccsmk=1.

\*\*\*\*\* COLUMN 3 \*\*\*\*\*.

\* Current Smoker of Manufactured Cigarettes.

if any(smoker, 1,2,3,4,5,6) cmcsmk = 2.

if (b06a gt 0 and b06a le 888) or (b10a gt 0 and b10a le 888) cmcsmk=1.

\*\*\*\*\* COLUMN 4 \*\*\*\*\*.

\* Current Smoker of Handrolled Cigarettes.

if any(smoker, 1,2,3,4,5,6) chrccsmk = 2.

if (b06b gt 0 and b06b le 888) or (b10b gt 0 and b10b le 888) chrccsmk=1.

\*\*\*\*\* COLUMN 5 \*\*\*\*\*.

\* Current Smoker of Kreteks.

if any(smoker, 1,2,3,4,5,6) ckccsmk = 2.

if (b06c > 0 and b06c le 888) or (b10c > 0 and b10c le 888) ckccsmk = 1.

\*\*\*\*\* COLUMN 6 \*\*\*\*\*.

\* Smokes Other Tobacco Products.

if any(smoker, 1,2,3,4,5,6) cother = 2.

if (b06d>0 and b06d le 888) or (b10d>0 and b10d le 888) or

(b06e>0 and b06e le 888) or (b10e>0 and b10e le 888) or

(b06f>0 and b06f le 888) or (b10f>0 and b10f le 888) or

(b06g>0 and b06g le 888) or (b10g>0 and b10g le 888)

cother = 1.

var labels ccsmk "Current Cigarette Smokers" /

cmcsmk "Current Manufactured Cigarette Smokers" /

chrccsmk "Current Handrolled Cigarette Smokers" /

ckccsmk "Current Kretek Smokers" /

cother "Current Smoker of Other Tobacco Products"

add value labels

ccsmk cmcsmk chrccsmk ckccsmk cother 1 'Yes' 2 'No'.

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*.

title 'TABLES 4.3 & 4.4: Current Smokers of Tobacco Products'.

subtitle 'For 4.3: % Within Category; 4.4: Population Size'.

use all.

```

cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = agegrp4 residence by ctsmk
  / subpop table = a01
  / cells popsize rowpct
  / statistics se cin(95)
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = agegrp4 residence by ccsmk
  / subpop table = a01
  / cells popsize rowpct
  / statistics se cin(95)
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = agegrp4 residence by cmcsmk
  / subpop table = a01
  / cells popsize rowpct
  / statistics se cin(95)
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = agegrp4 residence by chrccsmk
  / subpop table = a01
  / cells popsize rowpct
  / statistics se cin(95)
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = agegrp4 residence by ckccsmk
  / subpop table = a01
  / cells popsize rowpct
  / statistics se cin(95)
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = agegrp4 residence by cother
  / subpop table = a01
  / cells popsize rowpct
  / statistics se cin(95)
.
filter by over25.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by ctsmk
  / subpop table = a01
  / cells popsize rowpct
  / statistics se cin(95)
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by ccsmk
  / subpop table = a01
  / cells popsize rowpct
  / statistics se cin(95)

```

```
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by cmcsmk
  / subpop table = a01
  / cells popsize rowpct
  / statistics se cin(95)
```

```
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by chrsmk
  / subpop table = a01
  / cells popsize rowpct
  / statistics se cin(95)
```

```
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by ckcmk
  / subpop table = a01
  / cells popsize rowpct
  / statistics se cin(95)
```

```
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by cother
  / subpop table = a01
  / cells popsize rowpct
  / statistics se cin(95)
```

```
use all.
```

```
*****
```

```
***** TABLE 4.5 *****.
```

```
* Smoking frequency.
```

```
recode smoker (1 = 1) (2,3 = 2) (4 thru 6 = 3) (else = sysmis) into smkdon.
```

```
var labels smkdon "Frequency of Tobacco Smoking".
```

```
add value labels
```

```
    smkdon 1 "Daily" 2 "Occasionally" 3 "Non-smoker"
```

```
***** PRODUCE TABLE ESTIMATES *****.
```

```
title 'TABLE 4.5: Smoking Frequency'.
```

```
use all.
```

```
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = agegrp4 residence by smkdon
  / subpop table = a01
  / cells rowpct
  / statistics se cin(95)
```

```
filter by over25.
```

```
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by smkdon
  / subpop table = a01
  / cells rowpct
```

/ statistics se cin(95)

use all.

\*\*\*\*\*

\*\*\*\*\* TABLE 4.6 \*\*\*\*\*

\* Daily Tobacco Smokers.

recode smoker (1=1) (2 thru 6=2) (else=sysmis) into dtsmk.

\* Daily Cigarette Smokers.

\* Respondents are defined to be a daily cigarette smoker if they meet one of two conditional criteria.

\* The following code checks each condition separately and sets flags indicating whether they meet the

\* criteria or not. If either condition is flagged then R is a daily cigarette smoker.

\* Initialize as NOT current daily cig smokers.

if any(smoker, 1,2,3,4,5,6) dcsmk=2.

\*\* First condition for daily cigarette smoking \*\*.

compute flag1 = 0.

\* Initialize as not current daily cig smoker.

if (b06a gt 0 and b06a lt 888) or (b06b gt 0 and b06b lt 888) or

(b06c gt 0 and b06c lt 888) flag1 = 1.

\* flag1 = 1 Yes if R smokes cigs daily.

\*\* Second condition for daily cigarette smoking.

compute flag2 = 0.

\* Initialize as not current daily cig smoker.

\* count how many types of cigs are smoked less than daily \*.

count countA = b06a b06b b06c (888).

\* count how many other smoked products are NOT used daily \*.

count countB = b06d b06e b06f b06g (0,999).

if (countA ge 2 and countB = 4 and dtsmk = 1) flag2 = 1.

\* flag2 = 1 (Yes) if R smokes more than 2 kinds of cigs less than daily, does not smoke any other tobacco products (D,E,F,G) and has reported smoking tobacco daily.

if (flag1 = 1 OR flag2 = 1) dcsmk = 1.

\* If either flag1 or flag2 is a yes (1) then R is a daily cig smoker.

\* Number of manufactured cigarettes smoked per day among daily cig smokers Table 4.6 \*.

do if b06a > 0 and b06a < 888.

compute manufday = b06a.

else if b06a=888 and b06a1<999.

compute manufday = b06a1 / 7.

else.

compute manufday = 0.

end if.

\* Number of hand-rolled cigarettes smoked per day.

do if b06b > 0 and b06b < 888.

compute hrollday = b06b.

else if b06b=888 and b06b1<999.

compute hrollday = b06b1 / 7.

else.

compute hrollday = 0.

end if.

```

* Number of kreteks smoked per day.
do if b06c > 0 and b06c < 888.
    compute kretday = b06c.
else if b06c=888 and b06c1<999.
    compute kretday = b06c1 / 7.
else.
    compute kretday = 0.
end if.

* Number of cigarettes smoked per day (includes manufactured, hand-rolled, and kreteks).
compute cigday = manufday + hrollday + kretday.

* Group cigarettes per day into 5 categories.
if (cigday gt 0 and cigday lt 5) cigday5 = 1.
if (cigday ge 5 and cigday lt 10) cigday5 = 2.
if (cigday ge 10 and cigday lt 15) cigday5 = 3.
if (cigday ge 15 and cigday lt 25) cigday5 = 4.
if (cigday ge 25) cigday5 = 5.

var labels
    dtsmk "Daily Tobacco Smoker" /
    dcsmk "Daily Cigarette Smokers" /
    cigday "Average Number of Cigarettes Smoked per Day" /
    cigday5 "Average Number of Cigarettes Smoked per Day in 5 Categories" /
.
add value labels
    dtsmk dcsmk 1 "Yes" 2 "No"
    / cigday5      1 'Less than 5 Cigs/day'
                  2 '5-9 Cigs/day'
                  3 '10-14 Cigs/day'
                  4 '15-24 Cigs/day'
                  5 '25+ Cigs/day'
.

***** PRODUCE TABLE ESTIMATES *****
title 'TABLE 4.6: Average Number of Cigarettes per Day'.
use all.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = agegrp4 residence by cigday5
    / subpop table = a01
    / cells rowpct
    / statistics se cin(95)
.
filter by over25.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a04 by cigday5
    / subpop table = a01
    / cells rowpct
    / statistics se cin(95)
.
use all.
*****

```

\*\*\*\*\* TABLE 4.7 \*\*\*\*\*.

\*Age at Daily Smoking Initiation.

\* Note: Age was calculated at the top of the program.

```
do if b04<99.                                /* b04 = age when started smoking daily.
    compute agesmk = b04.
else if b08<99.                                /* b08 = age when started smoking daily.
    compute agesmk = b08.
else if b11<99.                                /* b11 = age when started smoking daily.
    compute agesmk = b11.
else if b04=99 and b05~=99.                    /* b05 = number of years ago started smoking daily.
    compute agesmk = age-b05.
else if b08=99 and b09~=99.                    /* b09 = number of years ago started smoking daily.
    compute agesmk = age-b09.
else if b11=99 and b12~=99.                    /* b12 = number of years ago started smoking daily.
    compute agesmk = age-b12.
end if.
```

\* Create 4 categories for age at smoking initiation.

```
recode agesmk (20 thru hi = 4) (17 thru 20 = 3) (15 thru 17 = 2) (0 thru 15 = 1)
    (else=sysmis) into agesmk4.
```

var labels

```
    agesmk "Age at Daily Smoking Initiation"/
    agesmk4 "Age at Daily Smoking Initiation in 4 Categories".
```

add value labels

```
    agesmk4      1 "Less than 15"
                  2 "15-16 yrs"
                  3 "17-19 yrs"
                  4 "20 yrs or older"
```

\*Creating a variable that defines whether a person is 20-34 or not.

```
recode Age (20 thru 34 = 1) (missing = sysmis) (else = 2) into age20t34.
```

```
var label age20t34 "Between 20-34 years old".
```

```
add value labels age20t34 1 "Yes" 2 "No".
```

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*.

```
title 'TABLE 4.7: Age at Smoking Initiation'.
```

```
filter by age20t34.
```

```
cstabulate
```

```
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 residence by agesmk4
    / cells rowpct
    / statistics se cin(95)
```

```
use all.
```

```
*****
```

\*\*\*\*\* TABLE 4.8 \*\*\*\*\*.

\* Former Daily Tobacco Smokers (Current Non-Smokers) Among All Adults.

```
recode smoker (4 = 1) (1,2, 3, 5, 6 = 2) (else = sysmis) into fdsmk.
```

\* Former Tobacco Smokers Among Ever Daily Smokers (Quit ratio for Daily Smoking).

```
recode smoker (4 = 1) (1,2 = 2) (else=sysmis) into edsmkf.
```

```

var labels
    fdsmk "Former Daily Tobacco Smokers Among All Adults" /
    edsmkf "Former Tobacco Smokers Among Ever Daily Smokers".
add value labels
    fdsmk edsmkf 1 "Yes" 2 "No"
.

```

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*.

title 'TABLE 4.8: Former Daily Smokers'.

use all.

```

cstabulate
    / plan file = 'c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 agegrp4 residence by fdsmk
    / cells rowpct
    / statistics se cin(95)
.

```

```

cstabulate
    / plan file = 'c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 agegrp4 residence by edsmkf
    / cells rowpct
    / statistics se cin(95)
.

```

filter by over25.

```

cstabulate
    / plan file = 'c:\GATS_data\gatsplan.csaplan'
    / tables variables = a04 by fdsmk
    / cells rowpct
    / statistics se cin(95)
.

```

```

cstabulate
    / plan file = 'c:\GATS_data\gatsplan.csaplan'
    / tables variables = a04 by edsmkf
    / cells rowpct
    / statistics se cin(95)
.

```

use all.

\*\*\*\*\*

\*\*\*\*\* TABLE 4.9 \*\*\*\*\*.

\* Time Since Quitting Smoking in Years.

if b13a = 1 yrsqtsmk = b13b.

if b13a=2 yrsqtsmk = b13b / 12.

if b13a=3 yrsqtsmk = b13b / 52.

if b13a=4 yrsqtsmk = b13b / 365.

if b13a=5 yrsqtsmk = 1 / 365.

\* Time Since Quitting Smoking in Years in 4 Categories.

recode yrsqtsmk (10 thru hi = 4) (5 thru 10 = 3) (1 thru 5 = 2) (lo thru 1 = 1) (else=sysmis) into yrsqtsmk4.

var labels

```

    yrsqtsmk "Time since Quitting Smoking in Years" /
    yrsqtsmk4 "Time Since Quitting Smoking in Years in 4 Categories".

```

add value labels

```

    yrsqtsmk4      1 "Less than 1 yr"
                  2 "1-4 yrs"
                  3 "5-9 yrs"

```

4 "10+ yrs"

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*

title 'TABLE 4.9: Time Since Quitting Smoking'.

use all.

cstabulate

    / plan file = ' c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = a01 agegrp4 residence by yrsqtsmk4  
    / cells rowpct  
    / statistics se cin(95)

filter by over25.

cstabulate

    / plan file = ' c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = a04 by fdsmk  
    / cells rowpct  
    / statistics se cin(95)

use all.

\*\*\*\*\*

\*\*\*\*\* TABLE 4.10 \*\*\*\*\*

\* Six-level Smokeless Tobacco Composite Variable.

do if C01=1.

    compute smkless=1.

else if C01=2.

    if C02=1 smkless=2.

    if C02=2 smkless=3.

else if C01=3.

    if C03=1 smkless=4.

    if C03=2 smkless=5.

    if C03=3 smkless=6.

end if.

variable labels smkless "Detailed Smokeless Tobacco Status".

add value labels

    smkless        1 "Daily smokeless tobacco user"  
                    2 "Occasional smokeless tobacco user, formerly daily"  
                    3 "Occasional smokeless tobacco user, never daily"  
                    4 "Former daily smokeless tobacco user"  
                    5 "Former occasional smokeless tobacco user"  
                    6 "Never user of smokeless tobacco"

\* Current Tobacco Users.

if any(smoker, 1,2,3) or any(smless, 1,2,3) ctobacco = 1.

if any(smoker,4,5,6) and any(smless,4,5,6) ctobacco = 2.

\* Type of Tobacco Used.

do if ctobacco = 1.

    if any(smoker,1,2,3) and any(smless,4,5,6) cctype = 1.

    if any(smoker,1,2,3) and any(smless,1,2,3) cctype = 2.

    if any(smoker,4,5,6) and any(smless,1,2,3) cctype = 3.

end if.

```

var label ctobacco "Current Tobacco Users" /
    ctype "Type of Current Tobacco Use".
add value labels
    ctobacco      1 "Yes" 2 "No" /
    ctype         1 "Smoked only"
                 2 "Both smoked and smokeless"
                 3 "Smokeless only"
.
**** PRODUCE TABLE ESTIMATES ****.
title 'TABLE 4.10: Current Tobacco Use'.
use all.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 agegrp4 residence by ctobacco
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 agegrp4 residence by ctype
    / cells rowpct
    / statistics se cin(95)
.
filter by over25.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a04 by ctobacco
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a04 by ctype
    / cells rowpct
    / statistics se cin(95)
.
use all.
*****
**** TABLE 4.11 ****.
* Time to First Tobacco Use Upon Waking.
* b07 is smoked tobacco & c07 is smokeless tobacco.
if (b07=4 or c07=4) ftobuse = 4.
if (b07=3 or c07=3) ftobuse = 3.
if (b07=2 or c07=2) ftobuse = 2.
if (b07=1 or c07=1) ftobuse = 1.

variable labels ftobuse "Time to First Tobacco Use Upon Waking".
add value labels
    ftobuse      1 'Within 5 Minutes of Waking'
                 2 'Within 6-30 Minutes of Waking'
                 3 'Within 31-60 Minutes of Waking'
                 4 'More than 60 Minutes of Waking'
.
**** PRODUCE TABLE ESTIMATES ****.
title 'TABLE 4.11: Time to First Tobacco Use'.

```

```

use all.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a01 agegrp4 residence by ftobuse
  / cells rowpct
  / statistics se cin(95)

```

```

.
filter by over25.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by ftobuse
  / cells rowpct
  / statistics se cin(95)

```

```

.
use all.

```

```

*****

```

\*\*\*\*\* CHAPTER 5. CESSATION \*\*\*\*\*

\*\*\*\*\* TABLE 5.1 \*\*\*\*\*

\* Smoking Quit Attempt in the Past 12 Months.

```

if d01=2 qtsmk12 = 2 .
if d01=1 or
  (b13a=2 and b13b<12) or
  (b13a=3 and b13b<52) or
  (b13a=4 and b13b<365) or B13A=5 qtsmk12=1.
/* Current smokers tried to quit in last 12 months */
/* Former smokers who quit in last 12 months */

```

\* Visited a Health Care Provider in the Past 12 Months.  
if d04 = 2 or (b14 = 2 and any(b13a,2,3,4,5)) hcpvisit = 2.  
if d04 = 1 or (b14 = 1 and any(b13a,2,3,4,5)) hcpvisit = 1.

\* Health Care Provider Asked about Smoking.  
if d06=2 or ((b16=2) and any(b13a,2,3,4,5)) asksmk =2.  
if d06=1 or ((b16=1) and any(b13a,2,3,4,5)) asksmk = 1.

\* Health Care Provider Advised to Quit Smoking Tobacco.  
if (d07=2 or d06=2) or  
 ((b17=2 or b16=2) and any(b13a,2,3,4,5)) adqtsmk = 2.  
if d07=1 or ((b17=1) and any(b13a,2,3,4,5)) adqtsmk = 1.

```

var labels
  qtsmk12 "Smoking Quit Attempt in the Past 12 Months" /
  hcpvisit "Visited a Health Care Provider in the Past 12 Months" /
  asksmk "Health Care Provider Asked about Smoking" /
  adqtsmk "Health Care Provider Advised Quitting Smoking"

```

```

.
add value labels
  qtsmk12 hcpvisit asksmk adqtsmk 1 "Yes" 2 "No".

```

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*

```

title 'TABLE 5.1: Quit Attempts & Health Care Provider Assistance'.
subtitle 'Report "Yes" Columns Only'.
use all.
cstabulate

```

```

/ plan file = ' c:\GATS_data\gatsplan.csaplan'
/ tables variables = a01 agegrp4 residence by qtsmk12
/ cells rowpct
/ statistics se cin(95)
.
cstabulate
/ plan file = ' c:\GATS_data\gatsplan.csaplan'
/ tables variables = a01 agegrp4 residence by hcpvisit
/ cells rowpct
/ statistics se cin(95)
.
cstabulate
/ plan file = ' c:\GATS_data\gatsplan.csaplan'
/ tables variables = a01 agegrp4 residence by asksmk
/ cells rowpct
/ statistics se cin(95)
.
cstabulate
/ plan file = ' c:\GATS_data\gatsplan.csaplan'
/ tables variables = a01 agegrp4 residence by adqtsmk
/ cells rowpct
/ statistics se cin(95)
.
filter by over25.
cstabulate
/ plan file = ' c:\GATS_data\gatsplan.csaplan'
/ tables variables = a04 by qtsmk12
/ cells rowpct
/ statistics se cin(95)
.
cstabulate
/ plan file = ' c:\GATS_data\gatsplan.csaplan'
/ tables variables = a04 by hcpvisit
/ cells rowpct
/ statistics se cin(95)
.
cstabulate
/ plan file = ' c:\GATS_data\gatsplan.csaplan'
/ tables variables = a04 by asksmk
/ cells rowpct
/ statistics se cin(95)
.
cstabulate
/ plan file = ' c:\GATS_data\gatsplan.csaplan'
/ tables variables = a04 by adqtsmk
/ cells rowpct
/ statistics se cin(95)
.
use all.
*****

```

\*\*\*\*\* TABLE 5.2 \*\*\*\*\*

\* Use of Cessation Aides by Smokers.  
\* Pharmacotherapy.  
if (d03b=1 or d03c=1) pharmsmk = 1.  
if ((b18b=1 or b18c=1) and any(b13a,2,3,4,5)) pharmsmk = 1.

if (d03b=2 and d03c=2) pharmsmk = 2.  
if ((b18b=2 and b18c=2) and any(b13a,2,3,4,5)) pharmsmk = 2.

\* Counseling/advice or quit lines.

if (d03a =1 or d03e =1) counselsmk = 1.  
if ((b18a=1 or b18e=1) and any(b13a,2,3,4,5)) counselsmk = 1.  
if (d03a=2 and d03e=2) counselsmk = 2.  
if ((b18a=2 and b18e=2) and any(b13a,2,3,4,5)) counselsmk = 2.

\* Other Methods.

\* Other methods (traditional medicines, switching to smokeless tobacco, anything else).  
if (d03d=1 or d03f=1 or d03g=1) otherqtsmk = 1.  
if ((b18d=1 or b18f=1 or b18g=1) and any(b13a,2,3,4,5)) otherqtsmk = 1.  
if (d03d=2 and d03f=2 and d03g=2) otherqtsmk = 2.  
if ((b18d=2 and b18f=2 and b18g=2) and any(b13a,2,3,4,5)) otherqtsmk = 2.

var labels

pharmsmk "Use of Pharmacotherapy for Smoking Cessation" /  
counselsmk "Use of Counseling/Advice or Quit Lines for Smoking Cessation" /  
otherqtsmk "Use of Other Methods for Smoking Cessation".

add value labels

pharmsmk counselsmk otherqtsmk 1 "Yes" 2 "No".

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*.

title 'TABLE 5.2: Cessation Methods Used'.

subtitle 'Report "Yes" Columns Only'.

use all.

cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'  
/ tables variables = a01 agegrp4 residence by pharmsmk  
/ cells rowpct  
/ statistics se cin(95)

.  
cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'  
/ tables variables = a01 agegrp4 residence by counselsmk  
/ cells rowpct  
/ statistics se cin(95)

.  
cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'  
/ tables variables = a01 agegrp4 residence by otherqtsmk  
/ cells rowpct  
/ statistics se cin(95)

.  
filter by over25.

cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'  
/ tables variables = a04 by pharmsmk  
/ cells rowpct  
/ statistics se cin(95)

.  
cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'  
/ tables variables = a01 agegrp4 residence by counselsmk  
/ cells rowpct

```

        / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 agegrp4 residence by otherqtsmk
    / cells rowpct
    / statistics se cin(95)
.
use all.
*****

**** TABLE 5.3 ****
* Interest in Quitting Smoking.
recode d08 (7=5) (9 = sysmis) (missing=sysmis) (else=copy) into inqsmk5.

var label inqsmk5 "Interest in Quitting Smoking in 5 Categories".
add value labels
    inqsmk5      1 "Planning to Quit Within Next Month"
                2 "Thinking About Quitting Within Next 12 Months"
                3 "Will Quit Someday, But Not in Next 12 Months"
                4 "Not interested in Quitting"
                5 "Don't Know"
.

**** PRODUCE TABLE ESTIMATES ****
title 'TABLE 5.3: Interest in Quitting Smoking'.
use all.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 agegrp4 residence by inqsmk5
    / cells rowpct
    / statistics se cin(95)
.

filter by over25.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a04 by inqsmk5
    / cells rowpct
    / statistics se cin(95)
.

use all.
*****

**** TABLE 6.1 ****
* Exposure to Secondhand Smoke at Work.
do if (e05 =1) or (e05=3).
    if e08=1 shswork=1.
    if e08=2 shswork=2.
end if.
/* Works indoors or both */
/* Does anyone smoke there */

variable labels shswork "Exposure to Secondhand Smoke at Work".
add value labels shswork 1 "Yes" 2 "No".

**** PRODUCE TABLE ESTIMATES ****
title 'TABLE 6.1: Exposure to Secondhand Smoke at Work'.

```

```

subtitle 'Report "Total" & "Non-Smoker" Columns Only'.
use all.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 agegrp4 residence by shswork
    / subpop table = ctsmk
    / cells rowpct popsize
    / statistics se cin(95)

```

```

.
filter by over25.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a04 by shswork
    / subpop table = ctsmk
    / cells rowpct popsize
    / statistics se cin(95)

```

```

.
use all.

```

```

*****

```

```

**** TABLE 6.2 ****.

```

```

* Exposure to Secondhand Smoke (SHS) in Public Places.

```

```

* Government buildings.

```

```

if (e10=2 or e10=7 or e09=2) shsgov = 2.
if e10=1 shsgov=1.

```

```

* Health Care Facilities.

```

```

if (e12=2 or e12=7 or e11=2) shshealth=2.
if e12=1 shshealth=1.

```

```

* Restaurants.

```

```

if (e14=2 or e14=7 or e13=2) shsrests=2.
if e14=1 shsrests=1.

```

```

* Public transportation.

```

```

if (e16=2 or e16=7 or e15=2) shspubtrans=2.
if e16=1 shspubtrans=1.

```

```

variable labels

```

```

    shsgov "Exposure to SHS in Government Buildings/Offices" /
    shshealth "Exposure to SHS in Health Care Facilities" /
    shsrests "Exposure to SHS in Restaurants" /
    shspubtrans "Exposure to SHS on Public Transportation"

```

```

.
add value labels shsgov shshealth shsrests shspubtrans 1 "Yes" 2 "No or Did Not Visit Location".

```

```

**** PRODUCE TABLE ESTIMATES ****.

```

```

title 'TABLE 6.2: Secondhand Smoke Exposure in Public Places'.

```

```

subtitle 'Report "Yes" Columns Only'.

```

```

use all.

```

```

cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 agegrp4 residence by shsgov
    / subpop table = ctsmk
    / cells rowpct

```

```

        / statistics se cin(95)
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a01 agegrp4 residence by shshealth
  / subpop table = ctsmk
  / cells rowpct
  / statistics se cin(95)
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a01 agegrp4 residence by shsrests
  / subpop table = ctsmk
  / cells rowpct
  / statistics se cin(95)
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a01 agegrp4 residence by shspubtrans
  / subpop table = ctsmk
  / cells rowpct
  / statistics se cin(95)
.
filter by over25.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by shsgov
  / subpop table = ctsmk
  / cells rowpct
  / statistics se cin(95)
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by shshealth
  / subpop table = ctsmk
  / cells rowpct
  / statistics se cin(95)
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by shsrests
  / subpop table = ctsmk
  / cells rowpct
  / statistics se cin(95)
.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by shspubtrans
  / subpop table = ctsmk
  / cells rowpct
  / statistics se cin(95)
.
use all.
*****

```

\*\*\*\*\* Economics \*\*\*\*\*.

\*\*\*\*\* TABLE 7.1 \*\*\*\*\*.

\* Brand of last cigarette purchase.  
if f03 ne 99 brand=f03.

variable label brand "Last Brand of Cigarette Purchased".  
add value labels  
    brand 1 'Brand #1' 2 'Brand #2' .

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*.

title 'TABLE 7.1: Brand of Manufactured Brand Purchased'.  
subtitle 'Report Overall Top Five Brands Only'.

use all.

cstabulate  
    / plan file = ' c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = a01 agegrp4 residence by brand  
    / cells rowpct popsize  
    / statistics se cin(95)

.  
filter by over25.

cstabulate  
    / plan file = ' c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = a04 by brand  
    / cells rowpct popsize  
    / statistics se cin(95)

.  
use all.

\*\*\*\*\* TABLE 7.2 \*\*\*\*\*.

\* Location of Last Cigarette Purchase.  
if f04 < 77 location = f04.

var label location "Location of Last Cigarette Purchase".  
add value labels location 1 "Vending Machine" 2 "Store" 3 "Street Vendor" 4 "Military store"  
    5 "Duty-free shop" 6 "Outside the Country" 7 "Kiosks" 8 "Internet" 9 "From another person" 10 "Other"

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*.

title 'TABLE 7.2: Location of Last Cigarette Purchase'.

use all.

cstabulate  
    / plan file = ' c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = a01 over25 residence by location  
    / cells rowpct  
    / statistics se cin(95)

\*\*\*\*\* TABLE 7.3 \*\*\*\*\*.

\* Number of manufactured cigarettes bought at last purchase. /\* A is unit, B is number of cigarettes /\*.  
if f01a = 1 numcig = f01b.  
if any(f01a,2,3,4) numcig = f01b\*f01d.

\* Price paid per manufactured cigarette.  
if f02 < 999 paycig = f02 / numcig.

\* Total monthly expenditure for manufactured cigarettes.  
 \* manufday was calculated already for Table 4.6.  
 compute monthcost = (paycig \* manufday) \* 365 / 12.

```
var labels
    numcig "Number of manufactured cigarettes bought at last purchase" /
    paycig "Price paid per manufactured cigarette" /
    monthcost "Total Monthly Expenditures on Manufactured Cigarettes"
```

```
***** PRODUCE TABLE ESTIMATES *****
title 'TABLE 7.3: Average Monthly Cigarette Expenditures'
```

```
use all.
csdescriptives
    / plan file = 'c:\GATS_data\gatsplan.csaplan'
    / summary variables = monthcost
    / subpop table = a01
    / mean
    / statistics se cin(95) count
```

```
csdescriptives
    / plan file = 'c:\GATS_data\gatsplan.csaplan'
    / summary variables = monthcost
    / subpop table = agegrp4
    / mean
    / statistics se cin(95)
```

```
csdescriptives
    / plan file = 'c:\GATS_data\gatsplan.csaplan'
    / summary variables = monthcost
    / subpop table = residence
    / mean
    / statistics se cin(95)
```

```
filter by over25.
csdescriptives
    / plan file = 'c:\GATS_data\gatsplan.csaplan'
    / summary variables = monthcost
    / subpop table = a04
    / mean
    / statistics se cin(95) count
```

```
use all.
*****
```

```
***** MEDIA *****
***** TABLE 8.1 *****
```

\* Awareness of Anti-Smoking Information in Specific Channels.  
 \* Select g01a or g01a1, etc. depending on structure used by country.

\* In newspapers/magazines.  
 recode g01a (1=1) (2,7 = 2) (else=sysmis) into antinews.  
 \* recode g01a1 (1=1) (2,7 = 2) (else=sysmis) into antinews.

\* On local TV.

```

recode g01b (1=1) (2,7 = 2) (else=sysmis) into antitv.
* recode g01b1 (1=1) (2,7 = 2) (else=sysmis) into antitv.

* On the radio.
recode g01c (1=1) (2,7 = 2) (else=sysmis) into antiradio.
* recode g01c1 (1=1) (2,7 = 2) (else=sysmis) into antiradio.

* On television or the radio.
do if antitv = 1 or antiradio = 1 .
  compute antitv_radio = 1.
else if antitv = 2 and antiradio = 2.
  compute antitv_radio = 2.
else.
  compute antitv_radio = $sysmis.
end if.

* On billboards.
recode g01d (1=1) (2,7 = 2) (else=sysmis) into antibillb.
* recode g01d1 (1=1) (2,7 = 2) (else=sysmis) into antibillb.

* Somewhere else.
recode g01e (1=1) (2,7 = 2) (else=sysmis) into antielse.
* recode g01e1 (1=1) (2,7 = 2) (else=sysmis) into antielse.

* Noticed in any of the above locations.
do if (antinews=1 or antitv=1 or antiradio=1 or antibillb=1 or antielse = 1).
  compute antiany=1.
else if ((antinews = 2) and (antitv = 2) and (antiradio=2) and (antibillb = 2) and (antielse = 2)).
  compute antiany = 2.
else.
  compute antiany = $sysmis.
end if.

var labels
  antinews "Noticed Anti-Smoking Information in Newspapers or in Magazines" /
  antitv "Noticed Anti-Smoking Information on Local TV" /
  antiradio "Noticed Anti-Smoking Information on Radio" /
  antitv_radio "Noticed Anti-Smoking Information on TV or Radio" /
  antibillb "Noticed Anti-Smoking Information on Billboards" /
  antielse "Noticed Anti-Smoking Information Somewhere Else" /
  antiany "Noticed Anti-Smoking Information at Any Location"
.
add value labels antinews antitv antiradio antitv_radio antibillb antielse antiany 1 "Yes" 2 "No".

***** PRODUCE TABLE ESTIMATES *****
title 'TABLE 8.1: Anti-Smoking Information'
subtitle 'Report "Yes" Columns For Current Smokers'.
use all.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a01 over25 residence by antinews
  / subpop table = ctsmk
  / cells rowpct
  / statistics se cin(95)
.
cstabulate

```

```

    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by antitv_radio
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by antitv
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by antiradio
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by antibillb
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by antielse
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by antiany
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
filter by over25.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a04 by antinews
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a04 by antitv_radio
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.

```

```

cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by antitv
  / subpop table = ctsmk
  / cells rowpct
  / statistics se cin(95)

```

```

.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by antiradio
  / subpop table = ctsmk
  / cells rowpct
  / statistics se cin(95)

```

```

.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by antibillb
  / subpop table = ctsmk
  / cells rowpct
  / statistics se cin(95)

```

```

.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by antielse
  / subpop table = ctsmk
  / cells rowpct
  / statistics se cin(95)

```

```

.
cstabulate
  / plan file = ' c:\GATS_data\gatsplan.csaplan'
  / tables variables = a04 by antiany
  / subpop table = ctsmk
  / cells rowpct
  / statistics se cin(95)

```

```

.
use all.

```

```

*****

```

```

**** TABLE 8.2 ****

```

```

* Noticed Health Warning Labels on Cigarette Packages.
recode g02 (1=1) (2,3 = 2) into sawciglabel.

```

```

* Thinking of Quitting Because of Health Warning Labels on Cigarette Packages.
do if g03=1.

```

```

  compute lablcigpk = 1.
else if (smoker =1 or smoker = 2 or smoker = 3) and
(g02 = 2 or g02 = 3 or g03 =2 or g03 = 7).
  compute lablcigpk = 2.

```

```

else.
  compute lablcigpk = $sysmis.
end if.

```

```

var labels
  sawciglabel "Noticed Health Warning Labels on Cigarette Packages" /
  lablcigpk "Thinking of Quitting Because of Health Warning Labels on Cigarette Packages".
add value labels

```

sawciglabel lablcigpk 1 "Yes" 2 "No" .

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\* .

title 'TABLE 8.2: Health Warnings on Cigarette Packaging'.

subtitle 'Report "Yes" Columns For Current Smokers'.

use all.

cstabulate

    / plan file = ' c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = a01 agegrp4 residence by sawciglabel  
    / subpop table = ctsmk  
    / cells rowpct  
    / statistics se cin(95)

.  
cstabulate

    / plan file = ' c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = a01 agegrp4 residence by lablcigpk  
    / subpop table = ctsmk  
    / cells tablepct  
    / statistics se cin(95)

.  
filter by over25.

cstabulate

    / plan file = ' c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = a04 by sawciglabel  
    / subpop table = ctsmk  
    / cells rowpct  
    / statistics se cin(95)

.  
cstabulate

    / plan file = ' c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = a04 by lablcigpk  
    / subpop table = ctsmk  
    / cells rowpct  
    / statistics se cin(95)

.  
use all.

\*\*\*\*\*

\*\*\*\*\* TABLE 8.3, 8.4, 8.5 \*\*\*\*\* .

\* Noticed Cigarette Marketing in Specific Channels.

\* Select questions (ie. g04a or g04a1, etc.) depending on structure used by country.

\* In stores.

recode g04a (1=1) (2,7 = 2) (else=sysmis) into adstores.

\* recode g04a1 (1=1) (2,7 = 2) (else=sysmis) into adstores.

\* On local TV.

recode g04b (1=1) (2,7 = 2) (else=sysmis) into advt.

\* recode g04b1 (1=1) (2,7 = 2) (else=sysmis) into advt.

\* On the radio.

recode g04c (1=1) (2,7 = 2) (else=sysmis) into adradio.

\* recode g04c1 (1=1) (2,7 = 2) (else=sysmis) into adradio.

\* On billboards.

recode g04d (1=1) (2,7 = 2) (else=sysmis) into adbillb.

\* recode g04d1 (1=1) (2,7 = 2) (else=sysmis) into adbillb.

\* On posters.

recode g04e (1=1) (2,7 = 2) (else=sysmis) into adpost.

\* recode g04e1 (1=1) (2,7 = 2) (else=sysmis) into adpost.

\* In newspapers/magazines.

recode g04f (1=1) (2,7 = 2) (else=sysmis) into adnews.

\* recode g04f1 (1=1) (2,7 = 2) (else=sysmis) into adnews.

\* In cinemas.

recode g04g (1=1) (2,7 = 2) (else=sysmis) into adfilm.

\* recode g04g1 (1=1) (2,7 = 2) (else=sysmis) into adfilm.

\* On the Internet.

recode g04h (1=1) (2,7 = 2) (else=sysmis) into adnet.

\* recode g04h1 (1=1) (2,7 = 2) (else=sysmis) into adnet.

\* On the public transportation vehicles or stations.

recode g04i (1=1) (2,7 = 2) (else=sysmis) into adtrans.

\* recode g04h1 (1=1) (2,7 = 2) (else=sysmis) into adtrans.

\* On the public walls.

recode g04j(1=1) (2,7 = 2) (else=sysmis) into adwalls.

\* recode g04j1 (1=1) (2,7 = 2) (else=sysmis) into adwalls.

\* Anywhere else.

recode g04k(1=1) (2,7 = 2) (else=sysmis) into adelse.

\* recode g04k1 (1=1) (2,7 = 2) (else=sysmis) into adelse.

\* Sponsorship of sport or sporting event.

recode g05 (1=1) (2,7 = 2) (else=sysmis) into sport.

\* Cigarette promotions.

recode g06a (1=1) (2,7 = 2) (else=sysmis) into freesamp.

recode g06b (1=1) (2,7 = 2) (else=sysmis) into sales.

recode g06c (1=1) (2,7 = 2) (else=sysmis) into coupons.

recode g06d (1=1) (2,7 = 2) (else=sysmis) into freegift.

recode g06e (1=1) (2,7 = 2) (else=sysmis) into logo.

recode g06f (1=1) (2,7 = 2) (else=sysmis) into mail.

compute anyads= \$sysmis.

do if (adstores = 1 or adtv =1 or adradio=1 or adbillb = 1 or adpost = 1 or adnews = 1 or  
adfilm =1 or adnet = 1 or adtrans = 1 or adwalls = 1 or adelse = 1 or sport = 1 or  
freesamp = 1 or sales = 1 or coupons = 1 or freegift = 1 or logo = 1 or mail = 1).

compute anyads =1.

else if (adstores = 2 and adtv = 2 and adradio = 2 and adbillb = 2 and adpost = 2 and  
adnews = 2 and adfilm =2 and adnet = 2 and adtrans = 2 and adwalls = 2 and  
adelse = 2 and sport = 2 and freesamp = 2 and sales = 2 and coupons = 2 and  
freegift = 2 and logo = 2 and mail = 2).

compute anyads = 2.

else.

compute anyads = \$sysmis.

end if.

var labels

adstores "Noticed Cigarette Advertisements in Stores" /  
 advt "Noticed Cigarette Advertisements on TV" /  
 adradio "Noticed Cigarette Advertisements on the Radio" /  
 adbillb "Noticed Anti-Smoking Information on Billboards" /  
 adpost "Noticed Cigarette Advertisements on Posters" /  
 adnews "Noticed Cigarette Advertisements in Newspapers or in Magazines" /  
 adfilm "Noticed Cigarette Advertisements in Cinemas" /  
 adnet "Noticed Cigarette Advertisements on the Internet" /  
 adtrans "Noticed Cigarette Advertising on Public Transportation Vehicles or Stations" /  
 adwalls "Noticed Cigarette Advertising on Public Walls" /  
 adelse "Noticed Cigarette Advertising Somewhere Else" /  
 sport "Noticed Sponsorship of Sport or Sporting Event" /  
 freesamp "Noticed Cigarette Promotions - Free Samples" /  
 sales "Noticed Cigarette Promotions - Sales" /  
 coupons "Noticed Cigarette Promotions - Coupons" /  
 freegift "Noticed Cigarette Promotions - Free gifts/discounts on other products" /  
 logo "Noticed Cigarette Promotions - Clothing/item with brand name or logo" /  
 mail "Noticed Cigarette Promotions - Mail Promotions" /  
 anyads "Noticed Any Advertisement, Sponsorship or Promotion"

add value labels adstores to anyads 1 "Yes" 2 "No".

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*

title 'TABLE 8.3, 8.4, 8.5: Cigarette Marketing'.

subtitle ' Report 8.3 Overall; 8.4 Smokers; 8.5 Non-smokers'.

use all.

cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'  
 / tables variables = a01 over25 residence by adstores  
 / subpop table = ctsmk  
 / cells rowpct  
 / statistics se cin(95)

cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'  
 / tables variables = a01 over25 residence by advt  
 / subpop table = ctsmk  
 / cells rowpct  
 / statistics se cin(95)

cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'  
 / tables variables = a01 over25 residence by adradio  
 / subpop table = ctsmk  
 / cells rowpct  
 / statistics se cin(95)

cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'  
 / tables variables = a01 over25 residence by adbillb  
 / subpop table = ctsmk  
 / cells rowpct  
 / statistics se cin(95)

cstabulate

/ plan file = ' c:\GATS\_data\gatsplan.csaplan'

```

    / tables variables = a01 over25 residence by adpost
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by adnews
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by adfilm
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by adnet
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by adtrans
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by adunder
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by adwalls
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by adelse
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'

```

```

        / tables variables = a01 over25 residence by sport
        / subpop table = ctsmk
        / cells rowpct
        / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by freesamp
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by sales
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by coupons
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by freegift
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by logo
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by mail
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
cstabulate
    / plan file = ' c:\GATS_data\gatsplan.csaplan'
    / tables variables = a01 over25 residence by anyads
    / subpop table = ctsmk
    / cells rowpct
    / statistics se cin(95)
.
use all.
*****

```

\*\*\*\*\* Knowledge, Attitudes, and Perceptions \*\*\*\*\*.

\*\*\*\*\* TABLE 9.1 \*\*\*\*\*.

\* Believes that Tobacco Smoking Causes Serious Illness.  
recode h01 (1 = 1) (2,7 = 2) (else=sysmis) into smkdanger.

\* Beliefs about other dangers of smoking.  
recode h02a (1 = 1) (2,7 = 2) (else=sysmis) into smkstroke.  
recode h02b (1 = 1) (2,7 = 2) (else=sysmis) into smkattack.  
recode h02c (1 = 1) (2,7 = 2) (else=sysmis) into smkcancer.  
do repeat danger = smkstroke smkattack smkcancer.  
    if (missing(danger) and h01=2) danger = 2.  
end repeat.

var label  
    smkdanger "Believes that Tobacco Smoking Causes Serious Illness" /  
    smkstroke "Believes that Tobacco Smoking Causes Strokes" /  
    smkattack "Believes that Tobacco Smoking Causes Heart Attacks" /  
    smkcancer "Believes that Tobacco Smoking Causes Lung Cancer".  
add value labels smkdanger smkstroke smkattack smkcancer 1 "Yes" 2 "No".

\*\*\*\*\* PRODUCE TABLE ESTIMATES \*\*\*\*\*.

title 'TABLE 9.1: Health Risks of Smoking'.

subtitle 'Report "Yes" Columns Only'.

use all.

cstabulate

    / plan file = ' c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = a01 agegrp4 residence by smkdanger  
    / subpop table = ctsmk  
    / cells rowpct  
    / statistics se cin(95)

.  
cstabulate

    / plan file = ' c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = a01 agegrp4 residence by smkstroke  
    / subpop table = ctsmk  
    / cells rowpct  
    / statistics se cin(95)

.  
cstabulate

    / plan file = ' c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = a01 agegrp4 residence by smkattack  
    / subpop table = ctsmk  
    / cells rowpct  
    / statistics se cin(95)

.  
cstabulate

    / plan file = ' c:\GATS\_data\gatsplan.csaplan'  
    / tables variables = a01 agegrp4 residence by smkcancer  
    / subpop table = ctsmk  
    / cells rowpct  
    / statistics se cin(95)

.  
filter by over25.

cstabulate

```

        / plan file = ' c:\GATS_data\gatsplan.csaplan'
        / tables variables = a04 by smkdanger
        / subpop table = ctsmk
        / cells rowpct
        / statistics se cin(95)
.
cstabulate
        / plan file = ' c:\GATS_data\gatsplan.csaplan'
        / tables variables = a04 by smkstroke
        / subpop table = ctsmk
        / cells rowpct
        / statistics se cin(95)
.
cstabulate
        / plan file = ' c:\GATS_data\gatsplan.csaplan'
        / tables variables = a04 by smkattack
        / subpop table = ctsmk
        / cells rowpct
        / statistics se cin(95)
.
cstabulate
        / plan file = ' c:\GATS_data\gatsplan.csaplan'
        / tables variables = a04 by smkcancer
        / subpop table = ctsmk
        / cells rowpct
        / statistics se cin(95)
.
use all.
*****
**** TABLE 9.2 ****
* Beliefs about the Dangers of Secondhand Smoke - Causes Serious Illness.
recode e17 (1 = 1) (2,7 = 2) (else=sysmis) into shsdanger.
var label shsdanger "Believes that Secondhand Smoke Causes Serious Illness in Non-Smokers".
add value labels shsdanger 1 "Yes" 2 "No".

**** PRODUCE TABLE ESTIMATES ****
title 'TABLE 9.2: Health Risks of Secondhand Smoke'.
subtitle 'Report "Yes" Columns Only'.
use all.
cstabulate
        / plan file = ' c:\GATS_data\gatsplan.csaplan'
        / tables variables = a01 agegrp4 residence by shsdanger
        / subpop table = ctsmk
        / cells rowpct
        / statistics se cin(95)
.
filter by over25.
cstabulate
        / plan file = ' c:\GATS_data\gatsplan.csaplan'
        / tables variables = a04 by shsdanger
        / subpop table = ctsmk
        / cells rowpct
        / statistics se cin(95)
.
use all.

```

```
*****
* DON'T FORGET TO SAVE YOUR NEW DATA FILE !!!
save outfile = 'c:\GATS_data\Country_Report.sav' /compressed.
*****
* END.
*****
```





GTSS  
GLOBAL TOBACCO SURVEILLANCE SYSTEM