



# International Tobacco Control Southeast Asia Survey

January 2011

## Wave 4 ITC SEA Technical Report (2010)

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### **Funder acknowledgement**

The ITC-SEA Project is supported by grants P50 CA111236 (Roswell Park Transdisciplinary Tobacco Use Research Center) and R01 CA100362 from the National Cancer Institute of the United States, Canadian Institutes of Health Research (79551), Ontario Institute for Cancer Research.

### **Suggested Citation**

ITC Project. (2011, January). *ITC SEA Wave 4 (2009) Technical Report*. University of Waterloo, Waterloo, Ontario, Canada; University Sains Malaysia, Pulau Pinang, Malaysia; Ministry of Health, Putrajaya, Malaysia; Institute for Population and Social Research, Mahidol University, Salaya, Thailand; and Thai Health Promotion Foundation, Thailand.

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## **Preface to Wave 4 ITC SEA Technical Report**

This report documents the fourth wave of the International Tobacco Control Policy Evaluation Survey, carried out in Malaysia and Thailand approximately 16 months after the third wave.

In most parts, the format of this report is similar to the Waves 1 to 3 technical reports. There are changes in certain contents and methods in the fourth wave.

Thailand continues to conduct face-to-face surveys while Malaysia conducted all of its fieldwork by telephone survey at Wave 4.

# 1. Introduction

## Background

The International Tobacco Control (ITC) Project is a multi-country prospective cohort study designed to measure the psychosocial and behavioural impact of key policies of the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC).

To examine the effect of the FCTC, the ITC Project is conducting parallel prospective cohort surveys with smokers in 20 countries: the United States, Canada, Australia, the United Kingdom, and Ireland as well as Thailand, Malaysia, South Korea, China, Mexico, Uruguay, France, Germany, the Netherlands, Mauritius, India, Brazil, Bhutan, Bangladesh and New Zealand. Thailand is one of the leading countries in the implementation of policy measures to prevent and reduce the public health impacts of tobacco consumption, having introduced pictorial warning labels, a ban on misleading package descriptors in both countries, and a ban on point of sale cigarette displays in Thailand.

The dates of the 4 waves conducted in Malaysia and Thailand as shown below:

Wave	Malaysia	Thailand
1	1 January - 7 March 2005	1 January - 7 March 2005
2	31 July 2006 – 25 Jun 2007	1 August – 28 September 2006
3	12 February – 3 September 2008	7 January – 26 March 2008
4	25 July – 18 November 2009	16 April to 2 July 2009

## Main Objectives

The objectives of the ITC Study in Southeast Asia are:

### 1) To examine the patterns of smoking behaviour among Thais and Malaysians.

This study provides accurate estimates of current smoking behaviour in Malaysia and Thailand, as well as detailed information about smokers' quitting behaviour, consumption patterns, and other important aspects of smoking behaviour.

### 2) To examine the impact of specific tobacco control policies being implemented in Thailand and Malaysia.

Each ITC survey follows standardized protocols and includes rigorous measures to assess the impact and identify the determinants of effective tobacco control policies in the following areas:

- Health warning labels and package descriptors
- Smoke-free legislation
- Pricing and taxation of tobacco products
- Education and support for cessation
- Tobacco advertising and promotion

ITC Survey findings will provide an evidence base to guide policies enacted under the FCTC, and to systemically evaluate the effectiveness of these legislative efforts.

### 3) To compare smoking behaviour and the impact of policies between Malaysia, Thailand, and other ITC countries.

All ITC Surveys are developed using the same conceptual framework and methods, and the survey questions are designed to be identical or functionally equivalent in order to allow strong comparisons across countries. The evaluation studies conducted from the ITC Surveys take advantage of natural environments created when an ITC country implements a policy: changes in policy-relevant variables in that country from pre- to post-policy survey waves are compared to other ITC countries where that policy has not changed. This research design provides high levels of internal validity, allowing more confident judgments regarding the possible causal impact of the policy.

#### **4) To measure the uptake of tobacco use among young people.**

Tobacco companies' prime target is the youth population. They carry out large advertising campaigns to recruit such a large market of potential smokers. The ITC survey in Southeast Asia involves youth respondents aged 13-17, identifying different factors, specifically government policies and tobacco companies' youth recruiting strategies that affect their likelihood of smoking initiation.

#### **Survey Design**

The ITC Project is a longitudinal cohort study, in which recruited respondents are recontacted in later waves for follow-up surveys. It tracks smoking behaviour changes in the population and identifies their predictors, such as the introduction of policies.

#### **The Research Team**

The survey was conducted in Malaysia by the National Poison Centre, Universiti Sains Malaysia (USM). The survey was conducted in Thailand by the Institute for Population and Social Research, Mahidol University. The research teams in Malaysia and Thailand are collaborating with an international team of researchers in Australia (The Cancer Council of Victoria), Canada (The University of Waterloo), and the United States (Roswell Park Cancer Institute).

## 2. The Sampling Design

### Target Population

Eligible respondents originally included youth smokers and non-smokers (recruitment age 13-17 in Malaysia, age 13-19 in Thailand), adult smokers (age 18+), and adult non-smokers in Malaysia. Adult non-smokers were not sampled in Malaysia at Wave 4. Individuals in jail, those living in institutions and non-citizens were ineligible.

### Malaysia

As in Wave 3, Wave 4 respondents were located in seven states in Malaysia:

- Kedah
- Penang
- Selangor
- Johore
- Terengganu
- Sabah
- Sarawak

Figure 1: ITC SEA Wave 4 Survey Locations in Malaysia

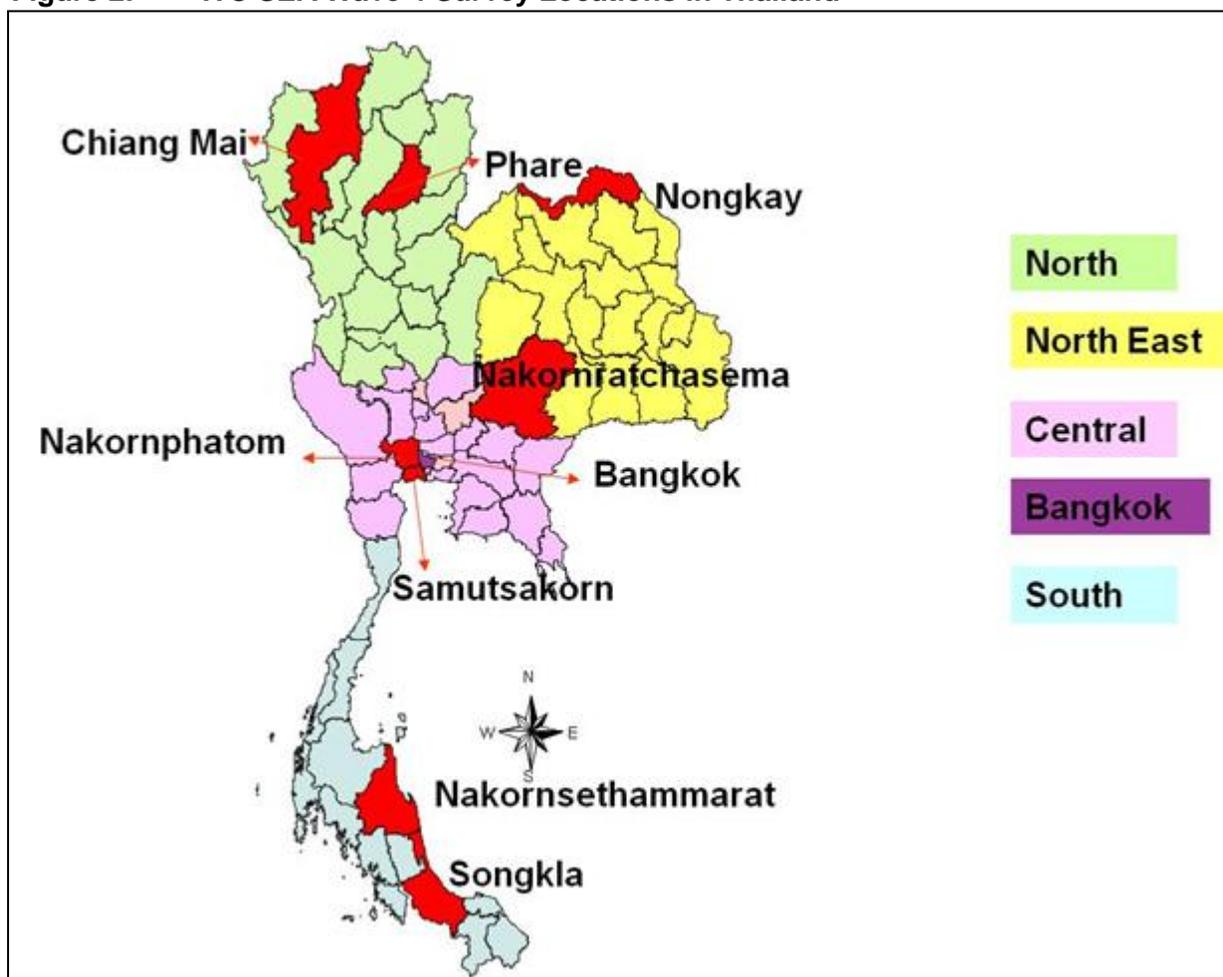


## Thailand

As in Wave 3, Wave 4 respondents were located in the following provinces:

- Northern Region
  - Chiang Mai
  - Phrae
- North-Eastern Region
  - Nong Khai
  - Nakhon Ratchasima
- Central Plain Region
  - Bangkok
  - Samut Sakhon
  - Nakhon Pathom
- Southern Region
  - Nakhon Si Thammarat
  - Songkhla

Figure 2: ITC SEA Wave 4 Survey Locations in Thailand



## Sample Size

For both countries in every wave, the sample was designed to include:

- 2,000 adult smokers\* (or quitters who had been recruited as smokers) (age 18+)
- 1,000 youths (age 13-17, both smokers and non-smokers\*)

In Waves 1, 2, and 3, the sample was designed also to include 1,500 adult non-smokers. In Wave 4, it was decided that the 1,500 adult non-smokers in Malaysia would be retired from the survey.

At each wave, efforts were made to recontact respondents who had participated in earlier waves. The sample at each wave was replenished, to replace respondents who had dropped out.

At Wave 4, the teams in both Thailand and Malaysia were successful in recontacting substantial numbers of respondents who had been missed at Wave 2 or Wave 3.

## Replenishment Sampling

In each country, the sampling scheme for households for Wave 1, and replenishment sampling for Wave 2, was a stratified multi-stage design, with inclusion probabilities proportional to size at the first few stages in each stratum. The next-to-last stage units were clusters of dwellings, each cluster having a quota of adult smokers, youth, and non-smokers (Malaysia) to be filled. In Wave 3, it was decided to carry out the recontact and replenishment efforts concurrently, and aim for the areas of new recruitment to be as similar to those of the original cohort as possible. This was thought to be best achieved by recruiting from clusters adjacent to clusters used in Waves 1 and 2, aiming for predetermined sample sizes. The sample lost was replenished within the urban and rural parts of each province in Thailand, and the same policy was carried out in Malaysia to the extent possible. In Wave 4 in Thailand, a decision was made to drop one or two rural subdistricts in each province, and the replenishment scheme was adjusted accordingly. In Wave 4 in Malaysia, since all recruitment for replenishment was being carried out by telephone, a scheme involving random selection of telephone numbers within Administrative Districts was implemented. (For details see Appendix B).

## Data Collection in Malaysia

In Malaysia, the feedback from Wave 2 showed that conducting a face-to-face survey was extremely costly, while the phone penetration especially in urban areas was quite high. It was decided that for Wave 3, the majority of the interviews could be conducted by phone (about 80%) while in some rural areas, where the phone penetration is low, the face-to-face survey mode could still be used. For the phone survey, respondents were first contacted by phone to find out if they would prefer to do the survey over the phone or by having an interviewer visit their homes. In Wave 4, all interviews were conducted by telephone.

The actual number of respondents that were interviewed at each wave is shown in the table below.

\*A smoker is defined as someone who smokes at least weekly. A non-smoker is someone who smokes less than weekly or not at all.

**Table 1: Total Unique Respondents Interviewed by Waves**

Wave 1	Respondent	<u>Malaysia</u>			<u>Thailand</u>		
		<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Recruited at Wave 1	Smokers	1,917	87	<b>2,004</b>	1,846	154	<b>2,000</b>
	Nonsmokers	469	1,086	<b>1,555</b>	<i>Not applicable</i>		
	Youth	494	515	<b>1,009</b>	516	484	<b>1,000</b>
	<b>Total</b>	<b>2,880</b>	<b>1,688</b>	<b>4,568</b>	<b>2,362</b>	<b>638</b>	<b>3,000</b>
Wave 2	Respondent	<u>Malaysia</u>			<u>Thailand</u>		
Recruited at Wave 1	Smokers	836	32	<b>868</b>	1,436	122	<b>1,558</b>
	Nonsmokers	249	620	<b>869</b>	<i>Not applicable</i>		
	Youth	211	234	<b>445</b>	332	340	<b>672</b>
	<b>Total</b>	<b>1,296</b>	<b>886</b>	<b>2,182</b>	<b>1,768</b>	<b>462</b>	<b>2,230</b>
Recruited at Wave 2	Smokers	752	20	<b>772</b>	460	48	<b>508</b>
	Nonsmokers	205	498	<b>703</b>	<i>Not applicable</i>		
	Youth	152	180	<b>332</b>	154	101	<b>255</b>
	<b>Total</b>	<b>1,109</b>	<b>698</b>	<b>1,807</b>	<b>614</b>	<b>149</b>	<b>763</b>
Wave 3	Respondent	<u>Malaysia</u>			<u>Thailand</u>		
Recruited at Wave 1	Smokers	807	19	<b>826</b>	1,374	115	<b>1,489</b>
	Nonsmokers	200	560	<b>760</b>	<i>Not applicable</i>		
	Youth	177	217	<b>394</b>	312	301	<b>613</b>
	<b>Total</b>	<b>1,184</b>	<b>796</b>	<b>1,980</b>	<b>1,686</b>	<b>416</b>	<b>2,102</b>
Recruited at Wave 2	Smokers	375	7	<b>382</b>	349	35	<b>384</b>
	Nonsmokers	96	239	<b>335</b>	<i>Not applicable</i>		
	Youth	60	74	<b>134</b>	108	79	<b>187</b>
	<b>Total</b>	<b>531</b>	<b>320</b>	<b>851</b>	<b>457</b>	<b>114</b>	<b>571</b>
Recruited at Wave 3	Smokers	747	2	<b>749</b>	539	53	<b>592</b>
	Nonsmokers	179	209	<b>388</b>	<i>Not applicable</i>		
	Youth	98	84	<b>182</b>	162	134	<b>296</b>
	<b>Total</b>	<b>1,018</b>	<b>288</b>	<b>1,306</b>	<b>701</b>	<b>187</b>	<b>888</b>

Wave 4	Respondent	Malaysia			Thailand		
		Male	Female	Total	Male	Female	Total
Recruited at Wave 1	Smokers	631	9	<b>640</b>	1,123	107	<b>1,230</b>
	Youth	165	197	<b>362</b>	249	221	<b>470</b>
	<b>Total</b>	<b>796</b>	<b>206</b>	<b>1,002</b>	<b>1,372</b>	<b>328</b>	<b>1,700</b>
Recruited at Wave 2	Smokers	343	5	<b>348</b>	321	27	<b>348</b>
	Youth	39	65	<b>104</b>	99	53	<b>152</b>
	<b>Total</b>	<b>382</b>	<b>70</b>	<b>452</b>	<b>420</b>	<b>80</b>	<b>500</b>
Recruited at Wave 3	Smokers	299	1	<b>300</b>	371	39	<b>410</b>
	Youth	59	49	<b>108</b>	95	86	<b>181</b>
	<b>Total</b>	<b>358</b>	<b>50</b>	<b>408</b>	<b>466</b>	<b>125</b>	<b>591</b>
Recruited at Wave 4	Smokers	748	9	<b>757</b>	249	39	<b>288</b>
	Youth	162	141	<b>303</b>	74	70	<b>144</b>
	<b>Total</b>	<b>910</b>	<b>150</b>	<b>1,060</b>	<b>323</b>	<b>109</b>	<b>432</b>
Total, all waves*	Smokers	4,164	118	<b>4,282</b>	3,094	294	<b>3,388</b>
	Nonsmokers	853	1,793	<b>2,646</b>		<i>Not applicable</i>	
	Youth	906	920	<b>1,826</b>	906	789	<b>1,695</b>
	<b>Total</b>	<b>5,923</b>	<b>2,831</b>	<b>8,754</b>	<b>4,000</b>	<b>1083</b>	<b>5,083</b>
<b>Grand Total</b>						<b>13,837</b>	

### 3. Replenishment and Recontact Protocols, and Quality Control

#### Eligible Types of Dwellings

##### Private Homes

A private home is any dwelling that is considered to be the *usual place of residence* for at least one of the persons living there. The person may be:

- a family member
- a roomer/boarder
- an employee

##### Private Home AND Business

A private home and business is any dwelling that serves both as a business and the usual place of residence, such as in the case of a business operating out of the home.

##### Dwellings Not Eligible

Surveys were not conducted in dwellings that were for *business purposes only* or with *institutions*, such as hospitals, nursing homes, jails, or religious institutions.

##### Definition of a Household

A household is any persons or group of persons living in a dwelling. It may consist of:

1. one person living alone
2. a family sharing the same dwelling
3. a group of people who are not related but share the same dwelling

To be included on the *Household Enumeration Form* for a particular dwelling, a respondent must have regarded the dwelling as his/her usual place of residence.

#### Data Collection Methods

##### **Recontact**

In Thailand, recontact of households and individuals was carried out for the most part face-to-face, with some face-to-face appointments being made by telephone, particularly in urban areas.

In Malaysia, recontact of households and individuals was carried out by telephone.

##### **Recruitment of new households and respondents**

New households were enumerated, and respondents selected, before the interviews were carried out.

In Thailand, new households and respondents were recruited using the face-to-face mode primarily. Interviews with adults were conducted face-to-face.

In Malaysia, replenishment participants were recruited via telephone. Telephone numbers were generated by randomizing the last two digits of numbers in the telephone directory of 2006.

For both Malaysia and Thailand, youth completed self-administered (paper and pencil) questionnaires, which could be mailed in depending on the respondent's convenience.

### **Main Components of the Recontact Protocol**

Prior to the actual fieldwork, the Thai team contacted and coordinated with the key figures in the study sites. Even after four waves, early contact and coordination with authorities to let them know the survey schedule allowed them to be prepared and be more cooperative.

The ITC Survey recontact protocol consisted of four main steps:

1. Household Recontact (including verification and updating of contact information)
2. Participant Recontact and Consent (in Thailand, recontact respondents have given their consent when they first participated and for follow-up surveys, therefore no further consent was needed).
3. Main Questionnaire
4. Exit and Compensation

### **Main Components of the Replenishment Protocol**

The ITC Survey replenishment protocol consisted of four main steps:

1. Household Enumeration (including demographic information)
2. Participant Selection & Consent
3. Main Questionnaire
4. Exit and Compensation

### **Attempts to Enumerate**

A maximum of four attempts were made to enumerate each household.

### **Length of the interview**

The interview for the survey took a total of approximately 50 minutes to complete for adult smokers, 40 minutes for youths, and 10 minutes for non-smoking adults.

### **Participant Gift / Remuneration**

In Malaysia, adult respondents received gifts worth RM35 while youth respondents received gifts worth RM15. For telephone interviews, gifts were mailed to respondents.

In Thailand, adult smoker participants received 300 Baht while youth participants received 150 Baht.

### **Private interviews**

If possible, adult participants were interviewed alone. If another person insisted on being present, the respondent must have approved of his/her presence for the interview to proceed. Youth respondents completed the questionnaire in private.

### **Proxy Interviews**

A proxy interview is an interview conducted with another knowledgeable member of the household on behalf of the selected respondent. ITC survey protocols always ensure that this situation does not occur.

### **Respondent Not Available**

If a respondent was unavailable at the moment, an appointment (hard appointment) was made to interview that respondent.

### Fieldwork Teams

A fieldwork team consisted of a field supervisor and several interviewers (Interviewers worked in pairs *at all times*, for efficiency and safety reasons). The number of field supervisors and interviewers assigned to each stratum varied according to the stratum size.

In Malaysia, 4 supervisors and 18 interviewers were recruited and trained to conduct telephone interviews.

In Thailand, there were a total of 5 field supervisors and 30 interviewers. Field Supervisors reported to the principal investigators at the Institute for Population and Social Research, Mahidol University. The principal investigators and research team also visited periodically to the monitor the fieldwork progress. The following describes the team composition for each area.

**Table 3: Fieldwork teams in Different Thailand Areas**

	North	Central	Northeast	South	Bangkok	Total
<b>Supervisor</b>	1	1	1	1	1	5
<b>Interviewer</b>	5	5	5	5	5	25
<b>Total</b>	6	6	6	6	6	30

**Table 4: Fieldwork teams for telephone in Malaysia**

	Telephone	Total
<b>Supervisor</b>	4	4
<b>Interviewer</b>	18	18
<b>Total</b>	22	22

### Monitoring & Quality Assurance

To ensure the accuracy and quality of the ITC survey, fieldwork was monitored through several means.

The field supervisor travelled with each fieldwork team to provide regular feedback to the interviewers and monitor interviews. The field supervisor also ensured that the survey protocol and data collection standards were being closely followed.

They were responsible for ensuring household and respondent identification numbers were properly filled out. See *Respondent ID* under *4. Disposition Codes and Retention Rates* for more information about identification numbers.

Field supervisors were also available to address any questions or concerns from the interviewers.

### Progress Reports

Field Supervisors also provided daily updates of quotas and any problems or issues to the principal investigators.

Field Supervisors were responsible for providing regular updates to the investigator teams, and consulting the investigators on problems encountered in the field, for example the sample cluster turning out to be non-existent or the fieldwork team being denied permission to sample in selected area).

### **Interviewer Training**

In Malaysia, training for telephone interviewers took place over two days, July 17<sup>th</sup> and 18<sup>th</sup>, 2009. There were 18 telephone interviewers – 14 females and 4 males. There were 10 trainers involved. The first day of training involved the theoretical parts of the survey. This included objectives of the study, sample selection, survey procedures, questionnaire content, interviewing techniques, and ethical procedures. The second day of training, interviewers gained hands-on experience with the interview process. They engaged in role-play and were given instructions on how to use the database.

In Thailand, training for interviewers and field supervisors took place over five days, from 6 to 10 January, 2008. 2 to 6 January, 2008. The first three days of training was on the objectives of the study, sample selection, survey procedures, questionnaire contents, interviewing methods and ethical procedures. For the next two days, interviewers received practical interviewing training.

### **Interviewing Aids**

For Thailand, in some cases, the response options are the same for several questions in a row. Flashcards were provided that could be shown to respondents to save time and to facilitate ease of interviewing. For example, there were several questions which asked the respondents about the intensity of their attitudes.

### **Household Enumeration**

For the replenishment survey, at each dwelling before respondents were selected, information was collected about the household (a roster of *all* household members with age, gender, and smoking status) from any *adult* member. In Malaysia, the ethnicity of the household informant was also coded. The time required to complete the *Household Enumeration Form* was 2-5 minutes.

Recontact respondents were not enumerated.

### **Identifying Eligible members**

There were three categories of eligible respondents in a household:

1. Adult Male Smoker
2. Adult Female Smoker
3. Youth

### **Selection of Household Members**

When there was more than one eligible household member in a category, the Kish Grid, a randomization technique, was employed to select the respondent (Appendix C). Substitutions were permitted only for selected household members who

1. Were absent during the entire fieldwork period at the survey location, OR
2. Could not speak the language of the survey, OR
3. Had physical or mental health issues and were unable to participate

Households who provided verbal consent when contacted were requested to provide detailed information.

## **Information and Consent**

Once a respondent was selected, the information letter was provided and the consent form was administered (face-to-face interview) or the consent script was read aloud (telephone interview). See Appendices F and G for the actual forms.

## **Handling Multiple Respondents at the Same Time**

For face-to-face interviews, if a youth respondent was selected and available, one interviewer would start the youth respondent on the survey, while the other dealt with the adults. Once the youth respondent began to fill out the questionnaire, the second interviewer could return to survey a second respondent, the adult. An interviewer could not interview two adults at the same time.

## **Language**

The survey was conducted in Thai in Thailand, and Malay or English in Malaysia. Household members were ineligible if they were unable to be interviewed in the survey languages.

Some problems concerning language were encountered during the fieldwork process. In Malaysia, interviewers had trouble expressing some of the questions in local dialect. For example “encourage” is different in Malay in some Malaysian dialects.

For replenishment, refusal rates were higher among Chinese respondents, especially those in Penang who spoke a particular Chinese dialect. The majority of interviewers were Malays and the interviews were conducted in the Malay language, which may have caused a language barrier.

## **Report from the Malaysian Team on their Fieldwork Experience**

During the W4 fieldwork, attempts were made to contact 500 adult smokers/quitters who did not participate in the previous wave. Calls were made to these respondents. The contact information (telephone numbers and addresses) were obtained from the enumeration forms that were collected in the W2 face-to-face fieldwork interviewing stage.

About 300 short surveys were also sent by mail, and recontact attempted by telephone, to respondents who were lost in Waves 2 and 3.

About 40 to 50 of those who completed short surveys completed the normal survey when recontacted by telephone for a follow-up.

## **Report from the Thailand Team on their Fieldwork Experience**

The fieldwork in Thailand for Wave 4 of the survey in 2009 generally went smoothly. No major problems occurred. A few points contributing to the relative success of the fieldwork are highlighted as follows:

1. Well-prepared and in-advance coordination: before the actual fieldwork begins, the Thai team makes contact and coordinates with key people in the study sites. Although they have conducted the survey for four rounds, early contact and coordination to let the key people know that the research team will come again help them to expect the visit, be prepared and cooperative.
2. Make several attempts in following-up previous cases as well as in contacting new cases: interviewers were trained to keep following up the target respondents at least 4

times before giving up. The Thai team makes this fieldwork rule strict and it maintains the high rate of retention.

3. The fieldwork team values a good relationship between field staff and respondents as well as other people in the study sites. They emphasize that even respondents who refused to participate in the study must receive respect from field staff. They even found a case who asked not to receive the compensation due to having a good feeling about the project (though the field staff convinced the man to receive it anyway).\*

The difficulty that the Thai team encountered during the most recent wave of the survey is mostly related to the timing of the survey. In Wave 4, they conducted the survey during April to June, 2009. It is the school break time for many adolescents, so a number of them were absent from their usual residence. For many rural residents, the time is also off-agricultural season. Many of them left home to explore opportunities for other jobs before returning for the next round of rice plantation in around July. This decreased the retention rate a bit.

\* A note for caution: as related to compensation, they, however, found a case who quitted smoking but reported as a current smoker (to be eligible as new case of smoker) because of wanting to get the compensation. Fortunately, the interviewer was careful enough to catch some inconsistency of his answers and asked him straightforwardly about his misinformation and he finally accepted it.

## 4. Disposition Codes and Retention Rates

### Face-to-face Recontact in Thailand

#### *Household outcome codes*

- 1 Could not find dwelling
- 2 Household moved, could not trace
- 3 Household moved, out of range
- 4 Threat to Safety
- 5 No Contact – Weather Conditions
- 6 No Answer – 4 attempts
- 7 No Answer – Survey Period Ends
- 8 Household Refusal
- 9 Language Barrier
- 10 No one capable of answering (all adults incapable for reasons of health, mental or physical)
- 11 Recontact prevented for other reasons: Specify
- 12 Recontacted successfully

#### *Individual outcome codes*

- 1 Missed (after 4 attempts)
- 2 Language Barrier
- 3 Health/Mentally Incapable
- 4 Proxy Refusal
- 5 Refusal
- 6 Incomplete (start, break off)
- 7 Complete
- 8 No longer part of household, and out of range or untraceable

### Face-to-face Replenishment

#### *Household outcome codes*

- 1 Could not find
- 2 Vacant Dwelling/Lot
- 3 Not a Household (e.g. Business)
- 4 Threat to Safety
- 5 No Contact – Weather Conditions
- 6 No Answer – 4 attempts
- 7 No Answer – Survey Period Ends
- 8 Household Refusal
- 9 Language Barrier
- 10 No one capable of answering (all adults incapable for reasons of health, mental or physical)
- 11 Enumeration prevented for other reasons: Specify
- 12 Enumerated

#### *Individual outcome codes*

- 1 Missed (after 4 attempts)
- 2 Language Barrier

- 3 Health/Mentally Incapable
- 4 Proxy Refusal
- 5 Refusal
- 6 Incomplete (start, break off)
- 7 Complete

### **Telephone Recontact in Malaysia**

#### ***Household outcome codes***

- 1 Not a working number (do not retry)
- 2 Working number but not a residence (e.g. business) (do not retry)
- 3 No contact: Fax/modem (retry)
- 4 No contact: Rings only (retry)
- 5 No contact: Busy signal (retry)
- 6 No contact: Answering machine (retry)
- 7 Contact, hang up before end of intro (can retry ONCE a few days later)
- 8 Contact, soft refusal (no time) (can retry ONCE a few days later)
- 9 Contact, refusal before any information filled out on enumeration form (do not retry)
- 10 Contact, language barrier (can retry ONCE a few days later)
- 11 Contact, no one capable of responding (can try ONCE a few days later)
- 12 Contact, appointment made before any information filled out on enumeration form (record appointment for next call attempt)
- 13 Contact, proceeded to enumeration/screening

#### ***Individual outcome codes***

- 1 Prefer face-to-face interview
- 2 Missed (after 4 call attempts – follow up with face-to-face)
- 3 Language Barrier
- 4 Health/Mentally Incapable
- 5 Proxy Refusal
- 6 Refusal
- 7 Incomplete (start, break off)
- 8 Complete

### **Telephone Replenishment**

#### ***Household Outcome Codes:***

- 1 Not a working number (do not retry)
- 2 Working number but not a residence (e.g. business) (do not retry)
- 3 No contact: Fax/modem (retry)
- 4 No contact: Rings only (retry)
- 5 No contact: Busy signal (retry)
- 6 No contact: Answering machine (retry)
- 7 Contact, hang up before end of intro (can retry ONCE a few days later)
- 8 Contact, soft refusal (no time) (can retry ONCE a few days later)
- 9 Contact, refusal before any information filled out on enumeration form (do not retry)
- 10 Contact, language barrier (can retry ONCE a few days later)
- 11 Contact, no one capable of responding (can try ONCE a few days later)

12 Contact, appointment made before any information filled out on enumeration form (record appointment for next call attempt)

13 Contact, proceeded to enumeration/screening

***Individual Outcome Codes:***

0 Prefer Face-to-Face interview

1 Missed (after 4 call attempts – follow-up with face-to-face )

2 Language Barrier

3 Health/Mentally Incapable

4 Proxy Refusal

5 Refusal

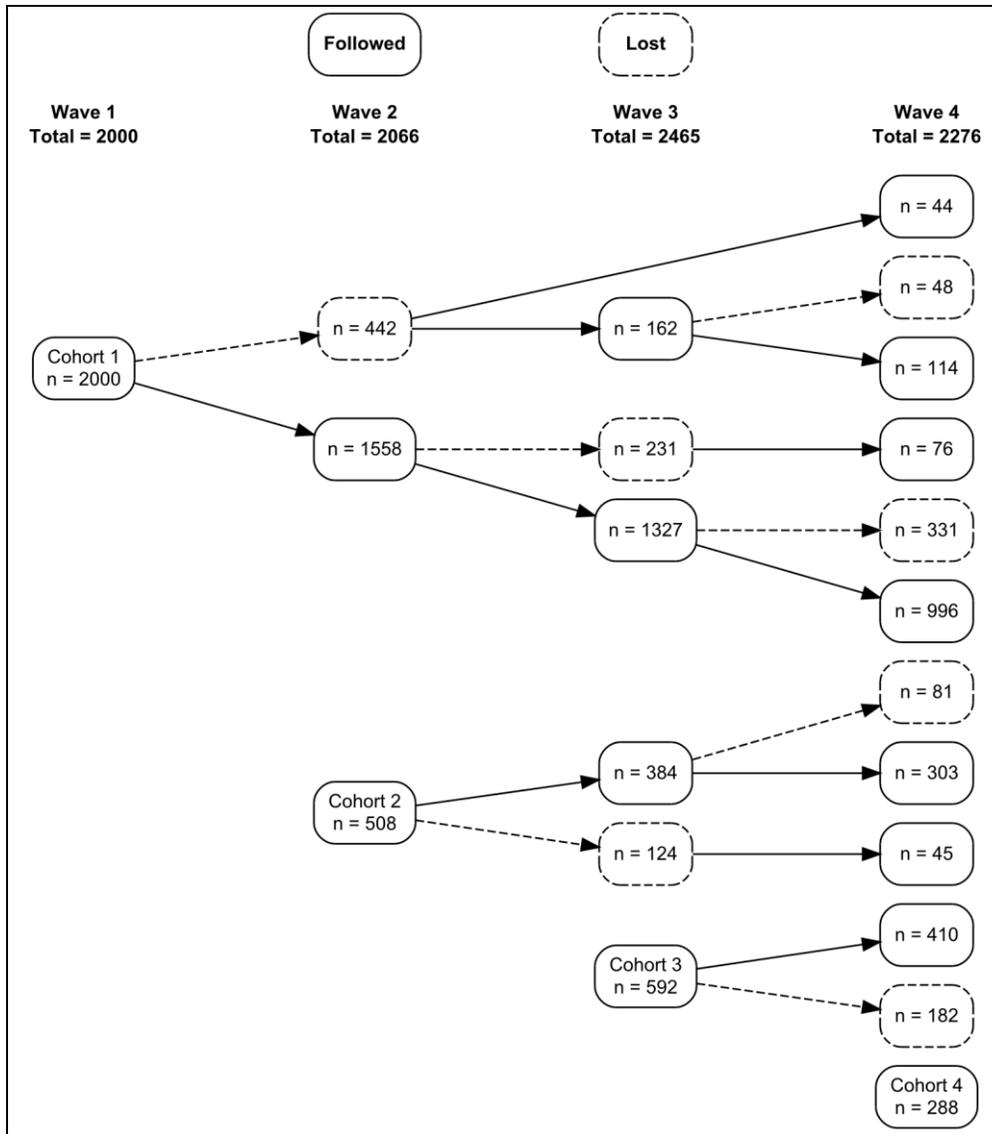
6 Incomplete (start, breakoff)

7 Complete

## Retention Rates for Recontact

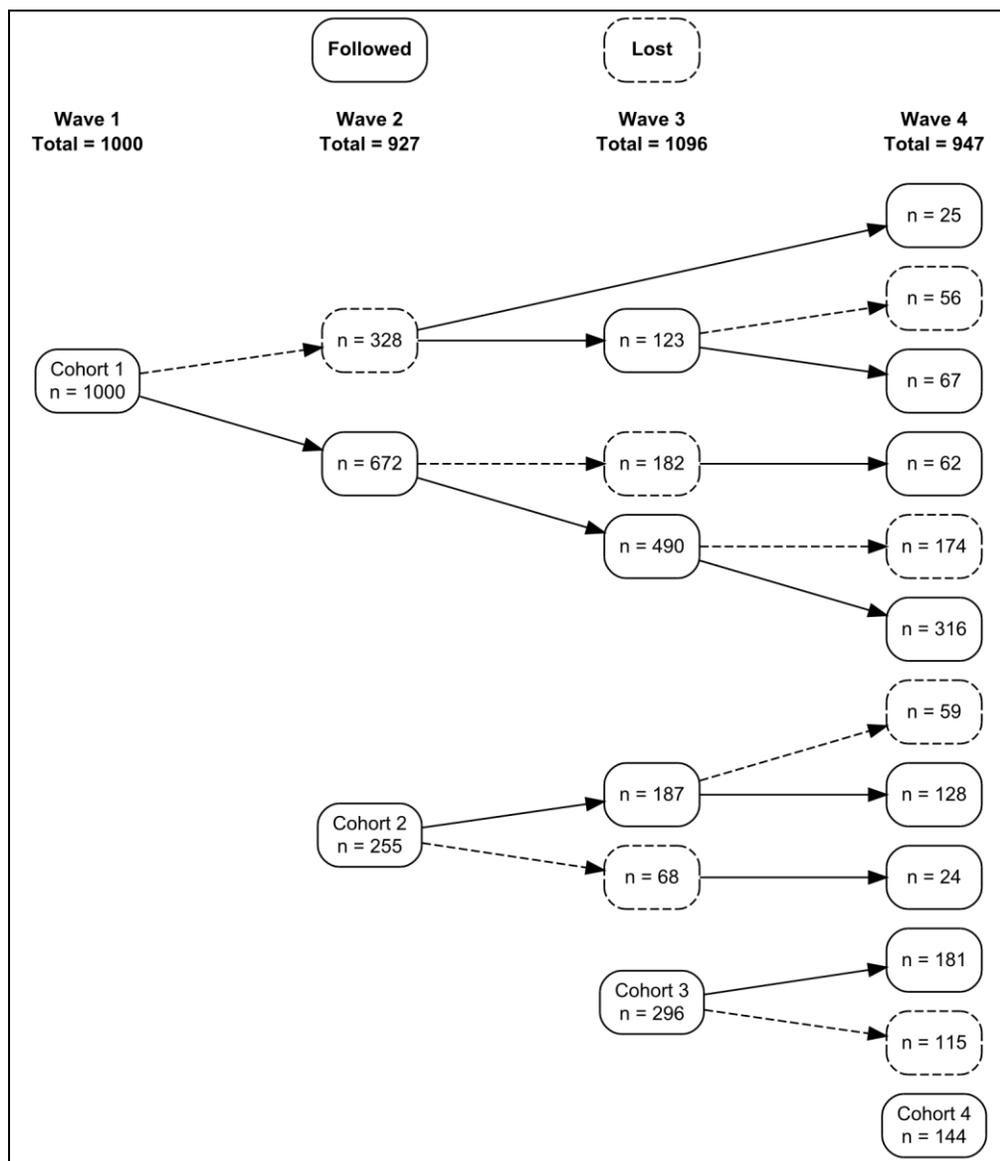
**Table 4: Thailand Retention Rates: Adult Smokers**

	Number Recruited	Wave 1 to Wave 2				Wave 2 to Wave 3				Wave 3 to Wave 4			
		n	Lost %	Retained n	Retained %	n	Lost %	Retained n	Retained %	n	Lost %	Retained n	Retained %
Wave 1	2000	442	22.1	1558	77.9	231	14.8	1327	85.2	331	24.9	996	75.1
		→ 162				→ 44				→ 76			
Wave 2	508					124	24.4	384	75.6	81	21.1	303	78.9
		→ 45				→ 45				→ 45			
Wave 3	592									182	30.7	410	69.3
<b>Overall</b>		<b>442</b>	<b>22.1</b>	<b>1558</b>	<b>77.9</b>	<b>355</b>	<b>17.2</b>	<b>1711</b>	<b>82.8</b>	<b>642</b>	<b>26</b>	<b>1823</b>	<b>74</b>
<b>Total recontacts at Wave 4</b>										<b>1988</b>			



**Table 5: Thailand Retention Rates: Youth Smokers**

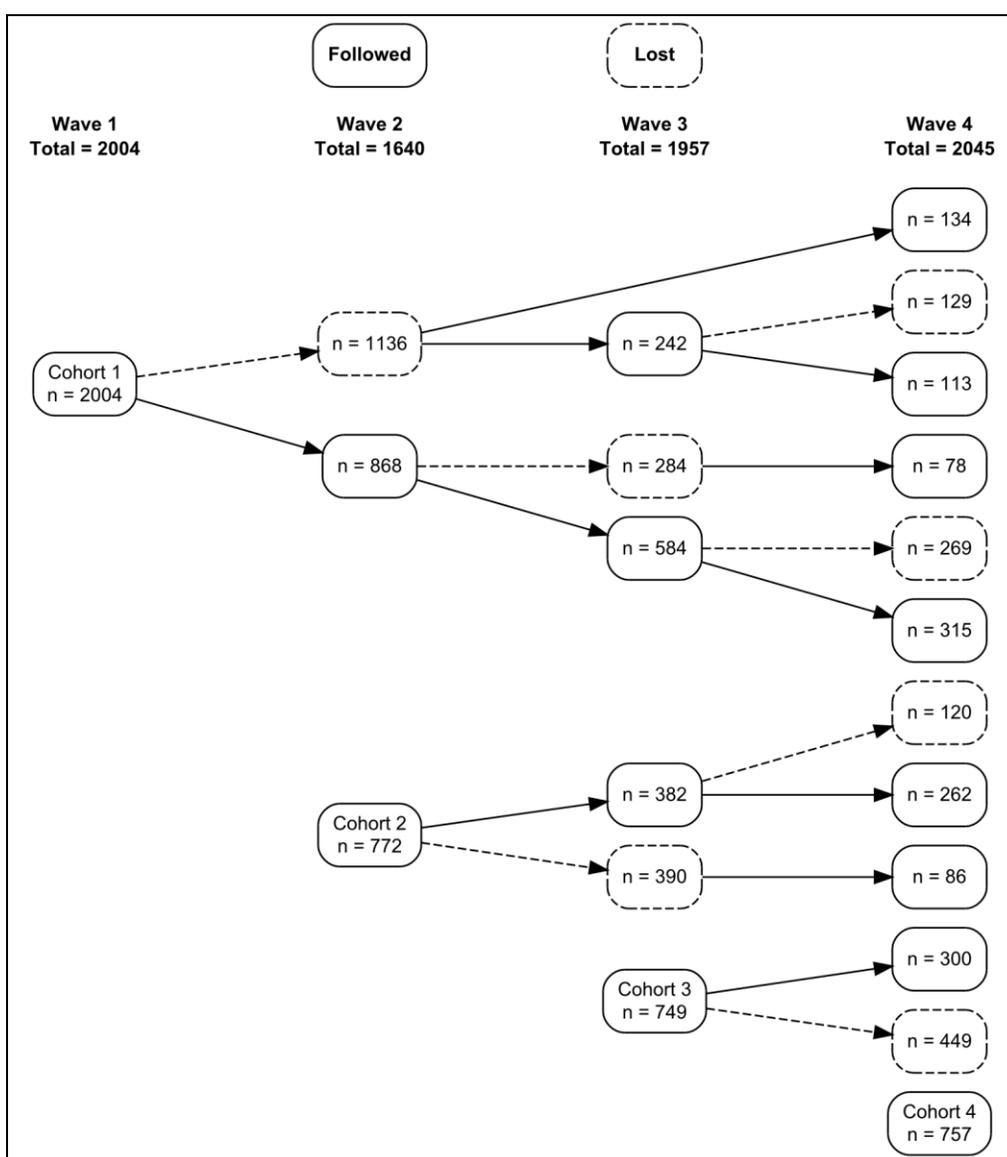
Number Recruited	Wave 1 to Wave 2				Wave 2 to Wave 3				Wave 3 to Wave 4				
	Lost		Retained		Lost		Retained		Lost		Retained		
	n	%	n	%	n	%	n	%	n	%	n	%	
Wave 1	1000	328	32.8	672	67.2	182	27.1	490	72.9	174	35.5	316	64.5
Wave 2	255					68	26.7	187	73.3	59	31.6	128	68.4
Wave 3	296									115	38.9	181	61.1
<b>Overall</b>		<b>328</b>	<b>32.8</b>	<b>672</b>	<b>67.2</b>	<b>250</b>	<b>27.0</b>	<b>677</b>	<b>73.0</b>	<b>404</b>	<b>36.9</b>	<b>692</b>	<b>63.1</b>
<b>Total recontacts at Wave 4</b>												<b>803</b>	



**Table 6: Malaysia Retention Rates: Smokers**

	Number Recruited	Wave 1 to Wave 2				Wave 2 to Wave 3				Wave 3 to Wave 4			
		Lost		Retained		Lost		Retained		Lost		Retained	
		n	%	n	%	n	%	n	%	n	%	n*	%
Wave 1	2004	1136	56.7	868	43.3	284	32.7	584	67.3	269	46.1	315	53.9
								242		129	53.3	113	46.7
												134	
												78	
Wave 2	772					390	50.5	382	49.5	120	31.4	262	68.6
												86	
Wave 3	749									449	59.9	300	40.1
<b>Overall</b>		<b>1136</b>	<b>56.7</b>	<b>868</b>	<b>43.3</b>	<b>674</b>	<b>41.1</b>	<b>966</b>	<b>58.9</b>	<b>967</b>	<b>49.4</b>	<b>990</b>	<b>50.6</b>

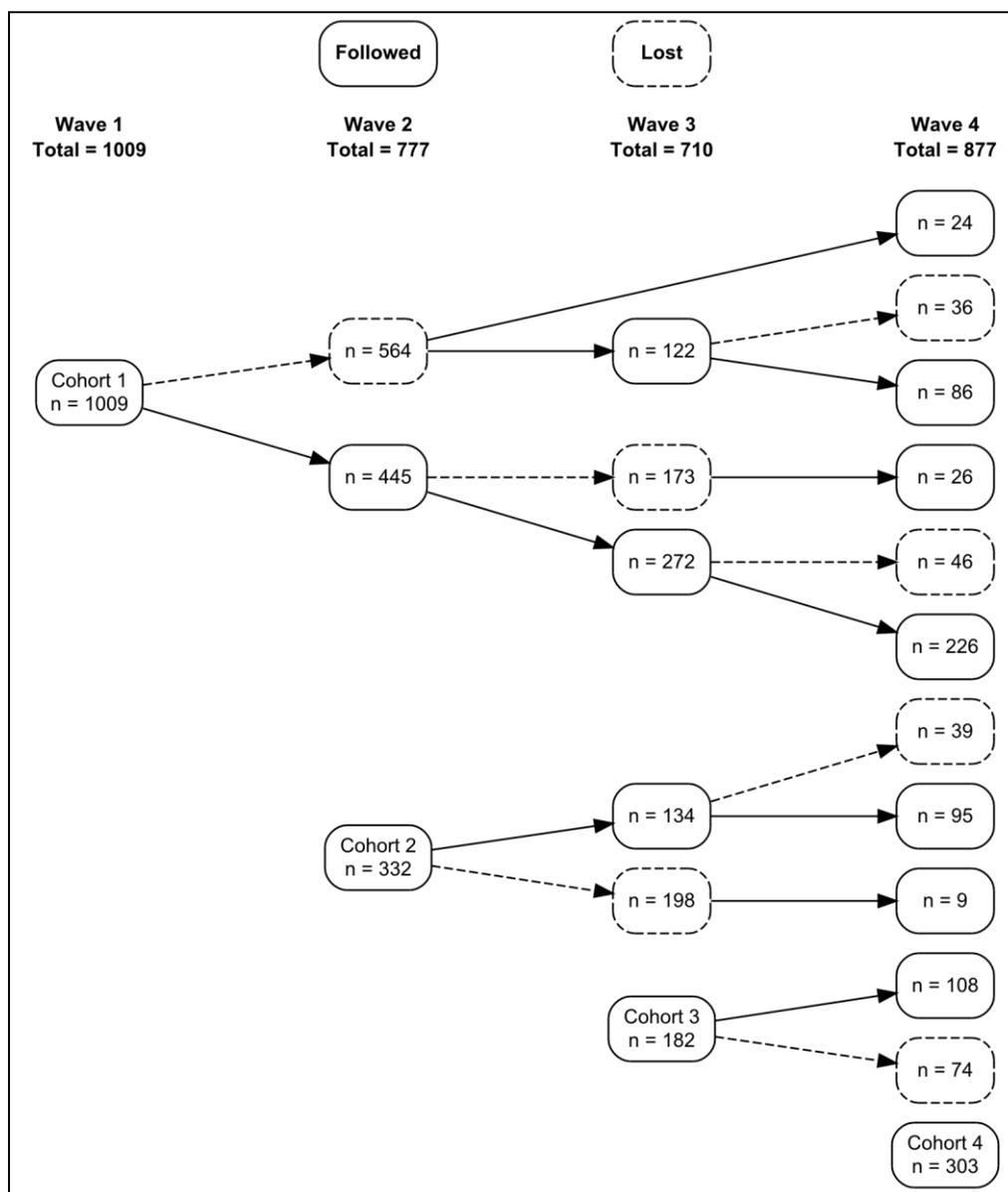
\* an additional 4 people were present at wave 4 but excluded at earlier waves due to missing data for age, sex or smoking status variables giving a total of 1289 recontact smokers surveyed at wave 4



**Table 7: Malaysia Retention Rates: Youth**

	Number Recruited	Wave 1 to Wave 2				Wave 2 to Wave 3				Wave 3 to Wave 4			
		Lost		Retained		Lost		Retained		Lost		Retained	
		n	%	n	%	n	%	n	%	n	%	n	%
Wave 1	1009	564	55.9	445	44.1	173	38.9	272	61.1	46	17.0	226	83.0
		→		→		→		→		→		→	
		→		→		→		→		→		→	
		→		→		→		→		→		→	
Wave 2	332					198	59.6	134	40.4	39	29.1	95	70.9
												9	
Wave 3	182									74	40.7	108	59.3
<b>Overall</b>		<b>564</b>	<b>55.9</b>	<b>445</b>	<b>44.1</b>	<b>371</b>	<b>47.7</b>	<b>406</b>	<b>52.3</b>	<b>195</b>	<b>27.5</b>	<b>515</b>	<b>72.5</b>

† an additional 14 youth were present at wave 4 but excluded at earlier waves, giving a total of 625 recontact youth surveyed at wave 4



**Table 8: Malaysia Retention Rates: Non-smokers\***

	Number Recruited	<u>Wave 1 to Wave 2</u>				<u>Wave 2 to Wave 3</u>			
		<u>Lost</u>		<u>Retained</u>		<u>Lost</u>		<u>Retained</u>	
		n	%	n	%	n	%	n	%
Wave 1	1555	686	44.1	869	55.9	283	32.6	586	67.4
Wave 2	703					368	52.4	335	47.6
Wave 3	388								
<b>Overall</b>		<b>686</b>	<b>44.1</b>	<b>869</b>	<b>55.9</b>	<b>651</b>	<b>41.4</b>	<b>921</b>	<b>58.6</b>

\* Nonsmokers were not surveyed in Wave 4.

## 5. Weight Construction

### Wave 1 weights

Here is a brief summary of the computation of the Wave 1 household and individual weights.

At Wave 1, each household in the sample was given a household weight  $HWTWV1$  which could be interpreted as the number of households that it represented in the urban or rural part of its state (Malaysia) or province (Thailand). (In this description, take Bangkok to have the status of both a province and a region in Thailand.)

Following this, an individual weight  $IHWTWV1$  was constructed for each individual within his/her household. ( $W1a$  in Wave 1 documentation.)

The product of household weight and individual within-household weight was then raised to the urban or rural part of its state (Malaysia) or province (Thailand), to produce weights  $W4aWV1$ .

These were further raised to the national level and calibrated to national population figures, to produce weights  $W6WV1$ .

Finally, the weights were rescaled to national sample sizes for pooled analyses, yielding weights  $RWTWV1$ .

### Wave 2 weights

Three sets of weights for Wave 2 were constructed.

The Wave 1- Wave 2 longitudinal weights were computed for households and individuals from Wave 1 who were re-contacted and interviewed again in Wave 2. They were essentially the Wave 1 weights adjusted for differential attrition at a high level, calibrated to the Wave 1 populations to produce weights  $W6WV12$ , and then rescaled to sum to national sample sizes for youth, adult smokers and adult non-smokers to produce weights  $RWTWV12$ .

The Wave 2 new cohort weights were computed for households and individuals newly recruited in Wave 2. The household weights were called  $HWTWV2$ , and the individual within household weights may be called  $IHWTWV2$  (or  $W1a$  in Wave 2 documentation). The Wave 2 new cohort weights were computed in a similar manner as the original Wave 1 weights, but theoretically calibrated to the Wave 2 populations to produce weights  $W6WV2$ , and rescaled to national sample sizes to produce weights  $RWTWV2$ .

The Wave 2 cross-sectional weights were computed for all households and individuals present in Wave 2. They were calibrated to the Wave 2 populations to produce weights  $W6WV2X$ , and  $W6WV2X$  weights in Thailand and the  $W4cWV2X$  weights in Malaysia were rescaled to sum to combined sample size within each country and sampling category (adult smokers, youth), to produce weights  $RWTWV2X$ .

### Sets of Wave 3 weights

Four sets of weights for Wave 3 were constructed.

The Wave 1- Wave 3 longitudinal weights were computed for households and individuals from Wave 1 who were re-contacted and interviewed again in Wave 3. They were essentially the Wave 1 weights adjusted for differential attrition at a high level, calibrated to the Wave 1 populations to produce weights *W6WV13*, and then rescaled to sum to national sample sizes for youth, adult smokers and adult non-smokers to produce weights *RWTWV13*. On the final data file, *W6WV13* is *cDE11923v*, and *RWTWV13* is *cDE11953v*.

The Wave 1-Wave 2-Wave 3 longitudinal weights were computed for households and individuals from Wave 1 who were re-contacted and interviewed again in Wave 2 and Wave 3. They were essentially the Wave 1 weights adjusted for differential attrition at a high level, calibrated to the Wave 1 populations to produce weights *W6WV123*, and then rescaled to sum to national sample sizes for youth, adult smokers and adult non-smokers to produce weights *RWTWV123*. In the final data file *W6WV123* is *cDE11921v* and *RWTWV123* is *cDE11951v*.

We computed longitudinal Wave 2- Wave 3 weights for new recruits at Wave 2 present in Wave 3, to aid in construction of cross-sectional weights.

The Wave 3 new cohort weights were computed for households and individuals newly recruited in Wave 3. The household weights were called *HWTWV3*, and the individual within household weights may be called *IHWTWV3*. The Wave 3 new cohort weights were computed in a similar manner as the original Wave 1 weights, but theoretically calibrated to the Wave 3 populations to produce weights *W6WV3*, and rescaled to national sample sizes to produce weights *RWTWV3*. On the final data file, *W6WV3* is *cDE11915v* and *RWTWV3* is *cDE11917v*.

The Wave 3 cross-sectional weights were computed for all households and individuals present in Wave 3. They were calibrated to the Wave 3 populations and rescaled to sum to combined sample size within each country and sampling category (adult smokers, youth), to produce weights *RWTWV3X*. On the final data file, *RWTWV3X* is *cDE11919v*.

### Sets of Wave 4 weights

Five sets of weights for Wave 4 were constructed. Note that at Wave 4, non-smokers were dropped from the cohorts in Malaysia. In Thailand, the decision was made to drop one or two rural subdistricts from each of the sample provinces; to carry out recontact and replenishment to Wave 3 levels in the rural subdistricts that were retained; and to bring up the adult smoker and youth sample sizes to previous levels overall by increasing the sample sizes in Bangkok and the other urban areas.

The Wave 1- Wave 4 longitudinal weights were computed for households and individuals from Wave 1 who were re-contacted and interviewed again in Wave 4. They were essentially the Wave 1 weights adjusted for differential attrition at a high level, calibrated to the Wave 1 populations to produce weights *W6WV14*, and then rescaled to sum to national sample sizes for youth and adult smokers, to produce weights *RWTWV14*. (*dDE11923v* on the adult dataset, *dDE12923v* on the youth dataset).

The Wave 1-Wave 2-Wave 3-Wave 4 longitudinal weights were computed for households and individuals from Wave1 who were re-contacted and interviewed again in Wave 2, Wave 3 and Wave 4. They were essentially the Wave 1 weights adjusted for differential attrition at a high level, calibrated to the Wave 1 populations to produce weights  $W6WV1234$ , and then rescaled to sum to national sample sizes for youth and adult smokers, to produce weights  $RWTWV1234$ . (dDE11921v adults; dDE12921v youth)

The Wave 4 new cohort weights were computed for households and individuals newly recruited in Wave 4. They were computed in a similar manner as the original Wave 1 weights, but theoretically calibrated to the Wave 4 populations to produce weights  $W6WV4$ , and rescaled to national sample sizes to produce weights 4.

The Wave 4 cross-sectional weights were computed for all households and individuals present in Wave 4. They were calibrated to the Wave 4 populations and rescaled to sum to combined sample size within each country and sampling category (adult smokers and youth), to produce weights  $RWTWV4X$ . (dDE11919v adults; dDE12919v youth).

The population figures used for calibration were the same as for Wave 3 in Thailand, but updated with new figures for Malaysia.

### Wave 1- Wave 4 longitudinal weights

For each Wave 1 household which was re-contacted and in which at least one interview was achieved at Wave 4, a new household weight  $HWTWV14$  was computed. Within each “pseudo-PSU” -- urban or rural part of the state (Malaysia) or province (Thailand) – the total of the  $HWTWV14$  over the re-interviewed households is the same as the total of the  $HWTWV1$  over the Wave 1 households where adult smokers and/or youth respondents were found. Thus, for example, for a household in an urban part of a state in Malaysia,

$$HWTWV14 = HWTWV1 \times \frac{\sum_{urbanS} HWTWV1}{\sum_{urbanSrect} HWTWV1}$$

where  $\sum_{urbanS}$  denotes the sum over all Wave 1 households containing an adult smoker or a

youth respondent in the urban part of the state, and  $\sum_{urbanSrect}$  denotes the sum over all Wave 1 households re-contacted with an interview in Wave 4 in the urban part of the state.

For each re-interviewed individual the state (Malaysia) or province (Thailand) level weight was obtained by multiplying  $HWTWV14$  by  $IHWTWV1$  to produce  $W4WV14$ , and rescaling. The rescaling adjustment was done so that the new totals were equal to the original Wave 1 totals, within the urban or rural part of the state or province, and within the same age category (youth or adult), gender (for adults) and baseline smoking status (in Malaysia). For example, for a youth in an urban part of a province of Thailand,

$$W4aWV14 = W4WV14 \times \frac{\sum_{urbanP,dem} W4aWV1}{\sum_{urbanP,dem,rect} W4WV14}$$

where the summation in the numerator was over all Wave 1 interviewed youths in the urban part of the same province, and the summation in the denominator was over all such youths reinterviewed in Wave 4.

Because the longitudinal weights were intended for analytic purposes, no further adjustment was applied in the Malaysia data before rescaling to total sample size. In the Thailand data, the weights  $W6WV14$  were formed to sum to the same totals as the weights  $W6WV1$  within regions. For example, for an adult female in the rural part of a province,

$$W6WV14 = W4aWV14 \times \frac{\sum_{ruralP,dem} W6WV1}{\sum_{ruralP,dem,rect} W4aWV14}$$

where the summation in the numerator is over all Wave 1 interviewed adult females in the rural part of the province, and the summation in the denominator is over all such adult females reinterviewed in Wave 4.

The  $RWTWV14$  were obtained by rescaling the final weights in each country to sum to national Wave 1-Wave 4 sample size, for youth, adult smokers, and adult non-smokers.

### Wave 1-Wave 2-Wave 3-Wave 4 longitudinal weights

For each Wave 1 household which was re-contacted and in which at least one interview was achieved at each of Wave 2, Wave 3 and Wave 4, a new household weight  $HWTWV1234$  was computed. Within each “pseudo-PSU” -- urban or rural part of the state (Malaysia) or province (Thailand) – the total of the  $HWTWV1234$  over the re-interviewed households is the same as the total of the  $HWTWV1$  over the Wave 1 households. Thus, for example, for a household in an urban part of a state in Malaysia,

$$HWTWV124 = HWTWV1 \times \frac{\sum_{urbanS} HWTWV1}{\sum_{urbanSrect} HWTWV1}$$

where  $\sum_{urbanS}$  denotes the sum over all Wave 1 households containing an adult smoker or

youth respondent in the urban part of the state, and

$\sum_{urbanSrect}$  denotes

the sum over all re-contacted households with interviews in Waves 1, 2, 3 and 4 in the urban part of the state.

For each re-interviewed individual the state (Malaysia) or province (Thailand) level weight was obtained by multiplying  $HWTWV1234$  by  $IHWTWV1$  to produce  $W4WV1234$ , and rescaling. The rescaling adjustment was done so that the new totals were equal to the original Wave 1

totals, within the urban or rural part of the state or province, and within the same age category (youth or adult), gender (for adults) and baseline smoking status (in Malaysia). For example, for a youth in an urban part of a province of Thailand,

$$W4aWV1234 = W4WV1234 \times \frac{\sum_{urbanP,dem} W4aWV1}{\sum_{urbanP,dem,rect} W4WV1234}$$

where the summation in the numerator was over all Wave 1 interviewed youths in the urban part of the same province, and the summation in the denominator was over all such youths reinterviewed in Waves 2, 3, and 4.

Because the longitudinal weights were intended for analytic purposes, no further adjustment was applied in the Malaysia data before rescaling to total sample size. In the Thailand data, the weights  $W6WV1234$  were formed to sum to the same totals as the weights  $W6WV1$  within regions. For example, for an adult female in the rural part of a province,

$$W6WV1234 = W4aWV1234 \times \frac{\sum_{ruralR,dem} W6WV1}{\sum_{ruralR,dem,rect} W4aWV1234}$$

where the summation in the numerator is over all Wave 1 interviewed adult females in the rural part of the region, and the summation in the denominator is over all such adult females reinterviewed in Waves 2, 3 and 4.

The  $RWTWV1234$  were obtained by rescaling the final weights in each country to sum to national Wave 1- Wave 2- Wave 3- Wave 4 sample size, for youth, adult smokers, and adult non-smokers.

### Wave 4 new cohort weights

In this part, the sample sizes referred to all relate to the new cohort

For any newly recruited individual, that individual's household had been recorded and at least to some extent enumerated. Thus we constructed a household weight for each household in the replenishment sample, within its "pseudo-PSU", namely the urban or rural part of state (Malaysia) or province (Thailand). Following this we constructed an individual weight for each individual within his/her household. The product of household weight and individual within-household weight was then raised to the national level. Finally, the weights were rescaled to national sample sizes for pooled analyses.

In Thailand, new recruitment or replenishment was carried out using the same kind of sampling design as in Wave 1, and face-to-face recruitment. Thus for Thailand the Wave 4 new cohort weights were constructed in a manner similar to that of Wave 1. In Malaysia, mixed mode (face-to-face and telephone) data collection was initiated in Wave 2, and continued in Wave 3. In Wave 4, almost all recruiting was carried out by telephone. Thus for Malaysia the Wave 4 new cohort weights were constructed in a manner similar to that of Wave 2.

In what follows, the term *sampling categories* refers to the categories adult smoker and youth, the categories for which quotas were set. The term *refined categories* refers to the same categories, but with the first divided according to gender.

### Computation of household weights HWTWV4

**Step H1:** For each enumerated household, a cluster (ED or VI) level (Thailand) or district (AD) level (Malaysia) weight  $HW1$  has been computed.

In Malaysia,

$$HW1 = H_{AD} / h_{AD}$$

where  $H_{AD}$  is an estimated number of households in the AD of the household in question, and  $h_{AD}$  is the number of households with anyone enumerated in that same AD.

Similarly, in Thailand, including Bangkok,

$$HW1 = H_{ED} / h_{ED} \text{ (urban) or } H_{ED} / h_{ED} \text{ (rural).}$$

In Thailand, in cases where the number of households in the cluster or ED was larger than 200 we have capped it at 200, to avoid unusually large weights.

**Step H2:** For each enumerated household in a rural area, a state level weight  $HWTWV4$  (in Malaysia) or a province level weight  $HWTWV4$  (in Thailand) has been computed. This is the approximate number of households in the same state or province in rural areas represented by the enumerated household. Similarly, for each enumerated household in an urban area, a state level weight (in Malaysia) or a province/Bangkok level weight  $HWTWV4$  has been computed. This can be taken to be the approximate number of households in the same state or province/Bangkok in urban areas represented by that enumerated household.

In Malaysia,

$$HWTWV4 = N_{rurals} \times HW1 / (nn \times H_{AD} \times NUMBAR)$$

or

$$HWTWV4 = N_{urbanS} \times HW1 / (nn \times H_{AD} \times NUMBAR)$$

where  $NUMBAR = (\sum_{AD} (HW1 \times NUM)) / \sum_{AD} HW1$ ,

$NUM$  is the number of people or the number of people aged 13 and over (whichever is available) in the household,  $N_{rurals}$  is the rural population of the state,  $\sum_{AD}$  denotes the sum

over enumerated **households** (not interviewed people) in the district or city ( $AD$ ), and  $N_{urban}$  is the urban population of the state;  $nn$  is a factor from the sampling design which is given by

$$nn = n_{AD}$$

where  $n_{AD}$  is the number of districts taken from the rural part or the number of cities taken from the urban part of the state.

For each enumerated household in Bangkok,

$$HWTWV4 = HW1 \times \left( \sum_{dis} N_{ED,dis} / \Pi_{dis} \right) / n_{ED}$$

where  $\sum_{dis}$  denotes the sum over all districts in sample;  $N_{ED,dis}$  is the number of EDs in the district  $dis$ ;  $\Pi_{dis}$  is the inclusion probability of the district  $dis$ , and is given by

$$\Pi_{dis} = 7 \times N_{dis} / N_{Bangkok} ,$$

where the  $N$ s are population sizes; and  $n_{ED}$  is the number of EDs in the Bangkok sample.

(Note that the new recruits in Wave 4 were taken from new EDs in 7 of the previously selected districts.)

For each enumerated household in the urban part of the rest of Thailand,

$$HWTWV4 = HW1 \times N_{urbanP} / [N_{ED} \times nn]$$

where  $N_{urbanP}$  is the size of the urban part of the province;  $N_{ED}$  is the size of the household's ED; and  $nn = n_{ED} \times n_{subd} \times n_{dis}$  or the product of number of EDs, the number of subdistricts, and the number of districts in the sampling "chain" for the household.

A similar formula was used for each enumerated household in the rural part of Thailand, replacing ED by village, and  $N_{urbanP}$  by  $N_{ruralP}$ .

## Computation of individual level weights to state or province level

**Step I1:** Each interviewed individual has been given a household level weight  $W1$ . This is interpreted as the number of people in the same household in the same refined category.

In Malaysia:

- for an adult male smoker,  $W1$  is the number of adult male smokers in the same household
- for an adult female smoker,  $W1$  is the number of adult female smokers in the same household
- for an adolescent aged 13-17,  $W1$  is the number of adolescents aged 13-17 in the same household.

Note:  $W1$  as defined above does not necessarily sum within the household to the number of people aged 13 and over in the household, since there may be one or more refined categories present from which no one was interviewed.

In fact, we have capped the value of  $W1$  at 2 to reduce the potential variability of the weights. Step I1a ensures that each individual still represents a correct number at the AD, ED or VI level.

**Step I1a:** Each interviewed individual has been given an adjusted household level weight  $W1a$ . This adjustment guarantees that hypothetical prevalence estimates based on the *HWTWV4* weights and on the final individual weights will be the same, in spite of the fact that quotas in one sampling category might be filled earlier than in the other.

For Thailand, let  $AMS_{ED/VI}$ ,  $AFS_{ED/VI}$ , and  $Y_{ED/VI}$  be respectively the numbers enumerated in the ED or VI of adult male smokers, adult female smokers, and adolescents. Let  $W1AMS_{ED/VI}$ ,  $W1AFS_{ED/VI}$ , and  $W1Y_{ED/VI}$  be respectively the sums of  $W1$  for all *interviewed* adult male smokers, adult female smokers, and adolescents in the ED or VI.

- for an adult male smoker,  $W1a$  is given by

$$W1a = AMS_{ED/VI} \times W1 / W1AMS_{ED/VI}$$

- similarly for the other two categories

For Malaysia, the same kind formula applies, with ED or VI replaced by AD; because of the low numbers of female adults recruited, we performed this local calibration for adult smokers, rather than separately for adult male smokers and adult female smokers.

**Step I2:** Each interviewed individual was given a preliminary state or province level weight  $W4WV4$ .

For an individual in a rural area  $W4WV4$  is thought of as the number of people in the same state or province in rural areas and the same refined category (adult male smoker, adult female smoker, and adolescent) represented by that individual. Similarly, each interviewed individual in an urban area was given a state or province/Bangkok level weight  $W4WV4$ . This is thought of as the number of people in the same state or province/Bangkok in urban areas and the same refined category represented by that individual.

The weight  $W4WV4$  is given by,

$$W4WV4 = HWTWV4 \times W1a.$$

## Calibration of individual weights at the state or province level

**Step C1:** For Malaysia, each interviewed individual in an urban area has been given a calibrated state-level weight,

$$W4a_{i,urban} = W4_{i,urban} \times N_{urban,Scat} / W4_{urban,Scat}$$

where  $N_{urban,Scat}$  is an estimated number of people in the urban part of the state in the same refined category (adult male smoker, adult female smoker, youth) as the individual, and  $W4_{urban,Scat}$  is the sum of the W4 weights for interviewed individuals in the urban part of the same state, in the same refined category.

Each interviewed individual in a rural area, has been given a calibrated state-level weight,

$$W4a_{i,rural} = W4_{i,rural} \times N_{rural,Scat} / W4_{rural,Scat}$$

where  $N_{rural,Scat}$  is an estimate number of people in the rural part of the state in the same refined category as the individual, and  $W4_{rural,Scat}$  is the sum of the W4 weights for interviewed individuals in the rural part of the same state, in the same refined category.

For Thailand, we have not performed an analogous calibration for adults because there are only smokers in the adult sample. Let

$$W4a_{i,urban} = W4_{i,urban}.$$

The analogous calibration may be tried in Wave 5.

## Raising of individual level weights to the zone or region level

**Step I3:** Each interviewed individual has been given a zone or region level weight  $W6_{i,zone}$ . This represents the number of people in the same stratum and the same refined category represented by that individual. (This weight  $W6_{i,zone}$  is a last-stage “basic” survey weight for the individual, in the sense that  $W6_{i,zone}$  can also be thought of as the number of people in the entire country represented by that individual.)

In Malaysia, urban parts,  $W6_{i,urban}$  is

$$W6_{i,urban} = N_{urban,Zcat} \times W4a_{i,urban} / W4a_{urban,Zcat}$$

where  $N_{urban,Zcat}$  is an estimated number of people in the urban part of the zone in the same refined category as the individual, and  $W4a_{urban,Zcat}$  is the sum of the  $W4a_{i,urban}$  weights for interviewed individuals in the urban part of the same zone, in the same refined category.

In Malaysia, rural parts,  $W6_{i,rural}$  is

$$W6WV4 = N_{ruralZ,cat} \times W4aWV4 / W4a_{ruralZ,cat}$$

where  $N_{ruralZ,cat}$  is the known number of people in the rural part of the zone in the same refined category as the individual, and  $W4a_{ruralZ,cat}$  is the sum of the  $W4aWV4$  weights for interviewed individuals in the rural part of the same zone, in the same refined category.

In Thailand, we have first calculated  $W5$ , which is  $W4a$  in the case of Bangkok, and which in the cases of the provinces is

$$W5 = W4a \times N_{region} / (2 \times N_{province}),$$

where the  $N$  variables are population sizes used in the probability proportional to size sampling.

Then for an adolescent,  $W6WV4$  is given by

$$W6WV4 = N_{region,y} \times W5 / W5_{region,y}$$

where  $N_{region,y}$  is the number of adolescents in the region (or Bangkok) and  $W5_{reg}$  is the sum of  $W5$  over adolescents in the sample in the region.

For an adult smoker,

$$W6WV4 = N_{region,smokdem} \times W5 / W5_{region,smokdem}$$

where  $N_{regiu}$  is the number of adult smokers in the region (or Bangkok) with the same gender as the respondent, and  $W5_{regi}$  is the sum of the  $W5$  over sampled adult smokers in the region with the same gender as the respondent.

## Rescaling

Finally, the weights in the two countries have been rescaled within each sampling category (youth, adult smokers) to sum to national sample sizes, for use in pooled analyses.

The formula used for the final weights in each country is as follows:

$$\text{Rescaled weight } RWTWV4 = n_c \times W6WV4 / (4),$$

where  $n_c$  is the actual (i.e. unweighted) size of the country subsample for the sampling category, and  $\sum_c$  denotes a sum over that subsample of the original weights.

A similar rescaling is applied to the state level weights in Malaysia.

### Note on calibration in Malaysia

Malaysia has a large non-Malay population in some urban areas. Because of the clustered nature of the sampling plan and differential response rates, the different ethnic groups (Malay, Chinese, Indian and Other) were not sampled in proportion to their numbers, either at the state level or the zone level. For (rare) descriptive purposes we have calibrated the final individual weights ( $W6WV4$ ) by gender and age category within zones. However, it should be noted that the new cohort weights do not correct for the differential rate of recruitment of ethnic groups.

In modeling, we recommend always entertaining ethnicity as a variable in the analysis.

### Wave 4 cross-sectional weights

The Wave 4 cross-sectional weights for the combined sample (recontacts and new cohort) have been calculated bearing in mind two features of the design:

- (i) Continuing sample members who were interviewed as youth in Wave 1, Wave 2 or Wave 3 were reinterviewed as youth in Wave 4, whether or not they were still under 18; there were no 13-16 year olds left in the Wave 1 cohort, no 13-14 year olds left in the Wave 2 cohort, and no 13 year olds left in the Wave 3 cohort.
- (ii) The new cohort was actually sampled to replenish the sample within sampling categories and within pseudo-PSUs.

In Malaysia, because of increased irregularity in retention patterns, and in Thailand, because of the dropping of some subdistricts and shifting of the sample, the calculation of cross-sectional weights has been changed for Wave 4. The components of the Wave 4 cross-sectional weights are  $W4aWV1$ ,  $W4aWV2$ ,  $W4aWV3$  and  $W4aWV4$ .

First, within each pseudo-PSU, the sample numbers  $n_{x1}$ ,  $n_{x2}$ ,  $n_{x3}$  and  $n_{x4}$  of age  $x$  at Wave 4, recruited at Waves 1, 2, 3 and 4 respectively, were computed, for  $x = 13, 14, 15, 16, 17, 18$  or over. For youth of current age  $x$  recruited at Wave 1, let

$$W4bWV1 = W4aWV1 \times \frac{n_{x1}}{n_{x1} + n_{x2} + n_{x3} + n_{x4}} .$$

For youth of current age  $x$  recruited at Wave 2, let

$$W4bWV2 = W4aWV2 \times \frac{n_{x2}}{n_{x1} + n_{x2} + n_{x3} + n_{x4}} .$$

For youth of current age  $x$  among the new recruits at Wave 3, let

$$W4bWV3 = W4aWV3 \times \frac{n_{x3}}{n_{x1} + n_{x2} + n_{x3} + n_{x4}} .$$

For youth of current age  $x$  among the new recruits at Wave 4, let

$$W4bWV4 = W4aWV4 \times \frac{n_{x4}}{n_{x1} + n_{x2} + n_{x3} + n_{x4}}.$$

For all adults recruited in Wave 1, let  $W4bWV1=W4aWV1$ . For adults recruited in Wave 2, let  $W4bWV2=W4aWV2$ . For adults recruited in Wave 3, let  $W4bWV3=W4aWV3$ . For new cohort adults, let  $W4bWV4=W4aWV4$ .

The weights  $W4bWV1$ ,  $W4bWV2$ ,  $W4bWV3$  and  $W4bWV4$  were then each rescaled to sum to sample size within each pseudo-PSU and sampling category, and put together to produce  $RW4WV4X$  (where  $X$  denotes cross-section).

The weights  $RW4WV4X$  weights were then raised to the province or state level within gender and age category, to produce weights  $W4cWV4X$ . For example, for an adult male smoker in the urban part of a state in Malaysia,

$$W4cWV4X = N_{urbanScat} \times \frac{RW4WV4X}{\sum_{urbanScat} RW4WV4X}$$

where  $N_{urbanScat}$  is the estimate of the number of adult male smokers in the urban part of the state, and the summation in the denominator is over adult male smokers in the combined sample in the urban part of the state. For an adult male smoker in the urban part of a province in Thailand,

$$W4cWV4X = \hat{N}_{urbanPdem} \times \frac{RW4WV4X}{\sum_{urbanPdem} RW4WV4X}$$

where  $\hat{N}_{urbanSdem}$  was an estimate from Wave 1 of the number of adult male smokers in the urban part of the province, as used also in the weights computation for Wave 3.

The weights  $W4cWV4X$  were then raised to the national level, to produce weights  $W6WV4X$ .

For example, for an adult male smoker in a region in Thailand,

$$W6WV4X = N_{region,dem} \times \frac{W4cWV4X}{\sum_{region,dem} W4cWV4X}$$

where  $N_{regi}$  is an estimate at the time of Wave 4 of the number of adult male smokers in the region. For an adult male smokers in a zone in Malaysia,

$$W6WV4X = N_{zone,cat} \times \frac{W4cWV4X}{\sum_{zone,cat} W4cWV4X}$$

where  $N_{zone,cat}$  is the census estimate of the number of adult male smokers in the zone.

Finally, for analytic purposes pooling across countries, the *W6WV4X* weights in Thailand and the *W4cWV4X* weights in Malaysia have been rescaled to sum to combined sample size within each country and sampling category (adult smokers, youth), to produce weights *RWTWV4X*. The Malaysia analytic weights are not calibrated for ethnicity, and it is recommended to use ethnicity in modeling.

## Appendix A: FCTC Policies in Malaysia

### **Background**

Malaysia has an estimated population of 27 million people,<sup>1</sup> 62% of whom live in urban areas.<sup>2</sup> In 2007, the GDP per capita was US \$14,900.<sup>3</sup> Smoking prevalence estimates indicate that 46.5% of males and 3.0% of females are current smokers.<sup>4</sup> Tobacco control policies in Malaysia are weaker in comparison to neighbouring Thailand. This has prompted the Malaysian government to implement stronger policies to reduce smoking prevalence.

Since 2005, multi-million dollar 'Tak Nak' (Say No) anti-smoking campaigns have been launched on print and electronic media to encourage Malaysians to quit smoking as well as to educate the young to avoid taking up the habit. In October 2008, the government extended the ban on smoking to include places such as national service camps and corridors around shopping malls. In January 2009, the Malaysian government rolled-out 6 rotating graphic warning labels covering 40% on the front and 60% on the back of the pack. The impact of graphic health warnings have been presented to Malaysian Ministry of Health recently from the ITC wave 4 data. 95.0% adult smokers noticed these graphic health warnings. Almost 60% have stopped many times from having a cigarette when they about to smoke one and more than 20% had thought a lot about likelihood to quit. In 2010, the popular 'kiddie packs' (cigarettes with 14 sticks) were also banned. In addition, several state governments in Malaysia are currently in the process of making their major cities smoke-free—with the capital city of Malacca being the first to become smoke-free in April 2010. The Malaysian Health Promotion Board released RM3.4million for Malacca to implement their smoke-free initiatives. The Board has also approved RM250,000 to Penang, Johore, Kelantan and Sarawak for their respective states' smoke-free initiatives.

In an effort to promote healthy lifestyles and reduce social ills, it is expected that the Malaysian government will continue to raise excise duties for tobacco to discourage smoking over the forecast period. However, this may cause price-sensitive smokers and young smokers to resort to illicit cigarettes which are more affordable. The tobacco companies in Malaysia have recently presented to the Malaysian government some data showing an increase in smuggling of cigarettes with an estimated smuggling rate of about 40%. The industry attributed this to excessive increase in taxation and excessive tobacco control regulations. The Confederation Malaysia of Tobacco Manufacturers (CMTM) Malaysia tried to persuade the government not to raise the tax on cigarettes excessively. However, ITC SEA Wave 4 Survey findings in Malaysia suggest that the tobacco industry's estimate is too high, as data collected report the smuggling rate to be 20%. A presentation was given to the Malaysian Ministry of Finance to provide research evidence to support the increase of tobacco taxes despite the alleged increase in smuggling following the tax increase. In the recent 2011 Malaysian Budget, the Prime Minister made the announcement of an increase of excise duty on cigarettes by 3 sen a stick to 21 sen a stick across the board effective from October 1, 2010. The new price of cigarettes for a pack of 20 is now RM10 for BAT, Phillip Morris and JTI brands while cigarettes from other companies will now cost RM8.50.

There are tobacco related surveys in Malaysia, however, these surveys are conducted infrequently,<sup>5</sup> and focus mainly on measure tobacco consumption, awareness of tobacco policies,<sup>6</sup> or focus on youth smoking habits.<sup>7</sup> The ITC Malaysia Survey is the only research effort that is designed to evaluate the impact of FCTC policies implemented in Malaysia.

## FCTC Status

Malaysia ratified the FCTC in September 2005<sup>8</sup> and is therefore expected to implement more stringent tobacco control policies. In January 2009, pictorial health warnings replaced text warnings. The Malaysian health warnings consist of six different pictorial and health messages and will be rotated every 2 years. Nicotine replacement therapy is available in Malaysia. In 2007, bupropion became available by prescription and in 2008, varenicline become available by prescription. In addition, both nicotine patch and gum are fully subsidized in all government hospitals that have a smoking cessation clinic. Smoking in Malaysia is banned in government offices, health facilities, air-conditioned venues and in 2010 extended to all private offices, public transport, and educational facilities. The Control of Tobacco Products (2005) Regulations ban direct and indirect tobacco advertising. However, point-of-sale advertising is not restricted. In 2010, further tobacco control initiatives were introduced, including smoke-free cities in several states, prohibition of the sale of tobacco products to minors, bans on cigarette packs with less than 14 sticks, and eliminating descriptors such as “light”, “mild” and “low tar” and replacing them with warnings of hazardous chemicals.

Country (Ratification Date)	Domains					
	Cessation		Price and Taxation		Smoke Free	
	Programs	NRT Availability/Use	Taxes - % of retail price	Other Issues	Ban in Public Places <sup>1</sup>	Ban in Hospitalit y
<b>Malaysia (16 Sept 05)</b>	Infoline, Quit clinic, run by MOH, , USM offering Quitline Services	pharmacy, nicotine patch and gum, fully subsidized by gov't, available in all quit clinics, Bupropion and Vareniclin as alternative to NRT	minimum price at RM8.50 (Oct 1, 2010)  established, 14 stick pack banned July 2010  Note: Premium brands from BAT (Dunhill), PMI (Malboro), JTI (Mild Seven) are taxed for 24.4 sen/stick, with retail price at 50 sen/stick with 48.8% tax to retail price; medium range brands from BAT (Winston) and PMI (L&M) are taxed for 24.14		Full: HCF, UNI, EDU, GOV, IO, IOW  20 types of venues gazetted smoke-free  Smoke-free city project initiated in Melaka (April 2010)  FUTURE: Penang, Johore, Kelantan and Sarawak	Partial: RES, B&P <b>FUTURE: Full</b>

			sen/stick, with retail price of 42 sen/stick with 57.48% tax to retail price; cheaper brands (SAAT) are taxed for 23.88 sen/stick, with retail price of 36 sen/stick, with 66.33% tax to retail price.			
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**Smoke-Free Venue Codes:** **1HCF**=Health-care facilities; **EDU**=educational facilities; **UNI**=universities; **GOV**=government facilities; **IO**=indoor offices; **OIW**=other indoor workplaces **RES**=restaurants; **B&P**=bars & pubs

Country (Ratification Date)	Domains									
	Labeling				Product	Advertising and Promotion				
	% of Pack	Picture Labels	Health Warnings	Light/Mild Descriptors	Emissions/Contents/Performance Standards	Broadcast	Print-Domestic	Print-Int'l	Bill-board	Sponsorship <sup>3</sup>
<b>Malaysia (16 Sept 05)</b>	40% of front, 60% of back	6 pictorial warning labels to be rotated on all packs	3 rotated warnings <b>FUTURE 10</b> health messages 2 year rotation	Descriptors of Light, UltraLight, Mild, Cool, Extra, Low tar, Special, Full Flavor, Premium, Rich, Famous, Slim, Grade A were fully banned	Eliminate tar/nicotine/descriptors (per FCTC requirements) replace with warning hazardous chemical in cigarette, restriction on sales to youth	Full (except cigarette packs)	Full	None	Full	Full

**Advertising/Promotion/Sponsorship Bans—Codes:** **DBM**=distribution by mail; **PD**=promotional discounts; **NTP**=non-tobacco products identified with tobacco brand names; **TP**=brand name of non-tobacco products used for tobacco products; **TVF**=appearance of tobacco products in TV and/or films; **SE**=sponsored events

## Appendix B: FCTC Policies in Thailand

### **Background**

Thailand has an estimated population of 64 million people,<sup>9</sup> 32% of whom live in urban areas,<sup>10</sup> and its GDP per capita was US \$8,440 in 2007.<sup>11</sup> Smoking prevalence is 34% among males and 2% among females.<sup>12</sup> Although the number of female smokers is unlikely to exceed the number of male smokers, the health risk from smoking is much higher for women and their children and is causing serious concern.<sup>13</sup> Smoking is the fourth leading cause of death in Thailand, after HIV-AIDS, accidents, and tuberculosis.<sup>14</sup> Lung cancer incidence is on the rise—it is the second most common form of cancer.

Thailand is one of the leading countries in the implementation of policy measures to prevent and reduce the public health impacts of tobacco consumption. Graphic warning labels were introduced in March 2005 covering 50% of the front and back of the pack. In March 2010, the number of graphic labels increased from 9 to 10 and the size of the label increased to 55% of the front and back of the pack. Thailand has a ban on point-of-sale cigarette displays, although this policy has not been enforced nor adopted by all retail establishments. There is a ban on misleading package descriptors, but the tobacco industry continues to promote the false impression that some brands are less harmful by using lighter colours in their package design. As of March 2010, complete smoking bans have been adopted in all indoor public places except Bangkok's Suvarnabhumi International Airport, which has designated smoking rooms. The Action on Smoking and Health Foundation (ASH), the most active tobacco control NGO in Thailand, is actively looking into initiatives to help curtail the rise in female smoking prevalence.<sup>15</sup> In 2010, the government launched anti-smoking campaigns to reduce smoking among women and men, including special campaigns held on Mother's Day and Father's Day.

To date, there have been relatively few surveys of tobacco use and its determinants in Thailand. The majority of the studies focus on youth smoking<sup>16,17,18,19,20</sup> while a few others report on the role that socioeconomic status plays on risky behaviours<sup>21,22,23</sup>. Overall, there are very few studies in Thailand that collect information beyond basic measures of smoking behaviour,<sup>24</sup> and none focus on the impact of tobacco control policies. The ITC Thailand Survey is the only ongoing research effort to evaluate tobacco control policies at the population level in Thailand.

### **FCTC Status**

Thailand ratified the FCTC in June 2003. However, Thailand had already begun to enact some of the strictest tobacco control policies in the world by 1992. Thailand has banned tobacco advertising in all media and has prohibited cigarette "power wall" displays from stores. As of March 2010, smoking has been banned in all public places except Bangkok's Suvarnabhumi Airport where a designated smoking room is allowed. Pictorial health warnings have increased in size from 50% to 55% of both front and back of the pack, and have increased from 9 to 10 different images.<sup>25</sup> The tobacco control movement in both governmental and non-governmental sectors is strong, and both public knowledge of tobacco issues and support for tobacco control efforts are high.

Country (Ratification Date)	Domains					
	Cessation		Price and Taxation		Smoke Free	
	Programs	NRT Availability/Use	Taxes - % of retail price	Other Issues	Ban in Public Places <sup>1</sup>	Ban in Hospitality
<b>Thailand (8 Nov 04)</b>	Bupropion (at pharmacy with Rx) Counselling available in some health facilities.	pharmacy with Rx, not on essential drug list	~79% Excise tax raised by 80% of actual tobacco value Note: Price of most sold brand (pack of 20) = 4THB (USD1.29); Taxes on most sold brand (% of retail price): Total taxes=64%, Total excise (specific & ad valorem=57%) ; VAT=7%		Full (in all indoor public places except Bangkok's Suvarnabhumi Airport where a designated smoking room will be allowed inside) (effective March 2010 under MOH's regulation No. 19))	Full
<b>Smoke-Free Venue Codes:</b> <sup>1</sup> HCF=Health-care facilities; <b>EDU</b> =educational facilities; <b>UNI</b> =universities; <b>GOV</b> =government facilities; <b>IO</b> =indoor offices; <b>OIW</b> =other indoor workplaces <b>RES</b> =restaurants; <b>B&amp;P</b> =bars & pubs						

Country (Ratification Date)	Domains									
	Labeling				Product	Advertising and Promotion				
	% of Pack	Picture Labels	Health Warnings	Light/Mild Descriptors	Emissions/Contents/Performance Standards	Broadcast	Print-Domestic	Print-Int'l	Bill-board	Sponsorship <sup>3</sup>
<b>Thailand (8 Nov 04)</b>	From 50% to 55% front and back (effective March 29, 2010)	Yes	9 to 10 specific warnings, rotating (effective March 29, 2010)	<b>Prohibited</b>	None <b>FUTURE possible</b>	Full: National None: Int'l	Full	None	Full	Full
<b>Advertising/Promotion/Sponsorship Bans—Codes:</b> <b>DBM</b> =distribution by mail; <b>PD</b> =promotional discounts; <b>NTP</b> =non-tobacco products identified with tobacco brand names; <b>TP</b> =brand name of non-tobacco products used for tobacco products; <b>TVF</b> =appearance of tobacco products in TV and/or films; <b>SE</b> =sponsored events										

## Appendix C: ITC SEA Sampling Plan

### Wave 1 Sampling Plan

The survey used face-to-face recruitment of participants from an area sample of households. The sample of households was selected using a stratified multistage sampling design. The primary strata consisted of Bangkok and four regions (North, Northeast, Central, South) in Thailand, and the six zones of Malaysia. In Thailand, respondents were selected from Bangkok and two provinces in each of Thailand's four regions (Chiang Mai, Phrae, Nakhon Ratchasima, Nong Khai, Nakhon Pathom, Samut Sakhon, Nakhon Si Thammarat, and Songkhla). In Malaysia, respondents were drawn from one state in each of the country's six zones: Kedah, Selangor, Johore, Terengganu, Sabah, Sarawak.

In both countries, within each province or state, there was a secondary stratification into urban and rural. Ultimate sample allocations within the secondary strata were made proportional to their sizes.

In Malaysia, two urban districts and two rural districts were selected within each state with probability proportional to size, and each pair of districts was pooled. In Thailand, "districts" were taken to coincide with the urban and rural sections of the provinces. In each country, sub-districts and communities were selected within urban and rural districts, with probability proportional to population size. Each selected last-stage unit was divided conceptually into clusters of size about 300 dwellings, and sampling of these provided a total of about 125 sampled clusters in each country. Each cluster was given a quota of about 16 adult smokers, and a corresponding quota of non-smokers and youth. The basis of the frame was provided by the Ministry of Health, and where necessary the cluster quotas were divided among several sub-clusters or Enumeration Blocks (EBs) of about 80-120 dwellings each. A sample of about 30 addresses was taken from each EB. In Malaysia households were selected within each EB or cluster using systematic sampling methods and in Thailand they were selected using simple random sampling following enumeration. Sampling within a cluster proceeded until the respondent quota in each sampling category was filled. Once a potentially eligible household was identified and contacted, interviewers enumerated all household members.

In Thailand, a maximum of three respondents were selected from each household: one female adult smoker, one male adult smoker, and one youth respondent. In Malaysia, one adult non-smoker per household was also surveyed, for a maximum of four respondents per household. In households with more than one eligible respondent per quota cell, respondents were randomly selected by using a variant of the Kish Grid.<sup>26</sup>

For further details on the planned design for Wave 1, please see the ITC South East Asia Wave 1 Technical Report.

## **Waves 2 and 3 Sampling Plan**

The Waves 2 and 3 sampling plan consisted of recontacting as many respondents as possible from previous waves, and at the same time replenishing the dropouts within pseudo-PSUs (districts in Malaysia and urban-rural parts of provinces in Thailand), from newly sampled clusters or EBs near the units from the previous wave. That is, efforts were made to replenish the sample lost within each sampling category (adult smokers, youth, and adult non-smokers) within each pseudo-PSU where possible.

## **Wave 4 Sampling Plan in Thailand**

The sampling design was the same as in previous waves, except that to cut some costs it was decided not to go back to every subdistrict, but to select one or two **rural** subdistricts to remove in each province. This meant deciding not to recontact 373 rural adult respondents and 157 rural youth respondents, effectively bringing the rural target numbers down.

In Bangkok, at Wave 3 there were 222 adult smokers/quitters and 108 youth. At Wave 4, 156 adults and 68 youth from Wave 3, or 70% and 63% respectively. Also 31 adults and 19 youth were recontacted from earlier waves. According to a plan developed before fieldwork, the sample was replenished by 112 adult smokers and 56 youth, bringing the totals to 299 adults and 143 youth. The team accomplished the replenishment by adding 7 Enumeration Areas, and recruiting and interviewing 16 adult smokers and 8 youth from each.

In urban areas outside Bangkok, at Wave 3 there were 605 adult smokers/quitters and 271 youth. At Wave 4, 519 adults and 217 youth were retained from Wave 3, or 86% and 80% respectively. Also, 46 adults and 31 youth were recontacted from earlier waves. The sample was replenished by 112 adult smokers and 56 youth, bringing the totals to 677 adults and 304 youth. This was done by adding 7 EDs in pre-planned urban subdistricts, and recruiting and interviewing 16 adults and 8 youth in each ED.

In rural areas, at Wave 3, there were 1639 adult smokers/quitters and 718 youth, but because of the removal of some subdistricts, attempts were made to recontact only 1265 adults and 560 youth at Wave 4. At Wave 4, 1148 adults and 407 youth were retained from Wave 3, or 91% and 73% respectively. Also, 88 adults and 61 youth were recontacted from earlier waves. The sample was replenished by 64 adult smokers and 32 youth, bringing the totals to 1300 adults and 500 youth. This was done by adding 4 villages in pre-planned rural subdistricts, and recruiting and interviewing 16 adults and 8 youths in each.

## **Wave 4 Sampling Plan in Malaysia**

Because replenishment in Wave 4 was to be carried out by telephone, and the telephone directories were available only for the higher level sampling units known as ADs, targets for number of adult smokers/quitters and number of youth were established for each AD. There was to be no replenishment in rural Sarawak or Sabah because of the low telephone penetration. The targets in urban Johore were increased to be closer to Wave 1 levels, and the targets for urban and rural Selangor were re-distributed toward Wave 1 levels (fewer in urban, more in rural). The targets in the ADs in other states remained the same as in Wave 3.

The results of sampling in Waves 1, 2, 3 and 4 are given in the following table.

Wave 1		Malaysia			Thailand		
		Male	Female	Total	Male	Female	Total
	Smokers/Quitters	1917	87	2004	1846	154	2000
	Non-smokers	469	1086	1555	Not applicable		
	Youth	494	515	1009	516	484	1000
<b>Wave 1 Total</b>		<b>2880</b>	<b>1688</b>	<b>4568</b>	<b>2362</b>	<b>638</b>	<b>3000</b>
<b>Wave 2</b>							
Re-contact	Smokers/Quitters	836	32	868	1436	122	1558
	Non-smokers	249	620	869	Not applicable		
	Youth	211	234	445	332	340	672
	<i>Total</i>	<i>1296</i>	<i>886</i>	<i>2182</i>	<i>1768</i>	<i>462</i>	<i>2230</i>
Replenishment	Smokers	752	20	772	460	48	508
	Non-smokers	205	498	703	Not applicable		
	Youth	152	180	332	154	101	255
	<i>Total</i>	<i>1109</i>	<i>698</i>	<i>1807</i>	<i>614</i>	<i>149</i>	<i>763</i>
<b>Wave 2 Total</b>		<b>2405</b>	<b>1584</b>	<b>3989</b>	<b>2382</b>	<b>611</b>	<b>2993</b>
<b>Wave 3</b>							
Re-contact	Smokers/Quitters	1182	26	1208	1723	150	1873
	Non-smokers	296	799	1095	Not applicable		
	Youth	237	291	528	420	380	800
	<i>Total</i>	<i>1715</i>	<i>1116</i>	<i>2831</i>	<i>2143</i>	<i>530</i>	<i>2673</i>
Replenishment	Smokers	747	2	749	539	53	592
	Non-smokers	179	209	388	Not applicable		
	Youth	92	77	169	162	134	296
	<i>Total</i>	<i>1018</i>	<i>288</i>	<i>1306</i>	<i>701</i>	<i>187</i>	<i>888</i>
<b>Wave 3 Total</b>		<b>2733</b>	<b>1404</b>	<b>4137</b>	<b>2844</b>	<b>717</b>	<b>3561</b>
<b>Wave 4</b>							
Re-contact	Smokers/Quitters	1273	15	1288	1815	173	1988
	Non-smokers	0	0	0	0	0	0
	Youth	263	311	574	443	360	803
	<i>Total</i>	<i>1536</i>	<i>326</i>	<i>1862</i>	<i>2258</i>	<i>533</i>	<i>2791</i>
Replenishment	Smokers/Quitters	748	9	757	249	39	288
	Non-smokers	0	0	0	0	0	0
	Youth	162	141	303	74	70	144
	<i>Total</i>	<i>910</i>	<i>150</i>	<i>1060</i>	<i>323</i>	<i>109</i>	<i>432</i>
<b>Wave 4 Total</b>		<b>2446</b>	<b>476</b>	<b>2922</b>	<b>2581</b>	<b>642</b>	<b>3223</b>

## Appendix D: Household Replenishment Form and Kish Grid Instructions

SELECTION OF PARTICIPANTS FROM A HOUSEHOLD USING THE KISH GRID  
(These instructions and the example are for Malaysia; the Thailand document is similar.)

Once you have enumerated the members of the household, you will select the participants to be interviewed. There are 4 categories: male adult smoker, female adult smoker, and adolescent. You will have quotas for adult smoker and adolescent. If the adult smoker quota is not yet filled, you will be selecting one male adult smoker if the household contains at least one, and one female adult smoker if the household contains at least one. (This might cause you to exceed the quota by one, if both male and female adult smokers exist in the household.) If the adolescent quota is not yet filled, you will be selecting one adolescent.

The Kish grid is used every time you have to make a selection within a category because there are two or more eligible household members.

The *row* of the grid to be used is the row corresponding to the number of household members in the category, e.g. if there are 3 male adult smokers, use row 3 of the Kish grid to select a male adult non-smoker.

The *column* of the grid to be used is the column corresponding to the last digit of the age of an adult household member. Each time you use the grid for a household, use the first listed age which you have not already used for that household. (You should put an “X” beside the listed age when you have finished using it.) See the example below.

The *entry* in the selected row and column tells you which household member to select. For example, if the entry is 2, select the individual who is the *second* listed person in the category.

Module **โครงการติดตามผลกระทบนโยบายการควบคุมการบริโภคยาสูบในประเทศไทย** Form Completed   
 Interviewer ID  -

**แบบสำรวจครัวเรือนกลุ่มตัวอย่างใหม่ในรอบที่ 3 (Household Enumeration Form)**

ภาค                      จังหวัด                      อำเภอ                      ตำบล                      หมู่บ้าน                      ลำดับครัวเรือน                      ลำดับบุคคล  
 ที่อยู่  
 ที่สามารถติดต่อได้:  
 ชื่อหัวหน้าครัวเรือน : \_\_\_\_\_ รหัสไปรษณีย์ \_\_\_\_\_  
 ที่อยู่ : \_\_\_\_\_ : \_\_\_\_\_  
 โทรศัพท์ (บ้าน) : \_\_\_\_\_ โทรศัพท์ (มือถือ) : \_\_\_\_\_  
 E-mail : \_\_\_\_\_  
 ชื่อผู้ให้ข้อมูลครัวเรือน : \_\_\_\_\_

บันทึกการติดตาม				นัดครั้งต่อไป	
ครั้งที่	วัน/เดือน/ปี	เวลา	บันทึกผล	วัน/เดือน/ปี	เวลา
1.					
2.					
3.					
4.					

Page 2

**ข้อสรุปสำหรับการปฏิเสธการสัมภาษณ์ (ให้วงกลม)**

1. หาด้านไม่พบ	6. ไม่มีคำตอบ - หลังจากพยายาม 4 ครั้ง	11. ไม่สามารถสำรวจได้เนื่องจากเหตุผลอื่น ๆ ระบุ .....
2. บ้านไม่มีคนอยู่	7. ไม่มีคำตอบ - ช่วงเวลาสำรวจเสร็จสิ้น	12. การติดต่อสำเร็จ - ทำการสำรวจ
3. ไม่ใช่ครัวเรือน เช่น สถานที่ทำงาน	8. การปฏิเสธของครัวเรือน	13. เมา
4. ไม่ปลอดภัย	9. มีปัญหาเรื่องภาษา	14. ปัญหาสุขภาพกาย
5. ติดต่อไม่ได้ - สภาพอากาศ	10. ไม่มีใครสามารถตอบได้	15. ปัญหาสุขภาพจิต

**ถ้าครัวเรือนปฏิเสธการให้สัมภาษณ์ :**

1. จำนวนคนที่อาศัยอยู่ในครัวเรือนอายุ 18 ปีขึ้นไป	=
2. จำนวนคนที่อาศัยอยู่ในครัวเรือนอายุ 18 ปีขึ้นไป ที่สูบบุหรี่เป็นประจำ	=

จำนวนผู้เข้าข่าย	ตัวเลขตัวสุดท้ายของอายุ									
	1	2	3	4	5	6	7	8	9	0
1	1	1	1	1	1	1	1	1	1	1
2	1	2	2	1	1	2	2	1	1	2
3	3	1	2	3	2	3	1	1	2	3
4	1	2	3	4	2	3	4	1	2	3
5	3	4	5	1	2	3	4	5	1	2

**\* รหัสผลส่วนบุคคลของผู้ให้ข้อมูล**

0. ไม่ได้เป็นส่วนหนึ่งของครัวเรือน และติดต่อไม่ได้ หรือตามหาไม่พบ  
 1. ไม่สำเร็จ (หลังจากพยายาม 4 ครั้ง)  
 2. มีปัญหาเรื่องภาษา  
 3. ทูพผลภาพทางกาย หรือใจ  
 4. การปฏิเสธส่วนตัวแทน  
 5. การปฏิเสธ  
 6. ไม่สำเร็จ (การเริ่มต้น)

Page 3

Module

I.Q.:

แบบสำรวจครัวเรือนกลุ่มตัวอย่างใหม่ในรอบที่ 3 (Household Enumeration Form)

KISH GRID

ลำดับที่	ชื่อสมาชิกในครัวเรือน (กลุ่มผู้ใหญ่อายุตั้งแต่ 18 ปี ขึ้นไป)	เพศ ชาย/หญิง	พฤติกรรมการสูบบุหรี่ สูบ/ไม่สูบ	อายุ (อายุเต็มปี)	ผู้ตอบแบบสอบถาม ใช่/ไม่ใช่	บันทึกผล
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
<b>(ชื่อสมาชิกในครัวเรือน (กลุ่มเด็กอายุ 13- 17 ปี))</b>						
1.						
2.						
3.						
4.						
5.						

Page 4

จำนวนเด็กที่อายุต่ำกว่า 5 ปีในครัวเรือน	=	จำนวนผู้ชายที่สูบบุหรี่ที่มีอายุ 18 ปีขึ้นไปในครัวเรือน	=
จำนวนเด็กที่อายุระหว่าง 5-12 ปีในครัวเรือน	=	จำนวนผู้หญิงที่สูบบุหรี่ที่มีอายุ 18 ปีขึ้นไปในครัวเรือน	=
จำนวนเด็กที่อายุระหว่าง 13-17 ปีในครัวเรือน	=	จำนวนผู้ชายที่ไม่สูบบุหรี่ที่มีอายุ 18 ปีขึ้นไปในครัวเรือน	=
		จำนวนผู้หญิงที่ไม่สูบบุหรี่ที่มีอายุ 18 ปีขึ้นไปในครัวเรือน	=

ID	ประเภทของผู้ให้ข้อมูล	ชื่อผู้ให้ข้อมูลที่ถูกละเลือก	รหัสส่วนบุคคลของผู้ให้ข้อมูล	รหัสพนักงานสัมภาษณ์
1.	ผู้ชายที่สูบบุหรี่			
2.	ผู้หญิงที่สูบบุหรี่			
3.	วัยรุ่น			

In the example above, consider each of the 3 categories in turn. (Suppose the non-smoker quota is filled).

1. You must choose between “R” and “Y” for the male adult smoker. Since there are two, you take row #2 of the grid. Since the first adult age, namely the age of “R”, ends in 3, you take column #3 of the grid. The entry in row #2, column #3 is 2. Thus you select “Y”, who is listed second among adult non-smokers. You now put an “X” beside the age of “R”.
2. There are no female adult smokers.
3. You must choose between “B” and “I” for the adolescent. Again you look at row #2, since there are two adolescents to choose from. The next adult is that of “O”, and the last digit is 5. Thus you take column #5 of the grid. The entry in row #2, column #5 is 1. This you select “B”, who is listed first among the adolescents.

You have now selected “Y” and “B”.



No*	RESPONDENT NAME	IC No.	Gender*	Age/Wave*	Type Last contact*	Outcome Code Wave 3	Notes	New Address? Y/N (Record on next sheet)	Interviewed by phone? Y/N	Mailed in form? (adolescent) Y/N	Interviewer ID

NB. \*Age is **age at recruitment** and must be pre-completed and indicate which wave (1 or 2) respondent was first recruited  
 NB. Number in first column is same as in recruitment wave  
 NB. Type at last wave can be S – smoker; Q – quitter; AD – adolescent

**Individual Outcome Codes:**

- 1 Prefer short survey by mail
  - 1.1 1, and mail out survey returned complete
  - 1.2 1, and mail out survey returned incomplete
  - 1.3 1, and mail out survey returned unopened (return to sender)
  - 1.4 1, and mail out survey never returned.
- 2 Missed (after 4 call attempts – follow up with mail out short survey)
  - 2.1 2, and mail out survey returned complete
  - 2.2 2, and mail out survey returned incomplete
  - 2.3 2, and mail out survey returned unopened (return to sender)
  - 2.4 2, and mail out survey never returned.
- 3 Language Barrier
- 4 Health/Mentally Incapable
- 5 Proxy Refusal
- 6 Refusal both surveys
- 7 Incomplete long survey (start, breakoff)
- 8 Incomplete short survey (start, breakoff)
- 9 Complete long survey
- 10 Complete short survey

Name and address of someone who would be able to provide contact information at next survey if respondents move: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Change of address information:**

Name : _____	Postcode: _____
Address: _____	
Phone House: _____	H/P: _____
Email: _____	
Name: _____	Postcode: _____
Address: _____	
Phone House: _____	H/P: _____
Email: _____	
Name: _____	Postcode: _____
Address: _____	
Phone House: _____	H/P: _____
Email: _____	



Respondent ID	Type	Selected Respondent Name	Outcome Code	Interviewer ID
1	MS			
2	FS			
3	AD			

NB. MS – male smoker; FS – female smoker; AD – a adolescent  
 The additional two rows are for use in the case of substitution. A substitution from the same household is allowed only if a selected respondent has outcome code 2 (language barrier) or 3 (health mentally incapable), or will be away for the entire survey period.

Before reaching the household, put an "X" in the third column for each Type for which the quota is already filled.

**Individual Outcome Codes:**

1. Missed (after 4 attempts)
2. Language Barrier
3. Health Mentally Incapable
4. Proxy Refusal
5. Refusal
6. Incomplete (start, breakoff)
7. Complete

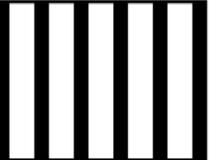
Name and address of someone who would be able to provide contact information at next survey if respondents move: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Appendix G: Sample of Response Card (Thailand)

**บัตรคำตอบ**

1.  2.  3. เฉย  4.  5.   
ไม่เห็นด้วย เห็นด้วย

**บัตรคำตอบที่ 16**

1.  2.  3.  4.   
ไม่มีหรือมีน้อยมาก มีน้อย 3. 4. มีมาก  
มีเพียงครึ่งเดียว

## Appendix H: Household Approach and Consent Script for Phone Interview (Malaysia)

STATE IDENTIFICATION CLEARLY AND IF NECESSARY, REPEAT INTRODUCTION

*Hello, my name is \_\_\_\_\_ and I am from Universiti Sains Malaysia. Is [adult respondent's name or the name of the adult informant, if household contains only a youth respondent] available?*

### **Adult respondent contacted**

*[Repeat introduction if necessary]:*

*Hello, my name is \_\_\_\_\_ and I am from Universiti Sains Malaysia. I am calling regarding the survey on smoking that you completed about 12-18 months ago. You may recall that the survey is being conducted by an international group of universities and research institutions in several countries. We are calling to ask whether you would be willing to answer the follow-up survey that would take about 40-45 minutes (15 minutes for non-smokers) this year and again 1-2 years time. To thank you for your participation, we will provide a token of appreciation for your time and effort. If you agree to be in our survey, we will immediately mail out to you a cheque for 35 Ringgit (5 Ringgit for non-smoker) as a token of our thanks. I would like to assure you that your survey responses would be absolutely confidential. No one outside of the survey research team would ever see your responses. We will not give your name or telephone number to anyone who is not associated with this survey. Would you be willing to participate in the survey?*

**1-No (See respondent refusal)**

**2-Yes (Continue below)**

*Is now a good time to conduct the survey?*

**1-No (Schedule another time)**

**2-Yes (Begin survey)**

**If YES:** Ensure they understand that their verbal agreement is taken as consent and proceed with the phone interview.

## Appendix I: Sample of Information and Consent Form (Malaysia)



Pusat Racun Negara  
Universiti Sains Malaysia

ID:	<input type="text"/>								
	Bandar/	Negeri	DP	DB	BP	Strata	UB	TK	ID-R Mukim

### BORANG MAKLUMAT PENGLIBATAN REMAJA (RECONTACT)

#### TAJUK KAJIAN: PENILAIAN POLISI KAWALAN TEMBAKAU DI ASIA TENGGARA

*Universiti Sains Malaysia Human Research Ethics Committee Clearance*

*Number: USM/PPSP/Ethics/2004 (137.4[3]), IRB# IRB00004494, FWA00007718*

*Ethics Committee of The Cancer Council of Victoria, Australia Clearance Number: HREC 0420, IRB#: IRB00001773*

*Ethics Committee of The University of Waterloo, Canada Clearance Number: 11762,*

*IRB#: IRB00002419*

#### PENYELIDIK :

- **Dr. Maizurah Omar**, Pusat Racun Negara, Universiti Sains Malaysia;
- **Professor Rahmat Awang**, Pusat Racun Negara, Universiti Sains Malaysia.

## **PENGENALAN**

Anda dipelawa untuk menyertai satu kajian penyelidikan yang melibatkan anda untuk melengkapkan satu soal selidik bertulis pada hari ini dan kemudian terlibat dalam dua lagi kajian dalam jangkamasa satu atau dua tahun kemudian. Kakitangan penyelidikan akan membekalkan satu soal selidik untuk dilengkapkan oleh anda sendiri dan dikembalikan dalam sampul surat yang bertutup.

## **TUJUAN KAJIAN**

Tujuan kajian ini ialah untuk:

- a. Mengkaji tanggapan dan kepercayaan tentang merokok di kalangan remaja.
- b. Mengkaji pengalaman merokok di kalangan remaja tanpa mengambil kira sama ada mereka merokok atau tidak pada masa sekarang
- c. Menentukan tahap kesedaran di kalangan remaja tentang barangan berkaitan dengan perkara-perkara yang berlaku dalam komuniti yang berkaitan dengan rokok.

Kami juga akan mengkaji faktor-faktor yang mungkin mempengaruhi golongan remaja merokok dan faktor-faktor yang melindungi mereka daripada serta menentukan sama ada terdapat perbezaan antara faktor-faktor yang terdapat di Thailand dan Malaysia.

## **KELAYAKAN PENYERTAAN**

Anda adalah remaja lelaki atau perempuan berumur antara 13 tahun hingga 17 tahun. Anda boleh dari kalangan perokok atau bukan perokok.

## **PROSEDUR KAJIAN**

Anda akan di beri satu set borang soal selidik dan diminta supaya melengkapkannya dengan sempurna. Masa untuk melengkapkan soal selidik akan mengambil lebih kurang 30 minit. Soal selidik yang telah lengkap dimasukkan dalam sampul surat bertutup sebelum diserahkan kembali kepada pengawai penyelidik. Anda akan diminta menengkapkan soal selidik dua kali lagi dalam jangkamasa satu atau dua tahun lagi.

## **RISIKO**

Penglibatan responden dalam kajian ini tidak melibatkan sebarang risiko terhadap kesejahteraan atau ketidakselesaan baik dari segi fizikal, psikologi, sosial atau kebudayaan.

## **PENYERTAAN DALAM KAJIAN**

Penglibatan dalam penyelidikan ini adalah secara sukarela dan anda bebas untuk menarik diri pada bila bila masa. Sekiranya anda bersetuju untuk mengambil bahagian, kami menggalakkan anda untuk terus kekal dalam penyelidikan ini dan melengkapkan ketiga-tiga soal selidik pada tahun berikutnya.

## **FAEDAH KAJIAN**

Hasil kajian berpotensi membantu penyelidik menilai dan memahami kesan polisi kebangsaan kawalan tembakau dalam negara membangun yang mempunyai budaya berbeza. Ia juga dapat digunakan sebagai bukti oleh penggubal polisi dari seluruh dunia bagi membentuk dan melaksanakan polisi kawalan tembakau yang terbukti berkesan.

## **PERTANYAAN**

Sekiranya anda mempunyai sebarang pertanyaan atau kemusykilan berkaitan projek penyelidikan ini, anda boleh berbincang dengan menghubungi:

**Dr. Maizurah Omar**

## **Prof. Rahmat Awang**

Penyelidik Bersama dari Malaysia, di Pusat Racun Negara, Universiti Sains Malaysia. Tel: 04-6570099

Sekiranya anda masih mempunyai kemusykilan setelah berbincang dengan mana-mana penyelidik di atas, anda juga boleh menghubungi:

**Professor Ron Borland**, Penyelidik Utama ITC-SEA dari The Cancer Council Victoria, 1 Rathdowne Street, Calton VIC 3053, Australia. Tel: (+613) 96355185

**Professor Geoffrey T. Fong**, Penyelidik Utama ITC Project, Department of Psychology, University of Waterloo, Canada. Tel: (519)888-4567

Sekiranya anda tidak berpuas hati dengan tatacara pelaksanaan kajian dan ingin mengajukan aduan, anda boleh menghubungi:

**Professor Abdul Aziz Baba**, Pengerusi Jawatankuasa Penyelidikan dan Etika, Pusat Pengajian Sains Perubatan, Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan.

Sekiranya anda merasakan jawatankuasa etika tempatan tidak dapat menyelesaikan kemusykilan anda pada tahap yang memuaskan anda boleh menghubungi jawatankuasa etika penyelidikan manusia di Australia:

**Ms. Woody Macpherson**, Head, Research Management Unit, The Cancer Council Victoria, 1 Rathdowne St. Carlton VIC 3053 Australia. (+613) 9635-5100.

atau

**Dr Susan Sykes**, Director, Office of Research Ethics, University of Waterloo, 200 University Avenue West Waterloo, Ontario, Canada N2L3G1 At +1 519-888-4567 ext 36005 or Email : [ssykes@uwaterloo.ca](mailto:ssykes@uwaterloo.ca)

### **KERAHSIAAN**

Semua maklumat yang anda berikan akan dikendalikan sebagai "SULIT", dan tidak akan di kemukakan kepada ibubapa atau penjaga anda, tertakluk kepada keperluan perundangan dan batasanya. Maklumat ini akan disimpan di tempat yang selamat dan hanya boleh di lihat oleh kumpulan penyelidik kajian ini. Data daripada kajian ini tidak akan dimusnahkan tetapi sebarang maklumat tentang anda akan dihapuskan supaya jawapan yang anda berikan tidak boleh dikaitkan kembali kepada anda. Selain daripada itu sebarang maklumat yang diterima oleh mana mana ahli keluarga anda yang mungkin terlibat dalam soalselidik ini juga akan dikendalikan sebagai "SULIT". Kami telah menyediakan responden dengan brosur maklumat sama seperti ini tetapi kami ingin anda menghubungi kami sekiranya anda mempunyai sebarang pertanyaan atau kemusykilan.

### **TANDATANGAN**

Sekiranya anda bersetuju untuk melibatkan diri dalam kajian ini, anda mesti menandatangani borang keizinan.

## BORANG KEIZINAN REMAJA (*RECONTACT*)

### TAJUK KAJIAN: PENILAIAN POLISI KAWALAN TEMBAKAU DI ASIA TENGGARA

*Universiti Sains Malaysia Human Research Ethics Committee Clearance Number:*

*USM/PPSP/Ethics/2004 (137.4[3])*

*Ethics Committee of The Cancer Council of Victoria, Australia Clearance Number: HREC 0420*

#### PENYELIDIK :

- **Dr. Maizurah Omar**, Pusat Racun Negara, Universiti Sains Malaysia;
- **Profesor Rahmat Awang**, Pusat Racun Negara, Universiti Sains Malaysia;

Untuk melibatkan diri dalam kajian ini, anda mesti menandatangani borang ini.

Setelah menandatangani kertas ini, saya mengesahkan perkara berikut:

- Projek ini dilaksanakan bagi tujuan penyelidikan.
- Penglibatan dalam penyelidikan ini adalah secara sukarela dan saya bebas untuk menarik diri pada bila-bila masa atau bebas menarik balik sebarang maklumat yang telah diberikan.
- Penyertaan dalam penyelidikan pada hari ini melibatkan melengkapkan satu soal selidik bertulis yang mengambil masa lebihkurang 30 minit dan akan diulangi sekali lagi dalam jangkamasa satu atau dua tahun dari sekarang.
- Hanya mereka yang terlibat dalam penyelidikan ini boleh menggunakan sebarang maklumat yang saya berikan.
- Semua maklumat yang saya berikan harus dianggap sebagai "SULIT" tertakluk kepada keperluan perundangan dan batasan.
- Saya telah membaca semua maklumat dalam kertas maklumat penyertaan remaja (*recontact*) dan borang memberi keizinan yang meliputi maklumat berkaitan risiko dan telahpun diberi masa yang secukupnya untuk memikirkan mengenainya.
- Semua pertanyaan telah dijawab sebaik mungkin.
- Saya secara sukarela bersetuju untuk melibatkan diri dalam kajian ini, mematuhi prosidur kajian dan memberikan maklumat sesuai dengan yang diminta.
- Saya telah menerima satu salinan maklumat remaja (*recontact*) dan borang memberi keizinan untuk disimpan oleh saya.

---

**NAMA REMAJA** (Ditera dan taip)

---

**NAMA SINGKATAN**

---

**NO. KAD PENGENALAN REMAJA**

---

**NO.K/P** (lama)

---

**TANDATANGAN REMAJA**

---

**TARIKH** (ddMMyy)

(Masukkan masa jika perlu)

---

**NAMA & TANDATANGAN INDIVIDU YANG  
MENGENDALIKAN KEIZINAN**

---

**TARIKH** (ddMMyy)

---

**NAMA & TANDATANGAN WAKIL SAH  
IBU/BAPA/PENJAGA**

---

**TARIKH** (ddMMyy)

**ALAMAT TERKINI DAN PERINCIAN**

**ALAMAT**

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**POSKOD**

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**TEL**

**H/P**

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**Nota:**

**Semua subjek yang mengambil bahagian dalam kajian penyelidikan ini tidak dilindungi oleh insuran**

**Sila beritahu kumpulan penyelidik dengan menggunakan poskad yang dibekalkan sekiranya berlaku sebarang perubahan sebelum kajian berakhir.**

# Appendix J: Sample of Consent Form (Thailand)

## ADULT SMOKER REPLENISHMENT CONSENT FORM

RESEARCH PROJECT: TOBACCO CONTROL POLICY EVALUATION IN SOUTH EAST ASIA

**Mahidol University Human Research Ethics Committee Clearance Number: 0517.191/0705**  
*Ethics Committee of The Cancer Council of Victoria, Australia Clearance Number: HREC 0420, IRB#: IRB00001773*  
*Ethics Committee of The University of Waterloo, Canada Clearance Number: 11762, IRB#: IRB00002419*

I agree to take part in the above international research project conducted in Thailand by the research team based at the Mahidol University in collaboration with the Ministry of Health. I have read the participant information sheet, which I will keep for my records. I understand that:

- This project is being conducted for research purposes.
- Participation in the research is voluntary and that I am free to withdraw from the research at any time, or to withdraw any information previously supplied.
- Participation in this research involves completing a face-to-face interview lasting about 30-40 minutes today and two more times subsequently one or two years apart.
- I understand that I will be paid a token sum of Baht300.00 each time that I participate in the study.
- Only those people involved with this research will have access to any information I supply.
- All the information I provide is treated as strictly confidential, subject to legal requirements and limitations.

I \_\_\_\_\_ give my consent to take part in this research.  
**PRINT NAME**

**Signed:** ..... **Date:** ...../...../.....

**Current address and contact details:**

Address: .....

..... Postcode: .....

Telephone:

Home: ..... Work: ..... Mobile .....

Note: Please notify the research team using the postcard provided if there is a change in contact details above before the end of the study.



## Appendix K: Sample of Forms Used in Survey Fieldwork (Malaysia)

### Distributing, Returning and Checking Surveys Form

**BORANG F**

**BORANG PEMBERIAN, PENERIMAAN DAN PENYEMAKAN SOAL SELIDIK KAJIAN**

ID:

Negeri      B/LB      DP      DB      BP

Nama Penyelia Lapangan: \_\_\_\_\_ ID:  -

Nama Penemubual: 1) \_\_\_\_\_ ID:  -

2) \_\_\_\_\_ ID:  -

Aktiviti	Tarikh	Jumlah Borang Lengkap				Komen
		Perokok	Quitter	Bukan Perokok	Remaja	
Jumlah soal selidik diberi						
Jumlah soal selidik diterima						
Jumlah soal selidik disemak						
Jumlah soal selidik (QC-10%)						

Nama Penemubual: 1) \_\_\_\_\_ ID:  -

2) \_\_\_\_\_ ID:  -

Aktiviti	Tarikh	Jumlah Borang Lengkap				Komen
		Perokok	Quitter	Bukan Perokok	Remaja	
Jumlah soal selidik diberi						
Jumlah soal selidik diterima						
Jumlah soal selidik disemak						
Jumlah soal selidik (QC-10%)						

Nama Penemubual: 1) \_\_\_\_\_ ID:  -

2) \_\_\_\_\_ ID:  -

Aktiviti	Tarikh	Jumlah Borang Lengkap				Komen
		Perokok	Quitter	Bukan Perokok	Remaja	
Jumlah soal selidik diberi						
Jumlah soal selidik diterima						
Jumlah soal selidik disemak						
Jumlah soal selidik (QC-10%)						

**Appendix L: ITC SEA Screener for Recontact Adult Smoker**  
(to determine which survey to use: **Recontact Smoker** or **Quitter Survey**)

ID Number of respondent: \_\_\_\_\_

Date of Interview: \_\_\_\_/\_\_\_\_/\_\_\_\_

**Consent: OBTAIN CONSENT BEFORE PROCEEDING.**

**001** Smoking status at wave3 (from master list):

- 1 Smoker
  - 2 Quitter (**Go to 006**)
- 

**002 FR11302** Since we last talked to you, about one year ago, in <Insert Month and Year>, have you made any change in the amount you smoke?

- 1 Yes
  - 2 No (**Go to 004**)
  - 8 Refused (**Go to 004**)
  - 9 Can't Say (**Go to 004**)
- 

**003 FR11303** What change did you make?

- 1 Quit smoking (**Go to 006**)
  - 2 Reduce smoking (smoke less)
  - 3 Increase smoking (smoke more)
  - 8 Refused (don't read out)
  - 9 Can't Say (don't read out)
- 

**004 QA11331** Since we last talked to you, have you made any attempts to quit?

- 1 Yes (**Go to 006**)
  - 2 No
  - 8 Refused
  - 9 Don't Know
-

---

**005** **<Ask unless certain of answer>**. So you are currently smoking, is that correct?

**SURVEY)**

1. Yes, current smoker (**Go to RECONTACT SMOKER**

2. No, I have quit (**Go to QUITTER SURVEY**)

*(Interviewer note: You can complete without asking if the person has already told you)*

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**006 QA11336 <If the respondent quit smoking in wave 3: “Last time we spoke to you, you had given up smoking.”>**

Are you back smoking or are you still stopped?

1 Back smoking (**Go to RECONTACT SMOKER SURVEY**)

2 Still stopped (**Go to QUITTER SURVEY**)

## Appendix M: Pictures of Survey Fieldwork (Malaysia)



## Appendix N: Pictures of Survey Fieldwork (Thailand)



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Data are available at the state level for men and women (and overall) and nationally for urban/rural areas.