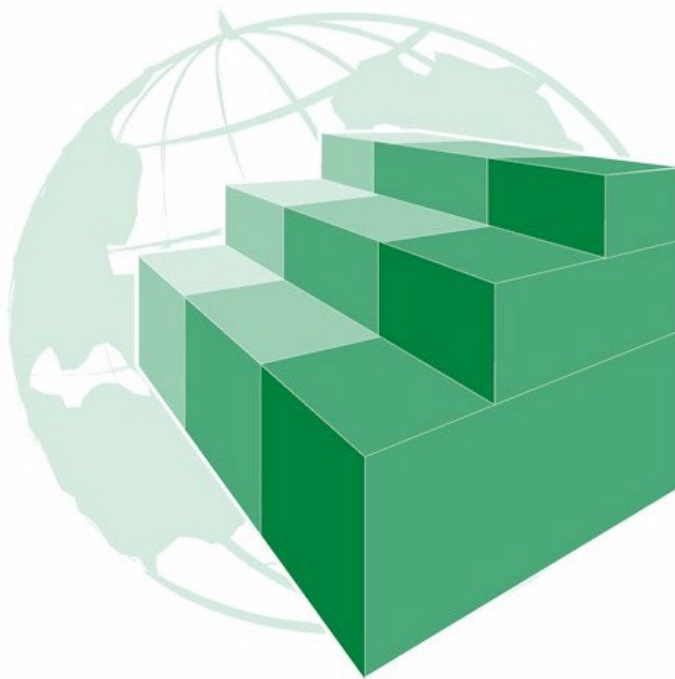


# **Tongan National NCD Survey**

## **Modified STEPS Instrument**



**The WHO STEPwise approach to Surveillance  
of noncommunicable diseases (STEPS)**



# STEPS Instrument

- This is the generic template which countries use to develop their own Instrument. It contains the CORE (unshaded and in double lined boxes) and EXPANDED items (shaded and in single lined boxes) and response options for Step 1, Step 2 and Step 3.
- The introductory statements, questions and response options should be translated and adapted where necessary to suit local conditions. *Italic typeface indicates where local examples should be inserted.*
- All CORE items should be included in the country-specific STEPS Instrument. Wording and response options for CORE questions should not be changed.
- Relevant skip patterns are shown and should be carefully reviewed. Modifications to the skip patterns will be needed according to the final items included.
- Some countries may wish to expand the CORE questions. Recommendations for EXPANDED questions for the key risk factors are included in the shaded areas. These items may be modified but it is preferable to use them where possible.
- Additional questions can be added as OPTIONAL items to meet local needs. For example questions asked in previous surveys could be added to link to previous data.
- The use of the coding column (as is used in this Instrument) facilitates easy, fast and accurate manual data entry. Using this approach does not replace the need for double data entry for maximum quality control (see data coding manual).

**EXAMPLE-** for a current smoker who eats 8 servings of fruit on a typical day

		Response	Skip	Coding col
<b>S 1a</b>	Do you currently smoke any <b>tobacco products</b> , such as cigarettes, cigars or pipes?	Yes 1 No 2 Don't know 7	<i>If No, go to Alcohol Section A</i>	<div>1</div>
<b>D 1b</b>	How many <b>servings</b> of fruit do you eat on one of those days? USE SHOWCARD	Number of servings Don't know 77		<div>0</div> <div>8</div>

- "Do not know" or "Don't remember" are response options indicated in CORE and EXPANDED questions where appropriate. These are coded as "7", "77" or "777" depending on the number of numerals in the other response options. Three other values are important to record: "refuse" and "not applicable" are coded as "8", "88", or "888". For example, *if S 1a is recorded as "No", then all remaining smoking questions will be set at "8"*. Missing responses to any questions should be entered as "9", "99" or "999" at time of data entry.
- Interviewer training is essential to develop thorough knowledge of the instrument format, introductory statements, questions, skip patterns, response options, use of show cards and prompts (where needed). The STEPS Field Manual is a guide and resource for training sessions.
- Undertaking pilot work with the draft country-specific STEPS instrument is essential.

Each country will need to prepare a list of the question numbers (e.g. D1a) and response code cross-referenced with the standard numbers and codes used in this generic template. This cross-referencing will facilitate communication and comparison.

## Identification Label

### Identification Information:

*This is a draft cover page. Each country will adapt this page to suit their local needs. The exact details to be collected in each country-specific STEPS instrument will vary depending on the survey design and implementation procedures. However, regardless of how the interview is administered (e.g., household, clinic or other) a process by which the cover page containing personal identifying information is stored should be carefully designed and must meet recommended ethical standards. Clear instructions on handling and storage of the cover sheets must be provided to the interviewers.*

<b>I 1</b>	Country/district code	□□
<b>I 2</b>	Centre (Village name):	□□□□□□□□
<b>I 3</b>	Centre (Village code): (SEE NOTE BELOW)	□□□
<b>I 4</b>	Interviewer code	□□□
<b>I 5</b>	Date of completion of the questionnaire	<div style="display: flex; justify-content: space-around; align-items: center;"> <div>□□/□□/□□□□</div> <div style="text-align: center;"> <div>Day</div> <div>Month</div> <div>Year</div> </div> </div>

Identification Label			
	<b>Consent</b>		
<b>I 6</b>	Consent has been read out to respondent	Yes      1 No        2	If NO, read consent <input type="checkbox"/>
<b>I 7</b>	Consent has been obtained (verbal or written)	Yes      1 No        2	If NO, END <input type="checkbox"/>
<b>I 9</b>	Time of interview (24 hour clock)	□□:□□	
<b>I 10</b>	Family Name		
<b>I 11</b>	First Name		

Additional Information that may be helpful

<b>I 12</b>	Contact phone number where possible		
<b>I 13</b>	Specify whose phone	Work            1 Home            2 Neighbour       3 Other (specify) 4	<input type="checkbox"/>

Please note: village code (or household code) is required as part of main instrument for data analyses.

## Step 1 Core Demographic Information

		Coding Column	
<b>C1</b>	Sex (Record Male / Female as observed )	Male Female	1 2 <input type="checkbox"/>
<b>C2</b>	What is your date of birth? <i>If Don't Know, See Note* below and Go to C3</i>	Day <input type="checkbox"/> <input type="checkbox"/> Month <input type="checkbox"/> <input type="checkbox"/> Year <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<b>C3</b>	How old are you?	Years	<input type="checkbox"/> <input type="checkbox"/>
<b>C4</b>	In total, how many years have you spent at school or in full-time study (excluding pre-school)?	Years	<input type="checkbox"/> <input type="checkbox"/>

\*Note: Coding Rule: Code "Don't Know" 7 (or 77 or 777 as appropriate).

EXPANDED: Demographic Information			
<b>C7</b>	Which of the following best describes your <u>main</u> work status over the last 12 months?	Government employee 0 1 Non-government employee 0 2 Self-employed 0 3 Non-paid 0 4 Student 0 5 Homemaker 0 6 Retired 0 7 Unemployed (able to work) 0 8 Unemployed (unable to work) 0 9	<input type="checkbox"/> <input type="checkbox"/>
<b>C9</b>	Taking <b>the past year</b> , can you tell me what the average earnings of the household have been?	Per week <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> OR per month <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> OR per year <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Refused 8 8 <input type="checkbox"/> <input type="checkbox"/>	

\*Note: Coding Rule: Code "Don't Know" 7 (or 77 or 777 as appropriate).

## Step 1 Core Behavioural Measures

CORE Tobacco Use (Section S)				
Now I am going to ask you some questions about various health behaviours. This includes things like smoking, drinking alcohol, eating fruits and vegetables and physical activity. Let's start with smoking.				
		Response	Coding Column	Skip
<b>S 1a</b>	Do you currently smoke any <b>tobacco products</b> , such as cigarettes, cigars or pipes?	Yes 1 No 2	<input type="checkbox"/>	If No, go to Alcohol Section A*
<b>S 1b</b>	<u>If Yes.</u> Do you currently smoke tobacco products <b>daily</b> ?	Yes 1 No 2	<input type="checkbox"/>	If No, go to Alcohol Section A*
<b>S 2a</b>	How old were you when you <b>first started</b> smoking daily?	Age (years) Don't remember 7 7	<input type="text"/> <input type="text"/>	If Known, go to S 3
<b>S 2b</b>	Do you remember how long ago it was?  (CODE 77 FOR DON'T KNOW or DON'T REMEMBER)	In Years OR in Months OR in Weeks	Years <input type="text"/> <input type="text"/> Mo. <input type="text"/> <input type="text"/> Weeks <input type="text"/> <input type="text"/>	
<b>S 3</b>	On average, <b>how many</b> of the following do you smoke each day? (RECORD FOR EACH TYPE)  (CODE 77 FOR DON'T KNOW CODE 88 FOR NOT APPLICABLE)  <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Manufactured cigarettes  Hand-rolled cigarettes  Pipes full of tobacco  Cigars, cheroots, cigarillos  ← Other (please specify):	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	If Using All Expanded Questions, Skip to S 6a

EXPANDED : Tobacco Use				
<b>S 4</b>	In the past, did you <b>ever</b> smoke <b>daily</b> ?	Yes 1 No 2	<input type="checkbox"/>	If No, go to S 6a

\* Amend skip instructions if EXPANDED or OPTIONAL items are added to the Tobacco section

# Identification Label

CORE Alcohol Consumption (Section A)				
The next questions ask about the consumption of alcohol.				
<b>A 1a</b>	Have you <b>ever consumed</b> a drink that contains alcohol such as beer, wine, spirit, etc	Yes No	1 2	<input type="checkbox"/>  <i>If No, Go to Diet Section D*</i>
<b>A 1b</b>	Have you consumed alcohol within the <b>past 12 months</b> ?	Yes No	1 2	<input type="checkbox"/>  <i>If No, Go to Diet Section D*</i>
<b>A 2</b>	In the past 12 months, <b>how frequently</b> have you had at least one drink?	5 or more days a week 1-4 days per week 1-3 days a month Less than once a month	1 2 3 4	<input type="checkbox"/>
<b>A 3</b>	When you drink alcohol, <b>on average</b> , how many drinks do you have during one day?	Number Don't know	7 7	<input type="checkbox"/> <input type="checkbox"/>
<b>A 4</b>	During each of the <b>past 7 days</b> , how many standard drinks of any alcoholic drink did you have each day?      (CODE 77 FOR DON'T KNOW)	Monday  Tuesday  Wednesday  Thursday  Friday  Saturday  Sunday	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

\* Amend skip instructions if EXPANDED or OPTIONAL items are added to the Alcohol section

## Identification Label

<b>History (Section His)</b>				
The next questions ask about family history of diabetes and family history of heart disease.				
		Response		Coding Column
<b>His 1</b>	Do or did any of the following members of your family have diabetes - your father, mother, brothers, sisters or children	Yes 1 No 2		<input type="checkbox"/>
<b>His 2</b>	Have you ever had a heart attack	Yes 1 No 2		<input type="checkbox"/>
<b>His 3</b>	Have you had heart surgery for a blocked artery to your heart	Yes 1 No 2		<input type="checkbox"/>

*If No, Go to His 4*

<b>History of Traditional Medicines</b>				
<b>His 4</b>	Are you currently taking any traditional medicines	Yes 1 No 2		<input type="checkbox"/>
		<i>If No, skip to Next Section</i>		
<b>His 4a</b>	Are you taking nonu	Yes 1 No 2		<input type="checkbox"/>
<b>His 4b</b>	What other traditional medicines do you take regularly			

<b>EXPANDED - History of High Blood pressure</b>				
<b>H 2</b>	During the past 12 months have you been told by a doctor or other health worker that you have elevated blood pressure or hypertension?	Yes 1 No 2		<input type="checkbox"/>
		<i>If No, skip to Next Section</i>		
Are you currently receiving any of the following treatments for high blood pressure prescribed by a doctor or other health worker?				
<b>H 3a</b>	Drugs (medication) that you have taken in the last 2 weeks	Yes 1 No 2		<input type="checkbox"/>
<b>H 5</b>	Are you currently taking any herbal or traditional remedy for your high blood pressure?	Yes 1 No 2		<input type="checkbox"/>

# Identification Label

## CORE Diet (Section D)

The next questions ask about the fruits and vegetables that you usually eat. I have a nutrition card here that shows you some examples of fruits and vegetables. Each picture represents the size of a serving. As you answer these questions please think of a typical week in the last year.

<b>D 1a</b>	In a typical week, on how many days do you <b>eat fruit</b> ? <i>USE SHOWCARD</i>	Number of days	<input type="checkbox"/>	If Zero days, go to D 2a
<b>D 1b</b>	How many <b>servings</b> of fruit do you eat on <b>one</b> of those days? <i>USE SHOWCARD</i>	Number of servings	<input type="checkbox"/> <input type="checkbox"/>	
<b>D 2a</b>	In a typical week, on how many days do you <b>eat vegetables</b> ? <i>USE SHOWCARD</i>	Number of days	<input type="checkbox"/> <input type="checkbox"/>	If Zero days, go to Section P
<b>D 2b</b>	How many <b>servings</b> of vegetables do you eat on one of those days? <i>USE SHOWCARD</i>	Number of servings	<input type="checkbox"/> <input type="checkbox"/>	



# Identification Label

## CORE Physical Activity (Section P)

Next I am going to ask you about the time you spend doing different types of physical activity. Please answer these questions even if you do not consider yourself to be an active person.

Think first about the time you spend doing work. Think of work as the things that you have to do such as paid or unpaid work, household chores, harvesting food, fishing or hunting for food, seeking employment.

<b>P 1</b>	Does your work involve mostly sitting or standing, with walking for no more than 10 minutes at a time?	Yes No	1 2	<input type="checkbox"/>	If Yes, go to P6
<b>P 2</b>	Does your work involve vigorous activity, like <i>[heavy lifting, digging or construction work]</i> for at least 10 minutes at a time?	Yes No	1 2	<input type="checkbox"/>	If No, go to P4
<b>P 3a</b>	In a typical week, on how many days do you do vigorous activities as part of your work?	Days a week		<input type="checkbox"/>	
<b>P 3b</b>	On a typical day on which you do vigorous activity, how much time do you spend doing such work?	In hours and minutes OR in Minutes only		hrs <input type="text"/> <input type="text"/> : mins <input type="text"/> <input type="text"/> or minutes <input type="text"/> <input type="text"/> <input type="text"/>	
<b>P 4</b>	Does your work involve moderate-intensity activity, like brisk walking <i>[or carrying light loads]</i> for at least 10 minutes at a time?	Yes No	1 2	<input type="checkbox"/>	If No, go to P6
<b>P 5a</b>	In a typical week, on how many days do you do moderate-intensity activities as part of your work?	Days a week		<input type="text"/> <input type="text"/>	
<b>P 5b</b>	On a typical day on which you did moderate-intensity activities, how much time do you spend doing such work?	In hours and minutes OR in Minutes only		hrs <input type="text"/> <input type="text"/> : mins <input type="text"/> <input type="text"/> or minutes <input type="text"/> <input type="text"/> <input type="text"/>	
<b>P 6</b>	How long is your typical work day?	Number of hours		hrs <input type="text"/> <input type="text"/>	

Other than activities that you've already mentioned, I would like to ask you about the way you travel to and from places. For example to work, for shopping, to market, to church.

<b>P 7</b>	Do you walk or use a bicycle ( <i>pedal cycle</i> ) for at least 10 minutes continuously to get to and from places?	Yes No	1 2		If No, go to P9
<b>P 8a</b>	In a typical week, on how many days do you walk or bicycle for at least 10 minutes to get to and from places?	Days a week		<input type="text"/> <input type="text"/>	
<b>P 8b</b>	How much time would you spend walking or bicycling for travel on a typical day?	In hours and minutes OR in Minutes only		hrs <input type="text"/> <input type="text"/> : mins <input type="text"/> <input type="text"/> or minutes <input type="text"/> <input type="text"/> <input type="text"/>	

The next questions ask about activities you do in your leisure time. Think about activities you do for recreation, fitness or sports *[insert relevant terms]*. Do not include the physical activities you do at work or for travel mentioned already.

<b>P 9</b>	Does your <i>[recreation, sport or leisure time]</i> involve mostly sitting, reclining, or standing, with no physical activity lasting more than 10 minutes at a time?	Yes No	1 2	<input type="checkbox"/>	If Yes, go to P 14
<b>P 10</b>	In your <i>[leisure time]</i> , do you do any vigorous activities like <i>[running or strenuous sports, weight lifting]</i> for at least 10 minutes at a time? <i>INSERT EXAMPLES &amp; USE SHOWCARD</i>	Yes No	1 2	<input type="checkbox"/>	If No, go to P 12
<b>P 11a</b>	If Yes, In a typical week, on how many days do you do vigorous activities as part of your <i>[leisure time]</i> ?	Days a week		<input type="text"/> <input type="text"/>	
<b>P 11b</b>	How much time do you spend doing this on a typical day?	In hours and minutes OR in minutes only		hrs <input type="text"/> <input type="text"/> : mins <input type="text"/> <input type="text"/> or minutes <input type="text"/> <input type="text"/> <input type="text"/>	

Identification Label

CORE Physical Activity (Section P)				
<b>P 12</b>	In your [ <i>leisure time</i> ], do you do any moderate-intensity activities like brisk walking for at least 10 minutes at a time?	Yes No	1 2	If No, go to P 14 <input type="checkbox"/>
<b>P 13a</b>	<u>If Yes</u> In a typical week, on how many days do you do moderate-intensity activities as part of [ <i>leisure time</i> ]?	Days a week		<input type="text"/> <input type="text"/>
<b>P 13b</b>	How much time do you spend doing this on a typical day?	In hours and minutes OR in minutes only	hrs <input type="text"/> <input type="text"/> : mins <input type="text"/> <input type="text"/> : or minutes <input type="text"/> <input type="text"/> <input type="text"/>	
The following question is about sitting or reclining. Think back over the past 7 days, to time spent at work, at home, in [ <i>leisure</i> ], including time spent sitting at a desk, visiting friends, reading, or watching television, but do not include time spent sleeping.				
<b>P 14</b>	Over the past 7 days, how much time did you spend sitting or reclining on a typical day?	In hours and minutes OR in minutes only	hrs <input type="text"/> <input type="text"/> : mins <input type="text"/> <input type="text"/> : or minutes <input type="text"/> <input type="text"/> <input type="text"/>	

## Step 2 Physical measurements

Height and weight			Coding column
<b>M 1</b>	Technician ID Code		<input type="text"/> <input type="text"/> <input type="text"/>
<b>M 3</b>	Height (in Centimetres)		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
<b>M 4</b>	Weight <i>If too large for scale, code 666.6</i> (in Kilograms)		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
<b>Waist</b>			
<b>M 5</b>	Technician ID Code		<input type="text"/> <input type="text"/> <input type="text"/>
<b>M 8</b>	Waist circumference (in Centimetres)		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

SELECTED EXPANDED ITEMS		
<b>M 7a</b>	Hip circumference (in Centimetres)	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

Blood Pressure				
<b>M 9</b>	Technician ID			<input type="text"/> <input type="text"/> <input type="text"/>
<b>M 10</b>	Device ID for blood pressure			<input type="text"/> <input type="text"/> <input type="text"/>
<b>M 11</b>	Cuff size used	small 1 normal 2 large 3		<input type="text"/>
<b>M 12a</b>	Reading 1 <b>Systolic BP</b>	mmHg:	Systolic	<input type="text"/> <input type="text"/> <input type="text"/>
<b>M 12b</b>	<b>Diastolic BP</b>	mmHg:	Diastolic	<input type="text"/> <input type="text"/> <input type="text"/>
<b>M 13a</b>	Reading 2 <b>Systolic BP</b>	mmHg:	Systolic	<input type="text"/> <input type="text"/> <input type="text"/>
<b>M 13b</b>	<b>Diastolic BP</b>	mmHg:	Diastolic	<input type="text"/> <input type="text"/> <input type="text"/>
<b>M 14a</b>	Reading 3 <b>Systolic BP</b>	mmHg:	Systolic	<input type="text"/> <input type="text"/> <input type="text"/>
<b>M 14b</b>	<b>Diastolic BP</b>	mmHg: _ _ _	Diastolic	<input type="text"/> <input type="text"/> <input type="text"/>
<b>M 15</b>	Are you currently on treatment with drugs prescribed by a health professional for treatment of blood pressure?	Yes 1 No 2		<input type="text"/>

### Step 3 Biochemical measurements

CORE Blood glucose			Coding column
B 1	During the last 12 hours have you had anything to eat or drink, other than water?	Yes No	1 2 <input type="checkbox"/>
B 2	Technician ID Code		<input type="text"/> <input type="text"/> <input type="text"/>
B 3	Device ID code		<input type="text"/> <input type="text"/>
B 4	Time of day blood specimen taken (24 hour clock)		<input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/> hours minutes
B 5	Blood glucose – capillary		mmol/l <input type="text"/> <input type="text"/> .
B 6	HbA1c		% <input type="text"/> <input type="text"/> .
CORE Blood Lipids			
B 6	Technician ID Code		<input type="text"/> <input type="text"/> <input type="text"/>
B 7	Device ID code		<input type="text"/> <input type="text"/>
B 8	Total cholesterol		mmol/l <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>

SELECTED EXPANDED ITEMS			
B 11	Triglycerides		mmol/l <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/>
B 14	HDL Cholesterol		mmol/l <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/>
B 15	LDL Cholesterol		mmol/l <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/>
B 5	Blood glucose – fasting – oral glucose tolerance test		mmol/l <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>
B 5	Blood glucose – 2hour – oral glucose tolerance test		mmol/l <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>