

APPENDICES

Appendix 1. Papua New Guinea NCD STEPS Survey Questionnaire

STEPS Instrument for Papua New Guinea Non-Communicable Diseases Risk Factor Survey Version 2.0



WHO STEPwise approach to Surveillance of
noncommunicable diseases (STEPS)

WHO STEPS Instrument for Chronic Disease Risk Factor Surveillance

<Papua New Guinea>

Survey Information

Location and Date		Response	Code
1	District code		I1
2	Centre/Village name		I2
3	Centre/Village code		I3
4	Interviewer Identification		I4
5	Date of completion of the instrument	dd mm year	I5

Consent, Interview Language and Name		Response	Code
6	Consent has been read out to participant	Yes 1 No 2 If NO, read consent	I6
7	Consent has been obtained (verbal or written)	Yes 1 No 2 If NO, END	I7
8	Interview Language	English 1 Gulf tokples 5 Tok Pisin 2 Manus tokples 6 Motu 3 Mamose tokples 7 Golin 4 Other 8	I8
9	Time of interview (24 hour clock)	hrs mins	I9
10	Family Name		I10
11	First Name		I11
12	Contact phone number where possible		I12
13	Specify whose phone	Work 1 Home 2 Relative/ Other 3	I13

Record and file identification information (I6 to I13) separately from the completed questionnaire.

Step 1 Demographic Information

Questions	Response	Code
14 Sex (Record Male / Female as observed)	Male 1 Female 2	C1
15 What is your date of birth? Don't Know 77 77 7777	dd mm year If known, go to C4	C2
16 How old are you?	Years	C3
17 In total, how many years have you spent at school or in full-time study (excluding pre-school)?	Years	C4
18 What is your tribal group?	Simbu, EHP, WHP, Enga 1 SHP 2 Central, Motu-Koitaban NCD 3 Gulf 4 Milne Bay, Oro 5 Morobe, Madang, East and West Sepik 6 Manus 7 NIP, ENBP, WNPB, Bougainville 8 Other - eg expat, Irian Jaya 9 Refused 77	C5
19 What is the highest level of education you have completed?	No formal schooling 1 Less than Grade 6 2 Grade 6 completed 3 Grade 8 completed 4 Grade 10 or vocational training completed 5 Grade 12 completed 6 University degree completed 7 Refused 8	C6
20 Which of the following best describes your main work status over the last 12 months? (USE SHOWCARD)	Government employee 1 Non-government employee 2 Self-employed 3 Non-paid 4 Student 5 Homemaker 6 Retired 7 Unemployed (able to work) 8 Unemployed (unable to work) 9 Refused 77	C7
21 How many people older than 18 years, including yourself, live in your household?	Number of people	C8
22 Does your household have electricity?	Yes 1 No 2	X1
23 Does your household have a refrigerator?	Yes 1 No 2	X2
24 Does your household have a car kept at the house overnight?	Yes 1 No 2	X3
25 If you were not born in the district where the study is being done, how many years ago did you move there?	Years	X4

Step 1 Behavioural Measurements

Tobacco Use

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 tobacco.

Questions	Response	Code
26 Do you currently smoke any tobacco products, such as cigarettes, cigars or pipes?	Yes 1 No 2 If No, go to T6	T1
27 If Yes, Do you currently smoke tobacco products daily?	Yes 1 No 2 If No, go to T6	T2
28 How old were you when you first started smoking daily?	Age (years) _____ Don't remember 77 If Known, go to T5a	T3
29 Do you remember how long ago it was?	In Years _____ If Known, go to T5a	T4a
(RECORD ONLY 1, NOT ALL 3)	OR in Months _____ If Known, go to T5a	T4b
Don't remember 77	OR in Weeks _____ If Known, go to T5a	T4c
30 On average, how many of the following do you smoke each day?	Manufactured cigarettes _____ Hand-rolled cigarettes _____ Pipes full of tobacco _____	T5a T5b T5c
(RECORD FOR EACH TYPE)		
31 In the past, did you ever smoke daily?	Yes 1 No 2 If No, go to T9	T6
32 If Yes, How old were you when you stopped smoking daily?	Age (years) _____ Don't remember 77 If Known, go to T9	T7
33 How long ago did you stop smoking daily?	Years ago _____ If Known, go to T9	T8a
(RECORD ONLY 1, NOT ALL 3)	OR Months ago _____ If Known, go to T9	T8b
Don't remember 77	OR Weeks ago _____ If Known, go to T9	T8c
34 Do you currently use any betel nut?	Yes 1 No 2 If No, go to T12	T9
35 If yes, Do you use betel nut daily?	Yes 1 No 2	T10
36 On average, how many times do you use betel nut daily?	Number of nuts per day _____	T11d
37 In the past, did you ever use betel nut daily? (Only ask if does not use betel nut now – i.e. answer to T9 was No)	Yes 1 Go to A1 No 2 Go to A1	T12
38 When you use betel nut, do you also use mustard and lime?	Always 1 Sometimes 2 Rarely 3 Never 4	X5

Alcohol Consumption

The next questions ask about the consumption of alcohol.

Questions	Response	Code
39 Have you consumed alcohol (such as beer, wine, spirits, home brew) within the past 12 months? (USE SHOWCARD OR SHOW EXAMPLES)	Yes 1 No 2 If No, go to D1	A1
40 In the past 12 months, how frequently have you had at least one drink? (READ RESPONSES USE SHOWCARD)	Daily 1 5-6 days per week 2 1-4 days per week 3 1-3 days per month 4 Less than once a month 5	A2
41 When you drink alcohol, on average, how many drinks do you have during one day? One drink = one beer or beer equivalent	Number _____ Don't know 77	X6
42 Have you consumed alcohol (such as beer, wine, spirits, home brew) within the past 30 days? (USE SHOWCARD)	Yes 1 No 2 If No, go to X8	A4
43 During each of the past 7 days, how many standard drinks of any alcoholic drink did you have each day? (RECORD FOR EACH DAY USE SHOWCARD)	Monday _____ Tuesday _____ Wednesday _____ Thursday _____ Friday _____ Saturday _____ Sunday _____	X7a X7b X7c X7d X7e X7f X7g
44 In the past 12 months, what was the largest number of drinks you had on a single occasion, counting all types of standard drinks together?	Largest number _____	X8
45 For men only: In the past 12 months, on how many days did you have five or more standard drinks in a single day?	Number of days _____	X9
For women only: In the past 12 months, on how many days did you have four or more standard drinks in a single day?	Number of days _____	X10
46 Where do you get most of your alcoholic drinks from? (choose one only)	I buy from store 1 Friends and relatives give to me 2 Home-brew 3	X11

Diet

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 local 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.

Questions	Response	Code
47 In a typical week, on how many days do you eat fruit? (USE SHOWCARD)	Number of days Don't Know 8 <input type="text"/> If Zero days, go to D3	D1
48 How many servings of fruit do you eat on one of those days? (USE SHOWCARD)	Number of servings Don't Know 88 <input type="text"/>	D2
49 In a typical week, on how many days do you eat vegetables? (USE SHOWCARD)	Number of days Don't Know 8 <input type="text"/> If Zero days, go to P1	D3
50 How many servings of vegetables do you eat on one of those days? (USE SHOWCARD)	Number of servings Don't Know 88 <input type="text"/>	D4

Physical Activity

Next I am going to ask you about the time you spend doing different types of physical activity in a typical week. Please answer these questions even if you do not consider yourself to be a physically 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, study/training, household chores, planting, tending and harvesting food/crops, fishing or hunting for food, marketing, seeking employment. In answering the following questions 'vigorous-intensity activities' are activities that require hard physical effort and cause large increases in breathing or heart rate, 'moderate-intensity activities' are activities that require moderate physical effort and cause small increases in breathing or heart rate.

Questions	Response	Code
Activity at work		
51 Does your work involve vigorous-intensity activity that causes large increases in breathing or heart rate like carrying or lifting heavy loads, digging or construction work for at least 10 minutes continuously? (USE SHOWCARD)	Yes 1 No 2 If No, go to P 4	P1
52 In a typical week, on how many days do you do vigorous-intensity activities as part of your work?	Number of days <input type="text"/>	P2
53 How much time do you spend doing vigorous-intensity activities at work on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P3 (a-b)
54 Does your work involve moderate-intensity activity, that causes small increases in breathing or heart rate such as brisk walking [or carrying light loads] for at least 10 minutes continuously? (INSERT EXAMPLES) (USE SHOWCARD)	Yes 1 No 2 If No, go to P 7	P4
55 In a typical week, on how many days do you do moderate-intensity activities as part of your work?	Number of days <input type="text"/>	P5
56 How much time do you spend doing moderate-intensity activities at work on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P6 (a-b)

Travel to and from places

The next questions exclude the physical activities at work that you have already mentioned.

Now I would like to ask you about the usual way you travel to and from places. For example to work, for shopping, to market, to school, or to church

57 Do you walk or use a bicycle for at least 10 minutes continuously to get to and from places?	Yes 1 No 2 If No, go to P 10	P7
58 In a typical week, on how many days do you walk or bicycle for at least 10 minutes continuously to get to and from places?	Number of days <input type="text"/>	P8
59 How much time do you spend walking or bicycling for travel on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P9 (a-b)

Recreational activities

The next questions exclude the work and transport activities that you have already mentioned.

Now I would like to ask you about sports, fitness and recreational activities

60 Do you do any vigorous-intensity sports, fitness or recreational activities that cause large increases in breathing or heart rate - like running or football or basketball - for at least 10 minutes continuously? (USE SHOWCARD)	Yes 1 No 2 If No, go to P 13	P10
61 In a typical week, on how many days do you do vigorous-intensity sports, fitness or recreational activities?	Number of days <input type="text"/>	P11
62 How much time do you spend doing vigorous-intensity sports, fitness or recreational activities on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P12 (a-b)

Physical Activity (recreational activities) contd.

Questions		Response	Code
63	Do you do any moderate-intensity sports, fitness or recreational activities that causes a small increase in breathing or heart rate such as brisk walking,(cycling, swimming, volleyball) for at least 10 minutes continuously? (USE SHOWCARD)	Yes 1 No 2 If No, go to H1	P13
64	In a typical week, on how many days do you do moderate-intensity sports, fitness or recreational activities?	Number of days <input type="text"/>	P14
65	How much time do you spend doing moderate-intensity sports, fitness or recreational activities on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P15 (a-b)

History of Raised Blood Pressure

Questions	Response	Code
66 When was your blood pressure last measured by a health professional?	Within past 12 months 1 1-5 years ago 2 Not within past 5 years 3	H1
67 During the past 12 months have you been told by a doctor or other health worker that you have raised blood pressure or hypertension?	Yes 1 No 2	H2
68 Are you currently receiving any of the following treatments for raised blood pressure prescribed by a doctor or other health worker as well as any advice?		
Drugs (medication) that you have taken in the last 2 weeks	Yes 1 No 2	H3a
Special prescribed diet	Yes 1 No 2	H3b
Advice or treatment to lose weight	Yes 1 No 2	H3c
Advice or treatment to stop smoking	Yes 1 No 2	H3d
Advice to start or do more exercise	Yes 1 No 2	H3e
69 During the past 12 months have you seen a traditional healer for raised blood pressure or hypertension?	Yes 1 No 2	H4
70 Are you currently taking any herbal or traditional remedy for your raised blood pressure?	Yes 1 No 2	H5

History of Diabetes

Questions	Response	Code
71 Have you had your blood sugar measured in the last 12 months?	Yes 1 No 2	H6
72 During the past 12 months, have you ever been told by a doctor or other health worker that you have diabetes?	Yes 1 No 2	H7
73 Are you currently receiving any of the following treatments for diabetes prescribed by a doctor or other health worker as well as any advice?		
Insulin	Yes 1 No 2	H8a
Oral drug (medication) that you have taken in the last 2 weeks	Yes 1 No 2	H8b
Special prescribed diet	Yes 1 No 2	H8c
Advice or treatment to lose weight	Yes 1 No 2	H8d
Advice or treatment to stop smoking	Yes 1 No 2	H8e
Advice to start or do more exercise	Yes 1 No 2	H8f
74 During the past 12 months have you seen a traditional healer for diabetes?	Yes 1 No 2	H9
75 Are you currently taking any herbal or traditional remedy for your diabetes?	Yes 1 No 2	H10

Oral Health

76	How many natural teeth do you have?	All of them 1 Some of them, but have lost some 2 None of them 3	X12
77	Do you have any removable dentures?	Yes 1 No 2	O3
78	Which of the following removable dentures do you have? (can have more than one)	A partial denture 1 A full upper denture 2 A full lower denture 3	O4
79	How would you describe the state of your teeth	Excellent 1 Very good 2 Good 3 Average 4 Poor 5 Very poor 6 Don't know 7	O5
80	How often do you clean your teeth?	Never 1 Once a month 2 2 to 3 times a month 3 Once a week 4 2 to 3 times a week 5 Once a day 6 Twice a day 7	O7
81	Which of the following do you use to clean your teeth (circle one only - main method)	Toothbrush alone 1 Toothbrush with toothpaste 2 Wooden toothpicks 3 Thread (dental floss) 4	O8

Participant Identification Number

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		Ash	5	
		Betel nut skin or other abrasive leaf	6	
		Sand	7	
		Steel wool	8	
		Other	9	
82	Do you use toothpaste?	Yes	1	O9
		No	2	
83	How long is it since you last saw a dentist?	Less than 6 months	1	O10
		6-12 months	2	
		More than 1 year but less than 2 years	3	
		More than 2 years but less than 5 years	4	
		More than 5 years	5	
84	Have you experienced any of the following problems, during the last 12 months, because of the state of your teeth? (may have more than one)	Never received dental care	6	O12
		Difficulty in chewing/biting foods	1	
		Difficulty in speech / trouble pronouncing words	2	
		Persistent pain	3	
		Embarrassment with others	4	
		None	5	

Participant Identification Number

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Step 2 Physical Measurements

Height and Weight		Response		Code
85	Interviewer ID		<div><div></div><div></div><div></div><div></div></div>	M1
86	Device IDs for height and weight	Height	<div><div></div></div>	M2a
		Weight	<div><div></div></div>	M2b
87	Height	in Centimetres (cm)	<div><div><div></div><div></div><div></div><div></div></div><div><div></div></div></div>	M3
88	Weight <i>If too large for scale, code 666.6</i>	in Kilograms (kg)	<div><div><div></div><div></div><div></div><div></div></div><div><div></div></div></div>	M4
89	<i>(For women)</i> Are you pregnant?	Yes	1 If Yes, go to M 8	M5
		No	2	

Waist and Hip

90	Device ID for waist and hip		<table><tr><td></td><td></td></tr></table>			M6			
91	Waist circumference	in Centimetres (cm)	<table><tr><td></td><td></td><td></td><td></td><td></td></tr></table>						M7
92	Hip circumference	in Centimetres (cm)	<table><tr><td></td><td></td><td></td><td></td><td></td></tr></table>						M15

Blood Pressure

93	Interviewer ID		<table><tr><td></td><td></td><td></td><td></td></tr></table>					M8
94	Device ID for blood pressure		<table><tr><td></td><td></td></tr></table>			M9		
95	Cuff size used	Medium	2	M10				
		Large	3					
96	Reading 1 (If automatic machine used, record heart rate below as well)	Systolic (mmHg)	<table><tr><td></td><td></td><td></td><td></td></tr></table>					M11a
Diastolic (mmHg)	<table><tr><td></td><td></td><td></td><td></td></tr></table>					M11b		
98	Reading 2 (If automatic machine used, record heart rate below as well)	Systolic (mmHg)	<table><tr><td></td><td></td><td></td><td></td></tr></table>					M12a
Diastolic (mmHg)	<table><tr><td></td><td></td><td></td><td></td></tr></table>					M12b		
99	Reading 3 (If automatic machine used, record heart rate below as well)	Systolic (mmHg)	<table><tr><td></td><td></td><td></td><td></td></tr></table>					M13a
Diastolic (mmHg)	<table><tr><td></td><td></td><td></td><td></td></tr></table>					M13b		
100	During the past two weeks, have you been treated for raised blood pressure with drugs (medication) prescribed by a doctor or other health worker?	Yes	1	M14				
		No	2					

Heart Rate and Body Composition

101	Heart Rate (Record if automatic blood pressure device is used)			
	Reading 1	Beats per minute	<div><div></div><div></div><div></div><div></div></div>	M16a
	Reading 2	Beats per minute	<div><div></div><div></div><div></div><div></div></div>	M16b
	Reading 3	Beats per minute	<div><div></div><div></div><div></div><div></div></div>	M16c
102	Bioelectric impedance body composition measurement If error E4 put 99.9	% fat	<div><div></div><div></div><div></div><div></div></div>	X13

Step 3 Biochemical Measurements

Blood Glucose		Response	Code
103	During the last 12 hours have you had anything to eat or drink, other than water?	Yes 1 No 2	B1
104	Technician ID	<input type="text"/>	B2
105	Device ID	<input type="text"/>	B3
106	Time of day blood specimen taken (24 hour clock)	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	B4
107	Fasting blood glucose	mmol/l <input type="text"/> <input type="text"/>	B5
	(only fill in if machine cannot give numerical reading)	Low 1 High 2 Unable to assess 3	B5a
108	Time Glucose Load given (24 hour clock). ONLY DO ON EVEN NUMBER SUBJECTS	<input type="text"/> : <input type="text"/>	X14
109	Time of day 2 hour blood specimen taken (24 hour clock)	<input type="text"/> : <input type="text"/>	X15
110	2 Hour Blood glucose	mmol/l <input type="text"/> <input type="text"/>	X16
	(only fill in if machine cannot give numerical reading)	Low 1 High 2 Unable to assess 3	X17

Appendix 2. The Data Book of the Papua New Guinea STEPS Survey**WHO STEPS****Chronic Disease
Risk Factor Surveillance****DATA BOOK FOR
PAPUA NEW GUINEA**