

The STEPS survey of noncommunicable disease (NCD) risk factors was carried out in April, November, and December 2021 in Sri Lanka. NCD Bureau, Ministry of Health and Department of Census and Statistics (DCS) has conducted the survey with the participation of staff of the provincial public health, Medical Research Institute and Department of Census and Statistics. This was a population-based survey of adults aged 18-69 and the survey was carried out in three steps. Sociodemographic and behavioural data were collected in Step 1. Physical measurements such as height, weight and blood pressure were collected in Step 2. Biochemical measurements were collected to assess blood glucose and cholesterol levels in Step 3. A multi-stage stratified cluster sample design was used to select the sample for that age range. A total of 6267 adults participated in the survey. The overall response (step 1) rate was 81%, step 2 response rate was 73% and step 3 response rate was 61%. This survey is usually carried out every five years and the repeat survey will be planned in 2026.

Results for adults aged 18-69 years (incl. 95% CI)	Both Sexes	Males	Females
Step 1 Tobacco Use			
Percentage who currently smoke tobacco	14.1% (13.0- 15.3)	30.2% (27.9- 32.4)	0.2% (0.0- 0.4)
Percentage who currently smoke tobacco daily	10.0% (9.0-11.0)	21.3% (19.3-23.4)	0.1% (0.0-0.2)
Percentage who currently use smokeless tobacco	17.5% (16.2-18.8)	30.3% (28.0-32.6)	6.4% (5.4-7.3)
Percentage who currently use smokeless tobacco daily	10.9% (9.9-11.9)	19.7% (17.7-21.6)	3.2% (2.5-3.9)
Percentage who currently use tobacco (smoked/smokeless)	26.2% (24.7-27.7)	48.9% (46.4-51.5)	6.5% (5.5-7.4)
Percentage who currently use tobacco daily (smoked/smokeless)	18.5% (17.3-19.8)	36.0% (33.6-38.4)	3.4% (2.6-4.1)
Percentage of Cotinine 200 test positive (urine nicotine)	27.3% (25.6-28.9)	47.6% (44.9-50.3)	9.9% (8.5-11.4)
<i>For those who smoke tobacco daily</i>			
Average age started smoking (years)	20.6 (20.0-21.1)	20.5 (19.9-21.0)	--
Percentage of daily smokers smoking manufactured cigarettes	70.5% (65.7-75.3)	70.9% (66.1-75.7)	--
Mean number of manufactured cigarettes smoked per day (by smokers of manufactured cigarettes)	3.7 (3.4-4.1)	3.7 (3.4-4.1)	--
Step 1 Alcohol Consumption			
Percentage who are lifetime abstainers	65.1% (63.4-66.7)	34.2% (31.7-36.6)	91.9% (90.7-93.1)
Percentage who are past 12-month abstainers	8.2% (7.4-9.1)	11.5% (10.1-12.9)	5.4% (4.4-6.3)
Percentage who currently drink alcohol (drank alcohol in the past 30 days)	20.7% (19.5-22.0)	43.3% (40.9-45.6)	1.2% (0.7-1.6)
Percentage who engage in heavy episodic drinking (6 or more drinks on any occasion in the past 30 days)	7.1% (6.2-7.9)	15.1% (13.3-16.8)	0.3% (0.1-0.5)
Step 1 Diet			
Mean number of days fruit consumed in a typical week	3.4 (3.4-3.5)	3.4 (3.3-3.5)	3.5 (3.4-3.6)
Mean number of servings of fruit consumed on average per day	1.2 (1.2-1.3)	1.2 (1.2-1.3)	1.3 (1.2-1.3)
Mean number of days vegetables consumed in a typical week	6.5 (6.5-6.6)	6.5 (6.4-6.5)	6.6 (6.5-6.6)
Mean number of servings of vegetables consumed on average per day	3.3 (3.2-3.5)	3.3 (3.2-3.4)	3.4 (3.2-3.5)
Percentage who ate less than 5 servings of fruit and/or vegetables on average per day	67.8% (66.1-69.6)	68.1% (65.7-70.5)	67.6% (65.5-69.7)
Percentage who always or often add salt or salty sauce to their food before eating or as they are eating	3.5% (2.8-4.2)	3.4% (2.6-4.3)	3.6% (2.8-4.4)

Results for adults aged 18-69 years (incl. 95% CI)	Both Sexes	Males	Females
Percentage who always or often eat processed foods high in salt	8.2% (7.2-9.2)	8.1% (6.7-9.4)	8.3% (7.2-9.5)
Percentage who put salt into rice during cooking	55.3% (53.7-56.9)	57.8% (55.6-60.1)	53.1% (51.1-55.1)
Mean intake of salt per day (in grams) (Levels of sodium and creatinine in spot urine samples are used in STEPS to estimate population 24 hour salt intake, using the Kawasaki equation)	14.2 (14.0-14.4)	15.1 (14.8-15.4)	13.5 (13.3-13.7)
Step 1 Physical Activity			
Percentage with insufficient physical activity (defined as < 150 minutes of moderate-intensity activity per week, or equivalent) *	34.8% (33.1-36.4)	24.2% (22.1-26.3)	43.9% (41.8-46.0)
Median time spent in physical activity on average per day (minutes) (presented with inter-quartile range)	64.3 (2.9-257.1)	154.3 (21.4-385.7)	30.0 (0.0-130.0)
Percentage not engaging in vigorous activity	73.4% (71.8-74.9)	55.4% (53.0-57.9)	88.9% (87.6-90.2)
Percentage with no recreational physical activities	87.2% (86.1-88.4)	82.2% (80.2-84.2)	91.6% (90.5-92.7)

* For complete definitions of insufficient physical activity, refer to the GPAQ Analysis Guide (<http://www.who.int/chp/steps/GPAQ/en/index.html>) or to the WHO Global recommendations on physical activity for health (http://www.who.int/dietphysicalactivity/factsheet_recommendations/en/index.html)

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Results for adults aged 18-69 years (incl. 95% CI)	Both Sexes	Males	Females
Step 1 Cervical and Breast Cancer Screening			
Percentage of women aged 30-49 years who have ever had a screening test for cervical cancer			40.2% (37.3-43.1)
Percentage of women aged 35-45 years who have ever had a screening test for cervical cancer			51.7% (48.0-55.4)
Percentage of women aged 30-49 years who have ever done a breast self-examination to detect any lumps in the breast			36.6% (33.9-39.2)
Step 2 Physical Measurements			
Mean body mass index - BMI (kg/m ²)	24.2 (24.0-24.3)	23.1 (22.9-23.3)	25.1 (24.8-25.3)
Percentage who are overweight (BMI ≥ 25 kg/m ²)	39.4% (37.9-40.9)	30.0% (27.7-32.3)	47.6% (45.5-49.6)
Percentage who are obese (BMI ≥ 30 kg/m ²)	11.0% (10.0-12.0)	6.3% (5.1-7.4)	15.2% (13.6-16.7)
Average waist circumference (cm)		85.3 (84.6-86.0)	86.4 (85.8-87.1)
Mean systolic blood pressure - SBP (mmHg), including those currently on medication for raised BP	128.5 (127.9-129.2)	130.3 (129.4-131.3)	127.0 (126.1-127.9)
Mean diastolic blood pressure - DBP (mmHg), including those currently on medication for raised BP	80.5 (80.1-81.0)	81.9 (81.3-82.6)	79.3 (78.8-79.9)
Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)	34.8% (33.3-36.3)	35.8% (33.4-38.2)	34.0% (32.0-35.9)
Percentage who were already diagnosed with hypertension among entire population (self-reported)	18.6% (17.4-19.7)	15.1% (13.5-16.7)	21.6% (20.1-23.2)
Percentage newly detected with raised BP among those with raised blood pressure or currently on medication for raised BP	54.7% (52.0-57.4)	62.0% (58.1-65.8)	48.1% (44.7-51.5)
Percentage having blood pressure controlled among those with raised blood pressure or currently on medication for raised BP	14.1% (12.3-15.9)	10.7% (8.4-13.0)	17.3% (14.7-19.9)
Percentage having blood pressure controlled among those who were taking treatment for raised blood pressure.	39.1% (35.2-43.0)	37.2% (30.7-43.7)	40.3% (35.3-45.4)

Results for adults aged 18-69 years (incl. 95% CI)	Both Sexes	Males	Females
Percentage with raised BP (SBP \geq 140 and/or DBP \geq 90 mmHg or currently on medication for raised BP) who are not currently on medication for raised BP.	63.9% (61.4-66.4)	71.2% (67.7-74.7)	57.2% (53.9-60.5)
Step 3 Biochemical Measurement			
Mean fasting blood glucose, including those currently on medication for raised blood glucose [mg/dl]	104.0 (102.4-105.6)	103.1 (100.9-105.4)	104.8 (102.7-106.8)
Percentage with impaired fasting glycaemia as defined below <ul style="list-style-type: none"> • plasma venous value \geq6.1 mmol/L (110 mg/dl) and $<$7.0 mmol/L (126 mg/dl) • capillary whole blood value \geq5.6 mmol/L (100 mg/dl) and $<$6.1 mmol/L (110 mg/dl) 	13.0% (11.7-14.2)	12.8% (10.9-14.6)	13.1% (11.6-14.7)
Percentage with raised Fasting Blood Glucose Known and newly reported: Includes respondents aged 18-69 years having plasma venous value \geq 126 mg/dl or currently on medication for raised blood glucose	14.6% (13.5-15.8)	14.5% (12.7-16.4)	14.7% (13.2-16.2)
Percentage who were already diagnosed with diabetes among entire population (self-reported)	13.9% (12.9- 14.8)	13.4% (11.9- 14.9)	14.3% (13.1- 15.5)
Percentage newly detected with raised fasting blood sugar among those with raised blood sugar or currently on medication for raised blood sugar	38.4% (34.1-42.7)	39.8% (33.0-46.6)	37.2% (31.9-42.4)
Percentage not taking treatment for raised blood sugar among those with raised Blood sugar or currently on medication for raised blood sugar	49.1% (44.7-53.5)	53.2% (46.6-59.8)	45.6% (40.2-51.1)
Percentage of respondents with comorbidity (raised blood pressure and blood glucose)	8.6% (7.7-9.6)	8.5% (6.9-10.0)	8.7% (7.5-9.9)
Mean total blood cholesterol, including those currently on medication for raised cholesterol [mg/dl]	187.2 (185.6- 188.8)	182.0 (179.8- 184.3)	191.7 (189.7- 193.7)
Percentage with raised total cholesterol (\geq 5.0 mmol/L or \geq 190 mg/dl or currently on medication for raised cholesterol)	48.7% (46.8- 50.6)	42.7% (40.0- 45.4)	54.0% (51.6- 56.4)
Percentage with raised total cholesterol (\geq 6.2 mmol/L or \geq 240 mg/dl or currently on medication for raised cholesterol): According to Sri Lanka guideline, cut off value of raised total cholesterol is 240 mg/dl.	19.0% (17.5-20.4)	15.6% (13.6-17.7)	21.8% (20.0-23.7)
Cardiovascular disease (CVD) risk			
Percentage aged 40-69 years with a 10-year CVD risk \geq 20%, or with existing CVD**	14.2% (12.8- 15.8)	16.9% (14.6- 19.6)	11.8% (10.1- 13.8)
Summary of combined risk factors			
<ul style="list-style-type: none"> <li style="width: 50%;">• current daily smokers <li style="width: 50%;">• overweight (BMI \geq 25 kg/m²) <li style="width: 50%;">• less than 5 servings of fruits & vegetables per day <li style="width: 50%;">• raised BP (SBP \geq 140 and/or DBP \geq 90 mmHg or currently on medication for raised BP) <li style="width: 50%;">• insufficient physical activity 			
Percentage with none of the above risk factors	8.6% (7.6- 9.6)	9.5% (7.87- 11.1)	7.8% (6.7- 9.0)
Percentage with three or more of the above risk factors, aged 18 to 44 years	18.2% (16.5- 19.9)	18.9% (16.1- 21.6)	17.6% (15.6- 19.7)
Percentage with three or more of the above risk factors, aged 45 to 69 years	36.3% (34.1- 38.5)	31.4% (28.1- 34.7)	40.5% (37.7- 43.2)
Percentage with three or more of the above risk factors, aged 18 to 69 years	26.5% (25.1- 28.0)	24.6% (22.4- 26.7)	28.2% (26.4- 30.0)

** A 10-year CVD risk of \geq 20% is defined according to age, sex, blood pressure, smoking status (current smokers), total cholesterol, and previously diagnosed diabetes.

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