



Mongolia Fourth National STEPS Survey – 2019

Fact Sheet (Regions)

The STEPS survey of noncommunicable disease (NCD) risk factors in Mongolia was carried out from June 2019 to September 2019. Mongolia carried out Step 1, Step 2 and Step 3. Socio demographic and behavioral information was 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. The survey was a population-based survey of adults aged 15-69. A multistage stratified sampling design was used to produce representative data for that age range in Mongolia. A total of 6654 adults participated in the survey. The overall response rate was 98.1%. A repeat survey is planned for 2024 if funds permit.

Results for adults aged 15-69 years (incl. 95% CI)	All	Western	Khangai	Central	Eastern	UB
Step 1 Tobacco Use						
Percentage who currently smoke tobacco	24.2 (22.9 – 25.6)	21.4 (17.4-25.5)	21.8 (18.8-24.8)	24.3 (20.8-27.8)	25.1 (21.3-28.9)	26.2 (24.2-28.3)
Percentage who currently smoke tobacco daily	21.6 (20.3 – 23.0)	19.7 (15.5-23.8)	18.8 (16.1-21.5)	21.7 (18.3-25.1)	23.6 (19.8-27.4)	23.4 (21.4-25.4)
<i>For those who smoke tobacco daily</i>						
Average age started smoking (years)	18.9 (18.5 – 19.2)	19.4 (18.6-20.2)	18.9 (18.1-19.7)	18.7 (17.8-19.6)	18.4 (17.6-19.2)	18.9 (18.3-19.4)
Percentage of daily smokers smoking manufactured cigarettes	96.8 (95.8 – 97.8)	93.4 (89.6-97.1)	91.4 (87.1-95.6)	98.2 (96.3-100.0)	96.4 (93.0-99.9)	99.5 (99.0-100.0)
Mean number of manufactured cigarettes smoked per day (by smokers of manufactured cigarettes)	10.7 (10.2 – 11.2)	10.8 (9.2-12.4)	10.4 (9.4-11.4)	11.1 (10.1-12.1)	11.7 (9.3-14.1)	10.5 (9.8-11.2)
Step 1 Alcohol Consumption						
Percentage who are lifetime abstainers	30.6 (28.4 – 32.7)	47.5 (38.9-56.0)	36.1 (30.8-41.3)	29.9 (25.0-34.7)	19.1 (14.6-23.7)	24.3 (21.6-26.9)
Percentage who are past 12 month abstainers	12.0 (11.0 – 13.1)	7.2 (5.1-9.4)	10.1 (7.7-12.5)	15.1 (12.0-18.2)	6.2 (3.8-8.7)	14.2 (12.5-16.0)
Percentage who currently drink (drank alcohol in the past 30 days)	34.8 (32.8 – 36.7)	28.9 (22.9-34.9)	38.6 (33.5-43.7)	35.5 (31.0-40.0)	46.5 (40.3-52.8)	32.5 (29.8-35.1)
Percentage who engage in heavy episodic drinking (6 or more drinks on any occasion in the past 30 days)	19.8 (18.4 – 21.2)	13.7 (10.6-16.7)	19.1 (15.6-22.7)	21.3 (18.0-24.6)	35.3 (30.2-40.3)	18.9 (16.6-21.1)
Step 1 Diet						
Mean number of days fruit consumed in a typical week	1.8 (1.7 – 1.9)	1.2 (1.0-1.5)	1.5 (1.3-1.8)	1.9 (1.6-2.1)	0.9 (0.7-1.1)	2.2 (2.1-2.4)
Mean number of servings of fruit consumed on average per day	0.9 (0.8 – 1.1)	0.4 (0.3-0.5)	1.0 (0.7-1.4)	0.9 (0.7-1.2)	0.2 (0.2-0.3)	1.2 (0.9-1.4)

Mean number of days vegetables consumed in a typical week	4.7 (4.6 – 4.8)	2.9 (2.5-3.4)	3.8 (3.5-4.1)	5.2 (4.9-5.5)	4.0 (3.5-4.4)	5.6 (5.5-5.8)
Mean number of servings of vegetables consumed on average per day	2.3 (2.1 – 2.6)	1.0 (0.8-1.2)	2.5 (1.9-3.0)	2.1 (1.8-2.5)	0.8 (0.7-0.9)	3.0 (2.6-3.4)
Mean number of servings of fruits and vegetables consumed on average per day	3.2 (2.9 – 3.5)	1.4 (1.1-1.6)	3.5 (2.6-4.3)	3.0 (2.4-3.5)	1.0 (0.9-1.1)	4.1 (3.5-4.8)
Percentage who ate less than 5 servings of fruit and/or vegetables on average per day	83.4 (81.2 – 85.6)	94.2 (91.9-96.5)	79.6 (73.6-85.5)	87.9 (84.2-91.5)	99.0 (98.2-99.8)	77.3 (73.5-81.1)
Percentage who always or often add salt or salty sauce to their food before eating or as they are eating	17.3 (15.8 – 18.9)	20.1 (14.7-25.5)	13.9 (10.3-17.5)	14.4 (11.2-17.7)	39.1 (34.1-44.1)	15.9 (13.7-18.1)
Percentage who always or often eat processed foods high in salt	11.0 (9.9 – 12.2)	7.2 (4.1-10.3)	8.4 (6.4-10.4)	14.3 (10.9-17.6)	14.5 (11.3-17.8)	11.6 (9.9-13.3)
Step 1 Physical Activity						
Percentage with insufficient physical activity (defined as < 150 minutes of moderate-intensity activity per week, or equivalent)*	21.9 (20.1 – 23.9)	19.1 (14.8-23.5)	18.1 (12.7-23.5)	28.7 (25.0-32.4)	5.7 (3.3-8.1)	24.6 (22.0-27.2)
Median time spent in physical activity on average per day (minutes) (presented with inter-quartile range)	120.0 (25.7 – 360.0)	141.4 (30.0-400.0)	270.0 (64.3-600.0)	60.0 (11.4-244.3)	261.4 (125.7-422.9)	82.9 (20.0-250.7)
Percentage not engaging in vigorous activity	61.0 (58.9 – 63.1)	44.1 (36.6-51.6)	56.3 (51.1-61.5)	63.2 (59.6-66.8)	63.4 (57.3-69.5)	67.7 (64.9-70.5)

* 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 15-69 years (incl. 95% CI)	All	Western	Khangai	Central	Eastern	UB
Step 1 Cervical Cancer Screening						
Percentage of women aged 30-49 years who have ever had a screening test for cervical cancer	64.2 (61.0 – 67.3)	67.8 (60.1-75.4)	57.7 (49.3-65.9)	82.2 (75.7-88.8)	78.9 (69.8-88.2)	57.7 (53.0-62.4)
Step 2 Physical Measurements						
Mean body mass index - BMI (kg/m ²)	25.5 (25.4 – 25.7)	24.3 (23.8-24.8)	25.5 (25.1-25.9)	26.2 (25.7-26.7)	25.2 (24.7-25.7)	25.8 (25.5-26.0)
Percentage who are overweight (BMI ≥ 25 kg/m ²)	49.4 (47.8 – 51.1)	37.9 (32.9-42.9)	49.4 (45.4-53.4)	53.5 (49.2-57.7)	46.1 (40.8-51.5)	52.1 (49.9-54.4)
Percentage who are obese (BMI ≥ 30 kg/m ²)	18.5 (17.3 – 19.7)	13.4 (11.1-15.8)	17.3 (14.4-20.2)	23.1 (19.7-26.5)	16.8 (12.8-20.8)	19.0 (17.2-20.8)
Average waist circumference (cm) men	87.3 (86.6 – 88.1)	84.1 (82.2-85.9)	85.8 (84.5-87.1)	88.3 (86.2-90.3)	84.9 (82.7-87.1)	89.6 (88.5-90.8)
Average waist circumference (cm) women	85.7 (85.0 – 86.4)	86.2 (84.3-88.1)	84.0 (82.7-85.4)	87.0 (84.9-89.1)	84.1 (82.0-86.2)	86.0 (85.1-86.9)
Percentage who are central obese (WC: for men ≥ 90 cm, women ≥ 80 cm)	53.0 (51.2-54.8)	47.3 (42.5-52.0)	47.9 (43.9-51.9)	55.4 (50.4-60.2)	44.6 (38.7-50.6)	57.9 (55.4-60.4)
Mean systolic blood pressure - SBP (mmHg), including those currently on medication for raised BP	120.5 (119.8 – 121.1)	119.7 (118.4-121.1)	121.5 (120.0-123.1)	121.5 (119.6-123.4)	121.7 (119.7-123.7)	119.5 (118.6-120.3)
Mean diastolic blood pressure - DBP (mmHg), including those currently on medication for raised BP	77.3 (76.9 – 77.8)	76.5 (75.3-77.7)	78.9 (77.6-80.1)	77.2 (76.0-78.5)	78.5 (77.0-80.0)	76.6 (76.1-77.2)
Percentage with raised BP (SBP ≥ 130 and/or DBP ≥ 80 mmHg or currently on medication for raised BP)	44.0 (42.2 – 45.7)	40.6 (35.8-45.5)	48.4 (44.4-52.4)	42.2 (37.2-47.3)	46.6 (39.4-53.8)	43.2 (40.8-45.5)
Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)	23.6 (22.3 – 24.9)	20.6 (17.5-23.8)	26.8 (23.7-30.0)	24.3 (20.6-28.1)	25.5 (20.5-30.4)	22.3 (20.5-24.2)
Percentage with raised BP (SBP ≥ 160 and/or DBP ≥ 100 mmHg or currently on medication for raised BP)	15.7 (14.6 – 16.8)	15.1 (11.7-18.5)	17.3 (14.9-19.7)	16.0 (13.0-19.0)	14.2 (11.1-17.2)	15.2 (13.6-16.8)
Percentage with raised BP (SBP ≥ 130 and/or DBP ≥ 80 mmHg or currently on medication for raised BP) who are not currently on medication for raised BP	69.5 (67.3-71.8)	67.1 (59.6-74.5)	69.9 (65.0-74.9)	67.8 (62.5-73.1)	75.4 (69.9-80.8)	69.8 (66.3-73.2)
Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP) who are not currently on medication for raised BP	43.2 (40.0-46.5)	35.2 (25.3-45.1)	45.7 (38.1-53.3)	44.1 (36.6-51.6)	54.9 (45.4-64.4)	41.6 (37.0-46.3)

Results for adults aged 15-69 years (incl. 95% CI)	All	Western	Khangai	Central	Eastern	UB
Step 3 Biochemical Measurement						
Mean fasting blood glucose, including those currently on medication for raised blood glucose [mmol/L]	5.8 (5.7 – 5.8)	5.5 (5.4-5.6)	5.8 (5.7-5.9)	5.9 (5.8-6.0)	5.7 (5.5-5.9)	5.8 (5.8-5.9)
Percentage with impaired fasting glycaemia as defined below • plasma venous value ≥ 6.1 mmol/L (110 mg/dl) and < 7.0 mmol/L (126 mg/dl) • capillary whole blood value ≥ 5.6 mmol/L (100 mg/dl) and < 6.1 mmol/L (110 mg/dl)	17.4 (16.1–18.7)	9.6 (6.7-12.5)	19.9 (16.9-22.8)	22.1 (18.4-25.8)	11.7 (7.6-15.9)	17.4 (15.5-19.3)
Percentage with raised fasting blood glucose as defined below or currently on medication for raised blood glucose • plasma venous value ≥ 7.0 mmol/L (126 mg/dl) • capillary whole blood value ≥ 6.1 mmol/L (110 mg/dl)	8.3 (7.4–9.2)	4.2 (2.4-5.9)	8.3 (6.3-10.3)	9.4 (6.9-11.9)	8.3 (5.7-11.0)	9.1 (7.6-10.6)
Mean total blood cholesterol, including those currently on medication for raised cholesterol [mmol/L]	4.4 (4.4 – 4.4)	4.4 (4.3-4.5)	4.3 (4.2-4.4)	4.6 (4.5-4.7)	4.3 (4.1-4.4)	4.4 (4.3-4.4)
Percentage with raised total cholesterol (≥ 5.0 mmol/L or ≥ 190 mg/dl or currently on medication for raised cholesterol)	27.8 (26.3 – 29.3)	27.1 (23.0-31.3)	21.6 (19.1-24.2)	35.2 (30.9-39.2)	23.6 (18.8-28.3)	28.7 (26.4-31.1)
Percentage with raised total cholesterol (≥ 6.2 mmol/L or currently on medication for raised cholesterol)	5.9 (5.2-6.2)	5.1 (3.3-6.9)	4.7 (3.4-6.1)	9.8 (7.5-12.1)	4.3 (2.1-6.5)	5.2 (4.3-6.2)
Mean fasting blood triglycerides [mmol/L]	1.5 (1.5-1.6)	1.4 (1.3-1.4)	1.5 (1.4-1.5)	1.7 (1.7-1.8)	1.4 (1.3-1.5)	1.6 (1.5-1.6)
Percentage of respondents with raised blood triglycerides (≥ 1.7 mmol/L)	31.1 (29.4-32.8)	23.8 (19.2-28.3)	25.9 (22.5-29.3)	39.7 (35.2-44.1)	27.0 (21.5-32.5)	33.2 (30.5-35.9)
Mean fasting blood HDL [mmol/L]	1.4 (1.3-1.4)	1.5 (1.4-1.5)	1.3 (1.3-1.4)	1.4 (1.3-1.4)	1.3 (1.3-1.4)	1.3 (1.3-1.4)
Percentage of respondents with lower blood HDL (men < 1.3 mmol/L; women < 1.29 mmol/L)	26.3 (24.8-28.0)	11.0 (7.9-15.1)	27.0 (24.1-30.2)	26.1 (23.0-29.4)	29.4 (23.8-35.8)	30.7 (27.9-33.6)
Mean fasting LDL [mmol/L]	2.4 (2.3-2.4)	2.3 (2.2-2.4)	2.3 (2.2-2.4)	2.4 (2.3-2.5)	2.3 (2.2-2.4)	2.4 (2.3-2.4)
Percentage of respondents with raised blood LDL (LDL ≥ 3.0 mmol/L)	23.3 (21.9-24.8)	18.5 (14.9-22.7)	18.9 (16.3-21.7)	26.1 (22.2-30.5)	20.3 (16.9-24.3)	26.6 (24.2-29.2)
Mean intake of salt per day (in grams)	10.5 (10.4 – 10.6)	10.2 (10.0-10.4)	10.5 (10.3-10.7)	10.6 (10.4-10.8)	10.6 (10.3-10.9)	10.5 (10.4-10.7)
Cardiovascular disease (CVD) risk						
Percentage aged 40-69 years with a 10-year CVD risk $\geq 30\%$, or with existing CVD**	19.3 (17.4 – 21.2)	19.2 (13.6-24.8)	15.8 (12.2-19.4)	14.8 (10.6-19.0)	27.3 (17.6-36.9)	21.8 (18.9-24.7)
Summary of combined risk factors						
<ul style="list-style-type: none"> current daily smokers less than 5 servings of fruits & vegetables per day insufficient physical activity 				<ul style="list-style-type: none"> overweight (BMI ≥ 25 kg/m²) raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP) 		
Percentage with none of the above risk factors	3.9 (3.1 – 4.8)	1.6 (0.1-3.1)	4.3 (2.2-6.4)	2.6 (1.1-4.1)	0.2 (0.0-0.5)	5.7 (4.2-7.3)

Percentage with three or more of the above risk factors, aged 15 to 69 years	30.8 (29.3 – 32.3)	26.5 (22.5-30.5)	29.0 (25.8-32.3)	39.2 (35.1-43.2)	26.9 (22.2-31.7)	30.4 (28.1-32.6)
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** A 10-year CVD risk of $\geq 30\%$ is defined according to age, sex, blood pressure, smoking status (current smokers OR those who quit smoking less than 1 year before the assessment), total cholesterol, and diabetes (previously diagnosed OR a fasting plasma glucose concentration >7.0 mmol/l (126 mg/dl)).