

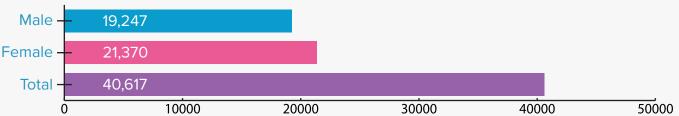
# Integrated Stepwise Household Survey 2023

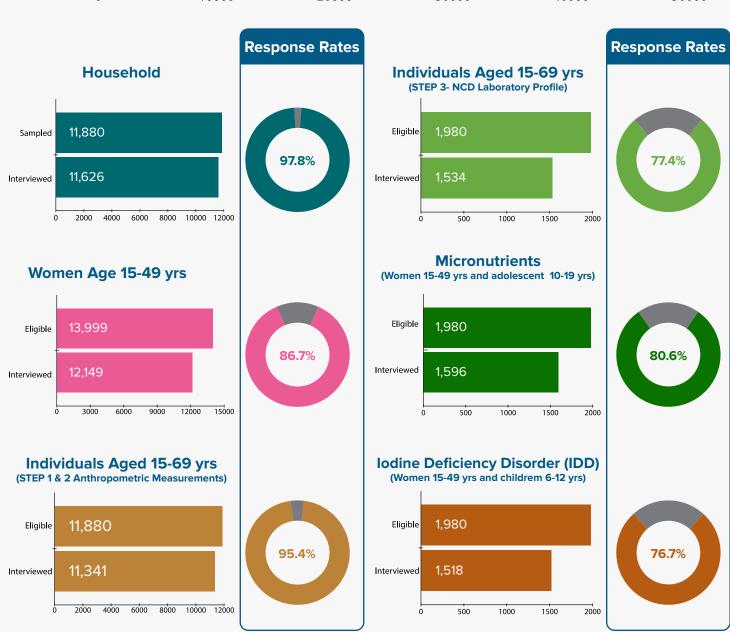


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### Study Population and Response Rate

### **Study Population**







# Integrated Stepwise Household Survey 2023



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# **Trends in selected indicator: NHS1984-NHS2023**

INDICATORS	Na	ntional Hea	alth Survey	s ESTIMA	ΓΕ	Unit of Measurement
INDICATORS	1984	1994	2000	2012	2023	
Population enumerated						
Male	27,747	30,440	33,489	29,159	19,247	
Female	28,458	33,450	35,358	30,362	21,370	Number of People
Total	56,205	63,890	68,847	59,521	40,617	
General Fertility Rate	169.6	172.7	142.7	72.0	75.2	Number of births per 1000 women 15-49 years
Total Fertility Rate	-	5.6	4.7	2.3	2.0	Average number of children per woman
Adolescent Birth/ Fertility Rate	-	120.0	61.7	28.4	18.6	No. of births per 1000 adolescent women 15-19 years
Neonatal Mortality Rate	-	-	-	21.0	6.9	Number of deaths before reaching the age of 1 month per 1000 live births
Infant Mortality Rate	102.8	70.7	60.5	30.0	15.2	Number of U1 deaths per 1000 live births
Under-five Mortality Rate	162.4	96.9	84.0	37.3	19.5	Number of U5 deaths per 1000 live births
Maternal Mortality Ratio	777.0	380.0	255.0	86.0	53.0	Number of maternal death per 100000 live births
Skilled Birth Attendance	-	15.1	23.7	74.6	98.5	Percentage of birth attendant by skilled health worker
Institutional Delivery	-	10.9	19.8	73.7	98.0	Percentage of deliveries at health facilities



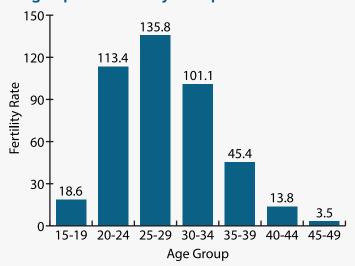
# Integrated Stepwise Household Survey 2023



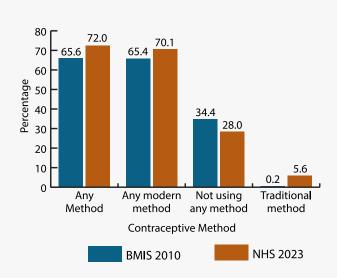
# BHUTAN

### **Fertility**

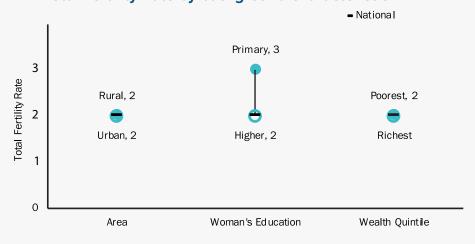
### Age Specific Fertility Rate per 1000 Women



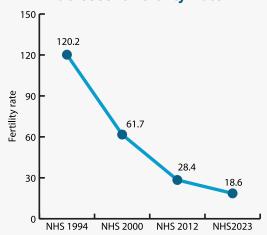
### Trend in contraceptive prevalence

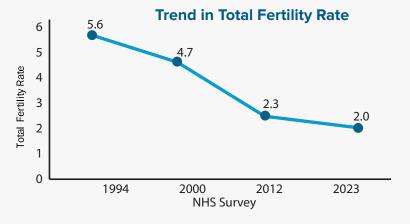


### **Total Fertility Rate by background characteristic**



### **Adolescent Fertility Rate**







# Integrated Stepwise Household Survey 2023



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### **Mortality**



### **Manner of Death** 78.1 80 -70 -60 Percentage 20 10 6.9 6.4 3.9 2.1 1.4 0.3 0.4 0.5 0 Illness **Accidents** Suicide Violence Alcohol Natural Poisoning Other Don't related calamities (uninten know cause or disaster tional)

Manner of Death



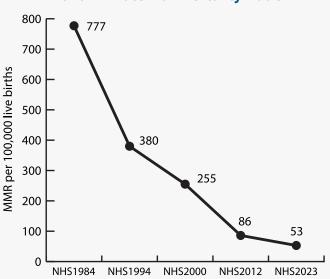
# Integrated Stepwise Household Survey 2023



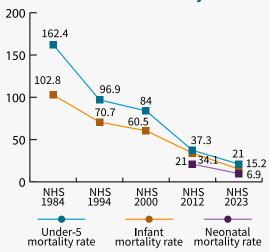
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### **Maternal and Child Mortality**

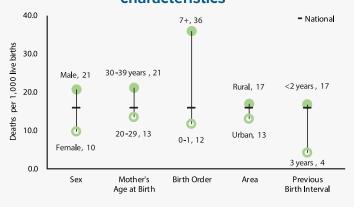
### **Trend in Maternal Mortality Ratio**



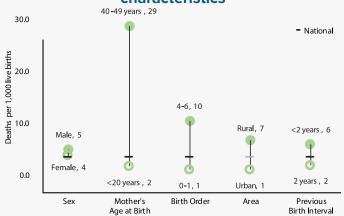
### **Trend in Child Mortality Rate**



# Infant Mortality Rate by background characteristics



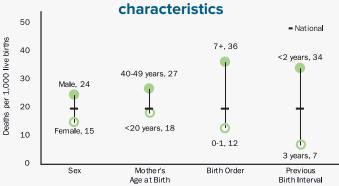
# Child Mortality Rate by background characteristics



# Neonatal Mortality Rate by background characteristics



# Under-5 mortality rate by background





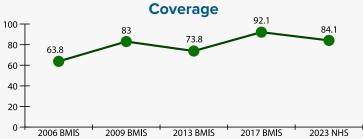
# Integrated Stepwise Household Survey 2023



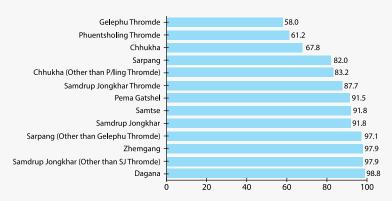
BHUTAN

Malaria

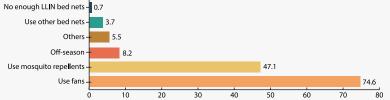
# Trend in LLINs (Long Lasting Insecticidal Nets)



# Percentage of households with at least one LLINs Available



### Reasons for not sleeping under LLINs or only sleeping sometimes



Condition of LLINs & Population Sleeping Under LLINs (of the household with LLINs)

100

97.2

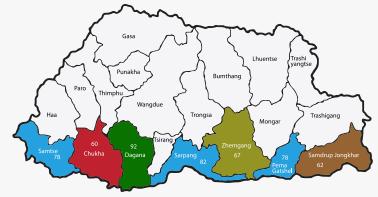
Household

with good

condition

LLINs

Percentage of respondents who slept under Long Lasting Insecticidal Nets (LLINs) last night, among the households with LLINs available



# 80 - 72.5 9 60 - 20 - 12.7 1

**ALWAYS** 

sleep

under

LLINs

**SOMETIMES** 

sleep under

LLINs

**NEVER** 

sleep

under

LLINs

Total respondent	2768
Percentage of household with atleast one LLINs	84.1
Percentage of respondent who slept under LLINs last night	72.6
Number of household whose members had malaria in past 12 months	11.0
Percentage of respondents who said that they or their household member faced difficulty in availing malaria services	1.3



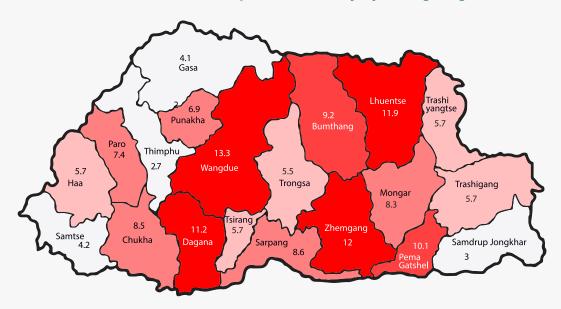
# Integrated Stepwise Household Survey 2023



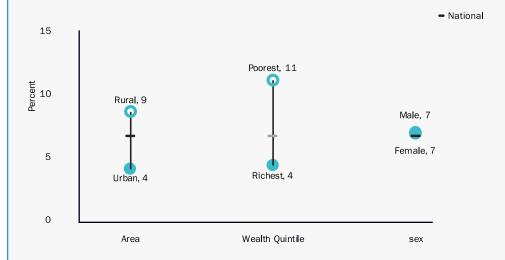
# BHUTAN

### **Self-reported Disability**

### Prevalence of Self-reported Disability by Dzongkhags



### Disability Prevalence According to Category by background characterictics



Prevalence of Disability (%)	Total
Vision	1.8
Hearing	2.0
Mobility	2.0
Communication	0.8
Self Care	2.4
Cognition	1.5
Any Disability	6.8

The WG Short Set of six questions on functioning was used for collecting the information on disability among population aged 5 years and above. Disability is determined, according to the WG-SS, as anyone having at least a lot of difficulty on at least one of the six domains.



# Integrated Stepwise Household Survey 2023



# BHUTAN

### **Drinking Water, Sanitation & Hygiene (WASH)**

Wate	er, Sanitation & Hygiene	Urban	Rural	Total
	Percentage of the households having improved water source	99.97	99.48	99.67
	Percentage of the households using piped water source	99.4	96.5	97.6
	Percentage of household with basic drinking water service	99.6	99.8	99.1
	Percentage of basic sanitation service (improved facilities that are not shared with other households, includes safely managed sanitation service which are shown separately)	81.6	85.1	83.9
	Percentage of limited sanitation service (improved facilities shared by 2 or more household)	17.8	13.8	15.3
	Percentage of the households practicing open defecation	0	0.3	0.2



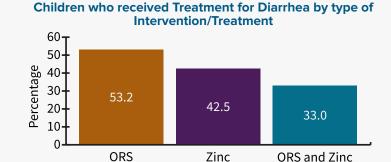
# Integrated Stepwise Household Survey 2023

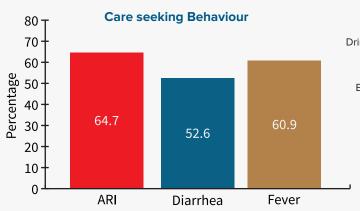


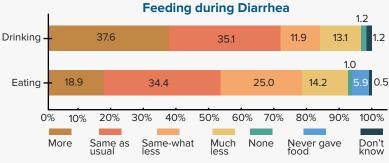
# BHUTAN

### **Child Health**

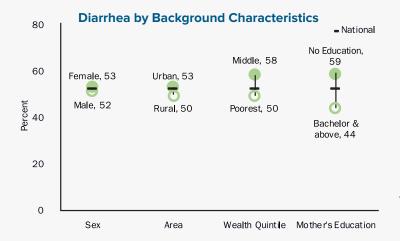
# Percentage of Children with Diarrhea, ARI and fever 2.5 Percentage Percentage with Percentage with with diarrhea ARI Percentage Fever



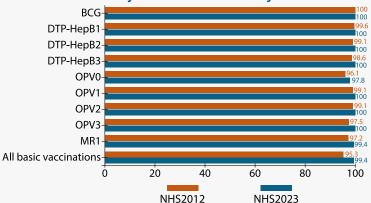




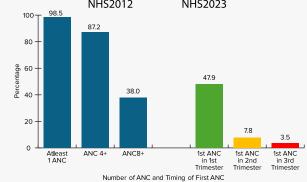
Percent distribution of children aged 0-59 months with diarrhea in the last two weeks by amount of liquids and food given.



Children age	12-23	months who received specific vaccines
	at an	y time before the survey



Children age 12-23 months who received All basic vaccinations	94.4%	
Children age 24-35 months who received All basic vaccinations		
Children age 12-23 months who received All age appropriate vaccinations	89.0%	
Children age 24-35 months who received All age appropriate vaccinations	82.6%	
Children age 12-23 months who received Pneumococcal 1	95.4%	
Children age 12-23 months who received Pneumococcal 2	99.9%	
Children age 12-23 months who received Pneumococcal 3	97.7%	
Children age 24-35 months who received MMR2	95.2%	





# Integrated Stepwise Household Survey 2023



# BHUTAN

### **Nutrition of Children and Adult**

### Wasting (Weight-for-Height):





Percentage children under-5 who are too thin for their height

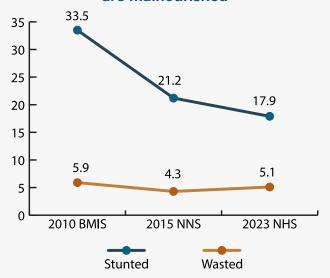
### Stunting (Height-for-Age):





Percentage children under-5 who are too short for their age

### Trend in percentage of Children under-5 who are malnourished



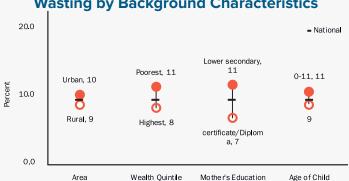
### **Underweight (Weight-for-Age)**



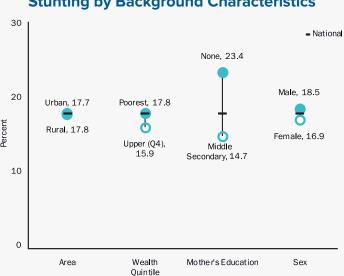


Percentage children under-5 who are underweight

### **Wasting by Background Characteristics**



### **Stunting by Background Characteristics**





# Integrated Stepwise Household Survey 2023

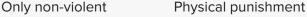


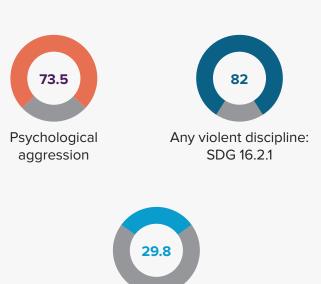
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### **Child Discipline**

Percentage of children aged 1 to 14 years who experienced any discipline in the past month, by type

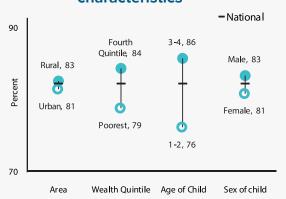


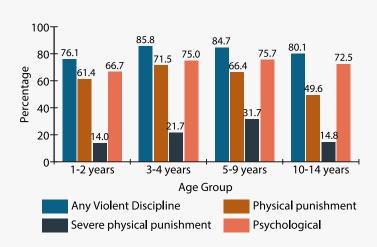




Percentage of mother/caretakers who believe physical punishment is needed

# Violent Discipline by background characteristics





Percentage of children aged 1 to 14 years who experienced any violent discipline in the past month, by age group

**Physical punishment:** Shaking, hitting or slapping a child on the hand/arm/leg, hitting on the bottom or elsewhere on the body with a hard object, spanking or hitting on the bottom with a bare hand, hitting or slapping on the face, head or ears, and hitting or beating hard and repeatedly.

Severe physical punishment: Hitting or slapping a child on the face, head or ears, and hitting or beating a child hard and repeatedly.

Psychological aggression: Shouting, yelling or screaming at a child, as well as calling a child offensive names such as 'dumb' or 'lazy'.

Violent discipline: Any physical punishment and/or psychological aggression.



# Integrated Stepwise Household Survey 2023



# BHUTAN

### Intimate Partner Violence Against Women and Girls



Physical violence



Sexual Violence



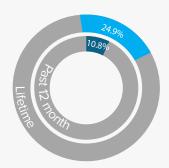
**Emotional Violence** 



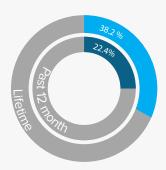
Controlling Behavior



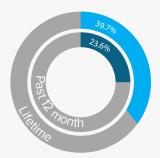
**Economic Violence** 



Physical, sexual or emotional violence



Physical, Sexual, Emotional violence or controlling behavior



Physical, Sexual, Emotional, Economic violence or Controlling behavior

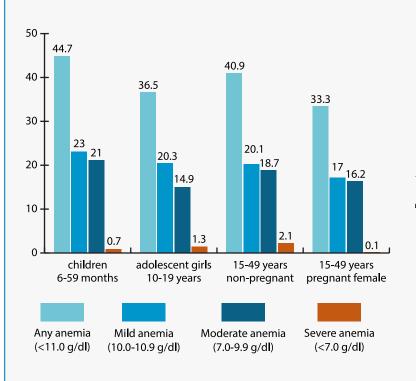


# Integrated Stepwise Household Survey 2023

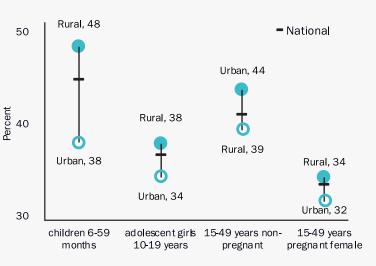


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**Anemia** 



### Anemia by background characteristics



Pregnant Women				Non-Pregnant Women				
Background characteristics	Any anemia (<11.0 g/dl)	Mild anemia (10.0-10.9 g/dl)	Moderate anemia (7.0-9.9 g/dl)	Severe anemia (<7.0 g/dl)	Any anemia (<11.0 g/dl)	Mild anemia (10.0-10.9 g/dl)	Moderate anemia (7.0-9.9 g/dl)	Severe anemia (<7.0 g/dl)
Residence								
Urban	31.6	16.2	15.4	0	43.7	22.4	18.5	2.8
Rural	34.3	17.5	16.7	0.1	39.4	18.9	18.8	1.7
Total	33.3	17	16.2	0.1	40.9	20.1	18.7	2.1

**Note:** The World Health Organization recently published the guideline defining the Hemoglobin cutoff.

The findings presented here are based on the previous guideline



# Integrated Stepwise Household Survey 2023



# BHUTAN

### Access to Health Services, Utilization & Satisfaction

### Time to reach nearest health facility



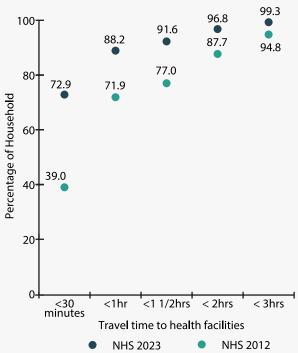


Percentage who visited
hospital in the past 12 month
Percentage who consulted
a Drungtsho / sMenpa in
the past 12 month



Percentage who were satisfied with quality of health service in the past 12 months

### Trend in time to reach nearest health facility



Reason for choosing other health facilities	Rural	Urban	Total
Most accessible	81.4	18.6	39.6
Provide better service	69.2	30.8	59.5
Better equipped	69.9	30.1	58.5
More qualified or competent care provider	73.4	36.6	41.0
Nearest doesn't have medicine	82.9	17.1	14.4
Nearest doesn't have care providers	84.4	15.6	5.9
I have/know someone in that place/facility	73.2	26.8	4.3



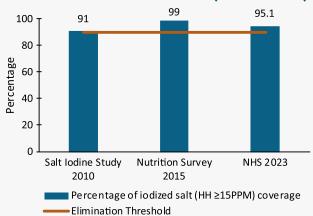
# Integrated Stepwise Household Survey 2023



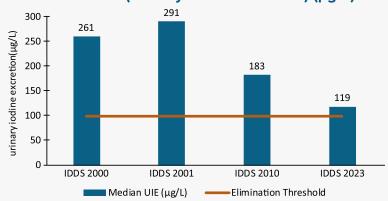
# BHUTAN

### **lodine & Micronutrients**

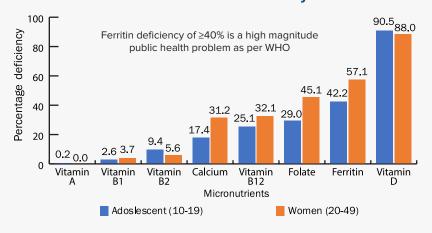
### Household with lodized salt (HH ≥15PPM)



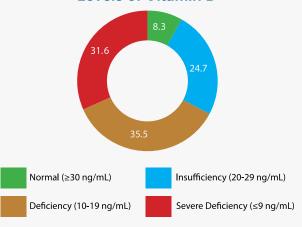
### Median UIE (Urinary Iodine Excretion) (μg/L)



### **Micronutrient Deficiency**



### Levels of Vitamin D



lodine	
Percentage of household coverage with iodized salts (iodine content ≥15 ppm)	95.1
Overall median urinary iodine excretion (µg/L)	119.0
Micronutrient Deficiency	
Percentage of Vitamin D deficiency	91.4
Percentage of <b>Ferritin</b> deficiency	50.6
Percentage of <b>Folate</b> deficiency	38.1
Percentage of Vitamin B12 deficiency	29.5
Percentage of <b>Calcium</b> deficiency	19.7
Percentage of Vitamin B2 deficiency	8.9
Percentage of Vitamin B1 deficiency	3.1
Percentage of <b>Vitamin A</b> deficiency	0.3



# Integrated Stepwise Household Survey 2023



# BHUTAN

### **Soil Transmitted Helminths**

**Trend in Soil Transmitted Helminths (STH) Prevalence** 20 16.5 15 Percentage 10 5 1.4 0.4 0 STH Study STH NHS 2003 2023 Survey (Western 2017 Bhutan)

Soil Transmitted Helminths (STH)				
Total number of sample collected	752			
Percentage of samples positive for STH	0.4			
Percentage of samples positive for other intestinal protozoan parasites	3.1			
The overall prevalence of either STH or intestinal protozoan parasites	3.4			

Note: Three STH surveys has been carried out in 1985, 1986, and 1989 and these surveys found STH prevalence between 20% and 70%

### **Home-Brewed Alcohol**

# Average %v/v ethanol in Home-brewed Alcohol









# Integrated Stepwise Household Survey 2023



# BHUTAN

# Non-Communicable Diseases and Risk Factors

	Alcohol Consumption	Both Sexes	Male	Fema
	Percentage who are lifetime abstainers	48.7	42.2	56.1
	Percentage who are past 12 month abstainers (former drinker)	11.1	11.5	10.7
	Percentage who currently drink (drank alcohol in the past 12 months)	40.2	46.3	33.3
JEER CONTRACTOR OF THE PARTY OF	Percentage who currently drink (drank alcohol in the past 30 days)	34.5	41.6	26.3
Whiskey	Percentage who engage in heavy episodic drinking (6 or more drinks on any occasion in the past 30 days) among current drinkers	39.8	45.4	29.7
	Percentage who engage in heavy episodic drinking (6 or more drinks on any occasion in the past 30 days) (overall population)	13.3	18.4	7.6
	Percentage who reported their households brewing alcohol at home	30.7	-	-
	Tobacco Use			
	Percentage who currently use tobacco (smoked/ smokeless)	31.4	42.7	18.5
	Percentage who currently smoke any tobacco	14.4	21.6	6.1
	Percentage who currently smoke tobacco daily (All respondent)	9.4	14.2	3.9
med.	Percentage who currently smoke tobacco daily (Current smoker)	65.5	66.2	64.7
Cigaro	Percentage who currently smoke cigarettes (manufactured/hand rolled cigarettes)	12.6	19.1	5.2
chewing	Percentage who smoke vape or e-cigarettes	2.5	3.9	1.0
chewing	Percentage who currently use smokeless tobacco	21.1	27.9	13.5
TOBACO	Percentage who use both smoking and smokeless tobacco	4.1	6.7	1.1
	Percentage who never smoked tobacco	69.5	56.9	83.9
	Mean age at initiation of smoking	18.2	17.9	19.5
	Percentage who were expose to second hand smoking at home	18.2	18.5	17.9
	Percentage who were expose to second hand smoking at work	51.2	54.1	47.8
	Betel and areca nut use			
	Percentage who currently use betel and/or areca nut (Doma and Paan)	59.7	60.7	58.6
	Percentage who currently use betel and/or areca nut on daily basis	26.9	28.6	24.8
	Percentage who never used betel and/or areca nut product	28.0	26.3	29.9
	Dietary Habits			
	Mean number of servings of fruit and/or vegetables consumed on average per day	1.6	1.4	1.8
	Percentage who ate less than 5 servings of fruit and/ or vegetables on average per day	74.6	74.3	75.0
Milk	Percentage who ate more than 5 servings of fruits and/ vegetables on an average day	25.4	25.1	25.7
	Percent of population self-reported as vegetarian	11.3	13.6	9.2
Ynn	Percentage of population self-reported as vegan	1.2	1.5	0.9
	Dietary Salt Intake	1.2	1.0	0.5
	Percentage who always or often add salt or salty sauce to their food before eating or as they are eating	12.7	11.9	13.7
	Percentage who always or often eat processed foods high in salt	5.2	4.5	5.9
	Mean intake of salt per day (in grams) (based on spot urine examination*(based on Intersalt equation for North America)	8.5	9.4	7.4
	Physical Activity			
	Percentage who are not meeting WHO physical activity recommendation	18.3	22.3	14.7
A	Average time spent in vigorous activity on an average per day (minutes) (1st and 3rd quartile)	90.0	123.2	52.3
<b>L</b>	Median time spent in moderate physical activity on average per day (minutes) (1st and 3rd quartile)	67.7	71.4	61.4



Integrated Stepwise Household Survey 2023

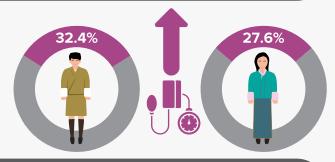


# BHUTAN



75.6% comsume

LESS THAN 5 SERVINGS of fruits and vegetables on an average per day



32.4% men and 27.6% women have raised **BLOOD PRESSURE** 

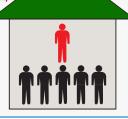


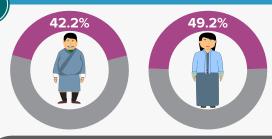
21.6% men and 6.1% women SMOKE



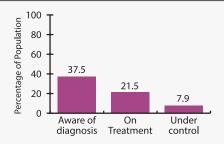
1 out of 2 are **EXPOSED** to second hand **SMOKING AT WORK** 

1 out of 6
are EXPOSED to
second hand
SMOKING AT HOME





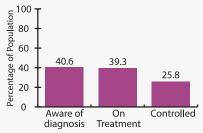
42.2% men and 49.2% women are **OVERWEIGHT OR OBESE** 



Care cascade among
15-69 YEARS PEOPLE WITH RAISED
BLOOD PRESSURE in Bhutan 2023



26.6% men and 12.3 % women use SMOKELESS TOBACCO



Care cascade among
15-69 YEARS PROPLR WITH RAISED BLOOD
GLUCOSE in Bhutan 2023



	Cancer	Both Sexes	Male	Female
	Percentage of women ever tested for breast cancer	-	-	54.3
	Percentage women ever tested for cervical cancer, aged 30 to 49 years	-	-	89.1
	Percentage women ever tested for cervical cancer, aged 25 to 65 years	-	-	87.7
	Mental Health			
	Percentage seriously considered attempting suicide in the past 12 months	0.6	0.4	0.8
	Percentage ever attempted suicide in the past 12 months	1.6	1.2	2.0
	Percentage involved in self-harming behavior in the past month	2.1	2.2	2.0
	Percentage whose family ever died of suicide	2.3	2.4	2.2
	Percentage with moderate to moderately severe depression	2.3	2.1	2.5
<b>,</b> , ,	Percentage with mild to none or minimal depression	97.6	97.8	97.3
	Percentage with moderate to severe anxiety	1.8	1.7	1.9
	Percentage with mild to none or minimal anxiety	98.2	98.4	98.1
	BMI and Obesity			
	Mean body mass index - BMI (kg/m2)	25.0	24.4	25.7
	Percentage with normal BMI (18.5-24.9)	50.2	53.3	46.6
	Percentage who are overweight (BMI ≥ 25 kg/m2 & <30 kg/m2)	33.3	33.6	33.1
	Percentage who are obese (BMI ≥ 30 kg/m2)	12.5	8.6	16.9
	Percentage of who are underweight (BMI <18 kg/ m2)	4.0	4.5	3.4
	Cardiovascular Disease (CVD) Risk			
	Percentage who ever had a heart attack or chest pain from heart disease or stroke	4.5	3.9	5.1
	Percentage currently taking aspirin	1.0	0.9	1.1
	Percentage currently taking statin	1.4	1.1	1.7
	Percentage aged 40-69 years with a 10-year CVD risk ≥ 30%, or with existing CVD	5.3	5.0	5.7
	Raised Blood Pressure, Raised Blood Sugar and Raised Cholesterol Level			
	Percentage prevalence of raised BP	30.1	32.4	27.6
	Percentage of people who ever got their BP measured from a health worker	77.2	73.6	81.2
	Percentage of people measured to have raised BP and on treatment but not controlled	13.6	10.3	17.4
	Percentage of people measured to have raised BP and on treatment and controlled	7.9	5.1	11.3
	Percentage of people ever told have raised blood sugar by doctor or health care provider	4.0	3.6	4.4
	Percentage of people who ever got their blood sugar measure from a health worker	38.4	34.1	43.3
	Percentage of people measured to have raised blood glucose and on treatment, but not controlled	13.5	14.3	12.6
	Percentage of people measured to have raised blood glucose and on treatment and controlled	25.8	13.1	40.2
	Prevalence of raised blood cholesterol level	20.9	21.5	20.2
	Percentage of people who ever got their blood cholesterol measure from a health worker	16.4	15.9	16.9
	Percentage of people measured to have raised blood cholesterol and on treatment, but not controlled	0.9	0.7	1.1



Integrated Stepwise Household Survey 2023



# BHUTAN



40.2% men and 33.3% women are **ALCOHOL DRINKER** (past 12 month)



1.8% with moderate to **SEVERE ANXIETY** 



2.3% with moderate to moderately SEVERE DEPRESSION





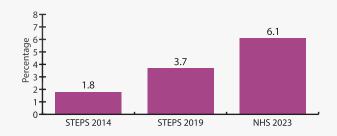
22.3% men and 14.7% women not meeting
WHO PHYSICAL ACTIVITY
recommendation



4.5% ever had a
HEART ATTACK OR CHEST PAIN FROM
HEART DISEASE OR STROKE

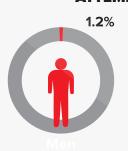


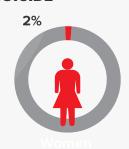
18.4% men and 7.6% women are engage in **HEAVY EPISODIC DRINKING** 



Trend of 10-YEAR CVD RISK (≥30%) AMONG BHUTANESE AGED 40-69 YEARS

### **ATTEMPTED SUICIDE**







87.71% women ever tested for **CERVICAL CANCER** 



54.34% women ever tested for **BREAST CANCER** 



# Integrated Stepwise Household Survey 2023



BHUTAN

# Overview of the **5**<sup>TH</sup> **NATIONAL HEALTH SURVEY (2023)**

The National Health Survey (NHS) is a key national survey in Bhutan, conducted periodically to monitor population health indicators. The 5th NHS (2023) is notable for its scale and complexity, as it integrated modules from 14 health-related household surveys with the conventional DHS-based NHS framework. The specific surveys integrated into the NHS 2023 include the Nutrition Survey (including MIYCN), NCD STEPS Survey, Micronutrients Survey, Mental Health Survey, Malaria Indicators Survey (high-risk areas), Soil-Transmitted Helminths Survey, Iodine Deficiency Disorder Survey, Immunization Coverage Survey, Cost-Effectiveness Threshold Study, WASH Survey, Survey of Drugs, Study on Violence Against Women and Girls, and the Multiple Indicator Cluster Survey (MICS).

The survey was conducted by the Ministry of Health (MoH) in collaboration with the National Statistics Bureau, with financial support from the Royal Government of Bhutan and development partners. The Policy and Planning Division, supported by the Technical Working Group and under the policy guidance of the Steering Committee, spearheaded the organization, preparation, and management of the survey. Data collection was carried out using Survey Solutions software by a team of over 380 enumerators and supervisors. The full report of the survey is available online on the MoH website.















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