## BHUTAN

- **67%** do not consume sufficient fruits and vegetables
- **27%** men and **40%** women are overweight or obese
- **36%** have raised blood pressure
- **ONE out of THREE** hypertensives is not treated for HIGH BLOOD PRESSURE
- **Bhutanese 9 gm**
  - **WHO recommends < 5 gm**
  - **6.4%** with raised blood sugar

## FACTSHEET BHUTAN

### Non Communicable Diseases Risk Factors:

**STEPS Survey Bhutan 2014**

The STEPS survey of noncommunicable disease (NCD) risk factors in Bhutan was carried out from April-June 2014. Bhutan carried out Step 1, Step 2 and Step 3.

Socio demographic and behavioural information was collected in Step 1. Physical measurements such as height, weight and blood pressure were collected in Step 2. Biochemical measurements were collected in Step 3.

The survey was a population-based survey of adults aged 18-69. A multi-stage stratified cluster sampling design was used to produce representative data for that age range in Bhutan.

A total of 2822 adults participated in the survey. The overall response rate was 98%.

A repeat survey is planned for 2018 if funds permit.

### Results for adults aged 18-69 years

<table>
<thead>
<tr>
<th>Step 1: Tobacco Use</th>
<th>Both Sexes</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage who currently smoke tobacco</td>
<td>7.4%</td>
<td>10.9%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Percentage who currently smoke tobacco daily</td>
<td>4.3%</td>
<td>6.0%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Percentage who currently use smokeless tobacco</td>
<td>19.7%</td>
<td>28.9%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Percentage who currently use smokeless tobacco daily</td>
<td>10.5%</td>
<td>25.2%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Average age started smoking (year)</td>
<td>19.9</td>
<td>19.0</td>
<td>18.4***</td>
</tr>
<tr>
<td>Percentage of daily smokers smoking manufactured cigarettes</td>
<td>84.1%</td>
<td>90.1%</td>
<td>82.9%***</td>
</tr>
</tbody>
</table>

### Step 1: Alcohol Consumption

| Percentage who are lifetime abstainers | 30.0% | 30.0% | 30.0% |
| Percentage who are past 12 month abstainers | 10.8% | 12.1% | 9.3% |
| Percentage who currently drink (alcohol in the past 30 days) | 42.4% | 50.0% | 32.3% |
| Percentage who engage in binge drinking (5 or more drinks on any occasion in the past 30 days) | 22.4% | 29.0% | 14.1% |

### Step 1: Diet

| Mean number of days that consumed in a typical week | 1.7 | 1.6 | 1.9 |
| Mean number of servings of fruit consumed on average per day | 0.7 | 0.7 | 0.8 |
| Mean number of days vegetables consumed in a typical week | 5.6 | 5.5 | 5.5 |
| Mean number of servings of vegetables consumed on average per day | 3.8 | 4.0 | 3.5 |
| Percentage who ate less than 5 servings of fruit and/or vegetables on average per day | 86.9% | 64.9% | 96.9% |
| Percentage who never or often add salt or salty sauce to their food or add salt to their foods or add salt to their foods during cooking or eating | 7.9% | 7.4% | 6.3% |
| Percentage who never or often add salt or salty sauce to their food or add salt to their foods during cooking or eating | 11.1% | 11.0% | 11.2% |

### Step 1: Physical Activity

| Percentage with insufficient physical activity (defined as < 150 minutes of moderate-intensity activity per week, or equivalent) | 6.4% | 3.9% | 9.6% |
| Median time spent in physical activity on average per day (minutes) | 330 | 367.1 | 274.3 |
| Percentage not engaging in vigorous activity | 40.8% | 35.2% | 66.0% |
### Results for adults aged 18-69 years

#### Step 1: Cervical Cancer Screening
- Percentage of women aged 30-49 years who have ever had a screening test for cervical cancer:
  - Both Sexes: -
  - Males: -
  - Females: 64.1%

#### Step 2: Physical Measurements
- Mean body mass index (BMI in kg/m²)
  - Males: 24.0
  - Females: 24.5
- Percentage who are overweight (BMI ≥ 25 kg/m²)
  - Males: 33%
  - Females: 40.4%
- Percentage who are obese (BMI ≥ 30 kg/m²)
  - Males: 8.2%
  - Females: 8.9%
- Average waist circumference (cm)
  - Males: 81.9
  - Females: 79.5
- Mean systolic blood pressure - DBP (mmHg), including those currently on medication for raised BP
  - Males: 126.2
  - Females: 128.0
  - Raised DBP (≥ 140 mmHg or ≥ 90 mmHg)
- Percentage with raised BP (DBP ≥ 140 or DBP ≥ 90 mmHg)
  - Males: 35.7%
  - Females: 35.9%
- Percentage with raised BP (DBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)
  - Males: 32.9%
  - Females: 32.0%

#### Step 3: Biochemical Measurements
- Mean fasting blood glucose, including those currently on medication for raised blood glucose (mg/dL)
  - Males: 88.8
  - Females: 88.7
  - Raised blood glucose (≥ 6.1 mmol/L or ≥ 110 mg/dL)
- Percentage with raised fasting blood glucose as defined below
  - Males: 10.7%
  - Females: 10.0%
- Mean total cholesterol, including those currently on medication for raised cholesterol (mg/dL)
  - Males: 148.1
  - Females: 144.1
  - Raised total cholesterol (≥ 5.0 mmol/L or ≥ 190 mg/dL)
- Percentage with raised total cholesterol (≥ 5.0 mmol/L or ≥ 190 mg/dL)
  - Males: 12.5%
  - Females: 13.3%
- Mean intake of salt per day (in grams)
  - Males: 9.0
  - Females: 9.6

#### Cardiovascular disease (CVD) risk
- Percentage aged 40-69 years with a 10-year CVD risk ≥ 10% or with existing CVD
  - Males: 1.2%
  - Females: 1.5%

### Summary of combined risk factors
- **Current daily smoker**
  - Males: 12.7%
  - Females: 15.3%
  - Raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)
- **Less than 5 servings of fruit & vegetables per day**
  - Males: 10.7%
  - Females: 9.5%
- **Insufficient physical activity**
  - Males: 10.8%
  - Females: 13.0%
  - Raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)
- **Percentage with none of the above risk factors, aged 18-39 years**
  - Males: 12.8%
  - Females: 9.3%
- **Percentage with three or more of the above risk factors, aged 40-69 years**
  - Males: 15.3%
  - Females: 11.2%


**A 10-year CVD risk of ≥ 10% 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 if a fasting plasma glucose concentration ≥ 7.0 mmol/L (126 mg/dL).

***Sample size was less than 50.