Do I have high blood pressure?

There is a common misconception that people with high blood pressure always experience symptoms. Most people with high blood pressure actually have no symptoms at all and may not even know they have it. Sometimes high blood pressure can cause symptoms such as headache, shortness of breath, dizziness, chest pain, palpitations of the heart or nose bleeds. If people ignore measuring blood pressure because they think symptoms will alert them to the problem, it can be dangerous because high blood pressure is often a silent killer. Everyone should know his or her blood pressure numbers.

- High blood pressure – also known as raised blood pressure or hypertension – is a condition in which the blood circulates at a persistently increased pressure.
- Many factors increase the risk of developing high blood pressure.

Blood pressure is expressed in millimetres of mercury (mmHg). It is recorded as two numbers, usually one written above the other. The top number is the systolic blood pressure. It is the highest pressure in blood vessels, which occurs as the heart contracts (heartbeat). The lower number is the diastolic blood pressure. It is the lowest pressure in blood vessels and occurs between heartbeats, when the heart muscle relaxes.

Normal adult blood pressure is defined as a systolic blood pressure of 120 mmHg and a diastolic blood pressure of 80 mmHg. Hypertension is defined as a systolic blood pressure equal to or above 140 mmHg and/or diastolic blood pressure equal to or above 90 mmHg. Normal levels of both systolic and diastolic blood pressure are particularly important for the efficient function of vital organs such as the heart, brain and kidneys and for overall health and well-being.
How can high blood pressure be prevented?

High blood pressure is both preventable and treatable. The chances of developing high blood pressure and its adverse consequences can be minimized by making healthy choices about:

**Diet**
- Adopting a healthy lifestyle throughout the life course with emphasis on balanced nutrition.
- Eating five servings of fruit and vegetables every day.
- Decreasing saturated and total fat intake, such as by eating low-fat products.

**Salt**
- Reducing salt intake; consuming less than 5 grams of salt per day from all sources.

**Physical activity**
- Doing regular physical activity. WHO recommends physical activity for at least 30 minutes each day.

**Alcohol**
- Avoiding harmful use of alcohol.

**Tobacco**
- Stopping tobacco use and exposure to second-hand smoke.

**Others**
- Effective management of stress.
The National Centre for Public Health conducted a survey of population salt intake from 2011 to 2012 in areas representing the four economic regions of Mongolia (Uvs, Dundgobi, Bulgan and Khentii provinces and Bayanzurkh, Khan-Uul and Songino Khairkan districts of Ulaanbaatar city). The survey involved 1034 people between the ages of 25 and 64 (44.8% male/55.2% female).

The average daily salt intake was 11.1g, with 83.2% of the population consuming more than the WHO-recommended limit of 5g per day. About half of the survey participants regularly consumed salty tea and high-salt meals. One fifth did not know which food products were high in salt content. Fully 30% of the people completing the survey did not reduce their consumption of salt and 12.5% had no knowledge or understanding of the impact of salt intake on health. Almost 40% of the participants had arterial hypertension.

Samples were taken from about 500 food products and meals to determine their average salt content. Those with the highest salt content were identified as processed and canned meats (0.75–1.64g/100g); variety ham (2.01g/100g); semi-smoked ham (1.84g/100g); bread (1.1g/100g); vinegar (19.3g/100g); pickled vegetables (3.9g/100g); sauces and ketchup (2.6g/100g); potato chips; temple (2.4g/100g); processed pork and chicken meat (2.3g/100g); and fish (1.9g/100g).

Several Mongolian companies (Makh Impex, Talkh Chikher and Goyo) took the initiative of reducing the salt intake for their workers by cutting the salt content of meals in the workers’ kitchens.

Talkh Chikher, one of the bread and confectionary producers in Mongolia, began reducing the salt content in its Atar bread by 10% in May 2011. The firm went on to reduce the salt content in different types of bread and other bakery products.
How can high blood pressure be managed?

The higher the pressure in the blood vessels, the harder the heart has to work in order to pump blood. If left uncontrolled, high blood pressure may lead to enlargement of the heart, a heart attack and, eventually, to heart failure. Under pressure, blood vessels may develop bulges (aneurysms) and weak spots, making them more likely to burst or clog up. The pressure in the blood vessels also can cause blood to leak into the brain, which can cause a stroke. High blood pressure also can lead to kidney failure, blindness or cognitive impairment.

People who already have high blood pressure can actively participate in managing their condition. They need to:

• Adopt healthy behaviours
• Monitor blood pressure at home (if possible)
• Check blood sugar, blood cholesterol and urine albumin levels
• Get their cardiovascular risk assessed using a risk assessment tool
• Get their eyesight checked
• Follow the advice given by doctors and health workers
• If medicines for lowering blood pressure have been prescribed, take them regularly and as instructed.

I keep my heart healthy

Noncommunicable disease management in the Philippines

The critical activities that were part of the introduction of the WHO package of essential noncommunicable (PEN) disease interventions in Pateros in metro Manila, Philippines, were a baseline assessment of the capacity to implement PEN, consultations with stakeholders, procurement of essential devices and medicines, training of health care providers and computerization of the health-information system. The risk assessment was integrated with other public health programmes, though purposive case-finding through community outreach also was undertaken. The referral system was strengthened by involving referral doctors during training and drafting a referral protocol. Noncommunicable disease (NCD) days were organized to improve compliance. Community awareness on the availability of NCD services was promoted through a high-visibility event and community health volunteers. Materials on NCDs were also formulated and used in the community. Health education classes were conducted among patients and their families.

A patient passbook was provided to help patients and doctors monitor progress. The results of the first six months of implementation showed that there were 789 cases assessed (26% in the community and 74% in the facility). Of these, 38% (301) matched the inclusion criteria for cardiovascular risk screening, 6% (49) were referred to a higher-level facility, 13% (104) had established disease and 43% (335) had no risk. Of the 301 who underwent risk screening, 56% had low risk, 11% mild risk, 6% moderate risk, 23% high risk and 4% very high risk. The poorest of the participants had no out-of-pocket payments but the non-poor paid US$ 1.19 for a one-month supply of medication.