Most Strokes are Preventable: Here’s How

A stroke occurs when blood circulation fails and cuts off oxygen supply to the brain. Stroke kills about 140,000 Americans a year and is a leading cause of long-term disability.

Research shows approximately 80 percent of the 795,000 strokes reported annually in the U.S. are preventable, primarily because high blood pressure (hypertension) that can be treated with medication and lifestyle changes is a significant contributing risk factor. Hypertension hardens arteries, restricting the flow of blood and oxygen to the heart and brain. It is called the “silent killer” because it often develops over time without any apparent symptoms.

A stroke is a medical emergency requiring immediate intervention. The sooner medical care is received, the greater the chance of survival and decreased likelihood of permanent disability.

There are two basic types of stroke: ischemic and hemorrhagic. About 87 percent of strokes are ischemic, occurring in one of three ways:

• **Thrombosis** – When a clot forms in a blood vessel of the brain or neck
• **Embolism** – When a clot moves from another part of the body to the neck or brain
• **Stenosis** – When there is severe narrowing of an artery in or leading to the brain

Bleeding into the brain or the spaces surrounding the brain cause a hemorrhagic stroke.

Managing Risk Factors

Some risk factors for stroke cannot be controlled, for example, genetics, race/ethnicity and gender (women have more strokes than men). In addition to high blood pressure, risk factors that can be managed include cholesterol (plaque) that builds up and clogs arteries, smoking, obesity and diabetes. One in three U.S. adults has at least one of these conditions, according to the Centers for Disease Control and Prevention.

Here are some recommendations to reduce stroke risk:

1. Periodically have your blood pressure checked at a clinic or monitor it yourself using a home kit or pharmacy station. Know your numbers. The upper number – systolic – measures pressure in arteries when the heart beats. The bottom number – diastolic – measures pressure between beats.
Stroke Prevention and Response

Response and Treatment

When calling 911 or onsite emergency responders, it’s important to note the time when symptoms first appeared because it influences the approach to treatment. A person who appears to be having a stroke should not be given aspirin, although it may be used later, as recommended by a doctor.

After a stroke, rehabilitation for speech and physical mobility may be needed in addition to medication and/or lifestyle modifications. In some cases procedures to remove arterial plaque or blood vessel blockages may be performed. When a blood vessel ruptures, a surgical procedure may be used to stop bleeding and repair the tear.

Nearly a third of strokes occur in people under 65 who are in the workforce. Many people successfully return to work. There are many local and national resources available to help facilitate safe work during recovery.

Did You Know?

At age 50, total life expectancy is about five years longer for people with normal blood pressure than it is for those with hypertension.

American Heart Association Blood Pressure Ranges

<table>
<thead>
<tr>
<th>Category</th>
<th>Systolic (mm Hg)</th>
<th>Diastolic (mm Hg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>less than 120</td>
<td>and</td>
</tr>
<tr>
<td>Prehypertension</td>
<td>120 – 139</td>
<td>or 80 – 89</td>
</tr>
<tr>
<td>High Blood Pressure: (Hypertension) Stage 1</td>
<td>140 – 159</td>
<td>or 90 – 99</td>
</tr>
<tr>
<td>High Blood Pressure: (Hypertension) Stage 2</td>
<td>160 or higher</td>
<td>or 100 or higher</td>
</tr>
<tr>
<td>Hypertensive Crisis: (Emergency care needed)</td>
<td>Higher than 180</td>
<td>or Higher than 110</td>
</tr>
</tbody>
</table>

Note: At Stage 1, lifestyle changes are recommended and medication may be introduced. By Stage 2, doctors are likely to prescribe both medication and lifestyle modifications such as exercise, changes in diet and stress management.

A reading of less than 120 over 80 is considered normal. Get medical advice when numbers exceed that range.

2. Eat a well-balanced diet that limits sodium, saturated fats, trans fats, added sugars and alcohol. Sodium causes your body to retain water and can make your cardiovascular system work harder.

3. Get regular exercise for cardiovascular fitness and to reduce stress, which can temporarily increase your blood pressure and affect your health over time.

4. Lose weight, as needed, with medical guidance. Weight is closely linked to the ability to manage blood pressure and chronic illness.

5. Take medications as prescribed for medical conditions; if you have prediabetes or diabetes, follow your doctor’s recommendations.

**Warning signs**

The acronym FAST is an easy way to remember sudden signs and symptoms of a stroke that require an emergency medical response.

Other signs and symptoms include sudden numbness or weakness in limbs, especially on one side; confusion; trouble with vision; difficulty walking, dizziness or loss of balance; and sudden severe headache. People who have had a stroke may continue to experience paralysis, difficulty speaking and thinking, pain or numbness, trouble chewing and swallowing, bladder and bowel disorders, memory problems, and anxiety and depression.

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