

Reducing Heart Attack and Stroke Risk

This WorkCare Fact Sheet explains why it's so important to monitor your blood pressure and take life-long steps to reduce heart attack and stroke risk.

High blood pressure, or hypertension, is called the “silent killer” because it develops over time, often without any apparent symptoms.

Hypertension hardens arteries, restricting the flow of blood and oxygen to the heart and brain. High blood pressure can affect brain function, such as learning and retention, and lead to life-threatening stroke, heart attacks and kidney disease. In addition, scientists have discovered links between uncontrolled blood pressure in mid-life and the development of dementia later in life.

There are two types of high blood pressure - primary and secondary:

- **Primary hypertension** is far more common, has no identifiable cause and develops over many years.
- **Secondary hypertension** tends to appear suddenly in response to a medical condition such as pregnancy, sleep apnea or a new medication.

Nearly half of the U.S. population over age 20 has high blood pressure. Many people don't know it or do not have it under control. It's important to monitor blood pressure and follow recommendations to manage cardiovascular health starting at an early age.

What Can You Do?

1. Have a medical professional periodically check your blood pressure. You can also check it yourself using a home kit or pharmacy blood-pressure station. Research shows that a period of home blood pressure monitoring using an automated device for one week per month is sufficient to guide people to better blood pressure control.
2. Know your numbers by familiarizing yourself with blood pressure ranges (Table 1). When you check your blood pressure you are measuring the force of blood pushing against arterial walls:
 - The upper number – systolic – measures pressure in arteries when the heart beats. The bottom number – diastolic – measures pressure between beats.
 - A reading of 120 over 80 is considered normal. A reading of 140 to 159 over 90 to 99 is Stage 1 hypertension. A reading higher than 180 over 110 is a medical emergency.
3. Get a thorough checkup if you are in an at-risk range. Let your provider know about any medical conditions, medications or supplements you take because they may affect your blood pressure numbers.



Table 1: American Heart Association Blood Pressure Ranges

Blood Pressure Category	Systolic (mm Hg) (upper number)		Diastolic (mm Hg) (lower number)
Normal	less than 120	and	less than 80
Elevated	120 – 129	and	less than 80
High Blood Pressure: (Hypertension) Stage 1	130 – 139	or	80 – 89
High Blood Pressure (Hypertension) Stage 2	140 or higher	or	90 or higher
Hypertensive Crisis (Emergency care needed)	Higher than 180	and/or	Higher than 120

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.

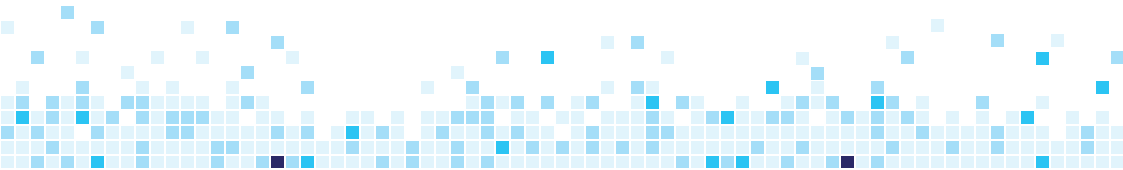
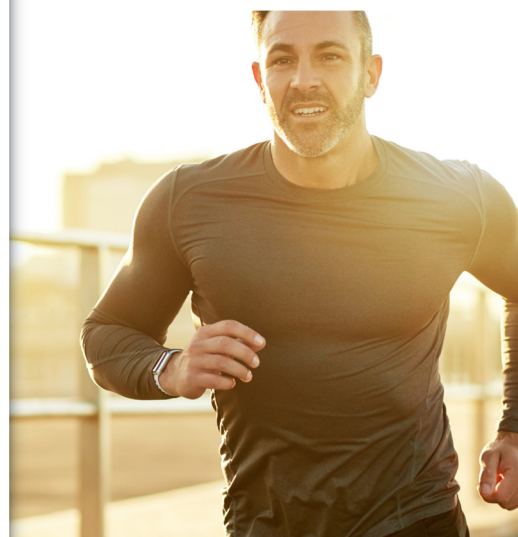
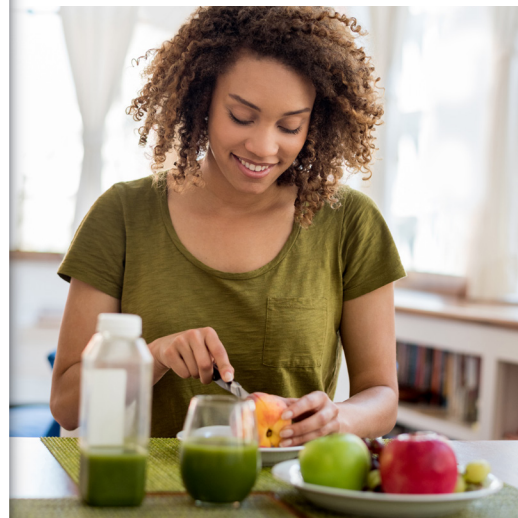
A healthy resting heart rate for adults is 60 to 80 beats per minute (BPM). You can get your resting rate by taking your pulse in your wrist or neck when you wake up. Some experts believe an ideal resting heart rate is 50 to 70 BPM. Research shows that a resting heart rate above 80 BPM may indicate higher risk for cardiovascular conditions, metabolic syndrome and all-cause mortality.

Risk Factors

Uncontrollable risk factors for hypertension, heart attack and stroke include family history, age, gender and race. However, many risk factors that contribute to high cholesterol, and narrowed or clogged blood vessels and arteries, can be controlled.

What Can You Do?

- Identify controllable risk factors in your life:
 - Unhealthy diet
 - Being overweight or obese
 - Smoking tobacco
 - Physical inactivity
 - Excessive drinking
 - Poor sleep habits
- Consult a medical professional and take steps to reduce your risk:
 - Eat a well-balanced diet; check labels to avoid foods high in saturated fat and sodium
 - If needed, begin a weight-loss program with medical guidance
 - Do not smoke tobacco and avoid second-hand smoke
 - Exercise or play an active sport on a routine basis



- Limit alcohol consumption; get help if it's hard to cut back
 - Get plenty of sleep; fatigue is a risk factor for stroke and heart disease
 - If you are pre-diabetic or diabetic, follow disease management guidelines
3. Practice stress management techniques. Stress temporarily increases blood pressure and can have long-term detrimental effects on your health.
 4. If you take prescription medications for hypertension, follow instructions. Do not skip doses.

Symptoms

Symptoms of stroke and heart attack vary. They include:

Heart attack:

- Chest discomfort
- Discomfort in other parts of the body
- Shortness of breath
- Cold sweat
- Nausea
- Light-headedness

Stroke:

- Drooping face
- Arm weakness
- Slurred speech
- Confusion

Getting emergency medical care saves lives and reduces the likelihood of permanent disability in many cases.

About Stroke

- *When blood flow to brain cells is restricted by narrowed or clogged arteries, it causes an ischemic stroke, the most common type.*
- *A hemorrhagic stroke occurs when a blood vessel in or near the brain erupts. Chronic hypertension and aging blood vessels are the main causes of this type of stroke.*
- *A mini-stroke or transient ischemic attack (TIA) occurs when blood flow resumes after a temporary blockage. A TIA typically produces symptoms similar to a stroke, but health effects tend to resolve without permanent disability.*

