

Blood Pressure - Know Your Numbers

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Dee Connelly, registered nurse at the Army Physical Fitness Research Institute, takes the blood pressure of another APFRI staff member, Chris Kusmiesz at the APFRI assessment center. Courtesy photo.

High blood pressure is a factor in 67% of heart attacks and 77% of strokes in the United States. Blood pressure is the force of blood against the walls of arteries. When the force stays too high, it becomes a life-threatening condition called high blood pressure, also known as hypertension. An estimated one in every three Americans has high blood pressure. In one study done on individuals between 40-55 years of age, over 16% of participants were found to have high blood pressure while over 75% were found to have above normal blood pressure, also known as prehypertension. Prehypertension places an individual at increased risk for heart disease while high blood pressure is the number one cause of stroke and a major risk factor for heart disease.

Blood pressure is measured as the force in the arteries when the heart beats (systolic pressure or top number) and when the heart is at rest (diastolic pressure or bottom number). Blood pressure is measured in millimeters of mercury (mmHg) and is considered normal when it is below 120/80mmHg. Blood pressure that measures between 120-139mmHg over 80-89mmHg is considered prehypertension. If it measures in the range of 140/90mmHg or higher it is high blood pressure or hypertension.

Listed below are the categories of blood pressure levels as determined by the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure.

Categories for Blood Pressure Levels in Adults

(Ages 18 Years and Older)

	Blood Pressure Level (mmHg)		
Category	Systolic		Diastolic
Normal	< 120	and	< 80
Prehypertension	120-139	or	80-89
High Blood Pressure			
Stage 1 Hypertension	140–159	or	90–99
Stage 2 Hypertension	160	or	100

When systolic and diastolic blood pressures fall into different categories, the higher category should be used to classify blood pressure level. For example, 160/80 mmHg would be stage 2 hypertension (high blood pressure).

In 90-95% of high blood pressure cases, the cause is unknown. In fact, you may have high blood pressure for many years and not know it. That is why it is often referred to as the "silent killer". You may live many years without any symptoms or ill effects but that does not mean it is not hurting you. Both hypertension and prehypertension force your heart to work harder to pump blood, increasing your risk for stroke, heart attack, heart failure and kidney failure.

High blood pressure is a lifelong disease—it can be controlled but not cured. The first step to managing your blood pressure is to have it checked regularly. If your blood pressure is within the range of prehypertension or higher, you can make lifestyle changes to help reduce it. These include reducing the fat and salt in your diet, losing weight, increasing regular physical activity, quitting smoking, and reducing alcohol intake. Your doctor will decide whether you need medication in addition to dietary and lifestyle changes.

Salty Situation

Though it can't prevent high blood pressure, cutting back on salt (sodium) can help regulate hypertension. Experts suggest that even people who are otherwise healthy should moderate their sodium intake. You can cut that intake by making wise food choices. A good place to start is by eliminating processed foods, which account for more than 75% of the salt we eat. If you eat out a lot, you should know that many restaurant meals contain a day's worth of sodium. What's more, not all foods that contain sodium have a salty taste. That's why it pays to read labels. The American Heart Association recommends no more than 2,400 milligrams of sodium per day. Most of us take in more than 4,000 milligrams every day. A low-fat diet rich in fruits and vegetables has been shown to lower blood pressure significantly.

APFRI provides an automated blood pressure machine just outside the Root Hall Library for your use. Please check your blood pressure regularly after sitting quietly for five minutes, with legs uncrossed.

Please learn your blood pressure numbers to determine if you are at risk for prehypertension or hypertension.

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