

## The Importance of Checking Your Blood Pressure

Blood pressure is a measurement of the force applied to the walls of the arteries as the heart pumps blood through the body. The pressure is determined by the force and amount of blood pumped, and the size and flexibility of the arteries.

Blood pressure is continually changing depending on activity, temperature, diet, emotional state, posture, physical state, and medication use.

Everyone should have their blood pressure checked regularly. In general, blood pressure checks should be performed every time you visit the doctor.

In addition to normal monitoring, certain groups of people should be watched more carefully, including:

- people over 35
- those with a family history of high blood pressure
- pregnant women
- anyone with a history of high blood pressure
- anyone with a history of heart or kidney problems

Anyone can develop high blood pressure, even children. If you or someone in your family hasn't had their blood pressure checked in the last 5 years, make an appointment to see your family doctor. Hypertension is the term doctors use for high blood pressure.

Blood pressure readings are measured in millimeters of mercury (mmHg) and usually given as 2 numbers. For example, 140 over 90 (written as 140/90).

- The top number is your systolic pressure, the pressure created when your heart beats. It is considered high if it is consistently over 140.
- The bottom number is your diastolic pressure, the pressure inside blood vessels when the heart is at rest. It is considered high if it is consistently over 90.

Either or both of these numbers may be too high.

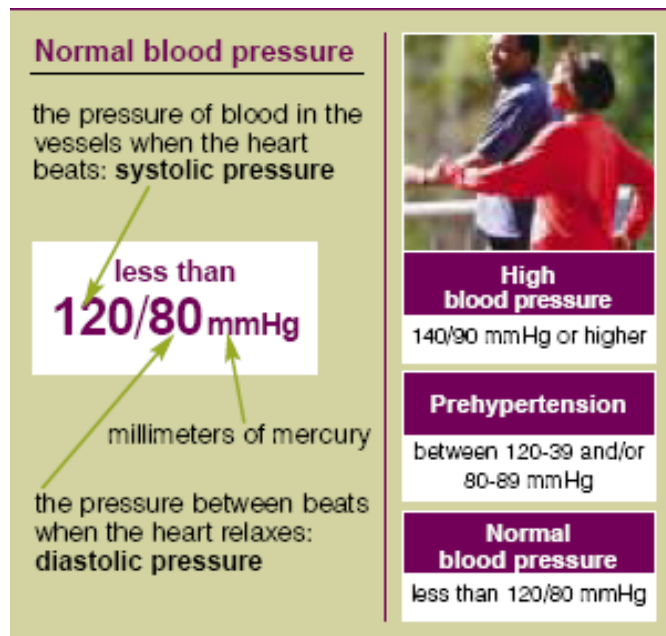
Pre-hypertension is when your systolic blood pressure is between 120 and 139 or your diastolic blood pressure is between 80 and 89 on multiple readings. If you have pre-hypertension, you are more likely to develop high blood pressure at some point.

Your blood pressure is an important component of how health your entire cardiovascular system is. For a long time, normal blood pressure was defined as 120/80 (systolic / diastolic). Recently, the American Heart Association changed the definition of normal blood pressure to "Less than 120 / Less than 80."

This redefinition was enacted because of ongoing research examining the long term health effects of different blood pressures. Along with redefining the normal value, the new American Heart Association guidelines changed the cutoff values for the different stages of high blood pressure. Again, these changes were also based on new research which more clearly shows the increasing risk of heart attack and other illness as the blood pressure rises.

While 120/80 used to be considered normal, the new American Heart Association guidelines define three levels of abnormal blood pressure values.

- **120-139 / 80-89** is now considered to be “prehypertension” (or “Almost High Blood Pressure”), and doctors are watching blood pressures in this range more carefully than in the past.
- **140/90** is the cutoff for Stage 1 Hypertension. Stage 1 Hypertension may or may not be treated with medicines, depending on lifestyle and other risk factors.
- Systolic pressures above **160**, or diastolic pressures above **100**, patients are classified as having Stage 2 Hypertension, a serious condition that warrants immediate medical treatment.



Hypertension is a serious condition that can damage the heart and blood vessels, and can eventually lead to several other conditions, including:

- Stroke
- Heart failure
- Heart attack
- Kidney failure
- Vision problems

Hypertension is typically treated by making changes in your lifestyle, and with drug therapy. Lifestyle changes include losing weight, stopping smoking, eating a healthy diet (such as the DASH diet, which includes lowering sodium but including daily servings of fruits, vegetables, and whole grain foods), and getting enough exercise, especially aerobic exercise.

Several types of drugs are available to treat hypertension, including ACE inhibitors, angiotensin receptor blockers (ARBs), diuretics, beta-blockers, and calcium channel blockers.

You can get your blood pressure checked free of charge at any of the Columbus Division of Fire's 32 fire stations. A map of the locations of these stations is on this web page.

