

Patient Information

s your blood moves through your body's complex network of arteries and veins, it exerts pressure on the walls of these vessels. Blood pressure measurements consist of two values, which correspond to the two motions that make up each heartbeat. The first value, called *systolic* (sis-**tahl**-ick) blood pressure, is measured while the heart contracts, pushing the blood through the vessels. The second, *diastolic* (die-eh-**stahl**-ick) blood pressure, is measured while the heart expands to fill with blood.

For adults, a healthy blood pressure reading is 119/70 mm Hg or less. If it's higher than this, it means the force exerted on your blood vessels is too high and your heart is working harder than it should to pump blood throughout your body. When your blood pressure remains high for an extended period of time, you're said to have hypertension. This condition can contribute to such serious health problems as stroke, heart disease, blindness, and kidney damage.

Unfortunately, hypertension is very common. One in four Americans over age 35 (and two in three over age 65) have hypertension. And once it occurs, it usually lasts a lifetime. Hypertension can be prevented, however—and if you already have it, you may be able to control it with medication and lifestyle changes.

Highlighting Hypertension

How do I know if I'm at risk?

Even if your blood pressure is normal now, you have a 90% chance of developing hypertension within your lifetime. Your risk rises as you age and is even greater if you are male, are black, or have a family history of high blood pressure. Your hypertension risk also may increase if you are overweight or obese, drink more than one or two alcoholic beverages per day, exercise infrequently, or eat too much salty food.

What are the warning signs?

If your blood pressure becomes extremely high, you may experience pulsating headaches, vision problems, nausea, chest pain, sudden weakness, or numbness. Any of these symptoms is a medical emergency and should prompt you to call your doctor right away.

But most people with hypertension have no symptoms. In fact, over 30% of Americans who have hypertension don't know that they have it. That's why it's important to have your blood pressure checked regularly by your health care provider—even if you don't think it's high.

What tests do I need?

The blood pressure screening test is quick and painless. As you sit, your health care provider wraps a rubber cuff around your upper arm, finds your pulse, and listens to your blood flow with a stethoscope while

These pages may be reproduced noncommercially by federal practitioners for their patients.

the cuff inflates. The cuff momentarily cuts off the blood flow to your arm and then slowly deflates.

One high blood pressure reading doesn't mean you have hypertension. Many things—including driving in traffic, drinking coffee, or walking a few blocks in the cold can affect your blood pressure temporarily. But a blood pressure reading that's consistently higher than 119/79 mm Hg means you probably either have hypertension or are likely to develop it in the near future (a condition called prehypertension).

Some people experience a rise in blood pressure when they visit their doctor's office. This is called "white coat hypertension." If this happens to you, your doctor may ask you to wear a monitor that measures your blood pressure periodically throughout the day.

How can I avoid the problem?

Regardless of your race, age, or gender, you can take steps to prevent or control hypertension. These include maintaining a healthy weight, exercising regularly (at least 30 minutes a day most days of the week), and following the Dietary Approaches to Stop Hypertension—or DASH—diet. (But be sure to check with your doctor before starting any new exercise or diet plan.)

The DASH diet is low in saturated fat, cholesterol, and salt, and high in magnesium and potassium (found in such foods as bananas, beans, and spinach). When you stick to the DASH diet, you include in your meals lots of fruits, vegetables, whole grains, fish, poultry, and low fat dairy products; limit your intake of red meat and sugar; and avoid prepackaged, processed foods, such as canned soups or frozen dinners, which tend to be high in salt.

If you smoke, get help to quit. If you drink more than one or two alcoholic beverages a day, try to cut back.

How is it treated?

If you have prehypertension, your doctor may suggest that you lose weight, cut back on salty foods and alcohol, and get more exercise. If these lifestyle changes alone don't lower your blood pressure enough, your doctor also may prescribe one or more blood pressure drugs.

The type of medication you're given depends on how high your blood pressure is, whether you have organ damage or other health problems, and how successful you are at sticking to a healthy diet and exercise plan. It also may take time for you and your doctor to find the best dose and combination of drugs for you. Hypertension drugs include *diuretics* (die-yuh-ret-icks), which flush excess water and salt from your body; beta-blockers, which slow your heartbeat and reduce the force with which blood is pumped into your blood vessels; angiotensin (an-jee-oh-ten-sen) converting enzyme, or ACE, inhibitors, which relax blood vessels; and calcium channel blockers, which relax the smooth muscle tissue of your heart and blood vessels.

Take your medications exactly as your doctor and pharmacist advise—and alert them if the drugs make you feel sick or strange. Sometimes these unpleasant effects last only a few days, but they could mean that the type of drug or dose needs to be adjusted.