

Managing Your Blood Pressure

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High blood pressure (BP), also known as hypertension, is when the pressure in your blood vessels is high and your heart must work harder than normal to pump blood throughout your body to deliver oxygen and nutrients. For most, normal BP is less than 120/80.

High BP is a major risk factor for heart disease, heart failure, atrial fibrillation, stroke, kidney disease, dementia, and eye disease. It is more common in people with family members who have high BP, in people with diabetes mellitus, obesity, heart disease, or stroke.

42% of people with high BP are unaware they have it and that is why it is called the "silent killer".

Most people with high BP don't have any symptoms although some may complain of a headache or just feeling unwell or tired. Studies have shown that controlling BP lowers the risk of these complications. The risk is lowered with even a mild reduction in BP, but optimal benefit is seen when BP is brought down to less than 130/80.

BP measurements can be affected by several factors. To get the most accurate reading:

- 1. Use the right size BP cuff for your arm
- 2. Don't eat, drink coffee/tea, smoke or exercise within 30 minutes of having your BP taken
- 3. Sit quietly for 5 minutes
- 4. Have your back supported, feet flat on the ground (legs uncrossed), and your bare arm resting at the level of your heart
- 5 Don't talk while your BP is being measured



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It is important to use an approved upper arm BP monitor and preferably not a wrist monitor.

Measure BP in both arms the first time, then use the arm with the highest BP reading going forward. If more than one reading is taken, wait 1–2-minute between readings. If your BP is higher when measured at the health care provider's (HCP) office, ask about home BP monitoring or getting "24-hour ambulatory BP monitoring". Such testing may help to confirm the diagnosis and avoid over-treatment of white coat hypertension (higher BP readings when BP is taken in a medical setting).

Your HCP may also order additional tests to look for complications and for other less common causes of high BP.

Your HCPs initial choice of BP medication may include an ACE inhibitor, thiazide diuretic, angiotensin receptor blocker or a calcium channel blocker. Other medications include beta blockers, aldosterone antagonists, and vasodilators. These medications are generally quite safe. To improve adherence, many of these medications are once daily and available in combination pills (more than one medication in one pill). To adequately control BP, people with diabetes often need three or more different BP medications.

In addition to medications, adequate physical activity, weight loss if overweight, stress reduction, minimizing alcohol and salt intake, and a diet high in fruits, vegetables, low-fat dairy products, nuts, legumes, and grains may help to lower BP.

In addition to BP control, other risk factors need to be addressed also such as diabetes, smoking cessation, and blood cholesterol with lifestyle and effective proven medications to lower risk of other complications.

BP Targets in Diabetes

HCP Office/Medical Setting: <130/80

Useful Websites

Hypertension Canada - Excellent resource for patients and families on all aspects of high BP https://hypertension.ca/public

Approved BP Monitors: https://hypertension.ca/public/recommended-devices

Useful App for Monitoring & Logging BP records:

- <u>https://apps.apple.com/us/app/sphygmo-bp-glucose/id1457406418</u> (App Store)
- <u>https://play.google.com/store/apps/details?id=ca.mmhg.sphygmo&pli=1</u>(Google Play)



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