

## What is hypertension?

High or elevated blood pressure, also known as hypertension, is a common health problem worldwide. The risk of developing hypertension increases as we age. Hypertension is a significant risk factor for cardiovascular disease, which includes heart attacks, strokes, congestive heart failure and even kidney failure.

Blood pressure is expressed as the systolic pressure (top number) over the diastolic pressure (bottom number). The systolic pressure is the pressure against the artery walls when your heart is pumping blood out. The diastolic pressure is the blood pressure when your heart muscle is relaxed and filling up with blood in between beats.

A normal blood pressure is less than or equal to 120/80. Pre-hypertension is defined as a systolic pressure between 120-139 and a diastolic pressure between 80-89. Anything above 140/90 is considered high. Your clinician will diagnose you with hypertension if your blood pressure readings are repeatedly above normal on two or more readings taken over several weeks.

## Who develops hypertension?

About 24% of people in the United States have high blood pressure and in 90-95% of the cases the cause is unknown. However, we do know that certain people are more likely to develop high blood pressure. Risk factors include:

- family history of high blood pressure
- obesity or overweight
- diabetes
- excessive alcohol use
- African-American descent
- use of oral contraceptives or "the pill" in some women
- certain over-the-counter drugs (e.g. decongestants). Read the label and ask your pharmacist about any over-the-counter drug before you take it.

## What are the symptoms?

There are usually no signs or symptoms, which is why it is sometimes known as the "silent killer". With very high blood pressure readings, sometimes there can be headaches, lightheadedness, fatigue, or unexpected nosebleeds.

## What is the medical treatment for high blood pressure?

- **Medical office visits** are needed so your clinician can measure your blood pressure, adjust your treatment as needed, and check for any side effects from the medication.
- **Medication:** Your clinician may decide to prescribe a medication to treat your high blood pressure. Types of medication include:

Check our website: [www.uhs.berkeley.edu](http://www.uhs.berkeley.edu) to learn more about this medical concern or others.

For an appointment [www.uhs.berkeley.edu](http://www.uhs.berkeley.edu) or call **510-642-2000**

Clinic Nurse **510-643-7197** for advice

- Diuretics** (water pills) are often the first choice. They help the body get rid of excess water and salt.
- Beta-Blockers** cause the heart to beat more slowly and relax blood vessels.
- ACE Inhibitors, Calcium Channel Blockers, Angiotensin Receptor Blockers, and Alpha Blockers** are medications that relax blood vessels to lower blood pressure.

**Remember: medication only works if you take it correctly.**

- **Take your blood pressure at home:** Keeping track of your blood pressure at home helps your clinician assess your high blood pressure and the effectiveness of the treatment. You can purchase an automated blood pressure monitor from a local pharmacy.

## **How can I prevent high blood pressure? Or, if I have been diagnosed with high blood pressure, how can I help manage it?**

**If you smoke, stop. If you don't smoke, don't start:** Smoking damages and constricts your blood vessels and is, by itself, a risk factor for stroke and heart disease.

**If you drink alcoholic beverages, do so in moderation:** Men: limit to 2 drinks per day; women: limit to 1 drink per day.

Note: one drink equals ½ oz or 15 ml ethanol (e.g., 12 oz. beer, 5oz. wine, 1.5 oz. 80-proof whiskey).

**Reduce salt (sodium) intake:** Try to take in less than 2.4 grams sodium or 6 grams sodium chloride per day. Some tips: Do not add salt to food at the table; reduce or eliminate use of salt in cooking; use herbs, spices and salt-free seasonings instead; cut back on frozen dinners, pizza, packaged mixes, canned soups and salad dressing with high sodium; read package labels for amount of salt (sodium) in foods.

**Consider the DASH (Dietary Approaches to Stop Hypertension) diet:** A diet high in fruits, vegetables and low fat dairy products has been shown to help lower blood pressure. <http://www.dashdiet.org>.

**Lose weight:** If overweight, losing weight often can decrease blood pressure.

**Be more physically active:** Exercise is a good way to control weight and manage stress. Thirty to forty-five minutes of brisk walking most days of the week can lower your blood pressure.

**Manage your stress:** Chronic stress can contribute to high blood pressure. Having a balanced schedule of academic classes, extracurricular activities—and—plenty of down time to relax alone or with friends is critical to your personal well being and success as a student. Make a Health and Wellness appointment with a professional health educator to learn effective stress management strategies (call 642-2000).

**Note: Making these healthy lifestyle choices can help prevent pre-hypertension from developing into hypertension. If you have already been diagnosed with hypertension, these guidelines will help you manage the condition.**

## **How can I work with my clinician?**

Follow up with your clinician every 1-3 months until your hypertension is under control. Once it is under control, check in with your clinician every 6-12 months. Contact your clinician sooner if you develop new symptoms or have other concerns.

## **Suggested websites:**

**National Heart Lung and Blood Institute:**

Information: [www.nhlbi.nih.gov/health/dci/Diseases/HBP\\_WhatIs.html](http://www.nhlbi.nih.gov/health/dci/Diseases/HBP_WhatIs.html)

Online tutorial: [www.nlm.nih.gov/medlineplus/tutorials/hypertension/htm/index.htm](http://www.nlm.nih.gov/medlineplus/tutorials/hypertension/htm/index.htm)

DASH diet: <http://www.dashdiet.org>