

# High Blood Pressure

What You Need To Know



## Permafold® Topics

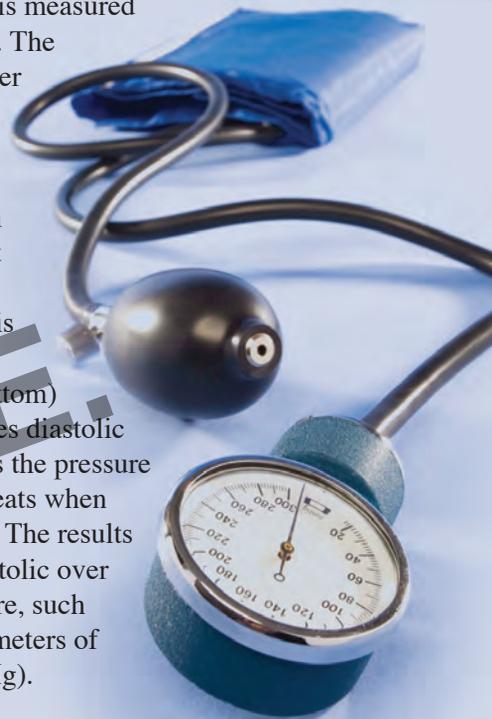
1. What Is High Blood Pressure?
2. Causes & Risk Factors
3. Signs & Symptoms
4. Diagnosis
5. Health Problems Related to HBP
6. Prevention & Self-Care
7. Medical Treatment
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## 1. What Is High Blood Pressure?

When blood pressure rises and stays high for a long time, a person has a condition called high blood pressure (HBP).

Blood pressure is measured with 2 numbers. The first (top) number measures systolic pressure. This is the maximum pressure against the artery walls while the heart is pumping blood. The second (bottom) number measures diastolic pressure. This is the pressure between heartbeats when the heart refills. The results are given as systolic over diastolic pressure, such as 120/80 millimeters of mercury (mm Hg).



### Blood Pressure Levels for Adults\*

Normal blood pressure	Less than 120 systolic Less than 80 diastolic
High blood pressure	140 or higher systolic 90 or higher diastolic

\* These are general guidelines. Some expert health groups define the target blood pressure for adults age 60 years and older that do not have diabetes or chronic kidney disease as less than 150/90.

Reviewed and Approved by the Senior Medical Advisory Board



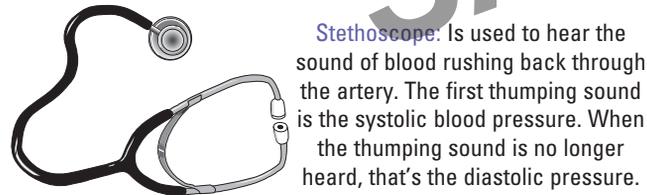
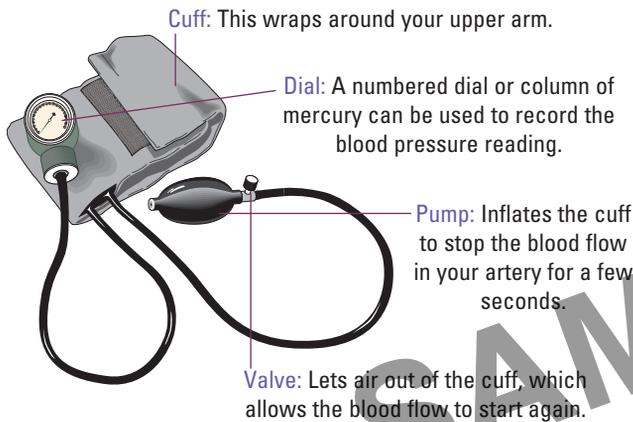
This Permafold® is not meant to take the place of expert medical care or treatment. Follow your doctor's or health care provider's advice.



## 4. Diagnosis

Blood pressure readings tell if your blood pressure is high.

A health care professional measures blood pressure during an office visit with a manual or automated device called a sphygmomanometer (sfig'-mo-ma-nom-e-ter). The numbers on the gauge measure your blood pressure in millimeters of mercury (mm Hg).



(Source: National Heart, Lung, and Blood Institute, "How Is Blood Pressure Tested?")

- You should get 2 or more readings and at different times.
- To confirm a diagnosis of HBP, your doctor may have you wear a device that records your blood pressure every 20-30 minutes over a period of 24 to 48 hours. This is called **ambulatory blood pressure monitoring (ABPM)**.

### Why is ambulatory blood pressure monitoring (ABPM) done?

During an office visit, a short-term rise in blood pressure can be due to:

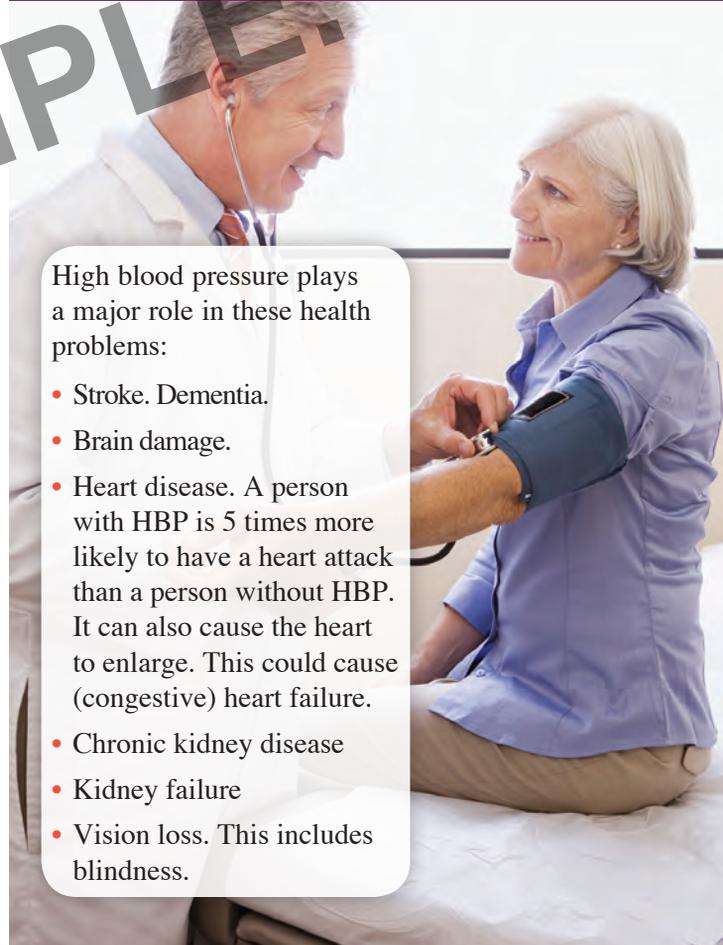
- Emotions or stress
- Pain or physical activity
- Caffeine or nicotine
- "White-coat hypertension." With this, just being at a doctor's office or in the presence of medical staff is enough to raise blood pressure.

Getting blood pressure readings over 1-2 days during normal activity and sleep gives a more accurate measurement of your blood pressure.

## 5. Health Problems Related to HBP

High blood pressure plays a major role in these health problems:

- Stroke. Dementia.
- Brain damage.
- Heart disease. A person with HBP is 5 times more likely to have a heart attack than a person without HBP. It can also cause the heart to enlarge. This could cause (congestive) heart failure.
- Chronic kidney disease
- Kidney failure
- Vision loss. This includes blindness.



## 6. Prevention & Self-Care

For blood pressure control, follow a healthy lifestyle.

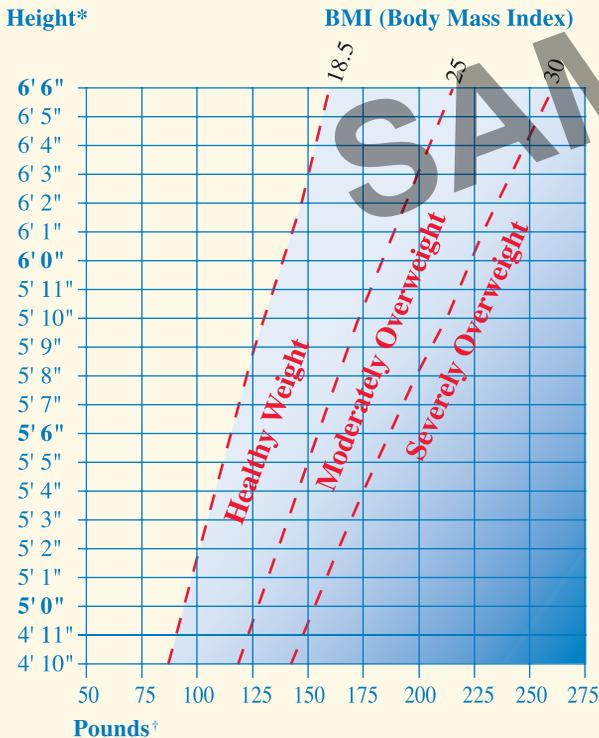
Limit sodium to 2,300 milligrams (mg) per day; 1,500 mg if you have HBP, are African American, or are middle-aged and older. Use sodium-free spices instead of salt.



- Get your blood pressure checked at each office visit, at least every 2 years, or as often as your doctor advises.
- Get to and/or stay at a healthy weight. Aim for a body mass index (BMI) between 18.5 and 24.9. Find your BMI using the table below or from: [www.nhlbisupport.com/bmi](http://www.nhlbisupport.com/bmi).



### Are You at a Healthy Weight?



\* Without shoes. † Without clothes.

Source: Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2000.

- Don't smoke. If you smoke, quit!
- Limit alcohol to 2 drinks or less a day if you are male and 1 drink or less a day if you are female or age 65 or older.
- Limit caffeine.
- Exercise. Try to do at least 60 minutes a day.
- Learn to handle stress. Take classes. Learn relaxation techniques, etc.
- Take medicine as prescribed. Tell your doctor if you have any side effects, such as dizziness, faintness, or a dry cough without having a cold. Don't stop taking your prescribed medicine or change the dose(s) unless your doctor tells you to.
- Talk to your doctor or pharmacist before you take antihistamines and decongestants. Discuss all prescribed and over-the-counter medicines with your doctor and pharmacist before you take them to avoid harmful drug interactions. Find out about drug and food interactions, too. Ask if grapefruit juice can cause harmful effects with the medicine(s) you take.
- Keep track of your blood pressure using a home testing device. Do this if advised by your doctor.



Follow the “DASH” (Dietary Approaches to Stop Hypertension) Eating Plan. (See the chart below.) Doing this and lowering the amount of salt you eat have been shown in studies to lower blood pressure and may help prevent high blood pressure.

Read food labels for sodium content. Choose foods that say “low sodium” or “no salt added” or have a Daily Value (DV) for sodium of 5% or less. Foods with a DV of 20% or more are high in sodium.

The DASH Eating Plan for 2,000 and 1,600 Calories/Day

Food Group	Daily Servings		Serving Sizes	Examples and Notes	Benefits of Each Food Group
	2000	1600			
<b>Grains and grain products</b>	7-8	6	1 slice bread 1 ounce dry cereal ½ cup cooked rice, pasta, or cereal	Whole-grain breads and cereals. English muffins. Pita breads. Bagels. Grits. Crackers. Unsalted pretzels and popcorn.	Major source of energy and fiber
<b>Vegetables</b>	4-5	3-4	1 cup raw leafy vegetable ½ cup cooked vegetable 6 ounces vegetable juice	Tomatoes. Potatoes. Carrots. Green peas. Squash. Broccoli. Turnip greens. Collards. Kale. Spinach. Green beans. Lima beans.	Rich sources of potassium, magnesium, and fiber
<b>Fruits</b>	4-5	4	1 medium fruit ¼ cup dried fruit ½ cup fresh, frozen, or canned fruit 6 ounces fruit juice	Apricots. Bananas. Dates. Oranges & grapefruits (and their juices). Mangoes. Melons. Peaches. Pineapples. Prunes. Raisins. Strawberries. Tangerines.	Rich sources of potassium, magnesium, and fiber
<b>Low-fat or fat-free dairy foods</b>	2-3	2-3	8 ounces milk 1 cup yogurt 1½ oz. cheese	Fat-free (skim) and low-fat (1%) milks. Low-fat buttermilk. Fat-free or low-fat regular or frozen yogurt. Low-fat and fat-free cheeses.	Major sources of calcium and protein
<b>Meats, poultry, and fish</b>	2 or less	1-2	3 ounces cooked meat, poultry, or fish	Choose lean meats. Trim visible fats. Broil, roast, or boil, instead of frying. Remove skin from poultry.	Rich sources of protein and magnesium
<b>Nuts, seeds, and dry beans</b>	4-5 per week	3 per week	½ cup or 1½ ounces nuts 2 Tbsp. or ½ ounces seeds ½ cup cooked dry beans, peas	Almonds. Filberts. Mixed nuts. Peanuts. Walnuts. Sunflower seeds. Kidney beans. Lentils.	Rich sources of magnesium, fiber, potassium, protein
<b>Fats and oils</b>	2-3	2	1 tsp. vegetable oil 1 tsp. soft margarine 1 Tbsp. low-fat mayonnaise 2 Tbsp. light salad dressing	Soft margarine. Low-fat mayonnaise. Light salad dressing. Vegetable oil (e.g., olive, corn, canola, and safflower).	DASH has 27% of calories as fat. This includes fat in or added to foods.
<b>Sweets</b>	5 per week	0	1 Tbsp. sugar 1 Tbsp. jelly or jam ½ ounce jelly beans 8 ounces lemonade	Maple syrup. Sugar. Jelly. Jam. Fruit-flavored gelatin. Jelly beans. Hard candy. Fruit punch. Sorbet. Ices.	Sweets should be low in fat.

The DASH Eating Plan lowers blood pressure and the risk of heart disease and stroke.

Find out more about the DASH Eating Plan from [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov). Search for “DASH Eating Plan.” To order it by phone, call 301.592.8573.

## 7. Medical Treatment

High blood pressure usually lasts a lifetime, but can be treated and controlled. If you are diagnosed with high blood pressure, follow your doctor's advice.

### Medical treatment includes:

- A physical exam and lab tests. These check for damage to your heart, kidneys, and other organs. They also identify risk factors you have for heart, kidney, and other diseases. Your treatment plan is based on your needs.
- Follow-up blood pressure checks and other tests as needed.
- Healthy lifestyle changes. (See topic 6.)
- Medications. Most persons need more than 1 medicine to treat high blood pressure.

Your doctor will decide if and what medication(s) you need. This is based on your blood pressure level, age, race, other conditions you have, heart disease risk factors, etc. Common medicines used to treat HBP are:

- Diuretics (water pills)
- Calcium channel blockers
- ACE inhibitors
- Angiotensin II receptor blockers
- Beta-blockers
- Alpha blockers. Alpha-beta blockers.
- Nervous system inhibitors
- Vasodilators



## 8. Reasons to Get Medical Care



- You have signs or symptoms of a **hypertensive crisis** listed on the bottom of panel 4. Get medical care right away.
- You have adverse side effects from taking medicine(s) to lower blood pressure. Examples are:
  - You feel lightheaded or dizzy.
  - You feel weak, sleepy, and/or drowsy.
  - Your heart races.
  - You get a skin rash.
- You need to schedule office visit appointments to get your blood pressure checked. Do this as often as your doctor advises.

### For More Information, Contact:

American Heart Association  
800.AHA.USA1 (242.8721)  
[www.heart.org/HEARTORG](http://www.heart.org/HEARTORG)

National Heart, Lung, and Blood Institute  
[www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)

Get Free Health Information, from:  
[www.HealthyLearn.com](http://www.HealthyLearn.com)