

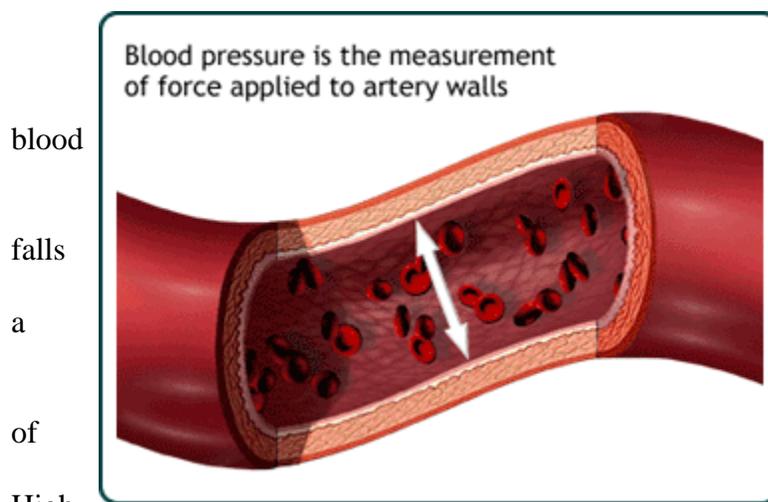
Basic facts about High Blood Pressure values, its risks and prevention methods, part of health awareness series

Presented to members of the Oromo Community Organization of Washington DC Metro Area

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About High Blood Pressure



Blood pressure is the force of against your artery walls as it circulates through your body. Blood pressure normally rises and throughout the day, but it can cause health problems if it stays high for long time. Having high blood pressure raises your risk for heart disease and stroke, leading causes death in the United States.¹

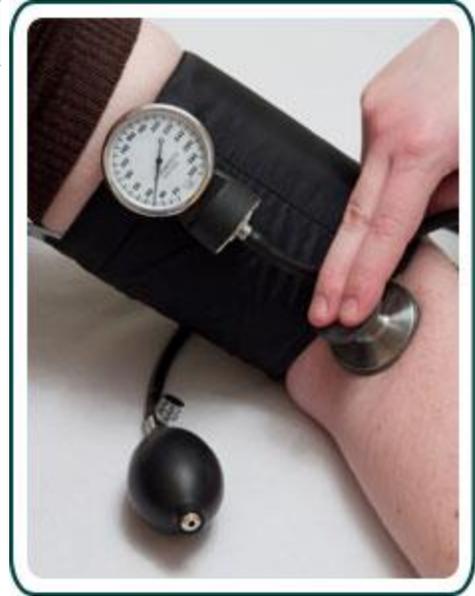
High blood pressure is called the "silent killer" because many people don't realize they have it. High blood pressure often has no warning signs or symptoms

Diastolic and Systolic

Measuring Your Blood Pressure

Measuring your blood pressure is quick and painless. A doctor or health professional wraps an inflatable cuff with a pressure gauge around your arm to squeeze the blood vessels. Then he or she listens to your pulse with a stethoscope while releasing air from the cuff and watching the gauge. The gauge measures blood pressure in millimeters of mercury, which is abbreviated as mmHg.

Blood pressure is measured using two numbers. The first (systolic) number represents the pressure in your blood vessels when your heart beats. The second (diastolic) number represents the pressure in your vessels when your heart rests between beats. If the measurement reads 120 systolic and 80 diastolic, you would say "120 over 80" or write "120/80 mmHg."



Blood pressure can also be measured using digital blood pressure monitoring machines that can be found in a number of pharmacies and medical supplies stores

Effects of High Blood Pressure

Heart attacks:

High blood pressure can damage your health in many ways.

For instance, it can harden the arteries, decreasing the flow of blood and oxygen to the heart. This reduced flow can cause—

- Chest pain, also called angina.
- Heart failure, which occurs when the heart can't pump enough blood and oxygen to your other organs.
- Heart attack, which occurs when the blood supply to your heart is blocked and heart muscle cells die from a lack of oxygen. The longer the blood flow is blocked, the greater the damage to the heart.

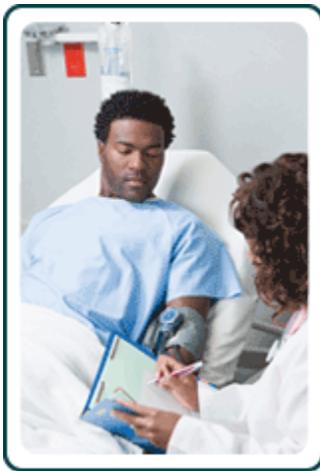
High blood pressure can burst or block arteries that supply blood and oxygen to the brain, causing a stroke.

A stroke occurs

When the blood supply to the brain is blocked or when a blood vessel in the brain ruptures, causing brain tissue to die. A stroke often starts as a sudden feeling of numbness or weakness on half of the body.

Stroke is the fourth leading cause of death in the United States and is a major cause of adult disability.^{1,2} About **800,000** people in the United States have a stroke each year.² One American dies from a stroke every **4 minutes**, on average.

High Blood Pressure Facts



Learn more about high blood pressure and its risk factors. It's important for everyone to know the facts about high blood pressure [PDF-255K].

High Blood Pressure in the United States

- **67 million** American adults (31%) have high blood pressure—that's **1 in every 3** adults.¹
- Only **about half (47%)** of people with high blood pressure have their condition under control.¹
- Nearly **1 in 3 American adults** has prehypertension—blood pressure numbers that are higher than normal, but not yet in the high blood pressure range.²
- High blood pressure costs the nation **\$47.5 billion each year**. This total includes the cost of health care services, medications to treat high blood pressure, and missed days of work.³

Blood Pressure Levels Vary by Age

Women are about as likely as men to develop high blood pressure during their lifetimes. However, for people younger than 45 years old, the condition affects more men than women. For people 65 years and older, high blood pressure affects more women than men.²

Age	Men (%)	Women (%)
20-34	11.1	6.8
35-44	25.1	19.0
45-54	37.1	35.2
55-64	54.0	53.3
65-74	64.0	69.3
75 and older	66.7	78.5
All	34.1	32.7

Blood Pressure Levels Vary by Race and Ethnicity

Blacks develop high blood pressure more often, and at an earlier age, than whites and Hispanics do. More black women than men have high blood pressure.²

Race of Ethnic Group	Men (%)	Women (%)
African Americans	43.0	45.7
Mexican Americans	27.8	28.9
Whites	33.9	31.3
All	34.1	32.7

Why Blood Pressure Matters

More than **348,000** American deaths in 2009 included high blood pressure as a primary or contributing cause.² That's **1,000 deaths each day**.

High blood pressure increases your risk for dangerous health conditions:

- **First heart attack:** About 7 of every 10 of people having their first heart attack have high blood pressure.²
- **First stroke:** About 8 of every 10 of people having their first stroke have high blood pressure.²
- **Chronic (long lasting) heart failure:** About 7 of every 10 people with chronic heart failure have high blood pressure.²
- **Kidney disease** is also a major risk factor for high blood pressure.

Although you can't control all of your risk factors for high blood pressure, you can take steps to prevent or control high blood pressure and its complications.

Talk with Your Health Care Team about Blood Pressure

- Since 1999, more people with high blood pressure—especially those ages 60 and older—have become aware of their condition and gotten treatment. Unfortunately, about **1 in 5 U.S. adults** with high blood pressure still don't know that they have it.²
- About **7 in 10 U.S. adults** with high blood pressure use medications to treat the condition.¹
- In 2009, Americans visited their health care providers more than **55 million times** to treat high blood pressure.²
- Team-based care that includes the patient, primary care provider, and other health care providers is a recommended strategy to reduce and control blood pressure.⁵

Reducing average population sodium intake from 3,400 milligrams (mg) to 2,300 mg per day—the level recommended in the Dietary Guidelines for Americans, 2010—may reduce cases of high blood pressure by **11 million** and save **18 billion health care dollars every year**.⁴

Blood Pressure Signs and Symptoms



High blood pressure is called the "silent killer" because many people don't realize they have it. High blood pressure often has no warning signs or symptoms.

The only way to detect whether or not you have high blood pressure is to have your blood pressure measured by a doctor or health professional—it is quick and painless.

Risk Factors



Some health conditions, as well as lifestyle and genetic factors, can put people at a higher risk for developing high blood pressure. However, everyone can take steps to lower their blood pressure.

.Conditions

.Behavior

.Heredity

Conditions

Because blood pressure tends to rise as people get older, everyone's risk for high blood pressure increases with age. In addition, some medical conditions can also raise your risk of high blood pressure.



Prehypertension

Prehypertension—blood pressure levels that are slightly higher than normal—increase the risk that you will go on to develop chronic high blood pressure.

Blood Pressure Levels

Normal

Systolic: less than 120 mmHg
Diastolic: less than 80 mmHg

At Risk (Prehypertension) Systolic: 120–139 mmHg
Diastolic: 80–89 mmHg

High Systolic: 140 mmHg or higher
Diastolic: 90 mmHg or higher

Behavior

Healthy behaviors contribute to keeping your blood pressure low, which in turn decreases your risk of heart disease.

Diet

Sodium is the element in salt that can raise blood pressure. Most of the sodium we eat comes from processed and restaurant foods. Eating too much sodium can increase blood pressure. Not eating enough potassium (from fruits and vegetables) can also increase blood pressure.



Weight

Being overweight can cause high blood pressure.

Physical Inactivity

Not getting enough exercise can make you gain weight, which can lead to high blood pressure.

Alcohol Use

Drinking too much alcohol can raise your blood pressure.

Tobacco Use

There are also several factors that you cannot change that affect your blood pressure, like heredity.

Age

Blood pressure tends to rise as people get older.

Race or Ethnicity

African Americans have a higher prevalence of high blood pressure than whites.¹

Diabetes

About 60% of people who have diabetes also have high blood pressure.²

Family History

High blood pressure can run in families. People can inherit genes that make them more likely to develop the condition. The risk for high blood pressure can increase even more when heredity is combined with unhealthy lifestyle choices, such as smoking cigarettes and eating a poor diet

Most Americans Consume Too Much Sodium



Most of the sodium we consume is in the form of salt, and the vast majority of sodium we consume is in processed and restaurant foods. Too much sodium is bad for your health. It can increase your blood pressure and your risk for a heart attack and stroke. Heart disease and stroke are the first and fourth leading causes of death in both men and women in the U.S. each year.

The Dietary Guidelines for Americans (DGA), 2010 recommend reducing sodium intake to less than 2,300 milligrams (mg) per day. The DGA's also recommend you should further reduce sodium to 1,500 milligrams (mg) per day if:

- You are 51 years of age or older.
- You are African American.
- You have high blood pressure.
- You have diabetes.
- You have chronic kidney disease.

The 1,500 mg recommendation applies to about half of the U.S. population overall and the majority of adults. Nearly everyone benefits from reduced sodium consumption. Eating less sodium can help prevent, or control, high blood pressure.

Most of the sodium we eat comes from packaged, processed, store-bought, and restaurants foods. Only a small amount comes from salt added during cooking and from being added at the table, and most Americans have already exceeded their daily limit of sodium before cooking or adding salt at the table.

How to Prevent High Blood Pressure

Increases in blood pressure increases your risk for heart disease. People at any age can take steps each day to keep blood pressure levels normal.



Lifestyle

- **Eat a healthy diet.** Eating healthfully can help keep your blood pressure down. Eat lots of fresh fruits and vegetables, which provide nutrients such as potassium and fiber. Also, eat foods that are low in saturated fat and cholesterol.
- Avoid sodium by limiting the amount of salt you add to your food. Be aware that many processed foods and restaurant meals are high in sodium.

Studies¹ have shown that people who eat a healthy diet can lower their blood pressure. For more information on healthy diet and nutrition..

- **Maintain a healthy weight.** Being overweight can raise your blood pressure. Losing weight can help you lower your blood pressure.

To find out whether your weight is healthy, doctors often calculate a number called the [body mass index \(BMI\)](#). Doctors sometimes also use waist and hip measurements to measure a person's excess body fat.

If you know your weight and height, you can compute your BMI.

- **Be physically active.** Physical activity can help lower blood pressure. The Surgeon General recommends adults engage in moderate-intensity exercise for 2 hours and 30 minutes every week.

Key Definitions

- **Cholesterol** is a fat-like substance in the body. High levels in the blood can lead to heart disease and stroke.
- **Saturated fats** come largely from animal fat in the diet, but also from some vegetable oils such as palm oil.
- **Sodium** is the element in salt that can raise blood pressure. Most of the sodium we eat comes from processed and restaurant foods.
- **Diabetes** is a disease that affects the body's use of insulin. Insulin tells the body to remove sugar from the blood. People with diabetes either don't make enough insulin, can't use their own insulin as well as they should, or both..
- **Don't smoke.** Smoking injures blood vessels and speeds up the hardening of the arteries. Further, smoking is a major risk for heart disease and stroke.

If you don't smoke, don't start. If you do smoke, quitting will lower your risk for heart disease and stroke. Your doctor can suggest programs to help you quit.

For more information about tobacco use and quitting, see CDC's Smoking and Tobacco Use Web site.

- **Limit alcohol use.** Drinking too much alcohol is associated with high blood pressure.

If you drink alcohol, you should do so in moderation—no more than one drink per day for women or two drinks per day for men.

What You Can Do

- **Check your blood pressure.** Getting your blood pressure checked is important because high blood pressure often has no symptoms.

Your doctor can measure your blood pressure, or you can use a machine available at many pharmacies. You can also use a home monitoring device to measure your blood pressure.

Blood pressure is written as two numbers. The first (systolic) number represents the pressure in your blood vessels when your heart beats. The second (diastolic) number represents the pressure in your vessels when your heart rests between beats.

Blood Pressure Levels

Normal	Systolic: less than 120 mmHg Diastolic: less than 80 mmHg
At risk (prehypertension)	Systolic: 120–139 mmHg Diastolic: 80–89 mmHg
High	Systolic: 140 mmHg or higher Diastolic: 90 mmHg or higher

Prevent or Treat Your Medical Conditions

- **Prevent and manage diabetes.** You can reduce your risk of diabetes by eating a healthy diet, maintaining a healthy weight, and being physically active.

About 60% of people who have diabetes also have high blood pressure.² If you have diabetes, you can lower your risk for high blood pressure by following the healthy guidelines listed here.

- **Treat high blood pressure.** If you already have high blood pressure, your doctor may prescribe medications in addition to lifestyle changes.

All drugs may have side effects, so talk with your doctor on a regular basis. As your blood pressure improves, your doctor will want to monitor it often.

Lifestyle changes are just as important as taking medications.

Body Mass Index

- Body Mass Index (BMI) is a number calculated from a person's weight and height. BMI provides a reliable indicator of body fatness for most people and is used to screen for weight categories that may lead to health problems.
- The standard weight status categories associated with BMI ranges for adults are shown in the following table.

BMI	Weight Status
Below 18.5	Underweight
18.5 – 24.9	Normal
25.0 – 29.9	Overweight
30.0 and Above	Obese
Pounds and inches	<p>Formula: $\text{weight (lb)} / [\text{height (in)}]^2 \times 703$</p> <p>Calculate BMI by dividing weight in pounds (lbs) by height in inches (in) squared and multiplying by a conversion factor of 703.</p> <p>Example: Weight = 150 lbs, Height = 5'5" (65") Calculation: $[150 \div (65)^2] \times 703 = 24.96$</p>

Thank you