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800-994-WOMAN (9662)

888-220-5446 (TDD)

The National Women's Health Information Center

A project of the U.S. Department of Health and Human Services, Office on Women's Health



## Frequently Asked Questions about High Blood Pressure

### What is high blood pressure and why is it so dangerous?

As blood is pumped from your heart through your body, the blood puts force or pressure against the blood vessel (or artery) walls. Your blood pressure is a reading, or measure, of this pressure. When that reading goes above a certain point, it is called high blood pressure, another name for hypertension. When you have high blood pressure, it is partly because your blood vessels become narrower, forcing your heart to pump harder to move blood through your body. These changes cause the blood to press on the vessels walls with greater force.

High blood pressure is called the “silent killer” because it usually has no signs or symptoms. It is dangerous because it makes the heart work too hard. If not controlled over time, high blood pressure can affect not only your heart and blood vessels but also other organs, making them function not as well as they should. The effects of uncontrolled high blood pressure include:

- **Stroke.** High blood pressure is the most important risk factor for stroke. High blood pressure can cause a break in a weakened blood vessel in the brain. This can cause bleeding in the brain, which is a stroke. If a blood clot blocks a narrowed blood vessel, it can also cause another type of stroke.
- **Impaired vision.** Blood vessels in the eye can in time burst or bleed due to high blood pressure. Vision can become blurred or impaired and can result in blindness.
- **Kidney damage.** The kidneys filter wastes from our bodies. Over time, high blood pressure can narrow and thicken the blood vessels of the kidneys. Thus the kidneys can not do their job well, and wastes build up in the blood. When kidney failure occurs, medical treatment (dialysis) or a kidney transplant is needed.
- **Heart attack.** High blood pressure is a major risk factor for heart attack. If the heart cannot get enough oxygen because of narrowed or hardened arteries, chest pain (*angina*) can occur. If the flow of blood is blocked, a heart attack results.
- **Congestive heart failure.** High blood pressure is the number one risk factor for congestive heart failure, a serious condition where the heart is not able to pump enough blood to meet the body's needs.

While high blood pressure can't be cured, in most cases, it can be prevented and controlled with a healthy lifestyle and medication.

### Should women be concerned about high blood pressure?

More than half of all women over age 55 suffer from high blood pressure, or hypertension. It is more common and more severe in black women. But this serious condition affects many Americans. In fact, 1 in 4 American adults have high blood pressure.

High blood pressure causes 3 of every 5 cases of heart failure in women. It can also lead to stroke, kidney failure, heart attack, and other health problems. Women who have both diabetes and high blood pressure are at an even greater risk of stroke and kidney problems than are women who have only high blood pressure.

## **What causes high blood pressure?**

For the majority of people with high blood pressure, the cause is unknown. Narrowing of the arteries, a greater than normal volume of blood, or the heart beating faster or more forcefully than it should, will cause increased pressure against the artery walls. Why this occurs in some people may not be clearly understood.

Less than ten percent of cases of high blood pressure are caused by other medical problems or illnesses. This type of high blood pressure is often temporary, and cured when the original medical problem is corrected.

## **What are the risk factors that contribute to high blood pressure?**

Risk factors are habits or traits that make a person more likely to develop a disease. There are some risk factors for high blood pressure that you can do something about. Risk factors that you can reduce include a high sodium (salt) intake and obesity (being overweight). A sedentary lifestyle – being inactive and not exercising regularly – can increase a person's chances for high blood pressure. Heavy drinking of alcohol will raise blood pressure. If you do drink alcohol, try not to drink more than 1 drink per day for women. If you are pregnant, you should not drink at all.

There are some risk factors for high blood pressure that you can't change. Heredity is one of these factors because high blood pressure tends to run in families. Racial background is another factor. Blacks are more likely to have high blood pressure than whites. Gender also plays a role in high blood pressure risk. Men have a greater risk of high blood pressure than do women up until age 55, then the risks become similar for men and women. At age 75 and older, women are more likely than men to have high blood pressure. Age is a risk factor for both women and men. Blood pressure tends to increase with age, and older people are more likely to have high blood pressure than younger people.

## **How can I tell if I have high blood pressure – what are the signs I should be looking for?**

High blood pressure – the “silent” killer – does not have any signs. That is why it is so important to have your blood pressure checked regularly by a health care provider.

## **How is blood pressure measured?**

Blood pressure is a measure of the force of blood pumped from the heart against the walls of your arteries (or blood vessels). It reflects how high the pressure in your arteries is to raise a column of mercury (similar to the way your temperature raises mercury in a thermometer), and is recorded as millimeters of mercury (mmHg).

Blood pressure is read as two numbers: a top number (systolic pressure), or the pressure of blood in the vessels as the heartbeats; and a bottom number (diastolic pressure), or the pressure of the blood between heartbeats. Although the average blood pressure reading for adults is 120/80, a slightly higher or lower reading (for either number) may not be a problem. If you have heart disease or major risk factors such as smoking, high cholesterol, diabetes, family history of heart disease or high blood pressure, or have gone through menopause (stopped having periods), your health care provider will help you aim for a lower blood pressure.

High blood pressure (or hypertension) in adults is defined as blood pressure that consistently exceeds 140/90 normally. Ask your health care provider to tell you what your blood pressure number is and what this means to you. Talk with your health care provider about ways to prevent, and if needed, to lower your blood pressure and about how often you need to have your blood pressure rechecked.

Many older people develop a form of high blood pressure called *isolated systolic hypertension* (ISH), which occurs when the top (systolic) number is high but the bottom (diastolic) number is normal. This type of high blood pressure also requires monitoring and treatment by your health care provider.

**Blood Pressure\*  
Categories in Women**

**(for women 18 years and older, who are not taking antihypertensive drugs, and are not acutely ill)**

<b>Category</b>	<b>Systolic</b>		<b>Diastolic</b>
Optimal	less than 120	and	less than 80
Normal	less than 130	and	less than 85
High-normal	130-139	or	85-89
<b>Hypertension (High blood pressure)</b>			
Stage 1	140-159	or	90-99
Stage 2	160-179	or	100-109
Stage 3	180 or higher	or	110 or higher

**\*Blood pressure level in mmHG**

## Can high blood pressure be prevented?

If you have high blood pressure, you can lower it and control it with proper treatment. If you don't have high blood pressure now, you can take steps to prevent it from developing. You can help to control and prevent high blood pressure by taking the following steps:

- Control your weight, or lose weight if you are overweight. Losing even ten pounds will help.
- Exercise regularly – 30 minutes a day for most days of the week is best.
- Limit your daily intake of sodium to less than 2,400 mg (about 1 teaspoon of salt). Sodium is found in many packaged foods, carbonated beverages, baking soda, and some antacids. Read product labels so you know what you are eating. If you would like to try a salt substitute, talk with your health care provider first, because they are not safe for everyone.
- Have a diet that includes more fruits and vegetables, and low fat or nonfat dairy products, and limited amounts of saturated fat and total fat.
- Eat foods that are rich in potassium since potassium seems to prevent high blood pressure. Aim to have more than 3,500 mg of potassium per day.
- If you drink alcohol, do so in moderation. No more than one serving per day for women (e.g. 12 oz. beer or 5 oz. wine), and no more than two servings per day for most men (e.g. 24 oz. beer or 10 oz wine).
- If you are prescribed high blood pressure medication, take it exactly as prescribed so it works properly. Don't forget to talk with your health care provider about other medications – both over-the-counter and prescription – that you are taking to make sure they do not interfere with the blood pressure medication. Ask questions about what types of over-the-counter medications you can take before you take them. Bring all of your medication, even those you buy over the counter, to your visit with your health care provider.
- If you are pregnant, get regular prenatal checkups so your health care provider can find and control a possible high blood pressure problem.
- If you are taking birth control pills, estrogen, or hormone therapy (HT), get regular blood pressure checks from your health care provider to find and control a blood pressure problem.

Talk with your health care provider if you need help with these steps or have any questions or concerns.

## When I get my blood pressure checked in my health care provider's office it is always sky high! Can I check my own blood pressure at home?

Some people have high blood pressure only when they visit their health care provider's office. This condition is called *white coat hypertension*. If your health care provider thinks you may have this condition, you may be asked to wear a device called an *ambulatory blood pressure monitor*. It is usually worn for 24 hours in order to get an accurate understanding of your blood pressure.

There are over-the-counter blood pressure measuring devices you can purchase in pharmacies and discount chain stores that you can use at home. These include the blood pressure cuff and a stethoscope and electronic monitors, such as digital readout monitors. Always be sure the person who will use the device reads the instructions before taking blood pressure readings. Your health care provider or pharmacist can help you check the device and teach you how to use it. You can also ask for their help in choosing the right type of blood pressure device for you. If you take your blood pressure at home, keep a record of the numbers and take them with you each time you see your health care provider.

Here are some tips for what you can do to ensure as accurate a blood pressure reading as possible:

- Don't drink coffee or smoke for 30 minutes before the blood pressure check.
- Before your blood pressure is checked, sit still for five minutes with your back supported and your feet flat on the ground. Try to rest your arm on a table at the level of your heart.
- Go to the bathroom prior to the reading. A full bladder can change your blood pressure reading.
- Get two readings, taken at least two minutes apart, and average the results.

If you are having your blood pressure taken by a health care provider, ask for the blood pressure numbers. You can also ask to compare the numbers to the ones taken during your last visit.

## **Do hormones affect blood pressure in women?**

Taking estrogen, either through birth control pills or through hormone therapy HT, can affect a woman's blood pressure. Women taking birth control pills can have a small and most often normal increase in their blood pressure reading. Talk to your health care provider about what you can do if your blood pressure goes up when taking the pill. Age (35 and older), length of use, and smoking are all thought to increase the risk for high blood pressure in women taking birth control pills. When you take birth control pills, be sure to have your blood pressure checked regularly. If you are taking birth control pills and have high blood pressure, talk with your health care provider about another method of birth control.

While not usual, women may see a rise in blood pressure due to taking estrogen or hormone therapy (HT). All women taking estrogen or HT need to have their blood pressure checked regularly. In the past, taking HT was thought to help protect women against heart disease. But recent findings from the Women's Health Initiative (WHI) study, sponsored by the National Heart, Lung, and Blood Institute (NHLBI), showed that taking HT poses more risks than benefits for a woman's heart health. The study found that HT could increase a woman's risk for heart disease, stroke, and *pulmonary embolism* (blood clot in the lung), as well as breast cancer. Because of these findings, the U.S. Preventive Services Task Force recommends that women who have gone through menopause should not be given HT to prevent heart disease and other chronic conditions. Hormones also are not recommended for women with heart disease or for women who have had a stroke. If you have gone through menopause, talk with your health care provider about whether hormones are right for you. For more information on the WHI study, go to <http://www.nhlbi.nih.gov> and click on "Postmenopausal Hormone Therapy," or call the NHLBI at the number listed at the end of this FAQ, in the "For more information" section. And, keep checking the NWHIC web site ([www.4woman.gov](http://www.4woman.gov)) for updates on postmenopausal hormone therapy.

During pregnancy, a woman can develop high blood pressure, which goes away when the baby is born. This is called *gestational hypertension*. Women who have high blood pressure before getting pregnant are more likely to have certain problems, such as *preeclampsia*, or *toxemia*, which can threaten the lives of both the mother and the fetus. Talk to your health care provider if you have high blood pressure and are thinking of having a baby. Prenatal care will be especially important for you.

## **What medicines are used to treat high blood pressure?**

For some people, lifestyle changes are enough to lower blood pressure. For others, particularly those with heart disease, medication may also be required. If you do require medication, make sure you continue your lifestyle changes. These changes help the medications work better, and over time, you may be able to reduce the medication.

There are many different types of blood pressure medications that work in different ways. You may be prescribed one or a combination of several drugs to help lower your blood pressure. *Diuretics* (or water pills) reduce the amount of fluid in the body. *Beta blockers* help the heart to beat less often and with less force. *Alpha blockers* relax blood vessels, allowing blood to flow more easily. *Alpha-beta blockers* work the same way alpha blockers do but also slow the heartbeat, as beta-blockers do. *Vasodilators* open blood vessels by relaxing the muscle in the vessel walls. *Calcium channel blockers* (CCBs) prevent calcium from getting into the muscle cells of the heart and blood vessels, relaxing the blood vessels. A somewhat new type of high blood pressure drug, called *angiotensin antagonists*, helps prevent the blood vessels from narrowing.

When you are prescribed medication, you may need to take it for a short or long time period. Be sure that you understand your health care provider's directions on how to take the drug. Know the amount you should take, if you should take it each day, and what time(s) you should take it during the day. If you are not sure about how to take the medicine, contact your health care provider. Write down the directions and keep them in a handy place.

Bear in mind that blood pressure medications may not work the same for everyone, so you may need to try a few of them before you find the one that works best for you. Likewise, different dosages (or amounts) of a drug can affect people differently. Your health care provider may also need to adjust, or change, the drug's dosage for you. It may take some time to find the best medication and best dosage for you.

Some over-the-counter medications or natural supplements may worsen blood pressure or interfere with prescription medications. You should inform your health care provider if you are regularly taking any over-the-counter medications. If you have any questions about whether you can take an over-the-counter medication when you are taking blood pressure medication, talk with your health care provider before you take the drug. Also, be sure to inform your health care provider about any other prescribed medications you are taking.

It is important to talk with your health care provider right away if you are having any problems with your medication. If you think you are having a side effect, do not stop taking the drug. Talk with your health care provider right away and she or he will give you advice about what to do.

## **For More Information...**

You can find out more about high blood pressure by contacting the National Women's Health Information Center (NWHIC) at (800) 994-9662 or the following organizations:

### **National Heart, Lung, and Blood Institute (NHLBI)**

Phone Number(s): (301) 592-8573

Internet Address: <http://www.nhlbi.nih.gov>

### **National High Blood Pressure Education Program**

National Heart, Lung, and Blood Institute (NHLBI)

Internet Address: <http://www.nhlbi.nih.gov/about/nhbpep/index.htm>

### **The Heart Truth**

National Awareness Campaign for Women about Heart Disease

National Heart, Lung, and Blood Institute (NHLBI)

Phone Number(s): (800) 575-9355

Internet Address: <http://www.nhlbi.gov/health/hearttruth/index.htm>

### **American Heart Association**

Phone Number(s): (800) 793-2665

Internet Address: <http://www.americanheart.org/>

### **American College of Cardiology**

Phone Number(s): (800) 253-4636

Internet Address: <http://www.acc.org/>

### **Texas Heart Institute**

Phone Number(s): (800) 292-2221

Internet Address: <http://www.texasheartinstitute.org/>

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