CENTRAL PA HEALTH CARE QUALITY UNIT NEWSLETTER FOR HEALTHY OUTCOMES

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What Those Blood Pressure Numbers Mean

From Health Ink & Vitality Communications

Blood-pressure readings are recorded as two numbers. Both are a measurement of the force of the blood against arterial walls. The first, higher number is the systolic pressure, which indicates the pressure of the blood against the arteries when the heart contracts to pump blood. The second, lower number is the diastolic pressure, which indicates the pressure of the blood against the artery walls when the heart is resting in between beats. It indicates the elasticity of the arteries. When blood pressure is recorded, the systolic pressure is always recorded first, followed by a diagonal line and the diastolic pressure.

The higher the number, the harder it is for the heart to pump blood. In a person who has not been diagnosed with high blood pressure or who does not have a chronic illness, a reading above 140/90 indicates hypertension or high blood pressure.

If your blood pressure reading is high, your doctor will take another reading later, to determine if you have high blood pressure. If it is 140/90 mm Hg or higher after two or more readings, your doctor will probably make the diagnosis of high blood pressure, or hypertension.

Here are the numbers to look for when you or someone else is checking your blood pressure. Your doctor may recommend a different schedule for follow-up depending on your risk factors, medical history and current health. Your doctor is your best source of information for your condition.

.If you are checking your blood pressure at home, here are some tips to help you take an accurate blood pressure:

- Make sure the blood pressure cuff fits your arm properly. The cuff should be long enough to fit around your arm with several inches extra. It should be wide enough to fit from the inside of the elbow to just below the armpit, according to the American Medical Association (AMA). Measuring the distance from your shoulder to your elbow. If the distance is less than 13 inches, you need a small cuff (5 inches by 9 inches). If the distance is 13 to 16 inches, you need a medium cuff (6 inches by 13 inches). If the distance is more than 16 inches, you need a large cuff (7 inches by 14 inches). An arrow on the cuff helps you align the cuff over an artery.
- Keep in mind that blood pressure fluctuates during the day and depending on what you are doing. It often is higher in the morning. Your blood pressure also may be higher if you have been talking or if you are under stress. Your blood pressure may be slightly lower at home than when it is measured by your health care provider. Your doctor may ask you to take your blood pressure several times a day.
- If you smoke or drink caffeinated beverages, these can affect your blood pressure for two or more hours afterward.
- Talk to your doctor about the type of blood pressure monitor you need. Electronic versions may be convenient, but they are not as accurate as a blood pressure cuff (sphygmomanometer).

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DIABETICS AND EYE EXAMS

From Health Ink & Vitality Communications

If you have diabetes, you are at greater risk for blindness, the American Diabetes Association (ADA) says. Most people with diabetes develop only minor eye disorders, and with prompt treatment, they could be prevented from developing into more serious problems. That's why it's important to have your eyes thoroughly checked at least once a year if you have diabetes. Following are some common eye problems that people with diabetes may experience.

Glaucoma

Glaucoma occurs when pressure builds up in the eye. The increased pressure squeezes the blood vessels that bring blood to the retina and optic nerve. Over time, the retina and optic nerve become damaged from the pressure, and vision declines. People with diabetes are 40 percent more likely to develop glaucoma than people without diabetes, the ADA says. The longer you have diabetes, the greater your chance of developing glaucoma. Treatment for glaucoma includes drug therapy or surgery. A doctor should be consulted about appropriate treatment.

Cataracts

When the clear lens of the eye clouds over, it's called a cataract. Cataracts block the light from entering the eye. Although many older adults develop cataracts, people with diabetes are 60 percent more likely to have them, the ADA says. People with diabetes tend to get cataracts at a younger age and they tend to progress faster. Mild cataracts can be handled by wearing sunglasses. If a cataract affects vision, an eye doctor can remove the lens of the eye, the ADA says. People with diabetes don't fare as well as others when they have a lens removed. Glaucoma may develop, and damage to the retina (retinopathy) may get worse.

Retinopathy

Diabetes can damage the retina (retinopathy). There are two main types of diabetic retinopathy: nonproliferative retinopathy and proliferative retinopathy.

Nonproliferative retinopathy is more common and milder, the ADA says. It usually does not affect vision. In this form of retinopathy, blood vessels in the eye balloon and form pouches. This kind of retinopathy can get worse, making it important to have your eyes checked regularly. The blood vessels may deteriorate, and the retina can become swollen. If the swelling affects the center of the retina, the condition is called macular edema. This can lead to loss of vision.

Proliferative retinopathy is the more advanced form of retinopathy. In this form, the blood vessels are so damaged that new blood vessels begin growing in the eye, the ADA says. These new vessels are weak and can leak blood, blocking vision. This condition is called vitreous hemorrhage. Scar tissue also can develop; this scar tissue can distort the retina or cause a retinal detachment, the ADA says. This can lead to loss of vision.

Early treatment of retinopathy can help prevent blindness in most people. It's best to treat retinopathy before vision problems occur. Your doctor is your best source of information on available treatments. The longer you have diabetes, the greater your risk for retinopathy, the ADA says. Nearly everyone who has type 1 diabetes, and most who have type 2 diabetes, will develop nonproliferative retinopathy. People who keep their blood sugar near normal are less likely to develop retinopathy or to have milder forms, the ADA says.

Prevention

The ADA suggests the following steps to avoid eye problems if you have diabetes.

*Keep your blood sugar levels under tight control. People who keep their blood sugar levels close to normal are much less likely to develop retinopathy, or to have it progress.

*Keep your blood pressure under control. High blood pressure can contribute to eye problems.

*Quit smoking.

*See an eye doctor at least once a year for a thorough examination. It's important to see an eye doctor and not just your regular doctor for an eye exam, the ADA says. You eyes should be dilated for the exam.

Warning signs

See your eye doctor if you have any of these symptoms: blurry vision, difficulty reading signs, double vision, eye pain, chronically red eyes, noticeable pressure in the eye, floats or spots, peripheral vision problems.

OLDER EARS

From MerckSource.com

The National Institutes of Health estimate that one-third of Americans older than 60 have hearing problems.

We begin to lose hearing in the higher frequency ranges almost immediately after birth and continue that loss well into old age. A 60-year-old may have trouble hearing above 10,000 hertz, the frequency of many bird songs. While this hearing loss is inevitable, most people with hearing problems can be helped.

Like eyes, the ears undergo many aging changes:

- Small arteries in the inner ear decrease in size and harden, reducing nourishment to ear structures.
- Sensitive "hairs" in the fluid-filled coil of the inner ear begin to break down, which can lead to permanent hearing loss.
- Earwax is produced more abundantly. For most, this doesn't pose a hearing problem. However, wax can become impacted and cause temporary hearing loss. Build up of earwax is an example of conductive hearing loss. Excessive wax fills the ear canal and may press against the eardrum and prevent it from vibrating. Earwax can be easily removed by a doctor, by softening it with oil and flushing it out with warm water.

The second type of hearing loss, so-called "nerve deafness" (sensory-neural loss), is more serious and involves permanent hearing loss. Many older adults develop *presbycusis,* an age-related hearing loss that involves the deterioration of the hairs inside the snail-shaped coil in the inner ear due to aging and excessive noise. Hearing aids can help compensate for such nerve hearing loss. Experts suggest avoiding as much loud noise as possible to prevent noise-related hearing loss.

Taking Care of Your Ears

- Have your hearing checked regularly
- Keep your ears clean, but avoid cotton swabs which only push wax and other debris further into the canal. Wash the outer ear with soap and warm water.
- Dry your ears after bathing by inserting the twisted end of a facial tissue into the ear opening and allowing it to wick the area dry.
- If you get water into your ear and cannot release it by tapping or tilting your head, place a few drops of rubbing alcohol, alcohol/white vinegar, or OTC ear drops into the canal.
- Avoid loud noises. If you must work around machinery or in other noise-producing environments, wear protective ear equipment.
- On airplanes, prevent pressure build up during take-off and landing by swallowing, yawning, or chewing. If you're congested, use a nasal-decongestant spray before take-off.
- During cold or windy weather, keep ears covered, warm, and dry.
- Use sunscreen on the ears on sunny days.
- Use caution with medications. Many drugs such as antibiotics, aspirin, and some anesthetics can cause hearing problems.

CHRONIC KIDNEY DISEASE (CKD)

From the National Kidney Foundation

The fact is that 26 million American adults have CKD and millions of others are at increased risk. Early detection can help prevent the progression of kidney disease to kidney failure. Heart disease is the major cause of death for all people with CKD. Glomerular filtration rate is the best estimate of kidney function. Hypertension causes CKD and CKD causes hypertension. Persistent protein in the urine means CKD is present. High risk groups include those with diabetes, hypertension and family history of kidney disease. African Americans, Hispanics, Pacific Islanders, Native Americans and Seniors are at increased risk.

Three simple tests can detect CKD: blood pressure, urine albumin and serum creatinine.

Your kidneys help maintain health by removing wastes and fluid from our body which may include drugs and toxins, regulate your body water and other chemicals such as sodium, potassium, phosphorus, and calcium, and release hormones into your blood to help your body regulate blood pressure, make red blood cells, and promote strong bones.

Chronic kidney disease includes conditions that damage your kidneys and decrease their ability to keep you healthy by doing the jobs listed. If kidney disease gets worse, wastes can build to high levels in your blood and make you feel sick. You may develop complications like high blood pressure, anemia (low blood count), weak bones, poor nutritional health and nerve damage. Also, kidney disease increases your risk of having heart and blood vessel disease. These problems may happen slowly over a long period of time. Chronic kidney disease may be caused by diabetes, high blood pressure and other disorders. Early detection and treatment can often keep chronic kidney disease from getting worse. As kidney disease progresses, it may eventually lead to kidney failure, which requires dialysis or a kidney transplant to maintain life.

The two main causes of chronic kidney disease are diabetes and high blood pressure, which are responsible for up to two-thirds of the cases. Diabetes happens when your blood sugar is too high, causing damage to many organs in your body, including the kidneys and heart, as well as blood vessels, nerves and eyes. High blood pressure, or hypertension, occurs when the pressure of your blood against the walls of your blood vessels increases. If uncontrolled, or poorly controlled, high blood pressure can be a leading cause of heart attacks, strokes and chronic kidney disease. Also, chronic kidney disease can cause high blood pressure.

What are the symptoms of CKD?

Most people may not have any severe symptoms until their kidney disease is advanced. However, you may notice that you:

- feel more tired and have less energy
- have trouble concentrating
- have a poor appetite
- have trouble sleeping
- have muscle cramping at night
- have swollen feet and ankles
- have puffiness around your eyes, especially in the morning
- have dry, itchy skin
- need to urinate more often, especially at night.

Anyone can get chronic kidney disease at any age. However, some people are more likely than others to develop kidney disease. You may have an increased risk for kidney disease if you:

- have diabetes
- have high blood pressure
- have a family history of chronic kidney disease
- are older, and/or
- belong to a population group that has a high rate of diabetes or high blood pressure, such as African Americans, Hispanic Americans, Asian, Pacific Islanders, and American Indians.