

LEARNING ABOUT HYPERTENSION

DISEASE MANAGEMENT BROCHURE Vol. 4, No 2, 2008

ACCESS NURSING SERVICES



What is Hypertension ?

Each time your heart beats, it pumps oxygen-rich blood through the blood vessels, or arteries, that run through your body. Blood pressure is the force of the blood pushing against the walls of the arteries.

Blood Pressure is often written or stated as two numbers. The first or top number represents the pressure when the heart contracts. This is called systolic pressure. The second or bottom number represents the pressure when the heart rests between beats. This is called diastolic pressure.

Blood pressure normally rises and falls throughout the day. When it consistently stays too high for too long, it is called Hypertension.

- **High blood pressure** or hypertension for adults is defined as a systolic blood pressure of 140 mmHg or higher or a diastolic blood pressure of 90 mmHg or higher.
- **Normal blood pressure** is a systolic blood pressure of less than 120 mmHg and a diastolic blood pressure of less than 80mmHg.
- **Prehypertension** is defined as a systolic blood pressure of 120-139 mmHg or a diastolic blood pressure of 80-89 mmHg. Person with prehypertension are at increased risk to progress to hypertension.

Types of Hypertension

Essential Hypertension

- In most cases, high blood pressure does not have a specific treatable cause. This form is called essential hypertension.

Secondary Hypertension

- In a few cases, the cause of hypertension is some other underlying condition. This is called secondary hypertension. This may be due to kidney disorders, congenital abnormalities, or other conditions. Blood pressure usually returns to normal when the problem is corrected.

Pregnancy-related Hypertension

- Existing high blood pressure can predispose some women to develop problems when they become pregnant.
- Also, some women first develop hypertension when they are pregnant.
- Either type of high blood pressure can harm the mother's kidneys and other organs, and it can cause low birth weight and early delivery.



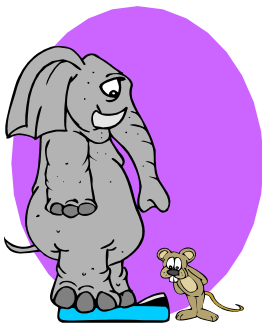
High Blood Pressure currently affects more than 72 million Americans. That's 1 in every 3 adults.

Outcome of High Blood Pressure

High blood pressure is often called the 'silent killer' because it usually has no noticeable warning signs or symptoms until other serious problems arise. When high blood pressure is not diagnosed and treated, it can lead to other life-threatening conditions, including heart attack, heart failure, stroke, and kidney failure. It can also lead to vision changes or blindness.

- High blood pressure can lead to hardened or stiffened arteries, which causes a decrease of blood flow to the heart muscle and other parts of the body. Reduced blood to the heart muscle lead to **angina**, or to a **heart attack**.
- Hypertension is a major risk factor for **heart failure**, a serious condition where the heart cannot pump enough blood for the body's need.
- It is also major risk for **stroke**. A stroke may be by a rupture or blockage of an artery that supplies blood and oxygen to the brain.
- High blood pressure can result in damage to the eyes, including
 - The blood vessel in the eyes can rupture or burst from high blood pressure leading to **impairment of sight**.
 - It can result in **kidney disease** and **kidney failure**. High blood pressure can thicken and narrow the blood vessels of the kidneys, resulting in less fluid being filtered and wastes building up in the body.

Who Gets High Blood Pressure?



- Smoking
- Being overweight
- Being diabetic
- Are a man over the age of 45 or a woman over the age of 55
- Have a family history of hypertension
- Being African American
- Have pre-hypertension, a reading of 120-139/ 80-89 mmHg
- Eating foods that are high in fat and cholesterol
- Eating lots of salty foods
- Not getting enough potassium in diet
- Drinking too much alcohol
- Being physically inactive
- Taking certain medicines, such as some antacids and hormone therapy
- Having long-lasting stress



Steps to Prevent High Blood Pressure

- Maintain a healthy weight, and lose weight if you are overweight or obese
- Be physically active get at least 2 and one-half hours of moderate physical activity each week
- Follow a healthy eating plan like **DASH** (Dietary Approaches to Stop Hypertension), which emphasizes fruits, vegetables, fat-free or low-fat milk and milk products, whole grains, fish, poultry, beans, seeds, and nuts, and choose and prepare foods with less sodium.
- If you drink alcohol beverages, do so in moderation; women should have no more than one drink a day, and man should have no more than two drinks a day.
- Quit smoking
- Learn to cope with and manage stress

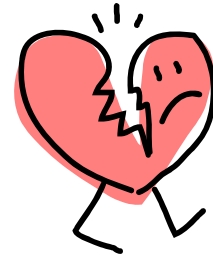


High Blood Pressure is one of the easiest health problems to discover!

What Are the Symptoms?

There are usually no early symptoms. Most of people can walk around with hypertension for twenty years without feeling bad. Unless they get their blood pressure checked, they won't know they have hypertension.

- Headaches (often severe)
- Heart palpitations
- Dizziness
- Nose bleeds
- Shortness of breath
- Chest pain
- Fatigue



Treatment of High Blood Pressure

Medication

■ **Diuretics** (sometimes called water pills) work in the kidney and flush excess water and sodium from the body: Lasix, Maxzide, Dyazide.

■ **Beta-blockers** reduce nerve impulses to the heart and blood vessels that make the heart beat slower and with less force: Lopressor, Inderal.

■ **Angiotensin-converting enzyme (ACE) inhibitors** cause the blood vessels to relax.

■ **Angiotensin antagonist** shield the blood vessels from angiotensin II. As a result, the vessels become wider.

■ **Calcium channel blockers** prevent calcium from entering the muscle cells of the heart and blood vessels. This causes the blood vessels to relax.

■ **Alpha-blockers** reduce nerve impulses to the blood vessels, which allows the blood to pass more easily.

■ **Alpha-beta-blockers** work the same way as alpha-blockers but also slow the heartbeat, as beta-blockers do. As a result, less blood is pumped through the vessels.

■ **Nervous system inhibitors** relax blood vessels by controlling nerve impulses. This causes the blood vessels to become wider.

■ **Vasodilators** directly open the blood vessels by relaxing the muscle in the vessel walls: Vasotec, Altace.

Losing Weight

■ Losing weight can lower blood pressure, help you need less medicine for your hypertension and/ or improve overall

health.

■ Studies have shown that losing just ten pounds if excess weight often brings blood pressure back into the normal range.



Exercise

■ The main thing is to get some kind of exercise regularly.

■ Regular exercise will help you in many ways—improving your strength, muscle tone, joints, appetite, and ability to fight off disease.

Special Diet

■ Foods to avoid on a Low Sodium Diet:

- Processed foods (frozen dinners, instant sauces and soups)
- Processed meats (like bologna or bacon)
- Processed cheeses

-like American cheese

- Canned foods
- Anything that's "pickled"
- Snack foods (chips, pretzels, and crackers)

■ Some ways to increase potassium in the diet:

- Read Labels
- Keep a potassium diary
- Eat high potassium foods: banana, tomatoes, tomato juice, dried fruit and raisins.

■ If you have edema you may be asked to weigh everyday. If so, be sure you weight:

- at the same time everyday
- while you wearing the same amount of clothing
- on the same



Tips for Helping Clients with a Hypertension

Medication

- If you suspect your client may not be taking his/her medications properly, notify your supervisor right away!
- If your client tells you he has been “cured” of his high blood pressure and doesn’t need his medication anymore, tell your supervisor.
- Encourage your clients to take their blood pressure medicine at the same time every day.
- Ask a friend or family member to call every day to remind your client to take the medicine.



Losing Weight

- Help your clients make small changes in their eating habits.
- Praise your clients for any success with their weight loss-even if it’s only one pound!

Exercise

- Help your clients set specific goals for exercise.
- See if a friend or family member will agree to go for regular walks with your client. It’s more fun to exercise with a “buddy”.
- If you have any doubts about a client’s ability to exercise, discuss it with your supervisor.



Reducing Stress

- Try to keep a positive attitude around your clients-so you aren’t adding to their stress!
- In addition, try to figure out what helps relax your clients. Here are just a few suggestions:
 - Listen to relaxing music.
 - Reading a book or being read to.
 - Taking a short nap.
 - Watching a comedy on TV.
 - Talking to friend.

Report

Immediately!!!

- Severe or constant headache
- Extreme tiredness
- Dizziness-like the room is spinning
- Nosebleeds
- Numbness or weakness on side of the body
- Chest pain
- Nausea, vomiting or heartburn
- Cold, moist skin
- Blue lips
- Shortness of breath or difficulty breathing
- Ankles that are suddenly swollen



Did you know that if you drink one glass of orange juice a day

Low Fat, Low Calories

You might suggest that they:

- Drink skim or 1% instead of whole milk.
- Eats lots of fresh fruits and vegetables.
- Eat more fish and chicken- and less beef.
- Eat fruit for dessert instead of cake.
- Choose oatmeal or whole wheat toast

Low Sodium

- Read labels-most foods are labeled, listing the amount of sodium per serving.
- Use fresh vegetables rather than canned.
- Low sodium broths and herbs mixtures can add flavor to foods- instead of salt.
- If possible, keep the salt shaker off the table.
- Encourage your clients to taste their food before adding salt. They may just be in the habit of adding salt-but don’t really need it.
- Help your client keep a sodium “diary”-writing down the amount of sodium in everything he or she eats.



POST TEST

Please circle the best choice and then check your answers with educator. **You can submit this paper to your coordinator or send by mail to office.**

1. True or False

A blood pressure reading below 120/80 is considered pre-hypertension.

2. True or False

Overweight and obesity increase your chances of developing high blood pressure and diabetes.

3. True or False

People with hypertension should only take their blood pressure medicine when their pressure is high.

4. True or False

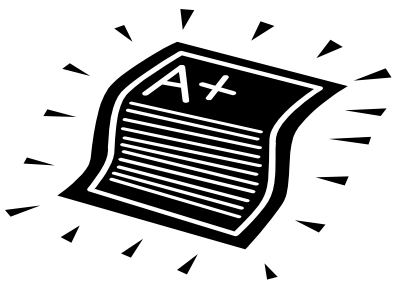
It's common for people with hypertension to have swollen ankles and feet.

5. True or False

Because it is relaxing, smoking a cigarette lowers the blood pressure.

6. True or False

African-American are less likely to have hypertension.



7. Which of the clients has the least risk for hypertension?

- A. A man who is a heavy drinker
- B. A woman who is 40 and exercise regularly
- C. A man who just turned sixty-five
- D. An overweight woman with diabetes

8. If not treated, high blood pressure can lead to:

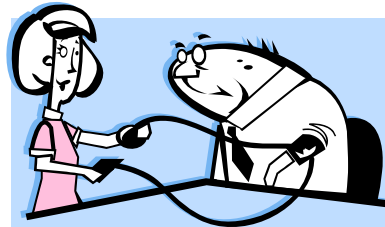
- A. Stroke
- B. Kidney disease
- C. Heart attack and heart failure
- D. All of the above

9. Mr. Smith is on a low sodium diet. He should:

- A. Eat canned vegetables
- B. Have bacon for breakfast
- C. Add salt to his food at the table
- D. Eat more fresh fruits and vegetables

10. Your client has hypertension. To help get her blood pressure under control, she should:

- A. Weigh herself once week
- B. Lose those extra ten pounds
- C. Stop exercising for a few months
- D. Eat a lot of foods with potassium



INSERVICE CREDIT: **1 HOUR**

SCORE: _____

EMPLOYEE NAME: _____

TITLE: _____

EDUCATOR SIGNATURE: _____

DATE: _____