# Hypertension 201



Acknowledgements: This protocol and associated curriculum materials were developed with support by Grant Numbers P60 MD000538 (NIH National Institute for Minority Health and Health Disparities), 1U48 DP001904-04 (Centers for Disease Control and Prevention), U58 DP004685 (Centers for Disease Control and Prevention New REACH Program), UL1 TR000038 (National Center for Advancing Translational Sciences), and funding from the New York City Department of Health and Mental Hygiene.

Image<sup>1</sup>

# Session Overview: HYPERTENSION 201

Say: Thank you for agreeing to meet with me today. If it's okay with you, I'd like to spend a few minutes sharing with you some additional information about hypertension that I hope you will find helpful. If at any time you have questions, please stop me and I'll do my best to answer them. Ready to get started?

## **HYPERTENSION 201**

Today's Topics:

- ✓ Basics of Cholesterol
- ✓ LDL / HDL
- ✓ Total Cholesterol
- ✓ Triglycerides
- ✓ Heart Healthy Diet
- ✓ Heart Attack Basics
- $\checkmark$  Know the Warning Signs
- ✓ Stroke Risk & Warning Signs
- ✓ Make a plan: Talking to Your Family & Friends

# Review: What is HTN?

- Say: Before we get started, I wanted to take a second to review what we talked about last time about high blood pressure:
- Ask: Do you remember what hypertension is?

If participant can't remember: That's okay - it's been a few days! Hypertension is when your blood pressure is high, and your heart has to pump harder than it should to get blood to all the other parts of the body. Do you remember how we talked about the garden hose, and how holding your thumb over the hose makes the water spray out harder?

Ask: Do you remember any of the strategies we discussed to take care of your heart every day? Or to make control your goal?

If participant can't remember: That's okay - this one was a little harder! Last time we discussed 3 things you can do to take care of your heart every day, which is to 1) follow a meal plan, 2) be physically active, and 3) to quit smoking. To make control your goal, you should 1) discuss your BP goal with your doctor, 2) take medications as prescribed, and 3) monitor your blood pressure.

Ask: Do you remember your ABCs?

If participant can't remember: That's okay - we'll go over it again.

- A: Aspirin Use
- B: Blood pressure control
- C: Cholesterol management
- S: (Quitting) Smoking



# Let's Review!



DC 12/4/2020

#### **Cholesterol**

Say: Remember that the "C" in the ABCs to remember is cholesterol management. Cholesterol comes from two sources:

> 1. Your liver makes all the cholesterol your body needs to keep you healthy. When cholesterol is produced, it goes into the bloodstream. The cholesterol that travels in your bloodstream is called blood cholesterol.

2. Cholesterol also comes from the food you eat. Foods that come from animals have cholesterol. The cholesterol from foods you eat is called dietary cholesterol. Other types of fat in foods that raise cholesterol are saturated fat and *trans* fat.

When too much cholesterol is in the blood, it leads to increased risk of a heart attack, stroke, and other health problems.<sup>1</sup>



Image<sup>3</sup>

# <u>Where does cholesterol come from?</u>



# <u>HDL / LDL</u>

Say: Cholesterol travels through the bloodstream in the form of packages called "lipoproteins." These packages are made of fat and protein.

Low-density lipoproteins, or **LDL**, carry the cholesterol to your blood vessels, clogging them like rust in a pipe. This is why LDL cholesterol is often called the "bad" cholesterol.

Cholesterol also travels in the blood in high-density lipoproteins, or HDL. HDL helps to remove cholesterol from your body. This is why HDL cholesterol is often called the "good" cholesterol. Picture it this way: [point to participant flipchart]

- An easy way to remember is to imagine the LDL as the person in the car ("bad" blood cholesterol), who throws fat and cholesterol into the street (your blood vessels). Just remember the "L" in LDL for Lousy, and the Lower it is, the better.
- The HDL person ("good" blood cholesterol) cleans up fat and cholesterol deposited by the LDL and puts it in the trash (liver).
  Remember the "H" in HDL for Healthy, and the Higher it is, the better.



Image<sup>3</sup>

Say: The goal for LDL (bad cholesterol) is different for everyone, based on risk factors. In general, you would want it to be less than 100 mg/dL, but your doctor can help you set a goal for your LDL level. The goal for HDL (good cholesterol) is 40 mg/dL or higher -- the higher the better!<sup>1</sup>

#### HDL & LDL: What's the difference?



# Total Cholesterol

Ask: How do you find out if you have high blood cholesterol levels or too much fat in your blood? The test is done at your doctor's office and is called a lipid profile. It measures total cholesterol, LDL, HDL, and triglycerides. Your doctor will usually ask you to fast for 12 hours before this test. Do you remember the last time you had this test? If so, do you remember what the results were?

Say: Cholesterol is measured in milligrams per deciliter (mg/dL). Here are what the **total cholesterol** numbers mean:

- Less than 200 mg/dL is the goal.
- 200–239 mg/dL is borderline high. Depending on your other risk factors, you may be at a higher risk for heart disease.
- 240 mg/dL or more is high. You are at a higher risk for clogged arteries and a heart attack. Ask your doctor what your risk is for heart disease.<sup>1</sup>



# Total Cholesterol: What's the goal?



DC 12/4/2020

# Triglycerides

Say: Triglycerides are another type of fat in the blood. When you eat too many calories, drink alcohol, or smoke, your body makes more triglycerides. When your triglycerides are high, it puts you at increased risk for heart disease. A healthy triglyceride level is less than 150 mg/dL. People with high triglycerides often have low HDL cholesterol (good cholesterol). People with diabetes can also have high triglycerides and low HDL cholesterol.

To have a healthy triglyceride level:

- Maintain a healthy weight or lose weight if you are overweight.
- Be physically active on all or most days of the week.
- Eat a heart healthy diet that is low in saturated fat, trans fat, and cholesterol.
- Limit candy, sweets, regular soda, juice, and other drinks high in sugar.
- Avoid smoking cigarettes and drinking alcohol. Smoking raises triglycerides and lowers HDL cholesterol. Excess alcohol also raises triglycerides.<sup>2</sup> Triglycerides: What do the numbers mean?

Ask: Do you know what your last triglyceride level was?

Say: So to review, we've talked about all 4 cholesterol tests: 1) total cholesterol, 2) LDL (bad cholesterol), 3) HDL (good



Image<sup>4</sup>

cholesterol), and 4) tryglycerides. To help you remember what the goals are, I have a wallet card for you to use, and you can write down the results of your next blood test. [provide Supplemental Handout - "Heart Healthy Wallet Card"]

# Triglycerides: What do the numbers mean?



# Heart Healthy Diet

Say: We will talk (or have talked) about nutrition at another time, but there are several key steps to having a heart healthy diet. [provide Supplemental Handout - "Heart Healthy Eating Plan"]

The first is to avoid foods that are high in saturated fat. Examples include whole milk, fatty cuts of meat (such as steak, ground beef, ribs, pork chops), skin of chicken, turkey, and pig, foods fried in grease, shortening and lard, doughnuts, pastries, cakes, and cookies. Foods that are lower in saturated fat include lean meats, fish/seafood, turkey and poultry without the skin, fat-free and low-fat milk, vegetable oil, fruits and vegetables.

The next step is to avoid foods high in trans-fat, as these increase LDL (bad) cholesterol and lower HDL (good) cholesterol. Examples include margarine, shortening, cake mixes and frostings, and flavored non-dairy creamers.

The last step to having a heart healthy diet is passing on the salt, as in sodium! Most of the sodium in our diet comes from packaged foods, restaurants, and fast foods. Examples include canned soups, frozen dinners, chips, lunch meats, hot dogs, and bacon. For packaged foods, you can find out how much sodium is in the product on the label [point to participant flipchart]. For restaurant and fast foods, it is usually very hard to find sodium information, so you should try and stick to heart <u>Heart Hearthy Diet</u>

healthy menu items like lean proteins, whole grains, and/or vegetables if available.<sup>1</sup>

Ask: What are your food weaknesses? What do you eat frequently that might not be considered heart healthy? [use opportunity to strategize about healthier alternatives]



Image<sup>3,5,6</sup> DC 12/4/2020

#### Heart Healthy Diet



DC 12/4/2020

# Heart Attack Basic

Say: A normal artery allows blood to flow freely. A heart attack occurs when the blood supply going to a portion of the heart through one of the coronary arteries is blocked.

Here's how this happens:

- Heart disease, which can lead to a heart attack, develops over time. Fatty deposits build up on the inside of the coronary arteries. When this happens, the arteries become narrower and not enough blood, oxygen, and nutrients get through to meet the needs of the heart. Remember we talked about the garden hose with blood pressure? Imagine if someone stuck a marble in the mouth of the garden hose -- the hose would become blocked.
- The coronary arteries can become blocked, usually by a clot. When this happens, the blood flow is closed off, and a heart attack happens.
- When a heart attack occurs, medical treatment can restore the blood flow to the heart. This keeps the heart muscle from dying, if there is medical treatment right away.
- Treatments work best if given as soon as possible, within 1 hour after warning signs of a heart attack begin.<sup>1</sup>



Image<sup>3</sup>

### What causes a heart attack?



# Heart Attack Warning Signs

- Say: These are the warning signs most commonly reported by women and men who have had heart attacks:
  - **Discomfort** in the center of the chest that lasts more than a few minutes. It can feel like uncomfortable pressure, squeezing, fullness, or pain.
  - **Discomfort** in one or both arms or the back, neck, jaw, or stomach
  - Shortness of breath, with or without chest discomfort
  - Cold sweat
  - Feeling light-headed
  - Nausea or feeling sick to their stomach

Say: [if participant is female] Some women do not feel the above symptoms, or may feel them only slightly or not as severe. Trust your body and your instincts -- if you feel any of the above, even slightly, do not hesitate to let someone know and get help if needed.<sup>1</sup>

Ask: I know that sometimes talking about these things can be difficult, especially if you have a family history or other personal experience with heart attack. But it is very important that we talk about the warning signs because receiving early treatment is crucial. Do you want to take a break for a few minutes or just talk?



Image<sup>3</sup> DC 12/4/2



DC 12/4/2020

# <u>Stroke</u>

Say: Heart disease can also make a person at increased risk for stroke. A stroke is also called a brain attack. A stroke happens when blood suddenly stops going to the brain, and brain cells die. A stroke is very serious and can lead to disability and death.<sup>2</sup>

The warning signs of a stroke happen suddenly. A person may have one or more warning signs.

The warning signs of a stroke include:

- Numbness of the face, arm, or leg (especially on one side of the body)
- Confusion, trouble talking, and difficulty understanding others
- Trouble seeing in one or both eyes
- Trouble walking, dizziness, and loss of balance or coordination
- Severe headache<sup>1</sup>



#### Know the Signs of Stroke & Act Quickly

#### Signs of a stroke:

- Numbness of the face, arm, or leg (especially on one side of the body)
- Confusion, trouble talking, and difficulty understanding others
- Trouble seeing in one or both eyes
- Trouble walking, dizziness, and loss of balance or coordination
- Severe headache



# Talking to Family/Friends & Making a Plan

Say: Now that we have talked about the warning signs of heart attack and stroke, it is very important that you discuss this information with your family and friends so that they are aware of what to do in the event of an emergency.

Another suggestion I have would be to have an emergency card that gives health care providers the information they need to know about you in case of an emergency.

Do you have an emergency card? [if yes:] Say: Let's look at your emergency card. [if no:] Say: I can help you create one if you like?

#### Your emergency card should include the following information:

- Name, relationship, and phone number of emergency contacts who should be called if you have to go to the hospital
- Emergency numbers in your area
- Name and phone number of your doctor or clinic
- Your health conditions
- Current medicines
- Known allergies

Ask:

• Any other important information<sup>1</sup>



Image<sup>3,7</sup>

It would be a good idea to give your family/friends a copy of the card, and to request that they make one too. I know that planning for an emergency can seem scary, but it is very important that doctors have this information as soon as possible if they need to provide treatment.

#### Make a Plan with Family & Friends



# Session Review:

Say: Great! That's all the information I have for today. Just to review, we talked about the following topics today:

- ✓ Basics of Cholesterol
- LDL / HDL
- ✓ Total Cholesterol
- ✓ Triglycerides
- ✓ Heart Healthy Diet
- ✓ Heart Attack Basics
- ✓ Know the Heart Attack Warning Signs
- ✓ Stroke Risk & Warning Signs
- ✓ Make a plan: Talking to Your Family & Friends
- Say: Remind me, of LDL and HDL, which is the "bad" and "good" cholesterol?
- Say: Do you have any other questions about the information we went over? Were there things you learned or didn't know before today? Were there things I didn't talk about that you'd like to discuss at a future visit?

# WORKS CITED:

- National Heart, Lung, and Blood Institute (2007). With Every Heartbeat is Life: Picture Cards for Community Health Workers (NHLBI Publication No. 08-5843). Washington, DC: U.S. Government Printing Office. Retrieved from http://catalog.nhlbi.nih.gov/catalog/product/With-Every-Heartbeat-Is-Life-Picture-Cards-for-Community-Health-Workers/08-5843
- National Heart, Lung, and Blood Institute (2007). With Every Heartbeat is Life, A Community Health Worker's Manual for African Americans (NHLBI Publication No. 08-5844). Washington, DC: U.S. Government Printing Office. Retrieved from http://www.nhlbi.nih.gov/files/docs/resources/heart/aa\_manual.pdf

#### **IMAGES**:

- 1. Blood Pressure Monitor ClipArt < blood-pressure-monitor.png>. Retrieved from <u>http://www.thisisant.com/assets/images/profiles/Blood-Pressure-Monitor.png</u>
- 2. Television ClipArt, <clip-art-television-298391>. Retrieved from <u>http://www.picgifs.com/clip-art/television/clip-art-television-298391-696285</u>
- 3. National Heart, Lung, and Blood Institute (2007). With Every Heartbeat is Life: Picture Cards for Community Health Workers (NHLBI Publication No. 08-5843). Washington, DC: U.S. Government Printing Office. Retrieved from http://catalog.nhlbi.nih.gov/catalog/product/With-Every-Heartbeat-Is-Life-Picture-Cards-for-Community-Health-Workers/08-5843
- 4. National Heart, Lung, and Blood Institute (2007). With Every Heartbeat is Life, A Community Health Worker's Manual for African Americans (NHLBI Publication No. 08-5844). Washington, DC: U.S. Government Printing Office. Retrieved from http://www.nhlbi.nih.gov/files/docs/resources/heart/aa\_manual.pdf
- 5. Healthy Diet ClipArt <heart-healthy-foods.jpg>. Retrieved from <u>http://www.vegan-nutritionista.com/images/heart-healthy-foods.jpg</u>
- 6. Trans Fats ClipArt <unk>. Retrieved from <u>http://www.foodchannel.com/articles/article/trans-fats-may-trigger-aggressive-behavior/</u>
- 7. Village of Rockville Center (2015). *Emergency Health Information Card.* Retrieved from <u>http://www.rvcny.us/RedCross.html</u>