



## Hypertension and Cardiovascular Disease: Improving Blood Pressure Control

Heart, Disease, Stroke and Diabetes Prevention Program  
Community Based Prevention Section

**PUBLIC HEALTH**  
ALWAYS WORKING FOR A SAFER AND  
HEALTHIER COMMUNITY



Hello everyone and thank you for attending today's webinar. It is my hope that through today's training you will better understand the effectiveness and importance of blood pressure self-measurement and how to support the management of HTN.

I want to thank all of my colleagues in the Heart Disease, Stroke, and Diabetes Prevention program for all of their hard work and support in producing today's webinar.

And I also want to thank Colette Rush and Lilia Gomez for the foundational groundwork they did in creating the platform for this training today.

## Today's Presenters

Cheryl Farmer, MD - Manager

[Cheryl.Farmer@doh.wa.gov](mailto:Cheryl.Farmer@doh.wa.gov) | (360) 236-3770

Sara Eve Sarliker, MPH - Hypertension Lead

[SaraEve.Sarliker@doh.wa.gov](mailto:SaraEve.Sarliker@doh.wa.gov) | (360) 236-3799

Heart Disease, Stroke, and Diabetes Prevention

Community-Based Prevention

Office of Healthy Communities

Prevention and Community Health

Washington State Department of Health



## Special Note

**Information contained in this presentation is not medical advice. Every individual needs to consult with their primary health care provider regarding their medical conditions, blood pressure, medications and any other medical concerns.**

# Objectives

Learn about the connections between cardiovascular health and chronic disease

---

Understand why blood pressure control is important

---

Learn what the blood pressure numbers mean

---

Learn how to check blood pressure accurately

---

Learn how to support self-management as a Health Home Care Coordinator



What will we review today?

-we will learn or better understand the relationship between the heart and blood pressure and what the blood pressure numbers mean.

-we will understand why controlling blood pressure is so important for each of us and our community.

## Words You Will Hear

- **Hypertension**

- Also known as elevated or high blood pressure, is a chronic condition.
- If left uncontrolled, **it can lead to damage of the heart, the brain and kidneys.**



Let's review some commonly used words that occur when we talk about hypertension.

### **Hypertension**

Also known as **elevated or high blood pressure**, is a **chronic condition**. The blood vessels have persistently raised pressure which makes the heart work harder in order to pump blood. If left uncontrolled, **it can lead to damage to the heart** (myocardium) (i.e., heart attack/myocardial infarction (**MI**), an **enlargement of the heart and eventually heart failure**, blood vessel damage [e.g., **aneurysms** (bulges in blood vessels)], weak spots **due to the increase high pressure-ruptures** , and clots), **the brain**, and **kidneys**.

## Words You Will Hear

- **Cardiovascular disease (CVD)**
  - Includes any disorders that affect the circulatory system. This includes coronary heart disease, congestive heart failure and stroke.
- **Heart disease**
  - Includes any condition that impairs the structure or function of the heart (i.e., atherosclerotic and hypertensive diseases, congenital heart disease, rheumatic heart disease and cardiomyopathies).



Other terms you may hear are:

**CVD** – disorders that affect the circulatory system

**Heart Disease** – impairs the structure or function of the heart.

## Words You Will Hear

- **Myocardial Infarction (MI)**
  - Commonly known as heart attack -- Most heart attacks happen when a clot in the coronary artery blocks the supply of blood and oxygen to the heart.
- **Stroke**
  - Also called cerebrovascular disease or a brain attack, is the interruption of blood supply to the brain.
  - Can lead to some level of cognitive or physical disability if not fatal.



The next terms we have are...

A blockage that is not treated within a few hours causes the affected heart muscle to die. Myocardial infarction (MI) causes a severe decrease in the pumping function of the heart. Often this leads to an irregular heartbeat - called an arrhythmia.

A blockage **can lead to damage to the heart** (myocardium) (i.e., heart attack/myocardial infarction (**MI**), an **enlargement of the heart and eventually heart failure**, blood vessel damage [e.g., **aneurysms** (bulges in blood vessels)], weak spots **due to the increase high pressure-ruptures**, and clots), **the brain**, and **kidneys**.

### Stroke

Also called **cerebrovascular disease or a brain attack**, is the interruption of blood supply to the brain due to either **an obstruction or rupture of a blood vessel**.

Can lead to some level of cognitive or physical disability if not fatal.

## Other Words You May Hear

- **Peripheral Vascular Disease (PVD)**
  - Narrowing of the blood vessels outside of the heart, causing arteries to narrow or become blocked. Can reduce or stop blood flow, usually to the legs. If severe enough, blocked blood flow can cause tissue death and may lead to amputation of the foot or leg.
- **Chronic Kidney Disease (CKD)**
  - Means kidneys are damaged and can't filter blood as they should. Diabetes and high blood pressure are the most common causes of CKD. Also, chronic kidney disease can cause high blood pressure.



Continuing with our terms:

### **Peripheral Vascular Disease (PVD)**

The cause of PAD is [atherosclerosis](#). This happens when plaque builds up on the walls of the arteries that supply blood to the arms and legs. Plaque is a substance made up of fat and cholesterol. The main risk factor for PAD is smoking. Other risk factors include older age and diseases like diabetes, high blood cholesterol, high blood pressure, heart disease, and stroke.

### **HBP causes [artery damage](#), and the kidneys are packed with arteries.**

Kidneys are supplied with dense blood vessels, and high volumes of blood flow through them. Over time, uncontrolled high blood pressure can cause arteries around the kidneys to narrow, weaken or harden. These damaged arteries are not able to deliver enough blood to the kidney tissue.

Healthy kidneys produce a hormone to help the body regulate its own blood pressure. Kidney damage and uncontrolled high blood pressure each contribute to a negative spiral.

## Other Words You May Hear

- **Angina Pectoris**
  - Angina is [chest pain](#) or discomfort you feel when there is not enough blood flow to your heart muscle.
- **Arrhythmias**
  - An arrhythmia is a problem with the rate or rhythm of your heartbeat. It means that your heart beats too quickly, too slowly or with an irregular pattern.
  - The most common type of arrhythmia is [atrial fibrillation](#), which causes an irregular and fast heart beat.



These are our final two terms:

### **Angina Pectoris**

Commonly known as angina

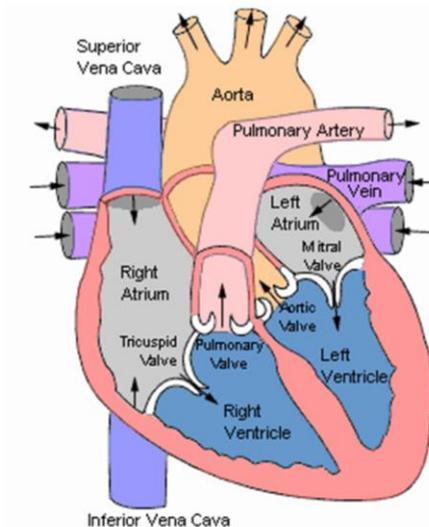
Your heart muscle needs the oxygen that the blood carries. Angina may feel like pressure or a squeezing pain in your chest. It may feel like indigestion.

It is a symptom of coronary artery disease

### **Arrhythmias**

Many factors can affect your heart's rhythm, such as having had a [heart attack](#), smoking, [congenital heart defects](#), and stress. Some substances or medicines may also cause arrhythmias.

## How The Heart Works



### Do not let this picture overwhelm you!

The heart has upper chambers called atrium and lower chambers called ventricles.

The heart has a right atrium which receives blood coming from all over the body. It flows into the right ventricle that then pumps the blood into the lungs to collect O<sub>2</sub>.

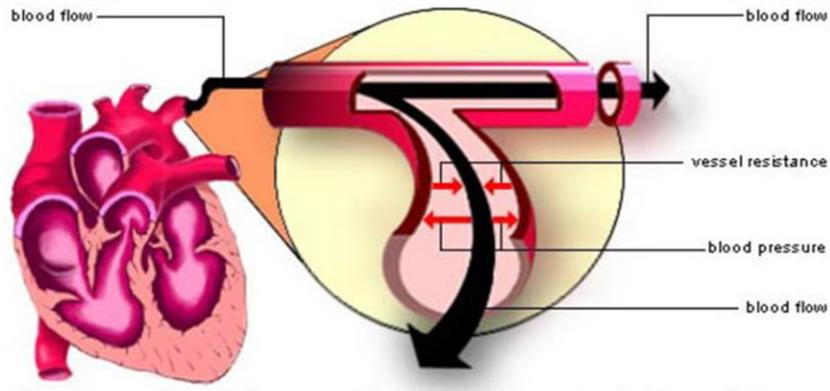
The blood then comes back into the left atrium and flows down into the left ventricle; The left ventricle pumps blood out to the body.

Like a faucet sending water through a garden hose, your heart pumps blood through your blood vessels.

Blood carries oxygen and food to every part of your body, keeping it alive and healthy.

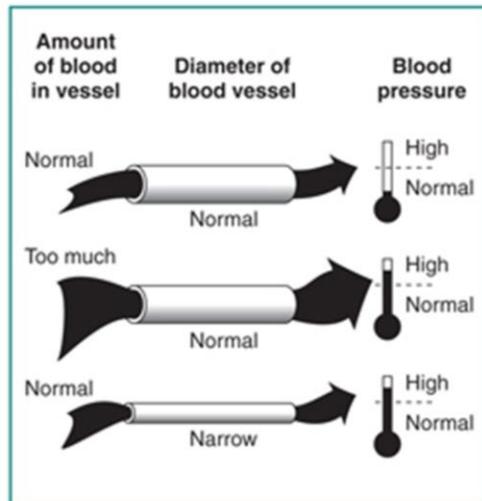
Three layers of tissue form the heart wall. The outer layer of the heart wall is the epicardium, the middle layer is the myocardium, and the inner layer is the endocardium. The myocardium of the heart wall is a working muscle that needs a continuous supply of oxygen and nutrients to function efficiently. For this reason, cardiac muscle has an extensive network of blood vessels to bring oxygen to the contracting cells and to remove waste products.

# What Is Blood Pressure?



Blood Pressure is the pressure exerted by the blood against the walls of the blood vessels.

# What Is Blood Pressure?



**Blood Pressure is the pressure exerted by the blood against the walls of the blood vessels.**

**Question: What would increase the pressure in the blood vessels?**

**Answer:**

- 1-The amount of blood** being pumped out of the heart;
- 2-How hard the heart is pumping** the blood;
- 3-How narrow the blood vessels** causing **increased resistance**.

**Example:** Water in a balloon being squeezed or water hose example

# Blood Pressure Levels For Adults

Blood Pressure Category	Systolic mm Hg (upper #)		Diastolic mm Hg (lower #)
Normal	less than 120	and	less than 80
Prehypertension	120 – 139	or	80 – 89
High Blood Pressure (Hypertension) Stage 1	140 – 159	or	90 – 99
High Blood Pressure (Hypertension) Stage 2	160 or higher	or	100 or higher
<u>Hypertensive Crisis</u> (Emergency care needed)	Higher than 180	or	Higher than 110



Here's how the American Heart Association categorizes Hypertension, as well as pre-hypertension.

## What Do The Numbers Mean?

**Systolic BP** – (top number) – is the amount of pressure inside the blood vessel when the heart squeezes, pumping blood through the vessels to the body.

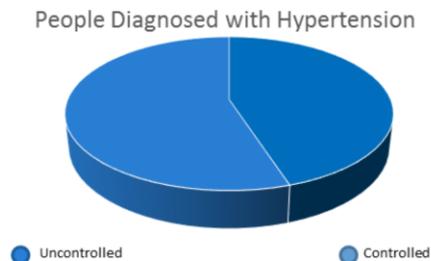
**Diastolic BP** – (bottom number) – is the amount of pressure inside the blood vessel when the heart relaxes and is not pumping.

## Facts About High Blood Pressure

- **1 in 3** adults (about 70 million people) in the US has high blood pressure (HBP)
- Less than **one-half** of those with HBP have it controlled
- People with HBP may not be know, because they do not feel bad or have any symptoms
- It can lead to many chronic diseases (i.e., heart disease, stroke, chronic kidney disease)

## Hypertension (HTN): A Major Risk Factor

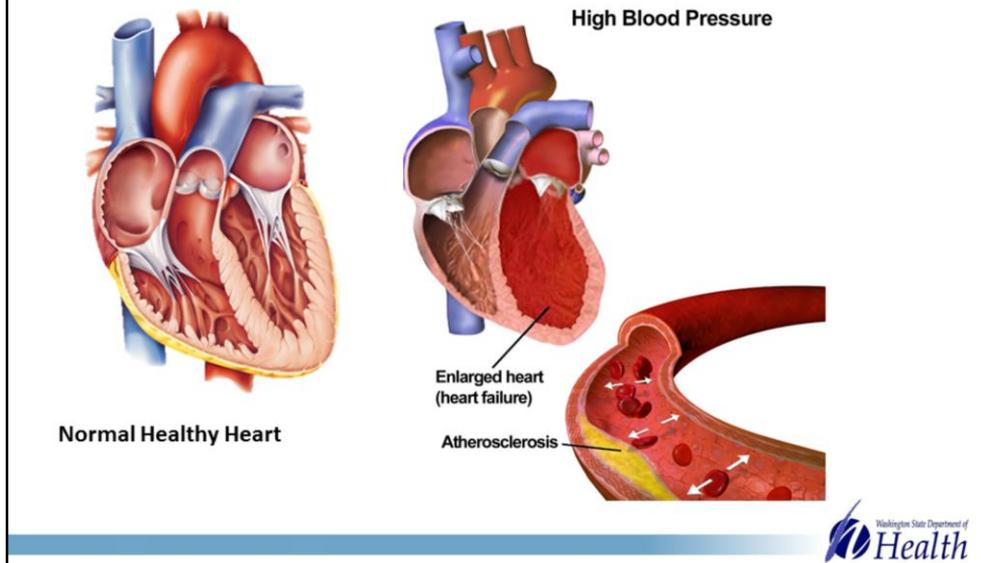
- The Centers for Disease Control and Prevention (CDC) has identified uncontrolled hypertension as a major modifiable risk factor for cardiovascular disease (CVD), stroke, and chronic kidney disease (CKD)



**Less than 50% of people diagnosed with hypertension (HTN) have achieved BP control**, which means that **more than 35 million Americans are at risk for** experiencing **complications due to** the effects of **hypertension**.

**HTN exacerbates** chronic conditions such as **diabetes, renal disease** and dysfunction (hypertensive nephropathy – chronic renal failure), **CAD** (myocardial infarction/heart attack), **heart failure** (hypertensive cardiomyopathy), and **can lead to a shortened life expectancy**.

## What Does High Blood Pressure Do to Our Bodies?



**When the force of the blood hitting the walls of the blood vessels is higher than normal it...**

- 1-Damages the walls of the blood vessels
- 2-Fatty substances stick to the walls
- 3-Vessels get clogged and narrow
- 4-Blood pressure goes up even more
- 5-More damage and higher BP occurs...a vicious cycle

**HBP affects the blood vessels of the heart, brain, kidneys, and legs**

This can cause diseases in these organs – chronic diseases and puts you at risk for heart attack, stroke, kidney failure, or peripheral vascular disease

**HBP is a sign that the heart and blood vessels are being overworked.**

**If untreated, the disease can lead to atherosclerosis and congestive heart failure.**

## Risk Factors for Heart Disease and Stroke

- **Non-modifiable**
  - Age
  - Family-History or Genetics
- **Modifiable**
  - **Hypertension**
  - High Blood Cholesterol
  - Diabetes
  - Difficulty Managing Healthy Weight
  - Smoking
  - Physical Inactivity
  - Poor Nutrition



**This slide reminds us of how significant HTN is as a risk factor for cardiovascular disease.**

**Cardiovascular disease is the leading cause of death for men and women in the United States.**

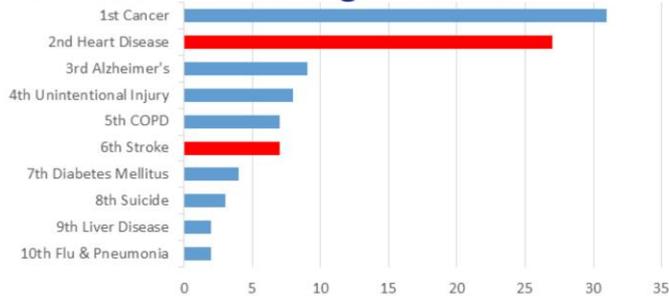
**Accounting for 1 in 3 deaths, and the annual national costs are estimated at \$315.4 billion dollars.**

## Who Is At Higher Risk?

- People with a **family history** of high blood pressure
- **African Americans, Native Americans, and Alaskan Natives**
- People **35 years or older**
- People who are **not at a healthy weight**
- People who **use tobacco**
- People who eat foods with **too much salt**
- People who do **not** eat **enough fruits and vegetables**
- People who drink **too much alcohol**
- Women who **use birth control pills**
- People who **do not exercise**
- **Pregnant women**

## 2014 Washington State 10 Leading Causes of Death

- Heart Disease and Stroke combined are the #1 cause of death in Washington State



So when we look at what is happening in our state and to our residents, this is what we are seeing...

Looking at this data, we see that **heart disease** and **stroke** are currently the **2<sup>nd</sup>** and **6<sup>th</sup>** leading causes of death, respectively. **These two conditions were the #1 cause of death for Washingtonians representing a quarter of all deaths in 2013.**

# Signs of a Heart Attack

- Chest Pressure or Tightness
- Pain in the Chest, Neck, Back, Arms, or Jaw
- Palpitations, fluttering in the chest, abnormal heartbeat
- Anxiety
- Fatigue
- Shortness of Breath
- Lightheadedness
- Sweating (cold sweats)
- Nausea, vomiting, indigestion or gas-like pain



Remember that **hypertension is a major risk factor!**

## Heart attack signs in women:

**Uncomfortable pressure**, squeezing, fullness or pain in the center of your chest. It lasts more than a few minutes, or goes away and comes back.

**Pain** or discomfort **in one or both arms, the back, neck, jaw or stomach.**

**Shortness of breath** with or without chest discomfort.

Other signs such as breaking out in a cold sweat, nausea or lightheadedness.

As with men, women's most common heart attack symptom is [chest pain](#) or discomfort. But **women are somewhat more likely than men to experience** some of the other common symptoms, particularly **shortness of breath, nausea/vomiting and back or jaw pain.**

**If you have any of these signs, call 9-1-1 and get to a hospital right away!**

## Signs & Symptoms of a Stroke

- Sudden **numbness** of arm, face, or leg
- Sudden **confusion**, trouble speaking or understanding
- Sudden **trouble seeing**
- Sudden **trouble walking**
- **Severe headache**



Remember that **hypertension** is a major risk factor!

# F.A.S.T.

- If you **THINK** the person is having a **STROKE**: **CALL 9-1-1 IMMEDIATELY!**
- F.A.S.T. is an easy way to remember the sudden signs of stroke.
  - When you can spot the signs, you'll know that you need to **call 9-1-1 for help** right away.
- F.A.S.T. is:
  - **F - Face Drooping** – Does one side of the face droop or is it numb? Ask the person to smile. Is the person's smile uneven?
  - **A - Arm Weakness** – Is one arm weak or numb? Ask the person to raise both arms. Does one arm drift downward?
  - **S - Speech Difficulty** – Is speech slurred or hard to understand? Ask the person to repeat a simple sentence, like "The sky is blue." Is the sentence repeated correctly?
  - **T - Time to call 9-1-1** – If you see any of these signs, even if the symptoms go away, **call 9-1-1**. Check the time so you'll know when the first symptoms appeared.



**FAST is an easy way to remember and identify the most common symptoms of a stroke.**

Recognition of stroke and calling 9-1-1 will determine how quickly someone will receive help and treatment.

Getting to a hospital rapidly will more likely lead to a better recovery.

# Treatment for High Blood Pressure

Modification	Recommendation	Approximate SBP Reduction (Range)
Reduce weight	Maintain normal body weight (body mass index 18.5–24.9 kg/m <sup>2</sup> )	5–20 mm Hg/ 10 kg
Adopt DASH eating plan	(dietary approaches to stop hypertension) Consume a diet rich in fruits, vegetables, and low-fat dairy products with a reduced content of saturated and total fat	8–14 mm Hg
Lower sodium intake	<ul style="list-style-type: none"> <li>a. Consume no more than 2,400 mg of sodium/day;</li> <li>b. Further reduction of sodium intake to 1,500 mg/day is desirable, since it is associated with even greater reduction in BP;</li> <li>c. Reduce sodium intake by at least 1,000 mg/day since that will lower BP, even if the desired daily sodium intake not achieved</li> </ul>	2–8 mm Hg
Physical activity	Engage in regular aerobic physical activity such as brisk walking (at least 30 min per day, most days of the week)	4–9 mm Hg
Moderation of alcohol consumption	Limit consumption to no more than 2 drinks per day in most men, and to no more than 1 drink per day in women and lighter weight persons	2–4 mm Hg



FDA has approved many medications to treat high blood pressure

Many people with high blood pressure may need more than one medication to reach their goal blood pressure.

Moderation of alcohol consumption: e.g. 24 oz. beer, 10 oz. wine or 3 oz. 80-proof whiskey.

## Common Medications

- **Diuretics (Thiazide)**  
“Water pills,” which help the kidneys flush extra water and salt from your body and decrease blood volume
- **Angiotensin converting enzyme (ACE) inhibitors and Angiotensin II receptor blockers (ARBs)**  
Reduce blood pressure by relaxing blood vessels
- **Beta blockers**  
Cause the heart to beat with less force



FDA has approved many medications to treat high blood pressure  
Lots of different generic and other names out there... they fall into one of these categories, or may come in a combination pill

Many people with high blood pressure may need more than one medication to reach their goal blood pressure.

## Common Medications cont.

- Calcium channel blockers (CCBs) and other direct dilators (relaxers) of blood vessels
  - Drugs that directly relax the blood vessels.
- Alpha blockers
  - Reduce nerve impulses that tighten blood vessels
- Nervous system inhibitors
  - Control nerve impulses from the brain to relax blood vessels

## When Might A Specialist Be Needed?

When primary care unable to control hypertension after following standard protocols

Usually nephrologists, internists

Cardiologists only involved when heart disease is present

## Before Measuring Blood Pressure

- Do not drink coffee for at least 30 minutes before measuring.
- Do not use tobacco products for at least 30 minutes before measuring.
- Do not exercise or eat a large meal two hours before measuring.
- Use the rest room. A full bladder can affect the reading.



Examples: 1-arm above the heart – increases the SBP by +2;

2-feet not flat on the floor – increases the SBP by +5 to 15mmHg;

3-back not supported – increases the SBP by +5 to 15 mmHg;

4-legs crossed – increases the SBP by +5 to 8 mmHg;

5-patient doesn't rest 3 to 5 minutes before having their BP taken –  
increases the SBP by +10 to 20 mmHg;

**6-tobacco or caffeine use – increases the SBP by +6 to 11**

**mmHg;**

7-patient talking – increases the SBP by +10 to 15 mmHg; and

**8-a full bladder – increases the SBP by +10 to 15 mmHg**

## Seating Posture and Proper Cuff Placement

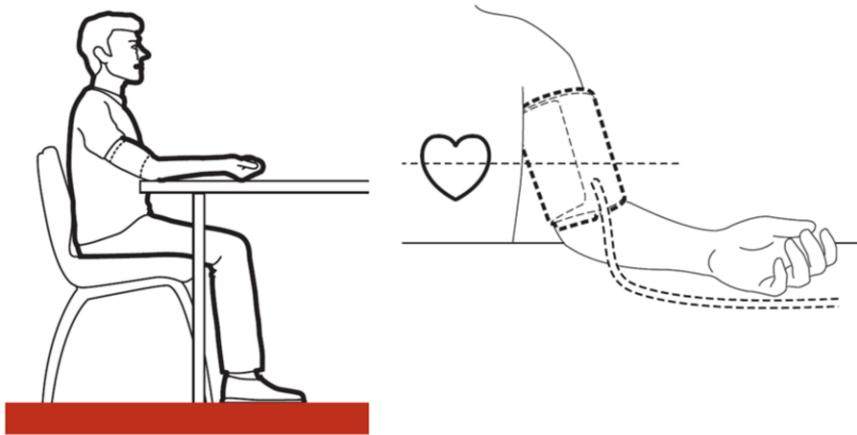
- Sit quietly in a chair for 5 minutes before measuring
- Keep your back supported and feet flat on the ground. Do not cross legs.
- Remove clothing from your upper arm.
- The bottom of the fitted and correctly positioned blood pressure cuff should be about a half inch above your elbow. Arrow over the brachial artery



Wrist cuff types of blood pressure monitors have not been found to be as accurate as the upper arm cuffs.

Common errors in taking BP can occur and when they do...it affects the BP reading.

## Seating Posture and Proper Cuff Placement



## Taking Your Blood Pressure (automated)

- Support your arm at the level of your heart on a table or high armrest.
- Stay in a seated position and avoid talking when taking a measurement.
- Press the **START** button to start the monitor.
- The cuff will inflate and feel tight for a few seconds, then it will relax and display the reading.
- **RECORD THE READING**
- Press the **STOP** button to clear the display.



Blood pressure changes during the day, so it is best to **take your readings** at the **same time every day**. (Give personal examples...)

Take BP on arm with the highest reading

Take your BP 2 times and wait 2 minutes between readings

One of **the best things** a person can do **to manage their BP** is to **Check it at home!**

**Record your BP readings** in a notebook or on a BP Tracker

Take your **BP Monitor** with you **to your doctor** appointment to make sure it is **calibrated** properly; **Take your readings** with you **to each clinic visit** and share the information with your medical provider; **Ask questions/Encourage the client** you are working with **to ask questions** and **follow up** with their provider regularly.

# Other Place to Have BP Taken

- Search on [win211.org](http://win211.org)
- Provider office
- Fire stations
- Drug stores/  
Pharmacies

The screenshot shows the Washington Information Network 2-1-1 website. The header includes the logo and the text "Washington Information Network 2-1-1". Below the header are navigation tabs: "Home", "Search By Keyword", "Search By Topics", and "My Saved Searches". A search bar is visible with the text "My Saved Searches Sign in to View Sign In".

The main content area is divided into two columns. The left column is titled "Narrow Your Results" and contains several filter sections:

- by Searching Within These Results**: A search bar with a "Search" button.
- by Distance**: A dropdown menu set to "Show Results within 25 miles" and a "Show" button.
- by Service Features**: A section with a "Show" button.
- by Group**: A section with a "Click on a group to narrow your results." and a "View All Results (77)" link. Below this are several filter categories with counts:
  - Access (21)
  - Building Accessibility options (1)
  - Days of the Week (59)
  - Disabilities and Health Conditions (4)
  - Hours of Service (6)
  - Languages other than English (10)
  - Payment options (46)
  - Public convenience (2)
- Other Groups**: A dropdown menu set to "Feature" and a "Change" button.

The right column is titled "Search Results" and shows the results for "Blood Pressure Screening". It indicates "1 - 20 of 77 Results" and "Results per page 20 results". Below this are two search results:

- Adams County Integrated Health Care Ser**: A link to "Adult Health Information and Services" with a description: "Provides services for adults age 20 years and over. Activities include blood pressure screenings, influenza immunizations, pregnancy/STD/ HIV/AIDS testing, and provides resources/information on other adult health issues." The website is <http://www.co.adams.wa.us/departments/health> and the last update is 9/3/2015.
- American Red Cross - Snohomish County**: A link to "Medical - Screening Blood Pressure" with a description: "Provides blood pressure screening at various sites throughout Snohomish County." The website is <http://snohomishcounty.redcross.org> and the last update is 12/2/2015.

At the bottom of the search results section, there is a "Use The Results" section with links for "Print results for this screen" and "Email Results".

## Blood Pressure Guidelines

**Unless told otherwise by your provider,**

- If Blood Pressure (BP) is less than 120 (systolic) and less than 80 (diastolic); Normal BP:  
*This is the recommended blood pressure level*
- If Blood Pressure is 120 – 139 (systolic) or 80 – 89 (diastolic); Pre-hypertension stage  
*At this stage, lifestyle modifications to prevent the development of HBP are recommended*
- If Blood Pressure is 140 – 159 (systolic) or 90 – 99 (diastolic); Hypertension Stage 1  
*Medical Follow-up Needed; **See your Doctor***
- If Blood Pressure is 160 or higher (systolic) or 100 or higher (diastolic); Hypertension Stage 2  
*Medical Follow-up Needed; **Call Provider for appointment***
- If Blood Pressure is 180 or higher (systolic) or higher than 110 (diastolic); Hypertensive Crisis:  
**Emergency Care Needed; Call 911**



Find out what has your provider told you about your blood pressure and what actions to take to better control HTN.

## Websites for Tracking Measurement

- American Heart Association
  - [Heart360.org](http://Heart360.org)
- Healthy Circles
  - [Healthycircles.com](http://Healthycircles.com)

## Blood Pressure Measurement

- American Heart Association reports that blood pressure measurements are one of the most **inaccurately performed** measurement in health care.
- Measuring blood pressure (BP) correctly is the **most effective tool** in helping a person self-manage their blood pressure



**Blood Pressure** – an important measurement for evaluating your health

Remember that **High Blood Pressure is a major risk factor for both Heart Disease and Stroke, which together were responsible for 25% of all deaths in WA State in 2013. So your work as care coordinators supports people in your communities with blood pressure support and can help improve the health of those within your communities.**

## The Benefit of Care Coordination on Blood Pressure Measurement

- **Health Home Care Coordinators** can help clients by
  - providing coaching and education
  - encouraging clients to include blood pressure measurement in the Health Action Plan
- **Health Home Care Allied Staff** can help by **reminding and encouraging clients to use their home BP Monitor**

## Individual and Family Support: one of the core HH services

- Health Home (HH) Care Coordinators can:
  - Provide health promotion and education
  - Locate resources
    - Chronic Disease Self-Management Program
    - Places to check blood pressure
    - Physical activity supports
    - Healthy eating supports
    - Mental health supports
  - Support the client to remember appointments and schedule transportation
  - Assist the client in setting up a system to take medications as prescribed
  - Encourage blood pressure self-measurement



# Starting the Conversation

Consider using this assessment to begin brainstorming about potential short-term goals



**Self-Efficacy for Managing Chronic Disease 6-Item Scale**

We would like to know how confident you are in doing certain activities. For each of the following questions, please choose the number that most closely describes how confident you are in doing the activity.

- How confident are you that you can keep the illness caused by your disease from making you do things you want to do?  
not at all confident 1 2 3 4 5 6 7 8 9 10 completely confident
- How confident are you that you can keep a physical condition or pain from making you do things you want to do?  
not at all confident 1 2 3 4 5 6 7 8 9 10 completely confident
- How confident are you that you can keep the emotional distress caused by your disease from making you do things you want to do?  
not at all confident 1 2 3 4 5 6 7 8 9 10 completely confident
- How confident are you that you can keep any other symptoms or health problems you have from making you do things you want to do?  
not at all confident 1 2 3 4 5 6 7 8 9 10 completely confident
- How confident are you that you can do the different tasks and activities needed to manage your health condition so as to reduce your need to see a doctor?  
not at all confident 1 2 3 4 5 6 7 8 9 10 completely confident
- How confident are you that you can do things other than just taking medication to reduce how much your illness affects your everyday life?  
not at all confident 1 2 3 4 5 6 7 8 9 10 completely confident



This is not a required screening for Health Home clients. It may be helpful to use when indicated to assist your clients in assessing their self-efficacy. This can be helpful when developing or revising their Health Action Plan (HAP).

## Suggestions for Short Term Goals

- Follow up with primary care provider
- Learn how to accurately measure blood pressure
  - Action step: Care Coordinator will provide a paper tracker for client to record BP
  - Action step: Care Coordinator will help client locate an application for their computer or phone to track BP (Heart360.org, Healthycircles.com)
- Ask pharmacist or doctor what my medications are and what they do



Tie the goals and action steps based on the client's, parents', or caregiver's level of activation.

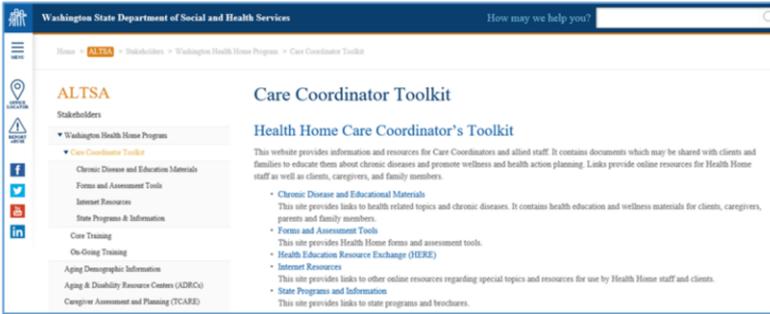
## Suggestions for Short Term Goals

- Caregiver will accompany client to medical appointments
- Client will attend a Chronic Disease Self-Management course
- Client will reduce sodium in their diet
- Client will work towards 30 minutes/day of moderate activity
- Client will begin to check for sodium, fat and saturated fat on food labels

# Resources

## Health Home Care Coordinators Toolkit:

<https://www.dshs.wa.gov/altsa/home-and-community-services/care-coordinator-toolkit>



# Resources cont.

## American Heart Association:

[http://www.heart.org/HEARTORG/HealthyLiving/HealthyEating/Nutrition/The-American-Heart-Associations-Diet-and-Lifestyle-Recommendations\\_UCM\\_305855\\_Article.jsp#Vx\\_SQX\\_2bIU](http://www.heart.org/HEARTORG/HealthyLiving/HealthyEating/Nutrition/The-American-Heart-Associations-Diet-and-Lifestyle-Recommendations_UCM_305855_Article.jsp#Vx_SQX_2bIU)

The screenshot shows the American Heart Association website. The main content area features the article title "The American Heart Association's Diet and Lifestyle Recommendations" with a sub-header "Healthy Eating". Below the title is a photo of a diverse group of people smiling. The article text begins with "A healthy diet and lifestyle are your best weapons to fight cardiovascular disease. It's not as hard as you may think! Remember, it's the overall pattern of your choices that counts. Make the simple steps below part of your life for long-term benefits to your health and your heart." A key message is highlighted: "Use up at least as many calories as you take in." Below this, there are three bullet points: "Start by knowing how many calories you should be eating and drinking to maintain your weight. Nutrition and calorie information on food labels is typically based on a 2,000 calorie diet. You may need fewer or more calories depending on several factors including age, gender, and level of physical activity." and "If you are trying not to gain weight, don't eat more calories than you know you can burn up every day." The right sidebar contains a "Healthy Eating" menu with links to "Healthy Eating Home", "Nutrition", "AHA Diet and Lifestyle Recommendations", "Making Healthy Choices", "Heart-Healthy Grocery Shopping", "National Eating Healthy Day", "Nutrition Basics", "Seasonal Eating", "Heart-Check Mark Certification", "Simple Cooking with Heart", "Heart-Healthy Recipes", and "Dining Out".



# Resources cont.

HERE: Health Education Resource Exchange:

<http://here.doh.wa.gov/>

The screenshot shows the H.E.R.E. website interface. At the top, there is a navigation bar with links for Home, About H.E.R.E., Materials, Professional Resources, Training & Events, Newsletter, and Success Stories. Below this is a search bar and a date indicator: "Last modified: 2016-04-23 13:10". The main content area is titled "What's New in H.E.R.E.?" and contains two sections: "Educational Materials from the Department of Health" and "Events". The "Educational Materials" section lists four items: "Healthy Weight Gain During Pregnancy (see itinerary)", "Diabetes Prevention Program: Stories of Success from WSU", "Washington Immunization Scorecard", and "Whooping Cough is Serious". The "Events" section lists three items: "YTH Live 2016 (Youth-oriented Health Design) (Conference in San Francisco, CA - April 24-26)", "32nd Annual Pacific Rim International Conference on Disability and Diversity (Conference in Honolulu, HI - April 25-26)", and "Working Together to Address Lead Exposure in our Communities (Webinar, April 28)". On the right side, there is a "Find Materials and Events By" section with filters for Language, Audience, Subject, and County. The bottom right corner features the Washington State Department of Health logo.

This is the Department of Health's website. It contains resources on not only cardiovascular disease but other chronic diseases such as diabetes. Please visit the website to find out what educational resources may be available for your clients.

# Resources cont.

Living Well  
with Chronic  
Conditions:  
<http://livingwell.doh.wa.gov/programs/workshops>

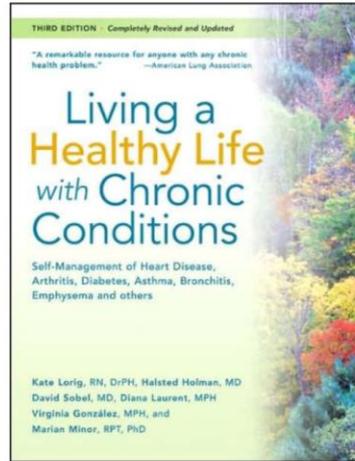
The screenshot shows the 'Living Well with Chronic Conditions in Washington State' website. The main content area is titled 'Contact Information' and includes a link to a list of contacts for workshop questions, sorted by county. Below this, there is a 'Workshops' section with a welcome message and a list of workshops, including 'Living Well with Chronic Conditions' and 'Living Well with Chronic Pain'. The left sidebar contains navigation links such as 'What is Living Well?', 'Find a Workshop', 'Get Trained', 'Programs', 'Resources', and 'Quick Links'. The right sidebar features a 'Filter by Workshop' section with various topics like 'Better Choices, Better Health' and 'Chronic Pain Self-Management', and a 'Search by county' section with checkboxes for Adams, Albin, and Benton counties.



This is the website that contains information about the Chronic Disease Self-Management classes.

## Resources cont.

*Living a Healthy Life  
with Chronic  
Conditions* by Lorig,  
Sobel, Gonzalez,  
and Minor



## Resources cont.

*How to  
Check  
Your  
Blood  
Pressure  
brochure*



This blood pressure tracker is located on the Department of Health's website. It is also available at the Care Coordinators Toolkit located online at DSHS.



## Recommended Videos for Your Client and You

- Unnatural Causes Video clip.  
<https://www.youtube.com/watch?v=bXBkOYMCARo>
- Blood Pressure Demo "MILLION HEARTS INITIATIVE" by the UCD School of Pharmacy.  
[https://www.youtube.com/watch?v=Blqei6\\_s6J0](https://www.youtube.com/watch?v=Blqei6_s6J0)



# References

- American Family Physician; Practice Guidelines – New AHA Recommendations for Blood Pressure Measurement; Vol 72, Number 7, Oct. 2005
- JNC-7 Express:  
[www.nhlbi.nih.gov/guidelines/hypertension/express.pdf](http://www.nhlbi.nih.gov/guidelines/hypertension/express.pdf)
- Pickering TJ et. al. Recommendation for Blood Pressure Measurement in Humans and Experimental Animals. Part 1. Blood Pressure Measurement in Humans. A Statement for Professionals from the Subcommittee of Professional and Public Education of the American Heart Association Council on High Blood Pressure Research. *Circulation* 2005;111:697-716.
- Million Hearts website  
(<http://millionhearts.hhs.gov/resources/toolkits.html#bpToolkit>)
- American Heart Association website (<http://www.heart.org/HEARTORG/>)
- Washington State Department of Health. How to Check Your Blood Pressure. Available at: <http://here.doh.wa.gov>

# Certificate of Completion

## Hypertension and Cardiovascular Disease

presented by Cheryl Farmer and Sara Eve Sarliker  
Washington State Department of Health  
Lacey, Washington

*Webinar aired on: June 9, 2016 in Lacey, Washington  
for Health Home Care Coordinators and Allied Staff*

*Training Credit of 1 Hour*

Please sign and date to attest that you reviewed this PowerPoint

_____	_____
Your Signature	Date
_____	_____
Supervisor's Signature	Date