

# ***Cardiovascular Health***



Eastern Highlands  
Health District  
Spring 2022

# Cardiovascular Health

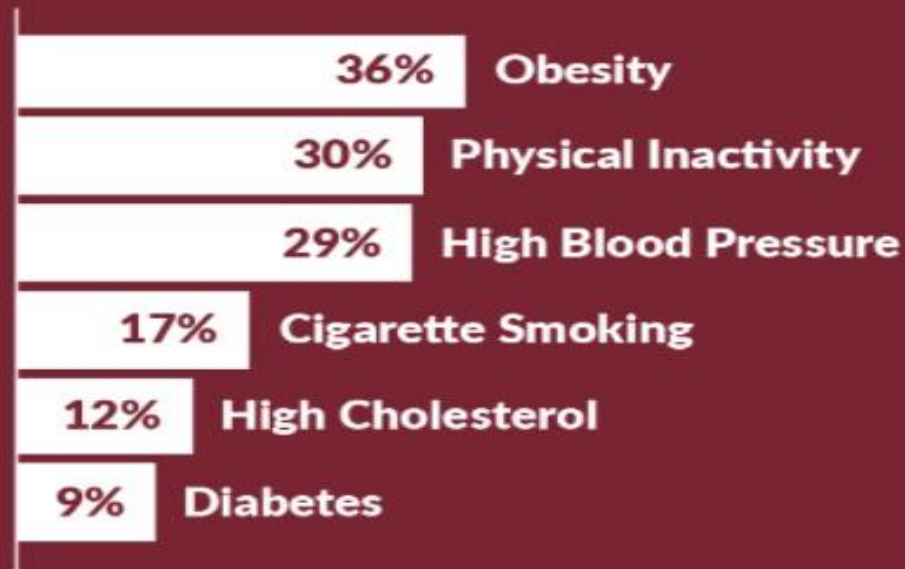
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Cardiovascular health refers to the health of the heart and blood vessels. Cardiovascular disease is a group of diseases of the heart and blood vessels, including coronary heart disease, stroke, heart failure, heart arrhythmias, and heart valve problems. There are several risk factors that lead to the development of cardiovascular disease, including high blood pressure, high blood cholesterol, tobacco use, and diabetes.

# Risk Factors for Cardiovascular Disease (CVD)

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Many Americans have risks for cardiovascular disease



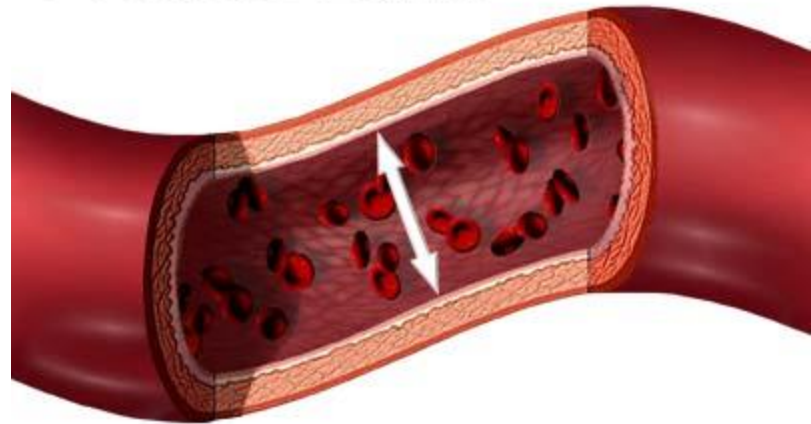
Source: <http://millionhearts.hhs.gov/learn-prevent/risks.html>

# Blood pressure: Sustains Life

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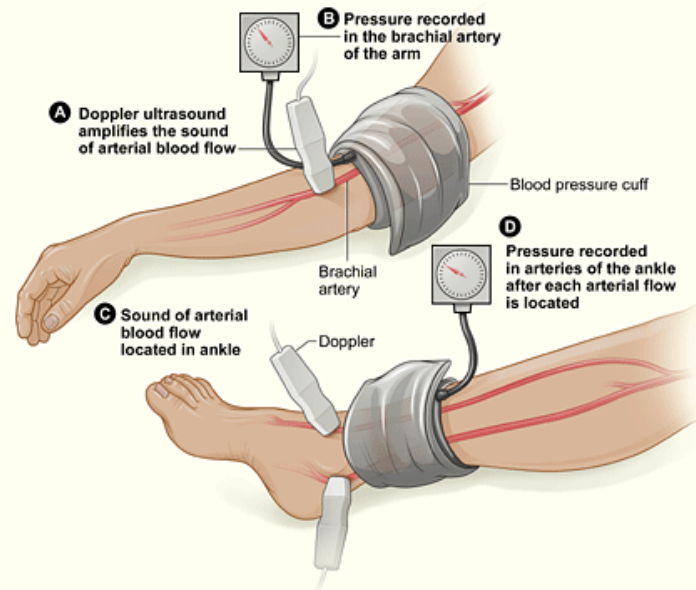
- Is the force of blood pushing against the walls of the arteries
- As the heart pumps out blood
- If this pressure raises and stays high over time
- Can cause damage to the heart, blood vessels, kidneys and other parts of body

Blood pressure is the measurement of force applied to artery walls



# Blood Pressure

- Represented by two numbers
- Systolic and diastolic pressure
- Terms of millimeters of mercury
- 120/80 mm hg



# Systolic: 120 mm of hg

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- Heart is sending out it's blood
- high volume/ peek pressure
- Send blood 5-6 feet
- 1<sup>st</sup> number you hear
- Remember this pressure: affects entire circulatory highway



# Diastolic : 80 mm of hg

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- Last number you hear
- As blood flows aorta, artery, arterioles
- Smaller branches pressure drops
- Resting pressure

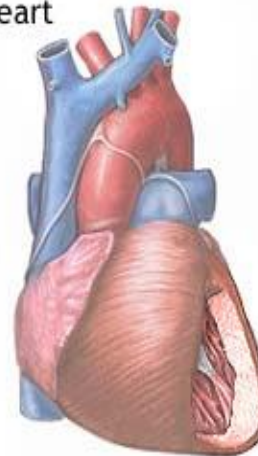


# Who is at risk for HTN

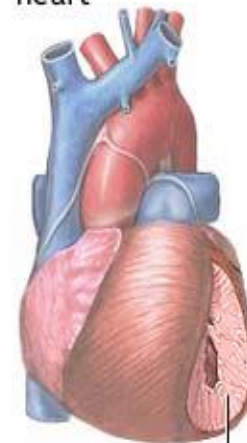
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- 1:3 adults have high blood pressure
- Blood pressure rises with age
- Race/Ethnicity
- Overweight/obese
- Gender:
- Unhealthy lifestyles
- Family history

Normal heart



Hypertensive heart



Thickening in  
walls of ventricles



# How is Blood pressure treated

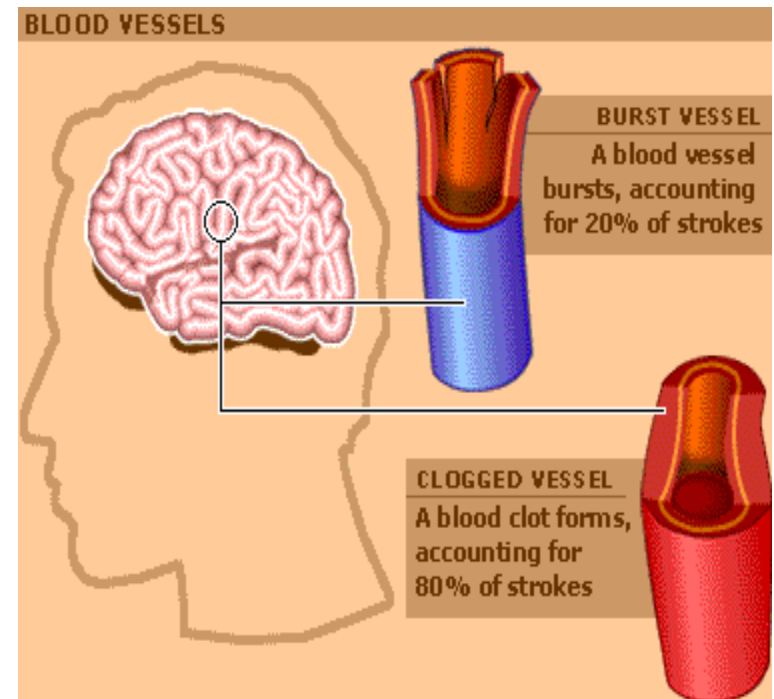
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- Awareness –
- check your BP
- Move it to loose it –
- Stress- is it you?
- On the lips, on the hips:
- Quit/reduce smoking
- Medications



# Stroke

- Change in speech
- Change in smile
- Change in motion
- Change in memory
- Severe headache
- Dizziness/pass out
  
- 911 Aspirin



Source: A.D.A.M.

# Risk Factors for Stroke

Nearly 800,000 Americans die each year from heart disease and stroke. Most of the major risk factors can be managed or prevented.

## Risk factors and solutions for managing them



**High blood pressure** – Make control your goal.



**High cholesterol** – Work with your doctor on a treatment plan to manage your cholesterol.



**Diabetes** – Work with your doctor on a treatment plan to manage your diabetes.



**Tobacco use** – If you don't smoke, don't start. If you do smoke get help to quit.



**Unhealthy diet** – Eat a healthy diet, low in sodium and trans fats and high in fresh fruits and vegetables.



**Physical inactivity** – The Surgeon General recommends adults engage in moderate-intensity exercise for 2 hours and 30 minutes every week.



**Obesity** – Work to maintain a healthy weight.

Source: [CDC](https://www.cdc.gov)

# ATHEROSCLEROSIS

## ATHEROSCLEROSIS STAGES



1. Healthy Artery



2. Fatty Streak



3. Atherosclerosis Plaque



4. Thrombosis



# Atherosclerosis and cholesterol

- Plaque (fatty deposits) build up in your arteries is called atherosclerosis. These deposits are made up of cholesterol, fatty substances, cellular waste products, calcium and fibrin (a clotting material in the blood). Cholesterol is an important part a well functioning body but excess cholesterol can cause damage.
- As plaque builds up, the wall of the blood vessel thickens. This narrows the channel within the artery – reducing blood flow. That lessens the amount of oxygen and other nutrients reaching the body.

# HDL (High-density lipoprotein vs LDL (Low-density lipoprotein)

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- HDL, Sometimes called the “good cholesterol” It takes cholesterol out of the blood and takes it to the liver, where it can be removed from the body.
- LDL, sometimes called the “bad cholesterol” it transports cholesterol that can stick to the arteries and cause a build-up of plaque which can go on to cause blockage of blood vessels, atherosclerosis.
- According to the National Institutes of Health, the most common cause of high LDL is an unhealthy lifestyle. [NIH](#)

# Treatment for High Cholesterol and Atherosclerosis

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- may include heart-healthy lifestyle changes
- medicines
- medical procedures or surgery

# Reducing Your Risk For CVD

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- Healthy eating, including reducing salt intake
- Oral hygiene
- Physical activity
- Stress reduction
- Regular Medical check-ups

# Eat a Healthy Diet: New dietary guidance emphasizes balance: It's not all or nothing

Here are some tips to help you and your family adopt a healthier eating style:

## INCLUDE

- [Fruits and vegetables](#)
- [Whole grains](#)
- [Beans and legumes](#)
- [Nuts and seeds](#)
- [Fish](#) (preferably oily fish with omega-3 fatty acids)
- [Skinless poultry and lean animal proteins](#)
- [Plant-based proteins](#)

## LIMIT

- Sweetened drinks
- [Sodium and salty foods](#)
- [Saturated fats](#) and dietary cholesterol
- Fatty or processed red meats – if you choose to eat meat, select leaner cuts
- Refined carbohydrates like added sugars and processed grain foods
- Tropical oils such as coconut and palm oil

Source: American Heart Association





# GOT FIBER?

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- Fiber helps to block the absorption of cholesterol in the digestive system
- Fiber helps to eliminate waste from the body
- Fiber help to make you feel full

# Sources of Fiber

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Experts suggest healthy adults should eat 25 to 38 grams of fiber a day.

- Whole grains
- Fruits and vegetables
- Nuts



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**What are some good sources of fiber in your diet?**

# Reduce Salt Intake

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Experts recommend that adults take in less than 2,300 milligrams (mg) of sodium a day—that's what's in about 6 grams of salt, or about a teaspoon. People with high blood pressure should shoot for 1,500 mg.



Source: National Institutes of Health

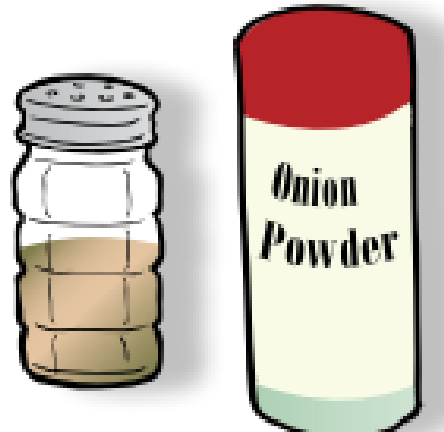
# Fill the salt shaker with a mixture of herbs and spices

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Use it instead of salt to flavor foods.

For example, try this recipe:

- 2 tablespoons black pepper
- 1 tablespoon cayenne pepper
- 1 tablespoon paprika
- 1 tablespoon onion powder
- 1 tablespoon garlic powder
- 1 bay leaf, ground



# Choose low-fat Protein Sources

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## Proteins to choose

- Low-fat dairy products, such as skim or low-fat (1%) milk, yogurt and cheese
- Eggs
- Fish, especially fatty, cold-water fish, such as salmon
- Skinless poultry
- Legumes
- Soybeans and soy products, such as soy burgers and tofu
- Lean ground meats

## Proteins to limit or avoid

- Full-fat milk and other dairy products
- Organ meats, such as liver
- Fatty and marbled meats
- Spareribs
- Hot dogs and sausages
- Bacon
- Fried or breaded meats



# Choose Healthier Fats

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## Fats to choose

- Olive oil
- Canola oil
- Vegetable and nut oils
- Margarine, trans fat free
- Cholesterol-lowering margarine, such as Benecol, Promise Activ or Smart Balance
- Nuts, seeds
- Avocados

## Fats to limit

- Butter
- Lard
- Bacon fat
- Gravy
- Cream sauce
- Nondairy creamers
- Hydrogenated margarine and shortening
- Cocoa butter, found in chocolate
- Coconut, palm, cottonseed and palm kernel oils

# Eat More Fruit and Vegetables

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- Leafy Greens
- Berries
- Citrus
- Carrots
- Celery
- Broccoli



Source: Google



# Oral Hygiene

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Oral health refers to the health of the teeth, gums, and the entire oral-facial system that allows us to smile, speak, and chew. Some of the most common diseases that impact our oral health include cavities (tooth decay), gum (periodontal) disease, and oral cancer.

According to the Centers for Disease Control and Prevention (CDC) poor oral health is associated with heart disease.



## 9 Ways to Care for Your Oral Health





**1**

Brush twice a day with fluoride toothpaste.

Keeping your teeth and gums clean can prevent cavities and gum disease.



**2**

Visit the dentist regularly.

Checkups can find tooth decay, gum disease, and other problems before they lead to more serious issues like tooth loss.



**3**

Drink fluoridated water

to keep teeth strong and reduce cavities.



**4**

Avoid all tobacco products  
and limit alcohol.

People who smoke have twice the risk of gum disease compared to people who don't smoke.



**5**

Limit sugary snacks and drinks,  
which can lead to cavities and other oral health problems, as well as obesity and type 2 diabetes.



**6**

If you have diabetes,  
work with your doctor to  
monitor your A1C levels.  
A high blood sugar level is associated with increased risk of gum disease and cavities.



**7**

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**Talk to your dentist about applying dental sealants.**

Dental sealants are thin coatings that when painted on the chewing surfaces of the back teeth (molars) can prevent cavities for many years.



**8**

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**Floss your teeth daily.**

Removing the dental plaque between teeth helps prevent decay.



**9**

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**It's safe to get regular and emergency dental care while pregnant.**

During pregnancy, you may be more prone to gum disease and cavities.

# Manage Stress

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- **Get enough sleep.**
- **Exercise regularly.** Just 30 minutes a day of walking can boost mood & reduce stress.
- **Build a social support network.**
- **Set priorities.** Decide what must get done and what can wait. Say no to new tasks if they are putting you into overload.
- **Think positive.** Note what you've accomplished at the end of the day, not what you've failed to do.
- **Try relaxation methods.** Mindfulness, meditation, yoga, or tai chi may help.
- **Seek help.** Talk to a mental health professional if you feel unable to cope, have suicidal thoughts.



# Physical Activity





# Examples of Physical Activity

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Before starting any new exercise routine please consult with your medical provider.

The best exercise has a positive effect on the heart and improves the skeletmuscular system.

The American Heart Association and the American College of Sports Medicine both recommend combining aerobic exercise (jogging, swimming, biking) with resistance training (moderate weightlifting).

Together, these two categories of exercise produce the greatest benefit for preventing and managing heart disease.



# Move Your Way, a program of Office of Disease Prevention and Health Promotion, a part of NIH



U.S. Department of Health and Human Services



Office of Disease Prevention and Health Promotion



## Walk. Run. Dance. Play. What's your move?

Everyone needs physical activity to stay healthy. But it can be hard to find the time in your busy routine.

The Move Your Way® tools, videos, and fact sheets on this page have tips that make it easier to get a little more active. And small changes can add up to big health benefits!

**No matter who you are, you can find safe, fun ways to get active — to move your way.**

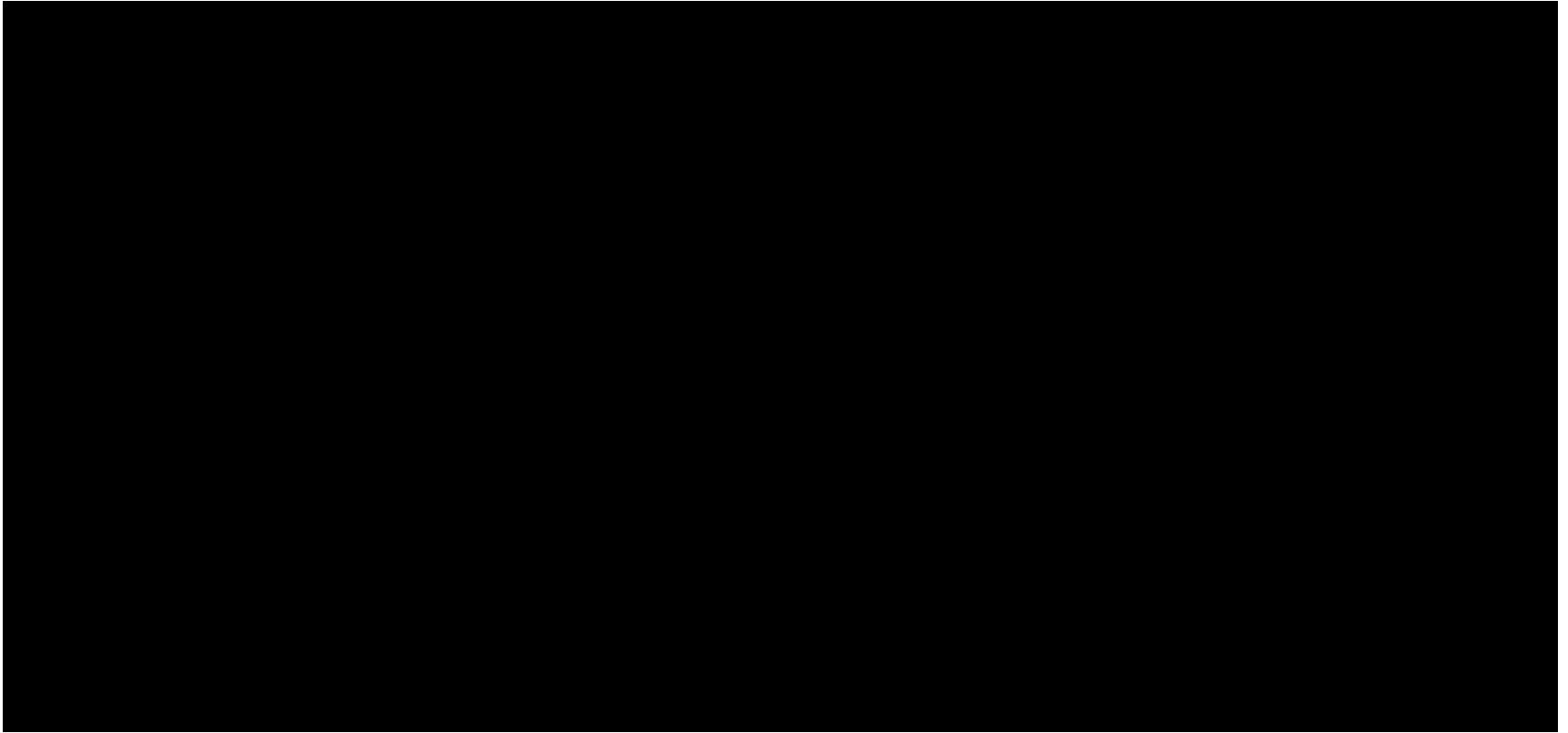
Find tools and resources:

- [For adults](#)
- [For parents](#)
- [For during and after pregnancy](#)

<https://health.gov/moveyourway>

# **Regular Medical Appointments**

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# Questions?

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# Sources

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- American Heart Association, [Healthy Living](#)
- Centers for Disease Control and Prevention (CDC), [Heart Disease Prevention](#)
- Centers for Disease Control and Prevention (CDC), [Oral Health is Good for Overall Health](#)
- Centers for Disease Control and Prevention, [Vital Signs Preventable Deaths From Heart Disease and Stroke](#)
- [A.D.A.M. Health](#)
- Grulke RN MS, Christina, PPT Cardiovascular Health, 2014

# Thank you

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To get credit for this on-line version of the training please complete the short [quiz](#).

