# SAFETY & LOSS PREVENTION

# AMERICAN HEART MONTH

This February, make your heart health a priority by finding out your risk of heart disease and learning how you can make changes now to help your heart for a lifetime.



**ISSUE 1** VOLUME 11

JAN-MAR 2020



## FEBRUARY IS AMERICAN HEART MONTH

FEBRUARY 7 National Wear Red Day FEBRUARY 9-15 National Cardiac Rehabilitation Week FEBRUARY 22 National Heart Valve Disease Awareness Day

# IN THIS ISSUE

Young At Heart	1
3 Key Risk Factors of Cardiovascular Disease	2
What Does It Mean? Deciphering Hazard Communication Pictograms	5
SFLPP Webinar Schedule / References / Resources	8
Credits	9



Cardiovascular disease (CVD), otherwise known as heart disease, is the leading cause of death for both men and women in this country. According to the U.S. Department of Health and Human Services, one in four deaths can be linked to heart disease. Here in Florida, more that 46,000 people died of heart disease in 2017 – the number one cause of death in the state.

In recent years, the average age of heart disease patients has decreased, because the conditions that lead to heart issues, such as high blood pressure, high cholesterol, and diabetes, are happening at younger ages.



## **DETERMINE YOUR "HEART AGE"**

Your heart age is the age of your heart and blood vessels based on certain risk factors. Knowing your heart age can help you to understand your risk of a heart attack or stroke. According to the CDC, most American adults – as many as 1 in 2 men and 2 in 5 women – have a heart age at least 5 years older than their actual age. There are some risk factors that cannot be changed, such as age and family history, but many other risk factors can. The most common causes for high heart age are: high blood pressure; high cholesterol; smoking; obesity; unhealthy diet; physical inactivity; and diabetes.

This chart shows how factoring in risks can affect a person's heart age:

ACTUAL AGE	REASONS	HEART AGE
45 year old male	<ul> <li>Smoker</li> <li>High blood pressure (systolic blood pressure of 150 mm Hg)</li> <li>Diabetic</li> <li>Healthy weight (body mass index {BMI} of 23)</li> </ul>	75 Years
50 year old female	<ul> <li>Non-Smoker</li> <li>High blood pressure (systolic blood pressure of 148 mm Hg)</li> <li>Diabetic</li> <li>Obese (BMI of 32)</li> </ul>	85 Years

If you know your HDL and total cholesterol numbers, or your BMI (body mass index), you can calculate your heart age here. Once you learn your heart age, you can work on making changes to improve it.

- A Construction of a 70-year-old man will have beaten about 2.5 billion times!
  The earliest known case of heart disease was
  - The earliest known case of heart disease was identified in the remains of a 3,500-year-old Egyptian mummy.



## **KEY RISK FACTORS** OF CARDIOVASCULAR DISEASE

About 47% of all Americans have at least one of these: hypertension, high cholesterol, and/or smoking. Making healthy choices and managing existing health conditions can decrease the risk of cardiovascular disease.

## **HYPERTENSION**

Also referred to as high blood pressure or HBP, this condition causes the blood pumping through your body to put too much pressure on your blood vessels, which can damage your heart and harden your arteries, which decreases blood flow. This can cause chest pain, heart failure (when your heart can't pump enough blood and oxygen to other organs), or a heart attack (when the tissues of the heart begin to die from lack of oxygen). Nearly half of American adults have high blood pressure, according to the American Heart Association. HBP is called the "silent killer" because it often has no warning signs or symptoms, which is why it is important to get your blood pressure checked regularly.

BLOOD PRESSURE CATE- GORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 - 129	and	LESS THAN 80
HIGH BLOOD PRESSURE	130 - 139	or	80 - 89
HIGH BLOOD PRESSURE (Hypertension) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (Consult your doctor immediately)	HIGHER THAN 180	and/ or	HIGHER THAN 120

There are many uncontrollable factors that increase your risk of developing hypertension:

- Family history
- Age and gender (men are more likely to develop HBP before age 64, at which point the risk for women increases)
- Race (African Americans tend to develop HBP more frequently and have more severe, difficult-to-treat cases)
- Chronic kidney disease (CKD)

However, you can help prevent and manage high blood pressure by modifying your behavior in the following ways:

- Increasing physical activity
- Eating a healthy, low-sodium diet
- Maintaining a healthy weight (not overweight or obese)
- Drinking alcohol in moderation, if at all
- Controlling obstructive sleep apnea
- Lowering your cholesterol (learn how below)
- Quitting tobacco use
- Decreasing stress
- Taking medication to lower your blood pressure as prescribed by your doctor

Learn more about how to manage your blood pressure at the American Heart Association website: https://www.heart.org/en/health-topics/high-blood-pressure

## **CHOLESTEROL**

Your liver makes blood cholesterol in order to build cell membranes, make hormones, produce vitamin D, and help your metabolism work efficiently. You also get cholesterol from foods like eggs, meats, and dairy.

There are two types of cholesterol: high-density lipoprotein (HDL) and lowdensity lipoprotein (LDL). HDL is known as "good cholesterol" because it helps to prevent heart disease by collecting and transferring cholesterol to the liver for disposal. LDL is referred to as "bad cholesterol" because it can cling to the walls of arteries, leaving fatty deposits called plaque, constricting blood flow. These plaque deposits can sometimes break from the vessel wall and form a clot, causing a heart attack or stroke. As a general rule, high levels of HDL and low levels of LDL are ideal.

As with hypertension, high cholesterol has no symptoms. It can be discovered through blood tests done by your doctor. Some blood donation centers will test your blood for you when you donate and give you your lipid numbers.

	HDL Cholesterol	LDL Cholesterol	Total Cholesterol
HIGH RISK	Below	Above	Above
	40 mg/dL	160 mg/dL	240 mg/dL
MODERATE RISK	41-59 mg/dL	130-159 mg/dL	200-239 mg/dL
DESIRABLE	Above	Below	Below
	60 mg/dL	129 mg/dL	200 mg/dL

Also like high blood pressure, there are uncontrollable factors at play here:

- Family history
- Age and gender (cholesterol levels increase with age, and women's LDL tends to increase significantly after menopause)
- Chronic conditions, such as hypothyroidism, liver disease, and kidney disease
- Certain medications, such as steroids and progestins, may increase LDL and decrease HDL

However, there are several things you can do to help get your cholesterol numbers into the healthy zone:

- Maintain a healthy weight
- Increase physical activity
- Eat a diet high in HDLs and low in LDLs

HIGH HDL FOODS	HIGH LDL FOODS
OLIVE OIL	FRIED FOODS
<b>BEANS &amp; LEGUMES</b>	HYDROGENATED OILS
WHOLE GRAINS	MEATS
FISH w/ OMEGA-3s	WHOLE-FAT DAIRY
NUTS & SEEDS	SUGARY BEVERAGES
AVOCADO	PASTRIES

## **SMOKING**

According to the CDC, more than 800,000 Americans each year die from smokingrelated cardiovascular conditions. The risk of CVD increases with the number of cigarettes smoked per day. Smoking cigarettes with lower levels of tar or nicotine does not decrease this risk.

Even nonsmokers are not safe from smokingrelated CVD – more than 33,000 nonsmokers in the U.S. die each year from coronary heart disease caused by exposure to secondhand smoke.



When you smoke a cigarette, cells in the lining of your blood vessels become swollen and inflamed. Chemicals in cigarette smoke also cause the blood to thicken and form clots inside blood vessels. This can lead to numerous cardiovascular conditions, such as:

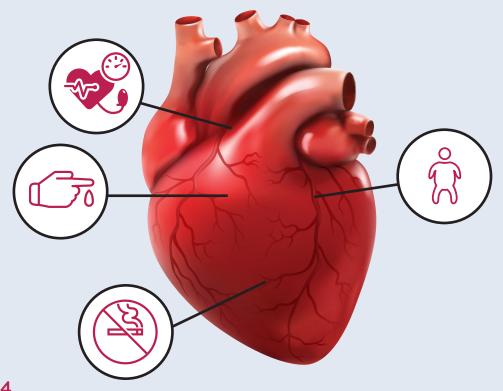
- Atherosclerosis arteries become narrow and less flexible, making it difficult for blood to flow to various parts of the body, causing plaque build up in the blood vessels.
- Coronary Heart Disease arteries that carry blood to the heart become narrowed or blocked, which can cause a heart attack and sudden death.
- Peripheral Arterial Disease (PAD) and Peripheral Vascular Disease (PVD) — narrowed blood vessels restrict the flow of blood to arms, legs, hands, and feet. In extreme cases, limbs become infected and must be amputated.
- Abdominal Aortic Aneurysm a bulge or weakened area in a portion of the aorta (the main artery carrying oxygen-rich blood through the body) in the abdomen. Almost all deaths from abdominal aortic aneurysms are caused by smoking.

There is good news for smokers, however. Although smoking damages the cardiovascular system very quickly, this damage is also repaired very quickly once smoking stops, even for long time smokers. Risk of heart attack drops dramatically after only one year, and after five years, risk of stroke is cut to nearly that of a nonsmoker.

## HOW CAN YOU LIVE A **HEART HEALTHY LIFESTYLE?**

### Watch your weight.

- Don't smoke and if you start smoking, quit. Get help for free at 1-800-QUIT-NOW and smokefree.org.
- Avoid secondhand smoke.
- Keep your cholesterol and blood pressure low with diet, exercise, and medication if necessary.
- - If you drink alcohol, drink only in moderation.
- Eat healthy foods.
- Stay active.



## **GETTING YOUR HEART BACK ON THE RIGHT TRACK**



High Blood Pressure – Make control your goal.



High Cholesterol – Work with you 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. Avoid secondhand smoke.



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



Physical Inactivity - Get 150 minutes every week of a moderat intensity exercise such as brisk walking.



**Obesity** – Maintain a healthy weight.

## WHAT DOES IT MEAN? DECIPHERING HAZARD COMMUNICATION PICTOGRAMS

You've likely seen these pictograms on chemical labels. But do you know which dangers they warn about?



We encounter thousands of chemical products throughout our lives, both at home and in the workplace. How can you determine whether a material is safe or hazardous?

As of June 1, 2015, the Hazard Communication Standard (HCS) requires pictograms on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed by a red diamond-shaped border and represents a specific hazard.

#### HEALTH HAZARD



Also known as the "exploding", "radiant", or "crumbling" man, this pictogram is used to label substances that can cause chronic, long-term health hazards, such as respiratory issues, reproductive issues, or organ toxicity.

Examples: Acids, cleaning products such as toilet cleaners, disinfectants, mildew remover, and chlorine bleach, glues, heavy metals such as mercury, lead, and aluminum, paint, pesticides, petroleum products, solvents, and photocopier toner.

#### SKULL & CROSSBONES



This symbol has been standard for centuries to indicate poison. Substances with this symbol have an immediate and severe toxic effect (acute toxicity).

Examples: Alcohol, medications, food supplements such as vitamins, minerals, and herbal products, nail polish, mouthwash, household cleaners, and pesticides.

In addition to the pictogram, warning labels on hazardous substances should contain the following:

- Name of manufacturer;
- Name of the product;
- Signal word "Danger" (for more severe hazards) or "Warning" (for less severe hazards);
- Hazard statement describing the nature of the hazard; and
- Precautionary statements describing recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure. There are four types of these statements: prevention (to minimize exposure), response (in case of accidental exposure), storage, and disposal.

#### FLAME



The flame indicates a flammable material or substance — one which is liable to self ignite when exposed to water or air (pyrophoric), or which emits flammable gas. NOTE: This symbol is also used for combustible liquids, typically with the addition of the word "COMBUSTIBLE".

Examples: Natural gas, propane, butane, gasoline, ethanol, methanol, acetone, rubber, isopropyl alcohol, diesel fuel, ethylene glycol, wood, and paper.

#### EXCLAMATION MARK



The exclamation mark draws attention to materials which can cause acute, or short-term health effects — irritants (skin, eye, or respiratory tract), skin sensitizers, materials with acute toxicity, and narcotics, as well as those hazardous to the ozone layer.

Examples: Hydrogen sulfide, arsenic, organophosphate pesticides, formaldehyde, ammonia, halogens, and sulfur dioxide.

#### **EXPLODING BOMB**



This symbol can be found on labels of chemical substances that are explosive, self-reactive (heating may cause fire or explosion without the need for air), or organic peroxides (may explode when heated).

Examples: Nitroglycerin, dynamite, blasting caps, flash powder, liquid oxygen, and TNT.

#### FLAME OVER CIRCLE



Materials labeled with this symbol are oxidizers, which are chemicals that facilitate burning or make fires burn hotter and longer by increasing the concentration of oxygen in the air.

Examples: Peroxides such as benzoyl peroxide, and concentrated hydrogen peroxide, nitric acid, bleach, concentrated perchloric acid, concentrated sulfuric acid, and oxygen.

For example, a container of paint thinner might have a label that looks like this:

#### T-100 LACQUER THINNER UN1263, PAINT RELATED MATERIAL



DANGER Hazard Statements:

Highly flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life.

#### **Prevention:**

Obtain special instruction before use. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Use explosion-proof electrical, ventilating, and lighting equipment. Use only non-sparking tools. Do not breathe dust, fumes, gas, mist, vapors or spray. Wash skin thoroughly after handling. Use only in well ventilated area. Wear protective gloves, chemical protective clothing, eye protective goggles and face shield.

#### **Response:**

If swallowed, immediately call poison center or doctor. If on skin, take off immediately all contaminated clothing and rinse skin with water. If inhaled, remove person to fresh air. Do NOT induce vomiting. If skin irritation occurs, get medical attention. In case of fire, use water spray, foam, dry chemicals, carbon dioxide, or other type of vapor producing extinguisher.

#### Storage:

Store in well ventilated place. Keep container tightly closed. Keep cool. Store locked up.

#### Disposal:

Dispose of container in accordance with local, regional, national, or international regulations.



#### CORROSION



As depicted in the symbol, these substances are corrosive and can cause skin burns, eye damage, and destruction of metals. Swallowing or inhaling corrosives can burn the lining of the nose, mouth, throat, esophagus, and stomach, and in serious cases can result in pulmonary edema.

Examples: Hydrochloric acid, sulfuric acid, ammonium hydroxide, potassium hydroxide, and sodium hydroxide.

#### **GAS CYLINDER**



The gas cylinder indicates a compressed, liquefied, or dissolved gas under pressure. These materials can cause fires, explosions, oxygen deficient atmospheres, and toxic gas exposures.

Examples: Liquid petroleum gases such as propane and butane, oxygen, helium, nitrous oxide, and chlorine.

#### ENVIRONMENT



This non-mandatory pictogram means the chemical can cause aquatic toxicity and can harm aquatic wildlife if dumped into a body of water.

Examples: Domestic wastes, insecticides, herbicides, food processing wastes, and heavy metals.

For more information, visit the U.S. Department of Labor's Occupational Safety & Health Administration website for its informational booklet on Chemical Hazard Communication. www.osha.gov/Publications/osha3084.html A quick glance at the pictograms on the label will tell you that this chemical is poisonous, flammable, and poses both long and short term health hazards.

Per OSHA guidelines, employers are responsible for maintaining safety labels on all containers, such as tanks, totes, drums, and cylinders, which contain hazardous materials. The labels must be maintained so that the pertinent information is legible. If the employer becomes aware of newly-identified hazards not already disclosed on the label, the employer must ensure that the workers are aware of these hazards.

What kind of hazardous materials might an employee encounter as part of their job? Here are a few examples.

- Office workers: rubber cement, cleaning products, disinfectants, inks, solvents, copy machine and printer chemicals, batteries
- Custodians: cleaning products, bleach, floor finishes, paint, solvents, drain cleaners
- Groundskeepers: fertilizers, pesticides, weed killer, insect repellent, paint, fuel
- Laboratory workers: chemicals, bacteria, radioactive materials, medications
- Law enforcement: explosives, artillery, fuel, chemical weapons, lead
- Healthcare workers: medications, pressurized gases, fixatives such as toluene and formaldehyde



An email blast will be sent from the State Loss Prevention Program prior to each of these webinars with registration information.

## UPCOMING TRAINING WEBINARS FOR 2019:

1/15/20 ACCIDENT INVESTIGATIONS

1/29/20 SAFETY COORDINATOR ORIENTATION

2/12/20 WORKERS' COMPENSATION & RETURN TO WORK

> 3/11/20 FACILITY & EQUIPMENT INSPECTIONS

3/25/20 HOW TO GET THE MOST OUT OF YOUR SAFETY COMMITTEE

> 4/8/20 PROMOTING EMPLOYEE SAFETY AWARENESS

All webinars will be offered on each date through GoToMeeting at both 10:00 am and 2:00 pm (Eastern Time).

For questions, contact Juana Powell in the Division of Risk Management / Loss Prevention: Juana.Powell@myfloridacfo.com

## **REFERENCES AND RESOURCES**

"Stats of the State of Florida," Centers for Disease Control and Prevention, National Center for Health Statistics, 2019. <u>www.cdc.gov/nchs/pressroom/states/florida/</u><u>florida.htm</u>

"Fun Facts About the Heart You Didn't Know," Diana Wells, Healthline, July 6, 2017. www.healthline.com/health/fun-facts-about-the-heart#1

"Heart Disease: It Can Happen at Any Age," Centers for Disease Control and Prevention, CDC Features, February 12, 2018. <u>www.cdc.gov/features/heartmonth/index.html</u>

"Heart Age: Is Your Heart Older Than You?" Centers for Disease Control and Prevention, Vital Signs, September 1, 2015. www.cdc.gov/vitalsigns/heartage/index.html

"Know Your Risk Factors for High Blood Pressure," American Heart Association, December 31, 2017. <u>www.heart.org/en/health-topics/high-blood-pressure/why-high-</u> blood-pressure-is-a-silent-killer/know-your-risk-factors-for-high-blood-pressure

"11 Foods to Increase Your HDL," Katherine Marengo, LDN, RD, Healthline, March 27, 2019. www.healthline.com/health/high-cholesterol/foods-to-increase-hdl

"Framingham Heart Study," Boston University & the National Heart, Lung, & Blood Institute, n.d. <u>www.framinghamheartstudy.org/fhs-risk-functions/</u> <u>cardiovascular-disease-10-year-risk/?CDC\_AA\_refVal=https%3A%2F%2Fwww.cdc.</u> gov%2Fvitalsigns%2Fcardiovasculardisease%2Fheartage.html

"OSHA QuickCard – Hazard Communication Standard Pictogram," United States Department of Labor, Occupational Safety and Health Administration, n.d. www.osha.gov/Publications/HazComm\_QuickCard\_Pictogram.html

"Know Your Hazard Symbols (Pictograms)," Princeton University, Environmental Health & Safety, August 22, 2016. ehs.princeton.edu/news/know-your-hazard-symbols-pictograms

"Hazard Communication Standard: Labels and Pictograms," OSHA Brief, United States Department of Labor, Occupational Safety and Health Administration, n.d. www.osha.gov/Publications/OSHA3636.pdf

## Florida Department of Financial Services Division of Risk Management

200 East Gaines Street Tallahassee, Florida 32399

Molly Merry, CPA Division Director

Robin Delaney Assistant Division Director

Jeffrey W. Cagle Chief of Risk Financing & Loss Prevention

## Wendy McSwain, MSA Loss Prevention Section Administrator



Office of the Director

State of Florida Loss Prevention Section

Bureau of State Liability & Property Claims

Bureau of State Employee Workers' Compensation Claims (850) 413-3123

Safety Coordinator Appointment Form

(850) 413-4700
(850) 413-4756
(850) 413-3122
(850) 413-3123
(850) 413-4756

## SAFETY AND LOSS PREVENTION OUTLOOK TEAM:

**Lori Taylor** Managing Editor/Writer

Wendy McSwain Staff Editor

**Terry Taylor** Graphic Designer

We look forward to your feedback on how we can better serve you. To submit story ideas, articles, and other suggestions—or to be added to our distribution list, please contact us by clicking on the link below: State Loss Prevention Program

The Safety and Loss Prevention Outlook newsletter is for informational purposes only. The Department of Financial Services does not endorse or support any websites, products, brands or services referenced herein.

www.myfloridacfo.com/division/risk/