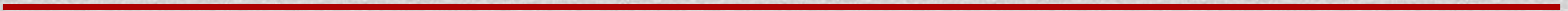




Heart Disease 3

- God is our Creator



- God is our Creator
 - God is our Redeemer.
-

- God is our Creator
 - God is our Redeemer
 - God is faithful
-

- God is our Creator
 - God is our Redeemer
 - God is faithful
 - God is our strength
-

- I can do all things through Christ who strengthens me.

Philippians 4:13

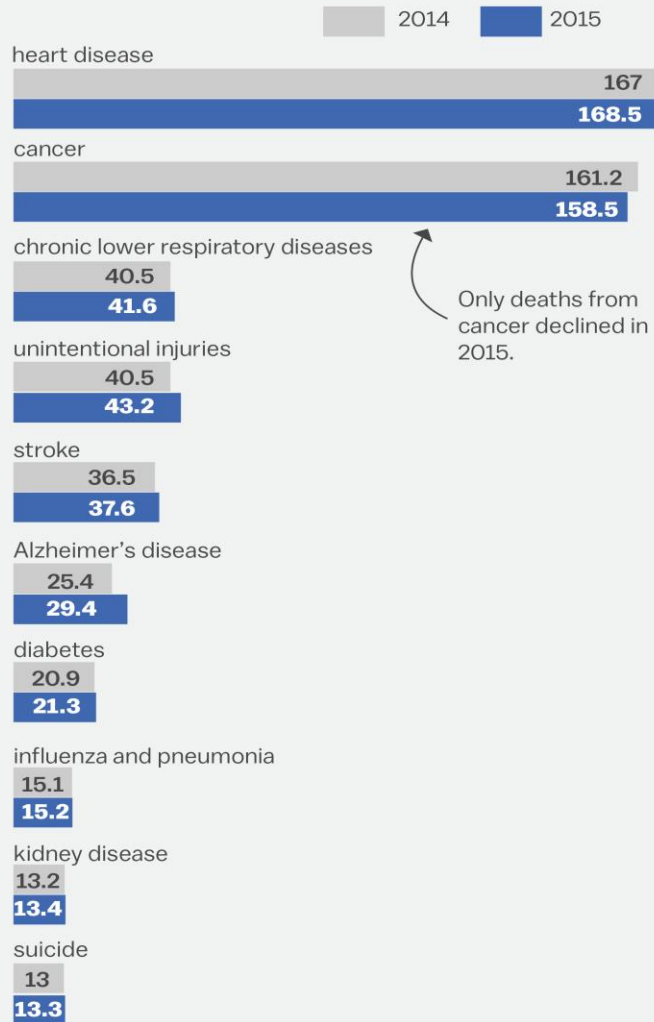
- Heart disease describes a range of conditions that affect your heart. Diseases under the heart disease umbrella include blood vessel diseases, such as coronary artery disease; heart rhythm problems (arrhythmias); and heart defects you're born with (congenital heart defects), among others.

• (<http://www.mayoclinic.org/diseases-conditions/heart-disease/basics/definition/con-20034056>)

Heart disease definition

Only one major cause of death in the US saw a decline in 2015

Rate of death for every 100,000 people



Source: National Vital Statistics System
Credit: Sarah Frostenson

Vox

- I will praise You; for I am fearfully and wonderfully made; Marvelous are Your works; and that my soul knows very well.

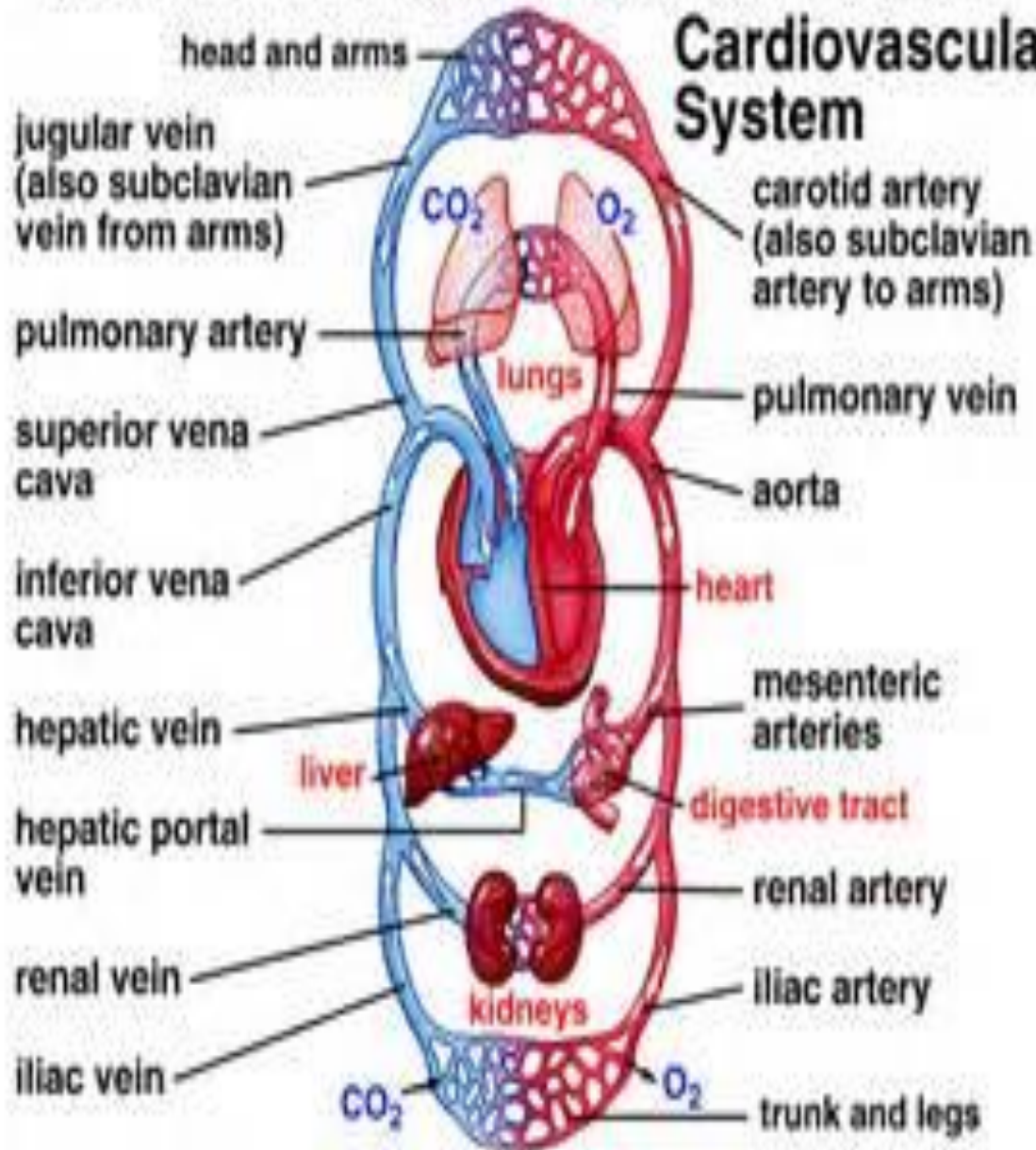
Psalms 139:14

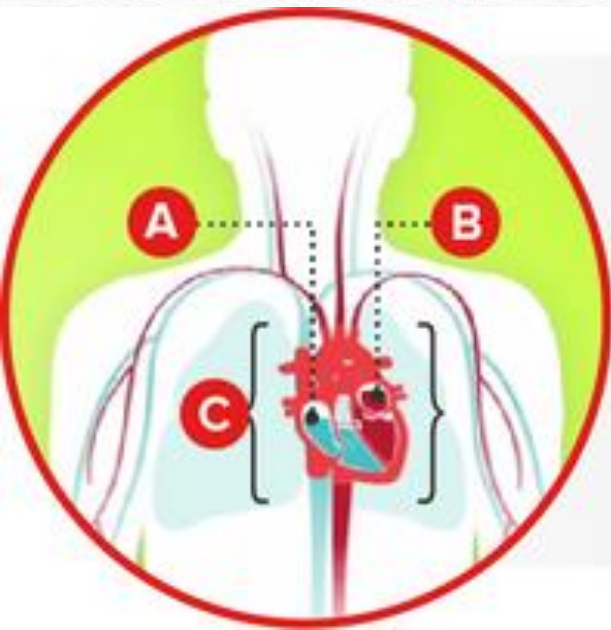
- God is our Creator
 - God is our Redeemer
 - God is faithful
 - God is our strength
-

- Heart failure is a chronic, progressive condition in which the heart muscle is unable to pump blood through to meet the body's needs.

- (http://www.heart.org/HEARTORG/Conditions/HeartFailure/AboutHeartFailure/What-is-Heart-Failure_UCM_002044_Article.jsp#.WU2494WHoio)

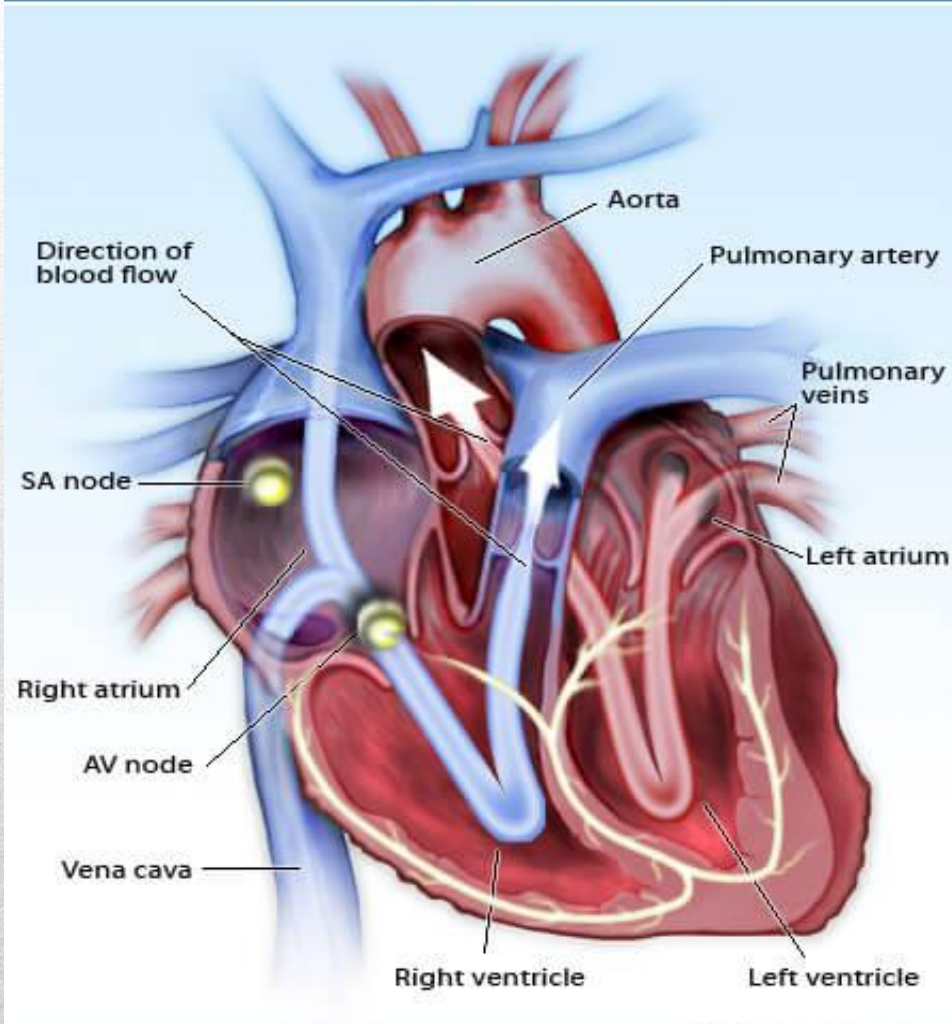
Cardiovascular System





- A Right-sided heart failure**
(Back-ups in the area that collects “used” blood)
- B Left-sided heart failure**
(Failure to properly pump out blood to the body)
- C Congestive heart failure**
(Fluid backs up into the lungs and tissues)

Heart Cross Section



- Coronary artery disease,
- Heart Attack,
- Cardiomyopathy (infections, alcohol, drugs, chemo drugs),
- Conditions that overwork the heart (HTN, valve disease, thyroid and kidney diseases, DM, congenital heart defects)

- <http://www.mayoclinic.org/diseases-conditions/heart-failure/basics/symptoms/con-20029801>
 - http://www.medicinenet.com/congestive_heart_failure_chf_overview/page3.htm
 - <http://www.webmd.com/heart-disease/heart-failure/heart-failure-overview#1-2>
 - <http://www.healthline.com/health/congestive-heart-failure#types2>

Principal causes

- Viral infection,
- Thyroid disorders,
- Heart rhythm disorders,
- Medications: (NSAIDS, steroids, DM meds),
- HIV infection,
- Severe anemia
 - <http://www.mayoclinic.org/diseases-conditions/heart-failure/basics/symptoms/con-20029801>
 - http://www.medicinenet.com/congestive_heart_failure_chf_overview/page3.htm
 - <http://www.webmd.com/heart-disease/heart-failure/heart-failure-overview#1-2>
 - <http://www.healthline.com/health/congestive-heart-failure#types2>

Less common causes

- viruses on heart muscle,
- severe infection,
- allergic reaction,
- pulmonary embolism,
- meds or illnesses affecting the whole body
 - <http://www.mayoclinic.org/diseases-conditions/heart-failure/basics/symptoms/con-20029801>
 - http://www.medicinenet.com/congestive_heart_failure_chf_overview/page3.htm
 - <http://www.webmd.com/heart-disease/heart-failure/heart-failure-overview#1-2>
 - <http://www.healthline.com/health/congestive-heart-failure#types2>

Acute causes

- About **5.7 million** adults in the United States have heart failure.¹
- One in 9 deaths in 2009 included heart failure as contributing cause.¹
- **About half** of people who develop heart failure **die within 5 years** of diagnosis.¹
- Heart failure costs the nation an estimated **\$30.7 billion** each year.³ This total includes the cost of health care services, medications to treat heart failure, and missed days of work.

- https://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_heart_failure.htm

Statisites

- Hypertension,
- Coronary Artery Disease,
- Heart attack,
- Diabetes,
- sleep apnea,
- congenital heart disease,
- valve disease,
- irregular heart beats,
- Thyroid disease,
- viruses,
- using diabetes meds,
- NSAIDS (ibuprofen, motrin, aleve, naproxen, etc),
- anesthesia meds,
- medication for hypertension, antiarrhythmic, cancer, blood, neurologic, psychiatric, lung, urological conditions,
- antibiotics,
- steroids,
- alcohol or tobacco use,
- overweight

<http://www.mayoclinic.org/diseases-conditions/heart-failure/basics/risk-factors/con-20029801>

Risk factors



2 Identify Your HF Needs

Do you know the symptoms of HF?



Shortness
of
Breath



Chronic
Coughing or
Wheezing



Build-up
of Fluid
(edema)



Fatigue
or Feeling
Lightheaded



Nausea
or Lack of
Appetite



Confusion
or Impaired
Thinking



High
Heart
Rate

People who experience more than one should be evaluated.

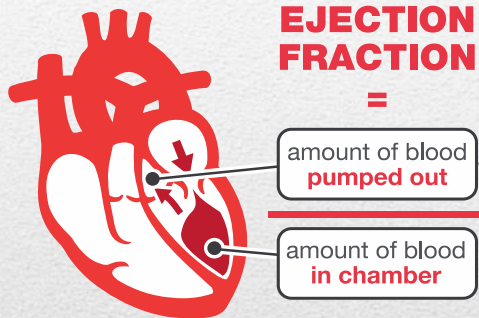
Symptoms

- Physical examination,
- Blood tests
- Chest X-Rays
- Electrocardiogram
- Echocardiogram
- Exercise Stress Test
- Cardiac Catheterization

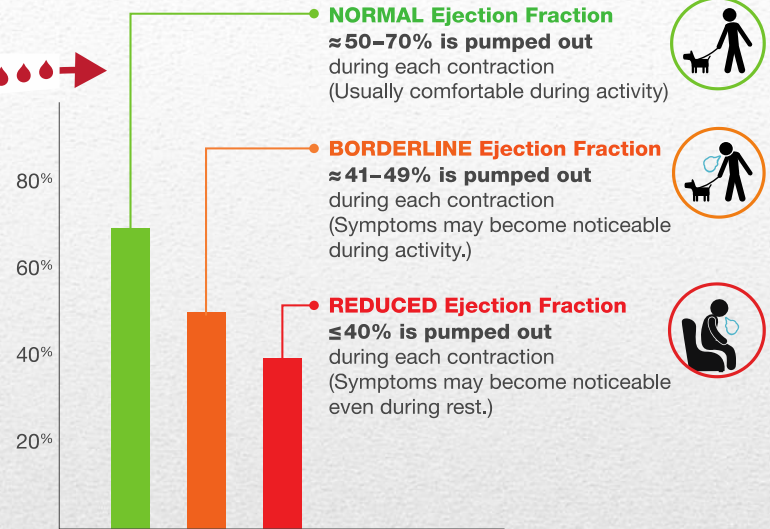
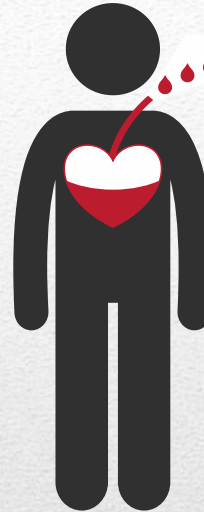
- http://www.heart.org/HEARTORG/Conditions/HeartFailure/DiagnosingHeartFailure/Common-Tests-for-Heart-Failure_UCM_306334_Article.jsp#.WU3EqoWHOio

Diagnosing CHF

The Ejection Fraction compares the **amount of blood in the heart** to the **amount of blood pumped out**. The fraction or percentage helps describe how well the heart is pumping blood to the body.



How much blood is pumped out?



It is also possible to have a diagnosis of heart failure with a seemingly normal (or *preserved*) ejection fraction of greater than or equal to 50%.



With the proper care and treatment, many patients are able to improve their ejection fraction and live a longer and healthier life. Talk with your healthcare provider about your options.

- Lifestyle changes,
- Medication
- Devices and surgical procedures
- Ongoing care

- http://www.heart.org/HEARTORG/Conditions/HeartFailure/TreatmentOptionsForHeartFailure/Treatment-Options-for-Heart-Failure_UCM_002048_Article.jsp#.WU3FjIWHoio

Treatment

- Quit smoking,
- Losing or maintaining your weight,
- Tracking daily fluids,
- Avoid alcohol,
- Avoid or limit caffeine,
- Eat a heart healthy diet,
- Being physically active,
- Managing stress
- Keep track of symptoms
- Monitor Blood pressure
- Get adequate rest
- Develop support system
- Avoid flu and pneumonia
- Follow heart patient guidelines
- http://www.heart.org/HEARTORG/Conditions/HeartFailure/TreatmentOptionsForHeartFailure/Lifestyle-Changes-for-Heart-Failure_UCM_306341_Article.jsp#.WU3Gb4WHoio

Lifestyle changes

- ACE Inhibitors (all the –pril ending meds)
- Angiotensin II Receptor Blocker
- Angiotensin-ReceptorNeprilysin Inhibitor
- I-f Channel Blocker
- Beta blockers (all the –lol ending meds)
- Aldosterone Antagonist
- Hydralazine
- Diuretics (water pills)
- Other meds: anticoagulants, cholesterol lowering drugs, digoxin)

- http://www.heart.org/HEARTORG/Conditions/HeartFailure/TreatmentOptionsForHeartFailure/Medications-Used-to-Treat-Heart-Failure_UCM_306342_Article.jsp#.WU3H3IWHOio

Medications

- ICD
- Cardiac Resynchronization Therapy
- Left ventricular assist device (LVAD)
- Heart transplantation,
- Percutaneous Coronary Intervention
- Coronary artery bypass
- Valve replacement

- http://www.heart.org/HEARTORG/Conditions/HeartFailure/TreatmentOptionsForHeartFailure/Devices-and-Surgical-Procedures-to-Treat-Heart-Failure_UCM_306354_Article.jsp#.WU3Ji4WHoio

Devices and surgical procedures

- Take medication as prescribed,
- Daily weight (recommended in upon waking up in am and after bladder is empty) and report to MD any eight gain of 2-3 lb overnight and 5-7 lb in a week
- Monitor fluid intake and respect fluid restriction as prescribed by the physician
- Eat a low salt diet and stay away from salt substitutes, using herbs and spices to season the food and reading the nutritional facts for sodium content to choose no salt or low salt food, increase intake in fruits and vegetables fresh or frozen avoiding canned or processed foods.
- Keep the scheduled appointments
- Monitor for symptoms
- Report all the new symptoms or worsening symptoms to provider as soon as possible.

What to do at home

- Shortness of breath at rest
- Shortness of breath when laying down or need more pillows to sleep
- Swelling in feet, ankles, legs, abdomen
- Dry cough,
- Lightheadness or dizziness,
- Fatigue,
- For chest pain call 911.

Symptoms to report



Self-Check Plan for HF Management



✓ Excellent – Keep Up the Good Work!



No new or worsening shortness of breath



Physical activity level is normal for you



No new swelling, feet and legs look normal for you



Weight check stable
Weight: _____



No sign of chest pain

**GREAT!
CONTINUE:**



Daily Weight Check



Meds as Directed



Low Sodium Eating



Follow-up Visits

🚩 Pay Attention – Use Caution!



Dry, hacking cough



Worsening shortness of breath with activity



Increased swelling of legs, feet, and ankles



Sudden weight gain of more than 2-3 lbs in a 24 hour period (or 5 lbs in a week)



Discomfort or swelling in the abdomen



Trouble Sleeping

CHECK IN!

Your symptoms may indicate:



A need to contact your doctor or provider



A need for a change in medications

⚠️ Medical Alert – Warning!



Frequent dry, hacking cough



Shortness of breath at rest



Increased discomfort or swelling in the lower body



Sudden weight gain of more than 2-3 lbs in a 24 hour period (or 5 lbs in a week)



New or worsening dizziness, confusion, sadness or depression



Loss of appetite



Increased trouble sleeping; cannot lie flat

WARNING! You need to be evaluated right away.



Call your physician or call **911**