

# Heart Failure

## Med Surg: Cardiac

### Patho

The heart fails to maintain adequate cardiac output (oxygenated blood pumped OUT to the body) due to impaired pumping ability.

#### MEMORY TRICKS

- **HF - Heart Failure** (failure to pump blood forward)
- **HF - Heavy Fluid** (backs up in lungs / body)  
**Weight Gain = Water Gain**

### Signs & Symptoms

R - RIGHT Sided HF R - ROCKS BODY with fluid	L - LEFT sided HF L - LUNG fluid
<ul style="list-style-type: none"><li>• <b>Peripheral</b> Edema</li><li>• Weight Gain = Water Gain</li><li>• JVD (big neck veins)</li><li>• Abdominal Growth<ul style="list-style-type: none"><li>- Ascites (fluid in abdomen)</li><li>- Hepatomegaly (big liver)</li><li>- Splenomegaly (big spleen)</li></ul></li></ul>	<ul style="list-style-type: none"><li>• <b>Pulmonary</b> Edema</li><li>• Crackles in lungs "Rales that don't clear with a cough"</li><li>• Pink Frothy "blood tinged" sputum</li><li>• Orthopnea - difficulty breathing when lying flat</li></ul>

### Causes

R - RIGHT-Sided HF	L-LEFT sided HF
<ul style="list-style-type: none"><li>• HTN (high BP)</li><li>• <b>Pulmonary HTN</b></li><li>• Stiff "fibrotic" lungs</li><li>• Left-sided HF can cause Right HF</li></ul>	<p>Weak heart = weak pump</p> <ul style="list-style-type: none"><li>• After a heart attack (<b>MI - myocardial infarction</b>)</li><li>• Ischemic heart disease - low oxygen to heart muscles (<b>CAD, ACS</b>)</li></ul>

### 3 Common EXAM Questions:

Patient with **heart failure** who is constipated!  
What would the **nurse recommend**?

- ✓ 1. Walking
- ✓ 2. Increase fiber
- ✓ 3. Stool Softeners
- 4. Drink extra water - **NO!**

Which **food item** should the **heart failure patient avoid**?  
Select all that apply.

- ✓ 1. Chips - **NO SODIUM!**
- 2. Fruits
- 3. Veggies
- ✓ 4. Grilled chicken & fries - **NO!**
- ✓ 5. Canned beans - **NO!**
- 6. Bread

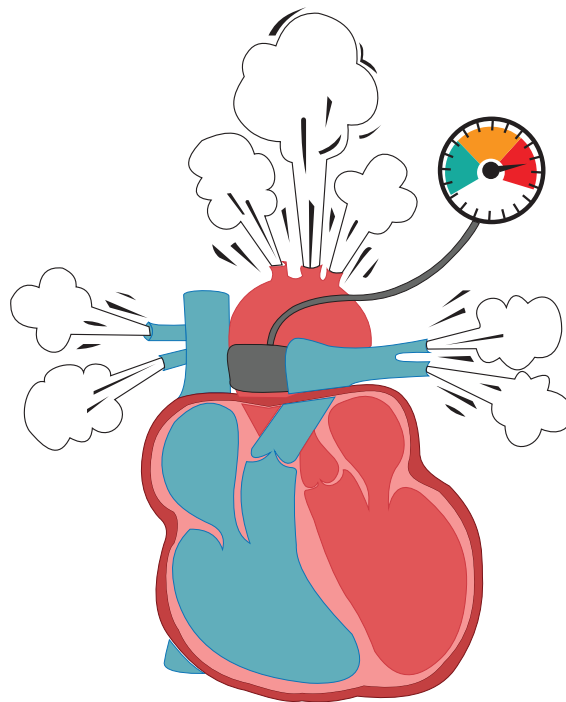
A client with chronic heart failure took **cold medicine** for her flu. She presents with **new** productive cough with **pink frothy sputum** and **worsening crackles**.

What action should the nurse take **first**?

- 1. Assess lung sounds
- ✓ 2. Give bumetanide IV Push - **YES**
- 3. Notify the HCP
- 4. Clock out for lunch

Look for **KEY WORDS**

"New, sudden, worsening, rapid symptoms"  
# 1 Action is Furosemide = "Body Dried"



### Risk Factors

1. Hypertension (high BP) is the **#1 risk factor**
2. Atrial fibrillation & other dysrhythmias
3. Mitral valve regurgitation
4. Cardiomyopathy

### Diagnostic tests

- **Labs: BNP** (brain type natriuretic peptides)  
Memory trick: B - Broken ventricles  
**Over 900+ = SEVERE HEART FAILURE**
- **Echocardiogram** measures  
**Ejection Fraction** (blood pumped out of heart)  
55 - 70% = normal  
**40% or LESS = BAD (heart failure)**
- **Hemodynamic Monitoring**  
"Swanz Ganz" (Pulmonary Artery catheter)  
**Over 8 = is NOT GREAT!** (normal: 2 - 8 mmHg)

### Priority Interventions

For Pulmonary Edema Crisis (lung fluid)

#### KEY WORDS

"New, sudden, worsening, rapid symptoms"  
# 1 Action is Furosemide = "Body Dried"

- **H** - HOB **45** degree or higher  
(Semi-fowler's, High fowler's, orthopneic position)
- **O** - Oxygen
- **P** - Push Furosemide + Morphine, Positive inotropes
- **E** - End sodium & fluids  
(Sodium Swells the body)  
**NO** drinking fluids + **STOP** IV fluids