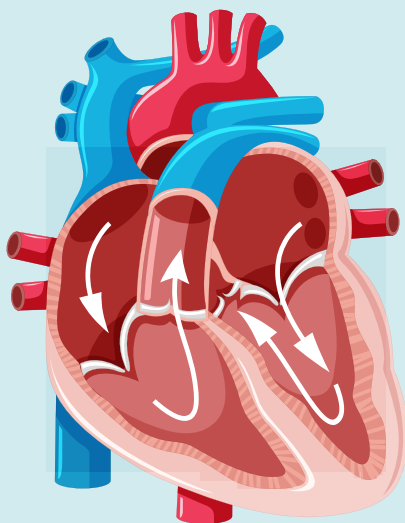# Know Your Heart, Protect Your Life!

Raho #DilSeFit

What are cardiovascular diseases (CVDs)?

CVDs are a group of disorders of the heart and blood vessels, including issues like coronary heart disease, cerebrovascular disease, rheumatic heart disease, and other related conditions.

Certain risk factors significantly increase the chances of CVDs. These factors are as follows:

- High Blood Pressure
- Unhealthy Diet
- High Cholesterol
- Diabetes
- Overweight & Obesity
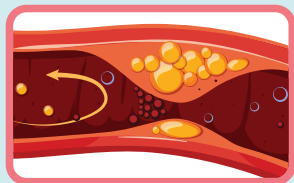- Tobacco use
- Air Pollution
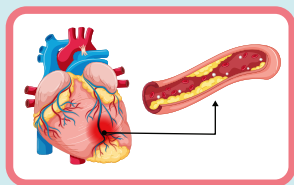- Kidney Disease
- Physical Inactivity
- Harmful use of alcohol

Types of heart diseases

Coronary Artery Disease (CAD)

- CAD occurs when there is a buildup of large plaques made of cholesterol in the arteries.
- It makes hard for your blood to flow, leading to a heart attack.

Heart Attack/ Myocardial Infarction (MI)

- The coronary arteries carry oxygen-rich blood to your heart. If they get clogged with plaque, the blood flow to your heart can slow down or stop, resulting in death of heart tissue leading to a heart attack.
- It can lead to severe consequences, including sudden death.
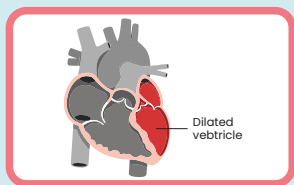
Congestive Heart Failure (CHF)

- CHF occurs when the heart is unable to efficiently pump blood, leading to an inadequate supply to your body.
- The heart can't handle the necessary volume of blood, resulting in an accumulation of fluid in various areas of your body.
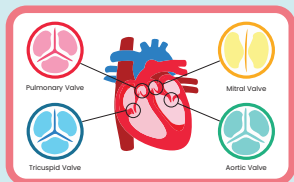

Heart Valve Disease

- Constriction or leakage in the valves of your heart (structures that permit the flow of blood from one heart chamber to another or blood vessel).
- It causes your blood to flow back into the heart chamber
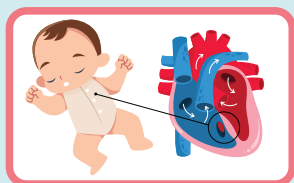
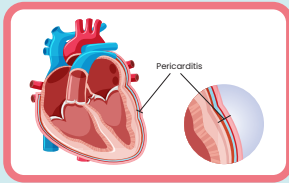## Congenial Heart Diseases (CHD)

- It is a defect in the heart's formation that is present from birth.
- Certain instances of CHD are uncomplicated and may not manifest any symptoms, while others can pose a severe risk.
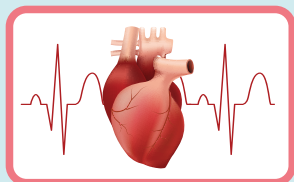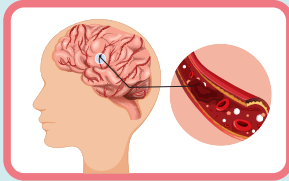

Arrhythmia

- Occurs when your heart beats too fast, too slow or irregularly.
- If left untreated it can result in cardiac arrest or stroke.

Pericarditis

- It is inflammation of the pericardium, a thin tissue layer surrounding your heart.
- It leads to sharp chest pain when irritated pericardial layers rub each other.

Stroke

- **Ischaemic stroke**
  Caused by a blockage of blood vessels with a clot.
- **Haemorrhagic stroke**
  Caused by the rupturing of a blood vessel and bleeding.

Among these CVDs, heart failure, heart attack, and strokes are the leading cause of death in patients with CVDs. One-third of these deaths occur prematurely in people under 70 years of age.

Heart failure

results from the heart's reduced ability to pump blood effectively

Heart attack

occurs when blood flow to the heart is obstructed

Stroke

caused by rupture or blockage of blood vessels in the brain

Common symptoms of heart diseases

CVDs are fatal human disease. Detection of early symptoms is crucial for preventing patients from more damage and saving their lives. Following are some of the early symptoms of CVD.
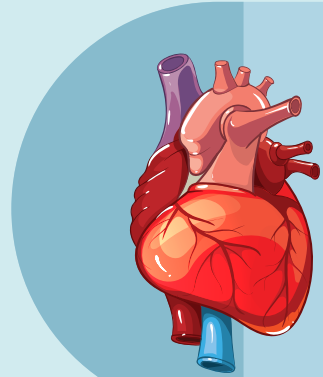
Chest Pain

Pain in Arm, Back, Neck or Jaw

Nausea, Indigestion, Heart Burn or Stomach Pain

Shortness of Breath

Loss of Appetite

Difficulty in sleeping

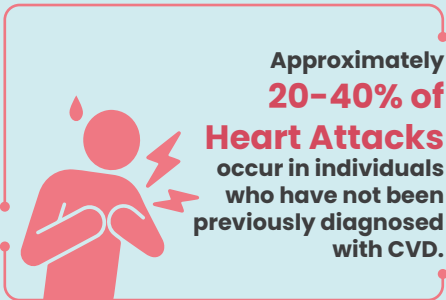Dry Cough

Irregular/Fast Heart Beats

Frequent Profuse Sweating

Fatigue, Fainting or Light Headed

Why early diagnosis is important?

Approximately
20-40% of
Heart Attacks
occur in individuals
who have not been
previously diagnosed
with CVD.

To effectively reduce the risk and prevent the onset of CVD, it is important to identify when you are at high risk and receive appropriate advice and preventive treatment.

Early diagnosis enables you and your healthcare team to apply lifestyle changes and utilize therapies to improve your quality of life and reduce the potential for severe complications.

Common Laboratory, Non-invasive and Invasive tests

Screening helps detect individuals at a high risk of developing CVD. It involves using validated risk-score tools incorporating various risk factors such as age, gender, tobacco use, blood pressure, and cholesterol levels.

You may have a series of laboratory tests (table 1) to help find the cause of your heart disease, guide your treatment and check for side effects.

Your care team may do laboratory tests throughout your journey to find any problems and check your progress.

List of laboratory, Non-invasive and Invasive tests used to help diagnose CVD

Lab tests

Complete blood count (CBC)

Blood electrolytes

Urinalysis

Serum creatinine

Lipid profile

Liver function test

Blood biomarkers
like NT-proBNP, Troponin-T

Thyroid Profile

Fasting glucose

Non-invasive tests

Echocardiogram (Echo)
/Stress EKG

Abdominal Ultrasound

Electrocardiogram (ECG)

Holter Monitor

Carotid Ultrasound

Nuclear cardiac stress test

Invasive tests

Cardiac
Catheterization

Coronary
Angiography

Electrophysiology
Study

When should you see a specialist?

CVDs are more manageable during their initial stages, making regular visits to a primary healthcare professional necessary. They can identify your heart problems before any noticeable symptoms arise. It will help if you visit specialists in the event of sudden occurrences like chest pain, fainting, severe breathlessness, pain or numbness in your limbs and intense back pain that feels like ripping or tearing.

Questions you need to ask your doctor

1 How do cardiovascular diseases affect my overall quality of life?

2 Which specific symptoms related to heart diseases should I remain vigilant about?

3 Could you suggest the laboratory or screening tests I should consider to rule out the chances of CVD complications?

Scan here to know more