

CVD Project DOC

What are **CVDs**?

CVD = Cardiovascular Diseases → a group of disorders affecting the **heart** and **blood vessels**. They often result from:

- Atherosclerosis (fat/cholesterol buildup in arteries).
- High blood pressure.
- High blood sugar/diabetes.
- Risk factors such as smoking, obesity, and lack of physical activity.

Main Types of CVD

1. **Coronary Artery Disease (CAD)**

- Cause: narrowing or blockage of the arteries that supply the heart.
- Examples:
 - Angina (chest pain).
 - Myocardial infarction (heart attack).

2. **Cerebrovascular Disease**

- Affects blood flow to the brain.
- Examples:
 - Stroke.
 - Transient ischemic attack (TIA / mini-stroke).

3. **Peripheral Arterial Disease (PAD)**

- Narrowing/blockage of arteries in legs or arms.
- Symptoms: leg pain while walking (claudication), cold or numb limbs.

4. **Heart Failure**

- The heart cannot pump blood effectively.
- Symptoms: shortness of breath, leg swelling, fatigue.

5. **Rheumatic Heart Disease**

- Valve damage caused by untreated streptococcal throat infection.

6. **Congenital Heart Disease**

- Heart malformations present from birth (e.g., septal defects).

7. Deep Vein Thrombosis & Pulmonary Embolism (DVT/PE)

- **DVT:** blood clots in deep veins (usually legs).
 - **PE:** clot travels to the lungs → pulmonary embolism
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Categories

BMI (Body Mass Index):

Below 18.5 → Underweight

18.5 to 24.9 → Normal weight

25 to 29.9 → Overweight

30 to 34.9 → Obese Class I (Class I obesity)

35 to 39.9 → Obese Class II (Class II obesity)

40 or more → Obese Class III (Very morbid obesity)

Total Cholesterol (mg/dL):

Less than 200 → Desirable

200 – 239 → Borderline High

240 and above → High

HDL (mg/dL):

Less than 40 → Low (higher heart risk)

40–59 → Acceptable/Borderline

60 and above → High (protective factor)

LDL (mg/dL):

Less than 100 → Optimal

100 – 129 → Near Optimal

130 – 159 → Borderline High

160 – 189 → High

190 and above → Very High

Fasting Blood Sugar (FBS):

Less than 100 mg/dL → Normal

100–125 mg/dL → Prediabetes (Impaired Fasting Glucose)

126 mg/dL or higher (on two different measurements) → Diabetes

Waist-to-Height Ratio :

Less than 0.40 → Underweight.

From 0.40 to 0.49 → Healthy.

From 0.50 to 0.59 → Increased Risk.

0.60 or more → High Risk.