

# Coronary Artery Disease

Family Health Center  
606 N Third Avenue Suite #101 - Sandpoint, Idaho 83864 - Telephone (208) 263-1435

## What is it?

Coronary artery disease (CAD), also known as coronary heart disease (CHD), is the most common type of heart disease. It is caused by gradual blockage of the coronary arteries. Your heart gets oxygen and nutrients from the blood that flows through these arteries.

In coronary artery disease, *atherosclerosis* (hardening of the arteries) causes thick patches of fatty tissue to form on the inside of the walls of the coronary arteries. These patches are called *plaque*. As the plaque thickens, the artery narrows and blood flow decreases. This causes the heart to get less oxygen. The plaque, or a clot of blood that forms on the plaque, may completely block an artery. This narrowing or blockage of the arteries increases your risk for heart attack and sudden death.

## What causes it?

Despite massive research efforts, we still don't completely understand the cause of CAD in all people. However, there have been several risk factors identified which help us predict who has a higher likelihood of developing CAD. The **major risk factors** other than bad LDL cholesterol are:

1. Current cigarette smoking
2. High blood pressure >140/90 or being treated
3. Low levels of good HDL cholesterol <40 mg/dl
4. Family history of early CAD
  - CAD in male first degree relative <55 years old
  - CAD in female first degree relative <65 yrs old
5. Advancing age
  - Men greater than 45 years old
  - Women greater than 55 years old

Some people have relatively high levels of the good HDL cholesterol >60 which counts as a negative risk factor.

## Who gets it?

Coronary artery disease is the #1 cause of death in women and men resulting in more than 500,000 deaths per year. The lifetime risk of CAD after age 40 is approximately 49% in men and 38% in women.

## What are the symptoms?

Coronary artery disease may have no symptoms. When there are symptoms, the most common one is chest pain, called *angina*. This pain usually feels like a heavy pressure in the middle of the chest. You may also feel the pressure in your neck, shoulders, arms, and even your jaw. Other symptoms of angina include shortness of breath, light-headedness, cold sweats, and nausea. Angina tends to occur with exertion, after a heavy meal, or with emotional stress. However, it may occur at any time.

## How do you prevent it?

Review your personal and family medical history and your lifestyle habits with your doctor to assess your risk. Eating a healthy low fat diet, staying active with the right kind of exercise, and not smoking are the best ways to avoid CAD. However, despite your best efforts, you may still need medication to meet the goal for lowering CAD risk. For those people with higher risk, treating blood pressure and cholesterol may be necessary. To help you decide if you are at risk, look at the table below. Your 10-year risk of major heart attack or stroke can be calculated on the reverse side of this handout for those with 2 or more major risk factors.

### LDL goals and cut points for therapy

Patient Risk group	LDL Goal	Initiate TLC	Consider Drug Therapy
<b>CAD or equiv</b>			
10 yr risk >20%	<100	>100	>130
<b>2+ risk factors</b>			
10 yr risk 10-20%	<130	>130	>130
10 yr risk <10%	<130	>130	>160
<b>0 to 1 risk factor</b>	<160	>160	>190

Conditions which are considered equally high risk to those with known CAD include carotid artery disease, peripheral artery disease, abdominal aortic aneurysm and diabetes. TLC stands for therapeutic lifestyle change including a reduced fat diet, increased physical activity, weight reduction and smoking cessation.