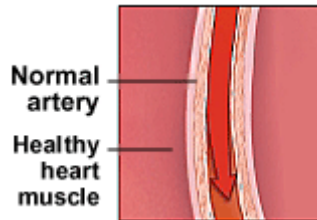


## Understanding Coronary Artery Disease

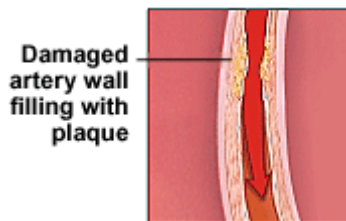
Your heart is a muscle that pumps blood through your body. To work right, your heart muscle needs a steady supply of oxygen. The coronary arteries supply your heart with the oxygen-rich blood it needs. CAD keeps the heart muscle from getting the oxygen it needs.

### A Healthy Artery



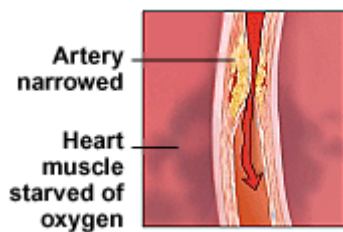
When a coronary artery is healthy, blood flows through it easily. So your heart muscle gets the oxygen it needs to stay healthy. When you exert yourself, your heart beats faster and harder and needs more oxygen. A healthy coronary artery supplies the oxygen-rich blood your heart needs to do this.

### A Damaged Artery



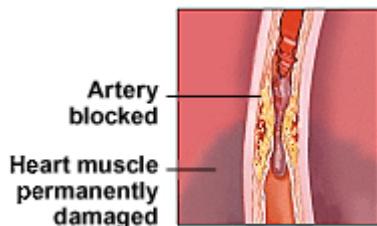
Coronary artery disease occurs when the artery wall is damaged by things like high blood cholesterol or smoking. **Plaque** (a fatty material) builds up in the damaged wall. This is called **atherosclerosis**. The buildup reduces blood flow to the heart. At this stage, you most likely won't feel any symptoms.

### A Narrowed Artery



As the plaque builds up, your heart muscle doesn't get enough oxygen-rich blood, especially during exercise. This is when you may feel **angina** (pressure, tightness, aching, or pain in your chest, jaw, neck, back, or arm). Angina is a warning sign that you are at risk for a heart attack.

### A Blocked Artery



Plaque or a blood clot may completely block the artery. When this happens, blood flow stops. Without any oxygen-rich blood, part of the heart muscle dies. This is called a **heart attack** (myocardial infarction). You may feel pressure or pain in or around your chest. A heart attack can permanently damage the heart muscle.