

Understanding Coronary

Artery Disease (CAD)

To understand coronary artery disease (CAD), you need to know how your heart works. Your heart is a muscle that pumps blood throughout your body. To work right, your heart needs a steady supply of oxygen. It gets this oxygen from blood supplied by the **coronary arteries.**



Healthy Artery

Damaged Artery



Narrowed Artery



Blocked Artery

Healthy Artery. When a coronary artery is healthy and has no blockages, blood flows through easily. Healthy arteries can easily supply the oxygen-rich blood your heart needs.

Damaged Artery. Coronary artery disease begins when damage causes **plaque** (a fatty substance) to build up within the artery wall. This damage could be caused by things like high blood pressure or smoking. This plaque buildup, called **atherosclerosis**, begins to narrow the arteries carrying blood to the heart.

Narrowed Artery. As more plaque builds up, your artery has trouble supplying blood to your heart muscle when it needs it most, such as during exercise. You may not feel any symptoms when this happens. Or you may feel **angina**—pressure, tightness, achiness, or pain in your chest, jaw, neck, back, or arm.

Blocked Artery. Plaque may tear, completely blocking the artery. Or a blood clot may plug the narrowed opening. When this happens, blood flow stops. Without oxygen-rich blood, part of the heart muscle becomes damaged and stops working. You may feel crushing pressure or pain in or around your chest. This is a heart attack (**myocardial infarction**).