

# Coronary Artery Disease

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## Who is at Risk?

Risk factors for coronary artery disease fall into two groups –modifiable (risk factors one can modify and control) and nonmodifiable (risk factors one cannot control). Nonmodifiable risk factors include a person’s age, gender, and family history.

**Older age.** Of all known risk factors, older age is the most potent risk factor for coronary artery disease, since the arteries of older adults have been exposed to the other risk factors (e.g., high cholesterol, hypertension, and smoking) for a longer period of time. Further, the incidence of hypertension and diabetes, two common late-life conditions among people in the United States, increases dramatically among older age groups and may further accelerate the worsening of coronary artery disease. In addition, older adults are more vulnerable to heart disease and regularly have more complications and worse outcomes as compared to younger patients. Therefore, knowledge of the risk and early recognition and treatment of coronary artery disease are especially important among older people.

**Gender.** Coronary artery disease is more common in men than in women during early and middle adulthood. However, the risk of heart disease rises dramatically in postmenopausal women after the age of 50. Although many women fear breast cancer as the number one cause of death, heart disease affects and kills more women than all forms of cancer combined.

**Heredity.** For both men and women, heredity plays an important role because the risk of heart disease is greater for those with a family history of premature heart attacks. For individuals who do not know their family history, establishing a family health record by questioning relatives is recommended. High levels of blood cholesterol can also run in families, and many medical studies now support the identification and

treatment of high cholesterol as an effective strategy in the prevention and treatment of coronary artery disease –even for adolescents and young adults.

**Hypertension (high blood pressure).** As we age, our arteries naturally get stiffer. Thus, hypertension often develops after the age of 50, even among those with good exercise and nutritional habits. Women develop hypertension with aging but about a decade later than men. Interestingly, up to 70 percent of 70-year olds and 80 percent of 80-year olds have high blood pressure. The type of hypertension that develops in older age is different from hypertension that develops at younger ages and is far more risky. Treating hypertension associated with aging markedly reduces the risk of coronary artery disease, heart failure, heart attacks, and other diseases (stroke, kidney disease, and dementia). Therefore, it is important to have blood pressure checked regularly to avoid or lessen the risk of developing these conditions.

**Diabetes.** Because obesity is a significant risk factor for diabetes (and hypertension), being overweight or obese is an important risk factor for coronary artery disease as well. (To determine if individuals are overweight or obese, health care professionals generally use the body mass index). In combination, diabetes, high blood pressure, and obesity are recognized by physicians as the metabolic syndrome. One of the simplest predictors of this syndrome is the measurement of waist size. Waist sizes greater than 40 inches for men and 35 inches for women are highly predictive of development of metabolic syndrome and the ultimate development of adverse health outcomes.

**Smoking.** Stopping smoking is the single most potent modifiable risk factor for delaying the onset of coronary artery disease