According to the American Heart Association (AHA), heart attacks are a result of cardiovascular disease, which occurs from a variety of factors. Both men and women are affected by a combination of risk factors, some that can be controlled and some that cannot.

- **Uncontrollable factors** include heredity (a family history of heart disease); age; and race (Blacks, Mexican Americans, American Indians, native Hawaiians and some Asian Americans appear to be at greater risk).
- **Medical conditions** including cholesterol levels, high blood pressure and diabetes raise the risk for cardiovascular disease and should be monitored.
- **Behavioral factors** affect your risk for heart disease. These include lack of physical activity, smoking, diet, obesity (being 20 percent or more over your ideal body weight), waist circumference, excessive alcohol use and stress.

**The More You Know**

Heart disease once was thought to be a man’s disease but that’s no longer the case. New research tells a different story. Women are more likely to develop heart disease than men, especially as they age, and are actually more likely to die as a result.

AHA lists some risk factor combinations that may have a greater impact on women. Metabolic syndrome, which includes abdominal obesity, high blood pressure; blood fat disorders (high triglycerides, low HDL and high LDL); and insulin resistance or glucose intolerance all affect women more strongly than men.

In addition, women are more likely to internalize stress, depression and anger, which have an adverse effect on heart health. Perimenopausal women may experience low estrogen levels, which contributes to cardiovascular disease in smaller blood vessels.

**Heart to Heart**

Most people will say the classic symptom of heart attack is gripping chest pain in the left side radiating to the arm, sort of like severe indigestion. Patients coming to the emergency department are evaluated either to rule out a heart attack or begin treatment in what is called the Golden Hour, the time period when anticoagulants can most effectively work their magic on the clots or plaque buildup stopping the flow of blood to the heart.

This method works well for most men, who usually complain of chest pain, anxiety and nausea. Less often, they may experience shortness of breath and feel lightheaded and clammy.

According to a 2003 study by McSweeney et al in Circulation, women may feel the same chest pain as men but are more likely to think it is indigestion. In many instances, women don’t have chest pain at all. They are more likely to have pain in the middle of their backs, jaw or shoulder, feel nauseated, have shortness of breath and what they think is heartburn, and feel very tired.

**Sound the Alarm**

Many cardiologists are now looking at a “warning system” that can sound several months to weeks before a woman has a heart attack.

In the Circulation article, “Women’s Early Warning Symptoms of Acute Myocardial Infarction,” of 500 women who participated, 95 percent reported a health concern up to a month before they experienced a heart attack. Nearly three-quarters reported being extremely fatigued, and nearly half said their sleep was disturbed. Indigestion and shortness of breath were reported by 40 percent, and more than a third said they felt anxious.

More than 70 percent of the women reported feeling no chest pain throughout the experience.

Because women don’t recognize their symptoms as those of a heart attack right away, they tend to wait to get medical attention. By the time they get to their doctor or the ED, their heart has been damaged.

For this reason, according to the National Heart, Lung, and Blood Institute, only one-third of women who have had a heart attack make a full recovery. For those who don’t, 50 percent will likely die in the first year following their heart attack. They’re also nearly twice as likely to experience a second heart attack within 6 years.

Candy Goulette is regional editor at ADVANCE.