

## Heart Attack Warning Signs

Some heart attacks are sudden and intense — the "movie heart attack," where no one doubts what's happening. But most heart attacks start slowly, with mild pain or discomfort. Often people affected aren't sure what's wrong and wait too long before getting help. Here are signs that can mean a heart attack is happening:

- **Chest discomfort.** Most heart attacks involve discomfort in the center of the chest that lasts more than a few minutes, or that goes away and comes back. It can feel like uncomfortable pressure, squeezing, fullness or pain.
- **Discomfort in other areas of the upper body.** Symptoms can include pain or discomfort in one or both arms, the back, neck, jaw or stomach.
- **Shortness of breath** with or without chest discomfort.
- **Other signs** may include breaking out in a cold sweat, nausea or lightheadedness

*As with men, women's most common heart attack symptom is chest pain or discomfort. But women are somewhat more likely than men to experience some of the other common symptoms, particularly shortness of breath, nausea/vomiting, and back or jaw pain.*

Learn the signs, but remember this: Even if you're not sure it's a heart attack, have it checked out (tell a doctor about your symptoms). Minutes matter! Fast action can save lives — maybe your own. Don't wait more than five minutes to call 9-1-1 or your emergency response number.

Calling 9-1-1 is almost always the fastest way to get lifesaving treatment. Emergency medical services (EMS) staff can begin treatment when they arrive — up to an hour sooner than if someone gets to the hospital by car. EMS staff are also trained to revive someone whose heart has stopped. Patients with chest pain who arrive by ambulance usually receive faster treatment at the hospital, too. It is best to call EMS for rapid transport to the emergency room.

## Risk Factors You Can Change

Extensive clinical and statistical studies have identified several factors that increase the risk of coronary heart disease and heart attack. Major risk factors are those that research has shown significantly increase the risk of heart and blood vessel (cardiovascular) disease. Other factors are associated with increased risk of cardiovascular disease, but their significance and prevalence haven't yet been precisely determined. They're called contributing risk factors.

Some risk factors can be modified, treated or controlled, and some can't. The more risk factors you have, the greater your chance of developing coronary heart disease. Also, the greater the level of each risk factor, the greater your risk. For example, everyone with total cholesterol greater than 240 mg/dL is considered high-risk, but a person with a total cholesterol of 300 mg/dL has a greater risk than someone with a total cholesterol of 245 mg/dL.

### Major risk factors you can modify, treat or control by changing your lifestyle or taking medicine

**Tobacco smoke:** Smokers' risk of developing coronary heart disease is 2–4 times that of nonsmokers. Cigarette smoking is a powerful independent risk factor for sudden cardiac death in patients with coronary heart disease; smokers have about twice the risk of nonsmokers. Cigarette smoking also acts with other risk factors to greatly increase the risk for coronary heart disease. People who smoke cigars or pipes seem to have a higher risk of death from coronary heart disease (and possibly stroke) but their risk isn't as great as cigarette smokers'. Exposure to other people's smoke increases the risk of heart disease even for nonsmokers.

Learn about smoking and cardiovascular disease

**High blood cholesterol:** As blood cholesterol rises, so does risk of coronary heart disease. When other risk factors (such as high blood pressure and tobacco smoke) are present, this risk increases even more. A person's cholesterol level is also affected by age, sex, heredity and diet. Here's the lowdown on where those numbers need to be:

**Total Cholesterol:** Less than 200 mg/dL

**LDL (bad) Cholesterol:**

- If you're at low risk for heart disease: Less than 160 mg/dL
- If you're at intermediate risk for heart disease: Less than 130 mg/dL
- If you're at high risk for heart disease (including those with existing heart disease or diabetes): Less than 100mg/dL

**HDL (good) Cholesterol:** 40 mg/dL or higher for men and 50 mg/dL or higher for women

**Triglycerides:** Less than 150 mg/dL

**High blood pressure:** High blood pressure increases the heart's workload, causing the heart to thicken and become stiffer. This stiffening of the heart muscle is not normal, and causes the heart not to work properly. It also increases your risk of stroke, heart attack, kidney failure and congestive heart failure. When high blood pressure exists with obesity, smoking, high blood cholesterol levels or diabetes, the risk of heart attack or stroke increases several times.

**Physical inactivity:** An inactive lifestyle is a risk factor for coronary heart disease. Regular, moderate-to-vigorous physical activity helps prevent heart and blood vessel disease. The more vigorous the activity, the greater your benefits. However, even moderate-intensity activities help if done regularly and long term. Physical activity can help control blood cholesterol, diabetes and obesity, as well as help lower blood pressure in some people.

**Obesity and overweight:** People who have excess body fat — especially if a lot of it is at the waist — are more likely to develop heart disease and stroke even if they have no other risk factors. Excess weight increases the heart's work. It also raises blood pressure and blood cholesterol and triglyceride levels, and lowers HDL ("good") cholesterol levels. It can also make diabetes more likely to develop. Many obese and overweight people may have difficulty losing weight. But by losing even as few as 10 pounds, you can lower your heart disease risk.

**Diabetes mellitus** : Diabetes seriously increases your risk of developing cardiovascular disease. Even when glucose levels are under control, diabetes increases the risk of heart disease and stroke, but the risks are even greater if blood sugar is not well controlled. At least 65% of people with diabetes die of some form of heart or blood vessel disease. If you have diabetes, it's extremely important to work with your healthcare provider to manage it and control any other risk factors you can. Persons who are obese or overweight should lose weight to keep blood sugar in control.

### **What other factors contribute to heart disease risk?**

**Stress**: Individual response to stress may be a contributing factor. Some scientists have noted a relationship between coronary heart disease risk and stress in a person's life, their health behaviors and socioeconomic status. These factors may affect established risk factors. For example, people under stress may overeat, start smoking or smoke more than they otherwise would.

**Alcohol**: Drinking too much alcohol can raise blood pressure, cause heart failure and lead to stroke. It can contribute to high triglycerides, cancer and other diseases, and produce irregular heartbeats. It contributes to obesity, alcoholism, suicide and accidents. The risk of heart disease in people who drink moderate amounts of alcohol (an average of one drink for women or two drinks for men per day) is lower than in nondrinkers. One drink is defined as 1-1/2 fluid ounces (fl oz) of 80-proof spirits (such as bourbon, Scotch, vodka, gin, etc.), 1 fl oz of 100-proof spirits, 4 fl oz of wine or 12 fl oz of beer. It's not recommended that nondrinkers start using alcohol or that drinkers increase the amount they drink.

**Diet and Nutrition**: A healthy diet is one of the best weapons you have to fight cardiovascular disease. The food you eat (and the amount) can affect other controllable risk factors: cholesterol, blood pressure, diabetes and overweight. Choose nutrient-rich foods — which have vitamins, minerals, fiber and other nutrients but are lower in calories — over nutrient-poor foods. A diet rich in vegetables, fruits, whole-grain and high-fiber foods, fish, lean protein and fat-free or low-fat dairy products is the key. And to maintain a healthy weight, coordinate your diet with your physical activity level so you're using up as many calories as you take in.

## **Risk Factors You Can't Change**

Extensive clinical and statistical studies have identified several factors that increase the risk of coronary heart disease and heart attack. Major risk factors are those that research has shown significantly increase the risk of heart and blood vessel (cardiovascular) disease. Other factors are associated with increased risk of cardiovascular disease, but their significance and prevalence haven't yet been precisely determined. They're called contributing risk factors.

Some of them can be modified, treated or controlled and some can't. The risk factors on this page are ones you're born with and cannot be changed. The more of these risk factors you have, the greater your chance of developing coronary heart disease. Since you can't do anything about these risk factors, it's even more important for you to manage the risk factors that can be changed.

### **Major risk factors that can't be changed**

**Increasing age**: About 82 percent of people who die of coronary heart disease are 65 or older. At older ages, women who have heart attacks are more likely than men are to die from them within a few weeks.

**Male sex (gender)**: Men have a greater risk of heart attack than women do, and they have attacks earlier in life. Even after menopause, when women's death rate from heart disease increases, it's not as great as men's.

**Heredity (including Race)**: Children of parents with heart disease are more likely to develop it themselves. African Americans have more severe high blood pressure than Caucasians and a higher risk of heart disease. Heart disease risk is also higher among Mexican Americans, American Indians, native Hawaiians and some Asian Americans. This is partly due to higher rates of obesity and diabetes. Most people with a strong family history of heart disease have

one or more other risk factors. Just as you can't control your age, sex and race, you can't control your family history. Therefore, it's even more important to treat and control any other risk factors you have.