

## Understanding your risk for a heart attack

### **Risk Factors**

#### *Conditions*

##### 1. Blood Cholesterol Levels

Cholesterol is a waxy substance produced by the liver or consumed in certain foods. It is needed by the body, and the liver makes enough for the body's needs. When there is too much cholesterol in the body—because of diet and the rate at which the cholesterol is processed—it is deposited in arteries, including those of the heart. This can lead to narrowing of the arteries, heart disease, and other complications.

Some cholesterol is often termed "good," and some often termed "bad." A higher level of high-density lipoprotein cholesterol, or HDL, is considered "good," and gives some protection against heart disease. Higher levels of low-density lipoprotein, or LDL, are considered "bad" and can lead to heart disease. A lipoprotein profile can be done to measure several different forms of cholesterol, as well as triglycerides (another kind of fat) in the blood.

##### 2. High Blood Pressure

High blood pressure is another major risk factor for heart disease. It is a condition where the pressure of the blood in the arteries is too high. There are often no symptoms to signal high blood pressure. Lowering blood pressure by changes in lifestyle or by medication can lower the risk of heart disease and heart attack.

##### 3. Diabetes Mellitus

Diabetes also increases a person's risk for heart disease. With diabetes, the body either doesn't make enough insulin, can't use its own insulin as well as it should, or both. This causes sugars to build up in the blood. About three-quarters of people with diabetes die of some form of heart or blood vessel disease. For people with diabetes, it is important to work with a healthcare provider to help in managing it and controlling other risk factors.

#### *Behavior*

##### 1. Tobacco Use

Tobacco use increases the risk of heart disease and heart attack. Cigarette smoking promotes atherosclerosis and increases the levels of blood clotting factors, such as fibrinogen. Also, nicotine raises blood pressure, and carbon monoxide reduces the amount of oxygen that blood can carry. Exposure to other people's smoke can increase the risk of heart disease even for nonsmokers.

##### 2. Diet

Several aspects of peoples' dietary patterns have been linked to heart disease and related conditions. These include diets high in saturated fats and cholesterol, which raise blood cholesterol levels and promote atherosclerosis. High salt or sodium in the diet causes raised blood pressure levels.

##### 3. Physical Inactivity

Physical inactivity is related to the development of heart disease. It also can impact other risk factors, including obesity, high blood pressure, high triglycerides, a low level of HDL (good) cholesterol, and diabetes. Regular physical activity can improve risk factor levels.

#### 4. Obesity

Obesity is excess body fat. It is linked to higher LDL (bad) cholesterol and triglyceride levels and to lower HDL (good) cholesterol, high blood pressure, and diabetes.

#### 5. Alcohol

Excessive alcohol use leads to an increase in blood pressure, and increases the risk for heart disease. It also increases blood levels of triglycerides which contributes to atherosclerosis.

#### *Heredity*

Genetic factors likely play some role in high blood pressure, heart disease, and other vascular conditions

#### **Prevention tips**

1. Eat a healthy diet. Choosing healthful meal and snack options can help you avoid heart disease and its complications. Be sure to eat plenty of fresh fruits and vegetables.
2. Eating foods low in saturated fat and cholesterol and high in fiber can help prevent high blood cholesterol. Limiting salt or sodium in your diet can also lower your blood pressure.
3. Maintain a healthy weight. Being overweight or obese can increase your risk for heart disease. To determine whether your weight is in a healthy range, doctors often calculate a number called the body mass index (BMI). Doctors sometimes also use waist and hip measurements to measure a person's excess body fat.
4. Exercise regularly. Physical activity can help you maintain a healthy weight and lower cholesterol and blood pressure. The Surgeon General recommends that adults should engage in moderate-intensity exercise for at least 30 minutes on most days of the week.
5. Don't smoke. Cigarette smoking greatly increases your risk for heart disease. So, if you don't smoke, don't start. If you do smoke, quitting will lower your risk for heart disease. Your doctor can suggest ways to help you quit.
6. Limit alcohol use. Avoid drinking too much alcohol, which causes high blood pressure. For more information, visit [CDC's Alcohol and Public Health website](#).

#### **Prevent or Treat Your Medical Conditions**

If you have high cholesterol, high blood pressure, or diabetes, there are steps you can take to lower your risk for heart disease.

1. Have your [cholesterol](#) checked. Your health care provider should test your cholesterol levels at least once every five years. Talk with your doctor about this simple blood test.
2. Monitor your blood pressure. High blood pressure has no symptoms, so be sure to have it checked on a regular basis.
3. Manage your diabetes. If you have diabetes, closely monitor your blood sugar levels. Talk with your health care provider about treatment options.
4. Take your medicine. If you're taking medication to treat high cholesterol, high blood pressure, or diabetes, follow your doctor's instructions carefully. Always ask questions if you don't understand something.
5. Talk with your health care provider. You and your doctor can work together to prevent or treat the medical conditions that lead to heart disease. Discuss your treatment plan regularly and bring a list of questions to your appointments.