

# HEART ATTACK

KNOW YOUR RISK FACTORS  
AND PREVENTION



PORT HURON

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HEALTH CARE



## WHAT IS A HEART ATTACK OR MYOCARDIAL INFARCTION?

A heart attack or myocardial infarction (MI) occurs when the arteries of your heart (coronary arteries) are blocked or have spasms leading to a decrease in blood flow to the heart. In the areas of blockage or spasm, the heart does not get enough blood supply so the heart muscle may become injured and weaken. Decreased blood flow leads to chest pain/angina. Your heart may not be damaged if you get care soon after your symptoms.

## HOW IS CORONARY ARTERY DISEASE TREATED?

- You must reduce your risk factors! Adopt a healthy diet, lifestyle, manage comorbidities, and take medications.
- Medications that improve blood flow to your heart may be needed. Take them as prescribed.
- Procedures to improve blood flow to the heart. They still require you to reduce risk factors:
  - Angioplasty with Stent – Opens and keeps open narrowed/clogged vessels.
  - Coronary Artery Bypass Grafting (CABG) – Provides a new route for blood to flow around a complete or partial blocked artery. It uses a healthy vessel from your chest, leg, or arm.

- Limit alcohol – Seek help if needed.
- Don't use illegal drugs – Seek help if needed.
- Take your medications as ordered by your doctor.

## HOW IS CORONARY ARTERY DISEASE DIAGNOSED?

- You and your doctor will discuss your symptoms, medical history, and risk factors.
- You will have a physical exam.
- You will have your blood drawn to check cardiac enzymes for heart muscle injury.
- You may have one or more of the following procedures:
  - Electrocardiogram (ECG or EKG) – This records the electrical signals in the heart. It can give doctors information about heart rate, rhythm, blood/oxygen supply to the heart, heart defects, as well as evidence of a current or past heart attack.
  - Chest XRAY – Provides images of your heart, vessels, lungs, airways, bones of spine and chest. XRAYs can also tell if there is fluid in or around the lungs, or air around the lungs. Some patients have serial XRAYs to see if their health condition is improving or not.
  - Exercise stress test – This will tell doctors how well your heart is working during physical activity and whether there are problems with blood flow to the heart.
  - Cardiac Catheterization – Procedures that can diagnose and treat heart and blood vessel conditions. A thin catheter is guided through a blood vessel to the heart to give doctors important information about heart muscle, valves, and vessels in your heart.
  - Echocardiogram – Uses sound waves to show pictures of your heart and how blood flows through the heart and valves. Another name for this is ultrasound.

## SIGNS AND SYMPTOMS OF A HEART ATTACK:

Signs and symptoms vary and are different for men and women.

### Men typically have:

- Chest discomfort/pressure, Angina
- Sweating/cold sweat
- Shortness of breath
- Nausea
- Left arm pain, lower back pain, jaw pain
- Feeling of “heartburn”
- “Not feeling right”
- Lightheadedness or dizziness

### Women may have the above as well as:

- Sharp pain felt in the neck, jaw, one or both arms, upper back, upper abdomen
- Unusual fatigue

Their symptoms may be less noticeable and may happen more when resting or sleeping. Emotional stress can trigger symptoms.

## WHEN DO SYMPTOMS OCCUR?

Warning symptoms can happen hours, days, or weeks in advance, or they may be sudden. Chest discomfort, pressure, or angina that is continuous even at rest can also be an early symptom.

Learn to recognize your symptoms and the situations that cause them.

## WHAT SHOULD YOU DO IF YOU EXPERIENCE SYMPTOMS OF MI?

Call 9-1-1. Take an aspirin if recommended. Take nitroglycerin as directed by your doctor if prescribed.

## WHAT CAUSES A HEART ATTACK?

- Coronary Artery Disease or CAD: one or more heart arteries are blocked by plaque deposits formed by fat and cholesterol which narrow the arteries, limiting blood flow to heart muscle. Another danger is if a plaque ruptures, it can cause a clot to form and close the artery.
- Complete or partial blockage of a heart artery: changes in the ST segment due to blockage or narrowing in one or more artery of the heart. The ST segment can be seen on an EKG/ECG reading.
- At times, it could be from severe spasm or spontaneous dissection.
- Spontaneous Coronary Artery Dissection or, SCAD: a tear inside of a heart artery.

## WHAT ARE THE RISK FACTORS FOR HEART ATTACK?

- Age – The older we are, the higher the risk.
- Tobacco use
- High blood pressure
- High cholesterol and high levels of “bad” cholesterol (LDL)
- Obesity
- Diabetes
- Metabolic Syndrome – The combination of three or more of the following increases your risk:
  - Central obesity or enlarged waist
  - High blood pressure
  - Low “Good” HDL Cholesterol
  - High cholesterol
  - High blood sugar (Diabetes)
- Family history of heart attack
- Lack of daily exercise/sedentary lifestyle
- Unhealthy diet – A diet high in sugar, fats, processed foods, and salt
- Stress

- Illegal drug use – Cocaine and amphetamines
- A history of pre-eclampsia – High blood pressure in pregnancy can increase your lifetime risk of heart attack.
- Autoimmune condition
- Heavy alcohol use

## WHAT ARE POSSIBLE COMPLICATIONS OF HEART ATTACK?

Heart muscle damage from having a heart attack can lead to possible complications:

- Arrhythmias – Irregular heart rhythms result from changes in electrical signals moving through the heart.
- Cardiogenic shock – Rare, this happens if the heart is suddenly not able to pump blood.
- Heart Failure – This may be temporary or chronic/long lasting.
- Pericarditis – Inflammation of the sac around the heart
- Cardiac Arrest – Without warning, the heart stops. This can lead to death without immediate treatment.

## HOW CAN I REDUCE THE RISK OF A HEART ATTACK?

You still have time to prevent a heart attack, even if you have had one in the past. Prevention includes following a healthy lifestyle:

- Quit smoking – You are risking the health of your vessels to your heart, organs, and limbs if you continue to smoke.
- Maintain a healthy weight and BMI – Your doctor can help you achieve this.
- Manage your co-morbidities that increase your risk of heart attack – High blood pressure, diabetes, high cholesterol.
- Eat a healthy diet containing fruits and vegetables, low fat, low sodium, low sugar such as The Mediterranean Diet.
- Get regular exercise that your doctor has approved for you.
- Manage your stress level.