



HEART DISEASE

HEART CONDITIONS, RISKS AND PROTECTION

Heart disease is the leading cause of death for both men and women worldwide, accounting for over 17 million deaths per year. By 2030 it is estimated that deaths from heart disease will increase to over 23 million.

Heart disease refers to several diseases all of which affect the heart. To help prevent heart disease, it is important to understand how the heart works. Healthy lifestyle choices are the cornerstone of prevention for many heart diseases.

If you have been diagnosed with heart disease, you can live a more active life by learning about your disease and how you can take better care of your health.

In this guide, we take a closer look at heart disease, exploring the various types of heart diseases, highlighting their symptoms, risks, and treatments, and exploring lifestyle changes that can help prevent disease.

THE ROLE OF THE HEART

The heart is fist sized and is located under the rib cage, to the left of the breastbone and between the lungs.

Its role is to send blood around the body, removing waste products and providing oxygen from the lungs and the nutrients required to sustain life.

The heart beats approximately 100,000 times per day, and can pump 5 to 7 litres of blood in one minute (7600 litres per day).

The right side of the heart receives blood from the body and pumps it to the lungs. The left side of the heart receives blood from the lungs and pumps it out to the body.

The blood which is pumped by the heart is carried through the body in three types of blood vessels:

Arteries carry blood from the heart to the body's tissues. Starting at the aorta they become smaller as they carry blood further from the heart.

Veins take blood back to the heart, they become larger as they get closer to the heart. The superior vena cava brings blood from the upper body to the heart, and the inferior vena cava brings blood from the lower body.

Capillaries are small blood vessels that connect the arteries and the veins. The walls of capillaries are thin, allowing oxygen, nutrients and waste products such as carbon dioxide to pass to and from the bodies organs.

When the heart is functioning properly this process ensures that there is sufficient oxygen and nutrients for your body to work efficiently.



Did you know?

The number of people diagnosed with heart failure is projected to rise by 46 percent by 2030.

Heart disease and cardiovascular disease

Heart disease is a term used to describe a range of conditions that affect the heart. The term 'heart disease' is often used interchangeably with the term 'cardiovascular disease', however, cardiovascular disease refers to diseases that affect the heart and blood vessels (arteries, veins, or capillaries), whereas heart disease refers solely to diseases of the heart.



Did you know?

Coronary heart disease is the most common type of heart disease.

CONDITIONS WHICH AFFECT THE HEART



Did you know?

At rest, a normal heart beats around 50 to 95 times a minute. Exercise, emotions, illness, and some medications can cause the heart to beat faster.

Arrhythmia

Arrhythmia is an abnormal heart rhythm, which occurs when the heart's electrical impulses that coordinate heartbeats do not work properly. During an arrhythmia, the heart may beat too fast, too slow, or with an irregular rhythm.

Tachycardia is when the heart beats too fast

Bradycardia is when the heart beats too slowly

Irregular heart rhythm can be common, particularly with increasing age, and feels like a fluttering of the heart. However, when they occur it is advisable to consult with your doctor.

Arrhythmia symptoms may include:

- Fluttering in the chest
- Racing heartbeat
- Slow heartbeat
- Chest pain or discomfort
- Shortness of breath
- Light-headedness
- Dizziness
- Fainting

Sudden **cardiac arrest** is the unexpected loss of heart function, when a person's heart stops pumping blood around their body and they stop breathing normally. Cardiac arrest is often caused by an arrhythmia or a heart attack.

Congenital heart disease

Congenital heart disease is a defect in the hearts structure, which is present at birth. The defects can disrupt the normal flow of blood through the heart and typically affect approximately eight out of every 1,000 children.

In many cases there may be very few or no signs and symptoms from congenital heart disease.

Symptoms of severe defects in babies may include:

- Rapid breathing
- Cyanosis (turning blue)
- Poor blood circulation/fainting

Treatment for congenital heart disease will depend on the type and severity of the defect, and a child's age and general health.

Coronary artery disease (atherosclerosis)

Coronary artery disease is the most common type of heart disease, it occurs when the arteries that supply blood to heart muscle become hardened and narrowed, due to the build-up of cholesterol as plaque on their inner walls.

As this build-up occurs blood flow through the arteries becomes restricted, reducing the levels of oxygen to the heart muscle.

Symptoms of coronary artery disease may include:

- Chest pain (angina)
- Nausea
- Shortness of breath
- Heart attack

Coronary heart disease can often develop over a long time period, contributing to heart failure and arrhythmias. However, with a healthy lifestyle and diet, the effects can be drastically reduced.

Atherosclerosis can also lead to **peripheral artery disease**. A condition where the extremities (generally the legs) don't receive adequate blood flow, leading to pain when walking.

Angina is not technically a disease, it is a symptom of coronary artery disease. When the heart muscle does not get enough oxygen, angina sufferers experience chest discomfort, tightness or pain. Some people feel the pain in their arm, neck, stomach or jaw.

Angina is often an indicator for some form of heart disease.

If you suffer from angina (which is being treated already) and you believe the pain is getting worse, feels different than previously, is more frequent or has changed in any way, you should speak with your doctor.

If you have not been diagnosed with angina and experience chest pain, contact the emergency services.

Cardiomyopathy

Cardiomyopathy is a condition where the heart muscle becomes enlarged, thick or rigid, in rare cases the muscle tissue is replaced with scar tissue.

As a result of cardiomyopathy, the heart becomes weaker and less able to pump blood through the body and maintain a normal electrical rhythm.

In some cases, cardiomyopathy may have no signs or symptoms and no treatment will be required. But, for others the condition can develop quickly with severe consequences.

Two of the main types of cardiopathy are:

Dilated cardiomyopathy where the chambers of the heart become dilated because the heart muscle has become weak and cannot pump blood properly. This is often due to a lack of oxygen to the heart muscle as a result of coronary artery disease.

Hypertrophic cardiomyopathy where the wall of the left ventricle thickens, decreasing blood flow from the heart. Hypertrophic cardiomyopathy affects both men and women equally, and at any age. It is the most common cause of cardiac arrest in younger people.

Cardiomyopathy may be genetic, or caused by high blood pressure, diabetes, obesity, metabolic diseases, or infections.

Heart attack

Also known as myocardial **infarction**, cardiac infarction and coronary thrombosis, a heart attack is a serious medical emergency in which the supply of blood to the heart is suddenly blocked, usually by a blood clot that develops in one of the coronary arteries. It can also occur if an artery suddenly narrows.

Most heart attacks occur in people with coronary artery disease, caused by atherosclerosis, as blood clots develop on the surface of the plaques that already narrow the coronary artery significantly.

Heart attack symptoms vary from person to person, and from one heart attack to another.

The symptoms of a heart attack include:

- Chest pain: the pain is usually located in the centre of the chest and feels like pressure, tightness or squeezing
- Arm pain: the pain usually travels from the chest to the arms (most commonly the left arm, but it can affect both arms). Pain may also be experienced in the jaw, neck, back and abdomen.
- Shortness of breath
- Nausea
- Anxiety
- Light-headedness
- Coughing
- Vomiting
- Wheezing

Many cardiac arrests happen because of a heart attack, because a person who is having a heart attack may develop a dangerous heart rhythm, causing a cardiac arrest.

Call the emergency services immediately if you suspect that you or someone else is having a heart attack or cardiac arrest.

The sooner you get help for a heart attack, the better the chances for recovery.

Mitral regurgitation

Mitral regurgitation occurs when the **heart's** mitral valve does not close properly, allowing blood to flow back into the heart and affecting blood flow to the body.

Symptoms of mitral regurgitation may include:

- Shortness of breath
- Fatigue
- Heart palpitations
- Swollen feet or ankles



Did you know?

Eighty-five percent of heart damage happens in the first two hours following a heart attack.

Heart failure

Heart failure occurs when the heart can't pump blood around the body efficiently. The decrease in the amount of blood pumped by the heart, is not adequate to circulate the blood returning to the heart from the body and lungs, causing fluid to leak from capillaries.

High blood pressure can often cause heart failure, as can heart defects, cardiovascular disease, valvular heart disease, infections or cardiomyopathy.

Symptoms of heart failure may include:

- Fatigue
- Shortness of breath
- Shortness of breath when lying flat
- Swollen feet and ankles
- Weight gain, over a short time period
- Loss of appetite and abdominal swelling
- Dizziness
- Coughing
- Being woken from sleep with severe breathlessness

If you are experiencing any of the symptoms above, consult your doctor.

Treatment for heart failure is to control symptoms and help those affected to live full and active lives, with a combination of medications and lifestyle changes.

RISK FACTORS FOR HEART DISEASE

The risk factors for developing heart disease are quite similar, regardless of the type of heart disease. While some risk factors are hereditary, some of the most serious risk factors for heart disease are behavioural and manifest in individuals as raised blood pressure, raised blood glucose or overweight and obesity.

Risk factors for developing heart disease include:

High blood pressure

High blood pressure (hypertension) can lead to thickening of the arteries, narrowing blood vessels and reducing blood flow, resulting in atherosclerosis.

Smoking

Smoking damages the lining of the arteries, leading to a plaque build-up which constricts the blood vessels.

High cholesterol

High blood cholesterol levels increase the risk of atherosclerosis.

Overweight and Obesity

People who are overweight are more likely to develop hypertension and type-2 diabetes, putting them at higher risk of developing heart disease.

Gender

Men are generally at higher risk of heart disease. However, women's risk increases after the menopause.

Stress

The links between stress and heart disease are still being explored, however stress is thought to affect behaviours which increase heart disease risk: high blood pressure and cholesterol levels, smoking, physical inactivity and overeating.

High salt diet

Poor diet is one of the leading risks for heart disease, particularly diets that are high in fat, salt, sugar and cholesterol.

Diabetes

People with diabetes tend to develop heart disease at a younger age than people without diabetes. Diabetes sufferers are at higher risk of obesity and high blood pressure, increasing their risk for heart disease.

Lack of exercise

People who are physically inactive are at greater risk of developing high blood pressure, overweight and obesity and diabetes. All of which are independent risk factors for developing heart disease.

Alcohol consumption

Excessive alcohol consumption can lead to raised blood pressure and obesity, increasing heart disease risk.

Family history

A family history of heart disease increases an individual's risk of developing heart disease, particularly if a parent developed it at a young age.

Age

Increasing age raises the risk of damaged and narrowed arteries.

Heart disease and ischemic stroke share the same risk factors. A stroke occurs when the arteries to the brain are narrowed or blocked, preventing blood from reaching the brain. Therefore, an individual who is diagnosed with one of these conditions has increased risk of having or developing the other.

TREATMENT FOR HEART DISEASE

Heart disease treatments vary by condition. However, the most effective prevention and treatment of heart disease involve limiting exposure to the risk factors.

Lifestyle changes

These include eating a low-salt and low-fat diet, at least 30 minutes of moderate intensity exercise per day, quitting smoking, reducing weight and taking steps to lower cholesterol and blood pressure levels.

Medications

Depending on the type of heart disease, in some instances medications will be required to control and treat heart disease.

Surgery

For some people surgery may be required for the treatment of heart disease. The type of procedure will be determined by the type of heart disease and the extent of the damage to the heart.



Did you know?

Fewer women than men survive their first heart attack.



YOUR INTERNATIONAL HEALTH INSURANCE COVER

Treatment for heart disease is more effective when the disease is detected early, so if you have concerns about your heart health talk to your doctor about steps you can take to reduce your heart disease risk. This is especially important if you identify with any of the risk factors outlined above.

“Heart disease is a silent killer, so take action now to make sure that this vital, precious organ in your body is lovingly taken care of .”

Dr Ulrike Sucher

Medical Director, Allianz Partners