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CORONARY HEART DISEASE

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Introduction

The illness known as coronary heart disease (CHD) is caused by a buildup of fatty deposits called plaque, which narrows or blocks the arteries that deliver blood and oxygen to the heart. This makes it harder to have enough blood to get to the heart muscle, which might result in a heart attack or angina (chest pain) (NHS, 2025). Chest pain, shortness of breath, arm, neck, jaw, or back pain, fatigue and weakness, and light-headedness are typical symptoms. According to the NHS (2025), some patients may not show any signs until they suffer a heart attack. Millions of people in the UK suffer from coronary heart disease each year, making it one of the top causes of mortality.

A significant public health issue that strains healthcare systems and lowers quality of life, coronary heart disease affects about 2.3 million people throughout the UK, according to the British Heart Foundation (British Heart Foundation, 2025). Globally around 140 million men and 100 million women have coronary heart disease. (British Heart Foundation)

What are the various methods for measuring and tracking coronary heart disease?

Globally, there are many ways of diagnosing and detecting CHD. Taking of blood pressure, blood cholesterol, and blood glucose are among such tests since these factors play a very important role when it comes to the risk of heart diseases (WHO, 2025).

An electrocardiogram is a test that shows the electrical activity of the heart, which helps in determining any changes in the rhythm of the heart or a history of heart problems.

An Echocardiogram is an ultrasound picture of the heart and shows how the heart works. Patients with CHD have scheduled visits with their GP or cardiologist to monitor their symptoms, blood pressure, cholesterol level and medications. It helps reduce the risks of other heart complications (WHO, 2025).

In the UK, doctors and nurses measure and track coronary heart disease (CHD) in a variety of ways. These tests help them in identifying whether a person has blocked arteries and the

health of their heart. Because it can help avoid serious issues like a heart attack, early detection is crucial (NHS, 2026).

Checking blood pressure is one common test. High blood pressure raises the risk of coronary heart disease and damages the arteries. Furthermore, doctors use blood tests to measure blood sugar, cholesterol, and other chemicals that may indicate cardiac disease.

Fatty deposits in the arteries brought on by high cholesterol can impede blood flow to the heart (NHS, 2026).

An electrocardiogram (ECG) is another crucial measurement. This test can determine if the heart is beating regularly or whether there are indications of a prior heart attack by recording the electrical activity of the heart. Also, some patients may undergo an exercise stress test in which their heart rate is tracked while they ride a stationary bike or walk on a treadmill. This supports medical personnel in understanding how the heart functions during exercise.

An echocardiogram, which creates images of the heart using sound waves, is another tool available to doctors.

This test shows whether the heart muscle is damaged and how well the heart pumps blood. Doctors may perform a coronary angiogram or a CT coronary angiography if more specific information is required. To determine whether the coronary arteries are obstructed or narrowed, these diagnostics include dye and specialised imaging (NHS, 2026).

Furthermore, CHD patients see their GP or cardiac specialist on a regular basis. Healthcare providers check blood pressure, cholesterol, symptoms, and medications during these appointments. This lowers the chance of more cardiac issues and ensures that the condition is effectively managed (NHS England, 2026).

Describe the methods used to control this illness.

CHD cannot be cured but can be controlled globally through lifestyle changes, medication, and even surgery to improve blood supply to the heart and prevent heart attacks (WHO, 2025).

Lifestyle changes include adopting a balanced diet, taking part in regular exercises, not smoking, maintaining a healthy body weight, and limiting consumption of alcohol. Lifestyle changes contribute to overall cardiovascular well-being and the reduction of risk factors.

Medication includes statins for lowering cholesterol levels, aspirin for the prevention of blood clots, and beta blockers, ACE inhibitors, or nitrates for controlling high blood pressure and chest pain.

Surgery could be required, including the coronary angioplasty, which involves the opening of blocked arteries using stents, and CABG, which involves improving blood circulation around blocked arteries.

In the UK, although coronary heart disease (CHD) cannot always be cured completely, it can be managed with medication, healthy lifestyle modifications, and sometimes surgery. Improving blood flow to the heart, reducing symptoms, and lowering the risk of heart attacks

or other problems are the main goals of treatment. Making healthy lifestyle adjustments is a crucial part of managing CHD. It is recommended that people consume a balanced, healthful diet low in sugar, salt, and saturated fat. Eating more fruits, vegetables, whole grains, and oily fish will help decrease cholesterol and strengthen the heart. Frequent exercise is also crucial for maintaining a healthy weight, lowering blood pressure, and strengthening the heart.

It is recommended that smokers quit since smoking destroys arteries and raises the risk of heart attacks. In addition, excessive alcohol use should be avoided as it can raise blood pressure and further strain the heart (NHS, 2026).

Many CHD sufferers require medication to assist manage their illness. Statins are used to control cholesterol and lessen the accumulation of fatty deposits in the arteries. Aspirin and other antiplatelet medications help lower the risk of blood clots. To lower blood pressure and lessen the strain on the heart, some people are prescribed beta-blockers, ACE inhibitors, or other medications. Nitrates are medications that can be prescribed to treat angina (chest pain) (NHS, 2026).

Surgery can be required if medication and lifestyle modifications are insufficient. One procedure is coronary angioplasty, in which a stent is inserted to keep the blocked artery open after a tiny balloon is used to unblock it. Coronary artery bypass graft (CABG) surgery is an additional treatment that involves creating a new pathway for blood to flow around the blocked artery using a healthy blood supply. To monitor the disease and ensure that the medication is effective, routine check-ups with medical specialists are crucial (British Heart Foundation, 2026).

What effects does this disease have on members of the community?

Globally, disease has impacts on individuals, families, and the whole community. An individual with CHD is likely to suffer from chest pain, shortness of breath, and fatigue, making it difficult for them to perform daily activities. The condition may result in either a heart attack or heart failure in severe cases (WHO, 2025).

In addition, coronary heart disease affects the mental health of an individual. A patient may experience stress, anxiety, or depression, while family members will be concerned about caring for the patient.

The disease also has financial implications because some patients cannot go to work, meaning that their family incomes decline. CHD strains healthcare facilities since the patients require regular checkups, drugs, and even hospitalisation. Promotion of healthy living styles and early diagnosis will help in minimising the impacts of CHD on the community (WHO, 2025).

In the UK, there are many different impacts that coronary heart disease (CHD) can have on individuals, their families, and the community. A person's capacity to work, social life, mental

health, and physical health can all be impacted by the illness. Many CHD patients require lifelong care, which can alter their daily routines (NHS, 2026).

People may experience fatigue, shortness of breath, and chest pain as one of the primary physical effects. It may be challenging to perform daily tasks like walking, climbing stairs, or working because of these symptoms. A heart attack might result in irreversible damage to the heart in certain individuals.

If left untreated, severe CHD can result in cardiac failure or even death (NHS, 2026).

A person's mental health may also be impacted by the illness. After receiving a CHD diagnosis or experiencing a heart attack, many patients experience worry, anxiety, or depression. Their confidence may suffer because of their fear of having another heart attack. Concerns about their loved one's health and the potential need for additional care and support may also cause stress for family members (British Heart Foundation, 2026).

Additionally, CHD may have social and economic consequences. Due to their health, some people may have to quit their jobs or cut back on their hours. The family may experience financial troubles and a decrease in income as a result. Some people lose their independence and require assistance from community resources or caretakers. Since many patients require frequent GP visits, hospital care, medication, and therapy, the illness also has a significant impact on the NHS. This uses a lot of NHS resources and raises healthcare costs. To improve people's health and lessen the burden on health and social care systems, it is crucial to prevent CHD through healthy lifestyles and early treatment (NHS England, 2026).

Which health and social care counselling services are necessary to address the demands of community members impacted by this condition?

Individuals with coronary heart disease (CHD) require assistance from many social and medical providers. These services assist people live as independently as possible, manage their condition, and enhance their health. Additionally, the support enhances quality of life and lowers the chance of future heart issues (NHS England, 2026). People often see their general practitioner (GP) first. The doctor examines the patient's general health, blood pressure, and cholesterol levels. Additionally, they write prescriptions for medications and, if necessary, refer patients to cardiac experts.

Cardiac nurses are crucial because they provide guidance on medications, nutritious food, exercise, and lifestyle modifications. They also assist in responding to enquiries and providing post-hospital patient assistance. Following a heart attack or heart surgery, many people are directed to a cardiac rehabilitation program. To aid in a safe recovery, these programs offer emotional support, education about heart disease, and supervised exercise (British Heart Foundation, 2026).

Other medical specialists are also crucial. Dietitians assist patients in lowering cholesterol and improving their nutrition. Physiotherapists assist patients in increasing their fitness and engaging in safe activity. Pharmacists talk about potential side effects and how medications should be administered. Because living with CHD can lead to anxiety or sadness, some people may also benefit from mental health therapies.

Social services are also crucial, particularly for those who struggle with everyday tasks. To monitor and treat patients, community nurses might come to their homes. For those in need of additional assistance, social workers can set up home care, equipment, or support. Occupational therapists assist individuals in maintaining their independence by offering strategies for simplifying daily tasks. Additionally, charities like the British Heart Foundation offer patients and their family's information, emotional support, and guidance. Together, these social and medical services enable individuals with CHD to lead more independent and healthy lives (British Heart Foundation, 2026).

Conclusion

In conclusion, many people in the UK and around the world suffer with coronary heart disease, a dangerous chronic illness. It occurs when the heart receives less blood and oxygen due to constriction or blockage of the coronary arteries. Heart attacks, chest pain, and other major health issues may result from this. To diagnose and monitor the illness, doctors use a variety of diagnostics, including blood tests, ECGs, and cardiac scans. While there is not always a cure for coronary heart disease, it can be managed with medication, healthy lifestyle modifications, and occasionally surgery. In addition to putting strain on families, communities, and the NHS, the illness can have an impact on a person's everyday life, mental health, and physical health, to provide treatment, rehabilitation, and continuing support, social workers and health care providers collaborate. For those with coronary heart disease, early diagnosis, routine checkups, and healthy lifestyle choices are crucial because they lower complications and enhance quality of life (NHS, 2026).

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