

Loss Prevention Bulletin

Cardiovascular Disease

Cardiovascular disease (CVD), also known as the heart and circulatory disease, is the leading cause of death worldwide. Global statistics show that approximately 18 million people lose their lives annually to the disease.

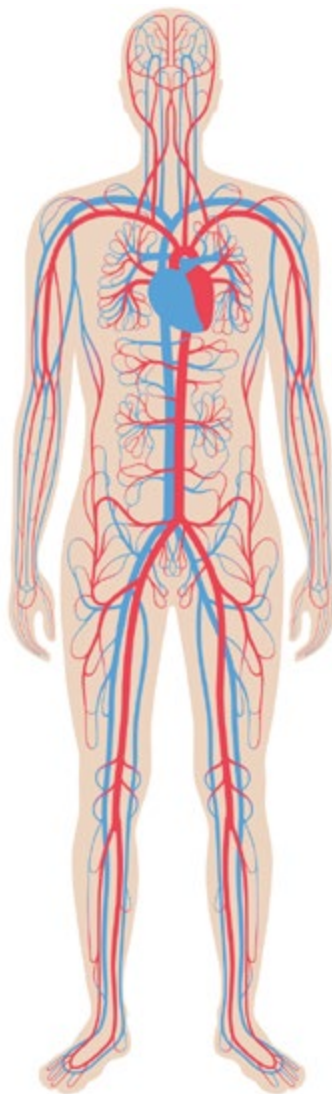
In addition, the Club's analysis of crew illness incidents shows that CVD accounts for the second-highest number of incidents within the category of illness claim and are the costliest in terms of loss of life and treatment.

CVD is an umbrella name for conditions affecting the heart and circulatory system, such as hypertension, stroke, heart attack and coronary artery disease.

When looking at CVD deaths, four out of five are due to heart attacks and strokes, and one-third of these deaths occur prematurely in people under 70 years of age.

Seafarers are not exempt from this. Even though they must have a medical fitness exam every two years and sometimes an additional pre-employment medical, there is still an assumed slightly higher risk of them having a form of CVD than those working ashore.

The influenceable risk factors onboard a ship consist of ship-specific stress situations, overeating and lack of exercise. Consequences of a CVD event depend highly on the measures taken within the first few hours of the event occurring; however, critical first aid is limited on cargo ships as they have basic facilities.



The purpose of this bulletin is to highlight the various conditions of CVD, their signs and symptoms, and preventative actions that an individual can take to avoid the onset of CVD.

Heart and Circulatory System

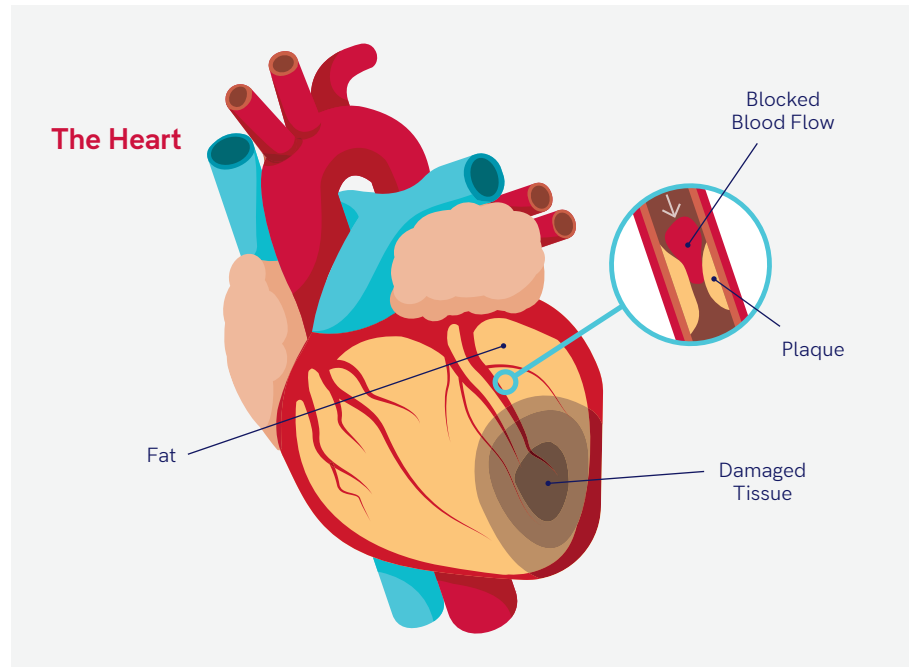
Since CVD is a condition that affects the heart and blood vessels, it is essential to understand its basics. The heart is a muscle the size of a human fist located slightly to the left of the middle of the chest.

The heart sends blood around the body, which provides the necessary oxygen and nutrients it needs and carries away the waste.

The system carrying blood towards and away from the heart is the circulatory system and is made up of blood vessels. Arteries carry blood away from the heart, and veins carry the blood back to the heart.

Heart Attack

A heart attack is when a blood clot is formed, blocking the blood flow through a blood vessel that feeds the heart, this could lead to possibly damaging or destroying a part of the heart muscle. In addition, a condition called Atherosclerosis can cause a heart attack where there is a build-up of fatty plaques in the arteries causing them to narrow or block.



The signs and symptoms are as follows:



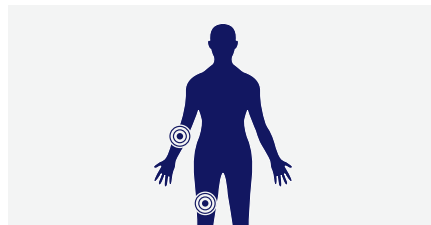
- Chest pain or the feeling of tightness/pressure in the chest area. A patient may clutch at their chest



- Shortness of breath



- Pain in the neck, jaw, throat or upper abdomen. It can feel as if the pain travels from your chest to your arms (usually, the left arm is affected, but it can affect both arms)



- Where blood vessels are narrow in areas such as the legs or arms, there will be pain, numbness, or weakness.

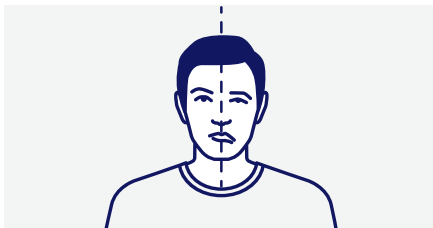
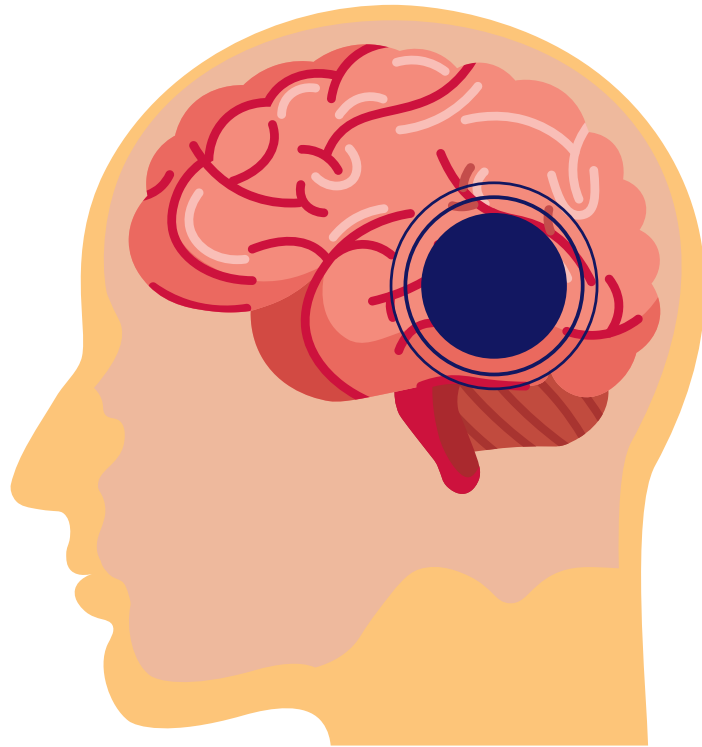
Signs and symptoms can differ between men and women. For example, men experience chest pain, whereas women experience chest discomfort, nausea and extreme fatigue.

Stroke & Transient Ischemic Attack

A stroke is also known as a “brain attack”, is where the blood supply to part of the brain is cut off and can result in brain damage and possibly death. There are two main types: an ischemic stroke, whereby the blood flow to the brain is blocked by a clot or a haemorrhagic stroke, when a blood vessel in the brain bursts, causing blood to leak into the brain.

A Transient Ischemic Attack (also called TIA or “mini-stroke”) is similar, but in this case, there is a temporary disruption of blood flow to the brain. It can cause symptoms similar to a stroke, such as speech impediment, visual disturbance and numbness/weakness in the face, arms and legs.

The main symptoms of a stroke or TIA can be remembered with the acronym FAST, which stands for:



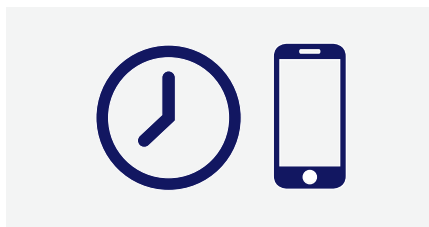
FACE - the face has dropped one side; the person cannot smile, and their mouth or eye may have dropped.



ARMS - the person may not have the ability to lift both arms and keep them raised because of weakness or numbness in one arm.



SPEECH - speech may be slurred or garbled, or the person may not be able to talk at all.



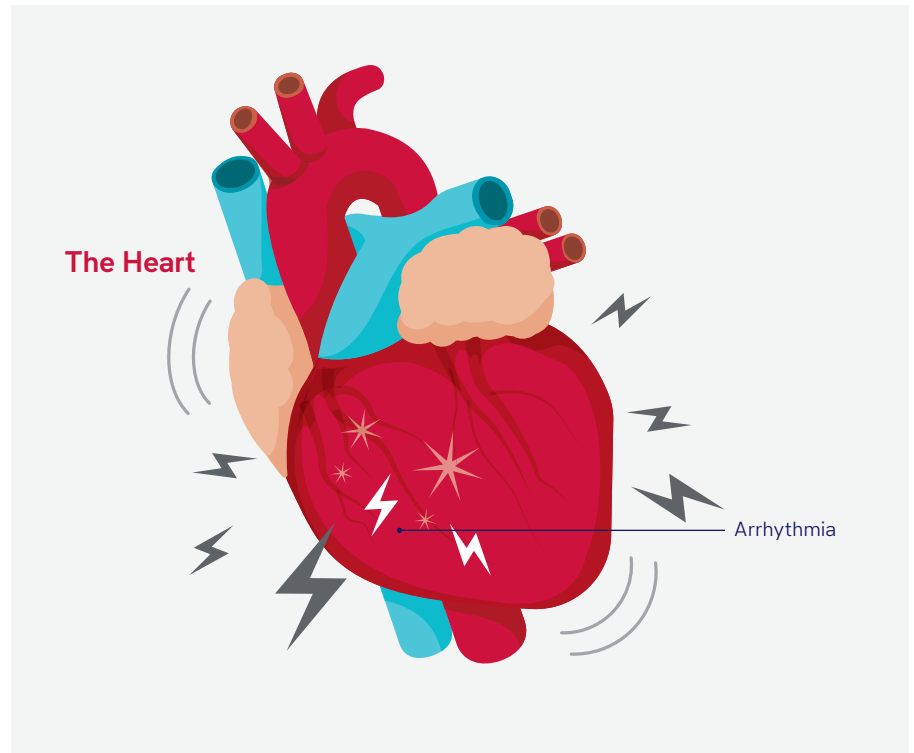
TIME - time to call for help immediately.

The duration and the severity of the stroke symptoms can vary from person to person. Some can last a few minutes, while others can last for hours or even days. The faster the stroke is treated, the better the chances of survival.

Cardiac Arrest

Cardiac Arrest occurs suddenly and without warning. The word arrest means to stop; in other words, the heart ceases to beat. There can be several causes, but commonly it is an electrical malfunction in the heart that can cause an irregular heartbeat (arrhythmia); however, cardiac arrest occurs when the heart's rhythm stops. With its pumping action disrupted, the heart cannot pump blood to the brain, lungs and other organs. Once this happens, a person loses consciousness and has no pulse. Death occurs within minutes if the person does not receive treatment.

It is reasonably common for a cardiac arrest to occur during a heart attack because the afflicted person develops a dangerous heart rhythm during the attack, which results in the onset of a cardiac arrest.



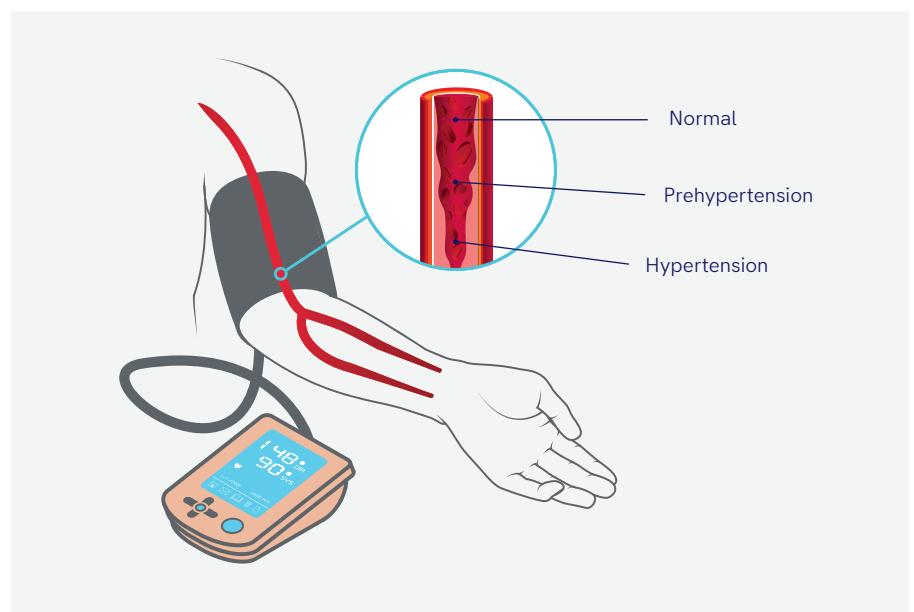
High Blood Pressure (Hypertension)

Blood pressure is the pressure of circulating blood against the walls of blood vessels. Most of the pressure results from the heart pumping blood through the circulatory system.

This pressure changes naturally, going up and down throughout the day and night, and when a person moves, it is normal for it to go up.

Hypertension requires the heart to pump harder to circulate the blood through the body and is a condition rarely noticed.

However, consistently high blood pressure can increase the risk of several severe and potentially life-threatening health conditions such as heart attacks and strokes.



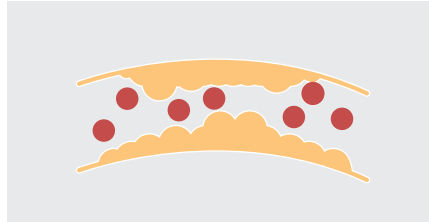
Even though the arteries are strong and stretchy to cope with the blood pressure going up and down, the arteries lose their stretchiness and become narrow if the blood pressure remains continuously high.

Narrow arteries make it easier for fatty plaques to clog them up and, depending on where the clogged artery is, can lead to a heart attack or stroke.

What increases the chances of getting cardiovascular disease?



■ **Smoking** - the harmful substances found in tobacco can damage and narrow the blood vessels.



■ **High cholesterol** - the fatty substances found in the blood. Having a high concentration can cause the blood vessels to narrow and increase the risk of developing a blood clot.



■ **Diabetes** – this is when the blood sugar level becomes too high. Having high blood sugar levels can damage the blood vessels, making them more likely to become narrow.



■ **Inactivity** - not doing a regular physical activity can lead to high blood pressure, high cholesterol levels, and obesity.



■ **Overweight / Obesity** - this increases the risk to develop diabetes and high blood pressure.



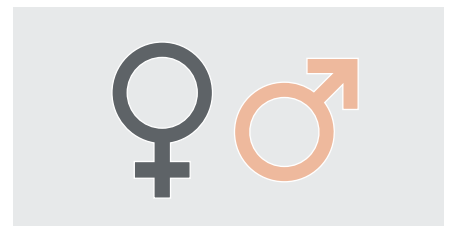
■ **Family history** - if a close family member has cardio-related issues, then the risk of developing them further increases.



■ **Ethnic background** - the diseases are more common in people of a South Asian, African or Caribbean background.



■ **Age** - the diseases become more common over 50 years old, and then the likelihood increases further.



■ **Gender** - men are more likely to develop it earlier than women.



■ **Diet** - having an unhealthy diet.



■ **Alcohol** - consuming an excessive amount of alcohol.



■ **Stress** - prolonged stress puts strain on the heart, causing it to work harder, leading to hypertension.

How to mitigate/prevent the development of cardiovascular diseases:



■ **Stop smoking.**



■ **Exercise** – try to do at least 150 minutes a week of moderate exercise. This could be something like a brisk walk or cycling. If this is difficult to undertake, do what feels comfortable, then gradually increase the duration and intensity of the exercise.



■ **Find a way to manage stress.**



■ **Maintain healthy blood pressure and cholesterol** – healthy blood pressure is 120 systolic / 80 diastolic. Systolic is the measurement of pressure when the heart is contracting (working). Diastolic measurement is when the heart is resting. If there are high numbers, the heart is working harder to pump the blood around the body.



■ **Have a balanced diet:**

- consume lower levels of saturated fats, such as cream, cakes etc. Healthy fats should be eaten, such as oily fish, nuts etc. but eaten in moderation as they are calorically dense
- consume lower levels of salt
- reduce levels of sugar
- eating a moderate amount of fibre and whole-grain foods
- eat a minimum daily portion of 5 fruits and vegetables.



■ **Maintain a healthy weight** – having excess or an unhealthy body fat distribution raises the risk of suffering from severe health conditions. There are various indices available – Body Mass Index (BMI), Waist Circumference, Waist to Hip Ratio, Skinfold Measurements, Circumference Body Fat Calculator, Smart Scales – that can be used to find out if you are a healthy weight.



- **Reduce alcohol consumption** - Try not to exceed the recommended limit of 14 alcohol units a week. A unit is half a pint of standard strength lager, a single measure (25ml) of spirits and a small glass of wine (125ml) equals 1.5 units.



- **If the condition is severe enough, medication may be required**, such as statins to lower cholesterol levels, a low dose of aspirin to prevent clots and possibly medication for reducing blood pressure.

Members requiring any further guidance should contact the Loss Prevention Department.

Associated Loss Prevention publications related to CVD can be seen in the listed REACT! posters below:

- Cardiac Arrest
- Heart Attack
- Hypertension
- Stroke.



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Emma is a Deck Officer and has a MSc in Sustainable Maritime Operations. During her four year seagoing career, she has served aboard combination carriers, passenger ships and yachts. Emma joined the Club in 2019 directly from sea and attends to Loss Prevention matters.

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