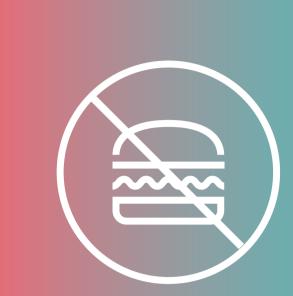


#### High systolic blood pressure

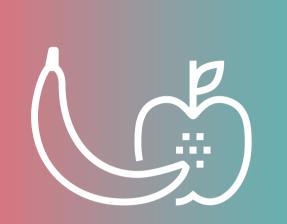
Heightened blood pressure or hypertension puts people at a high risk of coronary heart disease and stroke, as blood vessels weaken under the strain. According to the World Heart Foundation, symptoms includes tiredness, confusion, vision changes, chest pain, blood in urine, nosebleeds, an irregular heartbeat or buzzing in the ears.



## Dietary risks

Poor, unbalanced diets are major contributors to cardiovascular disease (CVD), and high intakes of salt, saturated fats and alcohol can lead to increased blood pressure. Heart-healthy foods include fish high in blood-thinning omega-3s, potassium-rich avocados which can

lower blood pressure and spinach high in nitrates that are found to widen clogged arteries.



## High total cholesterol

Cholesterol is vital for bodies to function properly. However, while HDL or "good" cholesterol moves cholesterol to the liver to be expelled, LDL or "bad" cholesterol takes cholesterol to the arteries, where it may collect in artery walls, cutting blood flow and reducing oxygen to the major organs. High levels of saturated fat in diets, smoking and inactivity can all increase levels of LDL and reduce HDL.



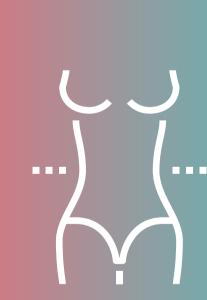
#### Air pollution

Traffic, power generation, factories or even cooking on a wood stove can increase exposure to the tiny pollution particles associated with CVD. Research shows that pollution can damage the inside walls of blood vessels, causing them to shrink and harden.



#### Tobacco

One in every six deaths from CVD is attributed to smoking, with smokers almost twice as likely to have a heart attack compared with non-smokers. Tobacco smoke damages the lining of arteries and narrows them through the build-up of atheroma (fatty material), while the carbon monoxide reduces the amount of oxygen in the blood, putting more pressure on the heart to pump harder. Nicotine, as a stimulant, also raises blood pressure by increasing adrenaline.

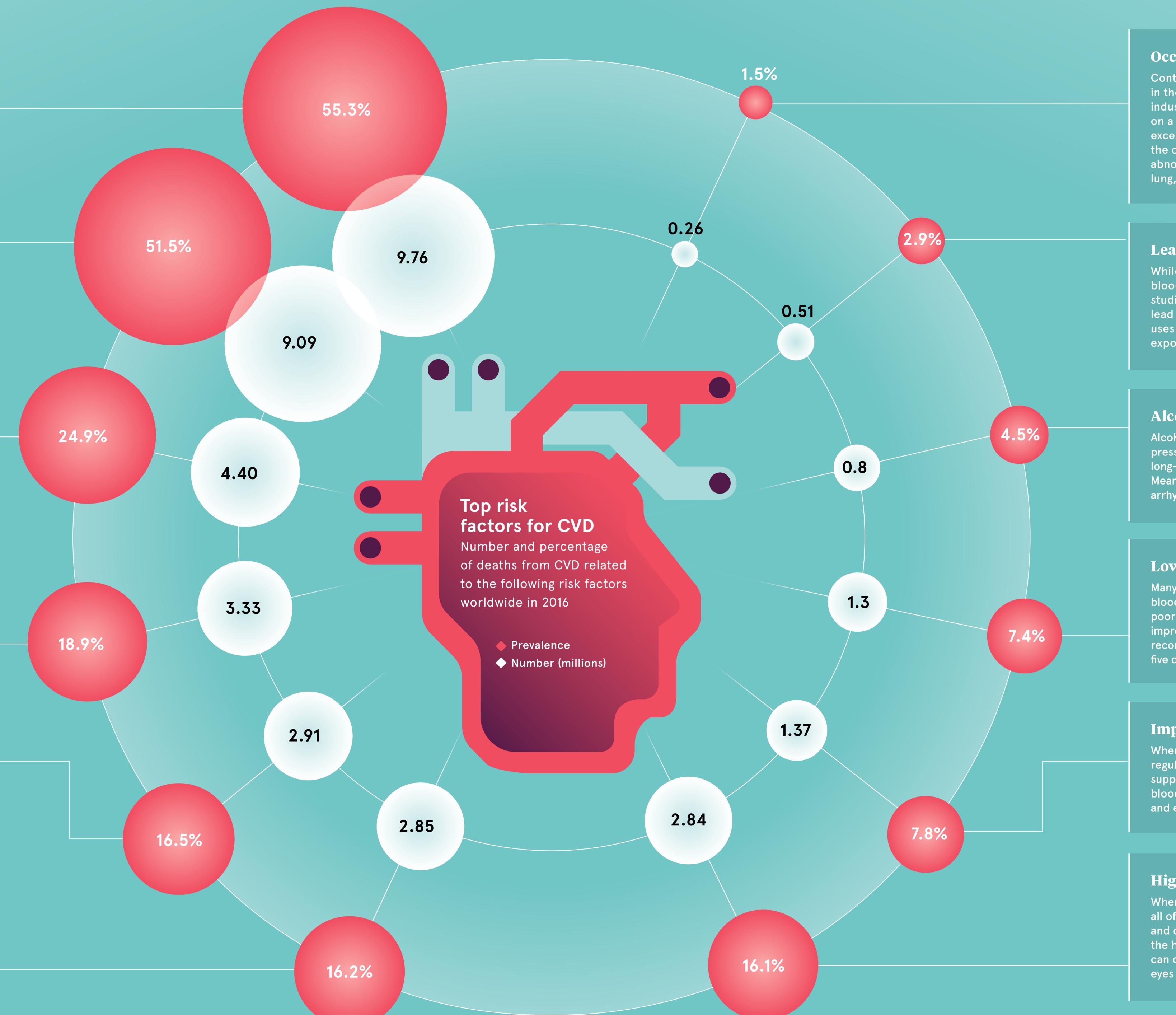


#### High body-mass index

Once considered a problem confined to high-income economies, obesity, classified by a body-mass index of 30 or more, is a growing epidemic which is now spreading to low and middle-income nations as dietary habits evolve. Overweight or obese people are more likely to develop hypertension, type-2 diabetes and musculoskeletal disorder, increasing the risk of CVD, according to the World Heart Federation.

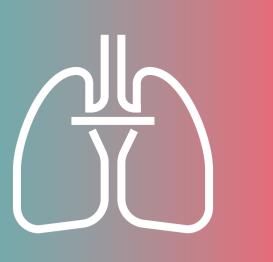
# RISK LIFESTYLES

A whole host of factors, from diet and alcohol intake to physical activity and blood pressure, can affect cardiovascular health. Knowing the importance of each and their impact on the heart can make a huge difference



#### Occupational carcinogens

Contact with harmful substances, agents or environments in the workplace are a major concern for employees in industrial sectors, who are exposed to certain carcinogens on a daily basis. According to the World Health Organization, excess exposure to carcinogens can "lead to changes at the cellular level, resulting in the uncontrolled growth of abnormal cells that invade and destroy normal tissues in the lung, blood system, etc".



# Lead exposure

While the positive correlation between lead exposure and blood pressure has been known for some time, recent studies have shown that there is in fact no safe threshold for lead exposure. Exposure typically occurs through historic uses of lead in fuel, paint and plumbing, and ongoing exposures through food and industrial sources.



# Alcohol use

Alcohol can lead to a temporary rise in heart rate and blood pressure – the most common risk factor for CVD – while long-term, heavy drinking can weaken the heart muscle. Meanwhile, binge drinking can lead to an irregular heartbeat or arrhythmia, which can cause cardiac arrest or stroke.



#### Low physical activity

Many of the risk factors linked to the worsening of CVD – high blood pressure, abnormal blood lipid and cholesterol levels, poor insulin resistance and glucose intolerance – can be improved through increased physical activity. Most guidelines recommend 30 minutes of moderate-intensity physical activity five days a week.



# Impaired kidney function

When kidneys are damaged, the hormone system which regulates blood pressure attempts to increase the blood supply to the kidneys. This rise in pressure can damage the blood vessels carrying blood to the kidney filters, and weaken and enlarge the heart muscle.



#### High blood sugar

When blood sugar levels are too high, body can't break down all of the sugar properly, so more of it sticks to red blood cells and can build up, damaging vessels carrying blood to and from the heart. At the same time, CVD affects circulation, which can cause other diabetes complications such as problems with eyes and feet.

Number of deaths from CVD
Percentage of all deaths related to CVD



Institute for Health Metrics and Evaluation 2018

# Global number and prevalence of deaths from CVD

2016 figures in millions; latest data available

