

totally avoidable risk factor of CVD

Tobacco and cardiovascular disease

Smoking is estimated to cause 10 per cent of cardiovascular disease (CVD) and is the second leading cause of CVD, after high blood pressure.¹ The impact of tobacco smoke is not confined solely to smokers. Nearly 6 million people die from tobacco use or exposure to secondhand smoke, accounting for 6 per cent of female and 12 per cent of male deaths worldwide, every year. By 2030 tobacco-related deaths are projected to increase to more than 8 million deaths a year.¹ Smoking is, however, avoidable and advancing a tobacco-free world is a key strategic priority for the World Heart Federation.

How tobacco causes cardiovascular disease

Tobacco acts in a number of ways to cause CVD. Its use, whether by smoking or chewing, damages blood vessels, temporarily raises blood pressure and lowers exercise tolerance. Moreover, tobacco decreases the amount of oxygen that the blood can carry and increases the tendency for blood to clot. Blood clots can form in arteries causing a range of heart diseases that ultimately result in a stroke or sudden death.

Facts and figures

- Smoking causes one-tenth of CVD worldwide.¹
- Globally, tobacco causes some 6 million deaths a year.¹
- The risk for coronary heart disease is 25 per cent higher in female smokers than in male smokers.²
- The risk of a non-fatal heart attack increases by 5.6 per cent for every cigarette smoked and persists even at only one to two cigarettes per day.³
- Chewing tobacco more than doubles the risk of heart attack.⁴
- Awareness of links between smoking and cardiovascular disease remains low in many parts of the world: in China, where the risk of stroke is very high, more than 70 per cent of all smokers do not know that smoking increases their risks of having a stroke.⁵
- Smoking bans have been found to decrease the rates of heart attacks;⁶ the evidence indicates that smokefree laws are one of the most cost-effective ways to prevent heart attacks.⁷

Secondhand smoke exposure and its link to cardiovascular disease

- There is no risk-free level of exposure to secondhand smoke.⁸
- Non-smokers who breathe secondhand smoke have between a 25–30 per cent increase in the risk of developing a CVD.⁹
- Each year, exposure to secondhand smoke kills 600,000 people: 28 per cent of them are children. Of all adult deaths caused by secondhand smoke, more than 80 per cent are from CVD.¹⁰
- In China and Bangladesh, more than half of all adults working indoors are exposed to secondhand smoke and in Russia, India and Ukraine it is more than one quarter.¹¹
- In most countries surveyed around the world, the majority of smokers want to quit.¹¹
- In 2002, exposure to secondhand smoke was found to kill as many women in China as active smoking.¹²

Secondhand smoke exposure and its link to cardiovascular disease, cont'd.

- Frequent exposure to tobacco smoke, whether in the workplace or home, has been found to nearly double the risk of having a heart attack.¹⁰
- Exposure to secondhand smoke worldwide causes an estimated 603,000 deaths each year among non-smokers, including 379,000 deaths from ischaemic heart disease.¹⁰

Impact of quitting

- Within 20 minutes of quitting smoking, blood pressure and pulse return to normal, and circulation improves.¹³
- Within eight hours, blood oxygen levels increase and the chances of a heart attack start to fall.¹³
- Within 24 hours, carbon monoxide is eliminated from the body and the lungs start to clear out mucus and debris.¹³
- Within 72 hours, the lungs can hold more air and breathing becomes easier.¹³
- Within five years, the risk of a heart attack falls to about half that of a smoker.¹³
- Within 10 years, the risk of lung cancer falls to around half that of a smoker.¹⁴
- Within 15 years, the risk of CVD becomes nearly the same as someone who has never smoked.¹⁵
- Quitting when older is still worthwhile: among smokers who quit at age 66 years, men gained up to two years of life, and women gained up to 3.7 years.¹⁶

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