

Cigarette smoking and heart disease

Heart attacks are 3 to 4 times more likely to occur in a cigarette smoker than in a nonsmoker – and the smoker's heart attack is more likely to be fatal. The risk of cardiac arrest is 10 times greater for male smokers and 5 times greater for female smokers as it is for nonsmokers. Nonsmoking spouse of smokers have twice the incidence of heart disease and 2.5 times the incidence of lung cancer as nonsmoking spouses of nonsmokers. In the Framingham study, male smokers were 40% more likely to suffer stroke than male nonsmokers and female smokers were 60% more likely to experience stroke than female nonsmokers. The lifespan of a smoker tends to be years less than that of a nonsmoker.

Tobacco smoke contains tar, nicotine, carbon monoxide, benzene, nitrogen dioxide, formaldehyde, hydrogen cyanide, nitrosamines and polycyclic aromatic hydrocarbons – which are all known to be harmful. Many of these substances are capable of injuring the arterial endothelial cells to begin the atherosclerotic process. Nicotine causes adrenaline (epinephrine) and noradrenaline release, which elevates heart rate and blood pressure. Carbon monoxide binds to hemoglobin 200 times more strongly than oxygen – thereby reducing the oxygen-carrying capacity of the blood and thickening the bloodstream through compensatory red blood cell proliferation. Smoking lowers the level of beneficial HDL-cholesterol and increases fibrinogen (promoting clotting). Even without coronary atherosclerosis, smoking can lead to cardiac arrest by causing the coronary arteries to go into spasm or by promoting irregularities of heartbeat.

Within one year of quitting smoking, the risk of heart attack falls 50%. Within ten years, ex-smokers who smoked one pack per day or less have the same heart attack risk as those who have never smoked. And the extra risk of stroke is eliminated within 5 years of kicking the cigarette habit.

Groups led by professional counselors have a 35% greater success rate in a period of a year than smokers who try to quit by themselves. Groups that use nicotine chewing gum have an 80% success rate. Most ex-smokers succeed only after several attempts to quit. A positive attitude to take after a failed attempt is to regard the failure as a learning experience – and to incorporate what was learned by the failure in planning the next attempt. Only one-third of ex-smokers gain weight, and most of those don't keep the extra weight.