Risk factor: tobacco

Cardiovascular risks of smoking
Percentage increase in risk

- Stroke; coronary heart disease; impotence
- Death from undiagnosed coronary heart disease
- Peripheral arterial disease
- Aortic aneurysm

100% increase in risk
300% increase in risk
more than 300% increase in risk
400% increase in risk

Cardiovascular risks of passive smoking

Adults
- Harms, clogs, and weakens arteries
- Heart attack, angina, stroke

Children
- Reduces amount of oxygen the blood can carry
- Damages arteries
- Early-onset atherosclerosis
- Sudden infant death syndrome (cot death)

The public may believe that the major risk from cigarettes is lung cancer, but far more smokers develop cardiovascular disease—mainly heart attacks and stroke. In 1940, a link was identified between cigarette use and coronary heart disease, and there is now a huge body of scientific literature linking tobacco with CVD. The risks are much higher in people who started smoking before the age of 16. Tobacco use, other than smoking, and passive smoking are also implicated as CVD risks.

Smoking promotes CVD through several mechanisms. It damages the endothelium lining of the blood vessels, increases cholesterol plaques (fatty deposits in the arteries), increases clotting, raises LDL-cholesterol levels and lowers HDL, and promotes coronary artery spasm. Nicotine accelerates the heart rate and raises blood pressure.

A gene has been discovered that increases smokers’ risk of developing coronary heart disease by up to four times. Around a quarter of the population carries one or more copies of this gene.

Women smokers are at particular risk, with a higher risk of heart attack than male smokers. Women who smoke only three to five cigarettes a day double their risk of heart attack, while men who smoke six to nine cigarettes a day double their risk.