

Fact sheet : Second Hand smoke (passive smoking)

What is second hand smoke?

Second hand smoke or passive smoking is defined as breathing in tobacco smoke from the air. Non-smokers exposed to passive smoking are at risk of developing diseases such as heart disease and cancers. ¹

What does second hand smoke contain?

Second hand smoke contains;

1. **Mainstream smoke** : which is the smoke exhaled by the smoker
2. **Sidestream smoke**: which is the smoke given off from the burning tip of cigarette, cigar etc. Sidestream smoke is far more hazardous than the mainstream smoke as it contains higher concentrations of a variety of harmful chemicals (Allwright et al 2003).

Second hand smoke is a mix of 15% mainstream and 85% side stream smoke.

3. **Chemicals**. Second hand smoke contains many toxic agents that are known to cause heart disease, cancer and other diseases. Tobacco smoke contains over 4000 chemicals, some of which have marked irritant properties and approximately 50 are known or suspected carcinogens (cancer causing substances) such as benzene, nickel, arsenic etc (Allwright et al, 2003).

Health risks

Second hand smoke has classified as a Group A carcinogen under the Environmental Protection Agency's (EPA) carcinogen assessment guidelines along with asbestos, arsenic, benzene and radon gas. The World Health Organisation International Agency for Research on Cancer has labelled second hand smoke carcinogenic to humans

This classification is reserved for those compounds or mixtures, which have been shown to cause cancer in humans, e.g. asbestos, arsenic, benzene and radon gas (EPA, 92).

Second hand smoke and heart disease

Second hand smoke is a risk factor for heart disease in non-smokers. Second hand smoke can cause narrowing and thickening of the arteries (atherosclerosis) supplying the heart, which may lead to angina and heart attack. It also makes the blood clot more easily thereby increasing the risk of heart attack and stroke.

- Non-smokers exposed to second hand smoke have a 25%-30% risk of getting heart disease compared to non-smokers ²
- Second hand smoke doubles the risk of stroke ³

Smoke free workplaces

Legislation in March 2004 was enacted to protect third parties, particularly workers, from exposure to the harmful effects of second-hand smoke. Research conducted by the Office of Tobacco Control 2005 showed that compliance with the legislation was around 90%. ⁴

References

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3. Bonita R, et al. Passive smoking as well as active smoking increases the risk of acute stroke. Tobacco Control, 8 (2), 1999, 156-160 Online at <http://tc.bmjournals.com/cgi/content/full/8/2/156>
4. Smoke free workplaces in Ireland; A one-year review Office of Tobacco Control Kildare 2005
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