

www.smokefreenorthernireland.com

Factsheet: The health risks of second-hand smoke

**Smokefree
Northern Ireland**

www.smokefreenorthernireland.com



Health
Promotion
Agency


Investing
for Health

Factsheet: The health risks of second-hand smoke

How does second-hand smoke affect health?

Previously, people often only considered second-hand smoke as a welfare issue, focusing on the smell and the irritation that tobacco smoke causes to eyes, nose and throat. But now the weight of evidence for much more serious risks to health from second-hand smoke has grown too great to ignore.

Why is one person's smoking harmful to others?

Tobacco smoke contains around 4,000 chemicals, including arsenic, benzene, formaldehyde and ammonia. Around 60 of these chemicals are known or suspected to cause cancer. Many of the toxic chemicals are actually more concentrated in the smoke that's given off by the burning tip of a cigarette (sidestream smoke) than in the smoke inhaled by the smoker through the filter (mainstream smoke).

Around 85% of the smoke in a room where people are smoking is the more toxic sidestream smoke. By breathing in the smoke in the atmosphere, the non-smoker is exposed to many of the same health risks as the smoker.

What are the health risks?

• Lung cancer

The best known risk to smokers, lung cancer, is also more common in people regularly exposed to second-hand smoke. The Government's Scientific Committee on Tobacco and Health (SCOTH) reported in 1998 that exposure to second-hand smoke increases the risk of lung cancer in non-smokers by 20-30%.¹

• Heart disease

Even though they inhale only 1% of the smoke, non-smokers exposed to second-hand smoke may suffer 25% of the increased risk of heart disease associated with active smoking (one recent study suggests it might be as much as 50%).² Just 30 minutes of breathing second-hand smoke can reduce the coronary blood supply of a non-smoker to the same level as that of a smoker.³

• Stroke

A study in New Zealand found that exposure to second-hand smoke increases the risk of stroke by 82% in non-smokers.⁴ This is a serious concern, as stroke is such a common condition.

• Asthma

Around 3.4 million people in the UK have asthma and for most of these, tobacco smoke is a trigger for an asthma attack. For someone with asthma, just one hour of exposure to second-hand smoke can cause a 20% deterioration in lung function.⁵

• Pregnancy complications

Breathing in second-hand smoke during pregnancy increases the risk of having a baby with a low birth weight. Small babies are at much greater risk of infections and other health problems.⁶

• Risks to children

Children don't make up much of the workforce, of course, but they may still spend quite a bit of time in other people's workplaces, like schools, leisure centres, cafes or shopping centres. Children are even more at risk because of their smaller lungs and the fact that their bodies are still developing. For them, exposure to second-hand smoke increases the risk of asthma, bronchitis, pneumonia and middle ear disease.

Conclusion

After reviewing all the available evidence, the latest report prepared for the Government by SCOTH has concluded that there is now no doubt that breathing in other people's smoke significantly increases the risk of cancer and heart disease, and advises that no infant, child or adult should be exposed to second-hand smoke.⁷

A recent review of international research on the immediate health impact of smokefree workplace legislation found rapid and dramatic improvements. Air quality, respiratory health and levels of heart attacks and heart disease all improved substantially within months of the legislation being introduced.⁸

References

1. Report of the Scientific Committee on Tobacco and Health. Department of Health, 1998.
2. Law MR, Morris JK and Wald NJ. Environmental tobacco smoke exposure and ischaemic heart disease: an evaluation of the evidence. *BMJ* 1997; 315: 973-80.
3. Otsuka R et al. Acute effects of passive smoking on the coronary circulation in healthy young adults. *JAMA* 2001; 286: 436-441.
4. Bonita R et al. Passive smoking as well as active smoking increases the risk of acute stroke. *Tobacco Control* 1999; 8: 156-160.
5. Dahms T, Bohlin J and Slavin R. Passive smoking effects on bronchial asthma. *Chest* 1981; 80: 530-4.
6. BMA Board of Science and Education and the Tobacco Control Resource Centre. Smoking and reproductive life: The impact of smoking on sexual, reproductive and child health. London: BMA, 2004.
7. Scientific Committee on Tobacco and Health (SCOTH). Secondhand smoke: review of evidence since 1998. London: Department of Health, 2004.
8. Office of Tobacco Control press release. International studies confirm health benefits of smoke-free workplace laws. 21 October 2004.



Health
Promotion
Agency

Investing
for Health



Designed and produced by the Health Promotion Agency for Northern Ireland, 18 Ormeau Avenue, Belfast BT2 8HS.
Tel: 028 9031 1611 (voice/minicom). Fax: 028 9031 1711.
www.healthpromotionagency.org.uk