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Supporting the PHO Performance Programme



It is estimated there are approximately 600 000 smokers in New Zealand.¹ Each of these people will be at different stages of the quitting spectrum – from having absolutely no desire to quit through to a significant proportion having already made a quit attempt. But in the meantime, until the quit attempts are successful, those around them continue to be exposed to the risks associated with their smoking.

Many smokers are aware of the risk to others, and have already taken steps to minimise this. It is becoming more common for people to choose to make their homes and cars smokefree, and many people choose not to smoke around babies or young children.

Other smokers may not have considered that they are putting other people at risk. It is worthwhile ensuring all smokers are aware of the risks they pose to others. This risk is greater for babies and children where involuntary exposure is an issue.

Non-smokers can be exposed to smoke by two recognised ways:

- "Second hand smoke", which is exposure to cigarette smoke from someone smoking nearby, often described as "the exposure that occurs as an unavoidable consequence of breathing in a smokefilled environment".²
- "Third hand smoke" which is residual tobacco smoke and particles remaining after the cigarette is extinguished.

Second hand smoke

Second hand smoke (also known as environmental tobacco smoke) is made up of approximately 85% "sidestream smoke" – smoke emitted from the burning end of the cigarette, and 15% "mainstream smoke" – smoke exhaled by smokers. Sidestream smoke poses the greatest risk because it has not been filtered.

Second hand smoke - at home and work

Approximately 10% of New Zealanders are regularly exposed to second hand smoke in their homes, with Māori being more likely to be exposed.³

In a 2001 survey of Year 10 students, in which neither parent smoked, approximately 11% of children were exposed to second hand smoke in their homes, from either visitors or other household members.⁴

In the 1980s workplace exposure to second hand smoke was estimated at 34% for men and 23% for women.⁵ There has however, been a marked drop in workplace exposure to second hand smoke, following the banning of smoking in most workplaces in the early 1990s.

The effects of second hand smoke

There is no safe level of second hand smoke exposure. In New Zealand, second hand smoke is considered to contribute to over 350 deaths per year.⁵ This represents an additional 8% over and above deaths due to first hand smoking. Numerous reviews have concluded that second

hand smoke is a significant contributor to disease. It is well recognised that people exposed to second hand smoke have an increased risk of lung cancer, coronary heart disease, stroke and sudden infant death syndrome. It has been estimated that in New Zealand, second hand smoke exposure in the home will contribute to approximately 15,000 episodes of childhood asthma annually, more than 27,000 medical consultations for child respiratory problems and 1500 operations to treat glue ear.⁵

Higher levels of exposure from second hand smoke are associated with higher risk.

However, second hand smoke poses risks even at lower levels. Brief exposure to second hand smoke, which is defined as 15–30 minutes exposure, has been demonstrated to produce measurable changes in coronary blood flow.⁶

People may be concerned by the potentially harmful effects of involuntary exposure to second hand smoke in outdoor settings, such as walking past someone smoking, or sitting next to a smoker. However, a recent study has demonstrated that in this situation the smoke is rapidly dispersed into the environment, and poses little risk.⁷

Third hand smoke

"Third hand smoke" is a recently coined phrase that refers to the particles and gases that linger in a room after someone has smoked, or remain in the clothing, hair or possessions of people who have been exposed to smoke. Although "third hand" smoke is recognised as a risk to non-smokers, there is a lack of evidence to quantify the extent of this risk.

Some of the volatile components of cigarette smoke (e.g. nicotine, naphthalene) are absorbed into surfaces within minutes of emission, and can be re-emitted into the air over the following days and weeks. In cars, surfaces such as upholstery, carpets and roof liners act as reservoirs for residual tobacco smoke. There is also concern that residual tobacco smoke particles accumulating inside

cars may be further potentiated by the effects of sunlight, extreme temperature and limited air exchange.

Children are generally considered more susceptible to the effects of third hand smoke because they may touch, mouth, play and crawl on contaminated surfaces.

Keeping others safe

Most people (including smokers) accept that smoking is associated with adverse health outcomes. People continue to smoke for a number of reasons, and some will find it difficult to ever quit. But while they continue to smoke, it is important they think about the risks to those around them.

In 2004, the Smokefree Homes campaign was developed by the Health Sponsorship Council (HSC) and The Quit Group. The campaign aimed to increase protection for non-smokers by informing people about the dangers of second hand smoke, and to protect the health of non-smokers by encouraging smokers to smoke outside. The campaign emphasised the importance of smokers protecting their children from second-hand smoke, by using the message "taking the smoke outside".

In 2006, the Smoke Free Cars campaign was launched. This campaign encouraged smokers to protect their children from the harms of second hand smoke by not smoking in their car, even when they are alone. The key messages were that second hand smoke is dangerous to the health of children, and that winding down a window does not rid a car of the poisons contained in second hand smoke, as they linger long after the smoke has disappeared.

In addition to encouraging smokers to quit, health professional are well placed to educate patients to minimise the risk to others. There are a number of resources available to encourage people to make their cars and homes smoke free. These are available from:

www.secondhandsmoke.co.nz

www.quit.org.nz



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