# **SMOKING**

## Why is this important?

Smoking remains the single biggest cause of preventable morbidity and mortality in New Zealand, leading to the premature deaths of 4,500 to 5,000 New Zealanders every year – around 10% of these in the Canterbury area. Smoking increases the risk of cardiovascular disease, asthma, chronic obstructive respiratory disease, lung cancer, and other cancers. Smoking reduces fertility, and exposure to second hand smoke increases the risk of cot death, asthma attacks, chest infections, and glue ear in children.<sup>1</sup>

High levels of smoking have implications for health needs, service provision and health funding in the future. The



societal cost of smoking in New Zealand was recently estimated at \$1.685 billion per annum, or about 1.1 percent of GDP. Major components are lost production due to premature mortality and smoking related illness, and in excess of \$1.5 billion every year in health care costs.<sup>2</sup> In addition, it is estimated that 81,650 quality-adjusted years of life are lost to smoking each year.<sup>3</sup>

## Data





In 2006, 19% of Christchurch residents aged 15 years and over were regular cigarette smokers – down from 22% ten years earlier. The proportion of adult smokers in Christchurch was lower than the country as a whole in both years (21% across New Zealand in 2006, down from 24% in 1996). In 2006, the proportion of Christchurch adults who were

<sup>&</sup>lt;sup>1</sup> Ministry of Health. 2009. Implementing the ABC approach for smoking cessation: framework and work programme. Wellington: Ministry of Health. <u>http://www.moh.govt.nz/moh.nsf/pagesmh/8794/\$File/implementing-abc-approach-smoking-cessation-feb09.pdf</u> Accessed 16.06.11.

<sup>&</sup>lt;sup>2</sup> Wright C. 2008. Excess costs to health care as a result of tobacco use in New Zealand during 2006/2007. Wellington: Ministry of Health.

<sup>&</sup>lt;sup>3</sup> O'Dea, D., Thomson, G. 2007. Report on Tobacco Taxation in New Zealand. Wellington: The Smokefree Coalition and ASH New Zealand.

ex-smokers was the same as nationally (22%) and a slightly larger proportion of Christchurch adults than nationally had never smoked regularly (59% versus 57% nationwide).<sup>4</sup>

## Impact on inequalities

Smoking is more prevalent in particular population groups, including Maori and Pacific, young people, those from more deprived socioeconomic levels and mental health consumers.

At present Maori life expectancy is about eight years less than non-Maori life expectancy.<sup>5</sup> Tobacco contributes significantly to this gap in life expectancy, since people who smoke are more likely to die early from diseases such as heart disease and cancer.<sup>6</sup>

The prevalence of smoking for Maori 15-64 year olds in New Zealand in 2008 was 45.4% (compared with 21.3% for European and 31.4% for Pacific), with 150,000 Maori and nearly 50,000 Pacific people smoking in 2008.<sup>7</sup>

#### Figure 2 Current smoking among 15–64-year-olds, by NZDep2006 quintile and sex, 2009 (age-standardised prevalence)8 (Source: 2009 New Zealand Tobacco Use Survey)



As Figure 2 shows, in New Zealand there is substantial evidence that adults in lower socioeconomic groups have higher smoking rates.<sup>9 10 11 12</sup> In particular, a detailed Ministry of Health study has found that at least one-third of the shorter life expectancy of people living in the most deprived areas of New Zealand is accounted for by smoking.<sup>13</sup>

<sup>8</sup> Age standardised to the WHO world population.

<sup>10</sup> Whitlock, G., MacMahon, S., Vander-Hoorn, S., Davis, P., Jackson, R., Norton, R. 1997. Socioeconomic distribution of smoking in a population of 10,529 New Zealanders. *New Zealand Medical Journal* 110: 327–30.

<sup>&</sup>lt;sup>4</sup> Statistics New Zealand. Census of Population and Dwellings, 1996 and 2006. <u>http://www.stats.govt.nz/census/2006-census-information-about-data/information-by-variable/cigarette-smoking-behaviour.htm</u>

<sup>&</sup>lt;sup>5</sup> Robson, B. and Harris, R. (eds). 2007. Hauora: Maori Standards of Health IV. A study of the years 2000–2005. Wellington: Te Ropu Rangahau Hauora a Eru Pomare, University of Otago.

<sup>&</sup>lt;sup>6</sup> Blakely, T., Fawcett, J., Hunt D., Wilson, N. 2006. What is the contribution of smoking and socioeconomic position to ethnic inequalities in mortality in New Zealand? *Lancet* 368: 44–52.

<sup>&</sup>lt;sup>7</sup> Ministry of Health. 2008. A Portrait of Health – Key results of the 2006/07 New Zealand Health Survey. Wellington: Ministry of Health. <u>http://www.moh.govt.nz/moh.nsf/pagesmh/7601/\$File/tobacco-use-ch2.pdf</u> Accessed 16.06.11.

<sup>&</sup>lt;sup>9</sup> Jackson, R., Beaglehole, R., Yee, R.L., Small, C., Scragg, R. 1987. Trends in cardiovascular risk factors in Auckland, 1982 to 1987. *New Zealand Medical Journal* 103: 363–5.

<sup>&</sup>lt;sup>11</sup> Crampton, P., Salmond, C., Woodward, A., Reid, P. 2000. Socioeconomic deprivation and ethnicity are both important for anti-tobacco health promotion. *Health Education and Behavior* 27: 317–27.

<sup>&</sup>lt;sup>12</sup> Howden-Chapman, P., Tobias, M. (eds). 1999. Social Inequalities in Health: New Zealand 1999. Wellington: Ministry of Health.

<sup>&</sup>lt;sup>13</sup> Tobias, M., Cheung, J. 2001. Inhaling Inequality: Tobacco's contribution to health inequality in New Zealand. Public Health Intelligence Occasional Bulletin No. 7. Wellington: Ministry of Health.

Furthermore, non-smoking adults in lower socioeconomic groups in New Zealand appear to suffer from increased exposure to second-hand smoke.<sup>14</sup>

## **Solutions**

The three key objectives of tobacco control activities remain:

- 1. To reduce smoking initiation.
- 2. To increase quitting.
- 3. To reduce exposure to second-hand smoke.<sup>15</sup>

Census data shows there has been greater success with reducing initiation than with getting existing smokers to quit.<sup>16</sup>

#### **Reducing initiation**

Strong scientific evidence supports increasing the price of tobacco products and conducting mass media campaigns combined with other interventions to reduce tobacco use, prevalence and consumption among adolescents and young adults.<sup>17</sup> These other interventions include:

- reducing the nicotine content in tobacco,
- banning tobacco displays in retail outlets,
- plain packaging, and
- smokefree policies in schools, marae and community locations.<sup>18</sup>

#### Increasing quitting

The ABC Strategy for Smoking Cessation is currently being rolled out in all DHBs (including the Canterbury DHB). This aims to engage all health professionals in primary and secondary care in providing brief advice to smokers, providing NRT and encouraging referral to a cessation programme.<sup>19</sup> A range of cessation programmes can be accessed through the national Quitline (phone and online support). Local face-to-face cessation support is provided by General Practice teams, including the long term PEGS programme run by Partnership Health PHO, support for pregnant women and their partners (Smokechange), by Maori for Maori support (Aukati KaiPaipa), support for Pacific families (Pacific Trust Canterbury) and others. These programmes all encourage the use of cessation medications (NRT, Zyban, Champix and nortriptyline).

Strong scientific evidence also supports the effectiveness of:

- increasing the unit price for tobacco products, •
- self-help smoking cessation resources,
- group counselling for smoking cessation,
- reminder systems prompting providers to interact with patients about smoking,
- cessation services for hospitalised patients, and
- mass media campaigns (when combined with other interventions).<sup>20</sup>

<sup>&</sup>lt;sup>14</sup> Whitlock, G., MacMahon, S., Vander Hoorn, S., Davis, P., Jackson, R., Norton, R. 1998. Association of environmental tobacco smoke exposure with socioeconomic status in a population of 7725 New Zealanders. Tobacco Control 7: 276-80. http://tc.BMJjournals.com/cgi/content/full/7/3/276 Accessed 16.06.11.

<sup>15</sup> Ibid.

<sup>&</sup>lt;sup>16</sup> Ministry of Health. 2009. Op. cit.

<sup>&</sup>lt;sup>17</sup> Ministry of Health. 2004. Clearing the Smoke: A five-year plan for tobacco control in New Zealand (2004–2009). Wellington: Ministry of Health. http://www.moh.govt.nz/moh.nsf/0/AAFC588B348744B9CC256F39006EB29E/\$File/clearingthesmoke.doc Accessed 16.06.11.

<sup>18</sup> Ibid.

<sup>&</sup>lt;sup>19</sup> Ministry of Health. 2009. Op. cit.

<sup>&</sup>lt;sup>20</sup> Ministry of Health. 2004. Op. cit.

#### Reducing exposure to second-hand smoke

Legislative (smokefree public places, schools and workplaces) and social marketing initiatives (smokefree homes and cars) have substantially reduced exposure to second-hand smoke.<sup>21</sup>

## **Data limitations**

The accuracy of this indicator relies on good-quality Census data. Limitations of the 2006 Census data include the way smoking status was derived and defined. The Census definition of regular smoking equates most closely to daily smoking. Internationally, this is seen as an underestimate of the true prevalence of smoking in the population as it excludes non-daily and occasional smokers.<sup>22</sup>

## **Connections with other issues**

Diabetes, Cardiovascular Disease, COPD, Asthma, Cancer, Alcohol, Open and Green Space

## Impact of the earthquakes

As time passes and these papers are updated the initial sections on the impact of the earthquake are going to be kept as an archive. Updates are provided where possible.

#### As at October 2011

There have been many anecdotal reports that ex-smokers have relapsed, and Quitline data reports that calls from Canterbury residents has fallen from 14% of all calls nationally to 9%, since the February 2011 earthquake. Cessation programmes and quit coaches reported some reduction in enrolments for a couple of months following the February earthquake, but at May 2011, enrolments have increased to their pre-earthquake rate. Special efforts will be required to regain the pre-earthquake prevalence rates.

Prepared by Community and Public Health.

<sup>21</sup> Ibid.

<sup>&</sup>lt;sup>22</sup> Ponniah, S., Bloomfield, A. 2008. Sociodemographic characteristics of New Zealand adult smokers, ex-smokers, and nonsmokers: results from the 2006 Census. *New Zealand Medical Journal* 121(1284). <u>http://www.nzma.org.nz/journal/121-1284/3313/</u>