

## People's estimates of how many New Zealand adults smoke

### Background

Previous research has used the perceived prevalence of smoking to assess whether or not tobacco use is seen as a normal behaviour. Research in young people has found that estimates in smoking prevalence among people their age vary by ethnicity and smoking status (Buller, Borland, Woodall, Hall, Burris-Woodall, & Voeks, 2003; Davis, Nonnemaker, Asfaw, & Vallone, 2010). However, the measure on perceived smoking prevalence has rarely been assessed in adult surveys. In the Health Promotion Agency's (HPA) Health and Lifestyles Survey (HLS), all respondents (aged 15+ years) were asked to estimate the number of New Zealand adults who smoked daily. To provide more contextual information, the daily smoking rate in New Zealand was 18% in 2006/07 and 17% in 2011/12, and the differences across years were not statistically significant (Ministry of Health 2012).

### Methodology

To understand New Zealanders' perceptions of how common smoking is, respondents in the 2010 and 2012 Health and Lifestyles Survey were asked to estimate the proportion of New Zealand adults who smoke daily. Responses to this question from the 2012 survey were compared by smoking status, ethnicity, neighbourhood deprivation status, age, gender, and educational background. Statistically significant differences by group ( $p < .05$ ) are reported. Responses collected from the 2010 and 2012 HLS were also compared.

### Perceived prevalence of daily smoking

In 2012, all respondents were asked to estimate the number of New Zealand adults (out of 100) who smoke daily. Responses ranged from '0' to '100', with the most common responses being '20' and '30'.

Respondents tended to over-estimate the prevalence of smoking among New Zealand adults, with eight in 10 (83%) respondents thinking that prevalence was more than the current figure of 17%. In fact, 30% of the respondents believed at least half of the adult population smoke daily.

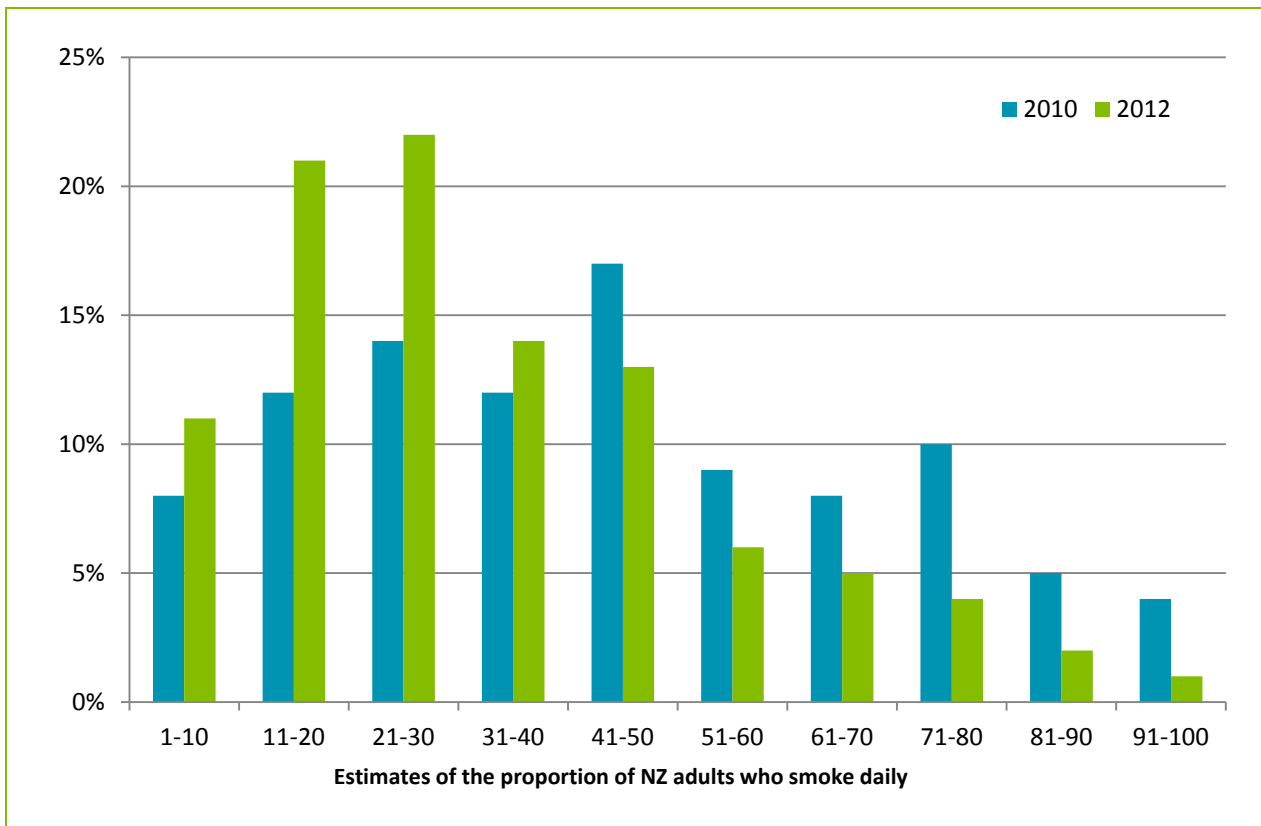
The overall mean ( $\bar{x}$ ) estimate of the number of adult New Zealanders who smoke was 36.3 (out of 100). Respondents who gave higher estimates were:

- Current smokers ( $\bar{x}=42.7$ ), compared with never smokers ( $\bar{x}=34.3$ ). Responses between never smokers and ex-smokers ( $\bar{x}=34.6$ ) were not significantly different.
- Māori ( $\bar{x}=45.3$ ) and Asian ( $\bar{x}=47.5$ ), compared with European/Other ( $\bar{x}=35.5$ ). Responses between European/Other and Pacific People ( $\bar{x}=50.4$ ) were not significantly different.
- People living in areas of medium ( $\bar{x}=35.8$ ) or high deprivation status ( $\bar{x}=41.4$ ), compared with those living in areas of low deprivation status ( $\bar{x}=31.6$ ).
- People aged between 15 to 24 years ( $\bar{x}=42.0$ ), compared with those aged 55+ years ( $\bar{x}=27.7$ ). Responses were not significantly different between those aged 15 to 24 years, compared with those aged 25 to 34 years ( $\bar{x}=42.0$ ) or 35 to 54 years ( $\bar{x}=40.6$ ).

### Changes in response over time

Compared with responses collected in 2010, respondents in 2012 gave significantly lower estimates of the proportion of New Zealand adults who smoke daily (see Figure 1). This finding was in spite of the lack of change in the actual daily smoking rate from 2006/07 to 2011/12.

Figure 1. Respondents' estimates of the number of New Zealand adults who smoke (out of 100), surveyed in 2010 and 2012.



## Key points

- In 2012, 83% of New Zealand adults over-estimated the prevalence of daily smoking.
- In 2012, 30% of New Zealand adults thought at least half the adult population in New Zealand smoked daily.
- Compared with 2010, respondents in 2012 gave lower estimates on how prevalent smoking is among adult New Zealanders. This finding was in spite of the lack of change in the actual smoking rate during that time period.

## References

Buller, D.B., Borland, R., Woodall, W.G., Hall, J.R., Burris-Woodall, P., & Voeks, J.H. (2003). Understanding factors that influence smoking uptake. *Tobacco Control, 12, suppl 4*, iv16-25.

Davis, K.C., Nonnemaker, J.M., Asfaw, H.A., & Vallone, D.M. (2010). Racial/ethnic differences in perceived smoking prevalence: evidence from a national survey of teens. *International Journal of Environmental Research and Public Health, 7, 12*, 4152-4168.

Ministry of Health (2012). *The Health of New Zealand Adults 2011/12: Key findings of the New Zealand Health Survey*. Wellington: Ministry of Health.

## Citation

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## About the Health and Lifestyle Survey

- The HLS is a nationwide in-home face-to-face survey conducted every two years, starting in 2008. The 2012 HLS consisted of a sample of 2,672 New Zealanders aged 15 years and over, who provided information about their health behaviours and attitudes relating to tobacco, sun safety, healthy eating, gambling, and alcohol.
- In 2012, the main sample, with a response rate of 86.3%, included 1,539 people of European/Other ethnicity, 619 Māori, 387 Pacific peoples and 127 Asian people (prioritised ethnicity).
- The data have been adjusted (weighted) to ensure they are representative of the New Zealand population.
- For this analysis, regression models were used to compare the 2012 responses by socio-economic variables, as well as the differences between the 2010 and 2012 responses. The significance level used for statistical analyses was set to  $\alpha=0.05$ .
- Comparison groups for these analyses were as follows:
  - Smoking status (current smokers and ex-smokers, compared with never smokers).
  - Ethnicity (Māori, Pacific and Asian compared with European/Other ethnicity).
  - Neighbourhood deprivation status (NZDep 8-10 and NZDep 4-7, compared with NZDep 1-3).
  - Age (25 to 34 years, 35 to 54 years, and 55+ years, compared with 15 to 24 years).
  - Gender.
  - Educational background (no formal qualifications, secondary school qualifications, and trade certificates or diplomas, compared with university qualifications).
- A full description of the 2012 HLS survey methodology and further HLS publications can be found online at <http://www.hpa.org.nz/research-library/research-publications>.

## About the HPA

The HPA is a Crown entity that leads and delivers innovative, high quality and cost-effective programmes and activities that promote health, wellbeing and healthy lifestyles, and prevent disease, illness and injury. The HPA also enables environments that support health and wellbeing and healthy lifestyles, and reduce personal, social and economic harm.

Research and Evaluation Unit

Health Promotion Agency, PO Box 2142,

Wellington 6140, New Zealand

<http://www.hpa.org.nz/research-library/research-publications>

[research@hpa.org.nz](mailto:research@hpa.org.nz)

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