## In Fact

research facts from the HPA



Volume 4 Issue 11 April 2015

# Influenza vaccine: Uptake and attitudes in 2014

### **Background**

The Ministry of Health recommends and subsidises the seasonal influenza vaccine to protect New Zealanders against the influenza virus (Ministry of Health, 2014). People who have a higher risk of contracting influenza or who are more likely to experience severe symptoms (people aged 65 years and over and people with specific medical conditions) are eligible to receive the vaccine for free (Ministry of Health, 2014).

To understand the factors that contribute to people taking up the influenza vaccine, the Health Promotion Agency's (HPA's) biennial Health and Lifestyles Survey (HLS) asks New Zealanders aged 15 years and over about their attitudes and behaviour in relation to the vaccine. In the 2012 HLS, 27% of New Zealand adults reported receiving the vaccine, while 46% reported being eligible to get it for free. Uptake varied by age and eligibility for the free vaccine, where older adults and those who were eligible were more likely to have taken it up (Guiney & Walton, 2014). This factsheet contributes to current knowledge on uptake of the influenza vaccine in New Zealand by updating the 2012 data with the results from the 2014 HLS.

### **Methodology**

To assess attitudes and behaviours relating to the influenza vaccine, all respondents in the 2014 HLS were asked whether they were eligible to get the vaccine for free and whether they intended to receive the vaccine in 2014. Respondents who said they were not planning on getting the vaccine in 2014 were also asked to give reasons for their decision. Interviews were conducted between autumn and winter (May to August) 2014.

Uptake of the influenza vaccine was defined as having already received the vaccine at the time of the survey (self-reported). Univariate regression analyses were conducted first to assess whether vaccine uptake varied by age, gender, ethnicity, neighbourhood deprivation, and perceived eligibility for the free vaccine (see the 'About the Health and Lifestyles Survey' section for the relevant comparison groups). A multivariate regression analysis was then conducted to assess which variables were still associated with vaccine uptake after adjusting for all others.

Adjusted odds ratios are reported where there were statistically significant differences (p < .05).

### Perceived eligibility for free influenza vaccine

In the 2014 HLS, all respondents were shown the eligibility criteria for getting the influenza vaccine for free and asked, "Are you eligible to get the 'flu vaccine for free?" Close to one-half of respondents (46%; 43-49%) reported being eligible, 46% (42-49%) reported being not eligible, and 8% (15-20%) reported not knowing their eligibility.

### Intent to receive the influenza vaccine

To assess intentions to get the influenza vaccine in 2014, all respondents were asked, "Will you receive the flu vaccine this year?" Table 1 shows the distribution of responses.

Table 1. Intentions to get the influenza vaccine in 2014

Response to "Will you receive the 'flu vaccine this year?"	%	95% CI
I already have	35%	32-39%
l will	5%	4-7%
No	58%	55-61%
I don't think so	1%	0-1%
I don't know	1%	0-1%

### Self-reported uptake of the influenza vaccine

The adjusted model showed that vaccine uptake varied by:

- Age: Adults aged under 65 years were less likely than adults aged 65 years and over to have received the vaccine (AOR = 0.32; 0.23-0.46)
- Gender: Males were less likely than females to have received the vaccine (AOR = 0.72; 0.53-0.96)
- Neighbourhood deprivation: People living in mid (AOR = 0.63; 0.41-0.96) and high deprivation

- neighbourhoods (*AOR* = 0.51; 0.34-0.75) were less likely than those living in low deprivation neighbourhoods to have received the vaccine
- Eligibility for free vaccine: Those who were not eligible (AOR = 0.26; 0.17-0.39) and those who did not know if they were eligible (AOR = 0.02; 0.00-0.08) were less likely than those who were eligible to have received the vaccine

Figures 1 to 4 illustrate the associations between influenza vaccine uptake and age, gender, neighbourhood deprivation, and eligibility for the free vaccine by showing proportion estimates of vaccine uptake for each of the relevant subgroups.

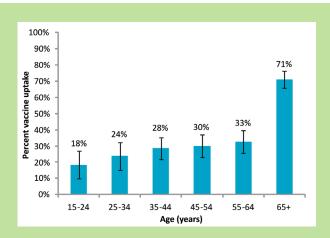


Figure 1. Self-reported uptake of the influenza vaccine by age

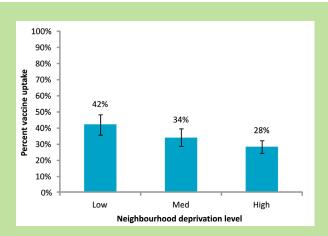


Figure 3. Self-reported uptake of the influenza vaccine by neighbourhood deprivation

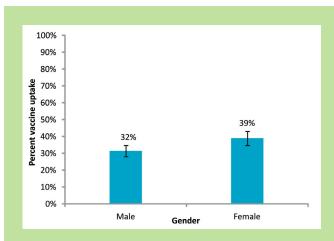


Figure 2. Self-reported uptake of the influenza vaccine by gender

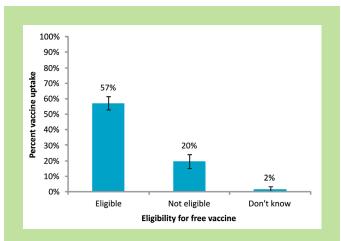


Figure 4. Self-reported uptake of the influenza vaccine by eligibility for the free vaccine

### Reasons for not intending to get the vaccine

Respondents who said they did not intend to get the influenza vaccine in 2014 were asked to give reasons for their decision. Respondents could give multiple openended responses, which were then back-coded into appropriate categories.

The range of reasons for not intending to get the vaccine in 2014 given by more than 5% of respondents is shown in Table 1. The most common reason was related to past uptake of the vaccine: either not being in the habit of getting it or never having had it before. The second most common reason was a low perceived personal susceptibility to contracting influenza (eg, "I never get the flu"; "I'm healthy so I don't need it"), followed by concerns about possible immediate side effects (eg, lethargy, fever, rash, illness, allergic reaction) and doubts about effectiveness of the vaccine.

Table 2. Common reasons for not getting or not intending to get the influenza vaccine

Reason for not getting the influenza vaccine	%	95% CI
Not in the habit of getting it/never had it before	31%	27-35%
Low perceived susceptibility to influenza	14%	11-17%
Concerns about immediate side effects	12%	9-14%
Doubts about effectiveness of the vaccine	11%	9-13%
Concern about long- lasting side effects	6%	4-8%

Note: 95% CI = 95% confidence interval

Only those reasons given by at least 5% of

respondents are reported

### **Key points**

- In 2014, 35% of New Zealanders aged 15 years and over reported receiving the influenza vaccine. This contrasts with self-reported vaccine uptake of 27% in the 2012 HLS.
- Similar to the 2012 HLS, close to one-half of respondents (46%) reported being eligible to get the influenza vaccine for free in 2014.
- Uptake of the influenza vaccine in 2014 was lowest among adults aged under 65 years, males, people living in mid or high deprivation neighbourhoods, and people who were ineligible for the free vaccine.
- The most common reason for not intending to get the influenza vaccine in 2014 was related to past uptake: that is, not being in the habit of getting the vaccine or never having had it before.

#### Reference

Guiney, H., & Walton, D. (2014). New Zealanders' self-reported uptake and attitudes towards the influenza vaccine in 2012. *NZ Med J*, 127, 1398.

Ministry of Health (2014). *Influenza*. Retrieved from http://www.health.govt.nz/your-health/conditions-and-treatments/diseases-and-illnesses/influenza.

#### Citation

Guiney, H. (2014). *Influenza vaccine: Uptake and attitudes in 2014. [In Fact]*. Wellington: Health Promotion Agency Research and Evaluation Unit.

### **About the Health and Lifestyles Survey**

- The HLS is a nationwide in-home face-to-face survey conducted every two years since 2008.
- The 2014 HLS consisted of a sample of 2,594 New Zealanders aged 15 years and over, who provided information about their health behaviours and attitudes relating to tobacco, sun safety, healthy eating, gambling, alcohol, exercise, immunisation, mental health, breast feeding, and cancer screening. The response rate was 73.2%.
- The 2014 HLS sample included 1420 European/ other people, 564 Māori, 393 Pacific people, and 217 Asian people (prioritised ethnicity).
- The data have been adjusted (weighted)
   according to 2013 Census data to ensure they are
   representative of the New Zealand population.
- For this analysis, jack-knife proportions and associated 95% confidence intervals were calculated first. Logistic regression was then

- used to compare responses between groups. The significance level was set to  $\alpha$ =0.05.
- Comparison groups for these analyses were as follows:
  - Age (under 65 years, compared to 65 and over)
  - Gender (males, compared with females)
  - Ethnicity (Māori, Pacific, and Asian, compared with European/Other)
  - Neighbourhood deprivation status (New Zealand Deprivation Index 8 to 10 and 4 to 7, compared with New Zealand Deprivation Index 1 to 3)
  - Eligibility for free vaccine (not eligible and unknown eligibility, compared to eligible)
- A full description of the 2014 HLS methodology and further HLS publications can be found online at www. hpa.org.nz/research-library/research-publications.

#### **About the HPA**

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. HPA 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

April 2015
ISSN 2350-2991

