

## In Fact: Young people's alcohol use during first smoking experience

### Background

Alcohol consumption and smoking tobacco is linked. Among adolescents, alcohol use has been found to be a predictor of smoking initiation (O'Loughlin et al., 2014). In New Zealand, research has shown in 14 and 15-year-olds who had smoked cigarettes during the past month, almost two-thirds (63%) had also consumed alcohol at a high-risk level (five or more alcoholic drinks in one session) during the same time period (White, Walton, & Walker, 2015).

Among adolescents, factors that influence first trying a cigarette include friends and siblings' smoking status and susceptibility to tobacco advertising has been shown to influence progression of becoming a daily smoker (O'Loughlin et al., 2009). Understanding the link between alcohol consumption and first smoking experience could provide useful information to create initiatives to prevent smoking uptake among young people. The Health Promotion Agency's (HPA's) Youth Insights Survey (YIS) monitors Year 10 students' behaviour, attitudes and knowledge on a range of tobacco and other health-related topics, including dual use of tobacco and alcohol. This factsheet examines the prevalence of alcohol use during young people's first cigarette smoking experience.

### Methodology

Participants in the 2014 YIS were asked, "If you have tried a cigarette/tobacco, were you drinking alcohol at

*the same time you first tried it?*" Responses (yes or no) were examined by gender, ethnicity, smoking status<sup>1</sup> and alcohol consumption status<sup>2</sup>. See the 'About the Youth Insights Survey' section for more detail and the relevant comparison groups.

When looking at differences by gender, ethnicity and alcohol consumption, we controlled for smoking status. This means that we have taken into account the respondent's own smoking status to ensure that any difference found is not in fact due to whether or not they smoke. Analysis was restricted to participants who had 'ever tried' a cigarette (n = 737). Only statistically significant ( $p < .05$ ) differences between groups are reported.

### Alcohol use during first smoking experience

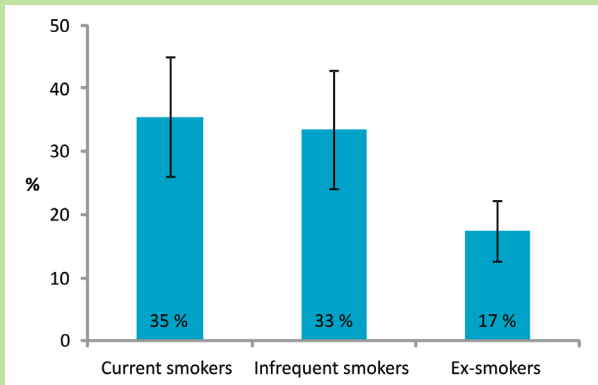
Among young people who had ever tried a cigarette, one-quarter (26%, 21-30%) reported they were drinking alcohol at the time they first tried a cigarette.

Young people more likely to report drinking alcohol when they first tried a cigarette were:

- Current smokers (35%) and infrequent smokers (33%), compared with ex-smokers (17%) (see Figure 1)
- High-risk alcohol consumers in the past month (36%), compared with non-high risk alcohol consumers in the past month (12%).

<sup>1</sup> Current smokers (smoke at least monthly), infrequent smokers (smoke less often than monthly), and ex-smokers (no longer smoke).

<sup>2</sup> High-risk alcohol consumers (ever consumed five or more alcoholic drinks in one session in the past month) and non-high risk alcohol consumers (never consumed five or more alcoholic drinks in one session in the past month).



**Figure 1. Proportion of ever-smokers who drank alcohol when they first tried a cigarette, by smoking status**

## Key points

- Among young people who have ever smoked, one quarter (26%) reported drinking alcohol at the time they first tried a cigarette.
- Young people who reported drinking alcohol the first time they tried a cigarette were more likely to still smoke (as either current or infrequent smokers) or have engaged in high risk alcohol consumption in the past month.

## References

- O'Loughlin, J. L., Dugas, E. N., O'Loughlin, E. K., Karp, I., & Sylvestre, M. P. (2014). Incidence and determinants of cigarette smoking initiation in young adults. *Journal of Adolescent Health, 54*, 26-32.
- O'Loughlin, J., Karp, I., Koulis, T., Paradis, G., & DiFranza, J. (2009). Determinants of first puff and daily cigarette smoking in adolescents. *American Journal of Epidemiology, 170*, 585-597.
- White, J., Walton, D., & Walker, N. (2015). Exploring comorbid use of marijuana, tobacco, and alcohol among 14 to 15-year-olds: Findings from a national survey on adolescent substance use. *BMC Public Health, 15*, 233.

## Citation

- Nelson, S., White, J., & Newcombe, R. (2015). *Young people's alcohol use during first smoking experience [In Fact]*. Wellington: Health Promotion Agency Research and Evaluation Unit.

## About the Youth Insights Survey

- The YIS forms part of the New Zealand Youth Tobacco Monitor (NZYTM), a collaborative effort by HPA and Action on Smoking and Health (ASH).
- The YIS is a nationwide paper-based survey conducted in schools every two years, first carried out in its current form in 2006 and dating back to 1995 in different formats.
- The YIS collects data on smoking-related knowledge, attitudes, and behaviour, as well as data on students' interests, lifestyles, activities, and media use, and responses to tobacco control initiatives. It monitors the broad spectrum of risk and protective factors that relate to smoking uptake among young people.
- The 2014 YIS was conducted with a sample of 2,919 Year 10 students (14 to 15-year-olds). The school-level response rate was 76%, the student level response rate 84%, and the overall response rate was 64%. The sample included 1,352 NZ European, 700 Māori, 321 Pacific, 353 Asian, and 193 people of 'Other' ethnicity (prioritised ethnicity). Eight percent (n = 218) were current smokers (smoke daily, weekly or monthly). The data have been adjusted (weighted) to ensure they are representative of the population of New Zealand Year 10 school students.
- For this analysis, jack-knife proportions and 95% confidence intervals were calculated first. Logistic regression was then used to compare responses between groups. The significance level used for statistical analyses was set to  $\alpha = .05$ .
- Comparison groups for these analyses were as follows:
  - Gender (females, compared with males)
  - Ethnicity (Māori, compared with non-Māori)
  - Smoking status (ex-smokers, compared with current smokers and infrequent smokers). Ex-smokers had smoked a cigarette, but no longer smoked. Current smokers reported smoking at least once a month or more often. Infrequent smokers reported smoking less often than once a month
  - Alcohol consumption status (high-risk alcohol consumers, compared with non-high risk alcohol consumers). High-risk alcohol consumption is having consumed five or more alcoholic drinks on one occasion in the past month. Non-high risk alcohol consumption is not having consumed five or more alcoholic drinks on one occasion in the past month.

A full description of the 2014 YIS methodology and further YIS publications can be found at <http://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, prevent disease, illness and injury. HPA enables environments that support health and wellbeing and healthy lifestyles, and reduce personal, social and economic harm. HPA also takes functions specific to providing advice and research on alcohol issues.

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July 2015

ISSN 2350-2991

