

# Rich Pickings: Extensive Information from a Survey of Discarded Cigarette Packs



Nick Wilson<sup>1</sup>, Jo Peace<sup>1</sup>, Richard Edwards<sup>1\*</sup>, George Thomson<sup>1</sup>, Janet Hoek<sup>2</sup>, Judy Li<sup>1</sup>, James Stanley<sup>1</sup>

(1) Health Promotion and Policy Research Unit, Department of Public Health, University of Otago, Wellington, New Zealand

(2) Department of Marketing, University of Otago, Dunedin, New Zealand

\* Contact for further information: richard.edwards@otago.ac.nz <http://www.wnmeds.ac.nz/academic/dph/research/hepru/>

## Aims

To test: (i) whether tobacco companies followed a regulation requiring seven new graphic health warnings (GHWs) to be evenly distributed on cigarette packs; and (ii) if fewer packs featuring warnings smokers regarded as more disturbing were distributed (Study 1). Other aims were to identify the prevalence of foreign packs consumed in New Zealand (Study 2) and determine the nature of descriptors on packs (Study 3).

## Methods

Volunteers collected discarded cigarette packs from the streets of four cities and six New Zealand (NZ) towns/rural locations between November 2008 and January 2009. For the Study 1 aim, our *a priori* warning impact assessment was tested against data from depth interviews with retailers and other NZ and Australian work about apparent smoker views of which warnings were more/less disturbing.

## Results

### Study 1 (graphic warning distribution):

The GHWs on the packs (n=1208) showed a distribution pattern that was consistent with the hypotheses. Disproportionately more packs featured the warning regarded as “least disturbing” by smokers, and the overall pattern of warning distribution was unequal (p=0.035). The results of this study were published in a journal [1].

### Study 2 (missed tax revenue from foreign packs):

Foreign packs were identified (3.2%, 95%CI = 2.4% – 4.3%) eg, see Figure 1. However the distribution by country/company was not indicative of smuggling. If this tobacco had been purchased in NZ, the NZ Government would have gained an additional \$36 million per year in tobacco-related tax. The results of this study were published [2] and generated significant print media and radio coverage in New Zealand.

### Study 3 (misleading descriptors):

The terms “light” and “mild” appeared rarely (4%) but 42% of packs featured a colour word (eg, red, blue, gold) to indicate mildness/strength. A further 18% employed other words to suggest mildness/strength (eg, “subtle”, “mellow” – see Figure 2). The results of this study have also been published [3].



Figure 1: Example of a foreign pack found in this survey



Figure 2: Example of a pack where the new descriptor “mellow” has replaced the descriptor “mild” (on the older pack on the left)

## Conclusions

This very low-cost study found evidence that the tobacco industry was subverting GHW regulations and persisting in their use of misleading descriptors. We also found information that could encourage elimination of duty-free sales, which represent a non-trivial supply of cheap tobacco. More generally, surveys of discarded cigarette packs provide detailed insights into industry practices and inform strategies that could address these.

## References

1. Wilson N, Peace J, Judy Li, et al, Thomson G. Distribution of new graphic warning labels: Are tobacco companies following regulations? *Tob Induc Dis* 2009, 5:14 (25 August 2009).
2. Wilson N, Thomson G, Edwards R, Peace J. Estimating missed government tax revenue from foreign tobacco: Survey of discarded cigarette packs. *Tob Control* 2009;18:416-418.
3. Peace J, Wilson N, Hoek J, et al. Survey of descriptors on cigarette packs: still misleading consumers? *NZ Med J* 2009;122:90-96

## Funding and Acknowledgements

The ITC Project (NZ) team thank colleagues who participated in cigarette pack collection. Background funding support for this project came from the Health Research Council of New Zealand. See also our other project partners: <http://www.wnmeds.ac.nz/itcproject.html>