

Addendum to

Study of the Impact of the Tobacco Plain Packaging Measure
on Smoking Prevalence in Australia

Report of Dr. Tasneem Chipty
May 19, 2016

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1. My name is Tasneem Chipty. In my capacity as an independent expert, I submitted a study on January 24, 2016 (“Chipty Plain Packaging Report”) that assesses the post-implementation evidence of the impact of plain packaging on smoking prevalence in Australia.¹ Using individual-level Roy Morgan Single Source Survey (“RMSS”) data over the period January 2001 to September 2015, I found that the 2012 packaging changes resulted in a 0.55 percentage point decline in smoking prevalence, beyond the historical trend in Australia.² I have now been asked by Australia’s Department of Health to convert the estimated reduction in smoking prevalence into an estimated reduction in the number of smokers attributable to the packaging changes.

2. This reduction is the difference in the number of smokers there would have been absent the packaging changes and the actual number of smokers post-implementation. As I explain in the Chipty Plain Packaging Report, average smoking prevalence over the post-implementation period from December 2012 to September 2015 would have been 0.55 percentage points higher than it actually was: average smoking prevalence would have been 17.77 percent absent the packaging changes, instead of the actual average smoking prevalence of 17.21 percent.³ According to the RMSS data, the average Australian population (aged 14 years or older) over the post-implementation period is 19,326,387. Applying the average smoking prevalence estimates, I calculate that there would have been an average of 3,434,299 smokers without the packaging changes ($= 0.1777 \times 19,326,387$), instead of 3,326,071 smokers ($= 0.1721 \times 19,326,387$) with the packaging changes. Thus,

¹ “Study of the Impact of the Tobacco Plain Packaging Measure on Smoking Prevalence in Australia, Report of Dr. Tasneem Chipty,” January 24, 2016.

² As I explain in the Chipty Plain Packaging Report (¶ 5), the implementation of the Tobacco Plain Packaging Act (“TPP Act”) happened at the same time as the introduction of updated and enlarged graphic health warnings on tobacco product packaging. Because of the timing of these changes, it is not possible to disentangle the effects of tobacco plain packaging from those of updated and enlarged health warnings without making restrictive assumptions. Therefore, I use the expression “2012 packaging changes” to refer to both policy changes collectively.

³ Chipty Plain Packaging Report, Table 4, Column (1), and ¶¶ 32-33. My preferred approach excludes the two transition months of October and November 2012, and measures the effect of the 2012 packaging changes using a December 2012 indicator variable. Due to rounding, 0.55 does not correspond to the difference between 17.77 and 17.21. The smoking prevalence rates up to the fifth decimal digit are 17.76509 percent without packaging changes, and 17.21153 percent with packaging changes. The difference between these two numbers is 0.55356, which has then been rounded to 0.55.

over the post-implementation period, I estimate that the packaging changes resulted in an average of 108,228 (=3,434,299 - 3,326,071) fewer smokers. These individuals would have continued to smoke, initiated smoking, or relapsed absent the packaging changes. The table below summarizes this result.

**Estimated Reduction in the Number of Smokers,
December 2012 to September 2015**

[A]	Average Australian Population (14 or older)	19,326,387
[B]	Smoking Prevalence <i>Without Packaging Changes</i>	17.77%
[C] = [A] x [B]	Number of Smokers <i>Without Packaging Changes</i>	3,434,299
[D]	Smoking Prevalence <i>With Packaging Changes</i>	17.21%
[E] = [A] x [D]	Number of Smokers <i>With Packaging Changes</i>	3,326,071
[F] = [C] - [E]	Reduction in the Number of Smokers	108,228

Note: Due to rounding, calculations based on displayed precision may not replicate the numbers presented.
Sources: Chipty Plain Packaging Report, Table 4, Column (1); and RMSS data.

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