

The competition is next door! Why a voluntary approach to tobacco retailer reduction will never work

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In 2011, Te Kāwanatanga o Aotearoa (The New Zealand Government) set the goal to become smokefree by 2025 and have less than 5% of the population smoking daily.¹ A decade on, adult (15 years+) daily smoking rates have decreased from 16.3% to the current 11.6%, over double the intended goal, and with 32% of wāhine Māori still smoking daily,² significant disparities still exist. Aotearoa is not on track to achieve Smokefree 2025, and to do so will require a significant reduction in uptake plus a quick increase in cessation.³⁻⁵ The reduction of tobacco supply is an important sector-supported strategy to ensure the success of the Government's Smokefree 2025 Action Plan.⁶⁻⁸ Marsh et al have previously published on the abundance of tobacco retailers, identifying 5,243 tobacco retailers across Aotearoa.⁹ They found that schools were more likely to have a tobacco retailer within 500m or 1,000m as well as a greater number of tobacco retailers compared to community pharmacies.

In this letter we share preliminary findings from a tobacco retailer study across the three Tāmaki Makaurau (Auckland) district health boards (DHBs) interrogating tobacco accessibility and density, using community pharmacies as a comparison. This builds on the work of Marsh et al, using Census 2018 and New Zealand Index of Deprivation (NZDep2018) data. We have used a new methodology for attributing deprivation and demographics to an address whereby the average of all Statistical Area 1 (SA1) within a 1km radius of the address is calculated. The advantage of using this methodology is that the deprivation and demographics attributed to each address represent their surrounding neighbourhood,

rather than the small area unit the address resides in. We calculated how many retailers of the same type were within a 100m and 250m radius of each retailer.

A total of 1,794 tobacco retailers and 425 community pharmacies were identified in Tāmaki Makaurau. Across the three DHBs there were an estimated 1,591,797 inhabitants, with 144,144 (11.3%) of the adults who responded to the New Zealand Census 2018 stating they smoke daily. Therefore, people have greater access to tobacco than pharmacies, with one tobacco retailer for every 887 inhabitants compared to one community pharmacy for every 3,745 inhabitants. This equates to one tobacco retailer for every 80 people who smoke daily. Comparing the DHBs, there is one tobacco retailer for every 51 people who smoke in Auckland DHB, one for every 115 people who smoke in Counties Manukau DHB and one for every 86 people who smoke in Waitemātā DHB. Tobacco retailers were similarly distributed across local boards and district health boards as community pharmacies, by percentage. There was a significant difference in distribution across council zones, with 25% of tobacco retailers being in residential zones versus 17.6% of community pharmacies.

Tobacco retailers were found to be more densely located in proximity to each other than pharmacies, with 55.4% of tobacco retailers having another tobacco retailer within 100m vs just 22.6% of pharmacies. At 250m the difference was 75.9% and 51.1%, respectively. An initial logistic regression model using retailer type as a predictor found tobacco retailers to have greater odds of having a retailer within 100m and 250m than pharmacies (OR: 4.26, 95%CI: 3.30-5.50,

$p < 0.001$ and OR: 3.03, 95%CI: 2.45–3.76, $p < 0.001$, respectively). Including NZDep2018 score and population with district health board and council zone the association remained (OR: 5.75, 95%CI: 4.37–7.57, $p < 0.001$ and OR: 4.85, 95%CI: 3.76–6.26, $p < 0.001$, respectively). Next we compared how many closely located retailers each type had and found 15% of tobacco retailers had three or more other retailers within 100m, whereas zero community pharmacies did. At 250m the difference was 42% and 13%, respectively.

The findings of our research demonstrate how abundant tobacco retailers are across Tāmaki Makaurau and detail what could be addressed in the Government’s Smokefree 2025 Action Plan. Tobacco retailers have previously expressed voluntarily stopping to sell tobacco is not likely, particularly when other retailers close to them continue to sell.^{10–12} The voluntary approach will not be enough to reduce tobacco supply and a mandated reduction in supply is required, particularly in high deprivation areas, which are most affected by smoking.²

Competing interests:

Richard Portch notes that they work for a health sector agency working in tobacco harm reduction and control.

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REFERENCES

1. New Zealand Parliament [Internet]. Government Final Response to Report of the Māori Affairs Committee on Inquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Māori, presented to the House of Representatives in accordance with Standing Order 248 (J.1) - New. Available from: https://www.parliament.nz/en/pb/papers-presented/current-papers/document/49DBHOH_PAP21175_1/government-final-response-to-report-of-the-māori-affairs (2011).
2. Ministry of Health NZ [Internet]. Annual Data Explorer 2018/19: New Zealand Health Survey [Data File]. Available from: <https://minhealthnz.shinyapps.io/nz-health-survey-2019-20-annual-data-explorer/> (2019).
3. NZIER [Internet]. N. Z. I. of E. R. Smoking targets A microsimulation analysis. Available from: www.nzier.org.nz (2012).
4. Ikeda, T, Cobiac, L, Wilson, N, Carter, K & Blakely, T. What will it take to get to under 5% smoking prevalence by 2025? Modelling in a country with a smokefree goal. *Tob. Control* 24, 139–145 (2015).
5. Tobias, M I, Cavana, R Y & Bloomfield, A. Application of a system dynamics model to inform investment in smoking cessation services in New Zealand. *Am. J. Public Health* 100, 1274–1281 (2010).
6. Der Deen, F S P Van et al. Restricting tobacco sales to only pharmacies combined with cessation advice: A modelling study of the future smoking prevalence, health and cost impacts. *Tob. Control* 28, 643–650 (2019).
7. Robertson, L & Marsh, L. Estimating the effect of a potential policy to restrict tobacco retail availability in New Zealand. *Tob. Control* 466–468 (2018) doi:10.1136/tobacco-control-2018-054491.
8. Wilson, N., Thomson, G. W., Edwards, R. & Blakely, T. Potential advantages and disadvantages of an endgame strategy: A ‘sinking lid’ on tobacco supply. *Tob. Control* 22, i18 (2013).
9. Marsh, L., Doscher, C., Cameron, C., Robertson, L. & Petrović-van der Deen, F. S. How would the tobacco

- retail landscape change if tobacco was only sold through liquor stores, petrol stations or pharmacies? *Aust. N. Z. J. Public Health* 1753-6405.12957 (2020) doi:10.1111/1753-6405.12957.
10. Robertson, L., Marsh, L., Hoek, J., McGee, R. & Egan, R. Regulating the sale of tobacco in New Zealand: A qualitative analysis of retailers' views and implications for advocacy. *Int. J. Drug Policy* 26, 1222–1230 (2015).
 11. Witt, M. et al. How important to dairies is selling tobacco? Views of dairy owners and managers on tobacco retailing. *NZMJ* 131, 1479 (2018).
 12. Badu, E. & Fowler, E. 'If government can't stop the smokes, no way we can stop selling them': why retailers want Government to act. *NZMJ* 131, 1482 (2018).