Progress toward Smokefree Aotearoa 2025 – how might tobacco retail restrictions contribute?

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We have just published research on the health gains and cost-savings from various legally mandated restrictions on tobacco retail outlets. In this blog, we briefly consider the results and put the findings in a wider context of how New Zealand might reach its Smokefree 2025 goal.

There is increasing policy and research interest in restrictions on tobacco retail outlet locations and density – including for achieving tobacco endgame goals. Many studies in the

'neighbourhoods and health' research stream have estimated the health effects of access to features of the built environment, including access to: alcohol outlets and harmful drinking (1), parks and obesity (2), gambling outlets and behaviours (3), etc.

Easy access to tobacco retail outlets is thought to facilitate smoking uptake in youth and to reduce (the success) of smoking cessation in adults (4-6). In NZ, retail access to tobacco is currently very high, with an estimated ~6000 retailers nationally (see previous blog for a map) and an average travel time of just over 3 minutes from each neighbourhood centre to the nearest retailer. Restrictions in the number, location or density of retailers could be mandated by law through zoning and/or licensing. The idea is that banning sales at certain locations or restricting the density of outlets selling tobacco would make purchasing tobacco inconvenient and would incur travel costs and thus decrease smoking. But, until now, the estimated effects of tobacco retail restrictions have been largely unknown. However, recent longitudinal evidence supports the notion that moving farther away from tobacco outlets increases cessation success (7).

The study that we recently published (8) set out to quantify the health benefits and cost savings to the health system for four different interventions for New Zealand:

- Reducing existing outlets by 95%
- Allowing sales at only 50% of current alcohol stores (since these have fairly strictly enforced age-controls on sales)
- Banning sales within 1km of schools
- Banning sales within 2km of schools

The most effective intervention was one that limited tobacco sales to 50% of liquor outlets (and nowhere else) at 129,000 quality-adjusted life-years (QALYs) gained over the lifetime of the population (95% uncertainty interval [UI]: 74,100 to 212,000, undiscounted). But other interventions, such as retail free zones around schools were also effective and also achieved net cost-savings to the health system. Indeed, all interventions were estimated to be cost-saving to the health system, with the largest saving for the liquor store only intervention: NZ$1.82 billion (95%UI: $1.03 to $2.96 billion, undiscounted).

Our study described here did not account for the possible de-normalising effects of reducing tobacco outlets – and so it may have under-estimated the likely health gain and cost-savings. But it also has the assumption that indirect cost impacts (via travel time and travel costs) work in a similar way as do price increases (via tobacco taxes).

Comparisons with other endgame interventions

These outlet reduction interventions were still not as effective as increases in tobacco tax (see previous blog) and this published paper (9). Nevertheless, particular advantages of outlet reduction as an endgame strategy are that:

- It might be relatively politically acceptable – especially the strategy of restricting tobacco outlets near schools.
- The indirect nature of the impact (travel time and travel costs), might also be more politically acceptable than further tax increases.

What next for the tobacco endgame in New Zealand?

There has been some favourable progress in NZ recently with tobacco tax increases

announced in 2016 (10) and with plans to introduce standardised (plain) packaging. But the NZ Government still lacks a documented strategy for getting to its Smokefree 2025 goal. There is an urgent need for such a strategy plus a careful consideration of other major endgame options including:

- Outlet reduction strategies (as detailed here).
- Tobacco tax increases further into the future (though these will not be sufficient on their own).
- The tobacco-free generation strategy (a ban from selling tobacco to those born after a certain year) (11).
- The sinking lid strategy (involving regular reductions in the amount of tobacco supply until supply ends) (12).
- Various packages of the above strategies.

Without consideration of these type of strategies, a business-as-usual approach to tobacco control (already enacted tax increases and ongoing smoking cessation services like the Quitline) is very unlikely to achieve the important 2025 goal.

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