**DATASET DETAILS**

1. Overview.

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| Number of Samples | n = 113 samples in dataset out of 243 samples in BODE3 Health Intervention League Table |
| Number of Research Papers used | 8 |
| Reasons for not using other papers | 1. Some research papers use Australia as their case study, and we cannot assume that the gender/age/ethnic groups behave similarly. 2. Some research papers do not have all available parameters, typically decrease in smoking prevalence. |
| Number of Interventions Modelled | 10 |

1. List of Research Papers Used

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| --- | --- | --- | --- |
| S/N | Title | Author(s) | Publishing Date |
| 1. | An examination of smoking initiation rates by age: results from a large longitudinal study in New Zealand | Edwards et al. | 2013 |
| 2. | Effects of vaping on uptake and cessation of smoking: Longitidinal analysis in Aotearoa New Zealand adults | Mason et al. | 2018 |
| 3. | Nicotine patches used in combination with e-cigarettes (with and without nicotine) for smoking cessation: a pragmatic, randomised trial | Walker et al. | 2020 |
| 4. | Potential Country-level Health and Cost Impacts of Legalizing Domestic Sale of Vaporized Nicotine Products | Van der Deen et al. | 2019 |
| 5. | Restricting tobacco sales to only pharmacies combined with cessation advice: a modelling study of the future smoking prevalence, health and cost impacts | Van der Deen et al. | 2018 |
| 6. | Theoretical impacts of a range of major tobacco retail outlet reduction interventions: modelling results in a country with a smoke-free nation goal | Pearson et al. | 2014 |
| 7. | Tobacco retail outlet restrictions: health and cost impacts from multistate life-table modelling in a national population | Pearson et al. | 2016 |
| 8. | Impact of five tobacco endgame strategies on future smoking prevalence, population health and health system costs: two modelling studies to inform the tobacco endgame | Van der Deen et al. | 2017 |

1. Data Table.

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| --- | --- | --- | --- | --- | --- |
| Intervention | Tax Increase | Outlet Reduction | Smoking Prevalence | Tobacco Supply | Smoking Uptake |
| Combined endgame strategy | Defined in van der Deen (2018) | | Van der Deen (2018) Figure 2  Black Column – Purple Column since we are comparing BAU vs Intervention |  | 0 due to TFG |
| Eliminating tobacco sales from outlets |  | Outlet Reduction Number: NZ tobacco outlets (n=5008)  Eliminating within 1km of schools: 641 remaining outlets  Eliminating within 2km of schools: 260 remaining outlets | Supplementary Table A6 |  | Smoking Uptake:  Assumes BAU  etable 2  eg. For non-Māori male, 23-(1-.034)^14 = 14.2  For non-Māori female, 19-(1-0.028)^14 = 12.8  Assume age 15-24 since smoking uptake in this group is the highest.  Assume population comprises non-Māori majority |
| Ongoing Tobacco Tax Increase |  |  | Van der Deen (2018) Figure 2  Black Column – Red Column since we are comparing BAU vs Intervention |  | Smoking Uptake by Age:  Smoking uptake between 2004/05 and 2008/09 was 14.2% for those aged 15–17 years, 7.0% for 18–19 years, 3.1% for 20–24 years, and 1.4% for 25–34 years, with low initiation among older age groups  Assume average of 8.1% uptake among those aged 15-24, 0% for 0-14, 1% for those aged 25-44, 0.7% for those aged 25-64, and 0% for 65+.  Assume 8 times smoking uptake for those aged 15-24 compared to others. Assumes that difference in smoking uptake amongst different age groups is constant across time.  Base smoking uptake for Māori male (15 – 24):  40\*(1-0.029)^14=26.5 (van der Deen, 2018)  Base smoking uptake for Māori female (15 – 24):  45\*(1-0.032)^14=28.5 (van der Deen, 2018) |
| Permitting tobacco sales at half the liquor stores (and nowhere else) by law |  | Tobacco Retail Outlet Restrictions Supplementary Table A6 | Tobacco Retail Outlet Restrictions Supplementary Table A6 |  | Same as above |
| Reducing the total number of tobacco retail outlets by 95% by law |  | Tobacco Retail Outlet Restrictions Supplementary Table A6 | Tobacco Retail Outlet Restrictions Supplementary Table A6 |  | Same as above |
| Restricting tobacco sales to only pharmacies combined with annual cessation advice from pharmacist |  | Tobacco retail outlets (n=5979) and community pharmacies (n=1082)  Outlet Reduction = (5979 – 1082) / 5979 \* 100% | Under BAU, smoking prevalence was projected to reduce from 34.7% in 2011 to 20.5% (95% UI 16.8% to 25.2%) for Māori, and from 14.1% to 8.1% (95% UI 6.4% to 10.3%) for non-Māori by 2025. But with the modelled intervention there were additional reductions in smoking prevalence by 2025 compared to BAU, that is, down to 17.3% (95% UI 13.3% to 22.4%) for Māori and 6.8% (95% UI 5.0% to 9.3%) for non-Māori.  Māori: 20.5 – 17.3 = 3.2  non-Māori: 8.1 – 6.3 = 1.8 |  | Same as above |
| Sinking lid on tobacco supply (reducing tobacco commercial sales each year until sales are zero in 2025) |  |  | Van der Deen (2018) Figure 2  Black Column – Blue Column since we are comparing BAU vs Intervention | 100 by definition | Assumes people don’t get introduced to smoking illegally |
| Substantive tobacco retail outlet reduction strategy (reducing the total number of outlets until 18 left in 2025) |  | Tobacco retail outlets (n=5979)  Outlet Reduction = (5979 – 18) / 5979 \* 100% = 99.7% | Van der Deen (2018) Figure 2  Black Column – Yellow Column since we are comparing BAU vs Intervention |  | Same as above |
| Tax increased by 20% per year until 2025, tobacco retail outlets reduced by 95% and tobacco-free generation strategy implemented | By definition | By definition | Van der Deen (2018) Figure 2  Black Column – Purple Column since we are comparing BAU vs Intervention |  | 0 due to TFG |
| Tobacco-free generation (law change prohibiting tobacco sale and supply to individuals born from 1993 onwards) |  |  | Van der Deen (2018) Figure 2  Black Column – Green Column since we are comparing BAU vs Intervention |  | 0 due to TFG |