

Submission to the: Inquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Māori

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Summary points

Terms of reference 1: Historical actions of the tobacco industry

- Despite strengthened regulations tobacco continues to be promoted through packaging, point-of-sale displays and electronic media.
- Māori are likely to have high exposure to tobacco promotions as a result of higher smoking prevalence and exposure through electronic media.
- Historically and today tobacco promotions have been exacerbated by deceptions around tobacco risks and spurious claims about the positive qualities of tobacco (for example labels such as light or mild, menthol, packaging design and colour).
- Tobacco promotions are likely to increase smoking uptake through rangatahi exposure to point-of-sale displays and tobacco packaging and discouraging quitting among established Māori smokers.
- Tobacco promotions have also appropriated Māori imagery and intellectual property.

Terms of reference 2: Impact of tobacco use on the health, economic, social and cultural wellbeing of Māori

- Smoked tobacco is a highly addictive and extremely hazardous product whose normal use results in the premature death of half of its long term users.
- Tobacco is a leading cause of death among Māori and contributes to the gap in health between Māori and non-Māori.
- Tobacco smoking causes social and economic disadvantage for Māori whanau, hapu and iwi.
- Māori smokers spend an estimated \$266 million per annum on tobacco. Low income whanau are particularly burdened by the costs of having members who smoke.
- Premature death deprives whanau, hapu and iwi of their leaders and support people.
- Smoking-related illness causes immense suffering and can inhibit whanau members from fully participating within their whanau.

Terms of reference 3: The impact of tobacco use on Māori development aspirations and opportunities

- Tobacco use is a barrier for Māori development as a result of depriving Māori of leaders, contributing to gaps in health status between Māori and non-Māori and illness inhibiting many Māori smokers from fully participating in society.

Terms of reference 4: Benefits for Māori from tobacco use

- Smokers may believe that smoking tobacco reduces stress. However, evidence indicates the smoking contributes to stress in various ways and that the perception of stress relief is mainly the result of alleviating nicotine withdrawal symptoms.
- The overwhelmingly negative impacts of smoking far outweigh any benefits, perceived or real, from smoking.

Terms of reference 5: Policy and legislative measures

- Incremental improvements to measures to reduce tobacco smoking will eventually reduce the scale of the tobacco epidemic for Māori. But a much faster approach is for government to adopt an ‘endgame’ policy aiming to reduce smoking to negligible levels eg, with a phase out of tobacco imports over 10 years. Such a phase out will also be helped by many supplementary measures to support smokers to quit.

Major Two Recommendations

Major recommendation 1: That the Inquiry endorse further work (eg, by government agencies such as the Ministry of Health) on the endgame option of a sinking import quota aiming to phase out tobacco imports by 2020. (See Appendices D, E & F for further details on endgame options, for the level of smoker support, and for supplementary measures).

Major recommendation 2: That the Inquiry request that government agencies support a range of intensified supplementary tobacco control measures to assist achieving the endgame option described above. (See Appendices for additional information).

Other Recommendations (see subsequent text for further justification of these)

Recommendation 1: That the Inquiry recommends that the NZ Parliament passes a law to require all tobacco companies operating in Aotearoa to supply copies of all their marketing-related documentation (including plans and strategies), at six monthly intervals into the future (including all such materials produced since January 1960). This could be modelled on existing Canadian regulations.¹

Recommendation 2: That the Inquiry recommends that the NZ Parliament upgrades the out-of-date Fair Trading Act 1986 and strengthens the powers of the Commerce Commission, so that the very sub-optimal response by NZ agencies to misleading tobacco product descriptors (eg, “light and mild” descriptors)² is properly addressed and never repeated for other tobacco-related investigations or other hazardous products.

Recommendation 3: To supplement an endgame strategy (see Main Recommendation 1), that the Inquiry recommend that the NZ Parliament legislates to: ban all point-of-sale displays of tobacco, require plain packaging of tobacco products, require warnings be increased to at least 90% of all pack surfaces, and require a rigorous monitoring regime be established to identify any new methods of tobacco product marketing.

Recommendation 4: That the NZ Government actively protects Māori intellectual property and New Zealand’s international image by keeping surveillance of international tobacco brands to ensure that Māori imagery is not used.

Recommendation 5: That the Inquiry request that the Ministry of Health provide more detailed costing information on the health, social, economic and cultural impact tobacco use in Aotearoa, to better inform the deliberations of this Inquiry. Also, that the Inquiry recommends that the NZ Parliament require that the Ministry of Health repeats this process at two-yearly intervals into the future.

Recommendation 6: Given (a) the high numbers of deaths from tobacco; and (b) high rates of smoking among Māori, efforts to curb smoking should be increased with a priority on supporting Māori not to smoke.

Recommendation 7: That support is given to those mass media campaigns aimed at debunking common myths associated with tobacco use.

Recommendation 8: That ways of minimising any adverse short-term impacts from any endgame measures are investigated and implemented for Māori and all other smokers.

Recommendation 9: That the Inquiry actively question people making oral submissions to the Inquiry on tobacco endgame solutions, and foster a public debate on “the time being right to have a clear endgame strategy to reduce tobacco smoking to negligible levels (<1% in Aotearoa by 2020”.

Main text of the submission

Congratulations to the Māori Affairs Committee on launching such an important inquiry. This is a topic of critical importance to Māori health, wellbeing and development and indeed to all New Zealanders and to peoples around the world.

Who we (the submitters) are: We are independent scientists and researchers with extensive collective experience in epidemiology and public health. In particular we have studied the impact of tobacco on health, and researched public health interventions to reduce the adverse impact of tobacco on health, health inequalities and on Māori health. Collectively we have published over 100 research outputs in the peer-reviewed scientific literature on tobacco-related issues. Links to additional information about some of us and our research are in Appendix A.

Terms of reference (ToR) 1: Historical actions of the tobacco industry to promote tobacco use amongst Māori.

Māori health experts have documented the long history of tobacco in Māori and Pakeha relations in Aotearoa / New Zealand.^{3,4} Nevertheless we focus here on more recent decades.

Regulations on tobacco advertising have been strengthened from radio and television bans in the 1960s and culminating in complete advertising and sponsorship bans in the 1990s. However, tobacco companies still undertake marketing via price reductions, the packaging of products, point-of-sale displays and there is extensive tobacco marketing on the internet.⁵ Furthermore, smoking can be frequently seen in movies, music videos and television programmes (with some of this having resulted from past “product placement” by tobacco companies). Research indicates that Māori have high exposure to media. For example, 80% of Māori watch television daily.⁶ Therefore, Māori are just as likely to be exposed to tobacco promotions. In addition, given higher smoking rates, Māori are more likely to be exposed to promotion on tobacco packaging.

Tobacco promotion has been exacerbated by chronic deception about tobacco risks, and the effects of tobacco-related policy interventions. Thus Māori and other smokers, and would-be smokers, have been deceived about the risks of addiction, and about secondhand smoke, smokefree policies, and many other areas.⁷⁻⁹ The industry has also concealed evidence of this deception, including destruction of documents, and obstructed research into this deception.¹⁰⁻¹²

Of particular relevance to Māori is the likelihood that tobacco industry marketing has contributed to harmful misperceptions among Māori smokers. As detailed in Appendix B, these include: misperceptions around “light and mild” cigarettes (currently marketed in colour-coded “blue” and “white” packs or with words such as “smooth”), misperceptions around the harm from menthols and roll-your-own tobacco, and misperceptions around the harm from second-hand smoke.

Tobacco promotions impact on Māori in at least three ways: (i) promotions that have served to increase smoking uptake among young Māori; (ii) promotions that have served to discourage Māori from quitting smoking; and (iii) promotions that have appropriated Māori imagery and intellectual property.

Promotions that have increased uptake: There is good international evidence that tobacco advertising and marketing increases smoking uptake among young people, in particular point-of-sale promotions.¹³

Research conducted by the University of Otago indicates that even in the New Zealand environment where tobacco advertising and sponsorship is banned, many young people are familiar with tobacco brands. In a national survey conducted by the Health Sponsorship Council in 2006 among ten and eleven year old students preliminary findings indicate that over half of all students were aware of the most popular brand of tobacco (Holiday) smoked in New Zealand (data tables available on request). With one exception (Benson and Hedges) awareness of tobacco brands was proportionate to their market share in New Zealand. Such brand-specific awareness suggests the pervasive effect of tobacco packaging. Of note was that tobacco brand awareness was markedly higher among Māori students compared to non-Māori.

Promotions that have discouraged quitting: International and New Zealand evidence indicates tobacco advertising increases consumption of tobacco.^{14 15} Any promotions by the tobacco industry, such as packaging, point-of-sale displays, can be seen as discouraging smoking cessation by maintaining or increasing consumption and brand loyalty.

Promotions that have appropriated Māori imagery and intellectual property: During the early to mid-twentieth century a range of tobacco related products were developed that used Māori imagery, designs and terms to market tobacco in New Zealand and internationally. These included trading cards, ash trays, tobacco packaging and lighters. Such exploitation has continued into the 21st century. In 2006, Philip Morris was confronted by Te Reo Marama over their use of “Maori Mix” a brand of cigarettes being sold in Israel. Such exploitation of Māori culture has and continues to promote stereotypes of Māori being smokers, undermines and subverts Māori culture and, internationally, damages New Zealand’s clean, green and healthy image.

Recommendation 1: That the Inquiry recommends that the NZ Parliament passes a law to require all tobacco companies operating in Aotearoa to supply copies of all their marketing-related documentation (including plans and strategies), at six monthly intervals into the future (including all such materials produced since January 1960). This could be modelled on existing Canadian regulations.¹

Recommendation 2: That the Inquiry recommends that the NZ Parliament upgrades the out-of-date Fair Trading Act 1986 and strengthens the powers of the Commerce Commission, so that the very sub-optimal response by NZ agencies to misleading tobacco product descriptors (eg, “light and mild” descriptors)² is properly addressed and never repeated for other tobacco-related investigations or other hazardous products.

Recommendation 3: To supplement an endgame strategy (see Main Recommendation 1), that the Inquiry recommend that the NZ Parliament legislates to: ban all point-of-sale displays of tobacco, require plain packaging of tobacco products, require warnings be increased to at least 90% of all pack surfaces, and require a rigorous monitoring regime be established to identify any new methods of tobacco product marketing.

Recommendation 4: That the NZ Government actively protects Māori intellectual property and New Zealand’s international image by keeping surveillance of international tobacco brands to ensure that Māori imagery is not used.

ToR 2: The impact of tobacco use on the health, economic, social and cultural wellbeing of Māori.

Health: Smoked tobacco is a highly addictive and extremely hazardous product whose normal use results in the premature death of half of its long term users. Smoking is a leading cause of preventable deaths in New Zealand. Hundreds of Māori die prematurely each year from smoking-related illnesses (with an update of a more precise number not yet available). The adverse health impact of tobacco includes its role in around 40 health conditions (including heart disease and various cancers),¹⁶ as well as premature death. Tobacco use contributes to the gap in health between Māori and non-Māori.^{17 18} In particular the gap in cancer mortality between Māori and non-Māori is growing¹⁹ and smoking contributes to this gap. Further specific details for the harm to Māori health and life expectancy are in Appendix C.

Economic: Nicotine addiction means that most Māori smokers feel compelled to spend many millions of dollars a year buying tobacco (eg, expenditure on cigarettes by Māori in 2000 was estimated at \$266 million per year²⁰). Additional costs to Māori relate to treating tobacco-related illness; and lost income from premature death among workers and from sick-leave. Low-income Māori particularly suffer from smoking-related costs.

Social and cultural: Smoking is thought to have contributed to the decimation of the Māori population during the latter part of the 19th century.⁴ Many important killers at that time (ie, tuberculosis and other respiratory diseases) are known to be exacerbated by smoking and exposure to second-hand smoke.

Tobacco continues to harm the Māori population today and is a leading contributor to lower life expectancies for Māori. Shorter life expectancies means whanau are deprived of their koroua and kuia and there are fewer kaumatua on the paepae or doing the karanga or acting in other leadership roles in Māoridom.

A study that critiqued smoking against Te Whare Tapa Wha, a Māori model of health, suggested smoking affected Māori physical health through nicotine dependence (tinana), psychological health through the experience of being a smoker (hinengaro), spiritual health through being a breach of tapu (wairua) and whanau ‘health’ where smoking has been normalised and self-perpetuating.²¹

In terms of whanau health, the cost of smoking among whanau members can mean that there is less money available for other important whanau activities (eg, good housing, education). The health impacts of tobacco use can also affect the ability of whanau members to fully participate within their whanau. The latter issue was a central motivator behind the successful “It’s about whanau” mass media cessation campaign that was launched in 2001.^{22 23}

If there is not a major reduction in tobacco use in the next 10 years, in the next few decades smoking will have a larger *relative* impact on Māori life expectancy than it is now (ie, given

the likely reduction in other risk factors for health, the harmful impact of tobacco will stand out even more). The lower life expectancy in Māori (partly due to tobacco) even results in fewer votes per life-time than for non-Māori.

Recommendation 5: That the Inquiry request that the Ministry of Health provide more detailed costing information on the health, social, economic and cultural impact tobacco use in Aotearoa, to better inform the deliberations of this Inquiry. Also, that the Inquiry recommends that the NZ Parliament require that the Ministry of Health repeats this process at two-yearly intervals into the future.

Recommendation 6: Given (a) the high numbers of deaths from tobacco; and (b) high rates of smoking among Māori, efforts to curb smoking should be increased with a priority on supporting Māori not to smoke.

ToR 3: The impact of tobacco use on Māori development aspirations and opportunities

He Korowai Oranga, the Māori health strategy, identified a number key threads and pathways for achieving Māori aspirations, whanau ora, and Māori wellbeing. These threads and pathways include rangatiratanga, reducing inequalities, and Māori participation, all of which are threatened by tobacco use. As discussed under ToR2, tobacco use decimates Māori leadership through illness and premature death and increases gaps in Māori – Pakeha health status. It also reduces the ability of Māori to participate fully in society through ill health among smokers and less money being available within whanau as a result of expenditure on tobacco.

Dependence on a non-traditional highly addictive substance (nicotine/tobacco) is also counter to all notions of freedom and cultural identity. The vast majority of smokers begin smoking as children or young adults, and later regret starting. Among Māori smokers, 85% agree with statement “If you had to do it over again, you would not have started smoking”, an immensely high level of regret.²⁴ Most smokers express a desire to quit smoking, including most Māori smokers.²⁵

Given the scale of the tobacco problem for Māori and the very slow rate of decline in smoking prevalence this creates an enormous barrier to making for progress in Māori development aspirations. Therefore, exceptional measures are required to tackle the problem (see Main Recommendation 1 of this report). Accepting the current slow decline in smoking prevalence and the current small incremental advances in tobacco control over future decades (based on current trends) is not at all ethically acceptable in our view.

ToR 4: What benefits may have accrued to Māori from tobacco use

A recent survey of Māori who smoke indicated that a perceived “benefit” from tobacco use was relaxation/relief of stress (19%).²⁶ However, it is known that the “stress” which smoking relieves is usually the anxiety caused by nicotine withdrawal. Nevertheless, it is likely that some smokers (including Māori smokers) may derive short-term psychological “benefits” from the pharmacological actions of nicotine on the brain (eg, improved visuospatial attention²⁷). But such benefits come at an enormous price given the serious long-term harm to health from smoking. Even in the short-term smoking can degrade quality of life as: (i) smokers’ can regularly experience withdrawal symptoms if they can not have a smoke in

some circumstances (eg, on a long bus trip or when in a smokefree setting); (ii) brain function is impaired by carbon monoxide in the smoke; (iii) and smokers generally have poorer quality sleep. Some of these factors may explain why smokers are more likely to die from motor vehicle crash injuries and from a range of other injuries.²⁸

Improved weight control may also be considered an advantage by some smokers. But this benefit is usually very small in terms of actual kilos of weight. Indeed, weight control can be achieved in much healthier ways eg, increased physical activity and a diet that is healthier (eg, increased satiety from increased dietary fibre). Overall the average risks to health of slightly increased obesity from smokers quitting are small compared to those from continued smoking (we can provide further evidence on this point on request).

The tobacco industry and the retail sector may argue that cigarette production and sales employs some New Zealanders (including Māori). The industry are less likely to mention that tobacco use also generates extra work for nurses, doctors and other health workers (including Māori health workers). But employment arguments are entirely spurious, since if people didn't smoke they would spend their money on other goods and services, or increase their savings rate, and will thus also maintain and generate jobs in this way (eg, in housing sector, education sector, food supply sector etc). Indeed, the productivity and size of a tobacco-free Aotearoa economy would be larger overall, as there would be less premature death of workers and less sick-leave from work.²⁹

Recommendation 7: That support is given to those mass media campaigns aimed at debunking common myths associated with tobacco use.

ToR 5: What policy and legislative measures would be necessary to address the findings of the Inquiry

Chipping away at the tobacco problem with a range of small incremental tobacco control steps is likely to work – eventually. But as the limited decline in smoking rates in Aotearoa over the last two decades (particularly among Māori) show, this process is far too slow to be ethically tolerable for our society. It also would allow the continuation of large Māori/non-Māori health inequalities. Continuing on this slow incremental path will result in tens of thousands of premature deaths among Māori and non-Māori before the last tobacco-related death occurs. Aotearoa needs a clear endgame strategy for phasing out tobacco smoking, as with the bold steps the country took for other endgames (ie, to ban the importation of asbestos, to ban lead-additives from petrol, and to eliminate brucellosis and hydatids). At least one nation (Finland) appears to be explicitly planning to become tobacco-free.³⁰

We regard the simplest two approaches to achieve the endgame for tobacco smoking in Aotearoa (detailed further in Appendix E) are:

1. A sinking quota system where the volume of tobacco imported into the country declines by 10% per year (and so imports effectively end completely in 10 years time). This approach is the most straightforward endgame option and is what we favour most. It is similar to that proposed by Republican Senator Mike Enzi (who introduced Bill S1834 into the United States Senate). It has also been suggested previously in the NZ context.³¹

2. A law that mandates a large (30%+) hike in tobacco tax annually until smoking prevalence is <1%. (With a minimum proportion of tax revenue going to support other tobacco control efforts such as health education campaigns, services to help smokers quit and to further strengthen customs efforts against smuggling).

If these options were pursued we would strongly recommend that further support is given to Māori smokers to quit (along with all smokers). This would help avoid any negative impacts on whanau income as a result of any Māori smokers who continued to smoke.

As pointed out in Appendices D and F, these endgame options will work to maximum effectiveness if supplemented with intensifying existing tobacco control measures (and implementation of some new ones). There is a strong ethical and social justice case that if the price of tobacco is going to increase substantially with endgame options, then all possible reasonable support must be offered to smokers to help them quit to ameliorate the adverse effects. We note extensive support for increased regulation of the tobacco industry and for enhanced tobacco control by Māori smokers and other New Zealanders (see Appendix E).

Major Recommendation 1: That the Inquiry endorse further work (eg, by government agencies such as the Ministry of Health) on the endgame option of a sinking import quota aiming to phase out tobacco imports by 2020. (See Appendices D, E & F for further details on endgame options, for the level of smoker support, and for supplementary measures).

Recommendation 8: That ways of minimising any adverse short-term impacts from any endgame measures are investigated and implemented for Māori and all other smokers.

Recommendation 9: That the Inquiry actively question people making oral submissions to the Inquiry on tobacco endgame solutions, and foster a public debate on “the time being right to have a clear endgame strategy to reduce tobacco smoking to negligible levels (<1%) in Aotearoa by 2020”.

Finally, we wish you well in your careful deliberations on this critically important topic to the future of Māori health and wellbeing. We welcome the opportunity to appear before the Committee to speak to this submission and to provide additional material and references to support the issues we have raised in this submission.

Associate Professor Nick Wilson*
Professor Richard Edwards (Head of Department)
Professor Tony Blakely (Director Health & Inequalities Research Programme)
Dr George Thomson
Andrew Waa (Research Fellow and Māori health researcher)
Dr Diana Sarfati
Dr Michael Keall
Dr Fiona Imlach Gunasekara
Kimberley O'Sullivan (PhD Candidate)

(All staff/students in the Department of Public Health, University of Otago, Wellington)

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Competing interests: Although we do not consider it a competing interest, for the sake of full transparency we note that some of us have undertaken scientific and health policy work for international, national and NGO health sector agencies working in tobacco control.

Appendices

Appendix A: Links to some of our personal websites with CVs or lists of recent research outputs

Professor Richard Edwards (Head of Department)*

<http://www.wnmeds.ac.nz/academic/dph/staff/richardedwards.html>

Professor Tony Blakely <http://www.wnmeds.ac.nz/academic/dph/staff/tblakely.html>

Associate Professor Nick Wilson <http://www.wnmeds.ac.nz/academic/dph/staff/nick.html>

Dr George Thomson <http://www.wnmeds.ac.nz/academic/dph/staff/gthomson.html>

Appendix B: Misperceptions held by NZ smokers and the links with tobacco industry marketing

The following publication is attached in its published form:

Wilson N, Thomson G, Weerasekera D, Blakely T, Edwards R, Peace J, Young D, Gifford H. Smoker misperceptions around tobacco: national survey data of particular relevance to protecting Maori health. *N Z Med J* 2009;122(1306):123-127.

<http://www.nzma.org.nz/journal/122-1306/3897/content.pdf>

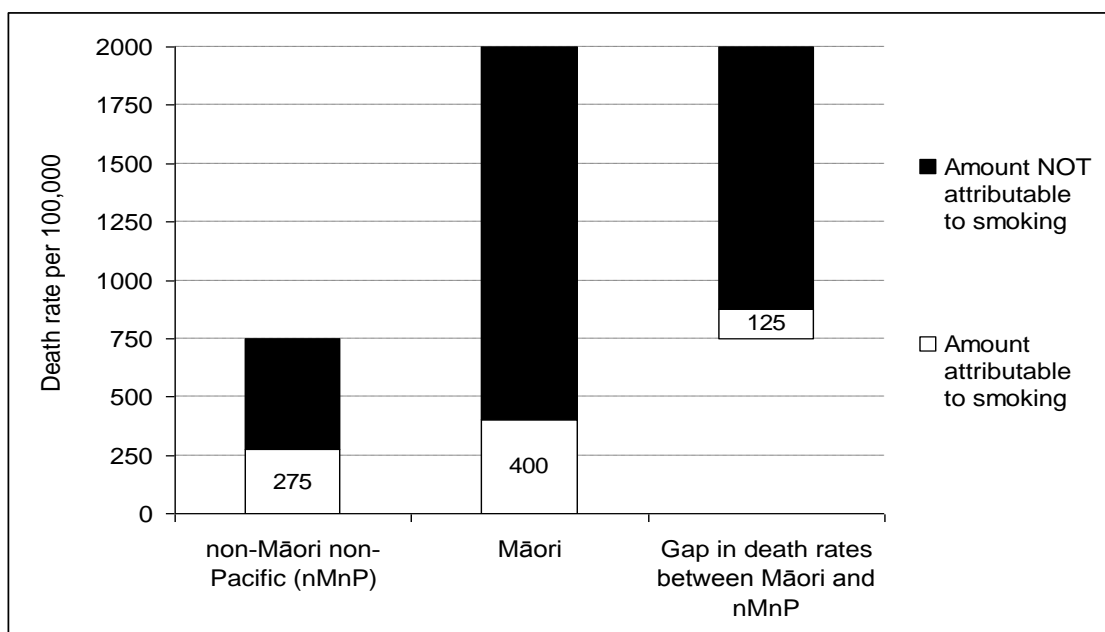
Appendix C: The impact of tobacco on Māori mortality, and ethnic inequalities in mortality

Key points

- Tobacco kills 4,500 to 5,000 people per annum in Aotearoa New Zealand and contributes to the gap in life expectancy between Māori and non-Māori.
- Based on detailed NZ-specific data and epidemiological analysis it is apparent that a major advance in tobacco control (such as a clear endgame strategy) is probably the single most effective way to achieve future gains in Māori life expectancy. It is also probably the most effective way to reduce the gaps in life expectancy between Māori and non-Māori in this country.

More detailed points

- Tobacco kills 4,500 to 5,000 people per annum in Aotearoa New Zealand.³²
- Tobacco smoking is highest among Māori adults, at 45.7% for current smokers (versus 20.6% for non-Māori) 35% (males) to 40% (females) among adults in the (data from the 2008 NZ Tobacco Use 6/07 Health Survey: [http://www.moh.govt.nz/moh.nsf/pagesmh/9084/\\$File/prevalence-data-ethnic-tobacco-trends08.xls](http://www.moh.govt.nz/moh.nsf/pagesmh/9084/$File/prevalence-data-ethnic-tobacco-trends08.xls)).³³ However, there is some concern that smokers may be slightly under-reporting their smoking status in surveys as smoking becomes less socially acceptable. Therefore the latest health survey may slightly underestimate adult smoking prevalence.
- Māori mortality rates are, generally speaking, two to three times greater than non-Māori mortality rates.^{19 34} Smoking plays a role in this ethnic inequality in mortality. Using 1996 census data (which includes smoking questions) linked to 1996-99 mortality data for 45-74 year olds, up to 10% of the gap in mortality between Māori and European/Other was attributable to tobacco smoking.³⁵ However, this is probably an underestimate due to some measurement error of smoking, a failure to measure the impacts of passive smoking, and due to this analysis assuming that European/Other adopted the smoking distribution of Māori. Our best estimate therefore might be 10% to 20% of the gap in mortality during the 1990s was due to smoking.
- The figure below presents a summary of the contribution of tobacco to mortality within Māori and European/Other aged 45-74 years (sexes combined) in the late 1990s, based on the references already cited above and other epidemiological work by ourselves,³⁶⁻³⁹ and using the more conservative “10% of the gap due to tobacco” option.



Over a third of European/Other mortality (275 out of the 750 per 100,000 death rate) is due to tobacco, and about 20% of the Māori mortality (400 of the 2000 per 100,000 death rate) is due to tobacco, leaving 10% of the gap (125 out of 1250 per 100,000) as explained by tobacco.

- Why does tobacco contribute to a smaller percentage of Māori mortality than European/Other mortality, despite the smoking prevalence being higher among Māori? Essentially, because there are so many other causes of the much higher Māori mortality rate (e.g. legacy of colonisation, socioeconomic differences between Māori and non-Māori, health care services access, diet, etc), that whilst tobacco makes a bigger absolute contribution to Māori mortality (400 compared to 275 per 100,000) its percentage contribution is actually less. That all said, removing tobacco from Aotearoa-New Zealand is probably *the single most important and feasible policy action* that will have the *greatest* impact on reducing Māori mortality and reducing ethnic inequalities in mortality.
- The future will not be the same as the present. And the deleterious impact of smoking on an individual's mortality risk and life expectancy in the future is likely to be greater than it is now. This is because life expectancy (the inverse of mortality) has been steadily increasing in the last 100 years, and (over the long run) at a faster rate among Māori. (The 1980s and 1990s were the important exception to these long run trends). If mortality rates continue to fall in the future as expected, the mortality impact of smoking will stand out more. Put another way, if a smoker's risk factors for mortality in the future are all better than they are now *with the exception of smoking*, then smoking will account for a greater percentage of premature mortality. We have recently undertaken life expectancy projections out to 2040, two hundred years after the signing of the Treaty, for a range of scenarios.⁴⁰ Whilst our projections have inevitable uncertainty, the following conclusions seem justified:
 - by 2040 the difference in life expectancy between current- and never-smokers for males and females among Māori and non-Māori, might be as high as 10 to 13 years. (It is currently 4 to 7 years).
 - by 2040 if there was near-zero tobacco consumption by 2020, compared to current rates of smoking continuing to 2040, we estimate that:
 - Māori life expectancy would be about 4 years greater
 - the gap between Māori and non-Māori life expectancy would be 1 to 2 years less.
- Summarising, smoking will be even more of a handbrake on life expectancy improvements in the future. Continued large increases in life expectancy, and closing of the Māori:non-Māori gaps in life expectancy, will be greatly assisted by major advances in tobacco control – namely, phasing out tobacco imports in Aotearoa by 2020 (see Appendix E).

Appendix D: Evidence for NZ smoker support for regulation and a tobacco endgame option

The following publication is attached in its published form:

Edwards R, Wilson N, Thomson G, Weerasekera D, Blakely T. Majority support by Māori and non-Māori smokers for many aspects of increased tobacco control regulation: national survey data. *N Z Med J* 2009;122(1307):115-118.

Appendix E: Ending the tobacco epidemic in Aotearoa within ten years: Key endgame options

Introduction

While a number of options are available that *may* end appreciable tobacco use in Aotearoa much more quickly than present methods, we focus here on two main options. These provide considerable certainty that under 1% smoking prevalence for all ethnic and social groups could be achieved within ten years.

The two endgame options are:

- (i) ***Sinking lid***: to create a sinking lid on the volume of commercial tobacco supply (via import quotas), and
- (ii) ***Regular large excise rises***: to principally use a strategy of sustained substantial annual or twice yearly tobacco excise rises.

In both options the *use* of tobacco would remain legal (within smokefree area constraints) and individuals would continue to be able to legally grow their own for their own use (though this is far from easy). Both endgame options could be used together (eg, the sinking lid policy could be added to the excise rise policy after several years, or an excise strategy could be added to the sinking lid).

Both options should be introduced in conjunction with a range of supplementary interventions, which we briefly detail below. However, because of the tendency for slippage in any intervention policy, we are proposing strong options that could largely achieve the desired end *even* in the worst case of the removal of all of the supplementary interventions.

Nevertheless, we strongly recommend one particular supplementary intervention. Improving help to support smokers to quit, to international best practice intensity, is highly desirable from an ethical perspective. This is because of the further hardship from the greatly increased tobacco costs, for some continuing smokers and their families.

Both endgame options would best be operated within a non-commercial tobacco supply framework (see supplementary interventions) but it would be possible to achieve the desired end without that framework, if it was not politically possible. Transition issues and tobacco industry exit issues will occur, and are addressed at the end of this appendix.

Endgame Option One: Sinking lid tobacco import quotas

This option would reduce the importation of tobacco products (leaf or finished) by a set proportion (eg, 10% or 2.5% absolute percentage points) every set period (eg, one year or three months) sufficient to achieve zero imports by 2020. Tobacco companies would bid for residual quota at government run auctions. Growing tobacco by individuals in New Zealand would continue to be only allowed for personal use (not for sale or trade).

If the commercial market operated without artificial barriers (eg, quota auction rigging, or hoarding within the supply chain) then as the supply decreased, the price would increase so that demand equalled supply. If significant barriers occurred within the market, then a non-commercial supply system (see below) might need to be created.

Having import reductions at shorter periods than one year may help reduce stockpiling in anticipation of price increases.

Overall, this is our preferred option, as it most clearly results in the end of commercial tobacco.

Endgame Option Two: Using tobacco excise as the main intervention

This option would use a minimum 20% annual excise increase (or an equivalent increase for shorter periods) for 10 years. The resulting price for a current \$11 pack after five years would be at least \$20 in current dollars, and after nine years would be at least \$44. If after reviews at three, five and seven years, insufficient progress was made, Option One could be introduced, or the rate of excise increase could be increased (eg, from 20% to 30%).

Using only price does not give the same certainty of under 1% prevalence for all groups as Option One. But in conjunction with even the present government tobacco interventions, prevalence is likely to be near the desired level. For those smoking six cigarettes a day, and on the median daily income from all sources (\$77), pack prices of \$44 (\$2.2/cigarette) would mean over 17% of that income, and would be affordable for few. For even the age group (40-49) with the highest median daily income (\$110), six cigarettes a day would be 12% of their daily income.

Having excise increases at shorter periods than one year may help reduce stockpiling in anticipation of price increases.

Possible side effects

As both options would result in much higher priced tobacco, possible side effects include:

- Smuggling at significant levels, sufficient to erode the price signal
- Stockpiling and hoarding within the commercial tobacco supply chain, and by smokers
- Theft from wholesalers, retailers and smokers (and some consequent illegal sales)
- Illegal cultivation for commercial sales

These issues are addressed in the *Supplementary interventions* and *Transition issues* below.

Supplementary interventions (highly desirable but not absolutely essential to the above options)

To help reduce demand, and to help ensure that the possible side effects (suggested above) are minimised, the following further interventions would help ensure the end of tobacco use:

1. *Better information:* Media campaigns funded from tobacco excise revenue. These could include those to help smokers quit, and those with effective information to the public and smokers on: (i) tobacco industry practices, (ii) the social impacts of tobacco, (iii) the justification for the endgame interventions, and (iv) on the consequences of social supply (giving an addictive poison as a gift).
2. *Better retailer controls:* Including no displays; storage appropriate for a highly addictive poisonous substance (to reduce theft); a licence system; reduced numbers of retailers, and increased minimum age of retail staff (eg, to age 30 years). For example, the number of retail outlets licensed to sell tobacco could also be reduced by 10% per year, or a reduction could be achieved by periodic auctions for a limited number of licences.
3. *Further controlling the pack and product:* Including, increasing graphic warnings to 90% of all pack surfaces; requiring 'plain brands' (black and white, no logos, specified type

fonts, etc); and removing all sweeteners and additives (including accelerants used to keep cigarettes burning – i.e. mandate fire-safe cigarettes).

4. *Other means of restricting supplies that undercut the price signalling from the endgame options:* Including removing duty free and all other personal imports (ie, all travellers to New Zealand would have to buy any tobacco they wanted to use in New Zealand at New Zealand prices); and ending loose tobacco sales (roll-your-own and pipe).
5. *Reducing the size of the legal smoker population:* Including raising the minimum legal age of buying tobacco annually, through increases of the minimum age of purchase. Thus current youth aged 17 years and under would never be eligible to buy tobacco. Intensive cessation help would be supplied by government to those smokers presently aged less than 19 years.
6. *Achieving best practice cessation help:* Much more comprehensive and effective cessation could be offered, including at the scale of the present methadone programme for those with opiate dependency, and funded from tobacco excise revenue. The cessation help could include a much wider range of nicotine replacement and other treatments. This would include targeted support for poorer smokers most affected by the price increases. Best practice help is ethically essential, as much higher prices for highly addictive tobacco products will result in further financial hardship for some continuing smokers and their families.
7. *Strengthened enforcement:* If illegal tobacco-related activity increases, increased Customs and Police activity, proportionate to their activity on illegal drugs, and funded from tobacco excise revenue.

Non-commercial supply

Both key endgame options above, and all the supplementary interventions would be aided by a non-commercial tobacco distribution system. In this system, a Crown Entity (or similar non-commercial agency with a health purpose) would be the sole buyer of tobacco products from manufacturers, and would sell unbranded products to retailers. This system could eventually remove all financial incentives to supply tobacco within the New Zealand tobacco supply system.

In Option One, licensed retailers would bid (by price and volume) to the Agency for the available supply (ie, the price would be determined by a regulated market for the fixed supply). The retail margin that retailers would be allowed would be fixed by the Agency. In Option Two, the price would be determined by excise rises, and retailers would bid (by volume) to the Agency for the available supply.

Transition issues

Because of the possible stockpiling, hoarding, illegal sales and smuggling, immediate legislation may be desirable for: (i) excise and *price* increases to achieve a minimum price (to discourage stockpiling in anticipation of future price rises), (ii) importer, wholesaler and retailer licensing (which include recording current stocks).

Tobacco industry exit issues

These include: (a) possible threats from manufacturers to exit the market immediately, and (b) the need to ensure that the tobacco marketing companies remain financially and legally accountable for the consequences of their products.

There is at least one current method used by the NZ Government to prevent an industry from exiting the country and leaving clean-up costs to others. This is the bond system required in

some cases from mining companies, to help prevent costs falling on others (see http://www.pce.parliament.nz/publications/reports_by_subject/all_reports/minerals/tailing_dams).

Before a tobacco endgame system was introduced by the NZ Government, this type of bond would need to be considered. Even if government does not consider an endgame now, it would be wise to have such a bond in place.

Appendix F: Opportunities to eliminate policy incoherence in tobacco control by Central Government

Our submission to this Committee has emphasised the primacy of tobacco endgame policies, i.e. to have a sinking lid on tobacco imports so as to achieve a negligible level of smoking (<1% prevalence) by 2020. But we recognise that supplementary incremental steps might be needed if political leaders do not adopt endgame strategies.

Therefore we also support enhancing established tobacco control strategies, and with this in mind we briefly reviewed current key tobacco control policy interventions supported by central government. The interventions we considered are those largely described on the Ministry of Health website and in other documents.²⁰ We particularly aimed to identify those central government interventions which could be strengthened by reducing the extent to which they were being constrained or countered by other government policies. That is, we classified these interventions as “coherent” where there was no such constraint or conflict, and “incoherent” where a policy was subject to such constraints and conflicts.

From the generated list of 12 intervention areas, we identified at least four where some level of policy incoherence appeared to exist (Table F1). Three of these were within the most important four areas of current incremental tobacco control intervention. Besides the specific intervention areas, there is the strategic contradiction of government encouraging and requiring tobacco companies in New Zealand to profit from selling an addictive and highly hazardous product (through the provisions of the Companies Act), while also having the reduction of tobacco use as a government health aim. If tobacco is to remain as a commercial product, one option would be to modify the Companies Act to require positive health impact assessments of commercial activities. Another option would be to move to a non-commercial tobacco supply system where a government agency controls the importation and distribution of tobacco.^{41 42}

Making these current policies more coherent would support tobacco endgame policies. Such endgame policies could include a sinking lid of quotas on tobacco imports, and/or large regular (six-monthly) tax hikes, with both approaches aiming to achieve negligible levels of smoking prevalence (<1%) within 10 years. Failing such endgame approaches being supported, the Committee should at least recommend rapid resolution of these areas of policy incoherence and increase the intensity of all effective tobacco control interventions. This would mean that at least the incremental approaches to ending the tobacco epidemic could proceed more effectively.

Table F1: Tobacco control interventions supported by central government and classification of policy coherence / incoherence

Tobacco control intervention	Evidence of policy incoherence	Description of the coherence / incoherence
Top 4 interventions⁴³		
Tobacco taxation to raise tobacco prices (to reduce youth uptake and promote quitting)	Yes	Tax/price policy has been inadequately implemented with no real increase in levels of tax since 2001. Tax/price policy is also partly undermined by government policy to permit duty free sales of tobacco and to allow for personal supplies of tobacco to be carried into NZ from overseas. This also results in substantial loss of government revenue that could be used for tobacco control. ⁴⁴ Allowing roll-your-own tobacco to be sold at essentially cheaper prices also undermines the price policy. ⁴⁵ Using all tobacco tax revenue for general purposes with no dedicated fraction for tobacco control may also partly undermine government arguments that the tax is a health protecting measure. Furthermore, the lack of any dedicated component of tobacco tax used to help smokers quit can be considered ethically problematic. ⁴⁶
Complete restrictions on tobacco sponsorship and nearly complete restrictions on tobacco marketing	Yes	The important marketing measures of point-of-sale displays, branding and use of positive imagery and wording on the tobacco packaging itself, continues to be permitted.
Smokefree environments (especially indoor public settings and school premises)	Yes	Allowing smoking in cars with young children present – despite this setting potentially having extremely high levels of second-hand smoke. ^{47 48} There is also a stark contrast with other in-vehicle laws designed for public safety purposes: seat-belts, child safety restraints and a ban on the use of cell phones when driving. New Zealand is becoming out-of-step with other jurisdictions in this area. ⁴⁹
Mass media campaigns	No	There is a coherent policy that links cessation promotion campaigns well with the Quitline service. Nevertheless, these mass media campaigns are still under-funded and do not adequately exploit the synergies of co-interventions (e.g., smokefree law changes ⁴³), nor use more innovative approaches such as targeting the tobacco industry itself).
Other interventions		
Commerce Commission warning in 2008 on the misleading nature of “light and mild” descriptors	Yes	The government allows the tobacco companies to use other misleading descriptor words (e.g., “smooth”) and allows the colour-coding of packs. ⁵⁰ There is good evidence that many NZ smokers are being misled by these messages on packaging, and misperceptions that these tobacco products are less harmful to health are common. ⁵¹
Age restrictions on tobacco sales	Possibly	This policy is possibly being undermined by allowing any retailer (and shop attendants of any age) to sell tobacco, and allowing tobacco sales to occur in shops frequented by children. In contrast if retailer licenses were required to sell tobacco, then these could be withdrawn when there was evidence of illegal sales by retailers. Tobacco sales could also be restricted to shops where children are not allowed to visit. Permitting point-of-sale tobacco displays and branding on packs also partly undermines this policy.
Requirements for graphic health warnings on tobacco packaging	No	Appears to be a coherent policy but the failure to fully utilise this intervention (which costs taxpayers nothing) might mean that more tax payer funds need to be spent on mass media campaigns to compensate for the lost opportunity from graphic warnings. See for example the larger (up to 80% of the front of the packet) and with higher “fear arousal” themes in the graphic warnings used by some other countries such as Brazil. ⁵²
Funding the Quitline service	No	Appears coherent with relatively high use of the Quitline by international standards.
Heavily subsidised pharmacotherapies (eg, NRT)	No	Appears a coherent policy and the link with the Quitline provides a distribution system for nicotine replacement therapy (NRT).
Vending machine controls	No	Policy appears coherent.

Tobacco control intervention	Evidence of policy incoherence	Description of the coherence / incoherence
Developing "New Zealand Smoking Cessation Guidelines"	No	Policy appears coherent.
Ministry of Health governance of the ABC approach for smoking cessation (framework and work programme)	No	Policy appears coherent.

References

References for this whole submission follow:

1. Health Canada. Tobacco Reporting Regulations. Ottawa: Health Canada, 2009.
2. Thomson G, Wilson N. Implementation failures in the use of two New Zealand laws to control the tobacco industry: 1989-2005. *Aust New Zealand Health Policy*. 2005;2:32.
3. Trainor S. Tobacco control in New Zealand: A history. Wellington: Cancer Control Council of New Zealand, 2007.
4. Reid P, Pouwhare R. Te-Taonga-mai-Tawhiti (the-gift-from-a-distant-place). Auckland: Niho Taniwha, 1991.
5. Ribisl KM. The potential of the internet as a medium to encourage and discourage youth tobacco use. *Tob Control*. 2003;12 Suppl 1:i48-59.
6. Forsyte-Research. TVC / Me Mutu campaign monitoring first baseline report. Auckland: Forsyte Research, 2001.
7. Stevenson T, Proctor RN. The secret and soul of Marlboro: Phillip Morris and the origins, spread, and denial of nicotine freebasing. *American Journal of Public Health*. 2008;98(7):1184-94.
8. Proctor RN. The global smoking epidemic: a history and status report. *Clin Lung Cancer*. 2004;5(6):371-6.
9. Thomson G, Wilson N. The tobacco industry in New Zealand: A case study of the behaviour of multinational companies. *Public Health Monograph Series*. Wellington: Department of Public Health, Wellington School of Medicine, University of Otago, 2002.
10. LeGresley EM, Muggli ME, Hurt RD. Playing hide-and-seek with the tobacco industry. *Nicotine & Tobacco Research*. 2005;7(1):27-40.
11. Muggli ME, LeGresley EM, Hurt RD. Big tobacco is watching: British American Tobacco's surveillance and information concealment at the Guildford depository. *Lancet*. 2004;363(9423):1812-9.
12. Muggli M, Forster J, Hurt R, Repace J. The smoke you don't see: uncovering tobacco industry scientific strategies aimed against environmental tobacco smoke policies. *Am J Public Health*. 2001;91(9):1419-23.
13. Slater S, Chaloupka FJ, Wakefield M, Johnston LD, O'Malley PM. The impact of retail cigarette marketing practices on youth smoking uptake. *Archives of Pediatrics & Adolescent Medicine*. 2007;161:440-445.
14. U.K.-Department of Health. Effect of tobacco advertising on tobacco consumption: A discussion document reviewing the evidence. London: Economics and Operational Research Division, Department of Health, 1992.

15. Toxic Substances Board. Health or tobacco: An end to tobacco advertising and promotion. Wellington: Department of Health, 1989.
16. Doll R. Risk from tobacco and potentials for health gain. *Int J Tuberc Lung Dis.* 1999;3(2):90-9.
17. Blakely T, Fawcett J, Hunt D, Wilson N. What is the contribution of smoking and socioeconomic position to ethnic inequalities in mortality in New Zealand? *Lancet.* 2006;368(9529):44-52.
18. Wilson N, Blakely T, Tobias M. What potential has tobacco control for reducing health inequalities? The New Zealand situation. *Int J Equity Health.* 2006;5:14.
19. Blakely T, Tobias M, Atkinson J, al. e. Tracking Disparity: Trends in ethnic and socioeconomic inequalities in mortality, 1981-2004. Wellington: Ministry of Health, 2007.
20. Ministry of Health. Clearing the smoke. A five-year plan for tobacco control in New Zealand (2004-2009) Wellington Ministry of Health [http://www.moh.govt.nz/moh.nsf/0/AAFC588B348744B9CC256F39006EB29E/\\$File/clearingthesmoke.pdf](http://www.moh.govt.nz/moh.nsf/0/AAFC588B348744B9CC256F39006EB29E/$File/clearingthesmoke.pdf), 2004.
21. Glover M. Analysing Smoking using Te Whare Tapa Wha. 2005.
22. Grigg M, Waa A, Bradbrook SK. Response to an indigenous smoking cessation media campaign—It's about whanau. *Australian and New Zealand Journal of Public Health.* 2008;32:559-564.
23. Wilson N, Grigg M, Graham L, Cameron G. The effectiveness of television advertising campaigns on generating calls to a national Quitline by Maori. *Tob Control.* 2005;14(4):284-6.
24. Wilson N, Edwards R, Weerasekera D. High levels of smoker regret by ethnicity and socioeconomic status: national survey data. *N Z Med J.* 2009;122(1292):99-100.
25. Ministry of Health. New Zealand tobacco use survey 2006. Wellington: Ministry of Health, 2007.
26. Health Sponsorship Council. Health and Lifestyle Survey: Topline tables. Auckland: National Research Bureau, 2008.
27. Hahn B, Ross TJ, Yang Y, Kim I, Huestis MA, Stein EA. Nicotine enhances visuospatial attention by deactivating areas of the resting brain default network. *J Neurosci.* 2007;27(13):3477-89.
28. Wen CP, Tsai SP, Cheng TY, Chan HT, Chung WS, Chen CJ. Excess injury mortality among smokers: a neglected tobacco hazard. *Tob Control.* 2005;14 Suppl 1:i28-32.
29. Easton B. The Social Costs of Tobacco Use and Alcohol Misuse. Wellington: Department of Public Health, Wellington School of Medicine, 1997.
30. YLE.mobi. Ministry Wants a Completely Tobacco-Free Finland. Finnish Broadcasting Company. Helsinki. October 1, 2009. Available from: http://yle.fi/uutiset/news/2009/10/ministry_wants_a_completely_tobacco-free_finland_1048621.html?origin=rss.
31. Laugesen M. Snuffing out cigarette sales and the smoking deaths epidemic. *N Z Med J.* 2007;120:U2587.
32. Ministry of Health. Tobacco Trends 2008: A brief update of tobacco use in New Zealand. Wellington: Ministry of Health, 2009.
33. Ministry of Health. A Portrait of Health: Key Results of the 2006/07 New Zealand Health Survey. Wellington: Ministry of Health, 2008.
34. Tobias M, Blakely T, Matheson D, Rasanathan K, Atkinson J. Changing trends in indigenous inequalities in mortality: lessons from New Zealand. *Int J Epidemiol.* 2009;38(6):1711-22.

35. Blakely T, Fawcett J, Hunt D, Wilson N. What is the contribution of smoking and socioeconomic position to ethnic inequalities in mortality in New Zealand? *The Lancet*. 2006;368(9529):44-52.
36. Hunt D. Mortality from Smoking in New Zealand: The association between cigarette smoking and mortality from all-causes, ischaemic heart disease and stroke in New Zealanders aged 25-74 years, 1981-1984 and 1996-1999 [MPH Thesis]. University of Otago, 2004.
37. Hunt D, Blakely T, Woodward A, Wilson N. The smoking-mortality association varies over time and by ethnicity in New Zealand. *Int. J. Epidemiol.* 2005;34:1020-1028.
38. Wilson N, Blakely T, Tobias M. What potential has tobacco control for reducing health inequalities? The New Zealand situation. *International Journal for Equity in Health*. 2006;5(1):14.
39. Wilson N, Blakely T, Tobias M. Correction: what potential has tobacco control for reducing health inequalities? The New Zealand situation. *International Journal for Equity in Health*. 2006;5(1):16.
40. Blakely T, Carter K, Wilson N, Edwards R, Woodward A, Thomson G, et al. Ending tobacco sales by 2020 and inequalities in mortality by 2040. (Submitted).
41. Borland R. A strategy for controlling the marketing of tobacco products: a regulated market model. *Tob Control*. 2003;12(4):374-82.
42. Callard C, Thompson D, Collishaw N. Transforming the tobacco market: why the supply of cigarettes should be transferred from for-profit corporations to non-profit enterprises with a public health mandate. *Tob Control*. 2005;14(4):278-83.
43. Wilson N, Thomson G, Edwards R. Use of four major tobacco control interventions in New Zealand: a review. *N Z Med J*. 2008;121(1276):71-86.
44. 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(5):416-8.
45. Wilson N, Young D, Weerasekera D, Edwards R, Thomson G, Glover M. The importance of tobacco prices to roll-your-own (RYO) smokers (national survey data): higher tax needed on RYO. *N Z Med J* 2009;122(1305):92-96.
46. Wilson N, Thomson G. Tobacco taxation and public health: ethical problems, policy responses. *Soc Sci Med*. 2005;61(3):649-59.
47. Edwards R, Wilson N, Pierse N. Highly hazardous air quality associated with smoking in cars: New Zealand pilot study. *N Z Med J*. 2006;119(1244):U2294.
48. Rees VW, Connolly GN. Measuring air quality to protect children from secondhand smoke in cars. *Am J Prev Med*. 2006;31(5):363-8.
49. Thomson G, Wilson N. Public attitudes to laws for smoke-free private vehicles: a brief review. *Tob Control*. 2009;18(4):256-61.
50. Peace J, Wilson N, Hoek J, Edwards R, Thomson G. Survey of descriptors on cigarette packs: still misleading consumers? *N Z Med J*. 2009;122(1303)(1303):90-6.
51. Wilson N, Thomson G, Weerasekera D, Blakely T, Edwards R, Peace J, et al. Smoker misperceptions around tobacco: national survey data of particular relevance to protecting Maori health. *N Z Med J*. 2009;122(1306):123-127.
<http://www.nzma.org.nz/journal/122-1306/3897/content.pdf>
52. Physicians for a Smoke-free Canada. Picture based cigarette warnings Ottawa: Physicians for a smoke-free Canada. <http://www.smoke-free.ca/warnings/default.htm>, 2009.