

# ASPIRE 2025

Research for a tobacco-free Aotearoa



Annual Report

2016



2016 Annual Report For the year ending December 2016

Me ka moemoeaa ahau, ko au anake Me ka moemoeaa e taatou ka taea e taatou

If I am to dream, I dream alone
If we all dream together then we shall achieve

Te Puea Herangi, CBE

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Special thanks to Kokiri Marae (Seaview, Wellington) for allowing us to use pictures from their marae complex on the cover and page 7 of this report. Kokiri has a long history of providing innovative social and health services for Māori in Wellington region. Kokiri Marae is one of the partner organisations for Te Ara Auahi Kore research project that features on page 8 of this report.











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# Foreword

nce again, we have great pleasure in presenting ASPIRE2025's annual report, which introduces some of our new team members and overviews our key research activities. Highlights include two new Health Research Council funded projects and a new feasibility study, and a mini-symposium co-hosted with colleagues from the University of Auckland.

Like other years, 2016 proved a challenging one for progressing smokefree policies, but we welcomed the third reading and passing into law of the Smoke-free Environments (Tobacco Standardised Packaging) Amendment Act in August. While we had hoped to see this pivotal legislation in place much sooner, we are pleased that New Zealand has joined the many other countries requiring tobacco companies to remove all brand imagery from packages. ASPIRE2025 has led several HRC and Heart Foundation funded studies into plain packaging and findings from this work supported innovative proposals that we made in submissions to the Ministry of Health.

Our work into smokefree spaces has assisted many local authorities as they move to make central business districts, outside eating and drinking areas, and children's playgrounds smokefree zones. Wellington City Council's recent decision to promote the Smokefree 2025 goal is part of a wave of similar actions by local authorities and partly reflects an intensive research programme led by Associate Professor George Thomson.

We hope 2017 will see more rapid progress in implementing important smokefree policies, particularly measures protecting children from second hand smoke in cars, and implementing a licensing scheme for all tobacco retailers or other measures that reduce the widespread availability of this lethal product. In these areas, New Zealand continues to lag behind international leaders and we need to act urgently to provide children – our most vulnerable citizens – with better protection from exposure to smoking and tobacco.

The ASPIRE team has shown exceptional productivity, not simply through traditional academic outlets such as journal articles and conference presentations, but also through our increasing public outreach via blogs, live-streamed seminars, and online videos. Several team members have worked with policy makers, NGOs, advocates, community groups, and DHBs to foster uptake of our findings and support the 2025 goal that unites the smokefree workforce.

We recognise the gains made throughout the sector, the courage shown in the face of trenchant and often aggressive opposition, and the passion those working towards the 2025 goal display. Nonetheless, we urgently need bolder measures to bring smoking prevalence below five percent by 2025 for all of New Zealand's peoples. We are committed to ensuring our research helps accelerate progress towards a world where tobacco is difficult to access, expensive to buy, and unpleasant to use; where children rarely see smoking, and where they and their whanau live full, healthy, and productive lives.



Richard Edwards



Janet Hoek

# The ASPIRE2025 team

 bringing great researchers together from many different backgrounds across multiple organisations to help achieve a Smokefree Aotearoa by 2025



# ASPIRE2025 research team

#### Co-Directors

Professor Richard Edwards (University of Otago, Public Health) Professor Janet Hoek (University of Otago, Marketing)

#### **Team Members**

Mei-Ling Blank (University of Otago, Marketing)

Dr Brent Caldwell (University of Otago, Medicine)

Professor Julian Crane (University of Otago, Medicine)

Professor Chris Cunningham (Massey University, Te Pumanawa Hauora Māori Health Research Centre)

Stephanie Erick (ASH New Zealand)

Dr Shelagh Ferguson (University of Otago, Marketing)

Emeritus Professor Phil Gendall (University of Otago, Marketing)

Dr Heather Gifford (Whakauae Research for Māori Health and Development)

Dr Ben Healey (University of Otago, Public Health)

Dr Richard Jaine (University of Otago, Public Health)

Dr Louise Marsh (University of Otago, Preventive and Social Medicine)

Professor Rob McGee (University of Otago, Preventive and Social Medicine)

Lindsay Robertson (Preventive and Social Medicine, University of Otago)

James Stanley (University of Otago, Biostatistical Services)

Dr El-Shadan Tautolo (AUT University, Centre for Pacific Health and Development Research)

Dr Lee Thompson (University of Otago, Population Health)

Associate Professor George Thomson (University of Otago, Public Health)

Louise Thornley (University of Otago, Wellington)

Andrew Waa (University of Otago, Public Health)

Professor Nick Wilson (University of Otago, Public Health)

#### Postgraduate Students

Jude Ball (PhD Public Health, University of Otago)

Rebecca Gray (PhD Public Health/Marketing, University of Otago)

## Marketing Administration and Support

Fran Wright (University of Otago, Public Health)

### **Sector Partners**

ASH New Zealand

Cancer Society of New Zealand

Hāpai Te Hauora Tapui Ltd

Health Promotion Agency

**QUIT Group** 

Smokefree Coalition

Tala Pasifika

# Profiling some of our researchers



### Lee Thompson

Lee is a Senior Lecturer in the Department of Population Health at the University of Otago in Christchurch. She is interested in the process of tobacco denormalisation and its intended and unintended impacts. Her current research focusses on the role and place of pleasure in tobacco control and quitting narratives. She is also involved in research on the meaning and function of electronic cigarettes and how vapers negotiate their use in the context of denormalisation.



#### Shelagh Ferguson

Shelagh is a Senior Lecturer in the Marketing Department at the University of Otago in Dunedin. Her research brings the everyday fabric of our lives into sharp perspective; she challenges and critically reviews collective and individual marketplace practices, and examines consumer agency. By unpacking culturally based practices, she goes beyond examining consumers' articulated opinions; her work has explored complex and contradictory consumer responses to smoking denormalisation discourses and she has investigated a consumption community formed around Mods (third generation e-cigarettes) and their users (self-titled hobbyists), their covert distinction practices and the role of the marketplace. Her work offers novel insights into emerging practices relevant to New Zealand's Smokefree 2025 goal.



#### James Stanley

James is a biostatistician and Senior Research Fellow at the University of Otago in Wellington. He is currently working on the ITC New Zealand longitudinal project and the TAKe study. He has also worked on or advised for several smaller-scale research projects on tobacco, including looking at patterns of smoking prevalence by occupation, and evaluating different health data survey sources for determining national smoking prevalence.



#### **Louise Thornley**

Louise is a Research Fellow at the University of Otago in Wellington. She is currently managing a project to review the status of, and possible policies to achieve, the Smokefree 2025 goal. This work will inform the collaborative development of an action plan to achieve a Smokefree Aotearoa by 2025. Louise's last tobacco control project took place in the tropics. In 2015 she lived and worked on a small atoll in Tokelau, as a VSA volunteer. She worked with the Department of Health to consult with atoll communities and leaders on the topic of smoking, and helped draft a policy for tobacco control. In her spare time she had a go at performing traditional Tokelauan dancing.



#### Mei-Ling Blank

Mei-Ling is a Research Fellow in the Department of Marketing at the University of Otago in Dunedin. Her current research includes co-leading an HRC Feasibility study investigating smoking transitions among participants attempting a quit attempt using a novel "smart" electronic nicotine delivery system (ENDS), and an HRC study exploring the information needs of ENDS users. She has a background in epidemiological research and is developing expertise in ecological momentary assessment (EMA) methods.



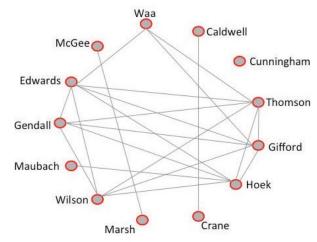
#### Lydia McMillan

Lydia McMillan is in her fourth year of a Bachelor of Medicine and Surgery degree at the University of Otago. Her summer scholarship project with Professor Janet Hoek explored the information needs and concerns of e-cigarette users. A series of in-depth interviews found many e-cigarette users sought information about the health effects of their devices, but few reported finding the information they would have found helpful. Others searched for usage information and data on e-cigarettes' addictiveness. Despite the lack of available information, participants generally considered e-cigarettes safer than smoked cigarettes.

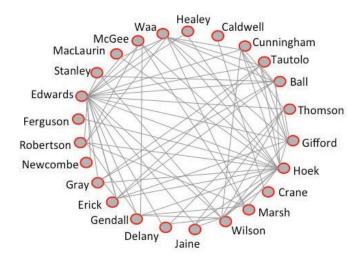
# Growing our collaborative outputs

he ASPIRE2025 team has diverse interests and is involved in many tobacco control projects. Since becoming a University of Otago Research Theme, our collaborations have grown significantly and we are proud of the talented early-career and mid-career staff who contribute to ASPIRE2025's work, and the team of post-graduate students attracted to tobacco control.

The charts below document the increased collaborations, as evidenced by jointly authored research outputs, that have developed since becoming a Research Theme.



ASPIRE2025 researcher connections 2010



ASPIRE2025 researcher connections 2016



# Te Ara Auahi Kore (TAKe)

Smoking among Māori continues to be significantly higher than among Pākehā. The high health cost, premature loss of koroua and kuia, and the financial burden on whānau, make tobacco use a critical problem for Māori communities. There is mounting evidence that continuing business as usual activity in tobacco control has little chance of achieving the Smokefree Aotearoa 2025 goal, particularly for Māori. There are significant gaps in knowledge about the determinants of smoking for Māori and the effectiveness of current cessation and wider tobacco control measures.

Te Ara Auahi Kore (the TAKe project) was developed to help fill these knowledge gaps and inform policies and legislation to achieve the 2025 goal. TAKe is a collaboration between Te Rōpū Rangahau Hauora a Eru Pōmare (University of Otago) and Whakauae Research Services.

The aims of TAKe include:

- $\bullet$   $\;$  To determine if key to bacco control policies and interventions are impacting Māori smokers.
- To explore the feasibility of different national and local policy options and interventions for achieving Smokefree 2025.
- To work with partners to stimulate evidence informed action.

The project is being delivered as three complementary studies:

- 1. The first (the PAI study) is a survey of engagement in tobacco control activities among key community based stakeholder organisations (e.g. PHOs, DHBs, iwi, local councils) in participating locations. This will be used to help draw a picture of what tobacco control looks like in those locations.
- 2. The second and most resource intensive study will follow a cohort of at least 700 Māori smokers for a year over two survey waves. The longitudinal design is ideal for exploring the impact of key policies (e.g. tax increases, plain packs, local initiatives) on smoking behaviour.
- 3. The third study is a series of qualitative focus group interviews with whānau of smokers. This study will explore the impacts of smoking behaviour and tobacco control interventions on whānau, as well as looking at whānau as a resource for supporting smokers to quit.

The PAI study will go to field in March 2017, while the cohort and whānau studies are due to go to field in mid and late 2017 respectively.

The development of TAKe follows closely work with the Talking About the Smokes (TATS) project in Australia, which explored the drivers for high smoking rates among Aboriginal and Torres Strait Island communities. TATS was implemented in partnership with Aboriginal Community Controlled Health Organisations and was the first 'indigenous' International Tobacco Control (ITC) project.

TAKe is a partner to the NZ arm of the ITC project (PI Richard Edwards). It is differentiated by its focus on community level activity (as well as impacts of national level policies) and kaupapa Māori framework that includes direct engagement with Māori communities. TAKe is being implemented within a participatory framework and we would like to acknowledge the support of Tei Davies and Kim Wilkins (Ora Toa PHO); Teresea Olsen, Cheryl Davies and Catherine Manning (Kokiri Marae Seaview); Frances King and Jennie Hindmarsh (Ngāti Porou Hauora); Janice Kuka and Cindy Mokomoko (Ngā Mataapuna Oranga); Rawiri Jansen and Marleen Tuigamala (National Hauora Coalition PHO); Rose Lightfoot and Ngaire Rae (Te Taitokerau and Manaia PHOs); David Thomas (Menzies School of Health Research); Pele Bennet (Queensland Dept of Health); Zoe Martin-Hawke (Hāpai te Hauora); and Gevana Dean (Hawkes Bay DHB).

#### Research team

Andrew Waa, Bridget Robson, Heather Gifford, James Stanley, Ruruhira Rameka, Richard Edwards, Gill Potaka-Osborne

#### **Funding**

Health Research Council



# FASE – Feasibility Assessment of a Smart E-cigarette

This feasibility study is one of two new Health Research Council projects examining ENDs (electronic nicotine devices). It will document how smoking and vaping trajectories evolve.

This FASE study involves leading researchers from Marketing, Psychology and Information Systems, and consolidates a growing collaboration with University of California San Francisco researchers from one of the FDA's Tobacco Centres of Regulatory Science.

It takes advantage of innovative technology that allows researchers to gain near-real time data on vaping behaviours as smokers make quit attempts using e-cigarettes (EC). These data will help us document how vaping and smoking patterns evolve, particularly the trajectory followed when smokers begin to transition to vaping. In addition, the study uses ecological momentary assessments to collect both retrospective and real-time data on smoking, cravings, drinking and other social activities.

The FASE study is testing the feasibility of a wider study by examining three questions:

- Will e-cigarette users find a smart e-cigarette to be an acceptable alternative to the device they are currently using and use it solely throughout the study period?
- Can compliance (sole use of a smart e-cigarette) be maintained for at least two months?
- How frequently can we collect data on smoked tobacco use without imposing an impractical burden on participants?

If these questions can be satisfactorily addressed, we hope to develop a larger scale study that will examine:

- How e-cigarette use affects smoked tobacco use, whether transition from smoked tobacco to sole e-cigarette use occurs and, if so, over what time period?
- · What patterns of e-cigarette use predict smoking cessation, and/or reduced or increased smoked tobacco use over time?
- What consumption patterns do e-cigarette users exhibit and how do these patterns compare to reported current and/or former smoked tobacco use?
- Where does e-cigarette use typically occur and what contextual factors are associated with e-cigarette use?

The feasibility study is using a sample of 15 smokers who wish to make a quit attempt using an e-cigarette. Participants have been recruited using social media and community advertising and the first four participant waves are now underway. Each participant receives a detailed training session, meets with the researchers each fortnight, and has a final de-brief interview at the end of the two month study period.

New Zealand's goal of reducing smoking prevalence to minimal levels by 2025 has focussed attention on novel technologies, such as EC, that could catalyse cessation. However, evidence that dual use is a common behaviour raises questions about whether EC support or suppress cessation. The data are crucial to ensuring New Zealand continues an evidence-based approach towards achieving the Smokefree 2025 goal.

#### Research team

Janet Hoek (PI), Mei-Ling Blank, Tamlin Conner, Tobias Langlotz, Mark George, Philip Gendall, Johannes Thrul, Pamela Ling

#### **Funding**

Health Research Council



# The EC-IC Project

# (Supporting informed e-cigarette use: A mixed methods study)

The second Health Research Council ENDs project examines a conundrum regarding e-cigarette use: while smokers are likely to benefit if they make a full transition to vaping, non-smokers may face harm, particularly if they become addicted to nicotine and then progress to smoking. Public health researchers thus face a challenge in assisting those who could benefit from moving to e-cigarettes while deterring those who may face harm.

The EC-IC team involves researchers from the Divisions of Commerce and Health Sciences who are collaborating with Professor Pamela Ling, UCSF, and Dr Lucy Popova, Georgia State University, both of whom have considerable experience in e-cigarette research.

The project aims to provide the first comprehensive NZ data on e-cigarette knowledge, beliefs and usage behaviours; we will also evaluate information messages, and assess the impact these have relative to other product attributes.

The specific research questions will examine:

- How different user groups perceive e-cigarettes' risk and safety, and their views on addiction, cessation and dual use, social acceptability of vaping, and regulation.
- · How different user groups understand information messages regarding e-cigarettes' potential risks and benefits.
- How different information messages and product attributes interact and influence the choice behaviours of different e-cigarette user groups.
- The likelihood that different user groups will trial e-cigarettes featuring different information messages.

The study will involve three phases:

- 1. A qualitative phase that explores information needs and how these might best be met. This phase is currently underway.
- 2. A survey to measure e-cigarette use patterns, attitudes, beliefs and knowledge among diverse smoker groups and examine perceptions of different product information messages.
- 3. Choice modelling and behavioural (probability) measures to estimate the relative effects of different product information messages and how these interact with other product attributes. We will also estimate the probability that respondents would trial ECs featuring different product information panels.

E-cigarettes' role in achieving smokefree goals remains ambiguous, making it crucial that potential users understand both the risks and benefits of using these products. We will explore risk and safety perceptions of ECs, examine users' information needs, evaluate how regulators might most effectively meet these needs, and estimate how different information messages affect EC users' knowledge and choice behaviours. This study is particularly timely, given the Associate Minister of Health's recent announcement that the government plans to allow sales of e-cigarettes containing nicotine.

#### Research team

Janet Hoek (PI), Lindsay Robertson, Mei-Ling Blank, Philip Gendall, Rose Richards, Claire Cameron, Pamela Ling, Lucy Popova

### Funding

Health Research Council

#### Collaborators

Hāpai te Hauora who have assisted with participant recruitment.



# Adolescent Smoking Decline Project

New Zealand has seen a dramatic decline in adolescent (14-15 year old) smoking across all ethnic groups over the past 15 years. Intriguingly, while tobacco control interventions have clearly contributed to this trend, they do not fully explain the data, and we do not know the relative contributions of specific individual and ecological factors to the decline. We also lack knowledge about whether the drivers of smoking decline differ in different ethnicities and socioeconomic groups, or are similar across the board.

The Adolescent Smoking Decline Project (ASDA) aims to address these knowledge gaps, and will help to inform the design and targeting of interventions for preventing smoking uptake in young people. Māori and Pacific adolescents remain much more likely to smoke than their European and Asian peers, so it is vital that we have a strong understanding of risk factors and drivers of decline in these priority populations.

The study uses annual ASH Year 10 Snapshot Survey Data (2002-2015) to determine the extent to which the decline in adolescent smoking can be explained by changes over time in key predictive factors: smoking status of parents, older siblings and best friend, exposure to second hand smoke in the home, peer smoking at the school level, and tobacco price. We are using multi-level, multi-variable modelling to investigate the relative importance of the various factors – overall, and by ethnicity and school decile (high, medium, low).

Because of the large size of the data set (over 20,000 respondents per year) we are able to undertake analysis by four specific Pacific ethnicities: Samoan, Cook Island, Tongan and Niuean, as well as analysing the findings for Pacific adolescents as a whole. To our knowledge, this is the first analysis of the ASH Year 10 data by specific Pacific ethnicity, and may reveal important differences among Pacific peoples.

Findings will be disseminated from mid-2017, and will contribute to our understanding of current risk factors for smoking, drivers of smoking decline over time, and ethnic and socioeconomic disparities. As one of the first in-depth studies of the causes of adolescent smoking decline (which has also been seen in USA, UK, Australia, and Canada) the project is likely to generate international interest, and may influence tobacco control thinking and policy development in other jurisdictions as well as New Zealand.

#### Research team

Richard Edwards (PI), Jude Ball, Dalice Sim

#### **Funding**

University of Otago Research Grant

Cancer Society Wellington Division Research Grant

#### Data owners

ASH New Zealand



# Smokefree 2025 Research Symposium

In 1997, and then approximately every two years until 2012, a national smokefree conference was held in New Zealand. The last of these was in Wellington in 2012. Since then there has been a gap which is only partially filled by the Oceania conference, which is most often held in Australia. As a result the opportunities to present and provide updates to the sector on NZ tobacco control research, practice evaluation and innovations and for networking between NZ smokefree practitioners, advocates and researchers have been limited. We believed this was particularly unfortunate given the context that the Smokefree 2025 goal increases the importance of such information sharing and networking.

To begin to address this gap we collaborated with leading researchers from the University of Auckland's National Institute of Health Innovation and convened the ASPIRE2025 –NIHI Research Symposium, on 26 October 2016. This event included presentations on recent, current and planned research by the ASPIRE2025 and NIHI tobacco control research teams, as well as presentations from Hāpai Te Hauora, the National Advocacy Service and the Health Promotion Agency. The event was a great success and we plan to hold a similar event, convened by the NIHI team, in Auckland in 2017.

# E-cigarette report and submission

E-cigarettes are a new product development that has sparked much debate and sometimes controversy in New Zealand as in much of the rest of the world. Views range from those who believe they are a game-changing technology that offers a vastly safer alternative to smoking and will assist millions of smokers to quit and, by doing so, help end the tobacco epidemic, to those who see them as potentially highly dangerous products of unproven efficacy for cessation that may prolong the harm from tobacco use by reducing quitting through predominant 'dual use' and functioning as a 'gateway' to young people taking up smoking. These disagreements threaten to impair the unity and effectiveness of the tobacco control community.

In response to this situation, the former National Smokefree Working Group commissioned researchers from ASPIRE2025 and the University of Auckland's National Institute of Health Innovation to produce a consensus report on e-cigarettes and options for policy and practice which the majority of the New Zealand tobacco control community could support. Richard Edwards led this workstream; the report was published in August 2016 and formed the basis of a submission from the sector to the Ministry of Health's consultation 'Policy options for the regulation of electronic cigarettes' in September 2016.

# Plain packaging

Although New Zealand was much slower than we had hoped to introduce plain packaging, the ASPIRE2025 collaboration warmly welcomed the final reading of the Smoke-free Environments (Tobacco Standardised Packaging) Amendment Bill. Since 2009, when we first received an HRC grant to examine plain packaging (09/195R), the ASPIRE collaboration has undertaken several projects to inform New Zealand's policy. This work has included in-depth analyses of smokers' and non-smokers' responses to standardised packages, surveys estimating support for different interventions, and rigorous experimental studies testing the relative effects of potential measures. Findings from these studies informed detailed submissions to the Health Select Committee and Ministry of Health, and were shared with the wider smokefree community so other groups could draw on this evidence in their own submissions.

In 2016, the final phase of a three year HRC project (13/062) drew to a close. This project anticipated New Zealand's introduction of plain packaging and focussed specifically on developing more diverse warnings that might have stronger effects on young adults, the group where smoking prevalence peaks. The results have been shared with policy makers and health promoters, and presented at national and international conferences.



# Tobacco endgame collaboration

In September 2016, Richard Edwards was invited to attend the Berzelius symposium titled "Tobacco endgame – Swedish style" in Stockholm, Sweden. The main purpose of this event was to launch Sweden's 2025 endgame goal and to bring together Swedish stakeholders and international experts on endgames to discuss possible strategies and experience from other countries with endgame goals. Richard was invited to bring a perspective from New Zealand and describe our experience with Smokefree 2025. The symposium was convened by Hans Gilljam of the Karolinska Institute. Other overseas people presenting included: Luke Clancy (University of Dublin, Ireland), and Antero Heloma (National Institute for Health and Welfare, Finland). Also present were Ken Warner (University of Michigan), Ruth Malone (University of California and editor of the Tobacco Control journal) and Luk Joosens (Association of European Cancer Leagues, Brussels).

The symposium included presentations and a panel session with the overseas guests and contributions from key researchers, advocates and stakeholders in Sweden. The international team also met with members of the Swedish Ministry of Health.

The symposium was an excellent opportunity to learn about some key developments in other countries with endgame goals. For example, Ireland has published a strategy for achieving its endgame and is forging ahead with interventions like standardised packaging. Finland has introduced a licence for retailers with a substantial associated fee.

We are also hoping to use the symposium as a springboard to launch more collaborative linkages between researchers and advocates in countries with endgame goals – so that we can learn from and leverage off activities within each country. As a first step we have initiated a stocktake of endgames within New Zealand, Ireland, Scotland and Finland; and we hope to set up a regular dialogue among representatives of these four countries, and others, including the Pacific Island countries, as they adopt endgame goals and implement new strategies and interventions to achieve them.

# Behavioural modelling collaboration

ASPIRE2025 researchers have worked closely with Professor Jordan Louviere (University of South Australia) and Associate Professor Christine Eckert (University of Technology Sydney) to develop innovative choice-based experiments.

Professor Louviere is the architect of "best-worst" modelling, a type of choice experiment that enables collection of more detailed and useful data. Internationally recognised for his pioneering methodological contributions, Professor Louviere is now collaborating closely with several health research teams to extend the behavioural measures they capture. Associate Professor Eckert brings complementary analytical skills and specialises in scale adjusted latent choice modelling, an analytical approach that identifies behavioural sub-groups within a wider sample.

With ASPIRE2025, Professor Louviere and Associate Professor Eckert have designed and analysed studies examining extensions to the plain packaging policy first introduced in Australia. This work has examined the optimal method of presenting Quitline information on tobacco packages, estimated the effect dissuasive cigarette sticks would have on smokers, analysed the effects different tobacco variant names have on smokers' choice patterns, and estimated the "value" smokers attached to branded packages.

These studies provide robust data and illustrate where New Zealand and other countries could go beyond the legislation enacted in Australia. Based on these findings, ASPIRE 2025 researchers have called for restrictions on variant names, which in Australia became increasingly evocative following the introduction of plain packaging. They have also highlighted the additional impact dissuasive, or unattractive, cigarette sticks would have if introduced alongside standardised (or plain) packages. As packaging becomes more aversive, it is important to support smokers wishing to quit; research illustrating the best format for Quitline information can help direct smokers to a specialised cessation support service, thus increasing the likelihood they will succeed in their quit attempt.

Professor Louviere and Associate Professor Eckert have brought highly specialised skills and enabled ASPIRE2025 researchers to undertake behaviourally oriented research with international implications.

# Published Research Highlights

# Impact of removing point of sale (POS) tobacco displays

In 2012, all tobacco displays were eliminated in retail settings in NZ. Two studies from ASPIRE2025 were published in 2016, looking at the impacts of this major tobacco control intervention.



### 1. Data from a New Zealand youth survey

This study used data from the ASH Year 10 survey – an annual survey of around 25,000 Year 10 students – and found that the removal of point-of-sale (POS) tobacco displays, accompanied by increased enforcement measures and penalties for selling tobacco to minors, was followed by significant reductions in experimental and regular smoking and recent smoking initiation, with levels now at record low levels.

An earlier NZ study, from pre- 2012, had found that children who frequently visited shops that sell tobacco were at greater risk of trying smoking. However, in 2013, a year after the tobacco display ban was implemented, these effects were eliminated or weakened.

#### Citation

Edwards, R., Ajmal, A., Healey, B., Hoek, J. (2016). Impact of removing point-of-sale tobacco displays: data from a New Zealand youth survey. *Tobacco Control*, doi:10.1136/tobaccocontrol-2015-052764

#### Funding

Internally funded



### 2. A meta-analysis

This study estimated the effect size of the association between PoS tobacco promotion and smoking amongst children and adolescents. It used systematic searches of published peer-reviewed literature and random effects meta-analyses. Results indicated that children and young people who are more frequently exposed to PoS tobacco promotion are around 1.6 times more likely to have tried smoking tobacco, compared to those less frequently exposed.

Both studies suggest that legislation banning tobacco POS promotion is likely to effectively reduce smoking among young people. The findings contradict assertions made by tobacco companies that the removal of point-of-sale displays would not work. This approach could be used to investigate the effects of other disputed interventions, such as standardised packaging.

#### Citation

Robertson, L., Cameron, C., McGee, R., Marsh, L., Hoek, J. (2016). Point-of-sale tobacco promotion and youth smoking: a meta-analysis. *Tobacco Control*, *25*(e2), e83-e89.

#### **Funding**

This work was supported by New Zealand Lottery Health, Asthma Foundation of New Zealand and the Cancer Society of New Zealand.



# Stakeholder appraisal of selected tobacco endgame policy options in New Zealand

Modelling suggests that NZ will not achieve the Smokefree 2025 goal by continuing the current approach. Radical "game-changer" policies are needed, but which should be prioritised? This qualitative study explored the strengths and weaknesses of five radical policy options from the perspective of politicians, policy makers and advocates, including Māori and Pacific stakeholders. The findings suggest that a suite of interventions will be needed to achieve the 2025 goal - no single policy will get us there. Dramatic tax increases were generally seen by key informants as both effective and politically feasible, if coupled with complementary interventions, but there was little consensus on the other four options: comprehensive retail restrictions to greatly reduce the number of outlets where tobacco is sold, mandating very low nicotine content in tobacco to reduce addictiveness, banning additives from tobacco to reduce their palatability, and raising the legal age of purchase by one year every year to create a tobacco-free generation. There was considerable uncertainty about the likely impact of these options, suggesting more work is required to collate, and raise awareness about, relevant evidence. Proactive monitoring of local and international research and policy developments is also needed, in order to keep abreast of cutting-edge strategies that may help New Zealand become a smokefree nation by 2025.

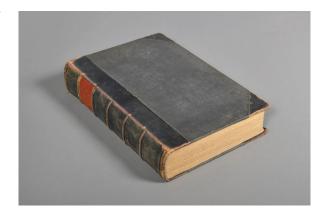
In addition to this paper, a more detailed research report entitled *Future directions to achieve Smokefree 2025?* was circulated to the NZ tobacco control sector in March 2016 and is available on the ASPIRE website.

#### Citation

Ball, J., Edwards, R., Waa, A., Tautolo, E-S. (2016). Stakeholder appraisal of selected tobacco endgame policy options in New Zealand. *Tobacco Regulatory Science*. 2017;3(1):56-67. doi: 10.18001/TRS.3.1.6

#### Funding

Tobacco Control Tūranga



### Key design features of a new smokefree law to help achieve the Smokefree Aotearoa New Zealand 2025 goal

Tobacco control legislation in New Zealand is only occasionally modified. The New Zealand Government's 2025 smokefree goal, adopted in 2011, has no legislated basis to ensure the goal is met.

We outlined new tobacco control legislation to achieve this goal. There would be a government agency with specific powers to enable New Zealand to reach the goal. Tobacco retailing would be moved to licensed 'not for profit' outlets, which would be progressively reduced. The age for access to tobacco would progressively rise. There would be minimum prices for tobacco, but the price the industry could charge before tax would be capped. The design and constituents of tobacco products would be controlled, e.g. to reduce addiction and remove sweeteners. The law would require smokefree cars and bar patios.

#### Citation

Delany, L., Thomson, G., Wilson, N., Edwards, R. (2016). Key design features of a new smokefree law to help achieve the Smokefree Aotearoa New Zealand 2025 goal. *New Zealand Medical Journal* 2016;129(1439):68-76.

#### Funding

Internally funded



# Qualitative exploration of young adult RYO smokers' practices

Many New Zealand smokers, particularly those with less disposable income and who are younger, use loose tobacco to make roll-your-own (RYO) cigarettes rather than purchase tailor-made cigarettes. Yet while RYO tobacco's cost advantage offers smokers an important benefit, this attribute has also contributed to unappealing stereotypes. We explored how young people manage that tension and dissociate themselves from these unattractive stereotypes and found they associate beneficial attributes with RYO, particularly greater "naturalness". Participants in our study also developed ritualistic practices that offset negative stereotypes. They saw rolling as an "art" and regarded the cigarette they had constructed as more valuable than a readymade one, created without their personal input.

We suggest policy makers could reduce the appeal of RYO tobacco by increasing the excise tax applied to this form of tobacco. They could also disrupt the rituals young adults use to elevate RYO tobacco by requiring rolling papers and filters to use standardised packaging, and by changing the paper and filter colour from white to an unattractive murky green colour.

#### Citation

Hoek, J., Ferguson, S., Court, E., Gallopel-Morvan, K. (2016). Qualitative exploration of young adult RYO smokers' practices. *Tobacco Control*. Advance online publication. doi: 10.1136/ tobaccocontrol-2016- 053168

#### Funding

University of Otago summer scholarship scheme; Ministry of Health



### A nicotine inhaler to help smokers quit

In this study, our researchers developed and tested a novel nicotine inhaler to see whether it helps smokers to quit smoking. The findings provide the first evidence that inhaled nicotine from a simple standard inhaler is highly effective and substantially increases a smoker's chances of quitting compared to the best current nicotine replacement treatment.

Currently most smokers use nicotine patches to help them stop smoking. This study shows that adding a nicotine inhaler to a nicotine patch doubles the chances of quitting over a nicotine patch alone.

The nicotine inhaler gives a metered dose of nicotine and offers an alternative therapeutic option for inhaled nicotine using a standard device that has been used for many decades for treatment of asthma.

But unlike electronic cigarettes, the inhaler has no physical associations to smoking itself.

The researchers are currently looking at how to make the inhaler available to all smokers who would like to use it.

#### Citation

Caldwell, B., Crane, J. (2016). Combination nicotine metered dose inhaler and nicotine patch for smoking cessation: a randomized controlled trial. *Nicotine & Tobacco Research*, first published online May 16. doi:10.1093/ntr/ntw093

#### **Funding**

Health Research Council



# Logic and tobacco industry arguments against plain packaging

In 2012, during the Government's consultation on standardised (plain) packaging, British American Tobacco (BAT) developed a campaign - Agree-Disagree - to oppose this measure. The campaign was the first time in over 20 years that the tobacco industry had openly opposed tobacco regulation in NZ media. This research examined the logic of the arguments and rhetorical strategies employed in the campaign. It found that all BATNZ advertisements contained flawed arguments that were either unsound or based on logical fallacies. Flawed arguments included misrepresenting the intent of the proposed legislation (strawman), claiming standardised packaging would harm all NZ brands (false dilemma), warning NZ not to adopt standardised packaging because of its Australian origins (an unsound argument), or using vague premises as a basis for claiming negative outcomes (equivocation). Given the industry's frequent recourse to these tactics, the researchers suggested that greater recognition of logical fallacies and rhetorical devices employed by the tobacco industry will help counter tobacco industry efforts.

#### Citation

Waa, A.M., Hoek, J., Edwards, R., Mclaurin, J. (2016). Analysis of the logic and framing of a tobacco industry campaign opposing standardised packaging legislation in New Zealand. *Tobacco Control* Sep 2016, doi: 10.1136/tobaccocontrol-2016-053146

#### **Funding**

University of Otago Research Grant (UORG)



# What effect does increasing the excise tax have on tobacco retail prices?

New Zealand has implemented regular tobacco excise tax increases for several years on the assumption that these directly affect the retail price of tobacco products. However, tobacco companies would benefit if they could shift price increases from lower-priced brands to premium brands, whose purchasers are likely to be less price sensitive. This study examined retailers' adherence to recommended retail prices (RRP), and whether the RRP included the full tax increase. We collected price data on three factory-made cigarette brands (premium, mainstream, and budget), and one roll-your-own brand before and after the 2014 tax increase. Comparison of price increases in each tobacco brand and the RRP showed that the median increase in price from before to after the tax change was only 3% for the budget brand. This contrasted with the median of 8% for the premium brand, and 11% for both mainstream and roll-yourown brands. These analyses suggest tobacco companies may be under-shifting excise tax on the budget brand, and overshifting tax on brands in other price partitions. The increasing price differential between budget brands and mainstream and premium brands may undermine cessation and impede realisation of New Zealand's Smokefree 2025 goal.

#### Citation

Marsh, L., Cameron, C., Quigg, R., Hoek, J., Doscher, C., McGee, R., Sullivan, T. (2016). The impact of an increase in excise tax on the retail price of tobacco in New Zealand. *Tobacco Control*, 25, 458-463. doi: 10.1136/tobaccocontrol-2015-052259

#### **Funding**

University of Otago; Cancer Society of New Zealand

# Research activity

– what we were up to in 2016 – research funding and students

# Research Activity

The following sections outline our core research themes and the new and continuing projects underway in each of these themes during 2016. Projects which were completed prior to 2016 but that had resulting publications during 2016, are listed in the outputs section of this report.

List of ASPIRE2025 projects that were active during 2016. (New projects are shown in RED)

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SMOKEFREE COMMU	JNICATIONS	22
Cessation messages	Smoking and quitting experiences among women who are pregnant SMIRQ smokefree messages, interpretation, response and quitting Exploring how members of the LGBA community respond to cessation messages Smokers' attitudes towards financial incentives for quitting	22 22 23 23
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RYO tobacco	Managing RYO stereotypes A videography of RYO tobacco users	24 24
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### SMOKEFREE COMMUNICATIONS

This theme explores the broad area of how smokefree communications can be most effectively used to help achieve the Smokefree 2025 goal.

#### **CESSATION MESSAGES**

### Smoking and quitting experiences among women who are pregnant

Background and aims

Reducing smoking among women who are pregnant is a high priority, given the harm that smoking causes to unborn children. However, while several programmes have examined smoking cessation interventions that assist women who are pregnant to quit, fewer studies have examined post-partum smoking behaviours. We recruited a pilot sample of women who quit smoking with the support of the Smokefree Babies programme and interviewed them four times (prior to and following the birth of their child). We explored their smokefree aspirations and actual behaviour, and identified factors triggering relapse and supporting continued cessation.

**Progress** 

Data collection is scheduled to conclude in early 2017. An abstract outlining early findings has been submitted to a conference and a full paper will be developed for submission in 2017.

Project team: Janet Hoek, Mei-Ling Blank, Lee Thompson and Shelagh Ferguson.

Funding: University of Otago.

### SMIRQ: Smokefree messages, interpretation, response and quitting

Background and aims

Several studies have reported that health warnings have less effect on young adults, who see these as too distal to be meaningful. Despite this evidence, many campaigns and warning messages feature longer term health warnings. Following a micro-survey where we examined varied image themes, we developed a comprehensive set of new warnings and tested these in an extensive qualitative study. We then undertook an experimental study using a choice experiment, where we manipulated the image content and accompanying text message. The findings showed that while non-smokers responded most strongly to health warnings, themes of social justice, illustrating the effects second-hand smoke has on innocent third parties, were very effective among both smokers and non-smokers. Messages featuring cosmetic effects were least effective. In addition, we estimated emotional reactions using an "emotion-wheel"; findings from this study tended to support the choice patterns observed.

Progress

The in-depth interview findings have been presented in several international research seminars and at several conferences. Analyses of the quantitative phases are complete and outputs outlining these findings are currently under review.

Project team: Janet Hoek, Phil Gendall, Christine Eckert and Jordan Louviere.

Funding: Health Research Council.

# Exploring how members of the LGBA community respond to cessation messages

Background and aims

Tobacco companies have targeted members of the LGBA (Lesbian, Gay, Bisexual and Asexual) communities and smoking prevalence among these groups is much higher relative to straight population groups. As an adjunct to the SMIRQ study, we tested cessation messages that used images of community and resilience, and that exposed tobacco companies' manipulation, to explore whether these elicited stronger responses from young people identifying as LGBA. Our findings show that both industry denormalisation messages and themes illustrating the LGBA community as a group resisting tobacco company promotions merit further investigation.

**Progress** 

A poster was presented at SRNT 2016 and a journal article is in preparation.

Project team: Cathy Hinder, Janet Hoek and Shelagh Ferguson.

Funding: Student stipend supported by the University of Otago; research expenses supported by ASH New Zealand.

## Smokers' attitudes towards financial incentives for quitting

Background and aims

Financial incentives can support smoking cessation, yet low public acceptability may limit the widespread implementation of such schemes. Very limited research exists on how the public and stakeholders perceive financial-incentive interventions. We therefore examined how smokers' perceive the use of financial incentives to support smoking cessation.

**Progress** 

A manuscript has been submitted to *Addiction*, and is currently under review. This research was also presented as a poster at the Society for Research on Nicotine and Tobacco conference in Chicago, March 2016.

Project team: Lindsay Robertson, Phil Gendall, Janet Hoek, Louise Marsh and Rob McGee.

Funding: NZ Lottery PhD scholarship, NZ Asthma Foundation and Cancer Society of New Zealand.

#### **E-CIGARETTES**

### A videography of mods users

Background and aims

Mods, or third generation e-cigarettes, allow users to create and personalise a device that is tailor-made to suit their purposes. Our earlier work has shown that mods users regard themselves as creative hobbyists; this study explored their responses to vaping "tricks", including those they have developed themselves. Using a novel videography approach, we used an elicitation exercise where we showed participants a video clip of vaping tricks, explored their responses to this, then probed their own behaviour patterns. The interviews allowed us to explore the creation of their own device and their use of it, and the social responses they experienced.

Progress

Data collection has concluded and a report outlining the findings has been submitted. A conference paper has been accepted and a journal article is in preparation.

Project team: Shelagh Ferguson, Janet Hoek and Chloe Banks.

Funding: University of Otago Summer Scholarship and Ministry of Health.

# A qualitative exploration of young adult ENDS users' expectancies and experiences

Background and aims

Like their international counterparts, New Zealand young adults are experimenting with Electronic Nicotine Devices (ENDS). While some are smokers looking for a less harmful option, others are non-smokers attracted to a novel device and the flamboyant behaviours this supports. In this study, we explored motivations for ENDS use among young adults and identified four themes: the desire to replicate past experiences of smoking, creating an entirely new and distinctive behaviour; regret for attributes unique to smoking, and non-smokers' use of ENDS to retain social connections with peers who smoke.

**Progress** 

A poster was presented at SRNT-Europe and the findings were presented at a Marketing conference in late 2015. This work has now been published in BMJ Open.

Project team: Janet Hoek, Pamela Ling and Johannes Thrul.

Funding: Internally funded.

#### **RYO TOBACCO**

### Managing RYO stereotypes

Background and aims

Although young adults use RYO tobacco because it is less expensive per stick than tailor-made tobacco, RYO brings with it unattractive stereotypes of older, heavily addicted smokers that are highly inconsistent with the social identities young adults wish to develop. We explored how young adults manage this tension and identified specific practices they employed. Participants mistakenly emphasised the "naturalness" of RYO tobacco, believing it to be less harmful than tailor-made cigarettes, and developed rituals that enhanced and personalised their smoking experience. The findings suggest quitting RYO tobacco use will require more sophisticated cessation strategies as young people's ritualistic practices may be as important to them as their access to nicotine.

Progress

This study has concluded. Papers have been presented at national and international conferences and a journal article has been published in *Tobacco Control*.

Project team: Janet Hoek, Shelagh Ferguson, Erin Court and Karine Gallopel-Morvan.

Funding: University of Otago summer scholarship scheme.

### A videography of RYO tobacco users

Background and aims

This project extended the in-depth interviews by introducing a novel videography component where we filmed participants' RYO rolling practices. Using a new sample of participants, we explore the art of rolling and identified different typologies within the sample. These groups varied according to the emphasis they placed on ritualistic practices relative to cost-effective nicotine access.

**Progress** 

In-depth interviews and filming with RYO users have been completed and a report outlining the findings is in preparation. A conference paper will be presented at the World Congress on Public Health and a journal article is nearing completion.

Project team: Shelagh Ferguson, Janet Hoek and Matthew Mulconroy.

Funding: University of Otago summer scholarship scheme.

### POLICY AND REGULATORY RESEARCH

This theme aims to inform the development, implementation and evaluation of regulatory and other policies.

#### **SMOKEFREE PLACES**

### Smoking at a café in a smokefree park

Background and aims

This observational study compared outdoor smoking at a café situated in a smokefree park with outdoor smoking at the nearest seven other cafés (in Karori and two other adjacent suburbs). The hypothesis was that outdoor smoking at the café inside the smokefree park would be less (including when adjusting for the presence of children).

**Progress** 

A report was published in 2016: Wilson & Thomson. "Evaluating smokefree compliance in a large smokefree park: Methods issues and results." otago.ac.nz/smokefreeoutdoors

Project team: Nick Wilson and George Thomson.

Funding: Internally funded.

# Signage relating to smokefree playgrounds and smokefree suburbs

Background and aims

To describe levels and quality of smokefree signage in children's playgrounds and in whole suburbs.

Progress

The playground survey was completed (covering 17 local authorities) and the publication was "in press" as of late 2016 with the *Australian and NZ Journal of Public Health*. Signage was compared in all plausible smokefree settings in a low-deprivation suburb (Karori) with a high-deprivation suburb (East Porirua).

Data collection on a more detailed playground study (measuring smokefree signs) occurred during 2016, as did data collection on smokefree signage at sports grounds and racecourses.

Project team: Nick Wilson and George Thomson.

Funding: Internally funded.

#### TOBACCO AVAILABILITY AND SUPPLY

### Quitting and tobacco retailer density

Background and aims

The widespread availability of tobacco is a major form of tobacco marketing. Greater access to tobacco retail outlets in an area is associated with higher rates of smoking, and exposure to a tobacco retail outlet can undermine smokers' attempts to quit, even in the absence of point-of-sale tobacco displays. In this study we will map the home and daytime addresses of a sample of "motivated quitters" (i.e. smokers who are attempting to quit) in relation to a Geographic Information System database of national tobacco retail outlets that we compiled in a previous research study.

Progress

Data analysis has been completed and a manuscript is being prepared for submission to Health and Place in 2017.

Project team: Lindsay Robertson, Crile Doscher, Ella Iosua and Louise Marsh.

Funding: NZ Lottery PhD scholarship, NZ Asthma Foundation and Cancer Society of New Zealand.

# Tobacco retail regulation in overseas jurisdictions

#### Background and aims

Despite our reputation as a leader in tobacco control, the retail environment for tobacco is relatively unregulated in this country. There are currently no restrictions on who can sell tobacco, nor where it can be sold. There is no single accurate register of who sells tobacco, which presents a challenge for enforcement of retail-level legislation. The aims of this research were to summarise the range of tobacco retail licensing schemes implemented in overseas jurisdictions and review the evidence of their effectiveness as a tobacco control strategy.

#### Progress

A viewpoint article was published in the *New Zealand Medical Journal*, April 2016. The work will also be presented at the *23rd Annual Meeting of the Society for Research on Nicotine and Tobacco*, Florence, Italy, 8-11 March 2017. This study found that a considerable number of overseas jurisdictions have implemented licensing schemes for tobacco retailers, some of which have resulted in (or will result in) large reductions in tobacco retail outlet density. We conclude that a positive licensing scheme could increase compliance with existing smokefree legislation, and enable the introduction of further measures to control the supply of tobacco in NZ.

Project team: Lindsay Robertson, Louise Marsh, Richard Edwards, Rob McGee, Janet Hoek and Frederieke van der Deen.

Funding: NZ Lottery Health PhD Scholarship, NZ Asthma Foundation and Cancer Society of New Zealand.

### Perceptions of tobacco retailing policies

#### Background and aims

A growing body of research suggests widespread retail availability of tobacco may be associated in a number of ways with an increased risk of smoking. This effect may be due to increased exposure to cigarette advertising in jurisdictions without a point-of-sale display ban, greater chance of relapse after a quit attempt, and the creation of a more competitive local market, possibly driving cigarette prices down and increasing sales to minors. The density of tobacco retail outlets tends to be higher in areas of lower socioeconomic deprivation, which may contribute to a higher smoking prevalence amongst socioeconomically disadvantaged groups. Research also suggests that a higher density of tobacco retail outlets around a school is associated with higher levels of experimental smoking. Various policy interventions have been put forward by tobacco control advocates; however research regarding attitudes to tobacco retail interventions is scarce, both in New Zealand and internationally.

This is an important area of research because the views of stakeholders can be influential in the policy-making process. This qualitative research assesses attitudes towards tobacco retail policy options amongst key stakeholders in New Zealand.

#### **Progress**

A manuscript based on interviews with tobacco control experts throughout NZ has been accepted for publication by the *New Zealand Medical Journal*, and is in press. This work will also be presented at the *23rd Annual Meeting of the Society for Research on Nicotine and Tobacco*, Florence, Italy, 8-11 March 2017, and has been accepted for presentation at the *Behavioural Research in Cancer Conference* in Melbourne, May 2017.

The findings of interviews undertaken with tobacco retailers were published in the International Journal of Drug Policy in 2015.

Project team: Lindsay Robertson, Louise Marsh, Rob McGee, Richard Egan and Janet Hoek.

Funding; NZ Lottery Health PhD Scholarship, NZ Asthma Foundation and Cancer Society of New Zealand.

# Smokers' perceptions of the relative effectiveness of five retail reduction policies

Background and aims

Reducing the widespread retail availability of tobacco could help realise tobacco endgame strategies. We conducted a randomised experimental survey in which smokers were asked to rate the effectiveness of one tobacco retail policy on i) preventing smoking initiation for a never-smoker and ii) supporting quitting for an adult smoker. The perceived effectiveness of these five policies was compared relative to a 'benchmark' policy of a 10% tobacco tax increase.

**Progress** 

This study was published in Nicotine and Tobacco Research and was presented as a poster at the Society for Nicotine and Tobacco Research Meeting in Chicago, March 2016.

Project team: Lindsay Robertson, Phil Gendall, Janet Hoek, Claire Cameron, Louise Marsh and Rob McGee.

Funding: NZ Lottery PhD scholarship, NZ Asthma Foundation and Cancer Society of New Zealand.

### Policy options around regulating e-cigarettes in NZ

Background and aims

To outline the policy options for regulating e-cigarettes in NZ.

Progress

A blog was published in "Public Health Expert" and also a more detailed analysis as a Viewpoint article in the *NZ Medical Journal* (November 2015).

A journal article was submitted to the *Bulletin of the WHO* (in press for publication in 2017)

Project team: Nick Wilson, George Thomson, Janet Hoek, Richard Edwards, Julian Crane (and other non-ASPIRE2025 colleagues).

Funding: Internally funded.

#### ASSOCIATED RESEARCH

# New Zealand arm of the International Tobacco Control Policy Evaluation Project (NZ-ITC project)

Background and aims

The international ITC project is a globally significant programme of research that includes many of the leading international tobacco control researchers. The ITC project has been providing evidence about the effectiveness of tobacco control policy for over 15 years. The core of the ITC programme is a series of cohorts of smokers in around 25-30 countries. Data from these cohorts creates a system in which the impact of policy interventions on populations of smokers can be evaluated through analysis within country cohorts and through comparisons with smokers in other countries where the policy has not been introduced.

The aim of the ITC NZ study (NZ-ITC) is to establish and follow-up a cohort of New Zealand smokers and ex-smokers in order to:

- describe trends in smoking-related behaviours, attitudes, experiences and perceptions;
- identify determinants of and estimate trends in smokers' and ex-smokers' smoking-related behaviours;
- assess the impact of tobacco control measures on smoking-related behaviours;
- explore patterns of use and impacts of alternative nicotine delivery devices;
- and explore the feasibility and acceptability of novel policy and practice interventions.

#### **Progress**

Recruitment and data collection are underway. We anticipate having first wave data from around 1200 current smokers and exsmokers by mid-April 2017 and will begin data analysis and preparing research outputs in May. The second wave of data collection is planned for early to mid 2018, after the introduction of standardised packaging in New Zealand.

Project team

Richard Edwards (PI), Andrew Waa, James Stanley, Beck O'Shaughnessy, El-Shadan Tautolo, Heather Gifford, Janet Hoek and Phil Gendall.

Funding: Health Research Council (HRC 15/072).

# Achieving a Smokefree Aotearoa Project – (ASAP)

Background and aims

The Smokefree 2025 goal was adopted in 2011, with mid-term targets set for 2018. This area of activity aimed to monitor progress towards the 2025 goal in order to hold the Government to account for the goal and identify areas where additional actions are required to help ensure that the goal is achieved.

**Progress** 

Richard Edwards gave several presentations at various events in New Zealand (NZ Lung Day, NZ College of Public Health Medicine conference, NZ Lung Cancer Day) and overseas (Symposium on the tobacco endgame, Stockholm). We also published three papers – an overview of progress in the NZMJ (led by Jude Ball), a commentary piece setting out possible legislative and regulatory actions to achieve Smokefree 2025 (led by Louise Delany), an overview paper of trends in smoking prevalence (led by Jude Ball), and an overview paper in the *Dutch Medical Journal* (led by Richard Edwards, in press). We also wrote an account of Smokefree 2025 for the WHO Framework Convention Alliance COP7 Bulletin and led the preparation of the NZ College of Public Health Medicine's Policy Statement on Ending the Tobacco Epidemic in New Zealand. We obtained funding from the Quit Group to carry out a review of the Smokefree goal (Achieving a Smokefree Aotearoa Project -ASAP). This is underway and is scheduled for launch in June 2017.

Project team

Numerous ASPIRE team members involved, including: Richard Edwards, Janet Hoek, Jude Ball, Louise Delany, George Thomson, Nick Wilson, Andrew Waa, Heather Gifford, Richard Jaine and Chris Cunningham. Others who contributed included Tony Blakely, Shane Bradbrook and Sue Taylor.

Quit Group Smokefree 2025 review: Richard Edwards, Louise Thornley, Andrew Waa and George Thomson.

Funding

Internal funding and The Quit Group.

# Covering our butts? An examination of strategies to reduce tobacco product waste

Background and aims

Tobacco product waste (TPW) represents a major environmental problem that costs local authorities hundreds of thousands of dollars in clean-up costs. Tobacco companies frame this problem as one of individual smoker responsibility, but this argument overlooks the fact that they manufacture cigarettes with non-degradable filters that mislead smokers into believing they have reduced the harm they would otherwise face from smoking. TPW often reduces the attractiveness of public amenities and may reinforce negative stereotypes of smokers. This newly initiated project explores how smokers and non-smokers perceive TPW, particularly who they see as responsible for TPW. A second phase will involve a survey estimating responses to different policy options aimed at reducing TPW.

**Progress** 

Phase One interviewing is about to commence and the Phase Two survey will be undertaken later in 2017.

Project team: Janet Hoek, Mei-Ling Blank, Philip Gendall, Rose Richards, Lindsay Robertson and Louise Marsh.

Funding: University of Otago Research Grant.

# Analysis of 2013 census smoking data

Background and aims

The New Zealand census includes a question on smoking status, making it the largest smoking prevalence survey in the world and a rich source of information for assessing progress towards Smokefree 2025. We have initiated a series of analyses using the census data, focusing initially on:

- Prevalence of smoking in 2013 and trends since the 2006 census by age, gender, ethnicity and socio-economic status
- Smoking among key occupational groups (e.g. health professionals) in 2013 and trends since 2006

Further analyses are planned such as detailed analysis of smoking by iwi and by different Pacific Island populations in New Zealand.

Progress

The overall prevalence analysis has been completed and a paper published in the NZMJ.

The occupational analyses are underway. A paper has been drafted describing smoking among doctors and nurses. Further papers on smoking among key occupational groups and groups with high and low smoking prevalence are in preparation.

Project team: Richard Edwards, James Stanley, June Atkinson, Rhiannon Newcombe, Danny Tu and Kirsten Lovelock.

Funding: Internally funded.

# Local Authority long terms plans and Smokefree 2025

Background and aims

The government has set a goal to make NZ smokefree by 2025, which will require a multi sector approach and coordinated effort to achieve. Local authorities can play an important role in improving community well-being through local policies and projects.

This research examines the commitment of local councils in the Canterbury/West Coast region to Smokefree 2025 using their long term plan as a measure. In addition, it aims to examine the role of community consultation which is an essential part of each authority's long term plan.

**Progress** 

A Master's thesis based on this research was submitted in March 2016 for examination, and a journal article will be submitted to a peer reviewed journal in 2017.

Project team: Manal Murad, Louise Marsh and Rob McGee.

Funding: University of Otago and Cancer Society of New Zealand.

# Exploring the hardening hypothesis in New Zealand

Background and aims

The hardening hypothesis suggests that as smoking prevalence declines, the remaining smokers will increasingly be variously more addicted, less motivated to quit and to be concentrated among disadvantaged groups in the population. The hypothesised effect is that quit rates decline over time. We aimed to explore whether there is evidence for hardening occurring in New Zealand in the context of the Smokefree 2025 goal using the Health Promotion Agency's Health and Lifestyle Survey (HLS) data from 2008-2014.

Progress

We developed a framework for the different facets of hardening and mapped these to indicators in data included in the HLS. Our analysis found no clear evidence of hardening on any of the facets examined. A paper was published in *Tobacco Control* together with a companion Public Health Expert blog summarising key findings and messages.

Project team: Richard Edwards, Rhiannon Newcombe, Darren Walton, Kate Holland and Danny Tu.

Funding: Internally funded.

### **SMOKING CESSATION SYSTEMS**

This theme covers research into the promotion of smoking cessation systems and treatment for tobacco addiction.

### Nicotine Inhaler (Inhale Project)

Background and aims

Only 10% of people who use nicotine replacement therapy (NRT) to quit will still be smoke free 12 months later. Therefore new, more effective, nicotine replacement therapies are needed. The 'Inhale' study, completed in 2014, examined whether a world-first nicotine inhaler helps people to quit smoking when used in combination with nicotine patches. Results published in early 2016 indicate it is highly effective. This project is now looking at how to make the inhaler available to all smokers who would like to use it.

#### Progress

We have been working with OIL and an Australian partner to explore commercialisation of the MDI (Meter-Dose-Inhaler). The MDI has been made available in the US as an OTC product and in New Zealand we are exploring a medicines approval process through Medsafe. We are also working with the Quit group, through Professor Chris Cunningham to help with the Medsafe approval.

Our Australian partners have been receiving very positive feedback from US consumer testing groups, with universal desire to continue using the inhaler after the initial orientation and trial period.

We are also considering a further 'real world' cessation study using the MDI through current quit service providers.

Project team: Julian Crane, Brent Caldwell, Chris Cunningham and Pete Hodgson.

Funding: Quitta and Quit Group.

### RESEARCH ON SMOKING AMONG YOUNG PEOPLE

Elimination of youth smoking initiation and promoting quitting among youth who smoke is a key route to achieving New Zealand's Smokefree 2025 goal. This theme addresses questions pertaining to this key target group.

## Does quitting smoking lead to less binge drinking?

Background and aims

There is a cross-sectional association between binge alcohol drinking and tobacco smoking among young people. Paradoxically, in our recent study of low-rate, non-daily smoking, we found that weekly binge drinking at age 21 was associated with decreased odds of increased smoking by age 38. This may reflect a pattern whereby younger low-frequency smokers tend only to smoke while drinking alcohol, and as their drinking patterns change over time, they either quit by age 38 or remain as long-term low-frequency smokers. This research will investigate the significance of changes in tobacco smoking on binge drinking, using longitudinal data from the Dunedin Multidisciplinary Health and Development study.

**Progress** 

Data analysis is in progress and a draft paper will be completed and submitted to a peer reviewed journal in 2017.

Project team: Rob McGee, Louise Marsh, and Bob Hancox.

Funding: Cancer Society of New Zealand.

### Smoking as an informed choice

Background and aims

Tobacco companies often argue that smoking is an informed adult choice, a claim that supports their suggestion they are supplying a "legal" consumer product. Our earlier work showed few young adults over the legal age at which they could purchase tobacco made deliberate and considered decisions to smoke. The next phases of the study involved a survey of young adult smokers and non-smokers, and a series of in-depth interviews and focus groups to explore measures that could promote "informed" choices. These measures ranged from education through to policy interventions, including endgame measures.

**Progress** 

One Phase 1 output has been published in *Tobacco Control* and another outlining Māori and Pacific young people's responses has been published in BMJ Open. An output from Phase 3 data was published in *Tobacco Control* in 2016 and two others are under review. Analyses of Phase 2 data are continuing with draft outputs in preparation.. Several conference papers using Phase 3 data had been presented and a workshop discussing the full findings was held in 2016 to share the findings with stakeholders.

Project team: Janet Hoek, Richard Edwards, Rebecca Gray, Jude Ball, Heather Gifford, Stephanie Erick and El-Shadan Tautolo.

Funding: Royal Society Marsden Fund.

# New Zealand adolescents' discouragement of smoking among their peers

#### Background and aims

Although there is much research on the negative impacts of peers on their friends' smoking behaviour, evidence shows that discouraging smoking among peers has been shown to be more common than peer influence on the promotion of smoking. Students who promote a non-smoking message may well influence the social norms within schools towards being smokefree, and lead to an opportunity for health education in schools to "co-opt" students as agents of change in spreading the Smokefree 2025 message. The aim of this research is to determine whether students discourage other students at their school from smoking, and what factors are associated with discouraging smoking amongst peers.

#### **Progress**

A paper has been submitted to the *Australian and New Zealand Journal of Public Health*. This research was presented as a poster at the *Society for Research on Nicotine and Tobacco 22nd annual meeting*, Chicago, USA, March 2016. It has also been accepted for presentation at the *Behavioural Research in Cancer Conference* in Melbourne, May 2017.

Project team: Louise Marsh, Ella Iosua, Rob McGee and Joanna White.

Funding: The Ministry of Health, Health Promotion Agency and Cancer Society of New Zealand.

# The association of smoking with drinking may provide opportunities to reduce smoking among students

#### Background and aims

Alongside smoking experimentation, many New Zealand university students binge drink. Although international evidence suggests many university students smoke when consuming alcohol, evidence from New Zealand would be of value because its restrictive tobacco marketing environment contrasts starkly with the liberal alcohol marketing and consumption environment. These regulatory disconnections make it possible for promotion of one product to foster uptake of another. We estimated current daily and non-daily smoking among university students in New Zealand, and associations with drinking patterns, demographics and smokefree status of the university.

#### Progress

This research has been accepted for publication in Kötuitui: New Zealand Journal of Social Sciences Online.

Project team: Louise Marsh, Kim Cousins, Andrew Gray, Kyp Kypri, Jennie Connor and Janet Hoek.

Funding: University of Otago, and Cancer Society.

# MĀORI AND PACIFIC TOBACCO CONTROL

The prevalence of smoking among both the Māori and Pacific populations in New Zealand is disproportionately high compared to the wider population. Progress against the 2025 goal is disappointing; research to evaluate the most effective approaches to reduce the incidence of smoking among Māori and Pacific people is a critical theme for the ASPIRE2025 group and our partners Whakauae Research Services, Eru Pomare Research Centre and Tala Pasifika. All of our research projects aim to include a Māori and Pacific focus, wherever appropriate.

# Smoking uptake and experiences among young adult Pacific

Background and aims

Smoking prevalence is higher among Pacific young adults than among their NZ European counterparts and progression from experimentation to regular smoking occurs more rapidly among Pacific young people than among either Māori or NZ European. This study, undertaken for the Health Promotion Agency, explored the cultural context of smoking and smokefree behaviours among young adult Pacific. Non-smokers saw smoking as alien to their identity and values while smokers were more influenced by the behaviour of their social networks, whether these were peer or family networks. Nearly all participants had been offered tobacco, which was easily available through social networks.

Progress

Data collection has concluded and two abstracts outlining the findings will be presented at the 2017 SRNT conference. A full paper examining social supply will be developed for submission in 2017.

Project team: El-Shadan Tautolo and Janet Hoek.

Funding: Health Promotion Agency.

# Research Funding

In late 2011, ASPIRE2025 achieved recognition as a University of Otago research theme. Research themes reflect pre-eminent areas of research activity that the University recognises and supports. In 2015 we were successful in our application to continue as a University of Otago research theme for a further five years.

During 2016 we carried out research funded by the Health Research Council, the Marsden Fund, the Quit Group and the University of Otago (UORG), and the Ministry of Health, amongst other funders.

Projects newly funded during 2016 included:

- Te Ara Auahi Kore TAKe project (Health Research Council)
- Supporting informed e-cigarette use: A mixed methods study (Health Research Council)
- FASE: Feasibility assessment of smart e-cigarettes (Health Research Council)
- · Covering our butts? Exploring responsibility for and potential solutions to tobacco product waste (UORG)
- Adolescent Smoking Decline Project (UORG and Wellington Cancer Society)
- · How does RYO tobacco use contribute to young adults' social identities (Commerce research grant)

We also acknowledge funding gained by partners of ASPIRE2025 which will help contribute to a tobacco-free Aotearoa. In 2016 this included:

• Me Mutu Kai Paipa – Improving the Provision of Cessation to New Zealand Smokers (Health Research Council). This project is led by Professor Chris Cunningham, Research Centre for Māori Health and Development, Massey University.

# Postgraduate and Summer Students

We view the recruitment and supervision of postgraduate research students as an important facet of ASPIRE2025 as we build capacity for tobacco control research in New Zealand and contribute to achieving the 2025 smokefree goal.

In 2016 we were delighted to have our first ASPIRE2025 PhD students complete their degrees:



Rebecca Gray (Investigation of exercise of informed choice by young adults starting smoking) – PhD



Lindsay Robertson (Regulation of tobacco retailing) – PhD

Congratulations also go to our international student, Manal Murad, who graduated with her Master's degree in Public Health. The title of Manal's thesis is: "Local authority Long Term Plans and Smokefree 2025: How committed are councils to the goal?"

We also had one summer student work with us:

• Lydia McMilllan - An exploration of information needs and concerns of e-cigarette users.

# Dissemination of ASPIRE2025 Research

# Dissemination of ASPIRE2025 research through sector and community engagement

ASPIRE2025 aims to be an international leader in tobacco control research and we work hard to ensure our findings are disseminated, understood and translated into actions that contribute to the Smokefree 2025 goal.

Specific translation initiatives include:

- Hosting a seminar series for the New Zealand tobacco control sector on topical issues;
- Attendance and presentation at international and national tobacco control conferences;
- Providing summaries of our research on our website, www.aspire2025.org.nz;
- Providing media releases, writing op-eds and blogs, and offering expert commentary;
- Making evidence-based policy submissions on tobacco control issues;
- Involvement in tobacco control sector advisory groups.

#### ASPIRE2025 Seminars

The ASPIRE2025 seminar series was a huge success in 2016, with six events held during the year including presentations from five international guests, all leaders in their field. This strategy of hosting senior public health and marketing academics who present research seminars on topical issues provides us with an excellent opportunity to showcase our own work and extend our reach into the community, policy and research sectors.

In 2016, each seminar was attended by over 60 people from all areas of tobacco control including government ministries, NGOs, DHBs and University staff and students. In order to further extend our reach, all ASPIRE2025 seminars were also offered through web-conferencing, which was again very well-received by the sector, particularly those people outside main centres. Content from each seminar is also made available on our website.



#### Councillor Richard Foster

It was an honour to host Councillor Richard Foster from Melbourne, Australia for our first seminar of 2016. Councillor Foster is an Australian leader in the creation of smokefree pedestrian areas and in his seminar, 'Thinking big on smokefree outdoor areas' he discussed Melbourne City's successful experience in making downtown areas smokefree including the processes involved, practical solutions and successes.



#### Dr Becky Freeman

The influence of social media is of growing importance for those working in tobacco control, so there was much interest in our second seminar, 'Tobacco control hashtags, shares, likes and LOLs'. Presented by Dr Becky Freeman from the University of Sydney, it covered the ways that social media can both advance and hinder our work in tobacco control.



#### Professor Jeff Colin

In March we were delighted to host Jeff Collin, Professor of Global Health Policy at the University of Edinburgh. His seminar 'Tobacco, trade and global health: The challenge of policy coherence' demonstrated the importance of going beyond legal analyses of trade agreements, highlighting the broader significance of the political economy of tobacco and trade. He argued that tobacco control strategies need to be situated within wider global health debates.



#### Associate Professor David Thomas and Pele Bennet

Our fourth seminar, 'Talking About The Smokes: Transforming the evidence to guide Aboriginal & Torres Strait Islander tobacco control' was presented by Australian researchers Associate Professor David Thomas and Pele Bennet. It was particularly pertinent to hear about what is working to reduce Aboriginal and Torres Strait Islander smoking, how they involved these communities in their study, and what potential implications there are for Māori tobacco control and research, in particular the TAKe project and the New Zealand ITC Project.



#### Dr Heather Gifford

'When good interventions go bad: Learning from failure' was the topic of a Public Health Seminar by Heather Gifford, founder of Whakauae Research for Māori Health and Development. Heather described an intervention study which was aimed at supporting Māori student nurses to quit smoking before graduation, but that never got off the ground. She discussed potential lessons from this failed initiative and implications for other projects and settings.



#### Professor Jim Thrasher

Our final seminar for 2016, 'Communicating about tobacco through product packaging and entertainment media', was presented by award-winning tobacco control researcher Associate Professor Jim Thrasher from the University of South Carolina, USA. He highlighted how marketing through tobacco packaging influences consumers' perceptions and behaviours, including recent research on "plain" packaging. He also discussed the role of entertainment media in promoting tobacco

use.

#### Public Health Summer School

In conjunction with the University of Otago's annual Public Health Summer School, ASPIRE2025 offered two very-well-attended 1-day courses in February 2016 on topics of current interest.

'Smokefree Urban Areas' was convened by George Thomson and explored critical questions about the evidence for smokefree outdoor area policies, how they are implemented and whether they are a good investment for local authorities. Presentations were made by a range of local authority, iwi and public health experts, including international guest, Councillor Richard Foster from Melbourne.

'From Facebook to Instagram: How social media is influencing public health' was presented by Dr Becky Freeman from University of Sydney. It proved to be a sell-out course with a very high level of interest from those wanting to learn how public health messages and initiatives can be communicated through social channels.



#### Conference Attendance and Invited Presentations

ASPIRE2025 members presented papers and posters at numerous international and local conferences in 2016.

Conferences attended are summarised below. For details of each paper or poster presented, please refer to the Research Outputs section of this report.

- · Society for Research on Nicotine and Tobacco (SRNT) 22nd Annual Meeting Chicago, USA, March 2016
- Public Health Seminar series Dunedin, New Zealand, April 2016
- Marketing and Public Policy Conference San Luis Obispo, USA, June 2016
- Macromarketing Conference Dublin, Ireland, July 2016
- Academy of Marketing Science 19th World Marketing Conference Paris, France, July 2016
- Society for Research on Nicotine and Tobacco (SRNT) Europe Conference Prague, Czech Republic, September 2016
- Australian and New Zealand Marketing Academy Conference Christchurch, New Zealand, December 2016
- Public Health seminar series Wellington, New Zealand, December 2016

ASPIRE2025 researchers are also frequently asked to give presentations at conferences, seminars and workshops. Events at which our researchers were invited to present to international groups during 2016 included:

- Berzelius symposium 92, Tobacco Endgame Swedish Style. Stockholm, Sweden, September, 2016.
- The 5th New Zealand Lung Cancer Conference, Thoracic Society of Australasia and New Zealand, Auckland, New Zealand, May, 2016.
- New Zealand Lung Day, Auckland, New Zealand, March, 2016.
- Society for Research on Nicotine and Tobacco (SRNT) 22nd Annual Meeting, Chicago, United States, March, 2016.
- National Cancer Institute 2016 Grantee Meeting on Emerging Research on Tobacco Product Warnings: Advancing Theory and Methods, Chicago, United States, February, 2016.

#### ASPIRE2025 website

The ASPIRE2025 website (aspire2025. org.nz) is a major publicity and dissemination medium for the group and in 2016 attracted around 15,000 page views. All new publications are promoted in summary form through the website.



#### Media Activities and Expert Commentary

We have had very strong media interest in our research findings. Many of our published papers have been accompanied by press releases, resulting in a high level of media coverage, and we are frequently asked to provide comment on policy developments.

Examples of coverage which included members of the ASPIRE team during 2016 include:

- January More action needed on Māori smoking rates Radio NZ, Māori TV (Richard Edwards)
- February Government told to keep hiking tobacco tax Fairfax, Otago Daily Times, New Zealand Herald (Nick Wilson)
- March Making cigarette sticks unattractive New Zealand Herald (Janet Hoek)
- April Call for clampdown on tobacco sales outlets Radio New Zealand (Janet Hoek)
- April Wellington city councillor suggests laws to deter smoking Fairfax (George Thomson)
- May Novel nicotine inhaler Otago Daily Times, New Zealand Herald (Julian Crane)
- June TV shows with smoking should be R-rated Radio New Zealand, Fairfax, New Zealand Herald (Nick Wilson)
- June Retail licensing scheme for tobacco New Zealand Herald (Janet Hoek)
- July Removal of point of sale displays working Otago Daily Times, NZ Doctor (Richard Edwards)
- July Fewer teens think smoking is 'cool' Fairfax (Stephanie Erick, Richard Edwards)
- July E-Cigarettes a health risk but less than tobacco New Zealand Herald, Otago Daily Times (Nick Wilson)
- August Government urged to go further on packaging Otago Daily Times (Janet Hoek)
- August Radical new laws to achieve Smokefree2025 Widespread (Richard Edwards)
- September Licensed retailing of electronic cigarettes New Zealand Herald (Nick Wilson)
- September Standardised packaging applauded Otago Daily Times (ASPIRE2025)
- September Stronger regulation of Roll Your Own tobacco TV3, Otago Daily Times, Fairfax, New Zealand Herald, Otago Daily Times (Janet Hoek)
- October Tobacco lockbox Yahoo, NZ City, MSN NZ (Janet Hoek)
- November New nicotine inhaler Television New Zealand (Julian Crane)
- December Smoking rates falling: Will we reach the Smokefree 2025 target? *Radio NZ, TVNZ, Fairfax* (Richard Edwards)

Many of these stories were also picked up internationally including by media in Australia, Bangladesh, Belgium, China, Denmark, India, Norway, Spain, United Kingdom and United States of America.

#### Blogs

ASPIRE2025 researchers wrote a number of blogs in 2016, to help translate the findings of our studies into discussion suitable for a general audience. Blogs are published on the blogsite Public Health Expert (blogs.otago.ac.nz/pubhealthexpert/) and often also syndicated to the Science Media Centre blogsite, Sciblogs. The topical issues addressed by our blogs in 2016 included:

- Should Smokefree Indoor Areas = Vapefree Areas?
- A Policy and Research Agenda for Roll-Your-Own Tobacco.
- Perspective: Options for Licensed Retailing of Nicotine-Containing E-Cigarettes in NZ.
- The hardening hypothesis for smoking but does the evidence point to "softening" in NZ?
- What does recent biomarker literature say about the likely harm from e-cigarettes?
- (Un)licensed to kill: do we need to regulate how tobacco is sold?
- New Zealand Can Lead the World in Tobacco Control: Plain Packaging 2.0.
- The Trans Pacific Partnership Treaty and tobacco: no cause to celebrate.

#### **Policy Submissions**

ASPIRE2025 researchers make regular policy submissions on tobacco control issues. In 2016 this included:

- Policy Options for the Regulation of Electronic Cigarettes
- Smokefree (Standardisation of Tobacco Packaging and Tobacco Products) Regulations
- New Zealand Government's Finance and Expenditure Budget Policy Statement 2016

#### Other contributions to the tobacco control sector

ASPIRE2025 members are fully engaged with tobacco control advocacy and practice supporting the achievement of the New Zealand's Smokefree 2025 goal. For example, in November 2016, a memorandum of understanding was signed between the national tobacco control advocacy organisation, Hāpai Te Hauora and both ASPIRE2025 and BODE3 from the University of Otago. Hāpai is an iwi owned organisation and is the only MoH funded organisation in NZ to focus on national tobacco control advocacy services. Richard Edwards and Andrew Waa are members of the Hāpai Expert Advisory Committee. Stephanie Erick is a Senior Advisor with Hāpai.

ASPIRE members also lead or participate in several tobacco control groups and organisations across the health and NGO sectors, including:

- Richard Edwards is a member of the Expert Advisory Group of the Asthma Foundation.
- Janet Hoek is a member of the Australian Government's Expert Advisory Group on plain packaging and of the Health Promotion Agency (HPA) Advisory group on refreshed health warnings.
- Andrew Waa is a Board Member of ASH New Zealand.
- Richard Edwards, Andrew Waa and Rob McGee are members of the Research Coordinating Group of the NZ Youth and Tobacco Monitor Survey.
- Lindsay Robertson is a member of the Cancer Society of New Zealand 'Reducing the retail availability of tobacco' working group.
- Stephanie Erick is a member of the HPA Smokefree Advisory group for the latest youth campaign and a member of the HPA Pacific Advisory Group.

The ASPIRE 2025 team also meet regularly with the tobacco control team at the Ministry of Health and work closely with the Health Promotion Agency, for example through contributions to the HPA Webinar series.

## ASPIRE2025 Research Outputs

### ASPIRE2025 Research Outputs 2016

#### **Book**

Barnett, R., Moon, G., Pearce, J., Thompson, L., & Twigg, L. (2016). *Smoking Geographies: Space, Place and Tobacco*. Oxford, UK: Wiley Blackwell.

#### **Articles**

- Ball, J., Edwards, R., Waa, A., & Tautolo, E-S. (2016). Stakeholder appraisal of selected tobacco endgame policy options in New Zealand. *Tobacco Regulatory Science*, 2017;3(1), 56-67. doi: 10.18001/TRS.3.1.6
- Ball, J., Stanley, J., Wilson, N., Blakely, T., & Edwards, R. (2016). Smoking prevalence in New Zealand from 1996-2015: A critical review of national data sources to inform progress toward the Smokefree 2025 goal. *New Zealand Medical Journal*, 129(1439), 11-22.
- Caldwell, B. O., & Crane, J. (2016). Combination nicotine metered dose inhaler and nicotine patch for smoking cessation: A randomized controlled trial. *Nicotine & Tobacco Research*, 18(10), 1944-1951. doi: 10.1093/ntr/ntw093
- Delany, L., Thomson, G., Wilson, N., & Edwards, R. (2016). Key design features of a new smokefree law to help achieve the Smokefree Aotearoa. *New Zealand Medical Journal*, 129(1439), 68-76.
- Edwards, R., Ajmal, A., Healey, B., & Hoek, J. (2016). Impact of removing point-of-sale tobacco displays: Data from a New Zealand youth survey. *Tobacco Control*. Advance online publication. doi: 10.1136/tobaccocontrol-2015-052764
- Edwards, R., Tu, D., Newcombe, R., Holland, K., & Walton, D. (2016). Achieving the tobacco endgame: Evidence on the hardening hypothesis from repeated cross-sectional studies in New Zealand 2008-2014. *Tobacco Control*. Advance online publication. doi: 10.1136/tobaccocontrol-2015-052860
- Gendall, P., Hoek, J., Edwards, R., & Glantz, S. (2016). Effect of exposure to smoking in movies on young adult smoking in New Zealand. *PLoS ONE*, 11(3), e0148692. doi: 10.1371/journal.pone.0148692
- Gifford, H., Tautolo, E.-S., Erick, S., Hoek, J., Gray, R., & Edwards, R. (2016). A qualitative analysis of Maori and Pacific smokers' views on informed choice and smoking. *BMJ Open*, 6(5), e011415. doi: 10.1136/bmjopen-2016-011415
- Hoek, J., & Smith, K. (2016). A qualitative analysis of low income smokers' responses to tobacco excise tax increases. *International Journal of Drug Policy*, 37, 82-89. doi: 10.1016/j.drugpo.2016.08.010
- Hoek, J., Ball, J., Gray, R., & Tautolo, E.-S. (2016). Smoking as an 'informed choice': Implications for endgame strategies. *Tobacco Control*. Advance online publication. doi: 10.1136/tobaccocontrol-2016-053267
- Hoek, J., Ferguson, S., Court, E., & Gallopel-Morvan, K. (2016). Qualitative exploration of young adult RYO smokers' practices. *Tobacco Control*. Advance online publication. doi: 10.1136/tobaccocontrol-2016-053168
- Marsh, L., Cameron, C., Quigg, R., Hoek, J., Doscher, C., McGee, R., & Sullivan, T. (2016). The impact of an increase in excise tax on the retail price of tobacco in New Zealand. *Tobacco Control*, 25, 458-463. doi: 10.1136/tobaccocontrol-2015-052259
- Marsh, L., Cousins, K., Gray, A., Kypri, K., Connor, J. L., & Hoek, J. (2016). The association of smoking with drinking pattern may provide opportunities to reduce smoking among students. *Kotuitui*, 11(1), 72-81. doi: 10.1080/1177083X.2015.1128953
- Marsh, L., McGee, R., Robertson, L., Ward, M., & Llewellyn, R. (2016). Little change in tobacco imagery on New Zealand television: 10 years on. *Australian & New Zealand Journal of Public Health*, 40(3), 218-220. doi: 10.1111/1753-6405.12527
- Robertson, L., Cameron, C., McGee, R., Marsh, L., & Hoek, J. (2016). Point-of-sale tobacco promotion and youth smoking: A meta-analysis. *Tobacco Control*. Advance online publication. doi: 10.1136/tobaccocontrol-2015-052586
- Robertson, L., Gendall, P., Hoek, J., Cameron, C., Marsh, L., & McGee, R. (2016). Smokers' perceptions of the relative effectiveness of five tobacco retail reduction policies. *Nicotine & Tobacco Research*. Advance online publication. doi: 10.1093/ntr/ntw193
- Signal, L. N., Bowers, S. G., Edwards, R., Gifford, H., Hudson, S., Jenkin, G. L. S., Lanumata, T. S., Russell, M. L., Thomson, G., & Walton, M. D. (2016). Process, pitfalls and profits: Lessons from interviewing New Zealand policy-makers. *Health Promotion International*. Advance online publication. doi: 10.1093/heapro/daw065
- Tu, D., Newcombe, R., Edwards, R., & Walton, D. (2016). Socio-demographic characteristics of New Zealand adult smokers, exsmokers and non-smokers: Results from the 2013 Census. *New Zealand Medical Journal*, 129(1447), 43-56.
- Waa, A. M., Hoek, J., Edwards, R., & Maclaurin, J. (2016). Analysis of the logic and framing of a tobacco industry campaign opposing standardised packaging legislation in New Zealand. *Tobacco Control*. Advance online publication. doi: 10.1136/tobaccocontrol-2016-053146
- Wilson, N., Thomson, G. (2016). Survey of smokefree signage at playgrounds: The potential value of comparisons with dog control signage. *Australian & New Zealand Journal of Public Health*. Advance online publication. doi: 10.1111/1753-6405.12540
- Wilson, N., Thomson, G. (2016). Surveying all outdoor smokefree signage in contrasting suburbs: Methods and results. *Health Promotion Journal of Australia* (In press)

#### Other articles (letters, viewpoints, editorials)

- Ball, J., Edwards, R., Waa, A., Bradbrook, S. K., Gifford, H., Cunningham, C., Hoek, J., Blakely, T., Wilson, N., Thomson, G., & Taylor, S. (2016). Is the NZ Government responding adequately to the Māori Affairs Select Committee's 2010 recommendations on tobacco control? A brief review [Letter]. *New Zealand Medical Journal*, 129(1428), 93-97.
- Delany, L., Thomson, G., Wilson, N., & Edwards, R. (2016). Key design features of a new smokefree law to help achieve the Smokefree Aotearoa New Zealand 2025 Goal [Viewpoint]. *New Zealand Medical Journal*, 129(1439), 68-76.
- Edwards, R. (2016). New research on secondhand smoke: Implications for research and practice [Editorial]. *Nicotine & Tobacco Research*, 18(11), 2045-2046. doi: 10.1093/ntr/ntw279
- Robertson, L., Marsh, L., Edwards, R., Hoek, J., van der Deen, F. S., & McGee, R. (2016). Regulating tobacco retail in New Zealand: What can we learn from overseas? [Viewpoint]. *New Zealand Medical Journal*, 129(1432), 74-79.
- Wilson, N., Edwards, R., Hoek, J., Thomson, G., & Jaine, R. (2016). Could New Zealand's law on "new psychoactive substances" provide lessons for achieving the Smokefree 2050 goal? [Letter]. *New Zealand Medical Journal*, 129(1432), 94-96.
- Wilson, N., Oliver, J., & Thomson, G. (2016). Ten years of a national law covering smoke-free school grounds: A brief review [Research letter]. *Tobacco Control*, 25(1), 122. doi:10.1136/tobaccocontrol-2014-052127

#### Reports

- Ball, J., Waa, A., Tautolo, E.S., Edwards, R. (2016). Future directions to achieve Smokefree 2025? Stakeholder perceptions of the smokefree 2025 goal and selected 'game-changer' policies for achieving it. Public Health Monograph Series 2016: 1. University of Otago, Wellington.
- Dick, G., Hoek, J., Wu, K. (2016). Where and how are e-cigarettes sold? Initial analysis to identify Brick and Mortar retailers of electronic cigarettes in Dunedin. Report prepared for Ministry of Health.
- Edwards, R., Bullen, C., Walker, N., Hoek, J., Beaglehole, R. (2016). *Background paper: E-cigarettes and their potential contribution to achieving the Smokefree 2025 goal*. National Smokefree Working Group, Wellington, August 18, 2016.
- Edwards, R., Waa, A., Hoek, J., Marsh, L., Robertson, L., Tautolo, E-S. (2016). Observations from SRNT Chicago 2016.
- Ferguson, S., Hoek, J., Mulconroy, M. (2016). A typology of young adult roll-your-own tobacco users. Report prepared for Ministry of Health.
- Ferguson, S., Hoek, J., Banks, C. (2016). A qualitative exploration of mods users' motivations and behaviours. Report prepared for Ministry of Health.
- Hoek, J., Ferguson, S., Court, E. (2016). *RYO tobacco use among young adult smokers: A qualitative analysis of perceptions and usage practices.* Report prepared for Ministry of Health.
- Tautolo, E-S., Hoek, J. (2016). *Pacific young adults' knowledge, attitudes and behaviours around smoking*. Report prepared for the Health Promotion Agency.
- Thomson, G., Martin, J., Gifford, H., & Parata, K. (2016). *Expanding smokefree outdoor areas in Wellington City: Rationale and options*. University of Otago, Wellington.
- Thomson, G., Martin, J., Gifford, H., Parata, K., Wilson, N. (2016) *Issues and options for progress towards a smokefree city: A case study for smokefree outdoor policies*. University of Otago, Wellington.
- Thomson, G., Pathmanathan, N. (2016) *The point prevalence of smoking in selected sports fields and downtown locations in Wellington: Observations in November 2015.* University of Otago, Wellington.
- Wilson, N., Thomson, G. (2016) Evaluating smokefree compliance in a large smokefree park: Methods, issues and results. University of Otago, Wellington.

#### Conference presentations / seminars / symposiums

- Ball, J., Edwards, R., Waa, A., & Tautolo, E.-S. (2016). Appraisal of radical options for achieving New Zealand's Smokefree 2025 goal: Maori, Pacific, and policy experts perspectives. Presented at 22nd Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting, Chicago, USA, March 2016.
- Eckert, C., Gendall, P., Hoek, J., & Louviere, J. (2016). Are social warnings the new frontier in standardised tobacco packaging? Presented at *Australian and New Zealand Marketing Academy Conference (ANZMAC)*, Christchurch, New Zealand, December 2016.
- Edwards, R., Gray, R., & Hoek, J. (2016). Do young adults exercise informed choice about smoking as the tobacco industry claim? Presented at 22nd Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting, Chicago, USA, March 2016.

- Edwards, R., Hoek, J., Thomson, G., Jaine, R., & Wilson, N. (2016). The world's first regulated legal market for psychoactive substances: Relevance to tobacco control? Presented at 22nd Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting, Chicago, USA, March 2016.
- Edwards, R., Thomson, G., Wilson, N., & Collins, D. (2016). Attitudes to outdoor smokefree policies in the USA and Canada. Presented at 22nd Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting, Chicago, USA, March 2016.
- Gendall, P., Hoek, J., Eckert, C., Louviere, J., Farley, T., Edwards, R., & Wilson, N. (2016). Impact of standardised packaging relative to a tobacco price increase: Results of two experiments. Presented at 22nd Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting, Chicago, USA, March 2016.
- Gendall, P., & Hoek, J. (2016). Evaluating the emotional impact of dissuasive images and messages on smokers and non-smokers.

  Presented at *Australian and New Zealand Marketing Academy Conference (ANZMAC)*, Christchurch, New Zealand, December 2016.
- Hoek, J., Ferguson, S., Court, E., & Gallopel-Morvan, K. (2016). An exploration of ritualistic practices among young adult RYO smokers. Presented at Australian and New Zealand Marketing Academy Conference (ANZMAC), Christchurch, New Zealand, December 2016.
- Hoek, J., Hinder, C. (2016). A qualitative analysis of smokefree messages targeting LGBA smokers. Presented at 22nd Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting, Chicago, USA, March 2016.
- Hoek, J., Ball, J., Gifford, H., Tautolo, E.S., Taylor, T., & Erick, S. (2016). When should a nudge become a shove? Young adult smokers' perceptions of tobacco endgame strategies. Presented at *Marketing and Public Policy Conference*, San Luis, Obispo, USA, June 2016.
- Hoek, J. (2016). How could social movements promote tobacco endgames? Presented at Macromarketing Conference, Dublin, July 2016.
- Hoek, J., Thrul, J., & Ling, P. (2016). Motivations for e-cigarette use among young adults. Presented at *Academy of Marketing Science 19th World Marketing Conference*, La Defence, Paris, France, July 2016.
- Marsh, L., & Robertson, L. (2016). New Zealand's tobacco retail landscape: Problems and potential strategies. Presented at *Public Health Seminar Series*, University of Otago, Dunedin, New Zealand, April 2016.
- Marsh, L., Ajmal, A., McGee, R., Robertson, L., Doscher, C., & Cameron, C. (2016). Tobacco retail outlet density and risk of youth smoking in New Zealand. Presented at 22nd Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting, Chicago, USA, March 2016.
- Marsh, L., Iosua, E., McGee, R., & White, J. (2016). New Zealand adolescents' discouragement of smoking among their peers. Presented at 22nd Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting, Chicago, USA, March 2016.
- Marsh, L., McGee, R., Robertson, L., Ward, M., & Llewellyn, R. (2016). Tobacco imagery on New Zealand television: Ten years on. Presented at 22nd Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting, Chicago, USA, March 2016.
- Maynard, O., Gove, H., Hoek, J., Leonards, W., Barry, R., Robinson, A., & Munafò, M. (2016). The impact of health warning immediacy on visual attention. Presented at *SRNT Europe Conference*, Prague, September 2016.
- Robertson, L., Cameron, C., McGee, R., Marsh, L., & Hoek, J. (2016). Point-of-sale tobacco promotion and youth smoking: A meta-analysis. Presented at 22nd Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting, Chicago, USA, March 2016.
- Robertson, L., Hoek, J., Gendall, P., Marsh, L., Cameron, C., & McGee, R. (2016). New Zealand smokers' perceptions of the effects of five theoretical tobacco retail reduction policies. Presented at 22nd Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting, Chicago, USA, March 2016.
- Robertson, L., Marsh, L., McGee, R., Hoek, J., & Gendall, P. (2016). New Zealand smokers' views of financial incentives to quit smoking. Presented at 22nd Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting Chicago, USA, March 2016.

#### **Invited Presentations**

- Edwards, R. Tobacco free New Zealand 2025. Invited presentation at *Berzelius symposium 92*, *Tobacco Endgame Swedish Style*. Stockholm, September 2016.
- Edwards, R. Tobacco control and ASPIRE 2025 where are we in 2016? Invited presentation at *The 5th New Zealand Lung Cancer Conference*, Thoracic Society of Australasia and New Zealand, Auckland, May 2016.
- Edwards R. Smokefree 2025. Invited presentation at New Zealand Lung Day, Auckland, March 18 2016.
- Hoek J, Walker, N. Co-Chairs and discussion leaders. Invited expert discussion on tobacco endgames. *Society for Nicotine and Tobacco Conference*, Chicago, March 01-05.
- Hoek, J. Invited presenter, *National Cancer Institute 2016 Grantee Meeting* on Emerging Research on Tobacco Product Warnings: Advancing Theory and Methods. Chicago, 29 February.

#### **Blogs**

- Edwards, R. (2016) The Hardening Hypothesis For Smoking But Does The Evidence Point To "Softening" in NZ? *Public Health Expert* https://blogs.otago.ac.nz/pubhealthexpert 22 August 2016.
- Hoek, J., Gallopel-Morvan, K., Edwards, R., Blakely, T. (2016) A Policy and Research Agenda for Roll-Your-Own Tobacco *Public Health Expert* 19 September 2016. Re-posted at Science Media Centre: http://sciblogs.co.nz/public-health-expert/2016/09/19/roll-tobacco-policy-agenda/
- Hoek, J., Gendall, P. (2016) New Zealand Can Lead the World in Tobacco Control: Plain Packaging 2.0. *Public Health Expert* 10 March 2016. Re-posted at Science Media Centre http://sciblogs.co.nz/public-health-expert/2016/03/10/new-zealand-can-lead-the-world-in-tobacco-control-plain-packaging-2-0/
- Robertson, L., Hoek, J., Edwards, R., Marsh, L. (2016) (Un)licensed to Kill: Do We Need To Regulate How Tobacco Is Sold? *Public Health Expert* 21 April 2016. Re-posted at Science Media Centre: http://sciblogs.co.nz/public-health-expert/2016/04/21/unlicensed-kill-need-regulate-tobacco-sold/
- Wilson, N., Hoek, J., van der Deen, F.S, Thomson, G., Edwards, R. (2016) Perspective: Options for Licensed Retailing of Nicotine-Containing E-Cigarettes in NZ. *Public Health Expert*. https://blogs.otago.ac.nz/pubhealthexpert 8 September 2016. Also on SciBlogs. Available at: http://sciblogs.co.nz/public-health-expert/2016/09/08/options-retailing-e-cigarettes-nz/
- Wilson, N., Gartner, C., Edwards, R. (2016) What Does Recent Biomarker Literature Say About The Likely Harm From E-Cigarettes? *Public Health Expert* https://blogs.otago.ac.nz/pubhealthexpert 4 July 2016.
- Wilson, N., Hoek, J., Thomson, G., Edwards, R. (2016) Should Smokefree Indoor Areas = Vapefree Areas? *Public Health Expert* https://blogs.otago.ac.nz/pubhealthexpert 3 October 2016.

#### Theses

Gray, R. J. (2016). Do young adults make informed choices about smoking? (Thesis, Doctor of Philosophy). University of Otago. Robertson, L. (2016). Regulating the tobacco retail environment in New Zealand (Thesis, Doctor of Philosophy). University of Otago.

#### Submissions

- Edwards, R., Beaglehole, R., Bullen, C. Walker, N., & Hoek, J. Submission on Policy Options for the Regulation of Electronic Cigarettes, September 2016.
- Edwards, R., Beaglehole, R., Bullen, C. Walker, N., & Hoek, J. E-Cigarettes And Their Potential Contribution To Achieving The Smokefree 2025 Goal. Submission background paper. August 2016.
- Hoek, J. (on behalf of named ASPIRE 2025 and NIHI researchers). Submission on the Smoke-free (Standardisation of Tobacco Packaging and Tobacco Products) Regulations, June 2016.
- Marsh, L., Robertson, L., & McGee, R. Submission on the New Zealand Government's Finance and Expenditure Budget Policy Statement 2016, January 2016.
- Marsh, L., Robertson, L,. & McGee, R. Submission on Policy Options for the Regulation of Electronic Cigarettes, September 2016.

#### **Awards**

- Hoek, Janet. Reviewer of the Year Award, *Tobacco Control*. Eight of 580 reviewers were honoured; http://tobaccocontrol.bmj.com/content/25/1/1.full.pdf+html
- Robertson, Lindsay. World Heart Foundation Emerging Leaders programme.
- Robertson, Lindsay. Department of Preventive and Social Medicine Early Career Research Award.
- Robertson, Lindsay. Awarded post-doctoral fellowship, Department of Preventive and Social Medicine.

### ASPIRE 2025









