

Tobacco Policy

Using evidence for better outcomes

**The Royal Australasian College of Physicians
(RACP)**

and

**The Royal Australian and New Zealand College
of Psychiatrists
(RANZCP)**

Suggested citation: The Royal Australasian College of Physicians and the Royal Australian and New Zealand College of Psychiatrists. Tobacco Policy: Using evidence for better outcomes. Sydney: RACP and RANZCP, 2005

© Royal Australasian College of Physicians 2005
ISBN 0-909783-53-5

Further copies are available from:
Policy and Communications, RACP
145 Macquarie Street
Sydney, New South Wales 2000, Australia
Tel +612 9256 9600, Fax +612 9256 9610
Email: hpu@racp.edu.au website: www.racp.edu.au

TABLE OF CONTENTS

Acknowledgements	4
Foreword	6
Executive Summary	7
Recommendations	9
Introduction	19
People and Populations	26
1: Prevent progression from regular cigarette smoking to tobacco-delivered nicotine addiction and dependence	26
2: Priority populations – children and young people	28
3: Priority populations – Indigenous peoples	30
4: Priority populations – People living with a mental illness	33
5: Priority populations – Pregnant women	37
6: Training in counselling for clinicians	39
7: Affordable Nicotine Replacement Therapy (NRT) and other pharmaceuticals	41
Settings	42
8: Schools as settings to delay initiation (prevention).....	42
9: Home, work and hospitality.....	44
10: Hospitals, public amenities and other institutions	48
Public Policy Strategy	52
11: Smoking tobacco product promotion and marketing.....	52
12: Pharmaceutical Benefits Scheme (PBS) listing for Nicotine Replacement Therapy (NRT) and other pharmaceuticals.....	54
13: Community awareness and education for better health	56
14: Taxation, trade and pricing	58
15: Harm reduction.....	62
Where to Next?	64
References	65

Acknowledgements

The Colleges would like to acknowledge the following individuals who contributed to the policy document:

Key working group

Dr Martin Bicevskis FAFOM

Australasian Faculty of Occupational Medicine

Ms Viki Briggs, Director, Centre for Excellence in Indigenous Tobacco Control
Aboriginal and Torres Strait Islander Health working group

Dr Murray Laugesen FAFPHM

Australasian Faculty of Public Health Medicine (New Zealand)

Dr Peter Martin FRACP

Thoracic Society of Australia and New Zealand

Dr Mark E Montebello FRANZCP FACHAM

RANZCP

Professor Bill Musk AM FRACP FAFOM (Co-Chair)

Thoracic Society of Australia and New Zealand

Dr Johnn Olsen, FAFOM

Australasian Faculty of Occupational Medicine

Ms Mary Osborn, RACP

Senior Policy Officer, Policy and Communications

Dr Philip Pattemore FRACP

Paediatrics & Child Health Division (New Zealand)

Dr Adrian Reynolds FACHAM

Australasian Chapter of Addiction Medicine

Dr Rob Roseby FRACP

Paediatrics & Child Health Division

Associate Professor Susan Sawyer FRACP

Paediatrics & Child Health Division

Ms Anita Tang

The Cancer Council NSW

Mrs Robin Toohey AM

Consumer Health Forum of Australia

Professor Jeanette Ward FAFPHM (Co-Chair until February 2005)

Australasian Faculty of Public Health Medicine

Associate Professor Kay Wilhelm FRANZCP

The Colleges would like to acknowledge the following corresponding organisations and people contributing substantially to the policy document:

Professor Jim Hyde, Director Policy and Programs/ ASH Board Member

Australasian Council of Prisoner Health Services

Ms Anne Jones, Chief Executive of ASH Australia

Ms Michelle Scollo, Co-Director, VicHealth Centre for Tobacco Control

Foreword

Nominees from the Royal Australasian College of Physicians and the Royal Australian and New Zealand College of Psychiatrists have worked together with the Centre for Excellence in Indigenous Tobacco Control and other organisations to produce a fresh and innovative policy document for both Colleges about tobacco smoking.

We believe that this document conveys new and effective solutions for tobacco control and will change the way physicians and psychiatrists view their role in reducing mortality and morbidity due to tobacco smoking.

Every recommendation in this document is important.

We hope that individual Fellows will refer to this document to meet their responsibilities in promoting the health and well-being of their patients whether children, young people or adults. In turn the Colleges, as peak professional bodies in Australia and New Zealand commit to an agenda for public health advocacy and organisational action that will further support Fellows' endeavours.

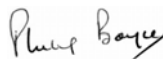
In this document, particular attention has been afforded to the cycle of disadvantage arising from socio-economic factors that clearly contribute to the patterns of smoking tobacco observed in modern societies. Fortunately, these are within the realm of governments and industry to change. Hence, this document presents a realistically funded, comprehensive tobacco control program that will bring together all contributing interests in a concerted effort to promote optimal health for Australians and New Zealanders.

This document states explicitly the obligation each College has to work alongside governments to reduce smoking tobacco. The policy document was an initiative from the Australasian Chapter of Addiction Medicine. It makes up the second of four policies on addiction medicine.

Each College commits to the provision of training and professional development programs at all levels of medical education to ensure that all Fellows in Australia and New Zealand can contribute effectively to the reduction of cigarette smoking.



Dr Jill Sewell
President
RACP
February 2005



Dr Philip Boyce
President
RANZCP
February 2005

Executive Summary

This document is a joint initiative between the Royal Australasian College of Physicians (RACP) and the Royal Australian and New Zealand College of Psychiatrists (RANZCP) to enable Fellows to take a leading role in tobacco control. The idea for this policy came from the Australasian Chapter of Addiction Medicine (AChAM). The AChAM will take the lead in implementing the recommendations. Physician and psychiatrists have a **'duty of care'**. The Royal College of Physicians (London) produced the first official report on cigarette smoking and health in 1962.¹ Our two Colleges now have reviewed developments since then. This report reflects the substantial progress made and leadership shown in our part of the world in tobacco control. While much has been achieved, control of smoking tobacco will regress unless our efforts are renewed. There is a need to radically reduce the uptake of cigarette smoking among the young.

Patterns of smoking tobacco also exhibit a significant socio-economic determination that requires commitment at the highest level to redress. As this document also shows, the greatest gain can be achieved by working in partnership with Indigenous communities to promote health and well-being in culturally safe ways. Unless we apply a rigorous and defensible evidence-based approach to tobacco control, tobacco control will languish for another 40 years, far beyond the lifespan of the authors of this report.

We can do better

By reducing the number of people who smoke and reducing the number of people who ever commence, we will begin to make a difference. Eventually, smoking cigarettes will become less socially acceptable. There will be less emphasis on 'victims' and greater recognition that population rates of cigarette smoking result from macro-economic forces in which it's virtually impossible for individuals to maintain health-promoting lifestyles. Disempowerment of individuals is recognised by the Colleges as an increasing contributor to smoking of tobacco. If smoking tobacco is seen as a behaviour arising from overwhelming social influences, then it can no longer be considered or debated as an individual 'choice'.

Irrespective of their specialisations, Fellows of these two Colleges will have seen the ravages of tobacco smoking. They also will acknowledge that an unbalanced focus in any policy document on interventions at *late* stages of disease is short sighted. Hence, this document first recognises the need for *early* intervention by physicians and psychiatrists in tobacco smoking by patients with depression, diabetes, asthma, chronic obstructive airways disease, vascular disease and tobacco-attributable cancer. Smoking of tobacco also features in addictions and drug dependency. This document also emphasises the need to improve access of smokers to affordable treatments. In addition, this document demonstrates that the social environment and factors that promote smoking tobacco also must change. Rates of 'ever

commencing' smoking tobacco must diminish. The Colleges are keen, that in the light of the overwhelming evidence for tobacco control, that effective action is taken against promotion of cigarette smoking. Exposure to environmental tobacco now must be recognised as a public health hazard beyond the control of the individual.

The increased adverse risk to health from environmental exposure has prompted the introduction of smoke-free air and train travel to protect 'innocent bystanders'. This document strengthens and extends this public health approach to ensure that future efforts in tobacco control will continue to make a significant difference. Thus, initiatives in diverse settings such as schools, early childhood programs and smoke-free workplaces are also recommended. As pricing, retail practices, and taxation predict reductions in population cigarette smoking rates, these too are reviewed and specific strategies are endorsed. This public health approach recognises the value of action by physicians and psychiatrists for individual patients alongside consensus-led organisational interventions by the Colleges themselves to change public policy.

Working with Indigenous populations

In Australia, half of the Indigenous population smoke cigarettes and this percentage (51 per cent) has not decreased since 1990.² In New Zealand, half of the Māori population smoke and this percentage (51 per cent) has not decreased since 1990.³ Similarly, cigarette smoking has not declined in Pacific Island peoples in New Zealand since 1990.³ Previous responses to tobacco control among these communities with the least social power in our modern societies have been relatively ineffective. The Colleges advocate a fresh start. The way forward must assure affordable, effective, culturally safe and accessible strategies for Indigenous people. As non-Indigenous leaders must no longer impose their own culturally determined views and recommendations upon Indigenous people, the Colleges assert the fundamental significance of long-term investment in building capacity and self-determination by Indigenous peoples as a precondition for their better health.

This document complements key strategies also endorsed as follows:

- *Australian National Tobacco Strategy 2004 – 2009*;⁴
- *The Aboriginal and Torres Strait Islander Peoples' Complementary Action Plan 2003 – 2006*;² and,
- *The National Māori Tobacco Control Strategy: 2003-2007*.⁵

Where to from here?

Fellows will find ten recommendations representing a comprehensive tobacco control program that will promote better health and well-being for Australians and New Zealanders now and in the future. Each of these recommendations has unique value, therefore, has not been ranked. Readers of this policy document may also refer to the accompanying implementation strategy and resource links including a two page fact sheet at www.racp.edu.au

Recommendations

1. The RACP and the RANZCP recognise that cigarette smoking is a major health and human rights issue requiring further action for change.

The redress of inequities in health outcomes and the reduction of disease for people who smoke cigarettes is a matter of health equity and not just a human rights issue.

Accordingly the Colleges will

Advocate for the Australian State and Territory governments and New Zealand government to:

- Ensure that all public institutions are fully smoke-free;
- Fund professional services and subsidise pharmaceuticals to assist smokers to quit cigarette smoking;
- Ensure that pregnant women and their partners obtain individual treatment to give up cigarette smoking and to support them by all means available;
- Work with Indigenous people to assess the social, cultural and economic factors influencing uptake of tobacco smoking;
- Promote awareness that tobacco-delivered nicotine dependency is associated with increasing risk of psychiatric disorders (which includes nicotine and other substance dependence disorders);
- Ensure that research strategies reduce the harm for those who do not quit;
- Ensure that research is undertaken that is beneficial to disadvantaged people, families and communities;
- Advocate to research the potential benefits, costs and feasibility of promoting use of alternative forms of nicotine and of non-smoking tobacco; and,
- Build capacity of health services for tobacco smoking control.

2. The RACP and the RANZCP recognise that proactive measures to reduce the burden of disease on the population of cigarette smokers will require comprehensive health and medical measures.

Cigarette smokers must change many entrenched behaviours if they want to quit. Tobacco-delivered nicotine addiction is often the main reason people continue to smoke. Behaviour modification must therefore be a major part of any smoking cessation program. A pharmacological approach is the most successful aid to behavioural change.

Accordingly the Colleges will

Advocate for the Australian State and Territory governments and New Zealand government to:

- Encourage medical practitioners and healthcare institutions to diagnose cigarette smoking as a major health condition;
- Adopt policies that ensure treatment of cigarette smoking is given the same public and professional recognition as other chronic conditions;
- Implement effective treatments and other programs to aid smokers to quit;
- Encourage all smokers to seek individual treatment to give up cigarette smoking and support them by all means available;
- Ensure the availability of quit programs with subsidised nicotine replacement;
- Actively encourage the use of pharmacological agents known to expedite nicotine withdrawal;
- Provide for ongoing research into, and consideration of, a range of methods to reduce nicotine from cigarette smoking; and,
- Consult with all relevant Government agencies and Indigenous community bodies and other organisations to achieve these policies and strategies.

3. The RACP and the RANZCP believe that tobacco taxes must be increased and then dedicated to evidence-based efforts to reduce cigarette smoking in the population.

Increases in the price of cigarette smoking are the most effective means of encouraging population-level reductions in cigarette smoking levels. Young people's smoking tobacco consumption is particularly sensitive to variations in price or in their own weekly income. The community is more likely to support tax increases on cigarettes if the revenue raised is directed towards helping cigarette smokers quit and preventing uptake of cigarette smoking. The value and impact of tobacco taxes must be protected against inflation.

Accordingly the Colleges will

Advocate for the Australian State and Territory governments and New Zealand government to:

- Increase the real price of smoking tobacco products by 2–5 per cent every year;
- Allocate the increased revenue to enhance tobacco control programs including smoking cessation programs, prevention programs;
- Treat tobacco taxation as a health issue;

- Notify the public in advance of the tax increase so that smokers and quitting services can maximise the health gains; and,
- Allocate the power to regulate the sale of smoking tobacco (as occurs for alcohol in some communities) to Indigenous communities.

4. The RACP and the RANZCP believe that it is necessary to counteract the marketing and promotion of tobacco products so that it is no longer regarded as normal to smoke cigarettes.

The elimination of all promotion of tobacco smoking products by those in the tobacco trade will discourage the positive portrayals of cigarette smoking. The media assist in the normalisation of cigarette smoking, prompts young people to experiment with smoking, hinder smokers to postpone quitting, and encourage quitters to relapse and ex-smokers to resume cigarette smoking.

Accordingly the Colleges will

Work in partnership with the Australian State and Territory and New Zealand governments, the National Public Health Partnership (NPHP) and the Ministerial Council on Drug Strategy (MCDS) to:

- Ensure tobacco packet labels graphically warn smokers of the dangers of smoking tobacco in line, with the Framework Convention for Tobacco Control (FCTC);
- Require smoking tobacco products to be placed out of sight at all retail outlets;
- Require quit messages to be placed at all points of retail;
- Prohibit emerging forms of smoking tobacco advertisements and promotions aimed at young people;
- Support efforts that require anti-smoking advertisements to be run where smoking tobacco advertisements or smoking tobacco funded promotions are being held;
- Advocate for the review of the Tobacco Advertising Prohibition Act (TAPA) every three years;
- Ensure that the Australian State and Territory and New Zealand governments increase their combined expenditure on mass anti-smoking campaigns; and,
- Institute immediate, middle and long-term campaign policies and strategies, with accompanying research into their effectiveness.

5. The RACP and the RANZCP believe smoke-free environments will reduce the harm caused by exposure to environmental tobacco smoke (ETS) and that everyone has a right to a smoke-free environment.

The evidence about the harms from exposure to ETS, together with an increasing awareness about employers' duty of care to employees, clients and customers, has led to the rapid escalation of cigarette smoking restrictions in many workplaces and public places.

Accordingly the Colleges will

Advocate for the Australian State and Territory governments and New Zealand government to:

- Ensure funding for media campaigns for smoke-free homes and cars;
- Press for institutional policies to assist smokers to quit, thus breaking the cycle of parental cigarette smoking, smoky home, glue ear, asthma in children, and heart disease and stroke in adults;
- Complete the transition to smoke-free workplaces, hospitality venues, prisons and mental health institutions and public places such as around children's playgrounds, sporting stadiums and playing fields;
- Ensure smoke-free activities include media support for the cigarette smoking population before, during and after the implementation date for any further bans on cigarette smoking, and provide practical advice for smokers to quit;
- Fund and build the capacity of mental health services to promote smoke-free institutions and assist staff and patients to quit; and,
- Ensure hospitals, clinics and health care centres are smoke-free environments.

6. The RACP and the RANZCP believe that research agendas of funding bodies must address gaps in evidence, in order to continuously improve the body of evidence on effective tobacco control.

Funding for tobacco control research is reported to be at a historic low. There is good evidence that research into tobacco control and the consequent results have proven to be cost effective in saving potential years of life lost from tobacco smoking mortality and morbidity.

Accordingly the Colleges will

Advocate for the Australian State and Territory governments and New Zealand government to:

- Commission research to ensure more effective policies and programs, including the funding of research into innovative program development;
- Use research findings to inform the funding and selection of strategies, policies and programs;
- Fund innovative research and programs that demonstrate effectiveness;
- Research more effective policies to increase successful quitting and to reduce the harm for those who do not quit;
- Encourage pharmaceutical companies to develop new ways to deliver Nicotine Replacement Therapy (NRT) and to undertake further study on appropriate drugs to treat smoking tobacco dependence;
- Encourage research into NRT and disseminate the results to College members; and,
- Increase scientific research capacity that is independent of the tobacco industry.

7. The RACP and the RANZCP believe that funding for anti-smoking programs in schools and the community should be sufficient to ensure that children are educated independently of the tobacco industry.

The tobacco industry has an obvious conflict of interest when it comes to the education of their future customers against cigarette smoking. The age of initiation into smoking tobacco is related to adverse outcomes. Smoking tobacco among young people is characterised by clear developmental stages and changes over time in relation to age.

Accordingly the Colleges will

Advocate for the Australian State and Territory governments and New Zealand government to:

- End the involvement of tobacco companies in educating students about tobacco smoking;
- Introduce levies for health promotion that are uniform across all jurisdictions to cover costs associated with health promotion activities; and,
- Introduce education programs for schools to discourage cigarette smoking initiation and encourage the progress towards smoke-free lifestyles as the norm.

8. The RACP and the RANZCP recognise that specific education programs are required for basic trainees, advanced trainees and for Continuing Professional Development (CPD).

Healthcare professionals who receive training in smoking cessation are more likely to perform tasks of smoking cessation. More than sixty per cent of smokers said that if they were to decide to quit, they would opt for some form of quit cigarette smoking program delivered by a medical practitioner or other health professional.

Accordingly the Colleges will

Advocate for policies that will increase the awareness and capacity of health professionals to take an active role in tobacco control by:

- Reinstating financial support to allow medical schools to train medical students more systematically and comprehensively to intervene effectively with patients who smoke;
- Increasing expertise for Aboriginal and Torres Strait Islander and Maori health workers as tobacco control experts;
- Ensuring tobacco control is on the agenda at both Colleges' scientific meetings;
- Continuing the Colleges' policy of not investing in tobacco companies;
- Including smoking cessation interventions in basic and advanced training curricula, and as part of continuing professional development;
- Ensuring that the Indigenous component of the undergraduate medical program is developed in partnership with key Indigenous bodies;
- Encouraging Fellows to promote smoke-free environments particularly in socially disadvantaged communities;
- Promoting best practice strategies in improving awareness of the effects of environmental tobacco smoke in institutions;
- Ensuring that health care institution policies, require patients' records including those of adolescents, to record cigarette smoking status;
- Ensuring that tobacco-delivered nicotine dependence is treated as a chronic relapsing illness; and,
- Supporting policies and activities in hospital settings and assisting in identifying issues faced by hospitals in developing and implementing smoke-free policies on hospital grounds.

9. The RACP and the RANZCP recognise the untapped capacity among physicians and psychiatrists for advocacy to reduce the morbidity and mortality due to tobacco smoking.

Advocate to substantially increase government investment in tobacco control which is needed to ensure continued reductions in the prevalence of cigarette smoking.

Accordingly the Colleges will

Appoint and support a spokesperson on smoking tobacco issues and liaise with tobacco control advocacy groups to:

- Advocate for government policies placing emphasis on the most effective ways of reducing the uptake of cigarette smoking and increase smoking cessation;
- Advocate for government funding to be directed towards programs that demonstrate evidence of effectiveness and to discontinue funding for programs where there is evidence of ineffectiveness; and,
- Identify community leaders with whom to explore community solutions to common clinical problems related to smoking tobacco (and alcohol).

10. The RACP and the RANZCP recognise that harm reduction has a place in the therapeutic armamentarium of clinicians who treat addicted patients.

Almost all tobacco smoking related deaths are due to the hazardous substances in tobacco smoke. Harm reduction aims to minimise the harmful effects of the continued smoking of tobacco or nicotine. While harm reduction includes advice to people to quit, it more usually implies reducing the harm of continued cigarette smoking (due to nicotine addiction).

Accordingly the Colleges will

Advocate for the Australian State and Territory governments and New Zealand government to:

- Regulate to reduce the toxicity of tobacco smoke;
- Assess the feasibility and public health benefit of requiring all cigarettes to incorporate a charcoal filter that reduces smoke toxicity;
- Encourage further research into the potential role and impact of non-smoking tobacco as a smoking cessation aid; and,
- Encourage the development of nicotine products that provide a satisfying alternative to tobacco-delivered nicotine.

TERMS USED IN THIS DOCUMENT

In this policy document terms are defined as follows:

- *Stopping smoking*, in which a cigarette smoker quits. Of the many different reasons for quitting, evidence supports price increases, cigarette smoking restrictions and personal circumstances that may be influential;
- *Smoking cessation* which, in this document, means stopping cigarette smoking with professional help;
- *Prevention* refers to social action ensuring low rates of initial uptake in population and sub-groups of populations thereby preventing smoking tobacco; and,
- Harm *reduction* refers to minimisation of the harmful effects of smoking tobacco. While harm reduction includes support to quit, it more usually implies reducing the harm of continued smoking of tobacco, or nicotine.

This document advocates a comprehensive approach to tobacco control in which all four dimensions described above are addressed simultaneously. Those who are profoundly addicted require therapeutic assistance.

Stopping cigarette smoking is crucial.⁶ Tens of thousands of individuals stop smoking cigarettes in Australia and New Zealand each year, encouraged by:

- Extensive media coverage about the health risks of cigarette smoking;
- Quit campaigns which personalise the dangers and encourage quit attempts;
- Increases in tobacco taxation which greatly reduce the affordability of cigarette smoking;
- Smoke-free workplaces and entertainment venues and growing social expectations about smoke-free homes and cars;
- Reduced promotion of cigarettes and smoking; and,
- Amendment to the law to put smoking tobacco products out of sight at retail outlets.

Overall effectiveness of our efforts will be much higher when governments and all other interested parties work in a coordinated manner.

Smoking cessation interventions such as advice and encouragement from health professionals, promotion of and referral to Quitlines and promotion and subsidy of pharmacotherapies will greatly increase the number of people successfully quitting. A UK report⁷ has shown that smoking cessation in general practice is excellent value for money. Cost per discounted life year saved from a societal perspective ranged from £212 (brief advice) to £873 (integrated brief advice, self-help, NRT and specialist smoking cessation service).⁸

Prevention. Shifting norms and expectations about tobacco smoking throughout society is the key to the comprehensive and sustainable avoidance of its preventable ill-effects on health. By optimising preventive efforts to change how society views smoking tobacco as a carcinogenic substance, the number of Australians and New Zealanders who never start to smoke will increase, inherently reducing the economic costs incurred by society as a result of smoking cigarettes.

Harm reduction. As there may be some highly dependent individuals who are not responsive to best efforts, alternative products that deliver nicotine without harming other people represent humane end-stage support for their addiction.

This document also focuses on tobacco smoking as the overwhelming contributor to avoidable mortality and morbidity in both Australia and New Zealand.

HOW TO USE THIS DOCUMENT

This document has been structured to make it easy for physicians and psychiatrists to locate those sections most relevant to their interests and readiness to act.

People and populations

In dealing with **people and populations**, physicians and psychiatrists across a wide range of specialties can play a major role.

Physicians and psychiatrists treat the victims of the smoking epidemic daily in their practices and, therefore, are uniquely placed to appreciate the impact of smoking on the lives of smokers and their families. Their ethical and legal responsibilities oblige them to provide the best available treatment and advice not only for the well-being of the smokers themselves but also of those exposed to environmental tobacco smoke (ETS), particularly children.

In the next 20 years virtually all tobacco smoking mortality and morbidity will be manifest among people who currently smoke. Smoking cessation is a priority. Many physicians and psychiatrists will appreciate the need for all health professionals, including their own groups, to make such therapeutic interventions a priority. Both Colleges' education and training curricula will include smoking cessation and other aspects of tobacco control.

Settings

Physicians and psychiatrists in their various work **settings** are well placed to influence the organisations they work for, their funding priorities, and the balance between prevention and treatment. It is no longer sufficient for

physicians and psychiatrists only to be expert in one to one encounters with patients. Smoking cessation activities require whole institutions to make this a priority and to allocate staff and budgets. Physicians and psychiatrists can help to make that happen, by encouragement and through their knowledge of the effects of smoking, as well as through their knowledge of the health care systems and policy processes.

Public policy

Many physicians and psychiatrists have a broad appreciation of the role of social determinants of health and the role of public policy in changing social factors.

To shape public policy, most physicians and psychiatrists rely on their Colleges to formulate and articulate their positions on tobacco control issues. This document provides a guide to public policy making.

This document articulates the Colleges' policy on the eradication of mortality and morbidity attributable to tobacco smoking.

As skills required to influence the media were not traditionally taught as part of the medical curriculum, physicians and psychiatrists may wish the Colleges to assist them in this regard.

Introduction

The Royal Australasian College of Physicians (RACP) and the Royal Australian and New Zealand College of Psychiatrists (RANZCP) jointly participated in the development of this document. Other bodies that have contributed to its content are the Centre for Excellence in Indigenous Tobacco Control, The Cancer Council NSW and the Australian Consumer Health Forum.

The policy document was an initiative from the AChAM. It makes up the second of four policies on addiction medicine. Earlier publications issued by the Colleges on behalf of AChAM have been on illicit drugs which were well received.^{9 10} The Colleges on behalf of AChAM are intending to release a policy statement on alcohol. While these are substances with major health implications, tobacco places an even greater burden on societies. In Australia, smoking tobacco is responsible for more than 60 per cent of the total economic impact of drug use.¹¹

Smoking has long been acknowledged as the most significant cause of premature death and disability. This is disproportionately so for the least advantaged sections of communities in both Australia and New Zealand.^{12 13}

This document has been written to inform Fellows of the two Colleges and other organisations by the following activities:

- Guiding member services and support for professional education and training and College investment policies;
- Guiding advocacy and representation roles, for example in submissions, statements and consultancy meetings, as in the development of the *Australian National Tobacco Strategy 2004 – 2009*,⁴ and endorsing other policy documents;
- Assisting policy decision makers, lobbyists and people with influence in developing evidence informed policy and practice in tobacco control; and,
- Influencing members of the wider community who are interested in learning more about the issues surrounding smoking tobacco.

Why the Colleges need a policy on smoking tobacco

Physicians and psychiatrists make up 32 per cent (5,266 out of 15,900) of all specialist medical practitioners in Australia¹⁴ and 42 per cent (1,114 out of 2,653) of all specialists in New Zealand.¹⁵

Eradication of mortality and morbidity attributable to tobacco smoking requires all College Fellows to:

1. Work with individual patients in their clinical practice;
2. Change policies and attitudes in their different work settings and among professional referral networks;
3. Form local alliances and coalitions to support political and social advocacy for population health; and,
4. Exert their influence through the corporate bodies of the Colleges themselves, to give voice to health issues and shape public policy in their respective countries.

Tobacco smoking causes 23,000 deaths a year in our two countries and is a leading contributor to the burden of disease. Reducing the harm and costs of tobacco products requires every skill and competence College Fellows can bring to bear.

INTERNATIONAL POLICY CONTEXT

In 1997 the World Bank began a global study on the economics of tobacco control in partnership with the World Health Organization (WHO). A team of over 40 economists, epidemiologists, and tobacco control experts critically examined the current state of knowledge about tobacco control. The aim was to provide a sound and comprehensive evidence base for the design of effective tobacco control policies in any country.¹⁶

Australia and New Zealand have both ratified the WHO Framework Convention on Tobacco Control (FCTC). This FCTC aims “to protect present and future generations from the devastating health, social, environmental and economic consequences of smoking tobacco and exposure to tobacco smoke”.¹⁷ It commits signatories to comprehensive measures for tobacco control, including the protection of non-smokers from the harmful effects of passive exposure to tobacco smoke.

Key findings from the WHO Framework Convention on Tobacco Control (FCTC) are:

- Tax increases are the single most effective intervention to reduce demand for smoking tobacco (tax increases that raise the real price of cigarettes by 10 per cent would reduce smoking by about 4 per cent in high income countries and by about 8 per cent in low income or middle income countries);
- Improvements in the quality and extent of information, comprehensive bans on smoking tobacco advertising and promotion, prominent warning labels, restrictions on smoking in public places, and increased access to nicotine replacement treatments are effective in reducing smoking; and,
- Comprehensive smoking tobacco control policies are unlikely to harm economies.

There are many factors that contribute to the global scenario of smoking tobacco. Among them:

- Just four companies now control 75 per cent of the world cigarette market: Philip Morris (PM), British American Tobacco (BAT), Japan Tobacco/RJ Reynolds and the China National Tobacco Corporation;¹⁸
- The sophistication of tobacco companies' marketing and their political influence are critical to the promotion and sustained use of tobacco smoking despite the overwhelming evidence for its harmful effects; and,
- The scale of the global smoking tobacco pandemic is reflected in other estimates that by 2030 the number of unnecessary deaths resulting from smoking tobacco will rise from some four million to 10 million a year, the majority in the developing world.¹⁹

Smoking tobacco is an international epidemic. The challenges of discouraging children from taking up smoking in the face of social pressures and of assisting adults to quit in the face of addiction are similar the world over. The threat posed by smoking to global health is unprecedented, and so is the obligation to prevent millions of smoking-related deaths with highly effective health policies.

NATIONAL POLICY CONTEXT

Cigarette smoking prevalence has declined in the mainstream populations of both Australia and New Zealand: 20 per cent in the total adult population in Australia; 21 per cent in the non-Indigenous population in New Zealand (25 per cent of the total adult population in New Zealand).

In Australia half of the Indigenous population smoke cigarettes and this percentage (51 per cent) has not decreased since 1990.² In New Zealand, half of the Māori population smoke and this percentage (51 per cent) has not decreased since 1990.³ Similarly smoking has not declined in Pacific Island peoples in New Zealand since 1990.³

In some regions of Australia, up to 83 per cent of Indigenous men and up to 73 per cent of Indigenous women smoke tobacco.²⁰ Indigenous communities in Australia currently do not have power to regulate the sale of tobacco, as occurs for alcohol in some communities. There is very little scientific evidence on interventions within Indigenous communities. In one study conducted in New Zealand however, the first smoking cessation program designed for Māori women not otherwise accessing mainstream services was well received and considered both effective and cost effective.²¹ While absolute gains in smoking cessation may yet be small, research studies conducted in partnership with Indigenous communities will contribute much-needed evidence over time and also develop capacity.

Public health framework. The Colleges recognise that many diverse approaches assist understanding and action to address modern epidemics. Effective action to eradicate mortality and morbidity due to tobacco smoking must begin by acknowledging that smoking tobacco is an unparalleled social problem ‘co-produced’ by commercial, intergenerational, political and environmental factors disempowering individual behaviour change. In adopting the ‘public health model’ in this policy document, the Colleges seek to avoid ‘victim blaming’ and simplistic individualistic solutions while identifying explicitly the multifaceted social action required. The public health framework also has the greatest salience among physicians and psychiatrists.

Choosing effective tobacco control strategies requires an understanding both of the public health context of smoking tobacco and scientific basis of modern medicine. The risk of tobacco smoking is related to characteristics of the host (for example: vulnerability), the agent (for example: the addictiveness of the product), and the vector (for example: the powerful marketing techniques used by tobacco companies). Henningfield²² compared the global spread of malaria with the way the tobacco industry spreads tobacco-delivered nicotine dependence and found control of the latter was more elusive because of the tobacco industries’ many legal protections and political power.

Environmental factors, including the regulatory environment, social norms, tobacco taxes, and educational interventions can also have an impact on agent, host and vector interactions. Accelerating progress in reducing smoking tobacco will accelerate reductions in tobacco-attributable morbidity and mortality.

Since the late 1980s, tobacco control advocates have developed powerful strategies to combat the tobacco industry, including efforts to "denormalise" it by exposing companies’ illegal or unethical practices.²³ Some major outcomes have been won in the courts. Every Australian and New Zealand jurisdiction is now committed to smoke-free public places.

Physicians treating smokers (with a 1 in 2 risk of early death if they continue to smoke past age 35 years of age) have a duty of care to ensure these smokers understand the risks and are offered evidence-based advice to increase their likelihood of smoking cessation.

Burden of Illness. More than 20 per cent of adults and 25 per cent of adolescents aged 12 - 17 in Australia in 2004 smoked at least weekly.²⁴ Around 25 per cent of adults smoke daily²⁵ and in 2003, 17.1 per cent of 14 - 15 year olds in New Zealand smoked at least weekly.²⁶

More people in Australia and New Zealand die from smoking than from illicit drug abuse, motor vehicle accidents, suicides, homicides, drowning, shark attacks, falls and electrocution combined.²⁷

The success of many strategies to reduce demand and help smokers to quit is well supported by evidence. Societal expenditure in sustained tobacco control has compromised effectiveness in the more recent past. Although cigarette smoking declined previously when government expenditure increased, expenditure now is insufficient to fund effective measures in tobacco control.

Expenditure on tobacco control is a small proportion of the revenue that governments receive from tobacco taxes. In Australia in 1998–9, tangible costs were estimated at A\$7.586 billion and intangible costs at A\$13.476 billion.¹³ Ten years earlier, in 1990, New Zealand tangible costs were estimated at NZ \$1.220 million and intangible costs at NZ \$2.1250 million.²⁸

Who is affected most by smoking tobacco? Smoking tobacco is particularly high amongst the most vulnerable and disadvantaged people of society: those with a mental illness, people living with a disability, those from lower socio-economic backgrounds, youth and Indigenous peoples. Its damaging effects exacerbate health and social issues, many of which overlap. Gender, sexuality, acculturation and geographic location can also contribute to the impact of smoking tobacco on inequities in health outcomes.

Cigarette smoking is a major risk factor for cancer, cardio-vascular, respiratory and renal diseases and contributes to greater complications of diabetes. A reduction in the therapeutic response to oral²⁹ and inhaled³⁰ corticosteroids has been shown in people who smoke and who have mild or chronic asthma.

Smoking cigarettes is also a major cause of the low-birth weight of babies born to women who smoke during pregnancy. Babies born to women who smoke remain low birth weight babies throughout their lives and are at risk of adverse health and social outcomes.³¹ In this context, smoking contributes to a cycle of disadvantage with costs borne by the entire community.³²

Parental cigarette smoking is a strong predictor of teenage uptake. Smoking in young people is more common in females. Immigrants may lack access to preventive information in their own language. Indigenous people may lack knowledge about the more specific harmful effects of cigarette smoking.

In the military forces, prisons and some mental health services, smoking has previously been normalised and used as a reward.

Cigarette smoking not only causes many diseases, it impedes treatment. Smokers use inpatient hospital services more than people who have never smoked,^{33 34} and are also more likely than non-smokers to use services such as emergency and outpatient departments.³⁵ Wounds heal less quickly³⁶ and smokers are more likely to be admitted to intensive care after surgical procedures.³⁷

Current opportunities. Cigarette smoking rates may have been reduced. However, cigarette smoking remains the daily habit or addiction of 3.6 million Australians²⁷ and 0.7 million New Zealanders, and half of the Indigenous populations of both countries. Their health and wealth “goes up in smoke” at the rate of 100 puffs per smoker per day. ***Every day, 52 Australians and 12 New Zealanders die from society’s failure to mitigate the social acceptability and widespread availability of tobacco.***³⁸

Legislation for smoke-free workplaces and hospitality venues will bring about huge improvements in air quality for non-smokers, will lower daily cigarette consumption by smokers, and result in reducing the prevalence of cigarette smoking. Importantly, these changes will make non-smoking the norm throughout society.

As the more affluent have abandoned cigarette smoking, tobacco control is further compromised. Smoking tobacco becomes the forgotten epidemic. Cigarette smoking becomes “out of sight, out of mind” to many of those with social power and political influence exposed only to groups with low rates of smoking. Decision making can become vulnerable to distorted advice from interested groups afforded access to politicians, health ministers and policy makers.

Economic and other drivers have ensured that tobacco-delivered nicotine is a comparatively cheap drug. One cigarette currently costs less than 50 cents, yielding 10 to 12 puffs, each of which sends nicotine to the brain within seconds. Five cents for a tangible immediate pleasure can be perceived as “good value” to the smoker in the absence of consistent alternative messages.

OUR GREATEST OPPORTUNITY: INDIGENOUS HEALTH

To reduce the high cigarette smoking prevalence in Indigenous peoples, the Colleges have welcomed the advice obtained from Indigenous experts.

One priority is to ensure Aboriginal and Torres Strait Islander peoples and Māori receive proven and culturally-safe interventions. The lack of research on what works best for Indigenous communities may be used to excuse non-delivery to these communities. Even if known best practice works for the general population it may not work in Indigenous populations. Social marketing such as the *Every cigarette is doing you damage* television commercials can provide a constructive and supportive background for culturally customised programs.³⁹ Culturally customised programs can be locally based, include local content, involve elders and secure community members in their design and delivery. Ivers suggests that if all Indigenous health professionals adopt effective non-smoking and smoking cessation policies, non-smoking will become the norm.²² Many Indigenous people believe that they could benefit from NRT but that this product must first be provided at a price all communities can afford.²²

College Fellows can be confident that the Colleges will support them in their endeavours to eradicate mortality and morbidity attributable to tobacco smoking.

People and Populations

1: Prevent progression from regular cigarette smoking to tobacco-delivered nicotine addiction and dependence

Young people who take up cigarette smoking should never be blamed for this is an understandable response to peer pressure, media advertising and psychological imperatives to experiment during adolescence and early adulthood. 'Never smoking' remains the ideal. Delay of uptake is less risky than unmitigated early uptake. Addiction to tobacco nicotine at age 15 predicts a high risk of continuing to smoke beyond 35 years. Smoking cigarettes at age 35 years carries a cumulative 50 per cent risk of premature death and reduced healthy years of life.⁴⁰

Experimentation with smoking cigarettes is common and often encouraged by peer pressure and triggered by the availability of cigarettes from friends or family.^{41 42} At this stage of experimentation, young people are unlikely to have a preferred brand. Smoking cigarettes is unlikely to occur daily. Answers to questions about smoking cigarettes will vary genuinely depending upon recent use. Beyond initial experimentation, users learn to inhale. Their cotinine levels (indicating nicotine absorption) gradually increase.⁴³ Cigarettes will be smoked more intensively to extract enough nicotine to maintain addiction. This behavioural progression to addiction can be measured accurately with the Hooked on Nicotine Checklist (HONC).⁴⁴

Parental cigarette smoking is highly influential in the daily cigarette smoking rates of children.⁴⁵

Homes. Whether the home is smoke-free is also influential on daily cigarette smoking by children.^{28 46}

Public places. Adolescent cigarette smoking rates are lower in communities with smoke-free public places,⁴⁶ other factors considered. When young people go 'down town', smoky venues and gathering places imply that cigarette smoking is the norm, and that non-smokers among them who want to be seen as an adult should be adopting a smoky or smoking lifestyle.

Pocket Money. Those with more pocket money are more likely to be daily smokers, after controlling for socioeconomic status.⁴⁷

Education. Life Skills Training (LST) from Years 7 to 9,⁴⁸ evaluated in 10 separate studies, reduced polydrug alcohol, cannabis and cigarette smoking by two-thirds when evaluated at year 12.⁴⁹

Schools. Progression to daily cigarette smoking is negatively associated with smoke-free school policies if they are perceived to be strongly enforced, whether the home is smoke-free, and whether public places are smoke-free.⁴⁶ (For more information on smoke-free schools see page 42)

HONC scores can be used to tailor interventions by physicians and psychiatrists. Young people with high HONC scores are addicted and can be supported according to 'harm minimisation' principles.⁵⁰ Those with lower HONC scores must be supported to deflect peer pressure, marketing and other influences from the industry.

People and Populations

2: Priority populations – children and young people

In both Australia and New Zealand, there was a reduction between 1999 and 2003 in the prevalence cigarette smoking among both male and females aged 14 –17 years, (except Māori females). More than 25 per cent of adolescents aged 12 - 17 in Australia in 2004 smoked cigarettes at least weekly.^{26 27} About 25 per cent of adults smoked daily²⁷ and in 2003, 17.1 per cent of 14 - 15 year olds in New Zealand smoked cigarettes at least weekly.²⁸

Cigarette smoking in young people is influenced by adults – what tobacco companies do and what electorates demand their political representatives in government do in response. In brief:

- Governments control the price of cigarettes – the most powerful factor known to affect adolescent cigarette smoking;
- Governments determine whether school and public environments are smoke-free;
- Governments control the size and type of health warnings on packets, and whether tobacco products are on display at point of sale at shops on the way home from school;
- Governments control how much the media carry informative messages such as *Every cigarette is doing you damage*; and,
- Parents control the home environment.

Both Colleges sympathise with young people confronted with resourceful tobacco transnationals which continue to market a glamorously wrapped product. Cigarette smoking imagery was banned from billboards long ago. Young people smoking cigarettes today have not been exposed to the tobacco company advertisements their parents saw. The cinema and video industry continues to portray cigarette smoking as the norm. Parents are the most pivotal role models for most young people. What they do and what they permit in the home environment predicts cigarette smoking uptake by young people.⁴⁶

Parents who insist upon a smoke-free home environment should be positively praised for reducing exposure of their children to environmental tobacco smoke, a hazard known to increase children's physical illnesses.

Unequivocal advice to parents who smoke to ensure that, at least, their home is smoke-free will reduce the risk of their children also taking up cigarette smoking.⁵¹

The evidence is weak that youth-oriented policies (for example bans on sale to under 18 year olds) reduce youth cigarette smoking. For effective policy, cigarette smoking must be regarded as an adult problem requiring adult solutions.

Young people's tobacco consumption is particularly sensitive to variations in price or in their own weekly income. (See below)

Affordability of popular brands to young people as at April 2004⁵²

Brand	Australia	
	Number of cigarettes that can be, bought by a 15 year old on a weeks average pocket money, (2002 pocket money, May 2003 price)	Percentage of teenage smokers usually smoking cigarettes by brand, August 1999
Longbeach 40s	44	20 per cent
Peter Jackson 30s	42	17 per cent
Winfield 25s	39	21 per cent

- Number of minutes to earn a packet of Winfield 25s. Aug 2003: 24 minutes

It may be perceived that young adults are making an informed choice about their cigarette smoking. One leading tobacco company, Philip Morris, has produced a school education kit titled *I've got the power* used by many schools in Australia and New Zealand. An Indigenous adaptation of this resource called *Our strengths* was also produced in some states in Australia. **Nothing could be further from the truth.** In view of their level of maturity, children need to be protected from damaging health hazards. Regulations to limit the availability of cigarettes in the general community and, specifically, to young people, are successful. Increases in the price of cigarette smoking are an effective means of encouraging population-level reductions in cigarette smoking levels.

People and Populations

3: Priority populations – Indigenous peoples

In Australia, half of the Indigenous population smoke cigarettes. This percentage (51 per cent) has not decreased since 1990.² In New Zealand, half of the Māori population smoke cigarettes. This percentage (51 per cent) has not decreased since 1990.³ Similarly, cigarette smoking has not declined in Pacific Island peoples in New Zealand since 1990.³ In Australia in some regions, up to 83 per cent of Indigenous men and up to 73 per cent of Indigenous women smoke cigarettes.²² The 2002 National Centre for Aboriginal and Torres Strait Islander Statistics (NCATSIS) found that 51 per cent of the Indigenous population aged 15 years or over smoked cigarettes, compared to 52 per cent in 1994.⁵³ There is a high prevalence of chronic diseases among Indigenous population in Australia^{54 55} and New Zealand,⁵⁶ with cardiovascular disease the largest single contributor to their higher death rate.

The burden of early death

- One in three Māori deaths in 1989–93 was attributed to cigarette smoking;⁵⁶
- Among Northern Territorians aged 15 or older, 23 per cent of Indigenous male deaths, and 17 per cent of Indigenous female deaths, were attributable to cigarette smoking;⁵⁷ and,
- Indigenous males die at up to more than four times the rate of non-Indigenous males from tobacco-related causes. Indigenous females die at up to nearly 11 times the rate of non-Indigenous females from tobacco-related causes.⁵⁸

Redressing inequities in health outcomes and the reduction of preventable disease for Indigenous populations is a matter of human rights.

Efforts in tobacco control have had a differentially better impact on non-Indigenous populations. Rates among non-Indigenous populations have fallen, yet they have remained unchanged or, worse, increased among Indigenous populations. One explanation is that successful tobacco-control efforts are culturally grounded. Strategies generated outside of the Indigenous community's culture that do not incorporate specific health beliefs, 'holistic' understanding of health and social values are unlikely to be effective. Hence, strategies to eradicate mortality and morbidity due to tobacco smoking in Indigenous populations must be developed within the culture and belief systems of that population.

Why has there has been so little progress?

- **Funding.** In the past funding has been fragmented, short term and given with no Indigenous control;
- **Services have been deficient.** For example, in the 1980s and most of the 1990s New Zealand had only one smoking cessation clinic. Up until 1999, there was no Quitline service in Maori in New Zealand. In Australia and New Zealand, a high proportion of Indigenous health workers smoke cigarettes;
- **Disparity of services.** It is not because the services have been any more deficient to Indigenous populations. The funding guidelines for the service have emphasised the need to reach Māori clients, to advertise the service to them, to provide advisers to ensure a friendly service to Māori. Māori have been involved in designing television commercials targeted at them; and,
- **Elders as role models.** Indigenous populations traditionally allot leadership roles to elders. The question of who should properly fund programs to allow elders to provide leadership in tobacco control needs to be addressed.

Despite concerns of Māori health workers that financial hardship caused by higher tobacco taxes would cancel out health benefits, analysis shows that such effects are 42 to 257 times less than the consequences of continued cigarette smoking.⁵⁹

There is a special role through smoking cessation services in New Zealand that focus on Indigenous people, such as the *Aukati Kai Paipa* programs. This smoking cessation pilot program was delivered to Māori women and their families. The program offers a free service and provides NRT in the form of skin patches and/or chewable gum, together with counselling support.⁶⁰

In recognition of the size and scope of smoking tobacco in Indigenous populations, there will be benefits from sustainable career structures for Indigenous health workers in order that their understanding of and contributions to tobacco control in these communities can be sustained. Relevant training and support will build capacity in a tenured Indigenous workforce. Research can be instigated into how to reduce rates of cigarette smoking among Aboriginal and Torres Strait Island peoples and Māori.⁶⁰ Not all interventions successful among non-Indigenous are directly transferable to Indigenous Australians and New Zealanders.²²

Most Indigenous ex-smokers, like other ex-smokers, quit by themselves, without help, for health reasons.²² Continuing smokers are more likely to quit with external support, such as Nicotine Replacement Therapy (NRT), or through legislative or other restrictions on smoking tobacco.²²

*The National Drug Strategy, Aboriginal and Torres Strait Islander Peoples' Complementary Action Plan 2003–6*² has recommended the following:

- Enhanced capacity of Aboriginal and Torres Strait Islander individuals, families and communities/neighbourhoods to address current and future issues in the use of alcohol, smoking of tobacco and other drugs and promote their own health and wellbeing;
- Substantially improved access for Aboriginal and Torres Strait Islander peoples to the range of services, programs and interventions that play a role in addressing alcohol, smoking of tobacco and other drugs issues;
- A range of holistic approaches, from prevention through to treatment and continuing care, that is locally available and accessible;
- Workforce initiatives to enhance the capacity of Aboriginal and Torres Strait Islander community-controlled and mainstream organisations to provide quality services to address current and future issues in the use of alcohol, smoking of tobacco and other drugs and promote their own health and wellbeing; and,
- Whole-of-government effort and commitment, in collaboration with community-controlled services and other non-government organisations, to implement, evaluate and continuously improve comprehensive approaches to reduce cigarette smoking.

In Australia monitoring and surveillance through NCATSIS ensures that Indigenous cigarette smoking is properly monitored. Information from this set of data can assist in planning well-informed services and programs.

People and Populations

4: Priority populations – People living with a mental illness

In the United States in 2001-2, 24.9 per cent of adult smoked cigarettes and nearly half of these people were nicotine dependent. The one eighth of adults (12.8 per cent) who were nicotine addicted consumed more than half (57 per cent) of all cigarettes smoked. The 7.1 per cent of adults with both nicotine dependence and a psychiatric disorder smoked 34.2 per cent of all cigarettes smoked. They smoked 28 per cent more cigarettes on average per day than those without dependence. People with any psychiatric disorder (including any DSM-IV alcohol or substance abuse disorder, or any mood, anxiety or personality disorder, regardless of nicotine dependency), smoked 53 per cent more cigarettes per day than those with no such psychiatric disorder. People with psychiatric disorder were twice as likely to be addicted to cigarette nicotine as those with no disorder (23.0 per cent versus 10.6 per cent). Overall, the 36 per cent of adults who had either a nicotine dependence or a psychiatric disorder, or both, smoked 70 per cent of the cigarettes.⁶¹ (See Table 1)

Table 1: The prevalence of tobacco-delivered nicotine dependence and psychiatric disorders

<i>Who is nicotine dependent, and who has a psychiatric disorder?</i>			<i>What proportions of cigarettes were smoked by each group?</i>		
Nicotine dependency			Nicotine dependency		
Psychiatric disorders	Yes	No	Psychiatric disorders	Yes	No
Yes	7.1%	23.2%	Yes	34.2%	12.1%
No	5.7%	48.0%	No	23.3%	30.4%
Total	12.8%	71.2%	Total	57.5%	42.5%

Source: National Epidemiologic Survey on Alcohol and Related Conditions. Grant BF et al. 2004.⁶¹

By extrapolating from United States data,⁶¹ nicotine dependence and psychiatric disorders combined account for one third (34 per cent) of all cigarettes smoked in the United States.

Does cigarette smoking cause depression?

The relationship is complex and the causation works both ways. Depression increases the risk of cigarette smoking, and cigarette smoking increases the risk of depression. There are high rates of nicotine use in those with depressive⁶² and anxiety disorders.^{63 64 65}

Dependent cigarette smokers have a higher prevalence of depression (both new and repeat episodes),^{62 66} higher rates of suicidal ideation, and 2–4 times the risk of suicide attempt and completion (which is smoking-dose related).⁶⁷ Concomitantly, smokers are at high risk of first onset major depression, with the highest rates of cigarette smoking occurring in those with recurrent depressive episodes,⁶² bipolar disorder^{68 69} and chronic schizophrenia.⁷⁰

Depression-history smokers (DHS) are over-represented amongst dependent smokers, and are heavier smokers. When quitting, DHS have more frequent, severe and prolonged withdrawal episodes; more depressive symptoms, anger and irritability, and approximately a 30 per cent risk of depressive relapse.⁷¹

Smoking of cigarettes and schizophrenia

Most patients start smoking cigarettes in their teens, before mental illness begins, yet people with schizophrenia have a cigarette smoking prevalence as high as 90 per cent. Those with the novelty-seeking personality trait are more likely to use a combination of nicotine, caffeine and alcohol.

There are interactions between nicotine use and effects of medications used for the treatment of schizophrenia and bipolar disorder. Nicotine withdrawal can lead to exacerbation of psychotic symptoms.⁷²

Smoking and medications

Nicotine assists the uptake of clozapine and its metabolism, as well as some of the atypical antipsychotics (but not risperidone). Clozapine appears to have specific anticraving effects not shared by other antipsychotic agents.^{73 74}
⁷⁵ The first rule of a physician is, of course, to do no harm. If nicotine is needed, then the smoking of tobacco is the most dangerous way to obtain nicotine, and other methods or sources of nicotine should be explored.

Tobacco - delivered nicotine or clean nicotine. This proposal has implications for longevity as cigarettes provide the most affordable nicotine available to smokers, including people who smoke and who have a mental illness. Unfortunately, tobacco-delivered nicotine, accompanied by the toxic gases in smoke is the ‘dirtiest’ form of nicotine possible. Since the 1980s nicotine gum and then patches have been available to provide nicotine in safer form. But unless government and the health services subsidise nicotine gum and patches, cigarettes will be the only accessible source of nicotine, and will continue to shorten the lives of people who have a mental illness and who smoke cigarettes.

Alcohol and illicit drugs. From two recent Australian community surveys, cigarette smokers had higher rates of alcohol dependence and/or use of, abuse of /or dependence on illicit drugs.^{27 76} In the twelve months before the survey, 31.7 per cent of smokers had used cannabis compared with only 7.2 per cent of non-smokers. Likewise, the rates for other illicit drug use in the preceding

twelve months were 19.1 per cent for cigarette smokers compared with 5.2 per cent for non-smokers.²⁷ There is evidence that cannabis is a gateway to cigarette smoking.⁷⁷ Those seeking treatment for problems related to alcohol or illicit drugs should have a cigarette smoking assessment and be offered appropriate smoking cessation interventions.⁷⁸

General

Cigarette smoking poses the same serious threat to the health of those addicted to other substances but there has been resistance to considering tobacco a "problem drug", along with other substances in addiction-treatment programs. A common reason for this is the perception that addressing cigarette smoking will interfere with and have a negative impact on the treatment of other addictions.⁷⁹ Also tobacco is not a drug that demands crisis management. Consequently, clinical interventions often focus only on alcohol or other illicit drug use. The importance of quitting cigarette smoking at the earliest feasible moment remains, however, as the cumulative mortality risk of continuing to smoke cigarettes beyond age 35 years of age is one in two.^{38 80}

1. Cigarette smoking and alcohol abuse are over represented in people with mental health problems;^{63 81}
2. There are high rates of nicotine use in those with depressive ⁶² and anxiety disorders; ^{63 64 65}
3. Cigarette smoking affects lifestyle, as those on the disability pension spend considerable amounts of their income on cigarette smoking; ⁸²and,
4. Smoking of tobacco is a confounder or trigger for other substance use and vice versa. It is therefore more effective to address co-existing drug dependence at the same time.

The situation among Indigenous populations may well be worse as depression and high cigarette smoking prevalence are intertwined. Mood cues for cigarette smoking in films may be unhelpful to people who are psychiatrically vulnerable. Relatives, friends and health professionals offering upset patients who have a mental illness a cigarette, to cope, may be equally unhelpful.

Mental health services and mental health professionals have to address the fact that smoking of cigarettes is still embedded in institutional and professional ways of coping with those who have a mental illness and who have difficulty coping.

The following summary of the smoke-free status in mental health institutions highlights the complexity of occupational health issues for mental health services. Once smoke-free workplaces are secured through smoke-free advocacy, policy decision makers will have to turn their attention to mental health services. Mental health services will need extra resources to cope with the tobacco control aspects of their work.

Cigarette smoking status in mental health institutions

	New Zealand	Australia
Cigarette sales	The sale of cigarettes was banned in hospitals circa 1990.	The sale of cigarettes was banned in hospitals circa 1990.
Smoke-free status	Some mental health facilities are almost entirely smoke-free, with restricted to special areas for high security patients. In community residential facilities, private living quarters have been exempted from legislated bans on workplace smoking. Generally smoke-free programs have been well received.	Some mental health facilities are almost entirely smoke-free, with smoking of cigarettes restricted to special areas for high security patients. In community residential facilities, private living quarters have been exempted from legislated bans on workplace smoking. Generally smoke-free programs have been well received.
Cigarette smoking cessation services	Some general hospitals have begun to take on staff for this purpose but most mental health services have not yet done so.	In locked psychiatric settings, staff appear to use cigarettes to clinically manage patients and to avoid violence by patients. ⁸³ Violence can be a risk when attempting to enforce smoke-free policies. There needs to be adequate support, including free NRT.
Cigarette smoking prevalence among staff	Psychiatric nurses have tended to have a higher cigarette smoking prevalence than other nurses.	Twenty-two per cent of nurses reported being current smokers and 21.5% reported being ex-smokers. ⁸⁴
Cigarette smoking prevalence among people with a mental illness	Not available	Cigarette smoking prevalence is even higher in those with psychotic disorders and bipolar disorder, ⁶⁶ but these were not rated in the Australian National Comorbidity Survey (NCS) and therefore not addressed for depression history smokers (DHS). Patients who have a mental illness, especially those with a psychotic illness, show dramatically elevated rates of cigarette smoking compared to the general population (60 per cent vs. 23 per cent). ⁸⁵
Co-morbidities	Not available	The National Survey of Mental Health and Well-being demonstrated a higher rate of cigarette smoking in people who had other substance use disorders. ⁷⁶

People and Populations

5: Priority populations – Pregnant women

Smoking of cigarettes in late pregnancy represents a ‘systems’ failure of tobacco control policies. Intense services are required to assist pregnant women to quit. There is no safe level of cigarette smoking in pregnancy. Cigarette smoking in pregnancy adversely affects mothers and babies, and smoking cessation programs can reduce cigarette smoking rates among pregnant women.⁸⁶

Pregnancy is a key time to intervene with cigarette smokers. Firstly, it is the start of a life-stage when a woman who smokes regrettably has the maximum potential to pose immediate and long-term harm to others – through death, premature rupture of membranes, growth impairment and airway malformation of the unborn child,^{87 88 89 90 91} and through the continuing effects of smoke exposure after birth on one or more children. These effects include 1.5 – 2 times increased risk of sudden infant death syndrome,^{92 93} 1.5 to 4 times increased rates of all respiratory infections (bronchiolitis, pneumonia, ear infections, tonsillitis),^{88 94 95 96 97 98 99 100 101 102 103} increased overall rates of hospitalisation,^{104 105} increased risk of invasive meningococcal disease^{106 107} and septicaemia, increased severity of asthma,^{108 109} decreased cardio respiratory fitness and lung function,^{88 110 111 112 113 114} and deaths and burns through house fires.¹¹⁵

Secondly, the long-term effects on a child exposed to tobacco smoke include a likely increased risk of chronic respiratory illness as an adult^{115 116} and a possible increased risk of cancer¹¹⁶ and heart disease.^{117 118} Secondly, in this life-stage, parents’ cigarette smoking most potently increases the likelihood of initiation of cigarette smoking in other people – their own children.¹¹⁹ In this way it perpetuates a cycle of cigarette smoking and its harm. Thirdly, it is a key time when women and their partners seek health care, are especially concerned for their health and the health of their unborn child, and are most motivated to change behaviours for the sake of health.

Expectations of pregnant women to quit are high. Socially desirable responses can mislead clinicians with respect to women’s cigarette smoking status.¹²⁰

Education programmes. Studies show that women are motivated to stop smoking of cigarettes during pregnancy, out of concern for their own health and that of their baby.^{121 122} However, while women are more likely to stop cigarette smoking while pregnant, they often relapse within six months following the pregnancy.¹²³ Half the women who quit cigarette smoking typically abstain for five to seven months postpartum.¹²⁴ An intensive cigarette smoking education program achieved 28 people quitting after four visits out of 437 pregnant smokers and 209 enrolled in the programme. The number still

not smoking cigarettes after the baby was born was not stated.¹²⁵ Quitting tended to be mainly among light smokers.¹²⁶

Ninety per cent of antenatal care providers do not provide written information and advice about smoking cessation to pregnant women.¹²⁷ Most (90 per cent) of protocols about smoking cessation did not include written information and advice, although 30 of these (28 per cent of the total sample) include cigarette smoking on a checklist. Of the 11 protocols that contained written information and advice, only two detailed how best to advise and support women in quitting cigarette smoking.¹²⁸

Indigenous women. Up to 72 per cent of pregnant Indigenous women smoke and Indigenous infants are more likely than others to have low birth weight, with cigarette smoking being considered a contributing factor.²² There is a lack of health promotion resources that specifically address the effect of cigarette smoking on pregnant Indigenous women. A literature review²² reported that interventions to assist pregnant women to quit were successful in decreasing smoking of cigarettes and increasing birth weight in non-Indigenous populations.

People and Populations

6: Training in counselling for clinicians

Clinicians are obliged to reduce smoking of cigarettes through one-to-one professional interactions with smokers. Their authority to speak on tobacco control relates to their core knowledge of what cigarette smoking does to their patients, and to their technical skills in helping smokers to quit.

Australian research has shown that quitters preferred receiving advice and help in quitting cigarette smoking through their health professional rather than from any other source.¹²⁸

Brief advice from a doctor during a routine consultation to stop cigarette smoking achieves a net 2.5 per cent gain of additional successful smoking cessation at 6- 12 months post intervention.¹²⁹

This advice is both cost-effective and can have a significant impact on population cigarette smoking rates.

Simple and brief advice during a consultation using the five A's significantly increases rates of smoking cessation. These are as follows:

1. Ask about cigarette smoking;
2. Advise quitting;
3. Assess current willingness to quit;
4. Assist in the quit attempt; and,
5. Arrange timely follow-up.¹³⁰

The Australian General Practice Guidelines¹³¹ describe an organised approach to smoking cessation in general practice based on these five 'A's'. These guidelines emphasise the efficacy of clear, compassionate, non-confronting and consistent advice that then links to specific assistance strategies. There is not yet equivalent document for physicians and psychiatrists providing a 'one-stop' handbook to support the provision of practical yet evidence-based professional advice.

Treatment and management of tobacco-delivered nicotine dependency will depend on the stage of readiness to quit as well as the level of dependence on nicotine. Drug therapy in the form of NRT can also assist smoking cessation; these treatments should be coordinated with the general and specific support and counselling strategies that are also of proven benefit.¹³²

Persistent, consistent and compassionate smoking cessation advice by every physician and psychiatrist in Australia and New Zealand could be expected to reduce overall smoking of cigarettes in the population by 2.5 per cent. There is no time to lose.

Training in smoking cessation

A study of cigarette smoking and smoking cessation on the curricula of UK medical schools in 2004 reported teaching on smoking to be inadequate. There is limited evidence both in Australia and New Zealand supporting the effectiveness of training of health professionals in smoking cessation counselling.¹³³

A Cochrane review of training healthcare professionals in smoking cessation reported that those who received training were more likely to perform tasks of smoking cessation than untrained controls.¹³¹ Of eight studies that compared patient cigarette smoking behaviour of trained professionals and controls, six found no effect of intervention, however, the effects of training using a systems approach increased if prompts and reminders were used.¹³¹ This highlights the importance of a systems approach.

Simplistic approaches to training will be ineffective. Although few studies have been published that evaluate the impact of training on the behavioural skills of either physicians or psychiatrists, studies of interventions in general practice demonstrate the need for intensive, multifaceted training strategies with built-in reinforcers and follow-up.¹³⁴

For undergraduates, Coordinators of Alcohol and Drug Education in Medical Schools (CADEMS) has been implemented in 57 medical schools globally.¹³⁵ CADEMS were originally funded by the federal government to coordinate teaching on smoking of cigarettes, alcohol and other drug use and counselling to medical students in each of Australia's 14 medical schools. An evaluation of these training programs demonstrated an increase in knowledge, skills, curriculum time and elective studies as a result of alcohol and drug teaching coordinators.¹³⁶

Training in advocacy

Physicians and psychiatrists can be taught strategies to undertake the following:

- Persuade their employing or accrediting institutions to become fully smoke-free;
- Ensure their institutions are funded and staffed to provide smoking cessation services to patients and staff;
- Encourage their Colleges to demand faster progress on tobacco control; and,
- Assist with organised efforts to raise awareness of cigarette smoking as a preventable disease risk factor, such as one-to-one meetings and communications with their elected politicians and other members of parliament.

People and Populations

7: Affordable Nicotine Replacement Therapy (NRT) and other pharmaceuticals

Tobacco-delivered nicotine dependence is a chronic, relapsing illness. Once identified, cigarette smokers will achieve better quit rates with support from a clinician (physician or psychiatrist) than from their lone unsupported efforts. Within the 5A approach described previously, NRT is an effective addition to smoking cessation advice for those who are addicted to tobacco-delivered nicotine. Therefore, NRT must be accessible, affordable and used according to published guidelines.^{130 137}

There is very good evidence for all forms of NRT to be made available for people smoking cigarettes more than 10 –15 cigarettes per day.¹³⁰ This intervention deals with NRT as it relates to individual people or population groups. Further information on the cost and availability of NRT can be read on page 54.

The aim of NRT is to assist smoking cessation by providing a near-constant level of nicotine above that which is associated with withdrawal. No form of NRT can replicate the rapid nicotine delivery from a cigarette. The NRT formulations available in Australia and New Zealand include gum, patches and oral inhaler. Nicotine nasal sprays and a sublingual tablets or lozenges are not presently available in Australia.

Cigarette smokers who want to quit have to change many entrenched behaviours. Nicotine addiction is often the main reason people continue to smoke cigarettes. Behaviour modification must therefore be a major part of any smoking cessation program. A pharmacological approach is the most successful route to behavioural change.¹³⁸ This approach may not suit everyone.

Cost is a significant barrier to cigarette smokers and for governments who wish to assist cigarettes smokers to quit smoking. If smoking cessation services were enabled to realise their full potential, government tobacco tax revenue would fall. Governments must be reminded of the revenue they already receive from cigarette smoking and the high cost of cigarette smoking to the community.

Settings

8: Schools as settings to delay initiation (prevention)

As described in section 1 and 2 (pages 26–29), smoking of cigarettes among young people is characterised by clear developmental stages and changes over time in relation to age. Those who smoke tobacco in early adolescence are more likely than their peers to become dependent on tobacco-delivered nicotine.¹³⁹ Cigarette smoking has been linked with a range of negative learning factors, such as absenteeism, alienation and lack of teacher control.¹⁴⁰

School-based anti-smoking programs will delay uptake of cigarette smoking,⁵² These programs include efforts to make a school and its grounds smoke-free;¹⁴¹ making local retailers aware that it is illegal to sell cigarettes to underage students; efforts to reduce supply or sale of cigarettes on school grounds; classroom teaching about smoking cigarettes and counselling support for students wishing to quit. In 1996–8 enforcement of no sales to under-18s was at a maximum, accompanied by a *Why start* campaign aimed directly at adolescents. No changes occurred in the school environment in the period 1999–2003, except that more schools became smoke-free.

Other factors may have been influential. In 2000 the price of cigarettes increased 20 per cent, the warnings on cigarette packets became stronger, and the quit campaign was launched nationally with television advertising (*Every cigarette does you damage.*)

Cigarette smoking has been banned in school buildings in all jurisdictions, but not in all cases on school grounds. Many Australian schools continue to treat smoking of cigarettes as a discipline issue for students rather than a health issue for the whole school community.

Counter strategies may be difficult to appraise. Some tobacco companies have identified a gap in government support for health education about smoking of cigarettes. As described on page 29, *I've got the power* is a school education kit produced by Philip Morris that embraces choice but provides too little information about the health consequences of cigarette smoking. Schools may also receive funding and support through the Life Education Trust. This Trust is partly supported by British American Tobacco in Australia and in New Zealand. It is also active in Aboriginal and Torres Strait Islander communities.

Drug education is compulsory in most jurisdictions, but programs have focused much more on alcohol, illicit drugs and inhalants than on cigarette smoking; this is particularly so in schools with a high proportion of Indigenous students.

Several state education departments in Australia have recently produced cigarette smoking prevention education resources. The *Smarter than Smoking* projects in Western Australia and *Quit* in South Australia and Victoria have collaborated extensively to produce high quality materials for students. However, across Australia, only 50 per cent of secondary school children can recall a recent lesson about cigarette smoking.¹⁴²

Settings

9: Home, work and hospitality

Evidence about the harms from exposure to environmental tobacco smoke (ETS) together with an increasing awareness among employers with respect to their duty of care to their employees, clients, and visitors have led to the rapid escalation of cigarette smoking restrictions in many workplaces and public places.

Exposure to ETS is a problem in public places such as children's playgrounds, sporting venues with allocated seating, and in closely shared spaces such as al-fresco dining areas, shared courtyards and apartment buildings. Although the ETS exposure in such settings is not of the magnitude of enclosed indoor areas, community interest in reducing exposure in these settings is growing.

Toxicity of environmental tobacco smoke. ETS exposes non-smokers to toxic and carcinogenic substances involuntarily. The composition of side stream smoke emitted from the burning stub of a cigarette is similar to that of mainstream smoke inhaled by the smoker through the mouth end. Most of the toxic molecules are small (under 100 molecular weight, and volatile gases.) (See Harm Reduction page 62 for details on toxicity of mainstream smoke). There are over 4,000 chemical compounds¹⁴³ and 43 known human carcinogens in tobacco smoke.¹⁴⁴

Disease risks from exposure to ETS. In one of the largest census-based studies to date of ETS effects, adults who had never smoked and who lived with smokers were demonstrated to have a 15 per cent higher risk of death from all causes than those living in a smoke-free household, after adjusting for age, ethnicity, marital status and socioeconomic position.^{145 146} Health effects of passive smoking have been confirmed by major reviews of the evidence conducted by peak international public health bodies including the US Surgeon General,¹⁴⁷ the World Health Organization¹⁴⁸ and the US Environmental Protection Agency.¹⁴⁹

The most recent published major review of the evidence relating to ETS and cancer was that of the International Agency for Research on Cancer (IARC).¹⁵⁰ Based on current data (ETS is responsible for between 7–8 per cent as many deaths as cigarettes smoking itself.³ Most of the attributed deaths from ETS are due to ischaemic heart disease or stroke, with a minority due to sudden infant death syndrome (SIDS) or lung cancer.¹⁵¹ Much of the attributed morbidity is due to asthma and glue ear in children.¹⁵⁰ A further study found that exposure to ETS is associated with an excess risk of Coronary Heart Disease (CHD) of about 50-60 per cent, much higher than the 25–30 per cent

increased risk previously attributable for those living with people who smoke cigarettes.¹⁵²

Workplace exposures and mortality. For New Zealand, 101 deaths a year are attributable to past exposure to ETS at work. With new legislation ratified in 2005, an estimated 70 deaths a year now will be avoided.¹⁵⁰

Offices. The Commonwealth Department of Health and Aging in Australia became smoke-free in 1986. The New Zealand Department of Health followed in 1987. Both Australia and New Zealand legislated only in 1990 to make all offices smoke-free.

Hospitality workplaces. In 1999–2000, 59 per cent of Wellington hospitality workers were exposed to ETS.¹⁵³ In unregulated hospitality environments, hair nicotine levels in non-smokers are comparable to those of smokers, even after adjusting for non-workplace exposure.¹⁵⁴ Smoke exposure as indicated by salivary cotinine is known to be higher for non-smoking hospitality workers where the smoking of cigarettes is uncontrolled in the workplace compared with those working in environments where cigarette smoking has been limited to designated areas.¹⁵⁵ A recent analysis of risk in NSW hospitality workers estimates about 73 workers die per year as a result of occupational exposure to ETS.¹⁵⁶

Home exposures. Most of the deaths from ETS occur from exposure in the homes.¹⁵⁰ Once the legislated ban on workplace cigarette smoking takes effect, virtually all remaining ETS deaths will be due to home exposure. In 2003, 30 per cent of year 10 students reported in a national survey in New Zealand that cigarette smoking occurred in their homes. By contrast, 41 per cent reported that one or both of their parents smoked.¹⁵⁷ Recent Australian studies have quantified the risk and costs attributable to passive smoking, particularly in domestic settings. A national Australian study estimates that, in 1998–99, 224 deaths were attributable to passive smoking. Further, 103 of these deaths occurred before the age of 15 years. In Australia, there is an increasing trend towards reduction of ETS exposure in the home and cigarette smokers who have children in the house are now more likely to smoke cigarettes outside.¹⁵⁸

Cigarette smoking bans are more effective than restrictions in reducing ETS exposure, and have been shown to be effective across a wide variety of public and private settings.¹⁵⁹ The most effective interventions to prevent cigarette smoking (and therefore exposure to ETS) in public places involve comprehensive programs to support compliance with a policy to ban cigarette smoking. Alternatives to cigarette smoking bans, such as use of signs requesting people not to smoke have little impact without other supportive measures. Prompting or requesting individual smokers not to smoke has only an immediate short-term effect on preventing cigarette smoking in public places.¹⁶⁰ The guiding principle to outdoor exposure in relation to toxic carcinogens is elimination of exposure.

The following columns illustrate the progress Australia and New Zealand have made in creating smoke-free environments.

**Smoke-free status of workplaces including hospitality venues
2004–6**

	Smoke-free offices and other workplaces	Smoke-free hospitality venues
New Zealand	Offices from 1990. All other work places from 2004	From December 2004
ACT	ACT Government has passed legislation that will prohibit cigarette smoking in pubs and clubs by December 2006 – making it the first Australian jurisdiction to introduce total smoking of cigarette bans in enclosed public places.	Pubs and clubs to be smoke-free by December 2006
Northern Territory	Northern Territory legislation prohibits smoking of cigarettes in public areas and all indoor workplaces, with exemptions for cigarette smoking areas in licensed premises, subject to equal amenity for all services.	
Tasmania	All enclosed public places and work places to be smoke-free, with the exception of some areas in bars and gaming venues by 2001. All nightclubs, gaming areas, cabarets and not less than 50 per cent of outdoor dining areas provided by businesses to be smoke-free by 2006. All bars to be smoke-free by 2006.	
NSW	Total indoor cigarette smoking bans in pubs and clubs by 2007	It has been estimated that 73 bar, club and pub workers die each year as a result of their exposure to ETS in the workplace. Of these 73, 59 deaths would be in non-smokers. ¹⁵⁰ Total indoor bans by 2007
Queensland	Queensland legislation has banned smoking of cigarette in most enclosed public places since 2002, with exemptions for licensed premises and certain gaming areas.	From July 1, 2006, cigarette smoking will be banned in all indoor areas of liquor licensed premises; and in all related outdoor areas where food or beverages are served.

	Smoke-free offices and other workplaces	Smoke-free hospitality venues
Victoria	Total indoor cigarette smoking bans in pubs and clubs by 2007	
South Australia	South Australia legislation bans cigarette smoking in enclosed public dining areas. The Government recently announced the bans would be extended to all enclosed workplaces, except licensed premises, within three months. Licensed venues will be required to be totally smoke-free by late 2007.	
Western Australia	Western Australian legislation banned cigarette smoking in most enclosed public places in 1999, with exemptions for licensed premises. Extensions to cigarette smoking bans are currently being considered.	
	Total indoor bans by 2006	

FOOTNOTE: There are exemptions under the legislation for licensed venues and gaming venues in all jurisdictions. In Australia, there are more than 130,000 people employed in pubs, clubs and casinos. The current exemptions from cigarette smoking bans leave the majority of these workers and many more patrons and performers exposed to the known risks of ETS.

Settings

10: Hospitals, public amenities and other institutions

Settings such as prisons, juvenile detention centres and community-based housing (shelters, live-in residential housing and hostels) are typically characterised by high rates of cigarette smoking among residents. In addition, smoking cigarettes can become a form of 'currency' in such settings. For many of these settings, ETS affects everyone: staff, residents and visitors. Yet smoke-free policies can be complex in such settings. De-normalisation of smoking cigarettes can be as challenging as in mental health settings.

In New South Wales, 79 per cent of prison inmates smoke cigarettes (78 per cent of men, 83 per cent of women). Younger inmates are more likely than older inmates to smoke cigarettes (86 per cent vs. 64 per cent). The median quantity of tobacco smoked is 50 grams a week. Most individuals smoke between 11 and 20 cigarettes a day. In the previous year, over half (52 per cent) of current smokers had attempted to quit or reduce the amount they smoked. At the time of the survey, 58 per cent of smokers had plans to quit; 21 per cent within three months.¹⁶¹

Some people with disabilities may require assisted accommodation. A US study¹⁶² found generally higher cigarette smoking rates among adults with disabilities than those without. There are no public data available in Australia or New Zealand on the prevalence of cigarette smoking for people living with a disability. Smoke-free policies in these institutional settings must be sensitive to the needs of those who are nicotine dependent.

Public amenities. Across Australia and New Zealand, some local councils have expanded smoke-free public spaces to include such areas as beaches¹⁶³ and children's playgrounds.¹⁶⁴

Prisons. Particular attention needs to be given to young people in juvenile justice settings.

The following columns illustrate the disparity in progress for smoke-free places between Australian states and territories and New Zealand, in hospitals, health and child care settings, playgrounds and correctional and justice centres. Australia does not have a coordinated national policy towards smoke-free hospitals, childcare centres, playgrounds or justice centres. Generally, access to a smoke-free prison cell is dependent on negotiations between cell mates. Given the high prevalence of cigarette smoking, it is more than likely that a non-smoker will be housed with a smoker-inmate. Smoke-free policies prohibiting smoking of cigarettes among staff and inmates must be more effectively monitored.

Smoke-free status in 2004 – 5 in New Zealand and Australia of hospitals, health care services, childcare centres, playgrounds, correctional systems and other justice centres.

	Smoke-free hospitals and health care services	Smoke-free childcare centres and playgrounds	Smoke-free correctional systems and other justice centres
New Zealand ¹⁶⁵	<p>“Live-in residential facilities” with ventilation are not smoke-free.</p> <p>District Health Boards have a smoke-free policy in all hospitals.</p>	All childcare centres are smoke-free	<p>Smoking of cigarettes is permitted by inmates in their own cells.</p> <p>An inmate who does not want to smoke in his or her cell must not be required to share it with an inmate who does want to smoke in the cell (as far as practicable).</p> <p>Prisons have a complaints procedure in place that identifies how complaints about workplace cigarette smoking are dealt with</p>
ACT	Cigarette smoking may occur in the grounds, in designated cigarette smoking areas (tend to be set up with benches, bins for cigarette smoking material, etc.).	<p>Childcare facilities are required to be non smoking.</p> <p>Playgrounds, sports ground, etc. no requirements under current ACT legislation.</p>	Remand centre is smoke-free
Northern Territory	Smoke-free excluding outdoor grounds	Childcare facilities : Smoke-free	Prisons and juvenile centres are smoke-free. Individual cells have no restrictions. Dorms are either all cigarette smoking or all non-smoking depending on inmates requirements. There are no restrictions on outdoor areas.
Tasmania	Smoke-free	<p>Smoke-free policy in childcare centres.</p> <p>Playgrounds: School playgrounds are smoke-free. Public playgrounds are not</p>	<p>Prisons: cigarette smoking permitted unless designated as smoke-free.</p> <p>Juvenile centres: no cigarette smoking</p>

	Smoke-free hospitals and health care services	Smoke-free child-care centres and playgrounds	Smoke-free correctional systems and other justice centres
NSW	All Area Health Services introduced an Area-wide Smoke-free Environment Policy in 1999, prohibiting cigarette smoking (except in designated areas) and requiring nursing and medical staff to manage nicotine withdrawal in their patients. ¹⁶⁶	<p>smoke-free</p> <p>Childcare centres all have a Smoke-free policy.</p> <p>Local councils ban cigarette smoking around all children's playground areas and around playing grounds.</p> <p>Signage is placed around these areas to act as a deterrent, and also has an educative role throughout the community.</p>	<p>Prisons: Smoking of cigarettes negotiated between cell mates.</p> <p>Prisons staff: Policy requires them not to smoke with prisoners.</p> <p>Juvenile centres: Smoke-free.</p>
Queensland	Smoke-free policy in progress	From 2005 cigarette smoking is banned on all patrolled beaches; within 10m of children's playgrounds; within 4m of all building entrances; and at major sporting venues including stadia, sport and entertainment centres.	No smoke-free policy.
Victoria	No smoking inside with recommendations for designated smoking areas outside the hospitals.	Childcare: smoke-free Playgrounds: Not smoke-free and nothing proposed.	<p>Smoke-free Work Environment policy requires that cigarette smoking within any prison building (including prisoner accommodation) will be banned and prison staff and prisoners will be permitted to smoke in designated open-air areas only. The policy is to be progressively implemented in all prisons, with a target of being fully enforced by March 2006.</p> <p>Prisoners in Corrections Victoria's prisoners are entitled to attend Prison -</p>

	Smoke-free hospitals and health care services	Smoke-free child-care centres and playgrounds	Smoke-free correctional systems and other justice centres
South Australia	N/A	N/A	specific Quit courses and receive nicotine therapy (patches). Non smoking prisoner will not be placed in a cell with a smoker unless he/she has said this is OK. Cigarette smoking is allowed in cells and in common areas.
Western Australia	All enclosed areas of hospitals and childcare facilities are smoke-free		Smoke-free policy in progress. Quit smoking support to staff and inmates to be implemented.

FOOT NOTE: No national approach to policy, standards or collaboration. Decisions are made state by state and thus ad hoc. In Australia costs attributable to passive smoking in hospitals amounted to \$AUD. 47 million nationally.¹³

Public Policy Strategy

11: Smoking tobacco product promotion and marketing

Both the Australian and New Zealand governments have ratified the World Health Organization's Framework Convention on Tobacco Control.¹⁹ This binds both countries to reduce smoking of cigarettes by regulating tobacco product promotion.

The (draft) Australian National Tobacco Strategy 2004–2009⁴ calls for more effective regulation of commercial conduct to mitigate ill-informed, non-voluntary and unnecessarily harmful and costly use of (and exposure to) tobacco products. The following columns highlight the progress currently taking place within Australian state and territories and in New Zealand.

Point of sale regulation of tobacco products and sales at 2004 –5

	New Zealand	Australia
Sale to under 18s	Not permitted	Not permitted
Tobacco product poster advertising	No	No
<i>Smoking kills</i> notices	Yes	Yes
Quitline information at point of sale	No	Yes
Graphic health warnings on packets	Under review	Due 2006
Display of cigarette smoking products	Permitted	Permitted but under review in TAS, WA, NSW and SA
Licensing of agents to sell tobacco products	No	Some jurisdictions (eg ACT, TAS, SA) but not all.
Community control	No provision in law	No provision in law
Smoking tobacco product display alongside sweets	Banned from December 2004	Permitted
Restriction on number of sales outlets	None	None

De-glamorising cigarette smoking. Cigarette smoking products should be removed from highly visible placement in retail outlets in order to denormalise tobacco purchasing. An additional advantage is that this may reduce impulse buying by smokers and unplanned relapses among former smokers. Young experimenters also may be discouraged. Tobacco smoking product displays are a form of advertising. In New Zealand, tobacco smoking products have been less visible in supermarkets since 2004 as a result of legislation prohibiting the display of tobacco smoking products close to children's confectionary near checkouts.

In Australia the *Tobacco Advertising Prohibition Act 1992* (Commonwealth) (The *TAP Act*)¹⁶⁷ has been important in limiting the exposure of the public to smoking of cigarette advertising through more traditional mass media forms of marketing. Exposure through other channels of communication to which the tobacco industry has increasingly been turning has yet to be fully resolved. In 2004, this Act was reviewed. Submissions endorsed suggestions to broaden the definition of “tobacco advertisement” to include covert marketing such as events and venue marketing, affinity marketing and internet marketing.¹⁶⁸

Public Policy Strategy

12: Pharmaceutical Benefits Scheme (PBS) listing for Nicotine Replacement Therapy (NRT) and other pharmaceuticals

Eight out of every ten people who smoke cigarettes have tried to quit. As described in page 41, NRT significantly increases smoking cessation rates when used in conjunction with behavioural techniques.^{66 131 138 169 170 171 172} Therefore, pharmacotherapy should be affordable and be no more expensive than smoking cigarettes. All commercially available forms of NRT – gum, transdermal patch, inhaler, nasal spray (not sold in Australia) and sublingual tablets/ lozenges – are effective. A review of over 100 studies found that NRT increases the odds of quitting 1.5 to two-fold (depending on product type) regardless of how products are prescribed or purchased.¹³¹ Medicines such as NRT and bupropion increase success rates independent of counselling, but the effects of counselling and pharmacotherapies are additive.^{173 174}

Other pharmacotherapies which affect dopamine release or reducing withdrawal symptoms also improve success rates.^{131 175} For example, a systematic review of 18 studies¹⁷⁵ and a single study enrolling 4,000 patients¹⁷⁶ demonstrated that bupropion is effective in doubling abstinence rates at six and 12 months compared to placebo.¹⁷⁷

In Australia, in 2002, economic modelling conducted to estimate PBS subsidies for drugs to treat smoking-related cardiovascular disease (CVD), assuming current cigarette smoking prevalence rates and a 5 per cent absolute reduction, found that PBS costs of smoking-related CVD were A\$126 million.¹⁷⁸ Of these costs 2.96 per cent included total PBS subsidies. The cumulative difference in these costs over a 40 year period with a 5 per cent reduction in cigarette smoking prevalence was estimated to be A\$4.5 billion, resulting in a 17 per cent reduction. This saving was estimated to be A\$1.14 billion discounting future costs at 5 per cent per year.

In Australia, the National Centre for Social and Economic Modelling (NATSEM) is currently addressing the issue of appropriate modelling to link the long term impact on health outcomes of pharmaceuticals on the PBS across the health system. However, NATSEM is not yet specifically focussing on smoking cessation pharmaceuticals. There is a clear need for research into effective smoking cessation pharmaceuticals that could curb the increasing costs of the PBS and which would contribute to government efforts to ensure the viability of healthcare-financing programs in both Australia and New Zealand.

Availability of NRT for New Zealand and Australia 2004–5

New Zealand

Quitline-related subsidies. NRT is available at nominal cost to people who access the various national Quit line schemes.

Subsidy. For those not using Quit line services, NRT is expensive. (Nicotine patches \$5 per day). Bupropion is not subsidised (cost NZ \$4 per day) Nortriptyline is subsidised as a pharmaceutical benefit.

Availability: Regulations permit the sale of NRT in supermarkets and other outlets but the industry, in practice, markets almost exclusively through pharmacies.

Australia

Bupropion available only on prescription and not subsidised for people calling Australian Quitlines.

PBS subsidy available only for use for a limited time.¹⁷⁹

Availability: The products are expensive. NRT is available over the counter in pharmacies.

Public Policy Strategy

13: Community awareness and education for better health

Reducing tobacco smoking and its health consequences depends on a well-resourced comprehensive tobacco control program. In the past, well-planned tobacco control programs have promoted reductions in mortality rates from tobacco smoking in both Australia and New Zealand. As discussed previously (See People and Populations pages 26–41), this impact is slipping and disturbing disparities have emerged.

Risk of New Zealanders and Australians aged 35–69 years dying from smoking cigarettes compared to the risk of dying from any cause³⁸

Risk of 35 year olds dying at age 35–69 years	Year	% risk of dying attributable to smoking cigarettes	% risk of dying due to any cause including smoking cigarettes
New Zealand: men	1990	9	30
	2000	5	23
Australia: men	1990	8	27
	2000	5	20
New Zealand: women	1990	4.1	20
	2000	3.2	15
Australia: women	1990	2.3	15
	2000	1.9	12

The prevalence of cigarette smoking is not spread evenly in the population. People with less education, less skilled jobs or who are unemployed are more likely to smoke than people of higher socio-economic status.¹⁸⁰

While previously exhibiting cigarette smoking rates comparable with the general community, less than 5 per cent of Australian doctors now smoke.¹⁸¹ Doctors have unfettered access to data about the health risks of cigarette smoking and see the consequences of tobacco smoking morbidity and mortality in daily practice.¹⁸² They are also a socially empowered group with the capacity to modify health risk behaviours. That a small proportion of doctors remaining addicted to tobacco-delivered nicotine indicates its potency and toxicity.

Advocacy is required to persuade governments to re-invest in tobacco control. Tobacco taxes that are incurred can be redeployed to fund tobacco control.

Mass media campaigns for public health messages require substantial funding which can only come from government. These efforts have been demonstrated to be effective among their target audiences.^{183 184 185 186}

It may be easy to lose sight of the longer term health savings and the intangible nature of social savings that will be achieved from tobacco control.⁵ In Australia and New Zealand, complacency has increased with respect to achievements in tobacco control, probably because of the decline in overall tobacco smoking death rates in both countries and decreasing rates of cigarette smoking among specific populations.^{187 188} By contrast, community support for tobacco control remains resolute, particularly for cigarette smoking restrictions.^{27 52}

Available international benchmarks now prescribe standards for smoking cessation programs. There is strong international and Australian and New Zealand evidence that comprehensive long-term tobacco control programs are very effective in reducing smoking of cigarette consumption among adult and teenage smokers.¹⁸⁹ The VicHealth Centre for Tobacco Control published *Tobacco control: a blue chip investment in public health* in 2001. This document outlines a practical agenda for action that would markedly reduce the social and health costs of cigarette smoking in Australia.⁵²

Having examined expenditure on tobacco control in developed countries, the Center for Disease Control (CDC) recommended that Australia should spend A\$38m–A\$115m per annum on anti-smoking education campaigns. By contrast, Canada spends \$2.29 per capita, Ireland \$3.00 and the United States \$3.17.⁵² In Australia, just A\$2.2 million in the 2004 budget was allocated for tobacco control. The national investment in tobacco control by all Australian governments is estimated to be A\$25 million. The Australian Government will collect some A\$5.2 billion in tobacco excise in 2005.¹⁹⁰

Comprehensive initiatives reduce impact on cigarette smoking rates.^{191 192} An evaluation of the Australian National Tobacco Campaign demonstrated persistent reductions in overall adult cigarette smoking rates since its inception. It has been further estimated that the first six months of this campaign prevented 922 premature deaths and afforded an additional 3338 years of life.¹⁹³ The National Tobacco Campaign has been estimated to have averted \$24 million in health expenditure in its first six months.¹⁸⁹

Evaluations of US tobacco-control campaigns have shown high levels of advertising recall among teenagers as well as increases in negative attitudes towards cigarette smoking among the young.^{194 195}

Public Policy Strategy

14: Taxation, trade and pricing

The World Bank has concluded that raising tobacco taxes is the single most important step that governments can take to reduce cigarette smoking among both adults and young people, particularly in lower socio-economic groups. On average, a 10 per cent increase in the price of cigarettes results in a 4 per cent reduction in cigarette smoking by adults and a 16 per cent reduction in smoking cigarettes by children, reducing overall cigarette smoking but increasing tobacco tax revenue.^{196 197}

Cigarette smokers not only involuntarily bear the majority of the costs of smoking of cigarettes; they also transfer significant revenue in the form of taxes on tobacco to the rest of society. In principle, a dedicated levy on tobacco for tobacco control will generate a source for the level of investment needed to resume progress in the eradication of mortality and morbidity due to tobacco smoking reducing cigarette smoking prevalence. A study on the impact on output, employment and other macroeconomic variables of a reduction in cigarette smoking prevalence in New South Wales demonstrated that the aggregate effects upon the economy of a decline in cigarette smoking prevalence would be largely neutral in their effects on output and employment.¹⁹⁸

Status of tobacco smoking policy and programs in New Zealand and Australia

New Zealand

Taxation. Automatic annual adjustment for CPI

Funding. Funds organisations and programs which encourage smoking cessation. The Pharmaceutical Management Agency for New Zealand (PHARMAC) subsidises NRT through approved providers.

Call number. Supplies telephone number on cigarette packet for free Quit line calls

NRT subsidy. Subsidises 92 per cent of the cost of NRT Posts quit packs which includes a NRT voucher redeemable at any pharmacy

Australia

Taxation. Automatic adjustment in February and August each year for CPI

Funding. Funds organisations and programs which encourage smoking cessation. Pharmaceutical Benefits Scheme (PBS) subsidises bupropion scripts but not NRT.

Supplies telephone number for free Quit line calls, on cigarette packets and at "Smoking kills" signs

Bupropion subsidy. In 2001, more than 350,000 bupropion prescriptions were filled, accounting for 2 per cent of the PBS budget and reaching an apparent 11 per cent of the cigarette

New Zealand

Quitting in hospitals. Some hospitals and health care services systematically identify patients who smoke and offer them access to quit counsellors.

Several hospitals are now introducing systems to ensure smoking cessation is provided to those admitted.

Quitline. In 2003 41,000 smokers contacted the free call number and 73 per cent had redeemed their NRT vouchers.

Guidelines. The New Zealand Guidelines²⁰¹ describe an organised approach to promoting smoking cessation based on the five ‘A’s “Ask about smoking; Advise quitting; Assess current willingness to quit; Assist in the quit attempt; and Arrange timely follow-up”^{202 203}

Australia

smoking population.

Few patients who smoke in Australia receive opportunistic smoking cessation interventions from their physicians. Only half of smokers are identified.¹⁹⁹ In another study, one in three received a smoking cessation intervention.²⁰⁰

NSW Health has guidelines for identification of patients who smoke in hospitals and health care services

Quitlines operate across Australia.

Guidelines.

NHMRC guidelines are available at www.nhmrc.gov.au

Australian College of General Practitioners guidelines: www.rcgp.edu.au

Status of trade and taxation activities as at New Zealand in December 2004 and in and Australia April 2004

	New Zealand	Australia
Excise rate	As at December 2004, the excise rate was NZ\$337.62 per kg loose tobacco or cigars, or NZ\$270.09 per 1000 cigarettes. For current rates, see www.customs.govt.nz	As at 1 February 2004, the excise paid per stick on a cigarette containing 0.8 grams of tobacco was 24 cents. Tobacco products containing more than 0.8 grams of tobacco are charged excise at the weight based rate of A \$275.55 per kilogram.
Price increases	Manufacturers nearly always raise their Recommended Retail Price (RRP) with excise rate increases, to maintain their trade share of the price.	Price increases are in line with the Consumer Price Index, (CPI) occurring in August and February each year. Revenue attributable to tobacco products collected by the Australian Tax Office’s (ATO’s) Excise Business Line (EBL) in 2000–01 totalled A\$4.8 billion, (\$5.09 billion estimated for 2003–04) which accounted for 24 per cent of total excise collections in that year. ²⁰⁴

	New Zealand	Australia
Illegal trade	According to the manufacturers' returns 36 million cigarettes, representing 22 per cent of Philip Morris's reported sales in New Zealand, escaped duty in 2001. This represented a loss in revenue of NZ\$9 million to the government.	Illegal tobacco produces a loss of effectiveness of price-elasticity effects on cigarette smoking rates.
Tobacco tax	Tobacco taxation is usually levied for revenue purposes. Tobacco tax increases are likely to be less unpopular if planned, pre-publicised, and the revenue channelled to helping smokers to quit.	In 1995, the Government de-regulated tobacco production. In 2001–02 801 million cigarettes were imported into Australia.
Health promotion levies	Some funding from the 2000 tax increase went towards Māori cigarette smoking cessation programs.	Health promotion levies were discontinued in 1997 in Victoria, Western Australia and South Australia after the abolition of state franchise fees on tobacco.
Smoking of cigarette levies	Although New Zealand applies levies on petrol to pay for roads, and on alcohol to pay for alcohol education, it has no tied taxes on tobacco. At the same time, it spends more per capita on tobacco control than Victoria and South Australia, which do have tobacco levies. Also, taxes and programs in NZ were linked in 1995 and in 2000, when some funding from the tax increase went towards Māori smoking cessation programs.	Taxes on cigarettes account for 68.9 per cent of the total cost of cigarettes in Australia.
Revenue from tobacco	Government revenue from tobacco totalled NZ \$938 million (NZ \$854 million excise, \$NZ 84 million in Customs duty) in 2002. ²⁰⁵	Government revenue from excise duty on tobacco products is expected to total \$5.2b in 2004–05. ²⁰⁶
Annual household expenditure		Annual household expenditure on 12 months tobacco to March 2004 was Aus \$10.137 billion.

Taxes on tobacco products increase prices and help to discourage consumption. In Australia, the excise on tobacco is indexed to the Consumer Price Index (CPI) every six months.

Taxes and prices as at December 2004 for New Zealand and April 2004 for Australia

	Manufactured cigarettes excise (national)	Tobacco control or health promotion levies	GST	Price of 20 cigarettes (popular brand)	Automatic adjustment for inflation
New Zealand	NZ\$0.27 cents per cigarette	None	One ninth of retail price	NZ\$ 9.25	Annually on 1 December
Australia	A\$0.22 cents per stick	None	One eleventh of retail price	A\$ 11.25 (Peter Jackson)	August and February each year

An end to duty-free exemptions. A small but symbolically significant percentage of total smoking of cigarette consumption escapes taxation as a result of the availability of these products in duty-free stores. Duty free concessions on smoking of tobacco not only deprive governments of both Australia and New Zealand considerable tax revenue but reinforce a positive attitude towards cigarette smoking.

Public Policy Strategy

15: Harm reduction

Harm reduction aims to minimise the harmful effects of cigarette smoking among those unable yet to quit.

- **Nicotine with smoking tobacco.** Nicotine reaches the brain (the hit) at almost the same time as hot toxic gases are absorbed from the lungs. Seeking the nicotine with every puff, the smoker inhales toxicants 100 to 200 times a day. Pleasure and harm work together. Nicotine maintains the momentum often enough and for long enough for smokers to die from the toxicants. Thus the underlying principle of smoking tobacco harm reduction is to separate the two.
- **Non-cigarette nicotine** in the doses used does not kill, certainly not as NRT, if it is not associated with cigarette smoking.
- **Oral tobaccos**, mean no smoke toxicants and are seldom lethal.

Harm reduction means doing all of the following things, preferably together, to obtain maximum effect:

1. Reaffirming the health benefit of smoking cessation and offering support to quit;
2. Regulating smoking tobacco products to minimise their toxicity;
3. Providing less dangerous (that is, non-cigarette forms) of nicotine (usually NRT or oral tobacco);
4. Regulation for fire safer manufactured cigarettes to reduce fire injuries and fatalities. The manufactured cigarette needs to be redesigned so it does not burn full length when left unattended; and,
5. Partial combined approaches. For the many cigarette smokers who continue to inhale both nicotine and smoke, harm reduction can only be partial. Toxicity and dependence on nicotine both need to be reduced. For example, some argue that, as toxicity-reduced cigarettes would be perceived to be less dangerous, then young people may be especially likely to take up cigarette smoking; indeed former smokers may be more likely to relapse. However relapse could also be prevented if satisfying forms of non-cigarette nicotine were available. Such measures are complementary parts of a comprehensive smoking tobacco control program.

Oral tobacco is much less dangerous than cigarette smoking.²⁰⁷ When sourced from Sweden (“snus”), oral tobacco is less toxic than when sourced from South Asia.²⁰⁸ Currently, commercial import from any country is prohibited in both

Australia and New Zealand. Both countries are well-placed to permit only the importation of 'snus'. Oral tobacco carries a reduced mortality risk (10 per cent) compared with cigarette smoking.²⁰⁴

Are the public misled about the toxicity of tobacco smoke?

Since the 1950s, it has been known that cigarette tar painted on the backs of mice caused cancer. Tar contains almost all of the addictive agent, nicotine, as well as known carcinogens such as benzalaphaprene, smoking tobacco specific nitrosamines and heavy metals. Tar yield has been found to be unrelated to lung cancer risk among those smoking filtered cigarettes.²⁰⁹ Descriptors such as 'light' or 'mild' are misleading.

With over 4000 chemicals in cigarette smoke, many have believed these were too numerous to assess. Those that were measured, such as tar, bore little relation to mortality rates. Recently, however, in a paper originally written for the New Zealand Ministry of Health,²⁰³ toxicological risk assessment principles were applied to cigarette smoke, whereby the known toxicity rating of each constituent was multiplied by its concentration in smoke. In this way the most toxic constituents of cigarette smoke were identified.^{203 210}

The vapour or gas phase of cigarette smoke contains a dozen or so volatile organic compounds (VOCs) which together account for most of the identifiable known toxicity of cigarette smoke. The particulate phase toxins such as the smoking of tobacco specific nitrosamines and the trace heavy metals, principally arsenic, ranked lower down the scale. Furthermore, the levels of these constituents in New Zealand cigarettes were lower than in a typical United States brand.²¹¹ Tests have shown that VOCs account for at least 80 per cent of the total identifiable toxicity of Holiday Extra-mild cigarettes.²¹² These VOCs were virtually all small molecules with a molecular weight of less than 100.

Charcoal filters. Documents from cigarette company laboratories from 40 years ago show that charcoal filters can greatly lower most VOCs in cigarette smoke, thus greatly lowering cigarette smoke toxicity.^{213 214} Current charcoal filters, however, do not contain sufficient charcoal.

In summary the Colleges recommend:

- Quitting smoking is the first choice; or
- Switching to more satisfying forms of smokeless nicotine (requiring pharmaceutical research and development) (Second choice when available);
- Pricing of all products to reflect putative level of harm i.e. NRT would be cheapest; and,
- Permitting the use of oral tobacco (snus) for example, as currently widely used in Sweden, as an aid to smoking cessation subject to confirmatory research trials.

Where to Next?

This document has summarised the continuing burden of illness caused by tobacco smoking to a significant number of people in both countries. Eradication of the mortality and morbidity due to smoking tobacco requires a concerted social effort. Physicians and psychiatrists must play a significant part.

By 2010, the Colleges should aim to have achieved the following:

- Disappearance of the social and class gradients in cigarette smoking prevalence;
- Presentation of cigarettes for sale in unbranded wrapping with graphic health warnings;
- Distribution of smoking tobacco products will be restricted to authorised outlets to prevent access by children and adolescents.
- Endorsement of sales revenues which are only used to underwrite manufacturing and distribution costs; and,
- Re-deployment of tax revenue through governments to medical research and health promotion programs, particularly to counter youth cigarette smoking.

Who will do the work? Recommendations from this document are now incorporated in a separate implementation strategy available at <http://www.racp.edu.au/>. This implementation plan documents each recommendation separately, specifying responsibilities, outcomes and indicators.

The Colleges will now work with government and non-governmental organisations to address smoking of tobacco. The Colleges also endorse and support the *Australian National Tobacco Strategy 2004 – 2009*,⁴ the *Aboriginal and Torres Strait Islander Peoples' Complementary Action Plan 2003 – 2006*², the *National Māori Tobacco Control Strategy: 2003-2007*⁵ and *Clearing the Smoke: A five-year plan for tobacco control in New Zealand*.²¹⁵

References

- ¹ Royal College of Physicians. Smoking and Health. Summary and Report of the Royal College of Physicians of London on Smoking in Relation to Cancer of the Lung and Other Diseases New York Pittman Publishing Company, 1962.
- ² Ministerial Council on Drugs Strategy. *National Drug Strategy. Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003-2006*. Canberra Commonwealth of Australia 2003.
- ³ New Zealand Ministry of Health. *Tobacco Facts 2002*. www.ndp.govt.nz
- ⁴ Ministerial Council on Drug Strategy. *Australian National Tobacco Strategy, 2004-2009: The Strategy* Canberra Department of Health and Ageing, 2004.
- ⁵ Apārangi Tautoko Auahi Kore (ATAK) National Māori Tobacco Control Strategy 2003-2007 Wellington: Apārangi Tautoko Auahi Kore 2003.
- ⁶ World Health Organization *Guidelines for controlling and monitoring the tobacco epidemic* World Health organisation: Geneva, 1998; 18.
- ⁷ McNeill A, Bates C. *Smoking cessation in primary care. How to spend NHS money more effectively* London ASH 2000.
- ⁸ Parrott S, Godfrey C, Raw M, West R, McNeill AD *Guidance for commissioners on the cost-effectiveness of smoking cessation interventions*. Thorax, 1998; 53: suppl 5(2): S1-38.
- ⁹ The Royal Australasian College of Physicians. *From Hope to Science: Illicit Drug Policy in Australia* Sydney: RACP 2000.
- ¹⁰ The Royal Australasian College of Physicians. *Illicit Drug Policy: Using evidence to get better outcomes* Sydney: RACP 2003.
- ¹¹ Collins DJ, Lapsley HM. *Counting the cost: Estimates of the costs of drug abuse in Australia in 1998 99*. Monograph Series No. 49. Canberra Commonwealth of Australia 2002.
- ¹² Mathers C, Vos T, Stevenson C. *The burden of disease and injury in Australia*. Canberra: Australian Institute of Health and Welfare: Report No. AIHW cat. No. PHE 17 1999.
- ¹³ New Zealand Ministry of Health. *Our health, our future: the health of New Zealanders*. Wellington: Ministry of Health 1999.
- ¹⁴ *Australian Medical Workforce Advisory Committee 2002*, Annual Report 2001-02 www.AMWAC.health.NSW.gov.au/amwac/annual20022pdf, accessed 8 April 2003.
- ¹⁵ The New Zealand Health Information Service (NZHIS). *New Zealand Medical Practitioners 2000* Ministry of Health, P O Box 5013, Wellington, New Zealand ISBN 0-478-24398-7 2001.
- ¹⁶ World Health Organization. *Making a difference, world health report 1999* Geneva: WHO 1999.
- ¹⁷ *World Health Organisation Framework Convention on Tobacco Control 2003*. http://www.who.int/gb/EB_WHA/PDF/WHA56/ea56rl.pdf
- ¹⁸ Crescenti M. *The New Tobacco World*. Tobacco Journal International, 1999; 51-53.
- ¹⁹ Kelley L, Jeff C. *Globalisation & Transborder Health Risk in the UK*, London The Nuffield Trust, 2003; p 53.
- ²⁰ Ivers R. *Indigenous Australians and Tobacco – a literature review* Darwin Cooperative Research Centre for Aboriginal and Tropical Health, 2001.
- ²¹ Aukati Kai Paipa *Evaluation of Culturally Appropriate Smoking Cessation Programme for Māori Women and their Whānau*. www.ndp.govt.nz 2003.
- ²² Henningfield JE. *Tobacco dependence treatment: scientific challenges; public health opportunities* Tobacco Control 2000; 9(Suppl 1): i3-i10 (spring).
- ²³ Henningfield JE, Moolchan ET, Zeller M. *Regulatory strategies to reduce tobacco addiction in youth* Tobacco Control 2003; 12:114.

-
- ²⁴ White V, Hayman J. *Smoking behaviours of Australian secondary students in 2002. National Drug Monograph Series No.54.* Canberra Australian Government Department of Health and Ageing, 2003.
- ²⁵ Australian Institute of Health and Welfare (AIHW) *Statistics on drug use in Australia 2002* AIHW cat. no. PHE 43. Canberra AIHW (Drug Statistics Series no.12), 2003.
- ²⁶ Scragg R. *ASH national year 10 survey of smoking, Tables.* Auckland: ASH NZ, 2003.
- ²⁷ Ridolfo B, Stevenson C. *The quantification of drug-caused morbidity and mortality in Australia, 1998 edition* Canberra AIHW 2001.
- ²⁸ Easton B. *The social costs of tobacco and alcohol misuse.* Public Health Monograph Series No.2. Department of Public Health, Wellington School of Medicine: 1997.
- ²⁹ Chaudhuri R, Livingstone E, Thomson L et al. *Effect of cigarette smoking on the therapeutic response to oral corticosteroids in chronic asthma* American Journal Respiratory Critical Care Medicine 2003;168(11):1308-11.
- ³⁰ Chalmers GW, Macleod KJ, Little SA, Thomson LJ, et al. *Influence of cigarette smoking on inhaled corticosteroid treatment in mild asthma.* Thorax 2002; 57:226-30.
- ³¹ Moser K, Li L, Power C. *Social inequalities in low birth weight in England and Wales: trends and implications for future population health* Journal of Epidemiology and Community Health 2003; 57:687-691.
- ³² McDermott R. *Can a risk approach work in the obesity epidemic? A possible role extension for physicians?* Adelaide University of South Australia, Unpublished report, 2005
- ³³ Robbins S, Fonseca VP, Chao SY, et al. *Short term effects of cigarette smoking on hospitalisation and associated lost workdays in a young healthy population.* Tobacco Control 2000; 9: 389-396.
- ³⁴ English DR, Vu HT, Knuiman MW. *The impact of smoking on use of hospital services: the Busselton study.* Australian & New Zealand Journal of Public Health 2002; 26: 225-230.
- ³⁵ Wagner EH, Curry SJ, Grothaus L, et al. *The impact of smoking and quitting on health care use.* Archives of Internal Medicine 1995; 155: 1789-1795.
- ³⁶ Adams C, Keating J, Court-Brown C. *Cigarette smoking and open tibial fractures.* Injury 2001; 32: 61-65.
- ³⁷ Moller AM, Maaloe R, Pedersen T. *Postoperative intensive care admittance: the role of tobacco smoking.* Acta Anaesthesiol Scand 2001; 45: 345-348.
- ³⁸ Peto R, Lopez AD, Boreham J, Thun M, Heath C Jr. *Mortality from smoking in developed countries 1950-2000: indirect estimates from national vital statistics.* Oxford: Oxford University Press, 1994.
- ³⁹ Miller CL, Wakefield M, Roberts L *Uptake and effectiveness of the Australian telephone Quitline service in the context of a mass media campaign* Tobacco Control 2003;12:53.
- ⁴⁰ Osler M, Prescott E. *Psychosocial, behavioural, and health determinants of successful smoking cessation: a longitudinal study of Danish adults.* Tobacco Control 1998; 7:262-267.
- ⁴¹ US Dept of Health and Human Services. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General.* Atlanta, Ga: US Dept of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 1994. US Dept of Health and Human Services publication SIN 017-00100491-0.
- ⁴² Choi WS, Pierce JP, Gilpin EA, Farkas AJ, Berry CC. *Which adolescent experimenters progress to established smoking in the United States?* American Journal Preventive Medicine 1997; 13:385-391.

-
- 43 McNeill AD, Jarvis MJ, Stapleton JA, West RJ, Bryant A. *Nicotine intake in young smokers: longitudinal study of saliva cotinine concentrations*. American Journal of Public Health 1989; 79: 172-5.
- 44 DiFranza JR, Savageau JA, Kenneth J, Ockene K, et al. *Measuring the loss of autonomy over nicotine use in adolescents: the DANDY (development and assessment of nicotine dependence in youths) study*. Archives of Pediatrics & Adolescent Medicine 2002; (156): 397.
- 45 Scragg R, Laugesen M, Robinson E. *Parental smoking and related behaviours influence adolescent tobacco smoking: results from the 2001 New Zealand national survey of 4th form students*. New Zealand Medical Journal 2003; 116.
- 46 Wakefield M. *Effect of restrictions on smoking at home, at school, and in public places on teenage smoking: cross sectional study*. British Medical Journal 2000; 31: 623.
- 47 Scragg R, Laugesen M, Robinson E. *Cigarette smoking, pocket money and socioeconomic status: results from a national survey of 4th form students in 2000*. New Zealand Medical Journal 2002; 115.
- 48 Botvin GJ, Baker E, Filazzola AD, Botvin EM. *A cognitive-behavioural approach to substance abuse prevention: one year follow-up*. Addictive Behaviours 1990; 15:47-63.
- 49 Dusenbury L, Falco M, Lake A. *A review of the evaluation of 47 drug abuse prevention curricula available nationally*. Journal of School Health 1997; 67 (4): 127-132.
- 50 Foulds J, Ramstrom L, Burke M, Fagerstrom K. *Effect of smokeless tobacco (snus) on smoking and public health in Sweden*. Tobacco Control 2003; 12: 349-59.
- 51 Kropp RY, Halpern-Felsher BL. *Adolescents' Beliefs about the Risks Involved in Smoking "Light" Cigarettes* Pediatric 2004; 114: 445-451.
- 52 VicHealth Centre for Tobacco Control <http://www.vctc.org.au/te-res/latest.htm> (Accessed December 2004).
- 53 Australian Bureau of Statistics *National Aboriginal and Torres Strait Islander Social Survey 4714. 0 2002*.
- 54 Australian Institute Health Welfare (AIHW): Strong K, Trickett P, Titulaer I, et al. *Health in rural and remote Australia* AIHW Cat. No. PHE 6. Canberra: AIHW 1998.
- 55 Australian Institute Health Welfare (AIHW) *Australia's health 2000*. Canberra AIHW Cat. No. AUS 19. AIHW 2000.
- 56 Laugesen M, Clements M. *Cigarette mortality among Māori, 1954-2028*. Wellington: Te Puni Kokiri 1998. www.tpk.govt.nz.
- 57 Measey M-A, d'Espaignet ET, Cunningham L. *Adult morbidity and mortality due to tobacco smoking in the Northern Territory, 1986-1995*. Darwin, Territory Health Services, 1998.
- 58 Unwin E, Thomson N, Gracey M. *The Impact of Tobacco Smoking and Alcohol Consumption on Aboriginal Mortality and Hospitalisation in Western Australia: 1983-1991*. Perth: Health Department of Western Australia, 1994.
- 59 Wilson N, Thomson G, Tobias M, Blakely T. *How much downside? Quantifying the relative harm from tobacco taxation*. J Epidemiol Community Health. 2004 Jun; 58(6): 451-4.
- 60 New Zealand Ministry of Health. *Evaluation of culturally appropriate smoking cessation programme for Māori women and their whānau: Aukati Kai Paipa* Wellington, New Zealand, Ministry of Health, 2000.
- 61 Grant BF, Hasin DS, Chou P, Stinson FS, Dawson DA. *Nicotine dependence and Psychiatric Disorders in the United States. Results from the National Epidemiologic Survey on Alcohol and Related Conditions*. Archives General Psychiatry 2004; 61: 1107-1115.

-
- ⁶² Breslau N, Peterson EL, Schultz LR, Chilcoat HD, Andreski P. *Major depression and stages of smoking. A longitudinal investigation.* Archives of General Psychiatry 1998; 55(2): 161-6.
- ⁶³ Breslau N, Novak SP, Kessler RC. *Daily smoking and the subsequent onset of psychiatric disorders.* Psychological Medicine 2004; 34:323-333.
- ⁶⁴ Glassman A. *Cigarette smoking: Implications for psychiatric illness.* American Journal of Psychiatry 1993; 150(4): 546-553.
- ⁶⁵ Wilhelm K, Mitchell P, Slade T, Brownhill S, Andrews G. *Prevalence and correlates of DSM-IV major depression in an Australian national survey.* Journal of Affective Disorders 2003; 75, 155-162.
- ⁶⁶ Wilhelm K, Arnold K, Niven H, Richmond R. *Grey lungs and blue moods: Smoking cessation in the context of lifetime depression history.* Australian and New Zealand Journal of Psychiatry 2004; 38, 896-905.
- ⁶⁷ Tanskanen A, Viinamaki H, Hintikka J, Koivumaa-Hnkanen H-T, Lehtonen J. *Smoking and suicidality among psychiatric patients.* American Journal of Psychiatry 1998; 155:129-130.
- ⁶⁸ Corvin A, O'Mahony, E, O'Regan, M, Comerford C, O'Connell R, Craddock N, Gill M. *Cigarette smoking and psychotic symptoms in bipolar affective disorder.* British Journal of Psychiatry 2001; 179(1): 35-38.
- ⁶⁹ de Leon J, Becona E, Gurpegui M, Gonzalez-Pinto A, Diaz FJ. *The association between high nicotine dependence and severe mental illness may be consistent across countries.* Journal of Clinical Psychiatry 2002; 63(9): 812-6.
- ⁷⁰ Kelly C, McCreddie R. *Cigarette smoking and schizophrenia.* Advanced Psychiatric Treatment 2000; 6(5): 327-331.
- ⁷¹ Kirch D. Nicotine and major mental disorders. In: Newhouse P, editor. *Nicotine in psychiatry: psychopathology and emerging therapeutics.* American Psychiatric Press 2000:111-131.
- ⁷² Dalack GW, Meador-Woodruff JH. *Smoking, smoking withdrawal and schizophrenia: Case reports and a review of the literature.* Schizophrenia Research 1996; 22(2): 133-141.
- ⁷³ Prior TI, Baker GB. *Interactions between the cytochrome P450 system and the second-generation antipsychotics.* Journal of Psychiatry & Neuroscience 2003; 28(2):99-112.
- ⁷⁴ Carrillo JA, Herraiz AG, Ramos SI, Gervasini G, Vizcaino S, Benitez J. *Role of the smoking-induced cytochrome P450 (CYP)1A2 and polymorphic CYP2D6 in steady-state concentration of clozapine.* Journal of Clinical Psychopharmacology 2003; 23(2):119-27.
- ⁷⁵ Sattar SP, Grant K, Bhatia S, Petty F. *Potential use of clozapine in treatment of substance dependence disorders.* Journal of Clinical Psychopharmacology 2003; 23(4):413-5.
- ⁷⁶ Degenhardt L, Hall W. *The relationship between tobacco use, substance-use disorders and mental health: results from the National Survey of Mental Health and Well-being.* Nicotine & Tobacco Research 2001; 3: 225-34.
- ⁷⁷ Tullis LM, DuPont R, Frost-Pineda K, Gold MS. *Marijuana and Tobacco: A Major Connection?* Journal of Addictive Diseases 2003; 3: 51-62.
- ⁷⁸ Prochaska, JO, DiClemente CC. *Transtheoretical therapy: Toward a more integrative model of change.* Psychotherapy: Theory, Research, and Practice 1982; 19: 275-288.
- ⁷⁹ Poole N, Greaves L, Cormier RA. *Integrating Treatment for Tobacco and Other Addictions at the Aurora Centre of the British Columbia Women's Hospital and Health Centre.* Canadian Journal of Nursing Research 2003; 1: 95-102.
- ⁸⁰ Peto J. *Cancer epidemiology in the last century and the next decade* Nature 2001; 411: 390 – 395.

-
- ⁸¹ Degenhardt L, Hall, W, Lynskey, M. *Alcohol, cannabis and tobacco use among Australians: a comparison of their associations with other drug use and use disorders, affective and anxiety disorders, and psychosis*. *Addiction* 2001; 96. (11): 1603-14.
- ⁸² McCreddie R, Kelly, C. *Patients with schizophrenia who smoke: Private disaster, public resource*. *British Journal of Psychiatry* 2000; 176(2): 109.
- ⁸³ Lawn S, Pols R. *Alcohol and other drugs Nicotine withdrawal: pathway to aggression and assault in the locked psychiatric ward?* *Australasian Psychiatry* 2003; 1:199.
- ⁸⁴ Nagle A, Schofield M Redman S *Australian nurses' smoking behaviour, knowledge and attitude towards providing smoking cessation care to their patients* *Health Promotion International* 1999; 14:2: 133-144.
- ⁸⁵ Kavanagh DJ. *Comorbidity in mental health and substance use: causes, prevention and treatment*. Paper presented at National Workshop on Comorbidity. Canberra, 6-7 March 2000.
- ⁸⁶ Lumley J, Oliver S, Waters E. *Interventions for promoting smoking cessation during pregnancy* (Cochrane Review). In: *The Cochrane Library*, Issue 2, Oxford, Update Software. 2003.
- ⁸⁷ *Smoking and the Young. A report of a working party of the Royal College of Physicians*. Royal College of Physicians 1992(Summary in *Journal Royal College Physicians London* 1992; 26: 352-6).
- ⁸⁸ Fergusson DM, Horwood LJ, Shannon FT. *Smoking during pregnancy*. *New Zealand Medical Journal* 1979; 89:41-43.
- ⁸⁹ Rantakallio P. *The effect of maternal smoking on birth weight and the subsequent health of the child*. *Early Human Development* 1978; 2(4):371-82.
- ⁹⁰ Hanrahan JP, Tager IB, Segal MR, Tosteson TD, Castile RG, Van Vunakis H, Weiss ST, Speizer FE. *The effect of maternal smoking during pregnancy on early infant lung function*. *American Revised Respiratory Disease* 1992; 145:1129-35.
- ⁹¹ Martinez FD, Wright AL, Taussig LM, Holberg CJ, Halonen M, Morgan WJ. *Asthma and wheezing in the first six years of life*. *The Group Health Medical Associates [see comments]*. *New England Journal of Medicine* 1995; 332(3):133-8.
- ⁹² Mitchell EA, et al. *Four modifiable and other major risk factors for cot death: The New Zealand study*. *Journal of Paediatric Child Health* 1992; 28(Suppl 1):S3-8.
- ⁹³ Anderson HR, Cook DG. *Passive smoking and sudden infant death syndrome: review of the epidemiological evidence*. *Thorax* 1997; 52(11):1003-9.
- ⁹⁴ Fergusson DM, Horwood LJ, Shannon FT, Taylor B. *Parental smoking and lower respiratory illness in the first three years of life*. *J Epidemiol Community Health* 1981; 35:180-4.
- ⁹⁵ Fergusson DM, Horwood LJ. *Parental smoking and respiratory illness during early childhood: a six-year longitudinal study*. *Pediatric Pulmonology* 1985; 1(2):99-106.
- ⁹⁶ Pedreira FA, Guandolo VL, Feroli EJ, Mella GW, Weiss IP. *Involuntary smoking and incidence of respiratory illness during the first year of life*. *Pediatrics* 1985; 75:594-7.
- ⁹⁷ McConnochie KM. *Parental smoking, presence of older siblings, and family history of asthma increase risk of bronchiolitis*. *American Journal Disease in Children* 1986; 140:806-12.
- ⁹⁸ Wright AL, Holberg C, Martinez FD, Taussig LM. *Relationship of parental smoking to wheezing and nonwheezing lower respiratory tract illnesses in infancy*. *Journal of Pediatrics* 1991; 118:207-14.
- ⁹⁹ Strachan DP, Cook DG. *Health effects of passive smoking. 1. Parental smoking and lower respiratory illness in infancy and early childhood*. *Thorax* 1997; 52(10):905-14.
- ¹⁰⁰ Etzel RA, Pattishall EN, Haley NJ, Fletcher RH, Henderson FW. *Passive smoking and middle ear effusion among children in day care*. *Pediatrics* 1992; 90:228-32.
- ¹⁰¹ Owen MJ, Baldwin CD, Swank PR, Pannu AK, Johnson DL, Howie VM. *Relation of infant feeding practices, cigarette smoke exposure, and group child care to the onset*

-
- and duration of otitis media with effusion in the first two years of life. *Journal of Pediatrics* 1993; 123:702-11.
- ¹⁰² Ey JL, Holberg CJ, Aldous MB, Wright AL, Martinez FD, Taussig LM. *Passive smoke exposure and otitis media in the first year of life*. Group Health Medical Associates. *Pediatrics* 1995; 95(5):670-7.
- ¹⁰³ Hinton AE, Herdman RC, Martin-Hirsch D, Saeed SR. *Parental cigarette smoking and tonsillectomy in children*. *Clin Otolaryngol* 1993; 18(3):178-80.
- ¹⁰⁴ Rantakallio P. *Relationship of maternal smoking to morbidity and mortality of the child up to the age of five*. *Acta Paediatrica Scandinavica* 1978; 67(5):621-31.
- ¹⁰⁵ Robertson J, Pattermore PK, Ford RPK. *The effect of maternal smoking on admission to hospital in infancy*. *New Zealand Medical Journal* 1993; 106:476-7.
- ¹⁰⁶ Kriz P, Bobak M, Kriz B. *Parental smoking, socioeconomic factors, and risk of invasive meningococcal disease in children: a population based case-control study*. *Archives Diseases in Children* 2000; 83(2):117-21.
- ¹⁰⁷ Iles K, Poplawski NK, Couper RT. *Passive exposure to tobacco smoke and bacterial meningitis in children*. *Journal Paediatric Child Health* 2001; 37(4):388-91.
- ¹⁰⁸ Dekker C, Dales R, Bartlett S, Brunekreef B, Zwanenburg H. *Childhood asthma and the indoor environment*. *Chest* 1991; 100:922-6.
- ¹⁰⁹ Chilmonczyk BA, Salmun LM, Megathlin KN, Neveux LM, Palomaki GA, et al. *Association between exposure to environmental tobacco smoke and exacerbations of asthma in children*. *New England Journal Medicine* 1993; 328:1665-9.
- ¹¹⁰ Tager IB, Hanrahan JP, Tosteson TD, Castile RG, Brown RW, Weiss ST, Speizer FE. *Lung function, pre- and post-natal smoke exposure, and wheezing in the first year of life*. *American Revised Respiratory Disorders* 1993; 147:811-7.
- ¹¹¹ Tager IB. *Passive smoking and respiratory health in children — sophistry or cause for concern?* [Editorial]. *American Revised Respiratory Disorders* 1985; 133:959-61.
- ¹¹² Burchfield CM, Higgins MW, Keller JB, Howatt WF, Butler WJ, Higgins ITT. *Passive smoking in childhood: respiratory conditions and pulmonary function in Tecumseh, Michigan*. *American Revised Respiratory Disorders* 1996; 133:966-73.
- ¹¹³ Sherrill DL, Martinez FD, Lebowitz MD, Holdaway MD, Flannery EM, Herbison P, Stanton W, Silva PA, Sears MR. *Longitudinal effects of passive smoking on pulmonary function in New Zealand children*. *American Review Respiratory Diseases* 1992; 145:1136-41.
- ¹¹⁴ Wang X, Wypij D, Gold DR, Speizer FE, Ware JH, Ferris BC, Dockery DW. *A longitudinal study of the effects of parental smoking on pulmonary function in children 6-18 years*. *American Journal Respiratory Critical Care Med* 1994; 149:1420-5.
- ¹¹⁵ MacKenzie TD, Bartecchi CE, Schrier RW. *The human costs of tobacco use (second of two parts)*. *New England Journal Medicine* 1994; 330:975-80.
- ¹¹⁶ Sandler DP, Wilcox AJ, Everson RB. *Cumulative effects of lifetime passive smoking on cancer risk*. *Lancet* 1985; i: 312-4.
- ¹¹⁷ Morley R, Payne CL, Lister G, Lucas A. *Maternal smoking and blood pressure in 7.5 to 8 year old offspring*. *Archives of Diseases in Children* 1995; 72:120-4.
- ¹¹⁸ Feldman J, Shenker JR, Etzel RA. *Passive smoking alters lipid profiles in adolescents*. *Pediatrics* 1991; 88:259-64.
- ¹¹⁹ Ford DJ, Scragg R, Weir J, Gaiser J. *A national survey of cigarette smoking in fourth-form school children in New Zealand*. *New Zealand Medical Journal* 1995; 108(1011):454-7.
- ¹²⁰ Ford RP, Tappin RM, Schluter PJ, Wild CJ. *Smoking during pregnancy: how reliable are maternal self-reports in New Zealand?* *Journal of Epidemiology of Community Health* 1997; 51: 246-51.
- ¹²¹ Orleans T, Barker D, Kaufman N, Marx J. *Helping pregnant smokers quit: Meeting the challenge in the next decade*. *Western Journal of Medicine* 2001; 174(4): 276-281.

-
- ¹²² DiClemente C, Dolan-Mullen P, Windsor R. *The process of pregnancy smoking cessation: implications for intervention*. Tobacco Control 2000; 9 (Suppl 3): 16-21.
- ¹²³ Carmichael S, Ahluwalia I. *Correlates of postpartum smoking relapse. Results from the Pregnancy Risk Assessment Monitoring System (PRAMS)* American Journal of Preventive Medicine 2000; 19:3: 193-196.
- ¹²⁴ U.S Department of Health and Human Services. *Women and smoking: A report of the surgeon general – 2001*. Rockville, Maryland: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2001.
- ¹²⁵ Ford RP, Cowan SF, Schluter PJ, Richardson AK, Wells JE. *Smokechange for changing smoking in pregnancy*. New Zealand Medical Journal 2001; 114: 107-10.
- ¹²⁶ Ford RP, Schuter PJ, Tappin DM. *Changes in cotinine levels during pregnancy*. Australian and New Zealand Journal of Obstetrics and Gynaecology 1998; 38:50-55.
- ¹²⁷ Hunt JM, Lumley J. *Are recommendations about routine antenatal care in Australia consistent and evidence based?* Medical Journal of Australia 2002; 176: 255-259.
- ¹²⁸ Owen N, Davies MJ. *Smokers' preferences for assistance with cessation*. Preventive Medicine 1990; 19:424-31.
- ¹²⁹ Silagy C, Ketteridge S. *Physician advice for smoking cessation (Cochrane Review)*. In: The Cochrane Library, Issue 2, 1999. Oxford: Update Software.
- ¹³⁰ Fiore MC, Bailey WC, Cohen SJ, et al. *Treating tobacco use and dependence*. Clinical practice guideline. Rockville, MD: US Department of Health and Human Services, Public Health Service, June 2000.
- ¹³¹ Australian General Practice. *Smoking Cessation Guidelines for Australian General practice*. http://www7.health.gov.au/pubhlth/publicat/document/smoking_flip.pdf (Accessed January 2005)
- ¹³² Silagy C, Lancaster T, Stead L, et al. *Nicotine replacement therapy for smoking cessation (Cochrane Review)*. In: The Cochrane Library, Issue 4, 2001. Oxford: Update Software.
- ¹³³ Lancaster T, Silagy C, Fowler G. *Training health professionals in smoking cessation (Cochrane Review)*. In: The Cochrane Library, Issue 2, Chichester, UK: John Wiley & Sons, Ltd. 2004.
- ¹³⁴ Anderson JE, Scott WJ. *Treating Tobacco Use and Dependence An Evidence-Based Clinical Practice Guideline for Tobacco Cessation* 2002; 121:932-941.
- ¹³⁵ Richmond R. *The process of introducing a tobacco curriculum in medical schools*. Respirology 2004; 9: 165-92.
- ¹³⁶ Cape G. *Evaluation of AOD education and training in New Zealand medical students*. <http://www.nceta.flinders.edu.au/pdf/proceedings2001/cape.pdf> (Accessed January 2005).
- ¹³⁷ NSW Health. *Guide for the management of nicotine dependent inpatients*, Sydney, New South Wales Health Department, 2002.
- ¹³⁸ Richardson K. *Smoking, Low Income and Health Inequalities: Thematic Discussion Document*. Report for Action on Smoking and Health and the Health Development Agency. May 2001.
- ¹³⁹ National Tobacco Strategy 1999-2002/3 occasional paper; *Cigarette smoking among women in Australia*. Sydney; Canberra: ASH & Health department Feb 2002; 8:76.
- ¹⁴⁰ Vic Health Centre for Tobacco Control, *Tobacco Control: a blue chip investment in public health*. April 2003; 41-42.
- ¹⁴¹ Wakefield MA, Chaloupka FJ, Kaufman NJ, Orleans CT, Barker DC, Ruel EE. *Effect of restrictions on smoking at home, at school, and in public places on teenage smoking: cross sectional study* British Medical Journal 2000; 9; 321(7261): 623b.

-
- ¹⁴²Hill D, White V, and Effendi Y. *Changes in the use of tobacco among Australian secondary students: results of the 1999 prevalence study and comparisons with earlier years*. Australia & New Zealand Journal of Public Health 2002; 26 : (2): 156-63.
- ¹⁴³Fowles J, Bates M, Noiton D. *Chemical constituents in cigarettes and cigarette smoke: priorities for harm reduction*. A report to the Ministry of Health. Porirua, 2000.
- ¹⁴⁴U.S. Department of Health and Human Services. *Reducing the Health Consequences of Smoking: 25 Years of Progress. A Report of the Surgeon General*. U.S. Department of Health and Human Services, Public Health Service, Centres for Disease Control, Centre for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1989.
- ¹⁴⁵Doll R. Effect of environmental tobacco smoke on adults. In: Stockwell T, editor. *Drug trials and tribulations: lessons for Australian policy*. Proceedings of an international symposium. National Centre for Research into the Prevention of Drug Abuse. Curtin University of Technology, 1998.
- ¹⁴⁶Hill S, Blakely T, Woodward A, Kawachi I. *Increased mortality amongst never-smokers living with smokers: evidence from two New Zealand cohorts 1981-84 and 1996-99*. British Medical Journal 2004.
- ¹⁴⁷U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Smoking*. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, Centre for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. Washington DC: US Government Printing Office, 1986.
- ¹⁴⁸World Health Organisation, Division of Non-communicable Diseases. *International Consultation on Environmental Tobacco Smoke (ETS) and Child Health*. Geneva, WHO 1999.
- ¹⁴⁹Office of Health and Environmental Assessment, Office of Research and Development, US Environmental Protection Agency. *Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders*. Washington DC, 1992.
- ¹⁵⁰International Agency for Research on Cancer. *IARC Monographs Programme on the Evaluation of Carcinogenic Risks to Humans*. Volume 83 Tobacco Smoke and Involuntary Smoking. Lyon 2002.
- ¹⁵¹<http://monographs.iarc.fr/htdocs/indexes/vol83index.html> (Accessed 5 June 2004)
- ¹⁵¹Woodward A, Laugesen M, *How many deaths are caused by second hand cigarette smoke?* Tobacco Control 2001; 10; 383-88.
- ¹⁵²Whincup, PH et al *Passive smoking and risk of coronary heart disease and stroke: prospective study with cotinine measurement* British Medical Journal 2004; 381.
- ¹⁵³Jones S, Love C, Thomsons G. et al. *Second hand smoke at work: the exposure, perceptions and attitudes of bar and restaurant workers to environmental tobacco smoke*. Australia & New Zealand Journal of Public Health 2001; 25: 90-3.
- ¹⁵⁴Al-Delaimy WK, Fraser T, Woodward A. *Nicotine in hair of bar and restaurant workers*. New Zealand Medical Journal 2001; 114: 80-3.
- ¹⁵⁵Bates MN, Fawcett J, Dickson S, et al. *Exposure of hospitality workers to environmental tobacco smoke*. Tobacco Control 2002; 11: 125-9.
- ¹⁵⁶Repace J. *Estimated mortality from second hand smoke among club, pub, tavern and bar workers in NSW Australia*, Sydney, The Cancer Council NSW, 2004.
- ¹⁵⁷Laugesen M. *Smoking and second hand smoke in Auckland District Health board area, 2003-4*. Report to ASH NZ 2004. ASH National Year 10 Smoking Survey, Wellington ASH 2003.
- ¹⁵⁸Borland R, Mullins R, Trotter L, White V. *Trends in environmental tobacco smoke restrictions in the home in Victoria, Australia*, Tobacco Control 1999; 8:266-271.
- ¹⁵⁹*Effectiveness of Smoking Bans and Restrictions to Reduce Exposure to Environmental Tobacco Smoke*, Guide to Community Preventive Services, 2003

-
- ¹⁶⁰ Serra C, Cabezas C, Bonfill X, Pladeavll-Vila M. *Interventions for preventing tobacco smoking in public places* (Cochrane Review) in Cochrane Library, issue 3, 2000.
- ¹⁶¹ Butler T, Milner L. *The 2001 New South Wales Inmate Health Survey*. Sydney. Corrections Health Service. ISBN: 0 7347 3560 X. 2003.
- ¹⁶² Brawarsky P et al. *Tobacco use among adults with disabilities in Massachusetts*. *Tobacco Control* 2002; 11:29-33.
- ¹⁶³ Manly Council, *Manly's ban on smoking – update*, Media Release, 25/10/04.
- ¹⁶⁴ Drabsch T. *Tobacco Control in NSW*. Briefing Paper No 1/05 NSW Parliamentary library research service. 2005.
- ¹⁶⁵ New Zealand Ministry of Health. *Smoke-free environment FAQ*. November 2004.
- ¹⁶⁶ Boomer MJ, Rissel C. *An evaluation of a smoke-free environment policy in two Sydney hospitals*. *Australian Health Review* 2002; 25(3):179-84.
- ¹⁶⁷ Tobacco Advertising Prohibition Act 1992 Act No. 218 of 1992. Canberra, Prepared by the Office of Legislative Drafting, Attorney-General's Department, 1992.
- ¹⁶⁸ Submission to the Commonwealth Department of Health and Ageing Review of the *Tobacco Advertising Prohibition Act 1992* (Cth) Prepared for The Cancer Council Australia by the VicHealth Centre for Tobacco Control, Melbourne, The Cancer Council Victoria, 2003.
- ¹⁶⁹ *Cost effectiveness of cessation programmes*. Clinical review. *British Medical Journal* 2004; 328:948.
- ¹⁷⁰ Stead L, Lancaster T. *Group behaviour therapy programs for smoking cessation*. (Cochrane Review) The Cochrane Library Issue 1 2002.
- ¹⁷¹ Jorenby D, Scott J, Mitchell A et al. *A controlled trial of sustained release bupropion, a nicotine patch, or both for smoking cessation*. *New England Journal of Medicine* 1999; 340:685-91.
- ¹⁷² Hurt R, Sachs D, Glover E et al. *A comparison of sustained-release bupropion and placebo for smoking cessation*. *New England Journal of Medicine* 1997; 337:1195-1202.
- ¹⁷³ Lancaster T, Stead L, Silagy C, Sowden A. *Regular review: Effectiveness of interventions to help people stop smoking: findings from the Cochrane Library*. *British Medical Journal* 2000; 7257: 355-7.
- ¹⁷⁴ Javitz H, Swan G, Zbikowski S, et al. *Cost-effectiveness of different combinations of bupropion SR dose and behavioural treatment for smoking cessation: a societal perspective*. *American Journal of Management Care* 2004; 10 : (3): 217-26.
- ¹⁷⁵ Hughes J, Stead L, and Lancaster T. *Antidepressants for smoking cessation* (Cochrane Review). The Cochrane Library, Issue 3, 2004. John Wiley & Sons Ltd, 2004.
- ¹⁷⁶ Richmond R and Zwar N. *Review of bupropion for smoking cessation*. *Drug and Alcohol Review* 2003; 22: 203-20.
- ¹⁷⁷ Hayford K, Patten C, Rummans T, et al. *Efficacy of bupropion for smoking cessation in smokers with a former history of major depression or alcoholism*. *British Journal of Psychiatry* 1999; 174: 173-8.
- ¹⁷⁸ Hurley SF, Scollo MM, Younie SJ, English DR, Swanson MG. *The potential for tobacco control to reduce PBS costs for smoking-related cardiovascular disease*. *Medical Journal of Australia* 2004; 181: 252–255.
- ¹⁷⁹ <http://www.health.gov.au/internet/wcms/Publishing.nsf/Content/pbacrec-novo4-positive#bupr> (Accessed February 2005).
- ¹⁸⁰ Siahpush M, Ron Borland R *Australians aged 18: multivariate results from the 1995 National Health Survey Australia & New Zealand Journal of Public Health* 2001; 25: 438-42.
- ¹⁸¹ Tessier J-F, Freour P, Nejari C et al. *Smoking behaviour and attitudes towards smoking of medical students in Australia, Japan, USA, Russia and Estonia*. *Tobacco Control* 1993; 2: 24-29.

-
- ¹⁸² Young JM, Ward JE. *Implementing guidelines for smoking cessation advice in Australian general practice: opinions, current practices, readiness to change and perceived barriers*. Family Practice 2001; 18: 14–20.
- ¹⁸³ Winstanley M, Woodward S, Walker N. *Tobacco in Australia: facts & issues*. Victorian Smoking and Health Program. Melbourne 1995. (See “Lobbying tactics of the tobacco industry” at <http://www.quit.org.au/quit/FandI/fandi/c14s19.htm> accessed 8 July 2004).
- ¹⁸⁴ Action on Smoking and Health Australia. *MPs who receive political donations from tobacco companies*. (http://www.ashaust.org.au/publications/publication_mps.htm (Accessed 8 July 2004).
- ¹⁸⁵ Healthfind.org (various documents on tobacco industry lobbying activity & strategies <http://www.thenewhealthfind.com/Health/Addictions/SubstanceAbuse/Tobacco/Industry/Lobbying/Lobbyists/> (Accessed 8 July 2004).
- ¹⁸⁶ Givel MS, Glantz SA. *Tobacco lobby political influence on US state legislatures in the 1990s*. Tobacco Control 2001; 10:124-134. <http://tc.bmjournals.com/cgi/content/full/10/2/124> (Sited 8 July 2004).
- ¹⁸⁷ Action on Smoking and Health Australia. *Tobacco facts for MPs*. October 1999 (<http://www.ashaust.org.au/pdfs/ashformpsoct99.pdf> (Sited 8 July 2004).
- ¹⁸⁸ Chapman S. *Tough on drugs, weak on tobacco*. Medical Journal of Australia 2000; 172: 612-614.
- ¹⁸⁹ Scollo M. *Facts and Figures About Anti-Smoking Education Spending* (<http://tobacco.health.usyd.edu.au/site/supersite/resources/pdfs/64m.pdf> (Accessed 8 July 2004).
- ¹⁹⁰ Chapman S. *Take heed of Bacon's warning*. The Australian June 21, 2004.
- ¹⁹¹ Friend K, Levy DT. *Reductions in smoking prevalence and cigarette consumption associated with mass-media campaigns*. Health Education Research Theory and Practice 2002; 17 : (1): 85-98.
- ¹⁹² The Guide to Community Preventative Services, *Effectiveness of mass media campaigns to reduce initiation of tobacco use and increase cessation, 2003*.
- ¹⁹³ Commonwealth Department of Health and Aged Care 2000c, *Australia's National Tobacco Campaign: evaluation report vol. 2*, Commonwealth Department of Health and Aged Care, Canberra, Accessed 24 March 2003.
- ¹⁹⁴ Wakefield M, Chaloupka F. *Effectiveness of comprehensive tobacco control programmes in reducing teenage smoking in the USA*. Tobacco Control 2000;9:177-186.
- ¹⁹⁵ Laugesen M, Difranza JR. *World's best practice in tobacco control*. Tobacco Control 2000; 9:228-236.
- ¹⁹⁶ World Bank. *Curbing the epidemic: governments and the economics of tobacco control*. 1999, Washington: World Bank.
- ¹⁹⁷ Jha P, Chaloupka FJ. *The economics of global tobacco control* BMJ 2000; 321:358-361.
- ¹⁹⁸ Junor W, Collins D, Lapsley H. *The macroeconomic and distributional effects of reduced smoking prevalence in New South Wales*. The Cancer Council New South Wales. Sydney June 2004.
- ¹⁹⁹ Milch CE et al. *Smoking cessation in primary care: a clinical effectiveness trial of two simple interventions*. Preventive Medicine 2004; 38:284-294.
- ²⁰⁰ Litt J. *How to provide effective smoking cessation advice in less than a minute without offending the patient*. Australian Family Physician, 2002. 31(12):1087-94.
- ²⁰¹ National Advisory Committee on Health and Disability, Wellington. National Health Committee May 2002.
- ²⁰² Peters MJ, Morgan LC, Matthew P. *The pharmacotherapy of smoking cessation* Medical Journal of Australia 2002; 176 (10): 486-490.

-
- ²⁰³ Fiore MC, Bailey WC, Cohen SJ, et al. *Treating tobacco use and dependence. Clinical practice guideline*. Rockville, MD: US Department of Health and Human Services, Public Health Service, June 2000.
- ²⁰⁴ Excise Duty (Accessed December 2004)
<http://www.anao.gov.au/WebSite.nsf/Publications/4A256AE90015F69BCA256BCF00808510>.
- ²⁰⁵ New Zealand Treasury letter to M. Laugesen, under Official Information Act, 7 August 2003.
- ²⁰⁶ Costello P. Budget Paper No 1. *Budget Strategy and Outlook: Statement 5: Revenue, in Budget 2004-05: Budget Paper No. 1. 2004*: Canberra. Table 3: Commonwealth General Government Revenue Estimates.
- ²⁰⁷ Fowles J, Bates M, Noiton D. *Chemical constituents in cigarettes and cigarette smoke: priorities for harm reduction*. A report to the Ministry of Health. Porirua 2000.
- ²⁰⁸ David T, Levy EA, Mumford K, Cummings M, Gilpin EA, Giovino G, Hyland A, Sweanor D, Warner KE. *The Relative Risks of a Low-Nitrosamine Smokeless Tobacco Product Compared with Smoking Cigarettes: Estimates of a Panel of Experts* *Cancer Epidemiology Biomarkers Prevention* 2004; 13(12):2035–42.
- ²⁰⁹ Harris JE, Thun MJ, Mondul AM, Calle EE. *Cigarette tar yields in relation to mortality from lung cancer in the cancer prevention study II prospective cohort, 1982-8*. *British Medical Journal* 2004; 328 (7431): 72.
- ²¹⁰ Fowles J, Dybing E. *Application of toxicological risk assessment principles to the chemical constituents of cigarette smoke*. *Tobacco Control* 2003; 12:424-30.
- ²¹¹ Laugesen M. *Submission to the New Zealand Ministry of Health Regulatory Review, October 2004*. Auckland: Health New Zealand Ltd. To be made available at www.ndp.govt.nz
- ²¹² Laugesen M, Fowles J. *The scope for regulation of cigarette smoke toxicity - utilising brand differences*. *New Zealand Medical Journal* 2005; 15; 118 (1213).
www.nzma.org.nz/journal
- ²¹³ British American Tobacco Company. 54 page document, circa 1965. Guildford miscellaneous collection. www.tobaccodocuments.org/guildford_misc/402368992-9045.html (Accessed February 2004).
- ²¹⁴ Laugesen M, Fowles J. *The scope for regulation of cigarette smoke toxicity - utilising charcoal filters*. *New Zealand Medical Journal* 2005; 15; 118 (1213).
www.nzma.org.nz/journal
- ²¹⁵ New Zealand Ministry of Health. *Clearing the Smoke: A five-year plan for tobacco control in New Zealand* www.moh.govt.nz/moh.nsf/