TOBACCO PRODUCTS

Introduction

Smokefree New Zealand 2000

This paper sets out the policies and programmes necessary to achieve a healthier and *Smokefree New Zealand 2000*. The goals recommended for the year 2000: are to further halve tobacco consumption levels, decrease the percentage smoking to 20 percent overall and to 40 percent in Maori; and to reduce the percentage of nonsmokers exposed to indoor environmental tobacco smoke during working hours to zero.

Policies and programmes are recommended which make it easier for New Zealanders to enjoy healthy and smokefree lifestyles as they enter the 21st century. These policies call for further taxation, for improved enforcement of the Smoke-free Environments Act 1990 and for strengthening of the Act through legislative amendment. Public Health Commission purchase and linkage plans will emphasise tobacco control among Maori. These tobacco control policies and programmes are designed to build on the societal changes that have already occurred, and assist particular groups: adolescents, would-be quitters, and unwilling passive smokers.

- Tobacco products consumption continues to be the leading preventable cause of death in New Zealand, causing over 4000 premature deaths per year.

- Uptake of smoking among young people remains high. Nearly three-quarters of a million adults still smoke. One-third of women and two-thirds of Maori women smoke while pregnant. Maori women have the highest reported lung cancer rate among women of any country.

- New Zealand has over 700,000 smokers. On a population scale, it is neither effective nor cost-beneficial for government to provide group or personal cessation courses to addicted smokers not yet able to consider quitting. For these reasons effective government intervention has used population-based approaches - mass media campaigns, taxation and legislation.

Proposed Goal

To reduce tobacco use and its health consequences

Setting Outcome Objectives

In choosing objectives for the reduction of tobacco use and its health consequences, it is necessary to consider

- Health status objectives; the health consequences of tobacco use.
- Risk factors: current levels and trends of tobacco use
- Objectives which are challenging, achievable and measurable.

Health Status

Health consequences of tobacco products use

Tobacco smoking is :

- a cause of: heart attacks, strokes, arterial disease causing reduced blood supply to legs and feet (causing gangrene), chronic bronchitis and emphysema, cancer of lung, cancer of the lip, tongue, throat, larynx and gullet;
- a contributing cause of cancer of bladder, pancreas and kidney;
- associated with cot death, aortic aneurysm, cancer of stomach and cancer of cervix;[1]
- responsible for 1 in 5 of *all* deaths of men of working age in New Zealand;[2]
- responsible for one in two to one in three smokers dying early from smoking, depending on how long a smoker smokes for, and how many cigarettes are smoked.[3]

Health consequences of tobacco products use in New Zealand

- Mortality

  The smoking of tobacco products remains the chief cause of preventable early death in New Zealand. Tobacco products have killed more New Zealanders prematurely than have all the wars this century.[4,5] Annually, up to 100 cot deaths per year,[6] over 600 deaths a year between 35 and 60 years of age and over 3,000 early deaths after 60 years of age are attributable to cigarettes.[7] Other types of tobacco products are less popular but also carry health consequences.

- The personal health care costs of tobacco use to New Zealand

  The cost to personal health care services in New Zealand in 1987 from tobacco use was estimated at $185.4 million in 1989 dollars[8], equal to $202 million in 1992 dollars. Not counted are costs of passive smoking or costs of cigar and pipe smoking. Included are directly estimated hospitals costs, including excess medicines and doctor visits.

The average cigarette smoker dies 3 to 8 years earlier than otherwise expected, but this risk is not spread evenly. For the 1 in 3 to 1 in 2 smokers who die early from their smoking, the loss of years of expected life is around 20 years. Tobacco is particularly lethal to New Zealanders because so many have arteries narrowed by coronary heart disease due to the high animal fat content of the New Zealand diet.

- Addiction

Addiction is both a cause and an effect of tobacco use, which leads in turn to health consequences. Ninety percent of New Zealand smokers describe their habit as addictive.[9] Addiction stresses the smoker until that stress is relieved by the next cigarette. Due mainly to addiction, over half of smokers keep smoking beyond 25 years,[10] putting their health at risk from smoking. Half a million smokers are currently in this health-at-risk category.

- Passive smoking

Exposure to environmental tobacco smoke is causally related to lung cancer[11] and to middle ear effusion (glue ear).[12] The evidence is growing for passive smoking to be accepted as a cause of coronary heart disease.[13] For lung cancer[14] and heart disease[15] the risk is elevated 30 percent for passively exposed smokers. Passive smoking is responsible for 7 percent of coronary heart disease deaths in nonsmokers;[16] these deaths are entirely preventable.

Half of all adults are exposed to cigarette smoke on weekdays and weekends. One-third of 1600 teenagers telephoned in 1991 said they were exposed to cigarette smoke at home;[17] if this percentage is typical of all children, then in total approximately 1.5 million New Zealanders in 1991 were still exposed daily to environmental indoor tobacco smoke.

- Lag times between smoking and disease, between quitting and better health

Uptake of smoking during adolescence exposes the lungs to gene-damaging cancer causing chemicals. Addiction to nicotine ensures prolonged and repeated exposure of the lungs to these chemicals over a lifetime. Smokers of age 30 years have an excess risk of dying early,[18] and this cumulative excess risk increases throughout the lifetime of smokers.[19] so that adolescents born in 1980 and commencing to smoke in 1993 mean increased health care burdens for society between the years 2010 and 2070. The sooner uptake of smoking in adolescence is reduced the sooner New Zealanders will be smoke-free and healthier.

When a population of smokers quit or cut down, death rates can be expected to fall within 6 years due to lower heart disease risk[20] and within 10 years due to lowered cancer risk[21]. Some measures such as tobacco taxation, which reduce uptake of smoking also assist older smokers to quit with immediate effect, and if applied now, will reduce death rates by the year 2000, below the level otherwise expected.

Health consequences of trends in tobacco use

The record 42 percent reduction in tobacco products use achieved between 1984 and 1992 has been accompanied by major improvements in the health of New Zealand men:

- between 1987 and 1990, a record one-third reduction in the risk of coronary heart disease death for men age 45 to 64 years
- a decline in lung cancer in both Maori and non-Maori men; particularly in men under age 50.[22]

Risk Factors

Current levels and trends in tobacco use

Tobacco products consumption per New Zealand adult halved between 1975 and 1992. Tobacco products consumption per adult in 1992 fell 10.5 percent to its lowest recorded level in 72 years.[23,24] New Zealand's tobacco consumption in 1992 at 1600 grams or cigarette equivalents per adult per year (under 5 cigarettes per day per adult and counting non-smoker adults) was probably the lowest among OECD countries, previously having ranked 12th among the 24 OECD countries in 1984. See also *Health Trends 1993*.

Among adults 55 and over the percentage who smoke declined by one third between 1984 and 1992; at ages over 65 only one in seven smoke. Adult smokers have cut down from 20 to 16 cigarettes per day, while the percentage of adults who smoke has declined from 32 to 27 percent, a one-sixth decline between 1984 and 1992.[25]

The smoking population

In the year ending December 1992 the cigarette smoking population was over 700,000. In the population age 15 and over in 1992, 27 percent still smoked cigarettes regularly.[25]

Groups with high smoking participation rates

Young adults, the unemployed, the less educated, women and ethnic minorities have higher than average rates of smoking participation.

Youth Among 20- to 24-year-olds 36 percent smoke cigarettes.[25] This age group reflects smoking uptake rates among adolescents in the preceding 5 to 10 years.

Women Among women in the age group 15 to 55 years, the percentage who smoke declined little between 1984 and 1992; from 34 to 32 percent. Among women age 25 to 34, smoking participation rates have shown no improvement between 1983 and 1992.[25] Lung cancer rates in young women are rising and now exceed those in young men.[25]

Maori Around half of Maori smoke. Two thirds of pregnant Maori women smoke[30]. Lung cancer rates in Maori women remain the highest recorded in the world for women.[31]

Workers: Exposure to indoor environmental tobacco smoke.

Justification for setting an objective

- The workplace is the most important site for reducing exposure to cigarette smoke, in terms of numbers exposed, duration of exposure, intensity of exposure, the compulsory nature of workplace exposure, and feasibility of intervention.

- Workplace provisions of the Smoke-free Environments Act 1990 support the principle that no-one should be routinely exposed to cancer-causing chemicals in order to earn their living. Environmental tobacco smoke is now recognised as a human lung carcinogen by the United States Environmental Protection Agency.[32]

- Inhalation of environmental tobacco smoke at work was estimated to be responsible for 175 deaths per year in the 1980s in New Zealand; 7 percent of coronary deaths in nonsmokers were attributed to passive smoking.[33]

Baseline and current trend-line

The percentage of New Zealand workers exposed to environmental tobacco smoke during actual working hours fell by one-third, from 29 percent in 1989[34] to 19 percent in 1991[35]. The percentage of workers exposed during tea breaks fell from 52 percent in 1989[36] to 39 percent in 1991.[37] Exposure trends for lunch breaks were almost identical to those for tea breaks. These steep reductions were supported by the associated publicity and workplace smoking policies required by the Smoke-free Environments Act 1990; further reductions are likely to be gradual. Most workers exposed currently to tobacco smoke in working hours are blue collar workers, and those working in hotel bars, restaurants and coffee shops.

Setting a feasible objective

The objective is to

- reduce the percentage of workers involuntarily exposed to cigarette smoke during actual working hours to zero by 2000 or sooner.

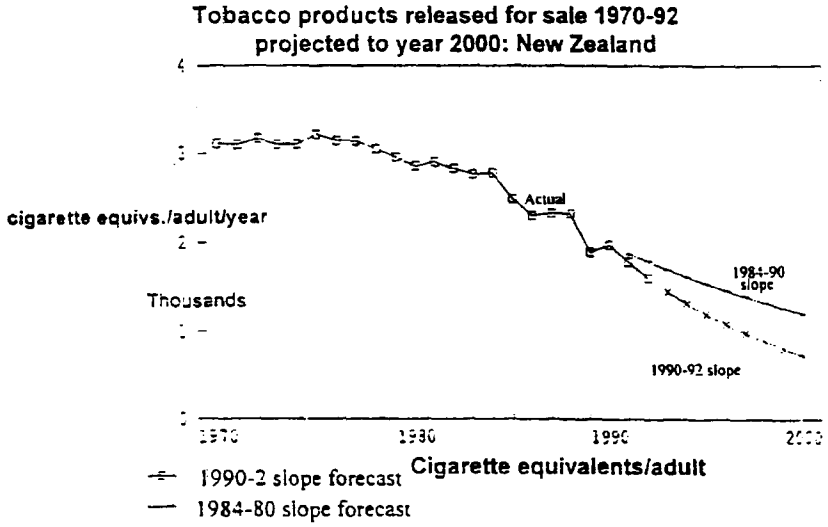
- reduce the percentage of smokers exposed during tea and lunch breaks at their workplace to 5 percent or less by 2000.

Enhanced monitoring, education and enforcement by public health services, combined with the risk of litigation and further reductions in tobacco consumption in the community, make this goal feasible.

Children exposed to cigarette smoke

Smoking by the mother nearly doubles a baby's risk of cot death,[38] increases the use of hospital emergency care by children with asthma,[39] and is a risk factor for new cases of asthma in children who have not previously displayed symptoms.[40] Health service contracts will continue to emphasise education of parents not to smoke indoors near young children.

Figure 1



1970-92: excise data. Dept. Statistics

Public Health Commission 1993

The objective of halving tobacco products consumption between 1992 and 2000 to 800 cigarette equivalents per adult is a projection from the 19 percent decrease achieved between 1990 and 1992. This objective is more ambitious than the 1989 goal. The 20 percent objective for adults smoking by 2000 is less ambitious but more realistic than the original 1989 goal now appears.

Outcome Objectives

Reduction of the number of premature deaths (before age 75) due to tobacco use, from ... in 1990 to .... per year in 2000.

Reduction in the percentage of New Zealand men prematurely dying (before age 75) of lung cancer, from .. percent in 1990 to .. percent in 2010.

Reduction of the lung cancer new case rate in women age 25 to 44 years by 2020

Reduction in cot deaths from ... per 1000 live births to ...per 1000 live births by 1995 and to ... by year 2000.

Reduction in the percentage of babies born at very low birth weight (500g-1000 grams)

Adults

To reduce tobacco consumption from 1600 cigarette equivalents per adult per year in 1992 to 800 cigarette equivalents or less in the year 2000.

To reduce the percentage of adults who currently smoke from 27 percent in 1992 to 25 percent in 1995 reducing to 20 percent or less in 2000.

Youth

To reduce the onset of smoking in adolescents so that the percentage of 15- to 24-year-olds who smoke decreases from 30 percent in 1992 to 20 percent or less in 2000

Women

To reduce the percentage of women who smoke while pregnant from 33 percent in 1990 to 25 percent in 1995, reducing to 20 percent or less in 2000.

Maori

To reduce the proportion of Maori who smoke from 52 percent in 1992 to 40 percent or less in 2000.

Workers in paid employment

To reduce the percentage of workers involuntarily exposed indoors to environmental tobacco smoke during actual working hours from 19 percent in 1991 to zero in 2000.

Healthy Public Policy

Smoking has been decreasing, but industry marketing efforts, price discounting and increased incomes have the potential to slow or reverse the decline.

Without enforcement of the Smoke-free Environments Act, tobacco sales to young people can increase. The key options for government policy are:

- Make tobacco products less affordable (more costly in relation to income)
- Enforce the Smoke-free Environments Act 1990
- Strengthen the Smoke-free Environments Act 1990 by amendment and regulation.

Strategies for reducing demand and supply for tobacco products

Strategies for addictive drug control can be considered as reducing demand and supply:

Reducing demand through education Smoking among young people is declining only slowly. Policies and programmes have relied so far on dampening the demand for tobacco. The health services have been educating young people about the dangers of smoking since 1948: and the schools since the early 1980s.

Reducing demand by promoting alternatives The Health Sponsorship Council now spends $4.5 million a year on smokefree sports sponsorships and sponsors smokefree rock music and other contests through schools.

Reducing demand through deglamourisation of the product. Packaging can be modified by law to look less like advertising.

Reducing demand through reducing affordability of the product. This involves tobacco product price policy and tax proposals.

Interruption of supply In the control of other drugs of addiction, interruption of the supply of the drug is regarded as essential. Sale of tobacco products to persons under 16 is illegal. Yet two-thirds of teenage smokers age 10 to 15 years of age said they were sold cigarettes by shops in 1989,[41] 1991,[42] and again in 1992.[43] Today, many workplaces deny smokers access to their drug in the workplace.

The justification for focusing on persuading young people not to start smoking

Ninety-four percent of smokers age 25 to 44 started smoking before age 21: 85 percent of smokers started smoking before age 19.[44] Preventing adolescents taking up smoking in the 1990s is the key to prevent the addiction and health consequences of smoking in the 21st century.

The justification for government action to persuade smokers to quit

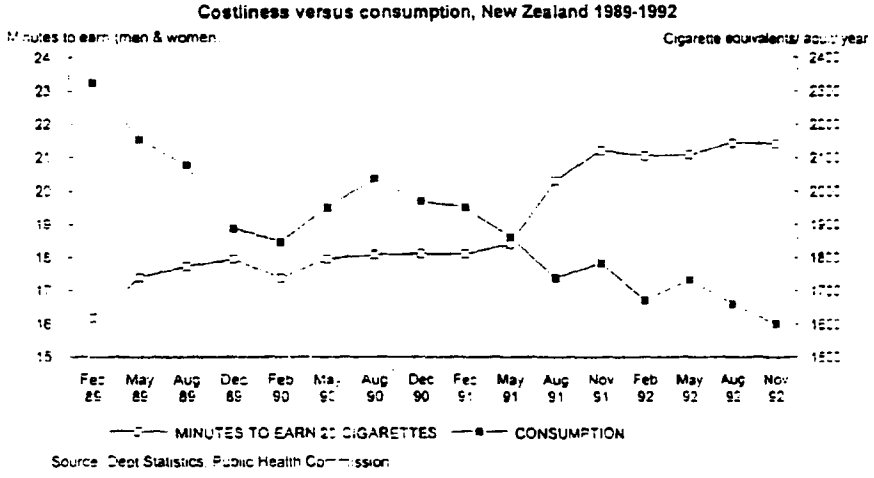
Two-thirds of smokers polled would like to give up smoking. Over three-quarters said they would find it fairly or very difficult to give up for one week. seventy-two percent of adults surveyed and 56 percent of smokers said the government should be active in discouraging smoking in order to discourage smoking diseases.[45] Government has effective policies at its disposal.[46]

Strengthening of fiscal policy to reduce tobacco use

Tobacco excise taxation is the strongest single policy instrument available to government for discouraging tobacco product use. Without such discouragement tobacco product use may increase (as in the UK in 1987) or only slowly decrease as in Norway after their Tobacco Act was passed.

For many years health reasons have been quoted as a reason for taxation of tobacco; substantial further regular increases in the level of tobacco excise are recommended for health reasons.

Figure 2



Source: Dept Statistics, Public Health Commission

Consumer responsiveness to the costliness of tobacco products has been exceptionally high since 1989, with marked gains to health. Any price increases will generate larger decreases in consumption than were expected before the Smoke-free Environments Act was passed. Tobacco revenue may decrease in the near future, whether tax is increased or not. The decreases in consumption and or in excise revenue will as now, be spread over a period of years. Smokers' expenditure on tobacco products, over $1 billion a year will not disappear overnight, but will shift gradually to other products.

Three key tobacco taxation policy proposals for reducing tobacco use

To achieve a healthier and *Smokefree New Zealand 2000* the Public Health Commission believes three changes in taxation policy are essential. These three policies mutually reinforce each other:

- Indexation of tobacco excise to the costliness of tobacco products in relation to wage rates
- A two-thirds increase in the costliness of tobacco products in relation to wage rates
- Equalisation of the excise rate per gram of tobacco across all tobacco products

Indexation of tobacco excise to the costliness of tobacco products

The costliness of tobacco products is measured by the number of minutes required to earn 20 cigarettes at hourly wage rates. In 1992 this was 21 minutes (see Figure ...Costliness versus Consumption). 'Minutes to earn' increased 19 percent between 1990 and 1992 and consumption also fell 19 percent in this period. This degree of responsiveness follows strong legislation and occurred during a recession. We would assume more conservatively that an increase in costliness of two-thirds would be required to lower consumption by half. This still implies a tobacco price elasticity of demand of -0.75, and implies that the 'minutes to earn' measure rises from 21 minutes in 1992 to 35 minutes, with consumption predicted to fall from 1600 cigarette equivalents in 1992 to 800 in 2000.

Tobacco excise rates can be indexed to the costliness of tobacco products in relation to wage rates (the number of minutes on average wages required to earn 20 cigarettes), rather than merely to the consumer price index as at present. This automatically raises or lowers tobacco prices in line with the wage index, so that rising incomes do not increase the demand for tobacco products and negate decisions of smokers to quit or cut down. As with the 1989 indexation of excise to the consumer price index, indexation for costliness would not rule out special government budgetary increases in tobacco tax rates, but by making regular adjustments for affordability, government avoids the 1980 situation, when it took only 10 minutes to earn 20 cigarettes, and smoking among young women increased.

A two-thirds increase in the costliness of tobacco products in relation to income

The more that a given tax increase is publicised the more consumption falls. Spread over the coming years, in several well-publicised steps, the Public Health Commission recommends a two-thirds increase in the price in relation to wages (measured in minutes of average hourly wage[47] required to earn 20 cigarettes[48]) is between 1993 and 2000. This assumes a continuing high price responsiveness (price elasticity of -0.75).

The effects of further increasing costliness of tobacco products on revenue are difficult to predict much ahead of time. Revenue may decrease despite tax increases, but large increases may be required to achieve such a result, and tobacco tax is only

one of many streams of revenue available to government. Large decreases in consumption will mean improved health and fitness. The policy will have the maximum effect if tobacco excise rates are already indexed to wages, are regular and if changes are notified well in advance, to increase price awareness. Further reduction by the year 2000 of heart disease death rates in men of working age is expected if the costliness of tobacco products is increased in the 1994 and 1995 government budgets. New Zealand cigarettes while costlier than previously, were in 1993 still cheaper than UK cigarettes.

Equalisation of excise per gram of tobacco across all tobacco products

As of June 1992, the excise tax rate is 27 percent lower for loose tobacco than for tobacco in manufactured cigarettes..

This proposal only relates to equalisation of tax rates: manufacturers are entitled to maintain retail price differences between products types and brands.

The loose tobacco tax rate is currently set lower, for example, at $135.30 per 1000 grams in June 1993 whereas the rate for manufactured cigarettes was set at the same time at $148.81 per 1000 cigarettes.

When allowance is made for the fact that manufactured cigarettes contain only 0.8 grams of tobacco, the effective tax rate per gram of tobacco is $186 per 1000 grams of tobacco in manufactured cigarettes, and the loose tobacco tax rate is 27 percent less than this.

The weight of a cigarette has traditionally been taken as 1.1 grams, but almost all cigarettes now contain filters which occupy a fifth of the cigarette by volume, thus displacing tobacco and obviating the need to insert as much tobacco for rigidity. Tax on manufactured cigarettes has been based on the weight of the cigarette (around 1.1 grams) not the weight of the tobacco in it. The amount of tobacco used per manufactured cigarette has been falling by around 1 percent per year for over 25 years, due to displacement by the filter, and due to modern technology and is now around 0.8 grams per manufactured cigarette.

The most recent government review of tobacco taxation, the Sullivan Committee Report in 1988,[48] recommended that the rates of duty on tobacco products be equalised: but not that the rate of tax be equalised according to tobacco content. Yet the same Committee, and indeed budgets since 1980 accepted the principle of taxing alcoholic beverages by alcohol content. The Committee's Report, in a calculated example used a 1.1 to 1 ratio between manufactured cigarettes and loose tobacco tax rates, thus basing taxation on equivalence by weight of tobacco product, the current practice.

The proposal is to raise the tax level for loose tobacco up to the rate for manufactured cigarettes. This is preferable for both health and revenue reasons, to lowering the tax on manufactured cigarettes. The revenue gain is expected to be between $10 million and $20 million.[50]

Health benefits Equal tax rates for loose tobacco will decrease the use of tobacco in both hand rolled and manufactured cigarettes, with health benefit.

- Manufactured cigarette smokers will be encouraged to quit rather than switch to cheaper handrolled loose tobacco as at present.

- Taxing tobacco rather than the product could mean less actual tobacco being smoked as manufactured cigarettes. Manufacturers might argue for lower excise per cigarette if they lowered the tobacco per cigarette. Australian cigarettes contain one-eighth less tobacco than New Zealand cigarettes, and yield less tar. Less tobacco per cigarette is likely to means less dangerous cigarettes. Any revenue shortfall generated can be made up for by raising the tax rate per gram of tobacco to ensure that the price of smoking does not decrease.

Strengthening of the Smoke-free Environments Act 1990

The Commission proposes that changes be made to the Smoke-free Environments Act 1990, to

- Part I of the Act: - Smoke-free provisions
- Part II of the Act: - Product Control

No changes are proposed to Part III of the Act which deals with the Health Sponsorship Council.

Smoke-free provisions: Part I of the Act

The 1990 Act is assisting a social change process, and thus may need updating periodically. Amendment may be required to improve protection from passive smoking for hotel bar staff, and to further promote smokefree schools.

Product control: Part II of the Act

In line with recent advances in tobacco control legislation in other advanced countries, the Act can be strengthened in various ways. These changes would require the passage of an amendment to the Act. The Public Health Commission, would, on obtaining the support of the Minister of Health, prepare a discussion paper for release in 1994, to form the basis for such an amendment bill.

Varied warnings, packet redesign and plain packaging

Such changes are recommended to deglamourise the product and give more prominence to health warnings, so as to further discourage the uptake of smoking by young people. New varied and more prominent warnings as in recent Australian legislation[51] are recommended. Further development of the plain pack policy[52] (black and white pack, brand name in uniform lettering) was requested by the Australian

Council of Health Ministers in 1992. Plain packaging for tobacco products was recommended by the Toxic Substances Board in 1990.

"The more rules and regulations that restrict cigarette advertising: the more important the pack becomes...When you launch a prestige brand. Or a new lady's cigarette."[53]

Licensing of new tobacco products

If tobacco products were discovered today, no government would permit their sale, because of what is known of tobacco's effects. Yet new brand variants are still being introduced into the New Zealand market.[54] There is nothing to stop an importer selling any tobacco products for smoking imported from any country. Levels of additives in each brand are not precisely known. The chemicals in tobacco products reach the human lung and brain within seconds of inhalation, and it is only prudent before permitting sale, to ensure product safety (with respect to risk of disease causation and addiction) as for any new food or drug. Under such a law, without such evidence, manufacturers would not be able to launch new tobacco products. Norway recently banned new tobacco products unless they could be shown to be safer than traditional tobacco products.[55]

Tightening of advertising restrictions

The Act may need amendment to prevent further tobacco product advertising under the guise of price lists. Currently a brand of cigarettes is being advertising in shops with a small price list in one corner of the colourful advertisement.

Lowering of tar in cigarettes

Gradual lowering of the upper permitted maximum levels for tar yields in cigarettes from 15mg to 12mg is recommended along the lines of the European Community directive[56] now adopted in many European countries.[57,58,59] The Smoke-free Environments Act 1990 contains regulatory powers to enable lowering of tar levels in cigarettes. Regulations are required to give effect to the Act in this respect.

Fire-safe cigarettes

On average five people[1] die each year in house conflagrations sometimes killing whole families, due to smouldering cigarettes, which unlike hand rolled cigarettes, have accelerants (such as potassium citrate) added to the cigarette paper to ensure they do not self-extinguish. An amendment is needed to the Act to require manufacturers to make their products less dangerous; such an amendment would await a report to the US Congress on this subject. Again the Act contains sufficient powers to enable removal of accelerants by regulation.

Raising the present age limit of 16 years

Presently the Smoke-free Environments Act makes it an offence to sell to anyone under age 16. Raising that minimum age to 18 years would:

- deny access to 16- and 17-year-olds.
- possibly make it easier to be sure if the person was under age or not
- bring New Zealand practice into line with most states in Australia[61] and the United States and with planned Canadian legislation.[62]
- bring tobacco products law more into line with the law on sales of alcohol to minors
- provide an opportunity for reassessing the fine attached to this offence. Currently this is up to $5,000 for retailers.

Healthy Public Policy Recommendations

The Commission to request the Minister of Finance each year to increase costliness of tobacco products, so that their costliness in relation to income rises by one-third by 1995, and by two-thirds by 2000.

The Commission to request Government in 1994 to equalise the per gram tax on tobacco products to encourage smokers to quit rather than shift between product types.

The Commission to request the Minister of Finance to index the price of tobacco products to their costliness in terms of hourly wage rates.

The Public Health Commission to produce a discussion document by the end of 1994 outlining proposals for strengthening the Smoke-free Environments Act, invite submissions from the public, arrange for the hearing of oral submissions from industry and public interest groups, analyse submissions, revise the proposals if necessary, then seek support from Cabinet for the changes.

Public Health Programmes

Public health programmes are delivered by both personal heath services and public health services. In addition there is considerable contribution from other central and local government sectors and voluntary agencies. Public health programmes will be discussed as follows:

- Public Heath Commission (including services purchased through RHA's)
- Regional Health Authorities (principally personal health services)

- other central and local government sectors
- Non-government agencies (both commercial and public interest orientated)

Population-Based Public Health Services

National co-ordination and focus on Maori

The percentage of Maori who smoke is double that for non-Maori. There is as yet no full-time health worker concentrating their effort on reducing smoking among Maori, and until there is adequate staffing to address Maori tobacco use, this disparity will not only persist, it will increase.

The Public Health Commission will co-ordinate the tobacco control programme at the national level. This will involve working in partnership with Maori on Maori smoking and will include the provision of policy advice to Government. With respect to policy and to Maori tobacco control programmes, a national focus would appear advantageous. The PHC proposes that a national Maori tobacco programme co-ordinator be funded in 1994/95. To be most effective, the Commission recommends that this Co-ordinator work in a national Maori non-government organisation.

Maori health efforts to reduce tobacco use among Maori will focus on:

- co-ordinating Maori health support for strengthening government tobacco reduction policies
- concentrate on education and awareness programmes on tobacco, and
- developing smokefree policies among Maori groups.

Te Hotu Manawa (Maori Heartbeat) programme funded by government works on diet as well as tobacco issues.

Training of Maori Health Workers

The PHC proposes that training of Maori health workers be funded in 1994/95.

Enforcement of the Smoke-free Environments Act

The Department of Health has, from 1 July 1993, statutory responsibility to enforce the whole of the Smoke-free Environments Act 1990 and will purchase assistance in enforcement from public health services through a management agreement with the PHC.

The Public Health Commission recommends that:

- the Director General of Health retain powers for enforcement of Part I and Part II of the Smoke-free Environments Act 1990, with appropriate allocations of staff to enable this to occur;
- the regional public health units be contracted to carry out surveillance and education work, and that for collection of evidence the Department of Health delegate powers to their own staff such as Medical Officers of Health, Senior Health Protection Officers or other named staff in the regions.
- From 1994-5 at latest, surveillance, education and enforcement of Part I and Part II of the Act be undertaken in a systematic manner, with particular emphasis on enforcement of no sales of tobacco products to under-16s.

Enforcement of Part I of the Act (workplaces, transport, other public places)

The 1990 Act provided, placed enforcement of Part I with the Area Health Boards. By an amendment to the Smoke-free Environments Act contained in the Health and Disabilities Services Act 1993, this responsibility reverts to the Director General of Health. At present neither the regions prior to July 1993, nor the Department from July 1993, appear to be organised for effective enforcement of the Smoke-free Environments Act. In the regions the available staff are deployed in educational activities with groups.

Table 1 National total of full-time equivalents of staff deployed by area health boards in promoting non-smoking. New Zealand. 1991-2

Enforcement of the Smoke-free Environments Act (Part I)	5
Promoting smoking cessation	12
Preventing nonsmokers starting smoking (educational)	15
Total for 21 health districts	32

Source: Public Health Resource Identification Project. Department of Health. Volume 3. Appendix 8. p.30

In addition, a total of 4 FTE (very approximately) are employed on smoking control work by the Cancer Society and the National Heart Foundation. A few in the private sector run smoking cessation clinics according to demand.

Calculating from the 8 months ending February 1992, area health boards reported that 4.6 annual full-time equivalents (FTE) were paid to enforce the Smoke-free Environments Act. (Table 1) Of the 21 health districts analysed, three were reported to have a public health nurse or health promotion officer working a half or more of their time on enforcement. The most reported for enforcement of this Act by any

board was 1.4 FTE. Some districts with high smoking rates reported as little as 0.04 FTE (under 2 hours per week), others reporting no enforcement of the Act. Area health boards recorded 103,303 workplaces, 3739 restaurants and 907 transport operators. In North Harbour Auckland, 297 non-compliances were notified, none in some other boards.[63] No cases have been taken to court. Few of the staff involved had experience in enforcement work, many did not enjoy such work. Managers controlled limited enforcement budgets and were responsible for enforcing a wide range of health laws.

Enforcement of the Smokefree Environments Act requires a continuum of surveillance, education, evidence gathering and prosecution. Up to now, the health workforce has concentrated on education in response to complaints; but Part I and particularly Part II of the Act are being widely flouted. Surveillance and enforcement obviously need strengthening.

Enforcement of Part II of the Act. (advertising, sale to under-16s, product control)

To achieve control of under-age sales, there has to a reasonable likelihood of offenders being prosecuted. On-going surveillance and prosecutions for non-compliance will be needed in each major region each year, and in smaller regions, every year or so.

As of May 1993, the Department of Health had one part-time advisory officer (with legal advice available) to arrange for the gathering of evidence and for prosecutions to enforce Part 2 of the Act. One case from Canterbury, initiated by evidence gathering by the Board staff there, has been taken to court with a conviction. As of May 1993 the Department had no plans for committing more staff or resources to cope with the increased centralisation of responsibility for enforcement of the Smoke-free Environments Act.

The Public Health Commission recommends that

- The Smoke-free Co-ordinator's role be recast to emphasise

  Enforcement of Part II of the Act as well as Part I.

  Surveillance and enforcement, supported by good media relations, with education designed to support enforcement.

  Outputs be measured in numbers of premises under regular surveillance, warnings issued and cases and types of cases referred to the Department.

- An experienced enforcement officer be appointed or employed on a case by case basis by the Department for each health district, to enforce the Smokefree Environments Act, and during 1994-5, particularly to enforce the ban on sales to under 16s.

- Training in enforcement be arranged by the Department of Health for all smokefree co-ordinators and enforcement staff.

- That educational work aimed at young people should be largely left to teachers in schools, while public health staff focus on educating tobacco retailers as part of, and in support of, a strong surveillance and enforcement programme.

Purchasing emphases

Regulatory services

In its contracting and purchasing or regulatory public health services, the Ministry of Health, using the Public Health Commission as its agent, will purchase regional or district programmes which :

- Have smoke-free co-ordinators appointed as a complaints, inter-agency co-ordination, education and enforcement focus for the media and public.
- Take account of Maori smoking rates in programming. Where for example only 10 percent of the population are Maori, nevertheless 20 percent of the smokers are likely to be Maori.
- Have user-friendly systems for both smokers and the smoke-free-conscious public to initiate complaints
- Monitor and assist the Department of Health in enforcing no selling of tobacco products to under 16s. *This is regarded as the most important provision of the Act for enforcement at local level.*
- Monitor and enforce removal of all tobacco product advertising signs from shops selling tobacco products by 1 January 1995, and tobacco sponsorship signs by 1 July 1995.
- Enforce and encourage smokefree zones in workplaces, enclosed public places, and transport, with particular emphasis on protecting people from unavoidable exposure to indoor tobacco smoke.

Surveillance and management systems

Shops selling tobacco products probably number over 11,000. Forty-five years of education have seen only modest declines in tobacco smoking by young people. The Public Health Commission believes the time has come to focus on those who illegally profit from the uptake of this habit. Two US studies have now demonstrated marked falls in tobacco access and tobacco use. In four Californian communities education and enforcement have reduced sales from 72 percent at baseline to 21 percent 2 years later. In another study, regular smoking fell from 16 percent to 5 percent after access legislation was enforced. [64 65]

The Smoke-free Co-ordinator must know the most popular brands smoked by teenagers, the prices, the shops which sell to them. Surveillance should be systematic. In parts of the USA children have been recruited and sent into dairies once every 6 months. A systematic approach protects from any hint that certain shops are being unfairly singled out.

Education

Education in support of enforcement includes

(1) public education to ensure a hospitable climate for enforcement,

Schools, parents, the public and retailers can be informed through the media and thus empowered to support surveillance and enforcement by public health staff to reduce illegal sales to under 16s. How many shops are there, and how many have been visited? How many complaints have been received? What action is being taken? How many children smoke in local schools? How many of the smokers under 16 buy their cigarettes from dairies? From garages? Such information is newsworthy, and provides a climate receptive to enforcement.

(2) education of shopkeepers as a group. Shopkeepers can be reached through their own newsletters and meetings.

(3) warnings to errant shopkeepers to avoid the need to prosecute where possible.

Public health workers do not have to wait till they have a complaint, nor do they have to issue warnings before deciding to gather evidence. For the first few cases, however, it will count in the Ministry's favour if the shopkeeper is being prosecuted after previous complaints received and warnings given..

Evidence-gathering and prosecution

In the case of the law against sale to under 16s, entrapment is sometimes cited as a reason for not prosecuting. There is Australian and New Zealand legal precedent that it is permissible to trap an offender into committing an offence even by encouraging or assisting in the commission of the offence. [66] The employment of ex-police personnel and of children to collect evidence on a contract basis should be considered.

Healthy schools programmes

The explicit curriculum: Responsibility for teaching lies primarily with teachers, and the Commission will not fund health staff to teach in classrooms. Health groups may have an important role in providing in-service training for teachers, and in ensuring teachers can obtain resource materials.

The implicit curriculum: While it is essential that young people be educated about the effect of drugs including tobacco, on health, it would be a mistake to rely on such a programme to reduce the uptake of smoking, without at the same time adopting a smokefree school policy and ensuring that the shops on the routes to school were not selling cigarettes to students under age 16. School trustees can insist on smokefree schools

Personal Health Services

Facilitation of counselling for smoking cessation

The vast majority of smokers who quit do so with little or no professional assistance. With over half a million smokers addicted to nicotine, government cannot afford to provide cessation courses except to certain special groups. Smoking cessation clinics no matter how effective reach only a small percentage of those quitting smoking. and cannot be recommended for funding priority as a general rule.[67] It is more important to apply what is already known more widely, and facilitate existing general practices to offer simple cessation advice to the many smokers already consulting them on other matters. than to set up a few expensive model clinics.[68]

Evidence is also lacking that cessation clinics are any better for adolescents. Mass media cessation programmes have also been disappointing.[69] Most smokers age 30 and over visit their doctor in the course of a year.

- Contracts with general medical practitioners should require all case notes to be flagged for smoking status. Firm brief medical advice to quit, relating their present symptoms to smoking. with a leaflet and a warning of follow-up, is cost effective.[70] Nicotine replacement therapy can double the percentage quitting due to this approach.[71] The Public Health Commission recommends that:
- Hospitals including obstetric hospitals record smoking status of patients on admission and to ensure that assistance to quit smoking is provided as early as possible in pregnancy.
- Coronary care and coronary surgical units will be required to have arrangements for referral of high-risk patients for smoking cessation.

Smoke-free babies programmes

Tobacco smoking during pregnancy increases the risk of both low birthweight and cot death. Cot death risk is increased mainly by smoking in pregnancy, and partly by smoking around the baby after birth. For this reason the goal has two parts:

- Promoting smoke-free pregnancies
- Promoting smoke-free homes

Promoting smoke-free pregnancies

In the year to June 1991, 33 percent of 4000 women surveyed by Plunket had smoked in pregnancy. Two-thirds of Maori and 63 percent of teenage mothers smoked in pregnancy. Women who smoke are long term less likely to see their grandchildren. . A woman age 25 smoking 25 a day has a 25 percent shorter life than a nonsmoker.[72] Smoking by mother doubles the risk of cot death for the baby.[73]The long term risks to the child from exposure from conception to the many carcinogens in cigarette smoke. are as yet unknown.

Educational approaches are more likely to be effective if begun early in pregnancy. and directed at both parents partners: father's smoking is also associated with cot death. Randomised trial of brief health education interventions by trained cessation

counsellors in an antenatal clinic setting with follow-up by mail and at each visit is both efficacious and cost beneficial. *An antenatal programme can save hospital services money otherwise spent on intensive neonatal care of low birth weight babies.*[24]

The Public Health Commission recommends that Regional Health Authorities purchase comprehensive antenatal instruction programmes. The Public Health Commission will assist if necessary in the development of model programmes.

Promoting smoke-free homes or smoke-free zones

The ideal environment for a baby is a tobacco-free home (no smokers, no smoke permitted).

For the woman's health as much as the baby's, the first aim is to ensure women who have remained off cigarettes during pregnancy do not resume their habit.

If there are any smokers in the new baby's household health workers should negotiate to obtain parents support for the maximum smokefree airspace around the baby. As smokefree conditions become the norm outside the home, parents who continue to smoke at home may increasingly be persuaded to smoke outside or in another room. At the other extreme some parents smoke in bed with the baby, increasing the risk of cot death

The Public Health Commission recommends that all Well Child Care contracts include contract outputs related to the promotion of tobacco-free and smoke-free homes.

Healthy Schools

The School Boards of Trustees Association, the Ministry of Education and other Government departments are collaborating with the PHC in the development of a national healthy schools programme, described elsewhere in this document.

Public Health Programme Recommendations

Population Health Services

To have a national Maori tobacco smoking programme by 1995

To have surveillance systems on no-sale of tobacco products to under 16s in all districts by 1995

Personal Health Services

To have smoke-free pregnancy programmes operating in all maternity services by 1995

To have all well child care services contracted to deliver smoke-free home programmes by 1995

Research and information

The Public Health Commission has a key role in the provision of accurate and timely information on the tobacco products goal, in monitoring trends in tobacco use and exposure to tobacco smoke in New Zealand across population groups, in monitoring the affordability of tobacco products and the health consequences of their use, and progress with enforcement of the Smokefree Environments Act.

Research and Information recommendations

To encourage public participation on tobacco price setting policy as a way of lowering consumption, it is recommended that the Public Health Commission:

(1) monitor tobacco products consumption, price and affordability in New Zealand and comparable countries. (2) publish its rationale and recommendations on tobacco price and taxation by 15 April each year;

That in view of the importance of enforcement of the Smokefree Environments Act, information on complaints received, surveillance carried out, and prosecutions taken, be published annually by the Public Health Commission (as part of Health Trends or a new publication).

That in view of changes in smoking and demographics, estimates of smoking deaths, current and projected, be revised every 5 years, and published by the Public Health Commission. (Last revision updated for 1989)

That the Public Health Commission publish quarterly and annual national smoking prevalence surveys by age, sex and quitting behaviour. (1991 was the last year published). This information is needed annually by regional health authority population.

That the Public Health Commission obtain in the same year as the five-yearly Census, and publish reliable smoking prevalence rates for

- the Maori and Pacific Islander population (last available 1981 Census)
- for the whole population by five year age and sex group. (last year available 1991)
- for regions served by the same regional public health services unit.

That the Public Health Commission monitor and publish

(1) passive smoking exposure of adults and children every two years till the year 2000. (last year surveyed 1991, latest data published, 1989).

(2) smoking by young people of school leaving age every 2 years. (last survey 1991, latest data published 1989)

Summary of Costs and Benefits

[A comprehensive budget will be distributed at a later date; for the timebeing we are seeking comment on the policy and programme proposals].

- **The economic cost of tobacco use to New Zealand**

  The cost of tobacco products use to New Zealand in 1988 is estimated at NZ$1.9 billion in 1992 dollars, without counting passive smoking costs. The New Zealand estimate for tobacco use costs is based on a study commissioned by the Australian Government from two leading health economists. The cost of tobacco use in Australia in 1988 was estimated at A$6.84 billion, estimating the cost of previous and current tobacco use impinging in that year, and including productivity losses as well as illness care costs. [75]

- **Effectiveness of tobacco control**

  New Zealand government tobacco control policies between 1984 and 1992 have shown than consumption can be reduced by 42 percent in 8 years, largely by taxation and legislation.

  Efficiency of tobacco control

  Those continuing to smoke have paid for tobacco control. Increases in excise for revenue purposes, but justified on health grounds since the 1980s have increased government's revenues by hundreds of millions of dollars per year, more than offsetting any costs in tobacco control.

- **Public support for tobacco control**

  Public opinion polls in past years have shown high levels of support for most tobacco control measures. All political parties supported the 1991 amendment phasing out tobacco sponsorship advertising by 1 July 1995.

- **Equity effects of tobacco control**

  Tobacco control policies have reduced Maori male lung cancer rates. Tobacco control policies are the single most important measure for reducing health burdens on Maori.

Summary of Population Group Focus and Infrastructure

text to come.

Recommendations

That Government accept in principle that it should support measures which will further halve tobacco consumption during the 1990s.

That the Minister of Health note that the Public Health Commission will shortly publish discussion papers on:

- Options for a healthy tobacco tax policy
- Options for strengthening the Smoke-free Environments Act 1990

That the Minister of Health note that despite widespread breaches of the sales to under 16s clause of the Smoke-free Environments Act 1990, no prosecution has been obtained so far.

[The following sections will be removed before publication, but will be summarised into a Cabinet paper].

Consultation

Non-governmental tobacco control agencies: Cancer Society of New Zealand, National Heart Foundation of New Zealand, Action on Smoking and Health.

Government departments and agencies: Ministry of Health, Health Sponsorship Council, Te Puni Kokiri, Department of Customs, The Treasury, Regional Health Authorities.

Treaty of Waitangi

Tobacco was one of the gifts given by Governor Hobson on behalf of the Crown at the signing of the Treaty. This fact highlights the fact that tobacco was not known to Maori in pre-European times. Now that the health effects of tobacco are known sufficient funding is required to assist Maori lower their health risks from tobacco use.

Fiscal Implications

[To be completed once costings completed].

As noted above, increasing the costliness of tobacco products through an increase in excise levels, is recommended on health grounds, and would not necessarily raise revenue.

Legal Implications

A discussion paper on options for amending the Smoke-free Environments Act 1990 is recommended, and so there are not immediate legal implications.

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