Actions will speak louder than words

Getting serious about tobacco control in Ontario

A Report to the Minister of Health
from her Expert Panel on the
Renewal of the Ontario Tobacco Strategy

February 1999

THE TOBACCO INDEX

Annual deaths from tobacco in Ontario:[1,2]	12,000
*Annual deaths from traffic accidents, suicide, homicide and AIDS **combined**:*[2]	*3,000*
Lifetime chance of developing lung cancer:[3]	
for a man who currently smokes:	1 in 6
***for a man who never smoked regularly**:*	*1 in 77*
Smokers who **tried to quit** in the past year:[4]	1 in 3
*Smokers who **quit successfully** for one year:*[4]	*1 in 33*
Social and economic costs of **tobacco** in Ontario (1992):[1]	$3.7 billion
*Social and economic costs of **illicit drug use** in Ontario (1992):*[1]	*$0.5 billion*
Forecast provincial **revenue** from tobacco taxes (1998-99):	$475 million
*Provincial **spending** for tobacco control (1998-99):*	*$4 million*
Ontario **adults** who support smoke-free workplaces:[5]	9 in 10
*Ontario **smokers** who support smoke-free workplaces:*[5]	*7 in 10*
Ontario **adults** who support smoke-free public places:[5]	9 in 10
*Ontario **smokers** who support smoke-free public places:*[5]	*7 in 10*

EXECUTIVE SUMMARY

Each year, tobacco kills 12,000 Ontarians. Each year, treatment of diseases caused by tobacco requires more than 1 million hospital days and costs the health care system more than $1.1 billion. Each year, tobacco costs the Ontario economy another $2.6 billion in lost productivity. Lung cancer now exceeds breast cancer as the number one cancer killer in women. In short, the adverse impact of tobacco on the health of Ontarians and the economy of the Province is nothing less than disastrous.

Tobacco control in Ontario is failing. Almost none of Ontario's tobacco control objectives have been or will have been met by their target dates. Smoking rates among adolescents are now much higher than they were in the early 1990s. Smoking among adults has not decreased. Many Ontarians continue to be exposed to second-hand smoke at work and in public places.

This year, the budget of the Ontario Ministry of Health for tobacco control is less than 25% of the allocation at the height of the Ontario Tobacco Strategy in 1994-1995. This is equivalent to approximately 36 cents per capita, about 5% of the amount needed to mount an effective control program. The provincial media campaign, a critical program element focusing on youth, was eliminated in 1995. Taxes have not been restored since the 1994 federal and provincial cuts, and cigarettes are now cheaper in Ontario than in any other province or adjacent U.S. state. Existing provincial legislation fails to protect workers from second-hand smoke. No new control measures have been introduced in the last four years.

The effective control of tobacco is not only possible, it is an essential component of health care reform. It will save lives and prevent sickness and disability. It can produce major cost savings for both the health care system and the provincial economy. Tobacco is also an issue about which Ontarians have made up their minds. There is strong support across the population for action on tobacco.

We recommend that the Government of Ontario take action on tobacco prices, public education, marketing including packaging, labelling and information disclosure, retail controls, smoke-free spaces, supports for smoking cessation, finance and infrastructure, research, monitoring and evaluation, and cost recovery litigation. Action is needed in all of these areas if the tobacco disaster is to be abated. Piece-meal measures, based on ease of implementation, low cost, or other considerations, *will not work.*

Specifically, the Government of Ontario should:

Price

1. Raise and maintain tobacco prices to make them at least comparable to surrounding jurisdictions.
2. Lobby the federal and Quebec governments for a similar increase in Quebec to prevent inter-provincial smuggling.
3. Require tax-paid markings printed directly on cigarette packages.

Public Education

4. Mount intensive mass media-based and community-based public education programs to educate about the risks of tobacco and deceptive industry practices, and to build support for policy.
5. Implement comprehensive school-based prevention programs.
6. Support school programming with community-based education programs.

Marketing: Packaging, Labelling, and Information Disclosure

7. Require plain packaging in a manner that has minimal impact on the printing and packaging industry.
8. Require additional warnings and ingredient information on tobacco packages.
9. Require health warning inserts in tobacco packages.
10. Eliminate deceptive labelling on tobacco packages.
11. Require the tobacco industry to disclose product ingredients, additives and smoke emissions by brand.
12. Liaise with other jurisdictions to minimize legislative and regulatory loopholes related to packaging, advertising and promotion.

Retail Controls

13. Require larger and stronger point-of-sale health warning signs, and ban all point-of-sale tobacco product advertising.
14. Increase enforcement resources, fines and other penalties for non-compliance with the *Tobacco Control Act*.
15. Amend the *Tobacco Control Act* to make it easier to prosecute vendors and prevent senior courts from diluting the *Act's* intent.
16. Require that tobacco products be placed out of sight behind counters at point-of-sale.
17. Ban the sale of chewing tobacco and snuff.
18. Require public disclosure by the tobacco industry of marketing and research information, provincial financial statements, and listings of retail outlets and wholesale distributors.

Smoke-free Spaces

19. Require that indoor public places be 100% smoke-free, with immediate implementation in youth recreation facilities.
20. Incrementally ban smoking in all indoor workplaces except where smoking areas are separately-enclosed and separately-ventilated to the exterior, beginning at once with offices and industrial worksites.
21. Implement media-based public education programs on the dangers of second-hand smoke.

Cessation

22. Develop, fund and implement a comprehensive, coherent, evidence-based, province-wide system for assisting smokers in the quitting process.

Finance and Infrastructure

23. Set the annual funding for a mature Ontario Tobacco Strategy at 0.5 cents per cigarette sold.
24. Assign responsibility for developing and resourcing the new Strategy and some of its elements to the Ministry of Health.
25. Locate specific elements of the Strategy outside the Ministry of Health.
26. Ensure adequate staffing within the Ministry to support the Strategy.
27. Designate the Chief Medical Officer of Health as champion for the Strategy.

Research, Monitoring and Evaluation

28. Adequately fund a comprehensive, arm-s length research, monitoring and evaluation system to measure both the implementation and outcomes of Strategy components and inform the Strategy's renewal.

Cost Recovery Litigation

29. Initiate legal action, supported by necessary legislation, to recover health costs caused by tobacco products.

A piece-meal approach to tobacco control will not work. Action must be taken in all of these areas. The seriousness of the tobacco disaster demands nothing less.

TABLE OF CONTENTS

List of Figures and Tables

1.0 MORE ACTIONS, FEWER WORDS

Over the past two decades, numerous government, expert committee, and other reports have clearly documented the devastating health and economic burden that Ontario incurs from the use of tobacco products.[1,2,6-16] Many of these reports have outlined what is needed to control the tobacco epidemic, including actions that are mainly the responsibility of the provincial government. However, with few exceptions, the responses of successive provincial governments have not matched the seriousness of this public health catastrophe.

One exception was the development and implementation in the early 1990s of the Ontario Tobacco Strategy. Along with the passage of the *Tobacco Control Act*, a program was put in place, which, *at the time*, was a comprehensive model for government action aimed at curtailing the tobacco epidemic.

Today, the Strategy is no longer a model for action. The Minister of Health has asked this Expert Panel to provide advice concerning tobacco control in Ontario. Specifically, our charge is A*to advise the Minister of Health on strategic revisions to the Ontario Tobacco Strategy (OTS), and to identify and recommend new approaches to tobacco use reduction*@ (See Appendix).

Experiences of other jurisdictions show that tobacco control can work. These experiences and recent developments related to the tobacco industry, itself, make this a particularly advantageous time to renew the Province=s commitment to tobacco control. We believe that effective tobacco control is an essential component of health care reform in Ontario and welcome this opportunity to advise the Minister on strategic new directions. If implemented, our recommendations will benefit *all* Ontarians.

2.0 WHY THE PROVINCIAL GOVERNMENT MUST ACT

2.1 The Public Health Disaster

Tobacco is Ontario=s number one preventable public health problem. The impact of tobacco on the health of its residents and its economy is nothing less than catastrophic.

Specifically:

- Tobacco kills 12,000 Ontarians each year, four times more than die from motor vehicle accidents, suicide, homicide and AIDS *combined*.[1,2]

- The treatment of diseases caused by tobacco requires more than 1 million hospital days each year.[1]

- Health care expenditures because of tobacco exceed an estimated $1.1 billion annually.[1]

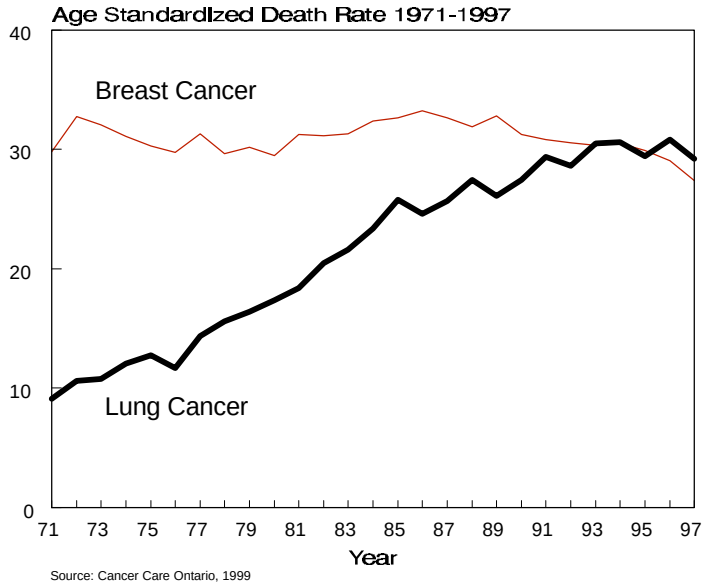
- Diseases caused by tobacco cost the economy an estimated $2.6 billion each year in lost productivity.[1]

- Tobacco is responsible for 25% of all fatal cancer suffered by Ontarians and is one reason for the current crisis in cancer care.[13]

- The impact on the health of women has been devastating. Lung cancer has increased at epidemic rates and now kills more women than breast cancer.[17]

FIGURE 1

Lung Cancer Deaths Surpass Breast Cancer Deaths in Ontario Women



Source: Cancer Care Ontario, 1999

- About 1 in 5 pregnant women smokes, with serious risks for herself and the developing fetus.[18]

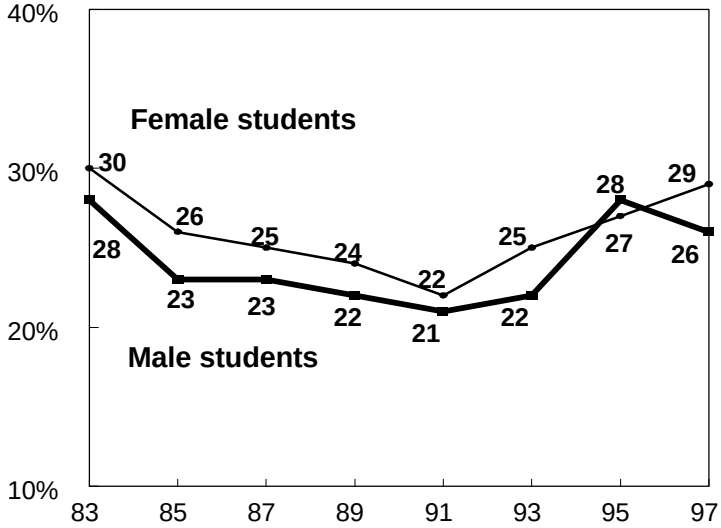
- More than 250,000 Ontario students in primary and secondary school smoke.[19] Youth smoking rates are now about the same as they were in the early 1980s, up significantly from their low in 1991. In 1997, 26% of male students and 29% of female students reported smoking more than one cigarette in the last year.[19]

FIGURE 2

Youth Smoking Is On The Rise

Ontario, Grades 7, 9, 11, 13

1983-1997



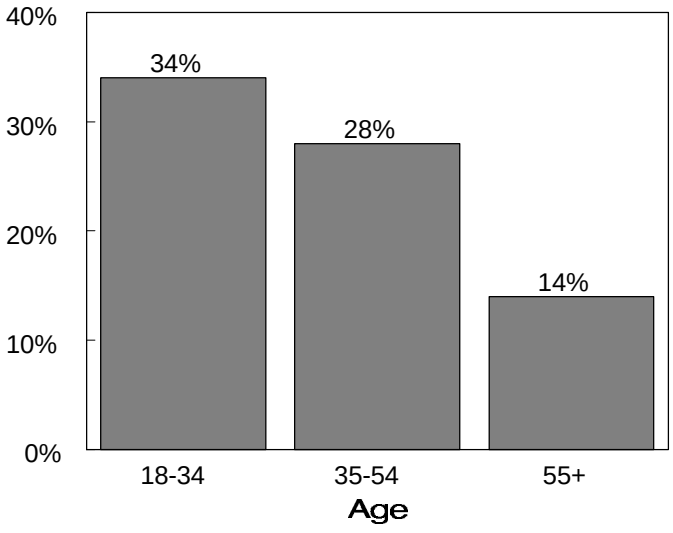
Source: Ontario Student Drug Use Survey, Centre for Addiction and Mental Health, Addiction Research Foundation Division

- Young adults, ages 18-34, have very high smoking rates**C**34% province-wide.[18]
- Smoking rates are particularly high in Northern Ontario, where 43% of young adults smoke.[18]

FIGURE 3

Smoking Is Highest Among Young Adults

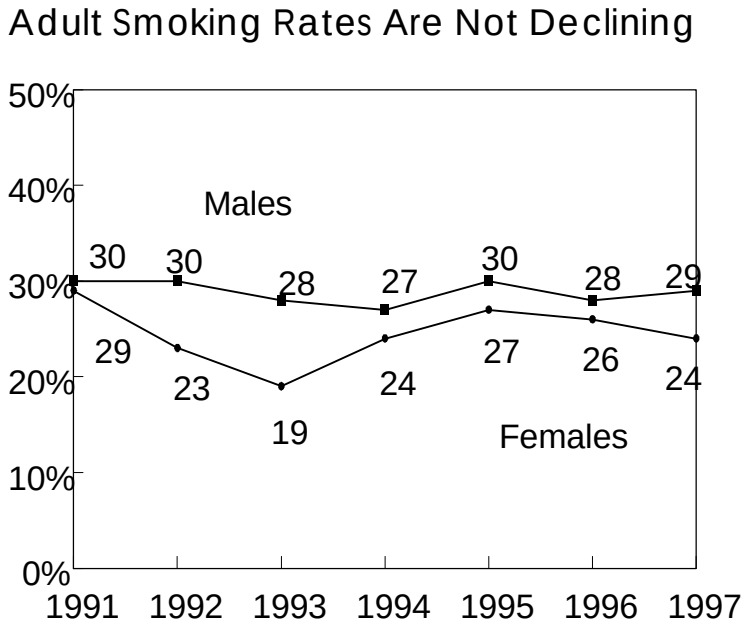
Ontario, 1997



Source: Ontario Drug Monitor 1997, Addiction Research Foundation

- More than one quarter of adult Ontarians ages 18 years or more smoke**C**29% of men and 24% of women.[18]

FIGURE 4



Source: Addiction Research Foundation surveys: Ontario Drug Use Survey 1991; Ontario Alcohol and Other Drug Opinion Survey 1992-95; Ontario Drug Monitor 1996-97
Note: Current smokers=daily+non-daily smokers

- Many Ontarians continue to be exposed to second-hand smoke at work and in public places.

- Most Ontario homes with smokers and children are not smoke-free.[20] Every day, more than 400,000 children are exposed to second-hand smoke in their homes.[18]

2.2 The Disaster Demands Provincial Government Action

Tobacco products are not Aordinary@ consumer products. They are addictive, cause disease, and kill people when used exactly as intended by their manufacturers. Cigarettes, by far the most common tobacco product, kill half of their long-term users.[21] The long-standing legal status of tobacco products has allowed their penetration into every corner of the provincial marketplace. Following bans on direct media advertising, cigarette manufacturers have developed and exploited sponsorship advertising, retail displays and promotional items, and have campaigned for lower taxes in order to maintain their markets.

This province-wide market penetration of tobacco products, so destructive to the public health and the provincial economy, can only be effectively reversed by a comprehensive legislative, fiscal and programmatic response. While action is necessary at the local level, only the provincial government can plan and initiate a comprehensive province-wide campaign, and implement certain components of it.

Action by the provincial government is even more critical since the tobacco industry cannot be relied on to act as a responsible corporate citizen. Evidence from tobacco industry documents, released as a result of legal action, proves that this industry has deceived the public about the damage caused by its products and has targeted its marketing activities toward young people.[22-25] In 1998, a tobacco industry subsidiary was convicted of complicity in cigarette smuggling between Canada and the United States. Documents from the U.S. and international parent companies of Canadian corporations also show that the industry has manipulated nicotine levels[26,27] and disseminated misleading and inaccurate information on the health effects of second-hand smoke.[28-36] Some U.S. companies closely related to Canadian companies are currently the subject of criminal investigations in that country.

The Government of Ontario has both the authority and the capacity to address the pricing of tobacco products, many aspects of marketing and promotion, exposure to second-hand smoke, media-based education, school programs and cessation assistance. In his April 20, 1995 letter to the Ontario Campaign for *Action* on Tobacco, the Premier noted that A*a Harris government is committed to the current multi-component tobacco strategy which utilizes education, community action and legislation initiatives to reduce the amount of tobacco consumption*@.[37]

In essence, the Ontario government has a choice: a healthy population or an uncontrolled tobacco industry.

2.3 Ontarians Support Tobacco Control

Government action to control tobacco must have solid public support. Public opinion data clearly show that Ontarians of all political and economic attitudes strongly support government intervention to control tobacco industry products, particularly to protect young people. An October 1998 Angus Reid Group poll[5] found that:

- More than 9 in 10 Ontarians want smoke-free workplaces.
- Nearly 9 in 10 think public places like arenas and shopping malls should be smoke-free.
- More than 9 in 10 want the provincial government to discourage young people from smoking.
- 8 in 10 support a 25**4** per pack tax to fund tobacco control programs.
- Nearly 7 in 10 believe the number of outlets where tobacco is sold should be reduced.

- More than 7 in 10 think all restaurants should be smoke-free.

These results are all the more remarkable since the polling data also show that Ontarians underestimate the real extent and severity of the tobacco epidemic.

Specifically:

- 46% believe alcohol use including drunk driving kills as least as many people as tobacco use. In fact, tobacco causes about 5 times more deaths than alcohol.[1]

- Nearly 3 in 10 believe AIDS kills as least as many people as tobacco. In fact, tobacco kills about 20 times more Ontarians than AIDS.[2]

- 2 in 3 women believe breast cancer kills more women than lung cancer. In fact, lung cancer surpassed breast cancer as a killer of women in this province in 1996.

In reviewing these data, John Wright, Angus Reid Group Executive Vice President, concluded that tobacco is an issue Aabout which Ontarians have made up their minds.@

2.4 Why Tobacco Control in Ontario is Not Working

A review of the evidence indicates that tobacco control in Ontario is not working.

Specifically:

- Although most schools in Ontario are now smoke-free, none of the other objectives of the Ontario Tobacco Strategy have been or will be met by their target dates (See Table 1).[18]

- Cigarettes are cheaper in Ontario than in any other province or adjacent U.S. state (See Figure 5).[18]

- The Government of Ontario spends about 36 cents per capita on tobacco control, approximately 5% of the amount needed for an effective program.[38]

- Ontario has not passed any new provincial tobacco control legislation since the *Tobacco Control Act* in 1994.

- Province-wide, media-based, public education on tobacco from the Government of Ontario has been eliminated.

TABLE 1. MEASURING PROGRESS TOWARD ONTARIO TOBACCO STRATEGY (OTS) OBJECTIVES

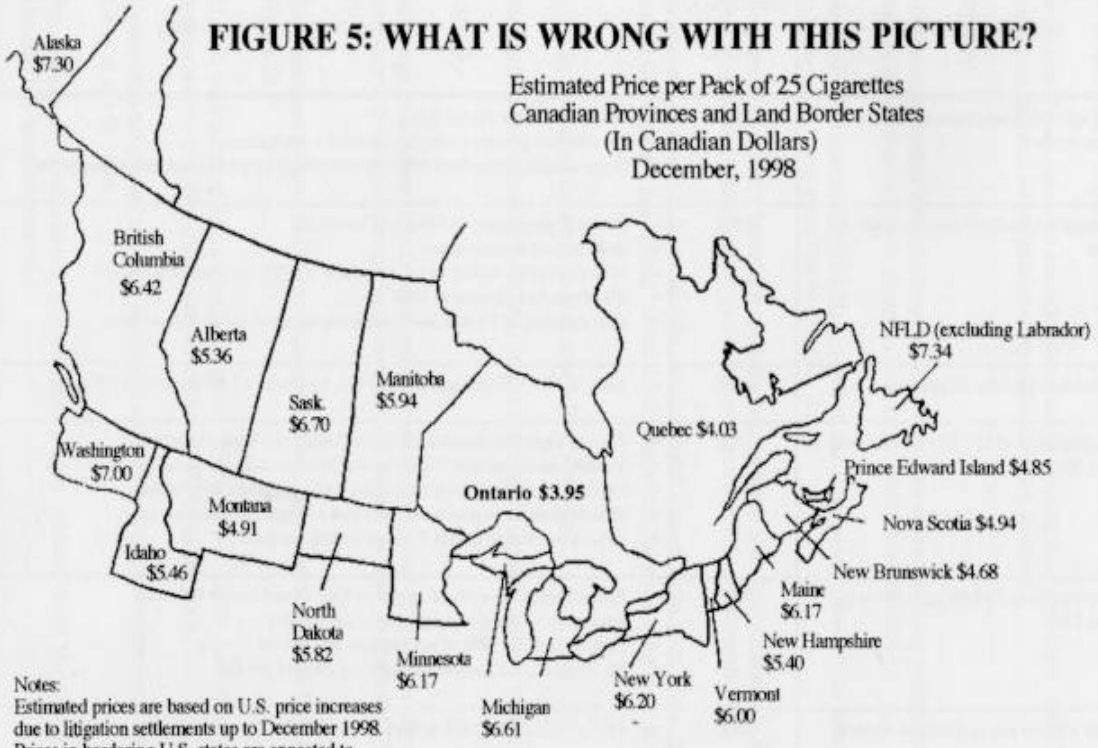
OTS OBJECTIVES	ORIGINAL TARGET DATE	CURRENT STATUS (1997/1998)
Make all schools, workplaces and public places smoke free	1995	C Most schools are smoke-free C No effective province-wide legislation for workplaces C Some municipalities have effective restrictions in workplaces and public places
Eliminate tobacco sales to persons under the age of 19	1995	C Statutory prohibition in *Tobacco Control Act* C Enforcement is inadequate C 31% of retailers willing to sell to minors in 1997, up from 26% in 1996 C 5% of vendors charged in 1997 C Less than half of Ontario underage smokers asked for ID at least once
Reduce tobacco sales by 50 per cent	2000	C Sales of 18.6 billion cigarettes in 1997, up from 14.3 billion sold in 1992
Reduce proportion of 12 - 19 year olds who smoke to 10%	2000	C Price of cigarettes remains lowest in Canada and border US states C Vending machines and Akiddie packs@ banned under the *Tobacco Control Act* C Patchwork of school programs, community programs and training C 28% of students in grades 7-13 smoked >1 cigarette in the last year C 19% of students in grades 7-13 are current smokers
Reduce proportion of adults aged 20+ who smoke to 15%	2000	C Price of cigarettes remains lowest in Canada and border US states C Patchwork of community programs and training C 29% of men and 24% of women ages 18+ smoke C No change in the number of cigarettes smoked per day
Eliminate tobacco use by pregnant women	2000	C 16% to 23% of pregnant women smoke regularly

Source: The Ontario Tobacco Research Unit. Monitoring the Ontario Tobacco Strategy. Progress Towards Our Goals 1997/1998. Fourth Annual Monitoring Report, November 1998

Actions Will Speak Louder Than Words: Getting Serious about Tobacco Control in Ontario

FIGURE 5: WHAT IS WRONG WITH THIS PICTURE?

Estimated Price per Pack of 25 Cigarettes
Canadian Provinces and Land Border States
(In Canadian Dollars)
December, 1998



Notes:
Estimated prices are based on U.S. price increases due to litigation settlements up to December 1998.
Prices in bordering U.S. states are expected to increase further as a result of the U.S. FY 1999 budget and expected state increases.
Exchange Rate is for Nov. 27: CDN=$0.6514.
Prices include all state, provincial, and federal taxes.
Local sales and tobacco taxes in US are excluded.

Source: Smoking and Health Action Foundation, 1998

8

- Although new legislation allows the Ministry of Health to 100% fund priority public health programs, tobacco control has not been given priority status.

- As a result of local services realignment, Ontario has nearly eliminated the Ministry of Health=s role in financially supporting the administration of the *Tobacco Control Act* and tobacco prevention programming by local public health units.

- Sales to minors charges laid under the *Tobacco Control Act* dropped by 20% between 1997 and 1998. Retailers willing to sell tobacco to young people increased from 26% in 1996 to 31% in 1997.[18]

It is not surprising that tobacco control in Ontario is not working. Here are some reasons:

- ***The budget allocation for tobacco control has been reduced.*** Funding for the Ontario Tobacco Strategy is about $4 million in the 1998-99 fiscal year. This is less than 25% of the amount allocated at the height of the Strategy in 1994-1995. Current provincial government funding for tobacco control in Ontario (about 36 cents per capita) is far below the amount needed for real impact[38], and much less than the amount spent in other North American jurisdictions, such as Massachusetts,[39] California,[40] and Oregon,[41] that have achieved notable reductions in tobacco consumption. For example, Massachusetts spends about $9 Cdn per capita (FY 1997) on its comprehensive tobacco control program.[39]

- ***Province-wide, media-based public education from the Government of Ontario has been eliminated.*** This important program element focussed specifically on youth.

- ***Critical elements of supportive policy have not been addressed.*** Tobacco taxes, originally cut by the federal government and the previous provincial government in early 1994, have been raised only slightly since then. In his April 20, 1995 letter to the Ontario Campaign for *Action* on Tobacco, Premier Harris stated that, while he refused to raise taxes unilaterally, *"we are committed, however, to working with other jurisdictions—international, federal and provincial—to develop a harmonized tax policy and a common tax protocol. As part of this effort, a Harris government will follow through with the recent commitment of the current government to raise taxes to stay in line with the recent increase announced by the federal government".*[37] This commitment has not been met. The federal tax increase of February 1995 was not subsequently matched by the province, nor has there been any indication that the province has advocated further tax increases either at the federal level or in Quebec.

- ***Existing legislation has not been strengthened.*** Necessary amendments have not been made to the *Smoking in the Workplace Act* and the *Tobacco Control Act* to effectively address smoking in the workplace and public places, respectively.

- ***Additional strategies have not been introduced.*** New tactics are required to counteract the powerful influences of the tobacco industry and its addictive products.

Clearly, renewal of tobacco control in Ontario is urgently needed.

3.0 A NEW ONTARIO TOBACCO STRATEGY

3.1 Goals of the Strategy

The Ontario Tobacco Strategy, as originally conceived, had three overall ***goals***: ***prevention, protection and cessation***.[42] Specifically, the Strategy aimed to:

- prevent tobacco use by non-smokers, particularly children and adolescents,
- protect Ontarians from second-hand smoke,
- help smokers quit.

These should remain the goals of the Strategy. They are evidence-based and embody the key aims and functions of a tobacco control strategy.

The Strategy, as originally designed, was modelled using the best science available at the time.[43] It was based on the recognition that reducing tobacco use is a complex challenge with no simple solutions. Consequently, the Strategy was envisaged as an integrated program incorporating provincial and community initiatives to reach defined groups through various approaches and delivery sites.

Objectives for the Strategy with target dates for their accomplishment were established in 1992, based directly on the tobacco control objectives and targets originally set by the Premier=s Council on Health Strategy.[44] The original objectives and targets were based on projections made from Health and Welfare Canada=s 1986 Labour Force Smoking Survey. They concerned making all schools, workplaces, and public places smoke-free, eliminating sales to minors, reducing overall tobacco sales, achieving substantial reductions in the proportions of young people and adults who smoke, and eliminating the use of tobacco products by pregnant women (See Table 1).

In *The Mandatory Health Programs and Services Guidelines*, implemented in the province of Ontario in January 1998, the original objectives of the OTS regarding smoking prevalence and smoke-free places were simply restated with extended dates, and two objectives concerning the reduction in tobacco vendor non-compliance and more smoke-free homes were added. However, there was little meaningful consultation with the broader health community about these changes. Most importantly, no new laws, policies, or programs were put in place and no new funding was allocated to attain these objectives.

3.2 Should New Objectives and Targets be Set Now?

The Minister asked us to review the objectives and targets of the existing Strategy and recommend change. Although the ***goals*** of the Strategy, ***prevention, protection and cessation,*** remain valid, the Panel believes that setting specific numerical objectives and targets, without the assurance of the necessary infrastructure to ensure progress, is a pointless exercise. What is worse, to do so would mislead the Minister and the public, by creating the impression that such objectives and targets are achievable, although, in fact, there is little hope of effective progress toward them without adequate implementation tools and resources.

Accordingly, the Panel has ***not*** revised the objectives and targets of the Strategy. A clear commitment by the provincial government of sufficient financial, legislative, regulatory and personnel resources to be sustained over several years is a critical underpinning of any meaningful endeavour in this regard. Without this underpinning, such an exercise would be no more than wishful thinking.

3.3 A Vision for Ontario

The Panel, nevertheless, does have a vision for a tobacco-free Ontario. This vision is based on the now substantial evidence that real progress toward a tobacco-free society is possible with comprehensive, sufficient and sustained resource commitments.

We see an Ontario where:

- the public understands the full extent of the harm caused by tobacco industry products,
- policy makers recognize the addictive and hazardous nature of tobacco products and regulate them accordingly,
- the tobacco industry pays the full cost of the harm inflicted by its products,
- substantially higher prices discourage the uptake of smoking, reduce the amount smoked, and accelerate quitting across the population,
- young people have little access to tobacco products because of high prices and controls on sales,
- there is no promotion of tobacco products, either directly or indirectly,
- public places are smoke-free,
- workplaces are smoke-free,
- parents understand the risks to children of exposure to second-hand smoke,

- children are not exposed to second-hand smoke anywhere,
- pregnant women are not exposed to tobacco smoke,
- every child participates in smoking prevention programs in school and in the community,
- smokers are no longer an underserviced population because they have access to a full range of information and services to motivate them and help them quit,
- health care providers are appropriately supported in their efforts to help smokers quit,
- ongoing research enables tobacco control measures to be monitored, evaluated and improved.

4.0 BUILDING A STRATEGY THAT WORKS

4.1 Comprehensive Measures Work

There is compelling evidence that a comprehensive tobacco control program, ***if adequately financed to allow appropriate implementation,*** could effectively prevent the onset of smoking, protect Ontarians from exposure to second-hand smoke, and increase smoking cessation rates. Copious research points to the need for such an approach.[45-52] Interventions that focus on one or a few population groups, such as women or youth, or on one or a few approaches, such as restrictions on sales to minors, have little impact.

Even more compelling is the demonstration from several U.S. states, notably Massachusetts, [39] California,[40] and Oregon[41] that a comprehensive approach is both possible and effective.[53-55]

The state of Massachusetts launched a comprehensive tobacco control program in 1993. Elements include legislation, enforcement, price increases, mass media, and funding of local boards of health, school health and other youth programs. California=s comprehensive program, which began in 1989, also includes legislation, enforcement, price increases, mass media campaigns, funding to local health agencies to provide technical support and monitor adherence to anti-smoking laws, community-based programs and enhancement of school-based prevention programs. Oregon=s program, initiated in 1996 and funded by increased tobacco taxes, includes community-based tobacco-use prevention coalitions in every county, a statewide public awareness and education campaign, comprehensive school-based programs, tribal tobacco-use prevention programs, multicultural outreach and education, a quitters= help line providing smoking cessation support, and projects evaluating new approaches to prevent or reduce tobacco use.
Evaluations show that full implementation of a comprehensive approach works.

Specifically:

- In California, per capita consumption fell 33% between 1989 and 1993, much more than the decline realized in the rest of the United States.[40]

- In Massachusetts, per capita consumption of tobacco fell 31% between 1992 and 1997, compared to a national decline of 7%.[39]

- In Oregon, within two years of the initiation of a comprehensive tobacco control program in 1996, per capita consumption fell by 11%. This drop compares favourably to the 2% increase in consumption between 1993 and 1996.[41]

The declines in cigarette consumption in Oregon, California, and Massachusetts indicate that adequately funded, comprehensive tobacco-control programs can quickly and substantially reduce tobacco use.

Other important outcomes in Massachusetts were:

- a reduction of 20% over 3 years in the number of cigarettes smoked by those who continued to smoke,[39]

- a reduction of 23% over 3 years in the proportion of workers exposed to second-hand smoke in the workplace,[39]

- greatly improved compliance with sales to minors laws, with rates increasing from 52% to 92% over 3 years.[39]

The California experience demonstrates that funding and a comprehensive effort must be sustained. In the face of national increases, smoking rates among young Californians held steady from 1990 to 1993 at about 9%; however, after 1993 they increased, reaching almost 12% by 1996. Between 1993 and 1996, adult smoking rates held steady, after a period of decline. This halting of progress in both groups was likely due to a combination of reduced funding to the tobacco control program, increased tobacco industry advertising and promotion, and tobacco industry pricing and political activities.[40]

These successes prompted the U.S. Centers for Disease Control and Prevention to recommend that all states establish tobacco control programs that are comprehensive, sustained over time and utilize community partnerships. Budget guidelines were developed, with recommended expenditures between $4.51 U.S. and $14.99 U.S. per capita, for a state with a population of 10 million.[38]

The successful control programs had six common ingredients:

- Programs were ***adequately financed***. A substantial investment in a sustained and comprehensive, multi-year strategy is necessary to counter the addictive power of nicotine and the pervasive efforts of the tobacco industry to promote its products.

- They included a ***mix of strategies*** designed to prevent young people from starting to smoke, protect people from exposure to second-hand smoke, and persuade and help smokers to quit. These strategies included policy promotion and implementation, enforcement, school-based and community-based education, and smoking cessation services.

- They included a major ***media campaign*** to provide information and influence public attitudes toward smoking.

- They included a number of ***state-wide initiatives*** (such as a Smoker=s Quitline), as well as extensive ***community programming*** that involved people in their homes, worksites, schools, entertainment venues, and other community locations.

- They included ***technical assistance*** and other ***support functions*** to increase the number and build the capacity of tobacco control professionals and community groups.

- They included ***research, monitoring and evaluation*** strategies to track progress and inform adjustments over time.

Arizona, Florida, Maine, Minnesota, Utah, and British Columbia are taking their lead from these successful experiences and have launched comprehensive tobacco control strategies. Building also on these experiences, this Panel recommends actions that must be taken in Ontario to strengthen and sustain the new Strategy and ensure that it is comprehensive.

These recommendations are presented according to their ***primary goal: prevention, protection, or cessation***. An exception is mass media which supports each goal of the new Strategy. Many recommendations will help achieve more than one goal: for example, higher prices[56] and better and larger package health warnings[57,58] will both discourage young people from starting to smoke and encourage cessation. Similarly, restrictions on smoking provide both protection from second-hand smoke and an environment that helps smokers to quit or cut down.[59-63]

An effective Ontario Tobacco Strategy needs a consistent policy and program environment in which actions reinforce each other, and contradictory or confusing messages about tobacco are eliminated. This is reflected in the Panel's recommendations. A brief rationale is included with each recommendation.

4.2 Prevention

This goal of the Strategy focuses on preventing non-smokers, particularly children and adolescents, from starting to use tobacco. To be effective, a comprehensive prevention program must address the issues of tobacco pricing, access to information about tobacco products, promotion and packaging, retail sale including sales to minors, mass media-based public education, and school education.

4.2.1 Price

Recommendations

1. **In light of U.S. price increases and the Canadian export tax, Ontario tobacco prices should be raised and maintained at levels at least comparable to surrounding jurisdictions.**

2. **The Government of Ontario should immediately and forcefully lobby both the federal and Quebec governments in support of a similar increase in Quebec, in order to prevent inter-provincial smuggling.**

3. **Ontario legislation should be amended to require that tax-paid markings be printed directly on cigarette packages sold in the province.**

Rationale

Increasing the price of cigarettes is essential to reducing and preventing smoking among young people, and is supported by several decades of research.[47,56,64-75] Young people are much more price-sensitive than adults, that is, for a given price increase, they are much more likely to quit or not take up smoking, or to reduce their consumption.

As of February 1999, Ontario has much lower cigarette prices than other surrounding Canadian provinces and U.S. states except Quebec. Ontario prices are only slightly lower than those in Quebec.

Governments and the media frequently cite smuggling as a reason not to raise taxes. Currently, this fear of smuggling has little foundation because:

- Prices are now much higher in bordering U.S. states than in Ontario and are expected to increase further as a result of President Clinton's FY 1999 budget and expected state increases.

- Even with substantially increased prices in Ontario, there will be no incentive for smugglers to bring illegal product into the province. Smuggling in Canada today is essentially inter-provincial, with cigarettes moving **from** Ontario and Quebec **to** other provinces which have higher prices. Higher prices in Ontario and Quebec will eliminate this illegal traffic.

- Improved tax-paid markings, which are difficult to counterfeit, would make identification of smuggled product much easier.

It is clear that Canadian tobacco companies played an important role in the 1992-1994 smuggling problem. They sent vast quantities of Canadian cigarettes to the United States, despite the lack of a legitimate market. These cigarettes were then brought back into Canada illegally, triggering the Acrisis@ that led to the 1994 tax reductions. Recently, an affiliate of RJR MacDonald was convicted for U.S. tax evasion as part of a scheme to transit Canadian cigarettes through New York State and back into Canada, and both U.S. and Canadian authorities continue to investigate the industry.

Even though the risk of smuggling is very low, it can be further minimized by changing the way the payment of tax is shown on tobacco packages. At present, each province has a coloured tear-off strip as part of the cellophane outer wrapping, indicating that tax has been paid. This can be easily counterfeited by smugglers and the packages rewrapped. However, new technology now permits paid markings that incorporate both covert and overt markings. These features are very difficult to counterfeit and can be printed directly on the package, further reducing any incentive to smuggle tobacco. New evidence from Michigan shows that tax paid markings can effectively eliminate smuggling. In 1998, the Michigan state government recouped $46 million in taxes using this strategy.[76]

4.2.2 Media-based and School Education Programs

Recommendations

4. Intensive mass media-based and community-based public education programs should be mounted to:

- **educate the public on the real risks of tobacco use**

- **educate the public on the behaviour of the tobacco industry, its targeting of young people, and its deceptive and manipulative practices**

- **build public support for price and other control measures**

5. Comprehensive school-based prevention programs should be prepared, implemented and monitored in all grade 6-12 classes in Ontario, and earlier in schools where experimentation begins in lower grades.

6. The Government of Ontario should fund communities to prepare and implement community-wide education programs to support smoking prevention programs delivered through the school curriculum.

Rationale:

Low prices and the pervasive retail presence of tobacco products send deceptive messages to Ontarians of all ages.

Media-based public education can counter these pro-tobacco messages. Experience from other jurisdictions has shown that mass media messages are a critical part of effective, comprehensive tobacco control.[47,77-83] They build support for policy measures, they can explain the real nature and the risks of tobacco products, and they can provide new information about the behaviour of the tobacco industry, its targeting of and marketing to young people, and its other unscrupulous practices. Further, they are a cost effective way to deliver prevention messages.[84]

The Government of Ontario should not assume that federal government mass-media programming can or will take the place of an Ontario campaign.

Public education in this area is best achieved with a combination of provincial media campaigns and intensive local programming.[85] Ontario has an active, established network of public health units and voluntary organizations with an interest in tobacco control. With better resources and a clear mandate to promote non-smoking, this network has the capacity to implement targeted education campaigns that could effectively complement a province-wide media campaign. Current legislation allows the Ministry of Health to fund 100% priority public health programs. Tobacco control has not been given priority status. This should be done immediately.

The school is an important channel to reach children and adolescents with smoking prevention programming. The vast majority of smokers begin smoking as children and teenagers making it crucial to focus prevention efforts on children.[47] Research indicates that effective smoking prevention programs should start just before children begin experimenting with tobacco,[46,77,86] and extend through the high-school years. At a minimum, this is grades 6 through 12 throughout the province. In some regions, or with some subgroups where smoking onset begins earlier, programming should begin earlier.

School-based programs are most effective when combined with comprehensive community approaches.[87] Specifically, school programs combined with mass media interventions have been shown to be more effective over the long term than school programming alone.[47,78,80]

4.2.3 Marketing: Packaging, Labelling and Information Disclosure

Recommendations

7. Plain (generic) packaging should be required in a manner that has minimal impact on the printing and packaging industry.

8. Additional health warnings and ingredient information should be required on tobacco packaging.

9. Package health warning inserts should be required.

10. Deceptive labelling such as, Alight@ and Amild@, should be eliminated.

11. The tobacco industry should be required to disclose product ingredients, additives and smoke emissions by brand.

12. The Minister of Health should liaise closely with other Canadian and U.S. authorities on all aspects of packaging, advertising and promotional controls, in order to minimize the possibility of legislative and regulatory loopholes.

Rationale

The current packaging of tobacco products promotes the positive imagery associated with these products.[88] Research findings from several areas indicate that plain (generic) packaging of tobacco products will likely reduce smoking uptake by non-smoking youth, and contribute to smoking cessation among youth and adults.[89]

Much better information about the toxic and cancer-causing contents of tobacco products is required by government and the public. The public has never been fully informed of these contents, nor of the health impacts of individual ingredients in tobacco products. Substantial health warnings help change knowledge, attitudes, and behaviour.[57,58] According to recent research, labels such as *Alight@* and *Amild@* have misled the public into believing such cigarettes are safer or that they contain less tar and nicotine.[90] In fact, to a great extent, the tar and nicotine delivery from a cigarette is determined by the way it is smoked. Many smokers compensate for any reduction in nicotine yield by blocking ventilation holes on the filter, increasing the number of cigarettes smoked, more frequent puffing, and increasing depth and duration of inhalation.[91-95] Contrary to what smokers may believe, they can inhale ***more*** tar and nicotine from some *Alight@* brands than from regular cigarettes.

The industry has shown itself to be adept at exploiting deficiencies or loopholes in legislation related to all aspects of marketing.[96] The proliferation of sponsorship advertising is a case in point.[97,98] Particular attention must be paid to industry initiatives to circumvent the intent of legislation and regulations in this area.[99,100]

4.2.4 Retail Controls

Recommendations

13. Provincial sales to minors restrictions should be strengthened by larger and stronger point-of-sale health warnings signage, and by eliminating all point-of-sale tobacco product advertising.

14. The *Tobacco Control Act* should be strengthened by increasing enforcement resources, increasing fines for non-compliance, and by requiring the posting of a prominent sign at convicted retail premises after *first* convictions, together with a prescribed notice in local newspapers paid for by the retailer.

15. The *Tobacco Control Act* should be amended to make it easier to prosecute vendors, and should be streamlined and clarified in order to prevent senior courts from diluting its intent.

16. Tobacco products should be placed out of sight of customers behind counters at point-of-sale.

17. The province should ban the sale of chewing tobacco and snuff.

18. The tobacco industry should be required to publicly disclose in a form specified by the Ministry of Health:

- **Marketing and research information including sales and consumption data by region,**
- **Provincial financial statements, and,**
- **An annual compilation and presentation of an up-to-date database of all tobacco retailers in Ontario.**

Rationale

At retail outlets throughout Ontario, attractive packaging, displays and point of sale advertising signs without comparable health warnings strongly reinforce the attractiveness of tobacco products and contribute to the false perception that they are a consumer product like any other. This image must be eradicated.

The original Strategy was built around significant restrictions on retail sales to minors. Restrictions to date have not produced anticipated reductions in such sales, due in part to:

- continuing low prices,
- ineffective and under-financed enforcement,
- attractive and prominent packaging and displays, and
- sponsorship advertising.

If additional restrictions on sales to minors and the retail environment do not produce anticipated results,[101-103] serious consideration must be given to reducing the number of tobacco sales outlets in Ontario. Tobacco is now available up to 24 hours a day in approximately 22,000 outlets throughout the province. This conveys an unwarranted image of product Anormality@, besides posing serious problems in effectively controlling sales to minors. Further, many outlets are staffed by young people, who may be reluctant to confront a group of older teenagers under the legal age who want to purchase tobacco. Options include:

- reducing the numbers and kinds of outlets,
- requiring a provincial tobacco sales licence, and
- special outlets.

Limiting the number and kinds of outlets and reducing hours of sale could have a substantial impact on consumption by young people. In Ontario, this approach has been employed for years for another hazardous consumer productCalcohol.

The sale of chewing tobacco and snuff, which is flavoured and packaged to be more appealing to young people, is a method of introducing young people to nicotine addiction without the difficulties many experience initially in inhaling cigarette smoke. There is documented evidence that manufacturers use a graduated strategy to move new users along to more addictive smokeless tobacco products.[104] A ban on these materials has been recommended by many health authorities, and some jurisdictions have acted. A ban would be a step toward eliminating one of many Agateways@ to nicotine addiction. Because these products are manufactured outside Canada and currently have no significant market in Ontario, their elimination would have very little negative economic impact.

The Mandatory Health Programs and Services Guidelines, which came into effect in January 1998 under the authority of the *Health Protection and Promotion Act*, requires local boards of health to enforce the *Tobacco Control Act*. These requirements include inspections of tobacco vendors, compliance checks, laying of charges for infractions and an annual compilation of all tobacco vendors within a board's jurisdiction. These provisions could be strengthened by specifying the data collected for the provincial government, and shifting

responsibility for data collection to tobacco manufacturers, as a cost of doing business in Ontario. This would have a positive impact on provincial monitoring and research and free up local public health resources.

A note on making youth possession illegal: While this approach has recently been advocated by some, the Panel strongly **recommends against it** because:

- In the United States, making youth possession illegal is supported by the tobacco industry and retailers, in an effort to shift the onus on preventing youth access away from the industry and retailers who sell illegally to young people, to young people themselves.[105]

- There are practical difficulties with enforcement.

- This approach is a method of avoiding compliance checks, which often reveal retailers who are violating sales to minors laws.

- Finally, courts may not view individual incidents of youth possession as serious enough to sanction, nullifying any deterrent effect.

4.3 Protection

This goal of the Strategy focuses on protecting Ontarians from exposure to second-hand smoke.

Recommendations:

19. The Government of Ontario should make all indoor public places 100% smoke-free. Facilities used for recreation by young people, such as arenas, bowling alleys and shopping malls, should be made smoke-free immediately. Target dates and specifications for other public facilities should be set, using a phased-in approach.

20. The Government of Ontario should ban smoking in all enclosed worksites in the province, except where such worksites contain smoking areas which are separately-enclosed and separately-ventilated to the exterior of the premises. This requirement should be implemented in stages, beginning at once with office and industrial worksites, then moving to restaurants and other hospitality venues, with bars (defined by alcohol sales as a percentage of revenue together with no admission for persons under 19 years of age) being the final stage. A timetable to accomplish this should be developed immediately.

21. The Government of Ontario should implement province-wide, media-based public education programs to ensure that every parent is informed of the risks of second-hand smoke to children, and urged to eliminate their children=s exposure by making homes and vehicles smoke-free and avoiding places where smoking may occur.

Rationale

The need for protection from second-hand smoke is based on more than two decades of research,[106,107] with the first major call for comprehensive protection coming from the U.S. Surgeon General in 1986.[108] Major research advances during the past several years demonstrate that the risks from exposure extend well beyond lung cancer and are experienced by both adults and children.[106-111] Besides lung cancer,[112,113] adults exposed suffer an increased risk of heart disease[114-116] and respiratory problems.[117] Exposed children incur significant risks of respiratory infections,[106,107] ear problems,[106,107,118,119] asthma [106,107] and sudden infant death syndrome,[120-122] with substantial costs to the health care system [123,124] In fact, there is no other consumer product to which large numbers of Ontarians are exposed on a daily basis with few or no restrictions that generates by-products as carcinogenic or toxic as second-hand smoke.

It is important to note that most debate on second hand smoke is generated by the tobacco industry,[31,32,35] its paid researchers,[34,36] a few sympathetic media and a small minority of smokers.[125-127] Evidence from tobacco industry documents now on the public record proves the existence of an extensive industry campaign to undermine the scientific consensus on the health risks of second-hand smoke.[22,23,28-36] A particular target of this campaign has been the hospitality industry, whose representatives have (often unwittingly) repeated tobacco industry arguments against second-hand smoke controls in their establishments. Extensive independent research shows there is essentially no negative economic impact of smoke-free policies on this sector,[128-134] that its employees are those most in need of protection,[135-137] and that when employees are protected, they experience significant health benefits within a very short period of time.[138] It is also a well-established tobacco industry tactic to raise concerns about non-compliance with restrictions. In Ontario, this is not an issue. In 1996, less than 10% of smokers surveyed in the province indicated that they would ignore more restrictions on smoking.[139]

Successful smoke-free policies in other jurisdictions have generally followed a staged approach, starting with office and industrial worksites, then moving to restaurants and other hospitality venues, and finishing with bars. At the provincial level, the *Smoking in the Workplace Act* enshrines the right to smoking in the workplace that is not restricted to separately-enclosed, separately-ventilated areas. As a result, many thousands of Ontario workers are exposed unnecessarily to a serious health hazard. Currently, the province is depending on individual municipalities to pass effective smoke-free by-laws, an approach that is haphazard, fails to provide the necessary protection for *all* workers, and precludes a level playing field for the hospitality sector.

For private settings where public policies are inappropriate, media-based educational programs should encourage reduction of exposure to second-hand smoke. Only 20% of Ontario homes with children and smokers were smoke-free in 1996.[20] Public education in this area should include a combination of provincial media campaigns and intensive local education programming. Health professionals across the province also have a role to play in educating the public about the hazards of second-hand smoke.

4.4 Cessation

This goal of the Strategy focuses on strategies to help smokers quit.

Recommendation

22. The Ministry of Health should develop, fund and implement a comprehensive, coherent, evidence-based, province-wide system for assisting smokers in the quitting process.

Key elements should include:

- **A toll free number placed on every package of tobacco products sold in the province to provide direct access to cessation services. A web site should also be provided.**
- **Media-based public education to reinforce the availability of the toll free number and web site, the best methods of quitting smoking, and the financial and health benefits of doing so.**
- **Nicotine replacement therapies available in the self-serve areas of pharmacies.**
- **Training for all health care providers in Ontario to enable them to systematically and effectively motivate and help smokers quit.**

Rationale

Most Canadian smokers have tried to quit smoking,[140] and about one-half of all daily smokers say they intend to quit in the next year.[141] However, only a small proportion of smokers report successfully quitting on a particular quit attempt.[4] Most smokers who do succeed in quitting have done so only after many failed attempts. There is a lot at stake: half of those who fail to quit will die before their time from smoking related diseases.[21]

Cessation measures must be part of a comprehensive program. Smokers who quit are more likely to remain long-term non-smokers if the community environment around them is supportive during the quitting process and helps them avoid potential relapse situations. Increased cigarette prices,[56] health warnings,[58] restrictions on smoking in the workplace and public places,[59] and mass media messages[142,143] help smokers quit and stay smoke-free.

The Panel is concerned about the current patchwork of cessation services in Ontario, the insufficient resources devoted to providing them, and the obvious difficulty experienced by many smokers in identifying an appropriate cessation method. There is now a substantial research base upon which to build an array of effective cessation strategies.[144-149] Cessation services, themselves, need great improvement. The Panel recognizes the potential public health impact of accessible help through a toll free number and the internet.[150] Computer-based systems for mass delivery of education and counselling are now being developed.[151-153]

Nicotine replacement therapies, in the form of nicotine gum or the transdermal patch, have been shown to increase success in smoking cessation attempts when used on their own or in conjunction with various counselling methods.[145,154-156] Providing these products in the self-service areas of pharmacies will increase their availability. Chances of successful cessation are further improved when nicotine replacement therapy is combined with counselling.[145] Nicotine nasal spray is also effective, [157] as is another pharmacologic aid, Zyban (bupropion hydrochloride).[158,159]

While access to services is important, so are the proficiency of service providers and the affordability and availability of adjunct therapies. With assistance from the Ministry of Health, three organizations, the Ontario Medical Association, the Ontario Pharmacists' Association, and the Program Training and Consultation Centre, are working to improve the ability of physicians and other health care professionals to effectively counsel their patients to quit. The practical effectiveness of health care providers has been demonstrated[145] and should be enhanced. Necessary program supports include training, program materials, a referral network and adequate compensation for services provided. Evidence indicates that the reach of such programs to smokers can have substantial public health impact.

Smoking cessation interventions have been shown to be cost effective in relation to other types of medical interventions.[148] Now, the key problems are the lack of a comprehensive plan and sufficient resources to support cessation services across the province.

5.0 SUPPORTING A STRATEGY THAT WORKS

5.1 Finance

Resource allocation to implement the components of a new Strategy should be based on funding models used effectively in other jurisdictions, such as Massachusetts and California, and should be consistent with the guidelines developed by the U.S. Centers for Disease Control and Prevention (CDC).[38] Funded elements should include legislation and enforcement, media and other public education campaigns, school programs, community programs, cessation programs, administration and management, and research, monitoring and evaluation.

Every attempt should be made to deliver programs through existing channels. The necessary skills and capacity should be developed and encouraged to institutionalize tobacco use reduction services and messages so that they are persistent, inescapable, and consistent with best practices. In addition to the necessary role of the provincial government, public health departments and local community groups have the capacity to implement proven tobacco use reduction programs and services. Easy access to technical assistance, training, and funding are needed to support program evaluation, media campaigns, implementation of smoke-free policies, smoking prevention and cessation programs, and reducing minors= access to tobacco.

Funding to province-wide organizations or resource centres should be increased to provide free and readily accessible support to ensure that these skills are developed, nurtured and maintained at the local level. The Ontario Tobacco Strategy was founded on the concept of partnership among key non-governmental organizations (NGOs), such as the Canadian Cancer SocietyCOntario Division, the Heart and Stroke Foundation of Ontario and the Ontario Lung Association. With adequate resources, their local volunteers and offices could play a key role in implementing the programs and services needed to support components of a comprehensive tobacco control plan.

Recommendation

23. Annual funding by the Government of Ontario for a mature Ontario Tobacco Strategy should be set at a level of 0.5 cents per cigarette sold per year. This funding should be introduced in incremental stages over three years, to allow for development of programs and delivery mechanisms.

Rationale

The recommended funding level for the new Strategy is based on the successful experiences of other jurisdictions, and would provide about $30 million in the first year, growing to approximately $90 million at maturity, based on cigarette sales of 18.6 billion cigarettes in Ontario in 1997. This mature amount equals about $8 per capita, an amount within the range required for an effective program under the CDC guidelines.[38]

This approach should be attractive to government because:

- Strategy interventions are based on ***proven best practices.***
- Government can be satisfied that its ***spending levels are appropriate.***
- As the revised Strategy succeeds, ***government costs are automatically reduced.***

This approach is also attractive as a formula for establishing funding levels because:

- It ties funding to an ***objective indicator of need*** (tobacco consumption), thus insulating it from internal government budgetary pressure.
- It would provide ***predictable funding*** levels from year to year.
- It would give the Strategy relative ***independence*** in program decisions.

5.2 Infrastructure

Recommendations

24. Responsibility for developing and resourcing implementation of the new Strategy, and elements such as legislation or litigation that are specifically the role of government, should be assigned to the Ministry of Health.

25. Responsibility for elements of the new Strategy that are politically sensitive or best delivered by others should be assigned to other organizations by the Ministry of Health.

26. The Ministry of Health must show internal commitment by providing adequate staffing to fulfill its role in support of the Strategy.

27. The Chief Medical Officer of Health should act as champion for the Strategy within government and with the public.

Rationale

The Panel has decided not to make a specific recommendation about the type of organization to which some elements of the new Strategy should be contracted. We debated the feasibility of recommending the creation of a special purpose organization, or contracting to an established health services organization, either in the broader public sector or the non-governmental (NGO) community.

The Panel has examined various approaches, including the comprehensive programs in California and Massachusetts. Both these programs are largely lodged within the state governments, and both have had undeniable successes. Nonetheless, there have also been well-documented pressures on these programs from within government. In California=s case, significant funding cuts to the program by the state government contributed to reductions in the program=s effectiveness,[40] and effective mass media messages were blocked by political forces.[160]

Closer to home, an obvious concern is the instability of the Ontario Tobacco Strategy. Funding is currently less than 25% of the allocation at the height of the Strategy. Further, province-wide media based education from the Government of Ontario has been eliminated. Clearly, to be effective, the Strategy must be both sustained and stable. It must also be free**C**and be seen to be free**C**from political pressure and tobacco industry influence.

Whatever the conclusion reached, certain principles are clear:

- the organizational model for management of the Strategy must be based on a responsible, accountable governance structure;

- the funding of the Strategy must be stable and sustained;

- the Strategy must have the capacity to form partnerships with voluntary, NGO and private sector stakeholders;

- the Strategy must be sufficiently flexible to permit adjustments and revisions;

- potentially controversial components of the Strategy, such as the media campaign, must be insulated from political and tobacco industry interference.

However the Strategy is organized, the Ministry of Health will need to provide substantial staff support. Clearly, some elements of the Strategy, such as legislation and certain enforcement activities, can only be carried out at the provincial level. The Ministry should also be responsible for ensuring that contracted work is conducted according to specifications.

It is critical that the new Strategy have a public face. In diffusing new attitudes and practices in the population, it is important to have a champion.[161] Designating the Chief Medical Officer of Health for the province as champion for the Strategy provides this public face and a respected spokesperson who can maintain a dialogue with the public.

6.0 SHOWING THAT THE STRATEGY WORKS AND KEEPING IT CURRENT

Recommendation

28. The Ministry of Health should adequately fund a comprehensive and arm's length research, monitoring and evaluation system to measure both the implementation and outcomes of Strategy components and permit their ongoing refinement and renewal.

Rationale

Key to the success of the California and Massachusetts programs are comprehensive well-funded monitoring and evaluation components.[39,162,163] Systems for data collection were integral to each initiative and included a variety of measures of both implementation and outcome. In Massachusetts, for example, information on the number of patients served in cessation programs is supplemented by information on the quality of treatment, obtained in periodic audits of treatment service providers. Long-term quit rates provide the ultimate outcome measure, but the implementation or process data are critical in determining how the system is working, so that weaknesses can be identified and corrected. In California, policy and program research continues to be important in developing the foundation for legislative, regulatory and program measures.[164]

Limited monitoring and evaluation and some research related to the Ontario Tobacco Strategy have been carried out over the past five years. In the initial planning stage of the Strategy, research funding was cut from the originally proposed $2.5 million per year to $0.4 million, resulting in a substantial reduction in the comprehensiveness and utility of this component.[165] Based on the CDC guideline,[38] an allocation of 10% of overall budget for monitoring and evaluation would be appropriate.

These elements are essential in evaluating the new Strategy and keeping it current:

- Annual monitoring surveys of key indicators of tobacco use, including prevalence, amount smoked, and cessation rates for both youth and adults;

- Specialized surveys conducted periodically to assess smoking behaviour among special groups, such as pregnant women, non-student youth, and psychiatric patients;

- In-depth surveys conducted periodically to assess attitudes and behaviours regarding smoking and second-hand smoke, perceptions of harm, access to tobacco, and other key issues;

- Retail sales data to track changes in consumer behaviour because current federal sales data reflect wholesale shipments and are unsatisfactory for determining purchasing behaviour;

- Regular surveys using youth of varying ages to monitor retailer compliance with sales to minors legislation coordinated with ongoing studies of youth smoking behaviour to allow for impact studies of the effect of compliance on youth smoking;

- Analysis of enforcement data including visits, inspections, charges, and convictions;

- Specific evaluation studies of the implementation and outcomes of programs and policies that comprise the Strategy;

- Monitoring and evaluation of public education and media campaigns;

- Specially designed studies that examine the effects of each component and the interactions among components within the comprehensive Strategy;

- Funding to enable the inclusion of tobacco-related questions in studies and surveys that focus on other health behaviours and disease outcomes.

These activities form the basis for tracking and evaluating the Strategy and keeping it current. Public interest is best served by a combination of concerted Ministry of Health efforts in collaboration with objective, arm-s length organizations.

7.0 RECOVERING COSTS AND ENDING ECONOMIC DEPENDENCY ON TOBACCO

Recommendation

29. The Province of Ontario should initiate legal action, supported by necessary legislation, to recover health care and other costs caused by tobacco products.

Rationale

Until five years ago, the tobacco companies won every lawsuit filed against them, because jurors were convinced that smokers knew the health risks involved and were responsible for their own actions. Leaked documents in the United States showed that tobacco companies had manipulated nicotine levels in cigarettes to increase their addictiveness, and had targeted children and youth. Relying on evidence that the industry had engaged in a conspiracy to misinform the public and deny proof that smoking is Aaddictive, injurious, and dangerous,@ a majority of the U.S. states instituted legal proceedings to recover smoking-related health care costs from the tobacco industry. These suits were supported by the development of alternate legal routes for holding companies liable.

Since July 1997, there have been four out-of-court settlements: the Mississippi case settled in July 1997 for $3.4 billion U.S., followed by Florida in August 1997 for $11.3 billion U.S., Texas in January 1998 for $15.3 billion U.S., and Minnesota in May 1998 for $6.0 billion U.S. Each settlement represents a one-time payment over 25 years. To facilitate the settlements, some states, such as Florida, passed special enabling legislation. In November 1998, a master settlement between the States Attorneys General and the tobacco industry was reached for the remaining 46 states. The settlement included $206 billion U.S. in industry payments and various non-monetary restrictions on certain industry practices.

Modelled on similar legislation in Florida, the Province of British Columbia proclaimed the *Tobacco Damages and Health Care Costs Recovery Act (TDHCCRA)* late in 1998. This *Act* gives the Province, as well as individual citizens, the legal authority to recover health care and other costs related to tobacco use from a tobacco manufacturer, if a tobacco-related wrong is established. The *Act* facilitates a lawsuit by the provincial government to recover health care costs related to tobacco use, as well as individual and class action lawsuits. The *TDHCCRA* also allows the government to intervene in any private action brought by an individual against a tobacco company, such that the government can attach to the action and recover related health care costs. This enabling legislation has since been amended to provide for suing in reverse onus, that is, the tobacco industry would have to prove that users were not harmed. As well, it allows the use of aggregate studies showing harm in populations, without having to prove harm to specific individuals, also increasing the likelihood of success.

There are economic, regulatory and public relations advantages in launching a suit against the tobacco industry. A few potential problems associated with an unsuccessful suit can be posited, but to date, there are no health care cost recovery cases in which the government has not been successful.

Here are some reasons why the Government of Ontario should sue:

- The Government of Ontario should be a champion of the public=s health. Suing the tobacco industry is a very public act. It will signal to Ontarians that the government is acting decisively to deal with the tobacco problem.
- Cost recovery of damages owed to the Province of Ontario would be fiscally responsible.

- Health care costs of smokers should be recovered from the producers of the product causing the damages. To date, tobacco companies have been able to make money by Athird-partying@ their costs. Total health and social costs of tobacco use in Ontario in 1992 were $3.7 billion, which includes $1.1 billion in direct health care costs and $2.6 billion in productivity losses due to tobacco-related illness and death.[1] Based on the Minnesota settlement, British Columbia estimates that it will recoup a total of $10 billion.

- The litigation process in other jurisdictions will reduce Ontario's costs. Much of the groundwork for suing the industry has already been laid by several U.S. states. The Minnesota Document Depository, established as part of the State of Minnesota's out-of-court settlement with the industry, contains 30,000,000 pages of industry documents. Further, British Columbia is willing to provide key documents including legislation, statement of claim, opinion on the law, and evidence to other provinces. This would result in substantial savings for Ontario in its litigation.

- There will be increased opportunities to regulate the tobacco industry. A settlement with the industry provides the opportunity for negotiating significant non-monetary benefits, such as marketing restrictions, regulating tobacco as a drug, and requiring the industry to meet tobacco reduction targets among youth, with substantial penalties for not achieving these targets. Non-monetary benefits form part of U.S. state settlements.

- Industry documents will be disclosed during the discovery process. In the United States, such documents have been instrumental in discrediting industry claims and publicizing industry efforts to suppress research findings contrary to its interests.

- Health care savings would be incurred. Successful litigation would probably result in substantial increases in the price of tobacco initiated by the industry to pay for cost recovery or for costs associated with a settlement. Price increases would reduce per capita consumption of tobacco and rates of initiation of smoking, and result in further reductions in health costs.

Although litigation requires a considerable initial investment and a sustained commitment to the process, the long-term benefits are diverse and substantial. The evidence against the industry is overwhelming. At this point, Manitoba, the Yukon, Newfoundland and the North West Territories have expressed interest in following British Columbia's lead. A successful suit would have a very positive impact on the government=s fiscal health, as well as the health of the population. It would do much to pave the way for further initiatives to reduce tobacco use.

A note on options for litigation: There are two alternatives to a British Columbia-style suit:

- **RICO**: A suit could be brought against the industry, including its Canadian subsidiaries, in the U.S. court system, using *The Racketeering-Influenced and Corrupt Organizations Act* (*RICO*). This approach is attractive, in part because it would be implemented by U.S. law firms with experience in this type of suit, and on a contingency basis.

- **Subrogation**: Under this approach, the government would join an existing action like the class action now underway in Ontario. **The Panel strongly recommends against this approach.** The class action has not been certified despite years of effort (and may well never be). Further, the government should under no circumstances become a subordinate partner to another party's action, given the uncertainty of the outcome, the magnitude of the task, the dollars at stake, and the severity of the public health problem at issue. Also, if the government were to support an individual plaintiff, the industry has shown the capacity to stall such actions for years.

Finally, **a note on tobacco growing in Ontario**: The presence of tobacco growing and processing activity in Ontario, and the economic dependency on this activity must be addressed. Government funding should be directed to financing a buy-out program for tobacco farmers, to establish training and retraining programs for workers displaced in the tobacco process industry, and to support an economic stabilization fund for communities whose economies suffer as a consequence of a decrease in tobacco consumption. Crop replacement programs have enabled some growers in the southwestern tobacco growing region to end their dependency on the tobacco crop, but such programs will never be a substitute for a comprehensive economic redevelopment program for the region. While some point to the high rates of return from tobacco (at least twice as much, and frequently more, than those from any other crop, depending on market circumstances) as a reason to ignore the growers= situation, the Panel does not agree with this perspective. Aggressive economic planning and redevelopment is required in the region, and the province should dedicate funding to such redevelopment. This funding **should not be taken** from the amount recommended to underwrite the new Ontario Tobacco Strategy, since it is not directly related to achieving public health objectives. Rather, it should be considered as part of the province=s economic development funding and programming, and should be the responsibility of the Ontario Ministry of Agriculture and Food and/or other appropriate ministries.

8.0 ACTIONS WILL SPEAK LOUDER THAN WORDS

Actions are urgently needed to curtail the public health catastrophe in Ontario caused by tobacco products. This report spells out these actions as recommendations. If implemented, they will pay dividends. Ontarians will be healthier and more productive. Unnecessary costs to the economy will be avoided, freeing up resources to provide other benefits to the people of Ontario.

Ontarians support measures to reduce the disastrous impact of tobacco in this province. What remains to be demonstrated is the political will to implement an effective program of tobacco control. A piece-meal approach will not work. Only a comprehensive approach incorporating all of the components outlined in this report will show that the Government of Ontario is serious about tobacco control.

Actions *will* speak louder than words.

9.0 EFERENCES

1. Xie X, Rehm J, Single E, Robson L. *The Economic Costs of Alcohol, Tobacco and Illicit Drug Abuse in Ontario: 1992*. Addiction Research Foundation Document Series No. 127. Toronto: Addiction Research Foundation, 1996.

2. Chief Medical Officer of Health. *Tobacco: Sounding the Alarm*. Toronto: Ontario Ministry of Health, 1996.

3. Villeneuve P, Mao Y. Lifetime probability of developing lung cancer, by smoking status. *Canadian Journal of Public Health* 1994; 85:385-388.

4. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), Office on Smoking and Health. Smoking cessation during previous year among adults **B** United States, 1990 and 1991. *Morbidity and Mortality Weekly Report* 1993;42:504-507.

5. Angus Reid Group: Ontario Campaign for *Action* on Tobacco: Proprietary Questions. Ontario Omnibus Survey, Toronto, October 1998.

6. Ontario Council of Health. *Smoking and Health in Ontario: A Need for Balance.* Report of the Task Force on Smoking Submitted to the Ontario Council of Health. Toronto: Ontario Council of Health, May 1982.

7. Ontario Health Review Panel. *Toward A Shared Direction For Health In Ontario: Report of the Ontario Health Review Panel (JR Evans, Chair).*Toronto: Ontario Health Review Panel, June 1987.

8. Panel on Health Goals for Ontario. *Health for All Ontario: Report of the Panel on Health Goals for Ontario (RA Spasoff, Chair).* Toronto: Ontario Ministry of Health, 1987.

9. Minister's Advisory Group on Health Promotion. *Health Promotion Matters in Ontario. A Report of the Minister's Advisory Group on Health Promotion (S Podborski, Chair).* Toronto: Minister's Advisory Group on Health Promotion, 1987.

10. Chief Medical Officer of Health. *Tobacco and Your Health*. Toronto: Ontario Ministry of Health, 1991.

11. Chief Medical Officer of Health. *A Report on Youth.* Toronto: Ontario Ministry of Health, 1992.

12. Chief Medical Officer of Health. *Promoting Heart Health*. Toronto: Ontario Ministry of Health, 1993.

13. Chief Medical Officer of Health. *Progress Against Cancer*. Toronto: Ontario Ministry of Health, 1994.

14. Addiction Research Foundation. *Preventing smoking: Tobacco control policies.* Best Advice. Toronto: Addiction Research Foundation, July 1995.

15. Ontario Task Force on the Primary Prevention of Cancer. *Recommendations for the Primary Prevention of Cancer*. Ontario Ministry of Health. Toronto: Queen=s Printer for Ontario, March 1995.

16. Ontario Medical Association. *Position Paper on Second Hand Smoke*. Toronto: Population Health Committee, OMA, November 1996.

17. National Cancer Institute of Canada. *Canadian Cancer Statistics 1998*. Toronto: NCIC, 1998.

18. Ontario Tobacco Research Unit. *Monitoring the Ontario Tobacco Strategy: Progress Toward Our Goals, 1997/98*. Fourth Annual Monitoring Report. Toronto: OTRU, November 1998.

19. Adlaf EM, Ivis F, Smart RG. *The Ontario Student Drug Use Survey 1977-1997*. Toronto: Addiction Research Foundation, 1997.

20. Ashley MJ, Cohen J, Ferrence R, Bull S, Bondy S, Poland B, Pederson L. Smoking in the home: Changing attitudes and current practices. *American Journal of Public Health* 1998;88:797-800.

21. Peto R, Lopez AD, Boreham J, Thun M, Heath C. *Mortality from Smoking in Developed Countries 1950-2000: Indirect Estimates from National Vital Statistics*. Oxford: Oxford University Press, 1994.

22. Kluger R. *Ashes to Ashes: America=s Hundred-Year Cigarette War, the Public Health and the Unabashed Triumph of Philip Morris.* New York: Alfred A. Knopf, 1996.

23. Glantz S, Slade J, Bero L, Hanauer P, Barnes DE. *The Cigarette Papers.* Berkeley: University of California Press, 1996.

24. Pollay RW. Hacks, flacks, and counter-attacks: Cigarette advertising, sponsored research, and controversies. *Journal of Social Issues* 1997;53:53-74.

25. O=Keefe AM, Pollay RW. Deadly targeting of women in promoting cigarettes. *Journal of the American Medical Women=s Association* 1996;51:67-69.

26. Slade J, Bero LA, Hanauer P, Barnes DE, Glantz SA. Nicotine and addiction: The Brown and Williamson documents. *Journal of the American Medical Association* 1995;274:225-233.

27. Hurt RD, Channing RR. Prying open the door to the tobacco industry=s secrets about nicotine: The Minnesota Tobacco Trial. *Journal of the American Medical Association* 1998;280:1173-1181.

28. Bero LA, Galbraith A, Rennie D. Sponsored symposia on environmental tobacco smoke. *Journal of the American Medical Association* 1994;271:612-617.

29. Glantz SA, Barnes DE, Bero L, Hanauer P, Slade J. Looking through a keyhole at the tobacco industry. The Brown and Williamson documents. *Journal of the American Medical Association* 1995;274:219-224.

30. Barnes DE, Hanauer P, Slade J, Bero L, Glantz SA. Environmental tobacco smoke: The Brown and Williamson documents. *Journal of the American Medical Association* 1995;274:248-253.

31. Bero L, Barnes DE, Hanauer P, Slade J, Glantz SA. Lawyer control of the tobacco industry=s external research program. The Brown and Williamson documents. *Journal of the American Medical Association* 1995; 274:241-247.

32. Barnes DE, Bero L. Industry-funded research and conflict of interest: An analysis of research sponsored by the tobacco industry through the Center for Indoor Air Research. *Journal of Health Politics, Policy, and Law* 1996;21:515-542.

33. Barnes DE, Bero LA. Why review articles on the health effects of passive smoking reach different conclusions. *Journal of the American Medical Association* 1998; 279:1566-70.

34. Concar D, Day M. Undercover operation: A tobacco industry memo describes a network of influential moles. *New Scientist* 1998; May 16:4.

35. Barnes DE, Bero LA. Scientific quality of original research articles on environmental tobacco smoke. *Tobacco Control* 1997; 6:19-26.

36. Smith GD, Phillips AN. Passive smoking and health: Should we believe Philip Morris=s >experts=? *British Medical Journal* 1996;313:929-33.

37. Harris, Michael D. Letter to Michael Perley, Director, Ontario Campaign for *Action* on Tobacco. Response to Questionnaire, Tobacco Control. Office of the Leader of the Opposition, Progressive Conservative Party of Ontario. Toronto, April 20, 1995.

38. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. *Sample State Comprehensive Tobacco Prevention and Control Budget Guideline Template*. Program and Funding Guidelines for Comprehensive Tobacco Control Programs. Atlanta: CDC, 1998.

39. Massachusetts Department of Public Health. *Independent Evaluation of the Massachusetts Tobacco Control Program*, Fourth Annual Report. Massachusetts: Abt Associates Inc., 1998.

40. Pierce JP, Gilpin EA, Emery SL, White MM, Rosbrook B, Berry CC, Farkas AJ. Has the California tobacco control program reduced smoking? *Journal of the American Medical Association* 1998;280:893-899.

41. Pizacani B, Mosbaek C, Hedberg K, Bley L, Stark M, Moore J, Fleming D. Decline in cigarette consumption following implementation of a comprehensive tobacco prevention and education programCOregon. *Morbidity and Mortality Weekly Report* 1999; 48:140-143.

42. Ministry of Health. *The Ontario Tobacco Strategy Overview*. Toronto: Health Promotion Branch, October 15, 1993.

43. U.S. Department of Health and Human Services. *Strategies to Control Tobacco Use in the United States: A Blueprint for Public Health Action in the 1990's*. Public Health Service, National Institutes of Health, National Cancer Institute, NIH Publication No 92-3316.

44. Premier=s Council on Health Strategy. Towards health outcomes. Goals 2 and 4: Objectives and targets. Toronto: Ontario Ministry of Health, 1991.

45. Townsend J. Policies to halve smoking deaths. *Addiction* 1993;88:43-52.

46. Glynn TJ, Greenwald P, Mills SM, Manley MW. Youth tobacco use in the United States - problems, progress, goals, and potential solutions. *Preventive Medicine* 1993;22:568-575.

47. U.S. Department of Health and Human Services. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General.* Public Health Service, Centres for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1994.

48. Lynch BS, Bonnie RJ (Eds.). *Growing Up Tobacco Free: Preventing Nicotine Addiction in Children and Youths.* Washington: Institute of Medicine, National Academy Press, 1994.

49. Reid DJ, McNeill AD, Glynn TJ. Reducing the prevalence of smoking in youth in Western countries: An international review. *Tobacco Control* 1995;4:266-277.

50. Manley M, Lynn W, Epps RP, Grande D, Glynn T, Shopland D. The American Stop Smoking Intervention Study for cancer prevention: an overview. *Tobacco Control* 1997;6(suppl 2):S5-S11.

51. Manley M, Pierce J, Gilpin, E, Rosbrook, B, Berry C, Wun L. Impact of the American Stop Smoking Intervention Study (ASSIST) on cigarette consumption. *Tobacco Control* 1997;6 (suppl 2):S12-S16.

52. U.S. Department of the Treasury. *The Economic Costs of Smoking in the United States and the Benefit of Comprehensive Tobacco Legislation*. Washington, D.C., March 1998.

53. Tobacco Education and Research Oversight Committee (TEROC). *Toward a Tobacco-Free California: Renewing the Commitment 1997-2000*. Report of the Tobacco Education and Research Oversight Committee, July 31, 1997.

54. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), Office on Smoking and Health. Cigarette Smoking Before and After an Excise Tax Increase and an Antismoking Campaign - Massachusetts 1990-1996, *Morbidity and Mortality Weekly Report* 1996;45: 967-970.

55. Pierce JP, Gilpin EA, Farkas AJ. Can strategies used by statewide tobacco control programs help smokers make progress on quitting? *Cancer Epidemiology, Biomarkers and Prevention* 1998;7:459-464.

56. Biener L, Aseltine RH, Cohen B, Anderka M. Reactions of adult and teenaged smokers to the Massachusetts tobacco tax. *American Journal of Public Health* 1998;88:1389-1391.

57. Borland R, Hill D. Initial impact of the new Australian tobacco health warnings on knowledge and beliefs. *Tobacco Control* 1997;6:317-325.

58. Borland R. Tobacco health warnings and smoking-related cognitions and behaviours. *Addiction* 1997;92:1427-1435.

59. Woodruff TJ, Rosbrook B, Pierce J, Glantz SA. Lower levels of cigarette consumption found in smoke-free workplaces in California. *Archives of Internal Medicine* 1993;153:1485-1493.

60. Kinne S, Kristal AR, White E, Junt J. Work-site smoking policies: Their population impact in Washington State. *American Journal of Public Health* 1993;83:1031-1033.

61. Patten CA, Gilpin E, Cavin SW, Pierce JP. Workplace smoking policy and changes in smoking behaviour in California: A suggested association. *Tobacco Control* 1995;4:36-41.

62. Longo DR, Brownson RC, Johnson JC, Hewett JE, Kruse RL, Novotny TE, Logan RA. Hospital smoking bans and employee smoking behaviour: Results of a national survey. *Journal of the American Medical Association* 1996;275:1252-1257.

63. Olive KE, Ballard JA. Changes in employee behaviour after implementation of restrictive smoking policies. *Southern Medical Journal* 1996;89:699-706.

64. Hu TW, Keeler TE, Barett PG, Sung HY. The impact of California Proposition 99, a major anti-smoking law, on cigarette consumption. *Journal of Public Health Policy* 1994;15:26-36.

65. Hu TW, Sung HY, Keeler TE. Reducing cigarette consumption in California: Tobacco taxes vs. an antismoking media campaign. *American Journal of Public Health* 1995;85:1218-1222.

66. Townsend J. Price and the consumption of tobacco. *British Medical Bulletin* 1996;52:132-142.

67. Grossman M, Chaloupka FJ. Cigarette taxes: The straw to break the camel=s back. *Public Health Reports* 1997;112:291-297.

68. Mummery WK, Hagan LC. Tobacco pricing, taxation, consumption and revenue: Alberta 1985-1995. *Canadian Journal of Public Health* 1996;87:4314-316.

69. Hamilton VH, Levinto C, St-Pierre Y, Grimard F. The effect of tobacco tax cuts on cigarette smoking in Canada. *Canadian Medical Association Journal* 1997; 156:187-191.

70. Chaloupka FJ, Wechsler H. Price, tobacco control policies, and smoking among young adults. *Journal of Health Economics* 1997;16:359-373.

71. Stephens T, Pederson LL, Koval JJ, Kim C. The relationship of cigarette prices and no-smoking bylaws to the prevalence of smoking in Canada. *American Journal of Public Health* 1997;87:1519-1521.

72. Lewit EM, Hyland A, Kerrebrock N, Cummings KM. Price, public policy, and smoking in young people. *Tobacco Control* 1997;6:S17-S24.

73. Meier KJ, Licari MJ. The effect of cigarette taxes on cigarette consumption, 1955 through 1994. *American Journal of Public Health* 1997;87:1126-1130.

74. National Cancer Policy Board: Institute of Medicine and Commission on Life Sciences, National Research Council. *Taking Action to Reduce Tobacco Use.* Washington, D.C.: National Academic Press, 1998.

75. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Response to increases in cigarette prices by race/ethnicity, income, and age groups - United States, 1996-1993. *Morbidity and Mortality Weekly Report* 1998; 47:605-609.

76. Gregg BG, Cain C. Cigarette tax revenue soars. Lansing Bureau. *Detroit News*, February 11, 1999.

77. U.S. Department of Health and Human Services. Centres for Disease Control and Prevention. Guidelines for School Health Programs to Prevent Tobacco Use and Addiction. *Morbidity and Mortality Weekly Report* 43:RR-2 (Feb. 25, 1994): 1-18.

78. Flynn BS, Worden JK, Secker-Walker RH, Badger GJ, Geller BM, Costanza MC. Prevention of cigarette smoking through mass media intervention and school programs. *American Journal of Public Health* 1992;82: 827-834.

79. Flynn BS, Worden JK, Secker-Walker RH, Badger GJ, Geller BM. Cigarette smoking prevention effects of mass media and school interventions targeted to gender and age groups. *Journal of Health Education* 1995;26:S45-S51.

80. Flynn BS, Worden JK, Secker-Walker RH, Pirie PL, Badger GJ, Carpenter JH, Geller BM. Mass media and school interventions for cigarette smoking prevention: Effects 2 years after completion. *American Journal of Public Health* 1994; 84:1148-1150.

81. Worden JK, Flynn BS, Solomon LJ, Secker-Walker RH, Badger GJ, Carpenter JH. Using mass media to prevent cigarette smoking among adolescent girls. *Health Education Quarterly* 1996;23:453-468.

82. Goldman LK, Glantz SA. Evaluation of antismoking advertising campaigns. *Journal of the American Medical Association* 1998;279:772-777.

83. Siegel M. Mass media campaigns: A powerful tool for health promotion. *Annals of Internal Medicine* 1998;129:128-132.

84. Secker-Walker RH, Worden JK, Holland RR, Flynn BS, Detsky AS. A mass media programme to prevent smoking among adolescents: Costs and effectiveness. *Tobacco Control* 1997;6:207-212.

85. Stevens C. Designing an effective counteradvertising campaign **B** California. *Cancer* 1998;83:2736-2741.

86. Glynn TJ. Essential elements of school-based smoking prevention programs. *Journal of School Health* 1989;59:181-188.

87. Perry CL, Kelder SH, Murray DM, Klepp K I. Long-term outcomes of the Minnesota Heart Health Program and the Class of 1989 Study. *American Journal of Public Health* 1992;82:1201-1216.

88. d:Avernas JR, Northrup D, Foster MK, Burton D, Ferrence R, Pollard J, Rootman I, Flay BR. Cigarette packaging and event marketing increases the attractiveness of smoking: A study of youth. Ontario Tobacco Research Unit, Working Paper Series # 28, Toronto: OTRU, 1997.

89. Health Canada. *When Packages Can't Speak: Possible Impacts of Plain and Generic Packaging of Tobacco Products*. Expert Panel Report. Ottawa: Health Canada, March 1995.

90. Kozlowski LT, Goldberg ME, Yost BA, White EL, Sweeney CT, Pilliteri JL. Smokers' misperceptions of light and ultra-light cigarettes may keep them smoking. *American Journal of Preventive Medicine* 1998;15:9-16.

91. Kozlowski LT. Tar and nicotine delivery of cigarettes: What a difference a puff makes. *Journal of the American Medical Association* 1981;245:158-159.

92. Kozlowski LT, Rickert WS, Pope MA, Robinson JC, Frecker RC. Estimating the yield to smokers of tar, nicotine, and carbon monoxide from the "lowest-yield" ventilated filter cigarettes. *British Journal of the Addictions* 1982;77:159-165.

93. Kozlowski LT. Blocking the filter vents of cigarettes (letter). *Journal of the American Medical Association* 1986;256:3214.

94. U.S. Department of Health and Human Services. *The Health Consequences of Smoking, Nicotine Addiction.* A report of the Surgeon General. Rockville Maryland: Department of Health and Human Services, DHHS Publication No. (CDC)88-8406, 1988.

95. Djordjevic MV, Fan J, Ferguson S, Hoffman D. Self-regulation of smoking intensity: Smoke yields of low-nicotine, low ›tar‹ cigarettes. *Carcinogenesis* 1995;16:2015-2121.

96. Wyckham RG. Regulating the marketing of tobacco products and controlling smoking in Canada. *Canadian Journal of Administrative Studies* 1997;14:1414-165.

97. Richards JW, DiFranza JR, Fletcher C, Fischer PM. RJ Reynolds' ›Camel Cash‹: Another way to reach kids. *Tobacco Control* 1995;4:258-260.

98. Coeytaux RR, Altman DG, Slade J. Tobacco promotions in the hands of youth. *Tobacco Control* 1995;4:253-257.

99. Sweda EL, Daynard RA. Tobacco industry tactics. *British Medical Bulletin* 1996;52:183-192.

100. Arno PS, Brandt AM, Gostin LO, Morgan J. Tobacco industry strategies to oppose federal legislation. *Journal of the American Medical Association* 1996;275:1258-1262.

101. Forster JL, Murray DM, Wolfson M, Blaine TM, Wagenaar AC. The effects of community policies to reduce youth access to tobacco. *American Journal of Public Health* 1998;88:1193-1198.

102. Forster JL, Wolfson M. Youth access to tobacco: Policies and politics. *Annual Review of Public Health* 1998;19:203-235.

103. Gemson DH, Moats HL, Watkins BX, Ganz ML, Robinson S, Healton E. Laying down the law: Reducing illegal tobacco to minors in central Harlem. *American Journal of Public Health* 1998;88:936-939.

104. Connolly GN. The marketing of nicotine addiction by one oral snuff manufacturer. *Tobacco Control* 1995;4:73-9.

105. Mosher JF. The merchants, not the customers: Resisting the alcohol and tobacco industries' strategy to blame young people for illegal alcohol and tobacco sales. *Journal of Public Health Policy* 1995;16:412-432.

106. U.S. Environmental Protection Agency. *Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders*. Bethesda: National Institutes of Health, National Cancer Institute. Smoking and Tobacco Control Monograph 4 (NIH publication 93-3605). August 1993.

107. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment. *Health Effects of Exposure to Environmental Tobacco Smoke*. Final Report, Sacramento, 1997.

108. U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Smoking: A Report of the Surgeon General.* U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control. DHHS Publication No. (CDC) 87-8398, 1986.

109. Mannino DM, Siegel M, Husten C, Rose D, Etzel R. Environmental tobacco smoke exposure and health effects in children: Results from the 1991 National Health Interview Survey. *Tobacco Control* 1996;5:13-18.

110. Mannino DM, Siegel M, Rose D, Nkuchia J, Etzel R. Environmental tobacco smoke exposure in the home and worksite and health effects in adults. Results from the 1991 National Health Survey. *Tobacco Control* 1997;6:296-305.

111. DiFranza JR, Lew RA. Morbidity and mortality in children associated with the use of tobacco products by other people. *Pediatrics* 1996;97:560-568.

112. Fontham ETH, Correa P, Reynolds P, Wu-Williams A, Buffer PA, Greenberg RS, Chen VW, Alterman T, Boyd P, Austin DF, Liff J. Environmental tobacco smoke and lung cancer in nonsmoking women: A multicenter study. *Journal of the American Medical Association* 1994;271:1752-1759.

113. Hackshaw AK, Law MR, Wald NJ. The accumulated evidence on lung cancer and environmental tobacco smoke. *British Medical Journal* 1997;315:980-988.

114. Kawachi I, Colditz GA, Speizer FE, Manson JE, Stampfer MJ, Willett WC, Hennekens CH. A prospective study of passive smoking and coronary heart disease. *Circulation* 1997; 95:2374-2379.

115. Law MR, Morris JK, Wald NJ. Environmental tobacco smoke exposure and ischaemic heart disease: an evaluation of the evidence. *British Medical Journal* 1997;315:973-980.

116. Wells AJ. Heart disease from passive smoking in the workplace. *Journal of the American College of Cardiology* 1998;31:1-9.

117. Eisner MD, Yelin EH, Henke J, Shiboski SC, Blane PD. Environmental tobacco smoke and adult asthma: The impact of changing exposure status on health outcomes. *American Journal of Respiratory and Critical Care Medicine* 1998;158:170-175.

118. Adair-Bischoff CE, Sauve RS. Environmental tobacco smoke and middle ear disease in preschool-age children. *Archives of Pediatrics and Adolescent Medicine* 1998;152:127-133.

119. Strachan DP, Cook DG. Parental smoking, middle ear disease and adenotonsillectomy in children. *Thorax* 1998;53:50-56.

120. Mitchell EA, Ford RPK, Stewart AW, Taylor BJ, Becroft DMO, Thompson JMD, Scragg R, Hassall IB, Barry DMJ, Allen EM, Roberts AP. Smoking and the sudden infant death syndrome. *Pediatrics* 1993;91:1893-1896.

121. Cohen-Klonoff HS, Edelstein SL, Lefkowitz ES, Srinivasan IP, Kaegi D, Chang JC, Wiley KJ. The effect of passive smoking and tobacco exposure through breast milk on sudden infant death syndrome. *Journal of the American Medical Association* 1995;273:795-798.

122. Anderson HR, Cook DG. Passive smoking and sudden infant death syndrome: Review of the epidemiologic evidence. *Thorax* 1997;52:1003-1009.

123. Aligne CA, Stoddard JJ. Tobacco and children: An economic evaluation of the medical effects of parental smoking. *Archives of Pediatric and Adolescent Medicine* 1997;151:648-653.

124. Stoddard JJ, Gray B. Maternal smoking and medical expenditures for childhood respiratory illness. *American Journal of Public Health* 1997;87:205-209.

125. Samuels B, Glantz SA. The politics of local tobacco control. *Journal of the American Medical Association* 1991;266:2110-2117.

126. Traynor MP, Begay ME, Glantz SA. New tobacco industry strategy to prevent local tobacco control. *Journal of the American Medical Association* 1993;270:479-486.

127. Cardador MT, Hazan AR, Glantz SA. Tobacco industry smokers' rights publications: A content analysis. *American Journal of Public Health* 1995;85:1212-1217.

128. Glantz SA, Smith LRA. The effect of ordinances requiring smoke-free restaurants on restaurant sales. *American Journal of Public Health* 1994;84:1081-1085.

129. U.S. Department of Health and Human Services. Centers for Disease Control and Prevention. Assessment of the impact of a 100% smoke-free ordinance on restaurant sales: West Lake Hills, Texas, 1992-1994. *Mortality and Morbidity Weekly Report* 1995; 44:370-372.

130. Sciacca JP. A mandatory smoking ban in restaurants: Concerns versus experiences. *Journal of Community Health* 1996;21:133-150.

131. The Conference Board of Canada. The economics of smoke-free restaurants. Report from the Canadian Tourism Research Institute and the Custom Economic Services Group. Ottawa: Conference Board of Canada, 1996.

132. Sciacca JP, Ratliff MI. Prohibiting smoking in restaurants: Effects on restaurant sales. *American Journal of Health Promotion* 1998;12:176-184.

133. Glantz SA, Smith LRA. The effect of ordinances requiring smoke-free restaurants and bars on revenues: A follow-up. *American Journal of Public Health* 1997;87:1687-1693.

134. Goldstein AO, Sobel RA. Environmental tobacco smoke regulations have not hurt restaurant sales in North Carolina. *North Carolina Medical Journal* 1998;59:264-268.

135. Siegel M. Involuntary smoking in the restaurant workplace: A review of employee exposure and health effects. *Journal of the American Medical Association* 1993; 270:490-493.

136. Dimich-Ward H, Gee H, Brauer M, Leung V. Analysis of nicotine and cotinine in the hair of hospitality workers exposed to environmental tobacco smoke. *Journal of Occupational and Environmental Medicine* 1997;39:946-948.

137. Trout D, Decker J, Mueller C, Bernert JT, Pirkle J. Exposure of casino employees to environmental tobacco smoke. *Journal of Occupational and Environmental Medicine* 1998;40:270-276.

138. Eisner MD, Smith AK, Blanc PD. Bartenders**:** respiratory health after establishment of smoke-free bars and taverns. *Journal of the American Medical Association* 1998;280:1909-1914.

139. Ashley MJ, Cohen J, Bull S, Ferrence R, Poland B, Pederson L, Gao J. Knowledge about tobacco and attitudes toward tobacco control: How different are smokers and nonsmokers? Ontario Tobacco Research Unit, Working Paper Series # 43, Toronto: OTRU, February 1999.

140. Health Canada. Survey on Smoking in Canada. Cycle 1. Fact Sheet No. 9. Profile of Quitters. Ottawa: Health Canada, August 1994.

141. Health Canada. Smoking Behaviour of Canadians. National Population Health Survey, Cycle 2, 1996/97. Overview of Results. Fact Sheet No. 1. Ottawa: Cancer Bureau, Laboratory Centre for Disease Control, January 1999.

142. Popham WJ, Potter LD, Bal DG, Johnson MD, Duerr JM, Quinn V. Do anti-smoking media campaign help smokers quit? *Public Health Reports* 1993;108:510-513.

143. Korhonen T, Uutela A, Korhonen HJ, Puska P. Impact of mass media and interpersonal health communication on smoking cessation attempts: A study in North Karelia, 1989-1996. *Journal of Health Communication* 1998;3:105-118.

144. U.S. Department of Health and Human Services. *The Health Benefits of Smoking Cessation.* U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. DHHS Publication No. (CDC) 90-8416, 1990.

145. Fiore MC, Bailey WC, Cohen SJ, and the Smoking Cessation Clinical Practice Guideline Panel and Staff. *Smoking Cessation.* Clinical Practice Guideline No. 18.

Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research. AHCPR Publication No. 96-0692. April 1996. (Also published in the *Journal of the American Medical Association* 1996;275:1270-1280.)

146. Fiore MC, Jorenby DE. Smoking cessation: Principles and practice based upon the AHCPR Guideline, 1996. *Annals of Behavioral Medicine* 1997;19:213-219.

147. Cromwell J, Bartosch WJ, Fiore MC, Hasselblad V, Baker T. Cost-effectiveness of the clinical practice recommendations in the AHCPR guideline for smoking cessation. *Journal of the American Medical Association* 1997;278:1759-1766.

148. Cummings SR, Rubin SM, Oster G. The cost effectiveness of counseling smokers to quit. *Journal of the American Medical Association* 1989;261:75-79.

149. Law M, Tang JL. An analysis of the effectiveness of interventions intended to help people stop smoking. *Archives of Internal Medicine* 1995;155:1933-1941.

150. Platt, S, Tannahill A, Watson J, Fraser, E. Effectiveness of antismoking telephone advice helpline: A follow-up survey. *British Medical Journal* 1997;314:1371-1375.

151. Ramelson HZ, Friedman RH, Ockene JK. An automated telephone-based smoking cessation education and counseling system. *Patient Education and Counseling* 1998 (in press).

152. Friedman RH, Stollerman JE, Mahoney DM, Rosenblyum L. The virtual visit: Using telecommunications technology to take care of patients. *Journal of the American Medical Informatics Association* 1997;4:413-425.

153. Velicer WF, Prochaska JO. An expert system intervention for smoking cessation. *Patient Education and Counseling* (in press).

154. Fiore MC, Smith SS, Jorenby DE, Baker TB. The effectiveness of the nicotine patch for smoking cessation: A meta-analysis. *Journal of the American Medical Association* 1994;271:1940-1947.

155. Fiscella K, Franks P. Cost effectiveness of the transdermal nicotine patch as an adjunct to physician=s smoking cessation counselling. *Journal of the American Medical Association*. 1996;275:1247-1251.

156. Wasley MA, McNagny SE, Phillips VL, Ahluwalia JS. The cost-effectiveness of the nicotine transdermal patch for smoking cessation. *Preventive Medicine* 1997;26:264-270.

157. Blondal T, Franzon M, Westin A. A double-blind study randomized trial of nicotine spray as an aid in smoking cessation. *European Respiratory Journal* 1997;10:1585-1590.

158. Hughes JR, Goldstein MG, Hurt RD, Shiffman S. Recent advances in the pharmacotherapy of smoking. *Journal of the American Medical Association* 1999;281:72-76.

159. Hurt RD, Sachs DPL, Glover ED, Offord KP, Johnson A, Lowell CD, Khayrallah MA, Schroeder DR, Glover PN, Sullivan R, Crogan IT, Sullivan PM. A comparison of sustained-release bupropion and placebo for smoking cessation. *The New England Journal of Medicine* 1997;337:1195-1202.

160. Begay ME, Traynor M, Glantz SA. The tobacco industry, state politics, and tobacco education in California. *American Journal of Public Health* 1993;83:1214-1221.

161. Ferrence RG. *Deadly Fashion: The Rise and Fall of Cigarette Smoking in North America*. New York: Garland Press, 1990.

162. Russell CM. Evaluation: Methods and strategy for evaluation - California. *Cancer* 1998;83:2755-2759.

163. Celebucki C, Biener L, Koh HK. Evaluation: Methods and strategy for evaluation - Massachusetts. *Cancer* 1998;83:2760-2765.

164. University of California. Tobacco-Related Disease Research Program. *Annual Report of the State of California Legislature, 1997.* Office of the President and the Office of Health Affairs. Oakland.

165. Garcia J. Personal communication.

APPENDIX: THE WORK OF THE EXPERT PANEL

THE WORK OF THE EXPERT PANEL

Appointment of the Expert Panel

In order to strengthen and confirm Ontario=s commitment to tobacco use reduction, in December 1998, the Minister of Health appointed an advisory panel of experts in the fields of epidemiology, public health, the social sciences and medicine to recommend steps that Ontario can take to achieve more effective tobacco control results.

Terms of Reference:

To advise the Minister of Health on strategic revisions to the Ontario Tobacco Strategy (OTS), and to identify and recommend new approaches to tobacco use reduction.

Expert Panel activities include the following:

1. Review the objectives and targets of the Ontario Tobacco Strategy (OTS) to recommend change based on relevant epidemiological reports, measures of health behaviour outcomes, and other ministry policies and programs.

2. Review and identify the programmatic, legislative and economic components of the OTS that may require change to reflect current innovative and evidence-based solutions in tobacco use prevention, cessation and protection.

3. Enhance the capacity of the OTS to address issues and concerns raised by experts and health practitioners in tobacco use reduction as it relates to children and youth.

4. Recommend options for an implementation plan which includes but is not limited to the assessment of the present OTS infrastructure to determine if it is client-focused (smokers, non-smokers, and those living with smokers), promotes collaboration among health service provider(s), volunteer(s), family(ies), and community(ies).

5. Review and recommend a protocol for monitoring and evaluating the progress of the OTS including outcome measures. This will include but not be restricted to monitoring the enforcement of the *Tobacco Control Act*.

The Review Process

The Expert Panel met once in December to establish the process and five times during the months of January and February 1999, to review the original objectives and targets of the OTS and to formulate recommendations for the Strategy=s renewal. Drafts of various sections of the report were prepared by Panel members and circulated for discussion.

Revisions occurred and the final recommendations were endorsed by all members of the Panel.

During the course of the Panel=s deliberations, guests with economic, policy and programming expertise were invited to make presentations. The information received was very helpful in formulating specific recommendations and a framework for successful implementation.

Staff of the Ministry of Health attended the Panel's meetings in a resource capacity and were invited to provide input into the discussions. However, the recommendations are the sole responsibility of the Panel, itself.

EXPERT PANEL MEMBERS

Mary Jane Ashley, MD, Chair
Professor
Department of Public Health Sciences
University of Toronto

Roberta Ferrence, PhD
Director
Ontario Tobacco Research Unit

Ted Boadway, MD
Executive Director, Health Policy
Ontario Medical Association

Andrew Pipe, MD
Medical Director
Smoking Cessation Clinic
University of Ottawa Heart Institute

Roy Cameron, PhD
Professor
Department of Health Studies and Gerontology
University of Waterloo

Richard Schabas, MD
Head, Division of Preventive Oncology
Cancer Care Ontario

Josie d'Avernas, MSc
Senior Consultant
Program Training and Consultation Centre

Penny Thomsen, BPE
Executive Director
Canadian Cancer Society
COntario Division