

mpower A POLICY PACKAGE TO REVERSE THE TOBACCO EPIDEMIC

mpower



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A POLICY PACKAGE TO REVERSE THE TOBACCO EPIDEMIC

mpower





Monitor tobacco use and prevention policies

Protect people from tobacco smoke

Offer help to quit tobacco use

Warn about the dangers of tobacco

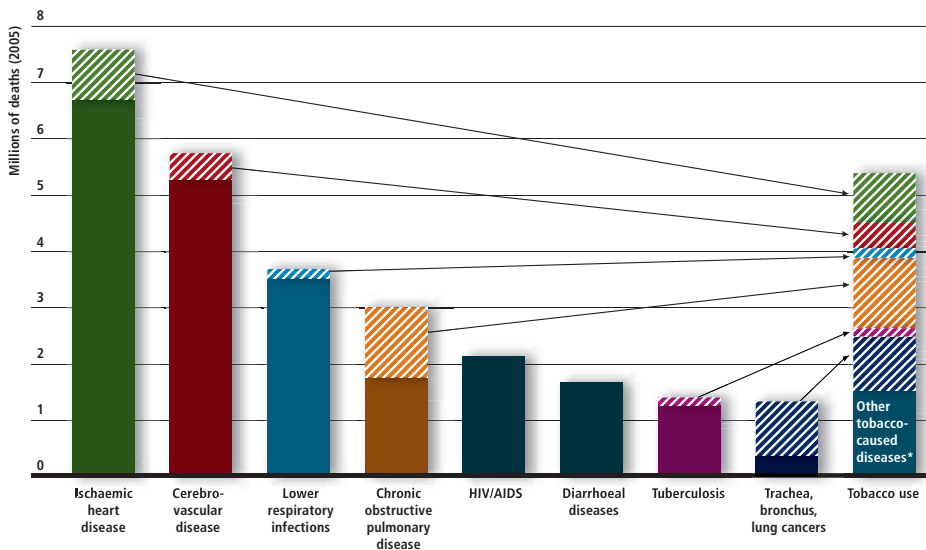
Enforce bans on tobacco advertising, promotion and sponsorship

Raise taxes on tobacco

Contents

- 7 INTRODUCTION
- 10 THE **mpower** VISION FOR TOBACCO CONTROL
- 13 THE **mpower** PACKAGE OF POLICIES AND INTERVENTIONS
 - P**: Protect people from tobacco smoke
 - O**: Offer help to quit tobacco use
 - W**: Warn about the dangers of tobacco
 - E**: Enforce bans on advertising, promotion and sponsorship
 - R**: Raise taxes on tobacco products
- 31 **mpower** SURVEILLANCE, MONITORING AND EVALUATION
- 33 **mpower** AND NATIONAL TOBACCO CONTROL PROGRAMMES
- 35 CONCLUSION
- 36 DEFINITIONS
- 37 REFERENCES

TOBACCO USE IS A RISK FACTOR FOR SIX OF THE EIGHT LEADING CAUSES OF DEATH IN THE WORLD



Hatched areas indicate proportions of deaths that are related to tobacco use and are coloured according to the column of the respective cause of death.

*Includes mouth and oropharyngeal cancers, oesophageal cancer, stomach cancer, liver cancer, other cancers as well as cardiovascular diseases other than ischaemic heart disease and cerebrovascular disease.

Source: Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Medicine*, 2006, 3(11): e442. Additional information obtained from personal communication with Mathers.

Source of revised HIV/AIDS figure: *AIDS epidemic update*. Geneva, Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO), 2007.

Introduction

Tobacco is the single greatest preventable cause of death in the world today, killing up to half the people who use it. More than one billion people worldwide currently smoke tobacco – about one quarter of adults – and tobacco use currently kills more than five million people worldwide each year. Tobacco use continues to grow in developing countries due to steady population growth along with aggressive tobacco industry marketing efforts.

If current trends continue, tobacco will kill more than eight million per year by 2030. By the end of this century, tobacco may kill a billion people. It is estimated that more than three quarters of these deaths will be in low- and middle-income countries.¹

Tobacco use is a risk factor for six of the eight leading causes of death in the world. Smoking tobacco causes cancer of the lung, larynx, kidney, bladder, stomach, colon, oral cavity and esophagus as well as leukaemia, chronic bronchitis, chronic obstructive pulmonary disease, ischaemic heart disease, stroke, miscarriage and premature birth, birth defects and infertility, among other diseases. This results in preventable human suffering and the loss of many years of productive life. Tobacco use also causes economic harm to families and countries due to lost wages, reduced productivity and increased health-care costs.

Tobacco use is often – incorrectly – perceived to be solely a personal choice. This is belied by the fact that when fully aware of the health impact, most tobacco users want to quit but find it difficult to stop due to the addictiveness of nicotine. Moreover, a powerful global industry spends tens of billions of dollars annually on marketing and employs highly skilled lobbyists and advertisers to maintain and increase tobacco use.²

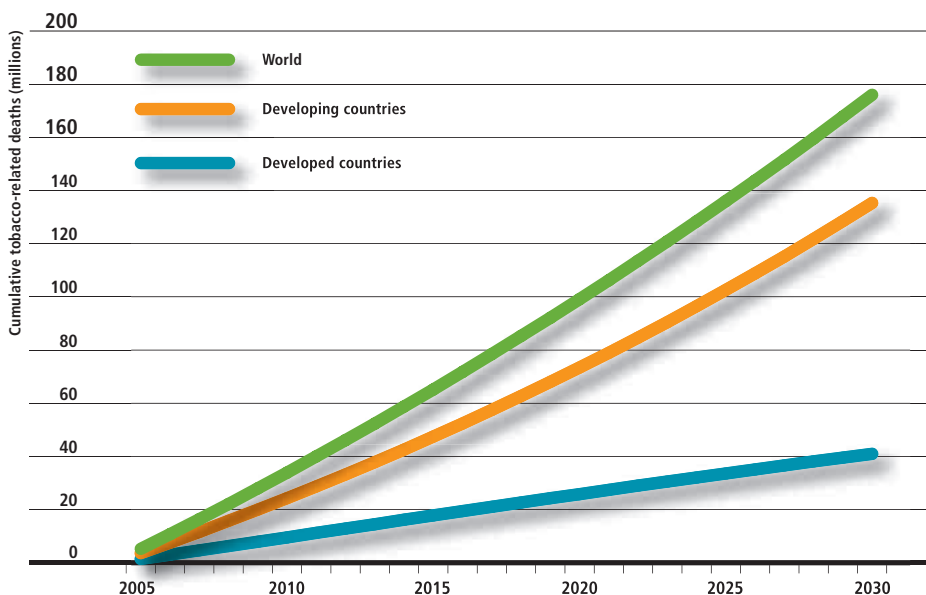
Several strategies have been shown to reduce tobacco use. However, more than 50 years after the health dangers of smoking were scientifically proven, and more than 20 years after evidence confirmed the hazards of second-hand smoke, few countries have implemented effective and recognized strategies to control the tobacco epidemic. Developing countries are even less likely to have done so; women and young adults in these countries have been specifically targeted by the

tobacco industry as having the greatest potential for increasing tobacco industry sales and profits.³ Additionally, in some countries governments have a direct or indirect interest in tobacco growing and manufacturing, which further impedes action.

International efforts led by WHO resulted in rapid entry into force of the WHO Framework Convention on Tobacco Control (WHO FCTC),⁴ which has 168 signatories and more than 150 Parties. The WHO FCTC provides the principles and context for policy development, planning of interventions and mobilization of political and financial resources for tobacco control. Achievement of tobacco control goals will require coordination among many government agencies, academic institutions, professional associations and civil society organizations at the country level, as well as the coordinated support of international cooperation and development agencies.

TOBACCO WILL KILL OVER 175 MILLION PEOPLE WORLDWIDE BETWEEN NOW AND THE YEAR 2030

Cumulative tobacco-related deaths, 2005–2030



Source: Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Medicine*, 2006, 3(11):e442.

Parties to the WHO FCTC have committed themselves to protecting the health of their populations by joining the fight against the tobacco epidemic. To help countries fulfil the promise of the WHO FCTC and turn this global consensus into a global reality, this document presents **mpower** – a policy package that builds on the measures of the WHO FCTC that have been proven to reduce smoking prevalence.⁵

The **mpower** package is an integral part of the WHO Action Plan for the Prevention and Control of Non-communicable Diseases that will be presented at the 61st session of the World Health Assembly. This follows from the adoption of a resolution at the 53rd session in 2000 giving priority to the prevention and control of these diseases.

Tobacco control requires strong political commitment as well as the participation of civil society.⁶ This document is meant to serve as a reference for stakeholders at country level to help them translate the tobacco control policies of the **mpower** package into practice. It is meant to assist planning, building and evaluating national and international partnerships, while facilitating access to financial resources for tobacco control activities. It is presented in four sections:

- The **mpower** vision for tobacco control
- The **mpower** package of policies and interventions
- **mpower** surveillance, monitoring and evaluation
- **mpower** and national tobacco control programmes.

The **mpower** vision for tobacco control

The **mpower** package encourages policy-makers along with the rest of society, including civil society, health-care providers and others, to envision a world free of tobacco use. Furthermore, the **mpower** package provides the tools to create a world where tobacco use declines by promoting a legal and socio-economic context that favours tobacco-free living. The goal is a world where no child or adult is exposed to tobacco smoke.

The **mpower** policy package to reduce global tobacco use requires that proven tobacco policies and interventions be implemented, that they be informed by data from systematic surveys designed to target and refine implementation, and that rigorous monitoring is done to evaluate their impact. Interventions should be implemented with a high level of coverage; partial implementation is generally inadequate for reducing tobacco use in the population. To implement the **mpower** policy package, countries need to:

- **m**onitor tobacco use
- **p**rotect people from tobacco smoke
- **O**ffer help to quit tobacco use
- **W**arn about the dangers of tobacco
- **E**nforce bans on tobacco advertising and promotion
- **r**aise taxes on tobacco products.

The table on the following page presents a summary of the policies and interventions of **mpower**. The policies are complementary and synergistic. For example, increasing taxation will help tobacco users quit, reduce the number of new tobacco users and protect people from second-hand smoke. Bans on tobacco industry promotion and anti-tobacco advertising will educate people about the health risks of tobacco use, alter public perceptions of smoking and facilitate political decision-making. They will also support the enforcement of tax legislation, ad bans and smoke-free laws. Rigorous monitoring is necessary to obtain baseline information, target activities, track progress and evaluate the results of interventions.



Raise children in smoke-free environments

Policies and interventions of the **mpower** package

<p>m</p> <p>MONITOR TOBACCO USE</p> <p>Cross-cutting activity m1</p> <p>Obtain nationally-representative and population-based periodic data on key indicators of tobacco use for youth and adults</p>	<p>PROTECT PEOPLE FROM TOBACCO SMOKE</p> <p>p Intervention p1 Enact and enforce completely smoke-free environments in health-care and educational facilities and in all indoor public places including workplaces, restaurants and bars</p>
	<p>OFFER HELP TO QUIT TOBACCO USE</p> <p>o Intervention o1 Strengthen health systems so they can make tobacco cessation advice available as part of primary health care. Support quit lines and other community initiatives in conjunction with easily accessible, low-cost pharmacological treatment where appropriate</p>
	<p>WARN ABOUT THE DANGERS OF TOBACCO</p> <p>w Intervention w1 Require effective package warning labels</p> <p>Intervention w2 Implement counter-tobacco advertising</p> <p>Intervention w3 Obtain free media coverage of anti-tobacco activities</p>
	<p>ENFORCE BANS ON TOBACCO ADVERTISING, PROMOTION AND SPONSORSHIP</p> <p>e Intervention e1 Enact and enforce effective legislation that comprehensively bans any form of direct tobacco advertising, promotion and sponsorship</p> <p>Intervention e2 Enact and enforce effective legislation to ban indirect tobacco advertising, promotion and sponsorship</p>
	<p>RAISE TAXES ON TOBACCO PRODUCTS</p> <p>r Intervention r1 Increase tax rates for tobacco products and ensure that they are adjusted periodically to keep pace with inflation and rise faster than consumer purchasing power</p> <p>Intervention r2 Strengthen tax administration to reduce the illicit trade in tobacco products</p>

The mPOWER package of policies and interventions

The following are strategies that have been shown to reduce tobacco use. They have been successful in many countries, and there are indications that they have a synergistic impact.



Protect people from tobacco smoke

Objective: Completely smoke-free environments in all indoor public spaces and workplaces, including restaurants and bars

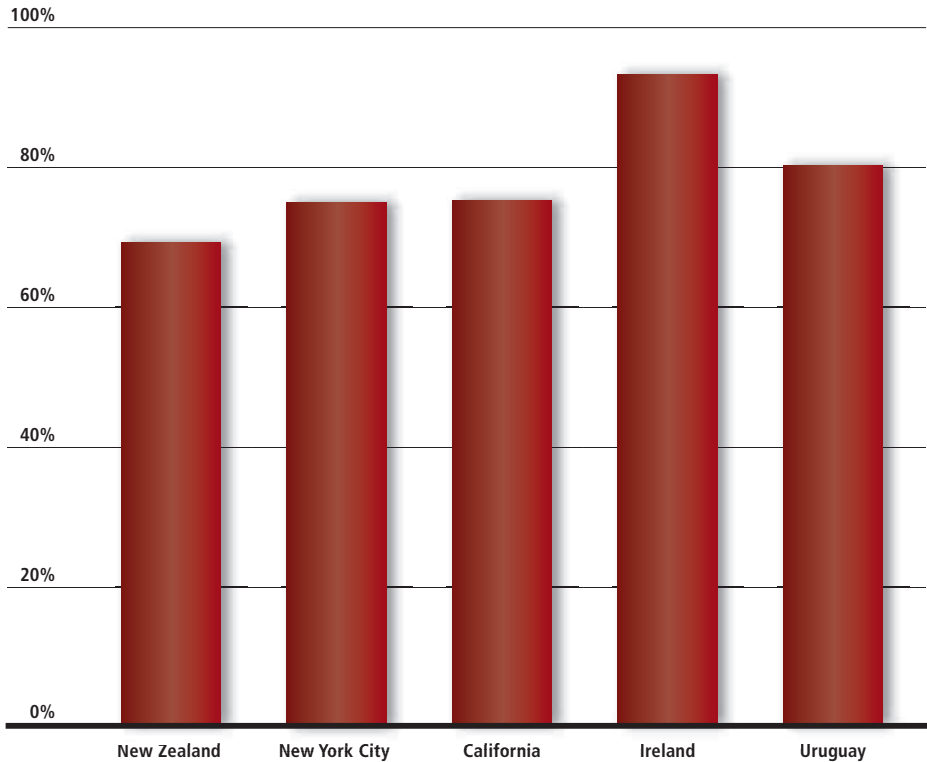
Second-hand smoke causes a wide range of diseases, including heart disease, lung cancer and other respiratory ailments.⁷ There is no known safe level of second-hand smoke exposure. Completely smoke-free environments are the only proven way to protect people adequately from the harmful effects of second-hand smoke. Smoke-free environments not only protect non-smokers,⁸ they also help smokers who want to quit.⁹

Intervention D1. Enact and enforce completely smoke-free environments in health-care and educational facilities as well as in all indoor public places including workplaces, restaurants and bars

Because second-hand smoke causes illness, it is unacceptable to permit smoking in any part of any health-care facility, from peripheral health posts or clinics to major hospitals. All indoor health-care facilities should be smoke-free, including facilities run by governments, nongovernmental organizations (NGOs) and private health-care services.

SMOKE-FREE AREAS ARE POPULAR

Support for comprehensive smoking bans in bars and restaurants after implementation



New Zealand

Asthma and Respiratory Foundation of New Zealand. *Aotearoa New Zealand smokefree workplaces: a 12-month report*. Wellington, Asthma and Respiratory Foundation of New Zealand, 2005 (http://www.no-smoke.org/pdf/NZ_TwelveMonthReport.pdf, accessed 5 December 2007).

New York City

1. Chang C et al. The New York City Smoke-Free Air Act: second-hand smoke as a worker health and safety issue. *American Journal of Industrial Medicine*, 2004, 46(2):188–195.
2. Bassett M. *Tobacco control; the New York City experience*. New York City Department of Health and Mental Hygiene, 2007 (<http://hopkins-famri.org/PPT/Bassett.pdf>, accessed 8 November 2007).

California

California bar patrons field research corporation polls, March 1998 and September 2002. Sacramento, Tobacco Control Section, California Department of Health Services, November 2002.

Ireland

Office of Tobacco Control. *Smoke-free workplaces in Ireland: a one-year review*. Dublin, Department of Health and Children, 2005 (http://www.otc.ie/uploads/1_Year_Report_FA.pdf, accessed 5 November 2007).

Uruguay

Organización Panamericana de la Salud (Pan-American Health Organization). *Estudio de "Conocimiento y actitudes hacia el decreto 288/005". (Regulación de consumo de tabaco en lugares públicos y privados)*. October 2006 (http://www.presidencia.gub.uy/_web/noticias/2006/12/informeo_dec268_mori.pdf, accessed 5 December 2007).

In addition to health-care facilities, all educational facilities should be made smoke-free. Making universities smoke-free is particularly important in order to protect young adults from exposure to smoking as well as to second-hand smoke.

The WHO FCTC stresses the importance of making all indoor workplaces smoke-free.¹⁰ The Parties to the WHO FCTC have unanimously adopted detailed guidelines on protecting people from second-hand smoke.¹¹ Smoke-free laws protect workers and the public and do not harm businesses – other than the tobacco industry.

In high-income countries, smoke-free public places and workplaces have been shown to reduce tobacco consumption by 3–4%.⁹ Smokers who work in smoke-free workplaces are more than twice as likely to quit smoking as those who work where smoking is permitted.¹²

Governments can more easily prohibit smoking in facilities under their direct control (e.g. government offices). However, because the vast majority of people in most countries work in the private sector, it is important to make all indoor workplaces smoke-free by law. Within any one sector (e.g. restaurants or bars), it is desirable to make all entities smoke-free at one time rather than only those of a given size or characteristic. Uniform implementation of smoke-free laws within a sector ensures a level playing field among all affected businesses. Public transport vehicles and stations, including taxis, should also be smoke-free.

The enactment of smoke-free policies in restaurants, bars, clubs and casinos may be challenging. However, experience in a growing number of countries and subnational areas shows that it is possible to enact and enforce effective bans in these establishments and that doing so is popular with the public, does not harm these businesses and improves health.^{13, 14, 15} Economic data can be used to counter false tobacco industry claims that establishing smoke-free places causes economic harm.^{16, 17}

Legislation is required to implement smoke-free places, as voluntary policies have proven ineffective. Ventilation and separate smoking rooms do not reduce exposure to second-hand tobacco smoke to an acceptable or safe level.^{18, 19} Good planning, adequate resources, strong political commitment, effective use of mass media, meticulous legal drafting and participation by civil society are essential.²⁰ When implementing legislation on smoke-free places, it is critical that governments generate broad public support through public education campaigns.²¹ Educational campaigns oriented to business owners about the

benefits of smoke-free workplaces, including the fact that they do not harm business, can reduce opposition from the business community.

Once enacted, laws establishing smoke-free places must be well enforced. It may be necessary to enforce smoke-free policies and legislation more actively in the period immediately after smoke-free laws are enacted in order to demonstrate the government's commitment to ensuring compliance. Once a high level of compliance is achieved, it may be feasible to reduce the level of formal enforcement, as maintenance of smoke-free places is largely self-enforcing in areas where the public and business communities support smoke-free policies and legislation.

Placing the responsibility for enforcing smoke-free places on the owners and management of facilities is the most effective way to ensure compliance with the laws. In many countries, business owners have a legal duty to provide safe workplaces for their employees. Levying fines and other sanctions against business owners is more likely to ensure compliance than fining individual smokers. Enforcement of legislation and its impact should be monitored regularly. Assessing and publicizing the lack of negative impact on business following enactment of smoke-free legislation will further enhance compliance with and acceptance of smoke-free laws.



Offer help to quit tobacco use

Objective: Easily accessible services to manage tobacco dependence clinically at 100% of primary health-care facilities and through community resources

Because most tobacco users are dependent on nicotine, an addictive drug, it is difficult for them to quit even when they make a concerted effort to do so. Tobacco users who understand their risk of tobacco-related disease and premature death are more likely to try to quit. Once the decision to quit is made, most tobacco users who quit do so without intervention, but assistance greatly increases quit rates.^{22,23} Of daily smokers who try to quit unaided, 90–95% will relapse.²²

Managing tobacco dependence is primarily the responsibility of a country's health-care system, including government, social security, NGOs and private clinical services.²⁴ Because clinical management interventions focus on the actions of individuals, they are less cost effective in reducing overall tobacco use than are other **mpower** strategies. Nonetheless, cessation interventions are important to help individual tobacco users quit in order to protect their health and lives. Additionally, clinical management interventions provide a greater impact on health and are much more cost effective than most other health-care system activities.²⁵

Governments implementing tobacco control interventions have a role to play in helping tobacco users quit. Even with implementation of tobacco control strategies that have been shown to increase quit rates – higher prices, banning all advertising, marketing and promotion, restricting places where people can smoke and educating smokers about the harms of tobacco – many tobacco users will have difficulty quitting. Support for tobacco users who are trying to quit may also reduce opposition to other policy elements of the **mpower** package. Tobacco cessation services can be subsidized by governments using revenues from tobacco taxation.

There are two main interventions to facilitate tobacco user cessation. The first is counseling, including face-to-face advice from physicians and other health-care workers incorporated into regular medical care as well as over the telephone via quit lines and community programmes. The other is access to low-cost pharmacological therapy.

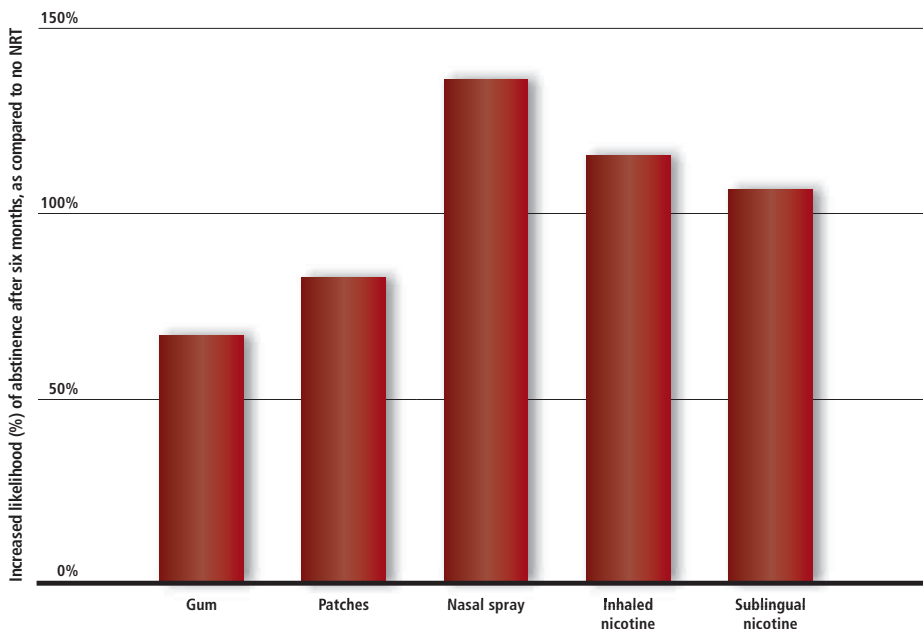
Intervention 01. Strengthen health systems to make tobacco cessation advice available through primary health care, quit lines and other community resources, in conjunction with easily accessible, low-cost pharmacological treatment where appropriate

Identification of tobacco users and provision of brief advice should be integrated into primary health-care services and other routine medical visits, and should include ongoing advice reinforcing the need to quit. Brief cessation counseling is effective and low cost. Cessation counseling is most effective when it includes clear, strong and personalized advice to quit from health-care practitioners as part of general medical care.^{22,23} Physician advice can be especially powerful when it is related to issues of specific interest to the patient (e.g. during pregnancy, consultation for heart or lung symptoms). Warnings from health professionals, who are generally highly respected, about the risks of tobacco use are usually well received. Quit rates also increase when counseling is delivered by a variety of health workers.²²

Tobacco cessation advice is relatively inexpensive because it occurs within already-existing health-care services that most people access at least occasionally. However, it requires that health-care workers, particularly physicians, be motivated to provide advice. Lay health workers, who are not medical professionals but have been trained to provide basic health services, could also be helpful with health education and cessation interventions. Health-care workers can become involved in local and national tobacco control activities; every health-care professional should be an advocate for **mpower** policies and interventions.

Cessation advice and counseling can also be provided in settings other than health-care delivery, including via telephone quit lines that should be free of charge, rely on live operators rather than pre-recorded messages and be

NICOTINE REPLACEMENT THERAPY (NRT) CAN DOUBLE QUIT RATES



Source: Silagy C et al. Nicotine replacement therapy for smoking cessation. Cochrane Database System Review 2004, (3):CD000146.

accessible to the public at convenient times. Quit lines are most effective in countries where fixed or mobile telephone service is widespread and the public is accustomed to making phone calls for services; quit lines require financing and staff training to answer incoming calls and provide appropriate counseling or referral for services. Quit lines should provide information similar to that available from face-to-face counseling, such as outlining reasons to quit, preparation for cessation and coping techniques.

Quit lines are most effective when staff make follow-up phone calls to people to check on callers' progress and provide encouragement to quit, maintain abstinence or make another quit attempt in case of relapse. Multiple follow-up calls at regular intervals have the greatest likelihood of keeping patients committed to long-term cessation.²⁶ In addition, community groups, non-health-care service providers and community leaders can be important sources of both motivation and information on quitting smoking.

Pharmacological treatment of nicotine addiction should ideally be used in conjunction with advice and counseling, although it is also effective when provided separately.^{22, 23} Cessation medications can double the likelihood that someone will successfully quit, and this likelihood increases further if the medication is administered in conjunction with counseling. Medications include nicotine replacement therapy (NRT), which can be made available over-the-counter in the form of trans-dermal patches, lozenges, chewing gum, sublingual tablets, oral inhalers and nasal spray. There are also prescription medicines such as bupropion and varenicline. NRT reduces withdrawal symptoms by replacing part of the nicotine normally absorbed during smoking; bupropion is an antidepressant that reduces craving and withdrawal symptoms; and varenicline blocks the nicotine-induced pleasure perceived during smoking. NRT can usually be discontinued one to three months after smoking cessation, although some heavily addicted tobacco users may benefit from a longer course of treatment.

Most countries can use lower-cost counseling options effectively, even if financial support for medication is beyond a country's budgetary limits. However, medication should be legally available for sale to patients even if they are not subsidized by the government.

Warn about the dangers of tobacco

Objective: High levels of awareness of the health risks of tobacco use across age groups, sexes and places of residence, so that all people understand that the result of tobacco use is suffering, disfigurement and early death

Despite overwhelming evidence of the dangers of tobacco, relatively few tobacco users worldwide fully understand the risks to their health.²⁷ Most people know generally that tobacco use is harmful but are unaware of the wide spectrum of specific illnesses caused by tobacco, the likelihood of disability and death from long-term tobacco use, the speed or degree of addiction to nicotine or the harmfulness of second-hand smoke. Most people also grossly overestimate the likelihood that they can quit when desired.

People are most likely to begin to use tobacco as adolescents or young adults.²⁸ People in these age groups are typically less concerned about risks to their health or lives and are more likely to engage in risky behaviours.²⁹ They are also highly susceptible to peer pressure and to advertising.^{30,31} They may also be more likely to become addicted to nicotine more quickly than people who are older, even if they smoke only occasionally.^{32,33}

Public education through mass media about the health dangers of tobacco use – smoking as well as second-hand smoke – can influence an individual’s decision to start or continue to smoke. Important educational interventions include disseminating information about the health risks of tobacco use to the general public, targeting education to particular groups with higher rates of tobacco use and/or lower levels of knowledge about tobacco use, and mandating warning labels on cigarette packs and other tobacco products.

Ultimately, the objective of anti-tobacco education and counter-advertising is to change social norms about tobacco use. By counteracting the glamorous image of smoking portrayed by tobacco industry marketing and by reversing the erroneous perception that tobacco use is a low-risk habit, societal pressures will cause many individuals to choose not to use tobacco. Changing social norms in

this way also increases support for other government initiatives to reduce tobacco consumption.

Although anti-tobacco programmes directed at children are politically popular and have broad public appeal, those conducted as part of health education classes in schools have not demonstrated a large impact in reducing youth smoking experimentation or initiation.^{34, 35} Considering the low return in prevention of uptake, and the lack of long-term effects of these programmes, school programmes should only be considered under a rigorous evaluation scheme and only when the other **mpower** policies and interventions are already in place. Focusing anti-tobacco educational initiatives on children could weaken a more comprehensive population-wide approach that might have greater long-term impact.³⁶

SMOKERS APPROVE OF PICTORIAL WARNINGS

Impact of pictorial warnings on Brazilian smokers



Source: Datafolha Instituto de Pesquisas. 76% são a favor que embalagens de cigarros tragam imagens que ilustram males provocados pelo fumo; 67% dos fumantes que viram as imagens afirmam terem sentido vontade de parar de fumar. Opinião pública, 2002 (http://datafolha.folha.uol.com.br/po/fumo_21042002.shtml, accessed 6 December 2007).

Intervention W1. Require effective pack warning labels

Warning labels on tobacco packs are a cost-effective method of advertising about the dangers of tobacco use, providing direct health messages to tobacco users as well as to non-users who see the packs.^{37,38,39} This intervention can be implemented at virtually no cost to the government.

The content and graphic presentation of pack warning labels should be legislatively mandated to be visible and clear, and ideally should cover at least half of principal pack display areas.⁴⁰ Warning labels should also describe specific health effects and diseases caused by tobacco use and should be periodically rotated to continue to attract the attention of the public. Pictorial warnings are effective for all smokers and are particularly important for persons who cannot read or for young children whose parents smoke. In addition, labels should not be permitted to include any wording or other indication that suggests that a particular tobacco product is less harmful than other products because it is “low tar”, “light”, “ultra-light” or “mild”. No cigarettes are safe, and the use of these terms suggests incorrectly that some products are less harmful.⁴¹

As the health risks of smoking are well documented, legislation requiring warning labels can usually be enacted with no objection from tobacco users. However, the tobacco industry almost always resists these efforts, particularly if large, graphic pictorial warnings are included. They do so because these efforts are known to be effective.

Intervention W2. Implement counter-advertising

Government and civil society, including NGOs, should coordinate efforts to educate the public and mobilize action against tobacco use.⁴² Information about the health risks of tobacco use should be presented clearly, with the same quality and persuasive power as tobacco industry advertising and marketing materials.

It is important to use the services of professional advertising agencies to adapt or create and place materials that can compete for public attention with intensive, pervasive and much better funded tobacco industry campaigns. Counter-advertising campaigns can be costly. However, by adapting existing ads, obtaining free or low-cost prime-time television and radio time if possible, and increasing a country’s budget for tobacco control, it is possible to implement sustained, effective, highly visible anti-tobacco messages that not only encourage many tobacco users to quit, but also help change the context and increase the

likelihood of successful implementation of all other **mpower** interventions. Young teens exposed to effective television anti-tobacco messages are less than half as likely to become established smokers,⁴³ and adult smokers who are exposed to anti-tobacco campaigns are more likely to quit smoking.⁴⁴ The tobacco industry has created its own anti-tobacco advertising, often in response to government actions to curtail its business practices. However, these efforts are ineffective in reducing smoking and may even increase smoking, especially among the young.⁴⁵

Intervention W3. Obtain free media coverage of anti-tobacco activities

In addition to paid advertising, anti-tobacco educational campaigns can be disseminated in the media through public relations efforts that promote television and radio coverage, news stories in print, broadcast and online media as well as letters to the editor and opinion articles. This process, sometimes referred to as “earned media”, can be a highly effective⁴⁶ and inexpensive way to educate the public about the harms of tobacco, increase attention on tobacco control initiatives and counter tobacco industry misinformation.

Well-designed media campaigns and implementation of **mpower** policies such as smoke-free places, counter-marketing and pack warnings can generate substantial free media coverage. Press releases highlighting anti-tobacco policy positions should be issued any time there is a development in tobacco control, such as when laws are introduced or passed or new research findings are released. The media will usually cover this type of news, so it is important to have a strong tobacco control advocacy component contained within these stories. Local stories with strong human interest angles backed by facts are likely to gain the greatest attention from media outlets and their audiences. Media outreach is often more successful when utilizing creative and unusual approaches that bring a fresh perspective to the topic, so tobacco control advocates need to be resourceful in developing new ways to gain media attention.

Enforce bans on tobacco advertising, promotion and sponsorship*

Objective: Complete absence of tobacco advertising, promotion and sponsorship

The tobacco industry spends tens of billions of dollars worldwide each year on advertising, promotion and sponsorship;² a key component of tobacco control, therefore, is a comprehensive ban on every form of marketing of tobacco products.⁴⁷ Comprehensive advertising, promotion and sponsorship bans are highly effective in reducing smoking among people of all income and educational levels.⁴⁸ Partial advertising bans have little or no effect on smoking prevalence.⁴⁹ In high-income countries, a complete ban that covers all media and all uses of brand names and logos has been documented to decrease tobacco consumption by about 7%.⁴⁹

Key target populations for tobacco advertising include the young, because they are more vulnerable to becoming tobacco users and will likely be steady customers for many years once they become addicted. Women, who in most countries have traditionally not used tobacco, are viewed by the tobacco industry as an enormous potential market because of their increasing financial and social independence and have been targeted accordingly. Bans on advertising, promotion and sponsorship should give special attention to marketing channels to which these groups are exposed.

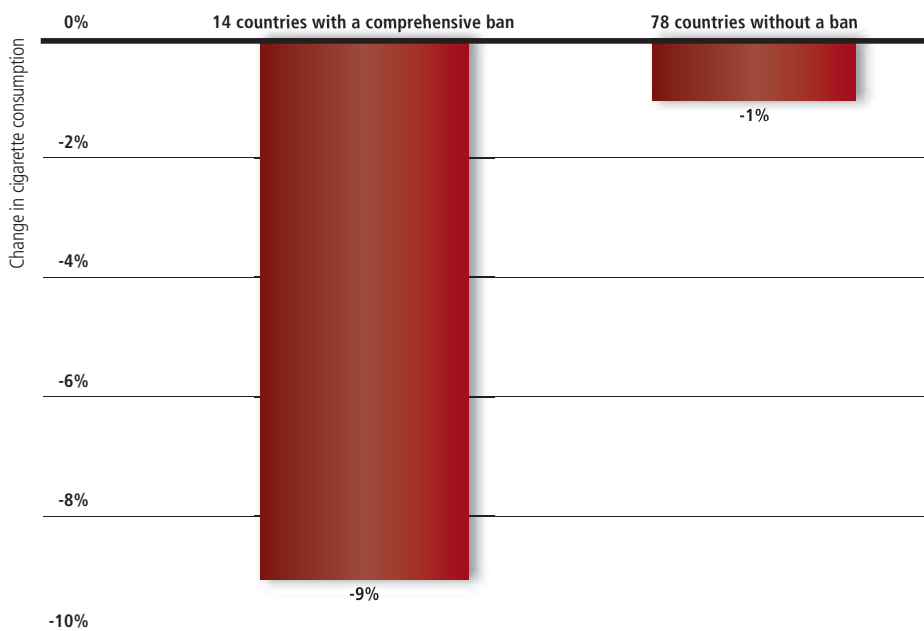
Enactment of legislation prohibiting tobacco industry advertising, promotion and sponsorship may potentially face resistance because some businesses besides tobacco manufacturers benefit from advertising expenditures. However, these laws are easy to maintain and enforce if they are well written. Key features of such legislation include:

- prohibitions on advertising in all types of media;
- restrictions on marketing activities by importers and retailers;
- restrictions on promotional activities involving the sporting and entertainment industries.

Voluntary restrictions on marketing and promotion are ineffective;⁵⁰ government intervention through well-drafted and well-enforced legislation is required because the tobacco industry has substantial expertise in circumventing advertising bans. The tobacco industry often touts advertising and promotion as a means of market competition among brands for current tobacco users, thereby disguising its primary purpose of attracting new users. Penalties for violations of marketing bans must be high to be effective. Tobacco companies have large amounts of money, and large punitive financial penalties are necessary to prevent efforts to circumvent the law.

COMPREHENSIVE ADVERTISING BANS AMPLIFY OTHER INTERVENTIONS

Average change in cigarette consumption 10 years after introduction of advertising bans in two groups of countries



Source: Saffer H. Tobacco advertising and promotion. In: Jha P, Chaloupka FJ, eds. *Tobacco control in developing countries*. Oxford, Oxford University Press, 2000.

* In Article 13 of the WHO Framework Convention on Tobacco Control, paragraph 1 states that: "Parties recognize that a comprehensive ban on advertising, promotion and sponsorship would reduce the consumption of tobacco products." At the same time, Article 13 recognizes that the ability of some countries to undertake comprehensive bans may be limited by their constitution or constitutional principles.

Intervention E1. Enact and enforce effective legislation that comprehensively bans all forms of direct tobacco marketing

To be effective, bans on direct advertising should be comprehensive and cover all types of media and advertising.⁵¹ Otherwise the tobacco industry will find alternative advertising vehicles to carry their message to target populations.^{52, 53} If advertising is prohibited in a particular medium, the tobacco industry merely shifts expenditures to places where advertising is permitted. Bans should include, but not be limited to, newspapers and magazines, radio and television, billboards and the Internet.

It is also important to ban point of sale advertising in retail stores, including product displays and signage.⁵⁴ This limits or blocks the ability of marketing to cue tobacco users to make a purchase. This intervention can be further strengthened by keeping cigarettes behind the counter and out of view so that customers must ask specifically if the store sells them. This small extra effort required of customers presents a large barrier to purchase.

Intervention E2. Enact and enforce effective legislation to ban indirect tobacco advertising, promotion and sponsorship

Indirect tobacco advertising, promotion and sponsorship associates tobacco use with desirable situations or environments and includes showing tobacco use in films and television, sponsoring music and sporting events, using fashionable non-tobacco products or popular celebrities to promote tobacco, and providing messages that involve statements of identity (e.g. tobacco brands printed on clothing). Indirect marketing improves the public image of tobacco and tobacco companies.

Monitoring tobacco industry strategies is important for establishing effective counter-measures. Ongoing monitoring can identify new types of marketing and promotional activities that circumvent even the most clearly written comprehensive bans. New media types and social trends will need to be monitored, such as text messaging and underground nightclubs that are advertised solely through word-of-mouth, in addition to monitoring traditional media and marketing channels.

Raise taxes on tobacco products

Objective: Progressively less affordable tobacco products

Raising the price of tobacco and tobacco products through tax increases is the most effective way to reduce smoking. Higher cigarette prices reduce the number of smokers and induce those who continue to smoke to consume fewer cigarettes per day. Due to inelastic demand and the low share of total taxes in retail prices, increasing tobacco taxes increases a country's tax revenues, at least in the short- and medium-term, even if reduced consumption is taken into consideration.⁵⁵ Indeed, some countries have imposed tobacco taxation rates in excess of 75% of the retail price.⁵

It is estimated that for each 10% increase in retail prices, consumption is reduced by about 4% in high-income countries and by about 8% in low- and middle-income countries. Smoking prevalence is reduced by about half those rates,⁵⁶ with variations associated with income, age and other demographic factors. Higher tobacco taxes are particularly effective in preventing or reducing tobacco use among teenagers and the poor.^{57, 58} Young people and low-income smokers are two-to-three times more likely to quit or smoke less than other smokers after price increases, because these groups are the most economically sensitive to higher cigarette prices.^{53, 59}

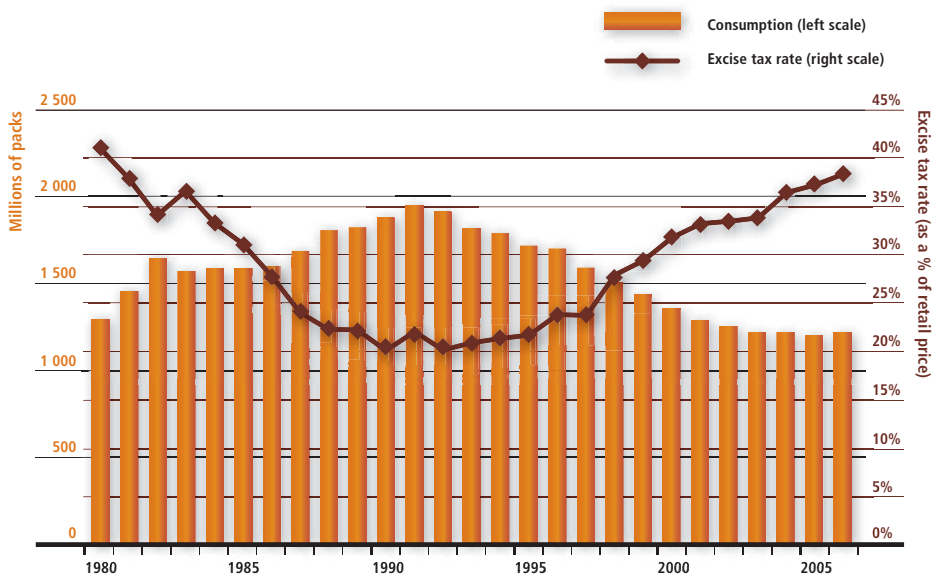
Intervention 1. Increase tax rates for tobacco products and ensure that they are adjusted periodically to keep pace with inflation and rise faster than consumer purchasing power

The goal of tobacco taxation is to make tobacco products *progressively less affordable*. This means that governments must increase taxes periodically to ensure that real price increases rise faster than consumer purchasing power and that tax rates are increased for all tobacco products, including those that are the most commonly smoked as well as the lowest cost products.

If tax increases do not result in increases in real cigarette prices and do not rise faster than purchasing power, then tobacco becomes relatively cheaper and more affordable. As a result, consumption rises and the prevalence of tobacco use increases. Furthermore, if taxes increase the prices of higher-end products but do not significantly increase prices of cheaper ones, then the poor will be less likely to reduce consumption since they are more likely to smoke cheaper products. In addition, some tobacco users may shift to less-expensive brands or less-expensive tobacco products, having the effect of keeping both individual expenditures and nicotine levels constant and not reducing tobacco consumption.⁶⁰ Different tobacco taxation schemes may raise the same amount of revenue yet may either greatly reduce or have little impact on tobacco use, depending on what products are taxed, in what way and at what levels.

TOBACCO TAXES REDUCE CONSUMPTION

Relationship between cigarette consumption and excise tax rate in South Africa



Source: van Walbeek C. *Tobacco excise taxation in South Africa: tools for advancing tobacco control in the XXIst century: success stories and lessons learned*. Geneva, World Health Organization, 2003 (http://www.who.int/tobacco/training/success_stories/en/best_practices_south_africa_taxation.pdf, accessed 6 December 2007). Additional information obtained from personal communication with van Walbeek.

To maximize the impact of taxation as a public health intervention, some increased tax revenues resulting from increased tobacco taxation can be earmarked to finance tobacco control and other public health and social programmes. This makes tobacco tax increases even more popular with the public, including tobacco users. In most countries, tobacco tax revenues are hundreds or thousands of times higher than government spending on tobacco control. Dedicating a larger share of these funds to tobacco control increases the popularity of tobacco taxes and results in significantly increased funding for **mpower** implementation (e.g. counter-advertising campaigns, cessation counseling, etc.).

Excise taxes can be applied according to the *number* (fixed-rate or specific taxes) or *value* of items (*ad valorem* taxes), or a combination of both. Both types of excises have their own strengths and weaknesses regarding retail prices and tax revenues as well as product variety and quality. Specific taxes (e.g. one dollar or the local equivalent per pack of 20 cigarettes) protect government revenues from manufacturer price reductions, are easier to calculate and can be automatically adjusted. They have a greater capacity to reduce tobacco consumption, particularly if automatically adjusted for inflation. Specific taxes should keep pace with inflation and should be periodically adjusted to account for increased consumer purchasing power to maintain the same effect on reducing tobacco consumption. *Ad valorem* taxes, on the other hand, keep pace with inflation automatically and ensure higher revenues if the industry increases the price of its products. However, in countries with large price differentials among smoked tobacco products, increased *ad valorem* taxes may primarily provide an incentive to smokers to switch to cheaper products, reducing the health benefits of taxation.

Excise taxes applied at the manufacturer level and certified by a stamp on the cigarette pack are the most practical method of levying taxes. This procedure facilitates tax collection by reducing the administrative work required of distributors and retailers, many of whom are smaller businesses that do not have the capacity to account accurately for taxes received. For tobacco imports, excise taxes are often applied at the port of entry as with any other custom duty. Sales taxes or value added taxes (VAT) can also be collected at the port of entry or at the retail sales level, as is the case with other products.

Intervention f2. Strengthen tax administration to reduce the illicit trade in tobacco products

A centralized taxation system focusing on manufacturers will also reduce illicit trade by making it easier to monitor compliance. It may be necessary for countries to strengthen the capacity of tax administration and the customs departments, particularly where there are high levels of smuggling and/or tax evasion.

Inspection using state of the art technology, better communication among customs officials and a high level enforcement are essential to reducing the incentives of illicit trade. In addition, affixing tax stamps to every package intended for retail sale, aggressive law enforcement supported by strong legislation, effective government record keeping and mandatory use of pack warnings in the local language are other effective means of reducing the incentives of illicit trade. All these measures require strong government commitment for curbing illicit trade activities.

Global action against tobacco smuggling is strengthening. Parties to the WHO FCTC are negotiating and drafting a new, legally binding protocol on illicit trade that will fight smuggling and counterfeiting as a part of global efforts to reverse the tobacco epidemic. This protocol should markedly increase coordination at the international level to address this important issue.



mpower surveillance, monitoring and evaluation



Objective: Effective surveillance, monitoring and evaluation systems in place to monitor tobacco use

Cross-cutting activity M1: Obtain nationally-representative and population-based periodic data on key indicators of tobacco use for youth and adults

More than half of countries do not even have recent and nationally-representative information on youth and adult prevalence of tobacco use.

Countries need accurate measures of tobacco use to plan tobacco control strategies and interventions effectively in order to implement them where they are needed, measure their impact and adjust them to ensure success. Accurate data allow for appropriate intervention implementation, efficient impact measurement and timely adjustment when necessary, which greatly improve the likelihood of success. Any surveillance, monitoring and evaluation system must use standardized and scientifically valid data collection and analysis practices. Population surveys, using a representative, randomly selected sample of sufficiently large size, can provide good estimates of tobacco use patterns within an acceptable margin of error. Surveys can be conducted on tobacco use alone or can be combined with surveys of other priority health issues.

Surveys should be repeated at regular intervals using the same questions, sampling, data analysis and reporting techniques so that data are comparable across different survey years. This is necessary to enable accurate evaluation of the impact of tobacco control interventions over time.

In addition to determining tobacco use status and consumption patterns in order to calculate overall smoking prevalence within a country and among subpopulations, other survey questions can be asked to discern knowledge, attitudes and practices relating to tobacco use within the general population and among specific groups as well as to determine public perceptions of tobacco control measures.⁶¹

The Global Youth Tobacco Survey and Global Adult Tobacco Survey, as parts of the Global Tobacco Surveillance System, can provide guidance on collecting internationally comparable data by employing survey protocols with common sampling procedures, a core questionnaire, field procedures and data management across countries. Tobacco surveillance information is useful in designing, monitoring and evaluating tobacco control interventions at the country level.

Other monitoring activities that should be undertaken include assessments of government enforcement of and societal compliance with tobacco control policies, including tax collection and tax evasion, smoke-free places as well as advertising and marketing bans. Epidemiologic studies can be conducted to determine the burden of tobacco-related illness and death and the impact of tobacco control interventions on health. Polls should be conducted regarding public support for tobacco control initiatives, including tax increases and establishing smoke-free places, and should monitor perceived levels of compliance with policies.

Studies can also be conducted to determine the economic costs of smoking and second-hand smoke from direct medical expenses as well as from productivity losses. The extent and type of tobacco advertising, marketing and promotional activities, including tobacco industry sponsorship of public and private events, should also be monitored.



mpower and national tobacco control programmes

National action is critical in order to achieve the vision embodied in the WHO FCTC. Building national capacity to carry out effective and sustainable national tobacco control programmes is one of the most significant measures required to combat the tobacco epidemic. A successful National Tobacco Control Programme (NTCP) must, by definition, cover the entire population.

Strategic planning for the NTCP usually occurs centrally, within the Ministry of Health. In larger countries, however, the programme must be designed for flexible implementation by decentralizing authority to the regional/state/municipal and county/village levels so that interventions can target and reach every citizen.⁶²

Successful implementation of **mpower** requires establishing a national coordinating mechanism with an official government mandate for developing and coordinating the implementation of a plan of action as well for building a national infrastructure to carry out the implementation of the plan. Countries with a central unit for planning and policy development in the Ministry of Health, with local units for implementation and enforcement, are well placed to carry out tobacco control activities.

Successful implementation of the **mpower** policies also requires support from senior levels throughout government as well as technical experts and persons with expertise in planning and implementation. A well-staffed national tobacco control programme, at both the central and local levels, can provide highly effective leadership and coordinated work on legal issues, enforcement, marketing, taxation, economics, advocacy, programme management and other key areas. Many countries also need subnational tobacco control offices to ensure effective implementation of the programme components as well to ensure that the tobacco control interventions reach the target population. Dedicated staff greatly increases the ability to implement **mpower** successfully. Staff and resources must be identified to address:

- programme coordination, including support for subnational efforts;
- epidemiology and surveillance;
- economics and taxation;
- public education, media and pack warnings;

- legal issues, including legislation and enforcement mechanisms in support of comprehensive smoke-free environments and bans on advertising, promotion and sponsorship.

An effective, well-staffed tobacco control programme can lead efforts to implement effective interventions that can reduce the number of tobacco users and save millions of lives. To prioritize programme capacity, countries may benefit from hiring staff in an order consistent with the priorities based on potential impact on tobacco use prevalence: increased taxation; marketing and promotion bans; counter-advertising, including pack label warnings; protection from second-hand smoke; and helping tobacco users quit. In smaller countries with limited financial resources, one staff member may take on more than one role.

In addition to human resources, the NTCP needs material and financial resources. No national programme can become operational and effectively implement the six **mpower** policies without logistic support and effective partnerships within the government and between the government and interested parties outside of it.

Since the programme is carried out at the local level, success depends on ensuring the availability of adequate resources and building the capacity of local public health professionals and government leaders.

Countries receive ample funds in the form of tobacco taxes to support the cost of additional staff and programmes. Data compiled from 70 countries, covering two thirds of the world's population, show that aggregate tobacco tax revenues in these countries are more than 500 times higher than expenses for tobacco control activities. Governments collect more than US\$ 200 billion in tobacco tax revenues and have the financial resources to expand and strengthen tobacco control programmes. Further tobacco tax increases can provide additional funding for these initiatives.



Conclusion

The number of people killed each year by tobacco will double over the next few decades unless urgent action is taken. But just as the epidemic of tobacco-caused disease is man-made, people – acting through their governments and civil society – can reverse the epidemic. Although the tobacco epidemic can be countered, this will depend upon countries taking effective steps to protect their populations. Furthermore, the tobacco epidemic is making health inequalities worse, both within countries, where in most cases the poor smoke far more than the wealthy, and internationally, with poor countries soon to account for more than 80% of the illnesses and death caused by tobacco.

The WHO FCTC, with over 150 Parties, demonstrates the global commitment to taking action and identifies key effective tobacco control policies. Through this landmark treaty, country leaders affirm their citizens' right to the highest attainable standard of health. To fulfil this fundamental human right, the **mpower** package of six effective tobacco control policies, if fully implemented and enforced, will protect each country's people from the illness and death that the tobacco epidemic will otherwise inevitably bring. The impact of the **mpower** policies can turn the vision of the WHO FCTC into a global reality.

Tobacco is unique among today's leading public health problems in that the means to curb the epidemic are clear and within our reach. If countries have the political commitment and technical and logistic support to implement the **mpower** policy package, they can save millions of lives. To implement the **mpower** package, countries need to undertake specific interventions to:

- Monitor tobacco use
- Protect people from tobacco smoke
- Offer help to quit tobacco use
- Warn about the dangers of tobacco
- Enforce bans on tobacco advertising and promotion
- Raise taxes on tobacco products.

This package will create an enabling environment to help current tobacco users quit, protect people from second-hand smoke and prevent young people from taking up the habit. As the tobacco epidemic is entirely man-made, the end of the tobacco epidemic must also be man-made. We must act now.

DEFINITIONS	
Ad valorem tax	Tax applied on the value of items (i.e. a percentage of the price)
Cessation	Quitting smoking (no smoking for at least three months)
Current smoker	Anyone who currently smokes any tobacco product on some or all days
NRT	Nicotine replacement therapy
Public place	A place which the public, or a section of the public, is entitled to use or which is open to, or is being used by, the public or a section of the public (whether on payment of money, by virtue of membership of a body, or otherwise)
Public place, indoor	All places accessible to the general public or places for collective use, regardless of ownership or right to access that are covered by a roof and one or more walls or sides, regardless of the type of building material used or whether the structure is permanent or temporary
Public transport	Any vehicle used at any time by members of the public, including taxis, usually for reward or commercial gain
Second-hand smoke	Both side stream smoke from the burning end of a cigarette or other tobacco product and mainstream smoke exhaled by the smoker
Smoke-free air	Air that is 100% smoke-free and in which smoke cannot be seen, smelled, sensed or measured
Specific tax	Tax applied on unit quantities of items (e.g. \$1 per pack of 20 cigarettes)
Tobacco smoking	Being in possession or control of a lit tobacco product
Tobacco advertising and promotion	Any form of commercial communication, recommendation or action with the aim, effect or likely effect of promoting a tobacco product or tobacco use either directly or indirectly
Tobacco industry	Tobacco manufacturers, wholesale distributors and importers of tobacco products
Tobacco products	Products made partly or entirely from tobacco leaf, which may be smoked, sucked or chewed, or sniffed
Tobacco sponsorship	Any form of contribution to any event, activity or individual with the aim, effect or likely effect of promoting a tobacco product or tobacco use either directly or indirectly
Workplace	Any place used by people during their employment or work, even if as an unpaid volunteer, including all attached or associated spaces as well as vehicles used in the course of work

References

- 1 Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Medicine*, 2006, 3(11):e442.
- 2 Federal Trade Commission. *Cigarette report for 2003*. Washington, DC, Federal Trade Commission, 2005 (<http://www.ftc.gov/reports/cigarette05/050809cigrpt.pdf>, accessed 6 December 2007).
- 3 World Health Organization. *Gender and Tobacco Control: A Policy Brief*. Geneva, World Health Organization, 2007 (http://www.who.int/tobacco/resources/publications/general/policy_brief.pdf, accessed 21 March 2008).
- 4 World Health Organization. *WHO Framework Convention on Tobacco Control*. Geneva, World Health Organization, 2003 (updated reprints 2004, 2005) (http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf, accessed 21 March 2008).
- 5 World Health Organization. *WHO report on the global tobacco epidemic, 2008: the MPOWER package*. Geneva, World Health Organization, 2008 (<http://www.who.int/tobacco/mpower/en/index.html>, accessed 21 March 2008).
- 6 World Health Organization. *WHO Framework Convention on Tobacco Control, Article 4*. Geneva, World Health Organization, 2003 (updated reprints 2004, 2005) (http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf, accessed 21 March 2008).
- 7 U.S. Department of Health and Human Services. *The health consequences of involuntary exposure to tobacco smoke: a report of the Surgeon General*. Atlanta, Public Health Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006 (<http://www.surgeongeneral.gov/library/secondhandsmoke/report/fullreport.pdf>, accessed 20 February 2008).
- 8 Mulcahy M et al. Secondhand smoke exposure and risk following the Irish smoking ban: an assessment of salivary cotinine concentrations in hotel workers and air nicotine levels in bars. *Tobacco Control*, 2005, 14(6):384–388.
- 9 Fichtenberg CM, Glantz SA. Effect of smoke-free workplaces on smoking behaviour: systematic review. *British Medical Journal*, 2002, 325(7357):188.
- 10 World Health Organization. *WHO Framework Convention on Tobacco Control, Article 8*. Geneva, World Health Organization, 2003 (updated reprints 2004, 2005) (http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf, accessed 21 March 2008).
- 11 Conference of the Parties to the WHO Framework Convention on Tobacco Control. Second session. *First report of committee A*. World Health Organization, July 2007 (http://www.who.int/gb/fctc/PDF/cop2/FCTC_COP2_17P-en.pdf, accessed 21 March 2008).
- 12 Bauer JE et al. A longitudinal assessment of the impact of smoke-free worksite policies on tobacco use. *American Journal of Public Health*, 2005, 95:1024–1029.
- 13 Office of Tobacco Control. *Smoke-free workplaces in Ireland: a one-year review*. Dublin, Department of Health and Children, 2005 (http://www.otc.ie/uploads/1_Year_Report_FA.pdf, accessed 21 March 2008).
- 14 Organización Panamericana de la Salud (Pan-American Health Organization). Estudio de "Conocimiento y actitudes hacia el decreto 288/005". (Regulación de consumo de tabaco en lugares públicos y privados.) October 2006 (http://www.presidencia.gub.uy/_web/noticias/2006/12/informeo_dec268_mori.pdf, accessed 21 March 2008).
- 15 Ministry of Health, *China tobacco control report*. Beijing, Government of the People's Republic of China, May 2007.
- 16 Scollo M et al. Review of the quality of studies on the economic effects of smoke-free policies on the hospitality industry. *Tobacco Control*, 2003, 12:13–20.
- 17 Binkin N. et al. Effects of a generalised ban on smoking in bars and restaurants, Italy. *International Journal of Tuberculosis and Lung Disease*, 2007, 11:522–527.
- 18 World Health Organization and International Agency for Research on Cancer. *Tobacco smoke and involuntary smoking: summary of data reported and evaluation. IARC monographs on the evaluation of carcinogenic risks to humans*. Volume 83. Geneva, World Health Organization, 2002 (<http://monographs.iarc.fr/ENG/Monographs/vol83/volume83.pdf>, accessed 21 March 2008).

- 19 California Environmental Agency. *Health effects of exposure to environmental tobacco smoke*. Sacramento, Office of Environmental Health Hazard Assessment, 1997 (http://www.oehha.org/air/environmental_tobacco/finalets.html, accessed 21 March 2008).
- 20 World Health Organization. *Protection from exposure to second-hand tobacco smoke. Policy recommendations*. Geneva, World Health Organization, 2007 (http://www.who.int/tobacco/resources/publications/wntd/2007/who_protection_exposure_final_25June2007.pdf, accessed 21 March 2008).
- 21 WHO Tobacco Free Initiative. *Building blocks for tobacco control: a handbook*. Geneva, World Health Organization, 2004 (<http://www.who.int/tobacco/resources/publications/general/HANDBOOK%20Lowres%20with%20cover.pdf>, accessed 21 March 2008).
- 22 Fiore MC et al. *Treating tobacco use and dependence: a clinical practice guideline*. Rockville, MD, U.S. Department of Health and Human Services (http://www.surgeongeneral.gov/tobacco/treating_tobacco_use.pdf, accessed 21 March 2008).
- 23 Tobacco Advisory Group of the Royal College of Physicians. *Nicotine addiction in Britain; a report of the Tobacco Advisory Group of the Royal College of Physicians*. London, Royal College of Physicians of London, 2000 (<http://www.rcplondon.ac.uk/pubs/books/nicotine>, accessed 23 March 2008).
- 24 World Health Organization. *WHO Framework Convention on Tobacco Control, Article 14*. Geneva, World Health Organization, 2003 (updated reprints 2004, 2005) (http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf, accessed 21 March 2008).
- 25 Cromwell J et al. Cost-effectiveness of the clinical practice recommendations in the AHCPH guideline for smoking cessation. *Agency for Health Care Policy and Research, 1997, 278 :1759–1766*. Cited in Centers for Disease Control and Prevention. Cigarette smoking among adults – United States, 1995. *Morbidity and Mortality Weekly Report, 1997, 46(51):1217–1220*.
- 26 Stead LF, Perera R, Lancaster T. A systematic review of interventions for smokers who contact quitlines. *Tobacco Control, 2007, 16(Suppl. 1):13–18*.
- 27 Siahpush M et al. Socio-economic variations in tobacco consumption, intention to quit and self-efficacy to quit among male smokers in Thailand and Malaysia: results from the International Tobacco Control-South-East Asia (ITC-SEA) survey. *Addiction, 2008, 103(3):502–508*.
- 28 U.S. Department of Health and Human Services. Atlanta, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1994.
- 29 Steinberg L. Risk taking in adolescence: what changes, and why? *Annals of the New York Academy of Sciences, 2004, 1021:51–58*.
- 30 Hoffman BR et al. Perceived peer influence and peer selection on adolescent smoking. *Addictive Behaviours, 2007, 32:1546–1554*.
- 31 Pollay RW et al. The last straw? Cigarette advertising and realized market shares among youths and adults, 1979–1993. *Journal of Marketing, 1996, 60:1–16*.
- 32 DiFranza JR et al. Symptoms of tobacco dependence after brief intermittent use: the development and assessment of nicotine dependence in youth-2 study. *Archives of Pediatric and Adolescent Medicine, 2007, 161:704–710*.
- 33 Panday S et al. Nicotine dependence and withdrawal symptoms among occasional smokers. *Journal of Adolescent Health, 2007, 40:144–150*.
- 34 Wiehe SE et al. A systematic review of school-based smoking prevention trials with long-term follow-up. *Journal of Adolescent Health, 2005, 36:162–169*.
- 35 Thomas R, Perera R. School-based programmes for preventing smoking. *Cochrane Database of Systematic Reviews, 2006, Issue 3, Art. No.: CD001293*.
- 36 Warner KE. The need for, and value of, a multi-level approach to disease prevention: the case for tobacco control. In: Smedley BD, Syme SL, eds. *Promoting health: intervention strategies from social and behavioral research*. Washington, DC, National Academies Press, 2000.
- 37 Hammond D et al. Effectiveness of cigarette warning labels in informing smokers about the risks of smoking: findings from the International Tobacco Control (ITC) Four Country Survey. *Tobacco Control, 2006, 15(Suppl. 3):iii19–iii25*.
- 38 Datafolha Instituto de Pesquisas. 76% são a favor que embalagens de cigarros tragam imagens que ilustram males provocados pelo fumo; 67% dos fumantes que viram as imagens afirmam terem sentido vontade de parar de fumar. *Opinião pública, 2002* (http://datafolha.folha.uol.com.br/po/fumo_21042002.shtml, accessed 6 December 2007).
- 39 World Health Organization. *Tobacco warning labels. Factsheet No. 7*. Geneva, Framework Convention Alliance for Tobacco Control, 2005 (<http://tobaccofreekids.org/campaign/global/docs/7.pdf>, accessed 25 February 2008).

- 40 World Health Organization. *WHO Framework Convention on Tobacco Control, Article 11*. Geneva, World Health Organization, 2003 (updated reprints 2004, 2005) (http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf, accessed 21 March 2008).
- 41 World Health Organization. *Tobacco: deadly in any form or disguise*. Geneva, World Health Organization, 2006 (http://www.who.int/tobacco/communications/events/wntd/2006/Tfi_Rapport.pdf, accessed 21 March 2008).
- 42 World Health Organization. *WHO Framework Convention on Tobacco Control, Article 12*. Geneva, World Health Organization, 2003 (updated reprints 2004, 2005) (http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf, accessed 21 March 2008).
- 43 Siegel M, Biener L. The impact of an antismoking media campaign on progression to established smoking: results of a longitudinal youth study. *American Journal of Public Health*, 2000, 90:380–386.
- 44 McVey D, Stapleton J. Can anti-smoking television advertising affect smoking behaviour? Controlled trial of the Health Education Authority for England's anti-smoking TV campaign. *Tobacco Control*, 2000, 9(3):273–282.
- 45 Wakefield M et al. Effect of televised, tobacco company-funded smoking prevention advertising on youth smoking-related beliefs, intentions, and behavior. *American Journal of Public Health*, 2006, 96:2154–2160.
- 46 American Cancer Society. *American Cancer Society/UICC Tobacco Control Strategy Planning Guide #4. Enforcing Strong Smoke-free Laws: The Advocate's Guide to Enforcement Strategies*. Atlanta, American Cancer Society, 2006.
- 47 World Health Organization. *WHO Framework Convention on Tobacco Control, Article 13*. Geneva, World Health Organization, 2003 (updated reprints 2004, 2005) (http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf, accessed 21 March 2008).
- 48 Borland RM. Advertising, media and the tobacco epidemic. In: *China tobacco control report*. Beijing, Ministry of Health, People's Republic of China, 2007 (http://tobaccofreecenter.org/files/pdfs/reports_articles/2007%20China%20MOH%20Tobacco%20Control%20Report.pdf, accessed 21 February 2008).
- 49 Saffer H, Chaloupka F. The effect of tobacco advertising bans on tobacco consumption. *Journal of Health Economics*, 2000, 19:1117–1137.
- 50 Government of Great Britain. *Select Committee on Health*. Second report. London, House of Commons, 2000 (<http://www.parliament.the-stationery-office.co.uk/pa/cm199900/cmselect/cmhealth/27/2701.htm>, accessed 25 February 2008).
- 51 Saffer H. Tobacco advertising and promotion. In: Jha P, Chaloupka FJ, eds. *Tobacco control in developing countries*. Oxford, Oxford University Press, 2000:215–236.
- 52 World Bank. *Tobacco control at a glance*. Washington, DC, World Bank, 2003 (<http://siteresources.worldbank.org/INTPHAAG/Resources/AAGTobacControlEngv46-03.pdf>, accessed 25 February 2008).
- 53 Jha P, Chaloupka FJ, eds. *Curbing the epidemic: governments and the economics of tobacco control*. Washington, DC, World Bank, 1999 (<http://www.usaid.gov/policy/ads/200/tobacco.pdf>, accessed 25 February 2008).
- 54 World Health Organization. *WHO report on the global tobacco epidemic, 2008: the MPOWER package*. Geneva, World Health Organization, 2008. (<http://www.who.int/tobacco/mpower/en/index.html>, accessed 21 March 2008: tables 2.1.2, 2.2.2, 2.3.2, 2.4.2, 2.5.2, 2.6.2).
- 55 Jha P et al. Tobacco addiction. In: Jamison D et al., eds. *Disease control priorities in developing countries*. Washington, DC, World Bank, 2006.
- 56 Chaloupka FJ et al. The taxation of tobacco products. In: Jha P, Chaloupka FJ, eds. *Tobacco control in developing countries*. Oxford, Oxford University Press, 2000:2737–2772.
- 57 van Walbeek C. *Tobacco excise taxation in South Africa: tools for advancing tobacco control in the XXIst century: success stories and lessons learned*. Geneva, World Health Organization, 2003 (http://www.who.int/tobacco/training/success_stories/en/best_practices_south_africa_taxation.pdf, accessed 6 December 2007).
- 58 World Health Organization. *Who Framework Convention on Tobacco Control, Article 6*. Geneva, World Health Organization, 2003 (updated reprints 2004, 2005) (http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf, accessed 21 March 2008).
- 59 Centers for Disease Control and Prevention. Response to increases in cigarette prices by race/ethnicity, income, and age groups – United States, 1976–1993. *Morbidity and Mortality Weekly Report*, 1998, 47:605–609.
- 60 White VM et al. How do smokers control their cigarette expenditures? *Nicotine and Tobacco Research*, 2005, 7(4):625–635.
- 61 Starr G et al. *Key outcome indicators for evaluating comprehensive tobacco control programs*. Atlanta, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2005 (http://www.cdc.gov/tobacco/tobacco_control_programs/surveillance_evaluation/key_outcome/00_pdfs/Key_Indicators.pdf, accessed 21 March 2008).
- 62 WHO Tobacco Free Initiative. *Building blocks for tobacco control: a handbook*. Geneva, World Health Organization, 2004.

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