



April 2006

# Tobacco Addiction

## Tobacco Controls Could Save 3 Million Lives a Year By 2030

Worldwide, only two large and growing causes of death exist: HIV/AIDS and tobacco use. Cigarette smoking and other forms of tobacco use impose a large and increasing global public health burden—directly linked to deaths from noncommunicable diseases such as cardiovascular disease, lung and other cancers, and respiratory diseases such as tuberculosis.

If current smoking and tobacco use patterns continue, about 1 billion people in the 21st century will be killed by their addiction to tobacco—most of them in low-income countries. Indeed, more than 1.1 billion people now smoke, with about 82 percent of smokers residing in low- and middle-income countries. Tobacco use already kills an estimated 5 million people annually (see table); in people over age 30, it accounts for one in every five deaths among men and one in every 20 deaths among women.

And about one-half of all tobacco deaths occur between ages 35 and 69, resulting in the average loss to each of these people of about 20 to 25 years of life and economic productivity. Adult deaths from tobacco use contributed to \$140 billion in economic losses for the former socialist economies of Europe in 1990.

### Tobacco Use Can Be Controlled

Evidence from countries across the socioeconomic spectrum shows that tobacco use can be controlled through tax increases, increased access to cessation therapies, restrictions on smoking in public and in workplaces, dissemination of information about the health risks of smoking, and comprehensive bans on tobacco advertising and promotion. And all of these interventions are cost-effective in many low-income settings. But governments need to implement a package of these interventions now to avoid some of the approximately 443 million deaths that will occur in the next 50 years due to smoking-related illnesses.

### Interventions

- **Raise tobacco taxation by up to 70 percent.** Tobacco taxation is the most cost-effective antismoking intervention. Numerous studies have shown that a 10 percent increase in cigarette prices will reduce overall cigarette smoking by 2.5 to 5.0 percent in high-income countries. But while two-thirds or more of the final price of a pack of cigarettes is taxed in developed countries, in low- and middle-income countries, taxes account for less than one-half the final price.

#### Tobacco Mortality by Gender, 2000

World Bank region	Tobacco deaths (in thousands)	
	Males	Females
East Asia & the Pacific	829	274
Europe & Central Asia	754	161
Latin America & the Caribbean	177	97
Middle East & North Africa	97	28
South Asia	768	187
Sub-Saharan Africa	105	66
Low- & middle-income economies	2,730	813
High-income economies	929	548
World	3,659	1,361

Note: The term *high-income* corresponds roughly to high-income and Europe and Central Asia regions using the World Bank classification. *Low-income* corresponds roughly to East Asia and the Pacific, Latin America and the Caribbean, Middle East and North Africa, South Asia, and Sub-Saharan Africa.

Source: Jha, P., F. J. Chaloupka, J. Moore, V. Gajalakshmi, P. C. Gupta, R. Peck, and others. 2006. "Tobacco Addiction." In *Disease Control Priorities in Developing Countries*, 2nd ed., ed. D. T. Jamison, J. G. Breman, A. R. Measham, G. Alleyne, M. Claeson, D. B. Evans, P. Jha, A. Mills, and P. Musgrove, table 46.2. New York: Oxford University Press.

A price increase of 70 percent in the price of cigarettes to consumers has the potential to avert between 46 million and 114 million deaths among those who smoked in 2000. Even a modest price increase of 33 percent could potentially prevent 66 million tobacco deaths over the next 50 years. Ninety percent of these averted deaths would be in low- and middle-income countries. A 33 percent tobacco price increase could also be achieved in low-income countries for a cost of \$3 to \$42 per disability-adjusted life year (or DALY, a measure of the amount of health lost due to a particular disease or condition).

- **Provide universal access to cessation therapies.** Cessation works: In some high-income countries, nicotine replacement therapy (NRT) and other cessation therapies such as community-based programs and self-help manuals have contributed substantially to rising prevalence rates of ex-smokers. (For instance, about 30 percent of the United Kingdom's male population is made up of former smokers.)

Adult cessation—even between ages 45 and 54—also avoids most of the excess hazards of smoking. Quitting before middle age, for instance, avoids more than 90 percent of the lung cancer attributable to tobacco, with quitters possessing a pattern of survival similar to that of persons who have never smoked.

In contrast to developed countries, however, the prevalence of male ex-smokers in most developing countries is low: 10 percent in Vietnam, 5 percent in India, and 2 percent in China. While pharmacological treatments such as NRT increase the likelihood of quitting by 200 to 300 percent, the demand for NRT is related to price—so policies that decrease NRT's cost and increase its availability would likely lead to a substantial rise in its use. Wider access to NRT could be achieved for between \$75 and \$1,250 per DALY averted.

- **Restrict smoking in public places and workplaces.** In Western countries, restrictions on smoking in a variety of public places and private worksites have reduced smoking rates by 5 to 15 percent and can also lead to changes in social norms regarding smoking behavior, especially among youths.
- **Educate the public about the risks of tobacco addiction.** Efforts to disseminate information about the risks of smoking and of other tobacco use have led to reductions in smoking in high-income countries. But in many low- and middle-income countries, a lack of awareness continues to exist about the risks of mortality and disease posed by smoking.
- **Ban tobacco advertising and promotion.** Advertising has a small favorable impact on demand for cigarettes. One study predicts that a comprehensive set of tobacco advertising bans in high-income countries could reduce tobacco consumption by more than 6 percent; partial bans have little impact on smoking behavior.

## For More Information

Jha, P., F. J. Chaloupka, J. Moore, V. Gajalakshmi, P. C. Gupta, R. Peck, and others. 2006. "Tobacco Addiction." In *Disease Control Priorities in Developing Countries*, 2nd ed., ed. D. T. Jamison, J. G. Breman, A. R. Measham, G. Alleyne, M. Claeson, D. B. Evans, P. Jha, A. Mills, and P. Musgrove, 869–86. New York: Oxford University Press.