

Case 14

Curbing Tobacco Use in Poland

Geographic area: Poland

Health condition: In the 1980s, Poland had the highest rate of smoking in the world. Nearly three quarters of Polish men aged 20 to 60 smoked every day. In 1990, the probability that a 15-year-old boy born in Poland would reach his 60th birthday was lower than in most countries, and middle-aged Polish men had one of the highest rates of lung cancer in the world.

Global importance of the health condition today: Tobacco is the second deadliest threat to adult health in the world and causes 1 in every 10 adult deaths. It is estimated that 500 million people alive today will die prematurely because of tobacco consumption. More than three quarters of the world's 1.2 billion smokers live in low- and middle-income countries, where smoking is on the rise. By 2030, it is estimated that smoking-related deaths will have doubled, accounting for the deaths of 6 in 10 people.

Intervention or program: In 1995, the Polish parliament passed groundbreaking tobacco-control legislation, which included the requirement of the largest health warnings on cigarette packs in the world, a ban on smoking in health centers and enclosed workspaces, a ban on electronic media advertising, and a ban on tobacco sales to minors. Health education campaigns and the “Great Polish Smoke-Out” have also raised awareness about the dangers of smoking and have encouraged Poles to quit.

Impact: Cigarette consumption dropped 10 percent between 1990 and 1998, and the number of smokers declined from 14 million in the 1980s to under 10 million at the end of the 1990s. The reduction in smoking led to 10,000 fewer deaths each year, a 30 percent decline in lung cancer among men aged 20 to 44, a nearly 7 percent decline in cardiovascular disease, and a reduction in low birth weight.

Only two major causes of death are growing worldwide: AIDS and tobacco. While the course of the AIDS epidemic is uncertain, one can be more sure that current smoking patterns will kill about 1 billion people this century, 10 times more than the deaths from tobacco in the 20th century.¹ Much of this burden will fall on poor countries and the poorest people living there. While smoking rates have fallen in rich countries over the past two decades, smoking is on the rise in developing countries.² Currently, more than three quarters of the world's 1.2 billion smokers live in low- and middle-income countries, and smoking-related deaths are estimated to double in number by 2030.

Case drafted by Molly Kinder.

As Poland's story shows, there is reason to hope that concerted efforts to tackle the growing smoking problem in low- and middle-income countries can succeed. In many instances, this will likely take a very high level of political commitment—enough to counter the significant economic influence of the tobacco industry—as well as state-of-the-art communication strategies to induce major shifts in attitudes toward smoking.

Lighting Up: Dangers of Tobacco

Smoking causes an astonishingly long list of diseases, leading to premature death in half of all smokers. Tobacco is implicated in numerous cancers including bladder, kidney, larynx, mouth, pancreas, and stomach. Lung

cancer is the most common disease caused by smoking, and overall, smoking is responsible for about one half of all cancer deaths.³ Smoking is also a major cause of cardiovascular diseases, including strokes and heart attacks, and of respiratory diseases such as emphysema. Additional health threats are emerging as research advances. A recent study in India found that smoking accounts for about half of the country's tuberculosis deaths and may well be increasing the spread of infectious tuberculosis.⁴

Cigarette smoking takes a heavy toll not only on smokers but also on those around them, particularly young children. Passive smoking (inhaling smoke in the surrounding air) contributes to respiratory illnesses among children including ear infections, asthma attacks, sinus infections, and throat inflammations. Tobacco use in and around pregnant women can contribute to sudden infant death syndrome, low birth weight, and intrauterine growth retardation.⁵

Smoking places an economic burden on individuals, families, and societies chiefly because of its massive death and disability toll and also because of the high cost of treatment, the value of lost wages, and the diversion of income from other basic needs such as children's food.⁶ Because the poor are more likely to smoke than their rich neighbors, the economic and health impact of smoking disproportionately burdens the poor. In Poland, most of the gap in risk of dying early between uneducated and educated men is due to smoking.⁷ Furthermore, because cigarettes claim the lives of half of their users, often during their prime years, smoking robs countries of valuable labor and strains health systems.

Curbing Tobacco Use

Compared with controlling other health scourges, stopping the deadly effects of smoking requires changing personal behavior rather than undergoing complex medical procedures. Preventing smoking-related cancer and respiratory disease simply requires that smokers quit smoking and that fewer people light up their first cigarette. Because most tobacco deaths over the next few decades will occur among today's smokers, getting adults to quit is a special priority.^{2,8}

However, despite the clear health and economic benefits, quitting is extremely difficult. In addition to having to

combat the addictive nature of nicotine, those seeking to reduce cigarette consumption are stymied by the fact that smoking is an ingrained social norm whose popularity is sustained through billions of dollars worth of cigarette advertising (which in the United States alone totaled over \$11 billion in 2001).⁹ Moreover, many smokers in developing countries are unaware of the link between smoking and health—just as was the case in the United States and other industrialized countries before the mid-1960s. In China, for example, a survey discovered that more than half of Chinese smokers and non-smokers thought that smoking did “little or no harm.”¹⁰

Although changing the behavior of smokers is daunting, it can be done—and it has been done. Governments and civil society can implement proven and highly cost-effective interventions to control tobacco use. Governments have at their disposal a range of legislative measures that can limit the supply of cigarettes and promote nonsmoking behavior, including increasing taxes on tobacco products; limiting tobacco advertising and promotion; limiting the harmful ingredients in tobacco products; requiring health warnings on products and advertisements; and establishing “nonsmoking” areas.^{2,8,10} Both the government and civil society can work to educate the public about the negative health effects of smoking.

Implementation of such interventions requires high levels of political commitment, as well as the determination and energy of civil society and antitobacco advocates to counter commercial interests. Tobacco companies are well financed and have played a key role in thwarting progress in tobacco control internationally.¹¹

Poland: Highest Cigarette Consumption in the World

Before the fall of the Berlin Wall in 1989, Poland had the highest cigarette consumption in the world. In the late 1970s, the average Pole smoked more than 3,500 cigarettes each year. Nearly three quarters of Polish men aged 20 to 60 smoked every day, and by 1982, 30 percent of adult women smoked regularly.^{12,13}

The impact on the health of Poles was staggering. In 1990, the probability that a 15-year-old boy born in Poland would reach his 60th birthday was lower than

most countries in the world—even India and China. Half of these early deaths were attributable to tobacco consumption.¹² Middle-aged Polish men had one of the highest rates of lung cancer in the world—higher than every European country except for Hungary—and other smoking-related illnesses, such as laryngeal and oral cancer, were at all-time high levels. It is estimated that 42 percent of cardiovascular deaths and 71 percent of respiratory disease in middle-aged men were due to smoking.

Few Poles were quitting, largely because of the political and social climate of the time. Because the state-run tobacco production was a significant source of revenue, the government—which controlled information—did not fully disclose the negative consequences of smoking. As a result, Polish smokers were less informed about the dangers of smoking than most of their European neighbors. In addition, tobacco-control laws were rarely enforced, and stronger tobacco-control legislation introduced in the early 1980s was rejected by the government because it was seen as a threat to government revenue during an economic downturn.

The dramatic social, economic, and political changes ushered into Poland after the fall of communism initially exacerbated Poland's addiction to tobacco. When a market economy replaced the state-run system in 1988 and 1989, the tobacco industry was one of the first to be privatized—opening the country to the powerful influence of multinational corporations. In less than a decade, multinationals had taken over more than 90 percent of Poland's lucrative tobacco industry. Suddenly, cigarettes in Poland were available in abundant supply and in more tempting variety. International brands flooded the market, along with popular new domestic brands like Solidarnosc and Lady Di. Adding to their appeal, cigarettes were also cheap, less than the price of a loaf of bread—thanks to deals made between the corporations and the Polish government that kept prices down during the first half of the 1990s.

At the same time, democratic changes sweeping the country brought with them a potent force: savvy and state-of-the-art marketing. Tobacco companies poured more than \$100 million into Poland, making the tobacco industry the largest advertiser in the country. The industry aggressively set out to increase consumption by

10 percent a year. As a result, smoking rates in the early 1990s climbed steadily, particularly among children aged 11 to 15.¹²

Roots of the Tobacco-Control Movement

As the tobacco epidemic was escalating in the early 1990s, historic changes in Poland set in motion powerful influences that helped amplify antitobacco voices.

Poland's scientific community laid the foundation of the antitobacco movement when they first established the in-country scientific evidence illustrating the devastating health impact of smoking. Research conducted in the 1980s by the Marie Skłodowska-Curie Memorial Cancer Centre and Institute of Oncology contributed to the first Polish report on the health impact of smoking, highlighting in particular the link between smoking and the escalating cancer outbreak in Poland. The body of evidence about the harmful effects of smoking and the need for tobacco-control legislation were further strengthened through a series of international workshops and scientific conferences held in Poland.

With solid evidence now in hand, Poland's budding civil society took up the call for tobacco-control measures. Health advocates in Poland were first brought together around the antismoking cause in the 1980s as civil society was experiencing a renewal. During this time, antitobacco groups such as the Polish Anti-Tobacco Society formed and began to interact with the WHO, the International Union Against Cancer, and other international groups.

Later in the new political milieu, when nongovernmental organizations (NGOs) could freely form, Poland's civil society had an even stronger voice. In 1990, Poland hosted "A Tobacco-Free New Europe" conference of western and eastern European health advocates, which resulted in a set of policy recommendations that would later prove instrumental in shaping Poland's own anti-tobacco laws. Finally, the Health Promotion Foundation was established to lead health promotion and antitobacco education efforts.

The free media was essential to the success of the advocates' movement to control tobacco use. In the new

democratic era, the Polish press could cover health issues, including the reporting of scientific studies illustrating the health consequences of smoking. The dissemination of this information raised awareness about the dangers of smoking and shaped public opinion about tobacco-control legislation. It also provided a venue for health advocates to broadcast special advertisements with health messages, such as how to take the steps to quit smoking.

Finally, democracy provided a window for the most powerful tool in the fight against smoking: tobacco-control legislation.

The Smoke Clears: Implementing Tobacco-Control Measures

In 1991, legislation was brought to the Polish Senate, which introduced a comprehensive set of tobacco-control measures based on the recommendations from the 1990 international conference and the WHO. The motion faced intense opposition from tobacco companies, sparking a heated public debate that lasted several years. Advocates consistently defended the bill by reiterating the scientific evidence of the public health threat of smoking, while the powerful tobacco lobbies countered by emphasizing their right to advertise freely and the potential threat to Poland's economy. The tobacco lobbies poured an unprecedented amount of money into fighting the legislation, wielding a force as a special interest never before seen in Poland. Media coverage of the debates helped shape public opinion, which eventually swayed toward the health advocates—the “David” against the “Goliath” tobacco lobby.

In November 1995, the Polish parliament passed the “Law for the Protection of Public Health Against the Effects of Tobacco Use” with a huge majority of 90 percent of the votes. The groundbreaking legislation included:

- A ban on smoking and the sale of cigarettes in health care centers, schools, and enclosed workspaces
- A ban on the sale of tobacco products to minors under 18 years of age
- A ban on the production and marketing of smokeless tobacco

- A ban on electronic media advertising (including radio and television) and restrictions on other media
- The printing of health warnings on all cigarette packs to occupy 30 percent of at least two of the largest sides of the packs—the largest health warnings on cigarette packs in the world at that time
- Free provision of treatment for smoking dependence

The sweeping legislation has served as a model for other countries. The European Union followed the Polish precedent in 2003 and required similar health warnings on all cigarette packs. In 1999 and 2000, the tax on cigarettes increased 30 percent each year, and a total ban on advertising was passed in 1999.^a In just a few years, Poland had transformed from one of the *least* favorable climates in Europe for tobacco controls to one of the *most* favorable.

According to legislation, Poland is required to dedicate 0.5 percent of all tobacco taxes to funding prevention programs. In practice, the tobacco-control movement has not received the full 0.5 percent allocation and continues to lobby the government for increased funds for prevention programs. However, one recipient of tobacco tax revenue, the Health Promotion Foundation, has led health education and consumer awareness efforts with a profound impact on smoking patterns in Poland. Since the early 1990s, the foundation has launched an annual campaign each November called the “Great Polish Smoke-Out” to encourage smokers to quit. For a time, the smoke-out, the largest public health campaign in Poland, included a competition that invites Poles who have quit smoking in the past year to send a postcard for the chance to win a week-long stay in Rome and a private audience with the Polish-born Pope John Paul II. The campaign attracted extensive media attention and uses television, radio, and print media to spread the core messages of how and why to quit. Throughout the year, health education promoted by schools, the Catholic Church, and local civic groups has reinforced the campaign's messages.

a The impact of these additional measures is not captured in this chapter.

The campaign is popular, and 80 to 90 percent of Poles have heard of it. Each year, between 200,000 and 400,000 Poles credit the campaign with their successful quitting. Since the first smoke-out in 1991, more than 2.5 million Poles have permanently snuffed their cigarettes because of the campaign.

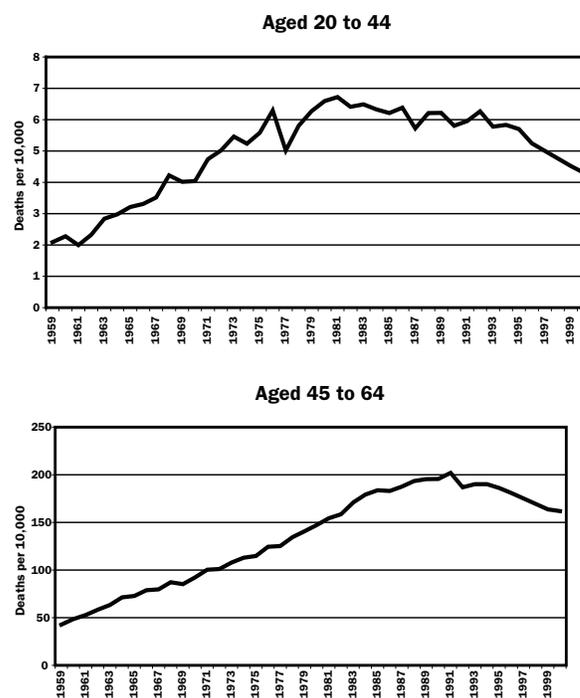
Because raising tobacco taxes has long been recognized as one of the most effective tobacco-control policy interventions, health promotion foundations like the one in Poland are becoming more common around the globe. Increasing the price of cigarettes not only keeps many from starting to smoke, but tobacco taxes can also be a source of sustained funding for tobacco control and other health promotion activities. Health promotion foundations financed by these taxes are not limited to supporting tobacco control: funds can also be used to subsidize treatment for HIV/AIDS, tuberculosis, or malaria; to conduct wider disease prevention and information campaigns; and to provide opportunities for training or other capacity building for health professionals that are otherwise unavailable.

Tobacco Consumption and Cancer Rates Plummet

Because of the extensive tobacco controls and the health education efforts, far fewer Poles now smoke. Cigarette consumption dropped 10 percent between 1990 and 1998. In the 1970s and 1980s, Poland had an estimated 14 million smokers, including 62 percent of adult men and 30 percent of adult women. By the end of the 1990s, this figure had dropped to less than 10 million Polish smokers, with 40 percent of adult men and 20 percent of adult women smoking.

The decline in tobacco use has led to a corresponding improvement of health in Poland. The total mortality rate in Poland, taking into account all causes of death, fell by 10 percent during the 1990s. The decline in smoking is credited for 30 percent of this reduction in deaths, translating into 10,000 fewer deaths each year. At the end of the 1990s, lung cancer rates in men aged 20 to 44 had dropped 30 percent from their peak levels just a decade earlier and fell 19 percent in middle-aged men between 45 and 64 years (see Figure 14-1). Decreased smoking rates have contributed to one third of the 20 percent decline in cardiovascular diseases since 1991.

Figure 14-1
Standardized mortality rates
among Polish males, 1959-1999.



Source: Zatonski W, personal communication, July 2, 2004.

Infant mortality has fallen as well, and the percentage of babies born with low birth weight has dropped from over 8 percent in 1980 to less than 6 percent a decade later. About one third of this reduced risk stems from decreased smoking among pregnant women. In total, life expectancy during the 1990s in Poland increased by four years for men and more than three years for women.¹³

Comparing the path of Poland with its neighbor Hungary, a country that did not implement tobacco-control measures, further illustrates the dramatic impact of Poland's efforts. In the 1980s, before Poland initiated controls and health awareness campaigns, lung cancer rates in the two countries were roughly equivalent. Throughout the 1990s, lung cancer rates in Hungary continued to climb, at the same time that they were falling by one third in Poland; today rates in Hungary have peaked at their highest levels ever for young and middle-aged residents.

Box 14–1

South Africa's Story

Until the 1990s, South Africa's tobacco industry—controlled almost entirely by one company—exerted immense power and operated virtually untouched by government restrictions or taxes. The tobacco industry was seen as a major source of government revenue, taxes, jobs, and advertising dollars. The dominant tobacco company, Rembrandt, was established in 1948, when the National Party came to power, and was seen as a symbol of Afrikaaner success in business—and therefore beyond question in policy debates about tobacco. With strong ties to the media and the apartheid government, nothing stood in its way.

When the African National Congress came to power in 1994, the antismoking movement gained a valuable ally in incoming President Nelson Mandela. Mandela had made his strong antismoking stance known during World Tobacco Day in 1992 and through his call for a “world free of tobacco.” Unlike the previous Afrikaaner government, Mandela's African National Congress party had no ties to the tobacco industry and placed a much higher priority on health care for all. The first health minister of the new government, Nkosazana Zuma, was an ardent supporter of the tobacco-control cause and fearlessly pursued the tobacco control that her predecessor Rita Venter had begun, despite intense opposition from the industry. Even before assuming office as the minister of health in 1994, she committed the African National Congress to take a leadership role when she addressed the first All-Africa Tobacco Control Conference in Harare in 1993.

Despite the influence of the tobacco industry, public health researchers worked tirelessly to bring attention to the dangers of smoking: Professor Harry Seftel's work from the 1970s stimulated many to recognize that unless action was taken, South Africa faced pending chronic disease epidemics. Derek Yach, a researcher who had established evidence on the economic and health impacts of smoking, collaborated in the mid-1980s with local civic groups such as the Tobacco Action Group and international partners to promote tobacco-control efforts.

The first major victory for the antitobacco movement occurred in 1995 with the passage of the Tobacco Products Control Act. The act introduced health warnings, banned smoking on public transportation, and established restrictions on youth under 16 purchasing cigarettes. Although relatively mild in reach, the legislation was an important milestone because it was the first schism between the government and the tobacco industry.

The tobacco-control policies implemented in the second half of the 1990s were bolstered by research at the University of Cape Town, which established the rationale and evidence base for increased taxes on smoking, considered by the group's researchers to be the most cost-effective and powerful way of rapidly reducing smoking. Studies demonstrated that because of the sensitivity of demand for cigarettes to changes in prices, an increase in prices would cause a decline in consumption and at the same time increase tax revenue. Health advocates argued that a tax increase of 50 percent—in their view necessary because the real value of taxes had fallen 70 percent between 1970 and 1990—would lead to 400,000 fewer smokers and an increase in tax revenue of approximately \$92 million.^{14,15}

In 1997, taxes on cigarettes were increased by 52 percent, to reach 50 percent of the value of the retail price of cigarettes. Between 1993 and 2001, the real value of cigarette taxes increased by 215 percent.

(continued on next page)

Box 14–1

South Africa's Story (continued)

In 1999, the Tobacco Products Control Amendment Bill was passed, outlawing smoking in enclosed public places, banning tobacco advertising and sponsorship, and requiring explicit health warnings on all cigarette packs.

The results of the price increases and control measures have been striking. Cigarette consumption fell from 1.9 billion packs in 1991 to 1.3 billion in 2002—a decline of more than 30 percent, peaking after the 1997 tax increases. The sharpest drops have been among youth and the poor, two groups that are most sensitive to changes in price. Smoking prevalence among youth has dropped from 24 percent in 1993 to 19 percent in 2000. At the same time that consumption dropped, tax revenues in South Africa doubled since 1994.

Yach has credited the mix of basic science and political commitment with the passage of one of the world's most far-reaching tobacco-control policies. "You need the right combination of science, evidence, and politics to succeed," he explained. "If you have one without the other, you don't see action."¹⁶

Strengthening Tobacco Controls Worldwide

Both South Africa (Box 14–1) and Poland share a common lesson in battling tobacco. Once smoking is seen for what it is—the leading cause of preventable deaths among adults worldwide—then governments do act. They do so with a set of tools that are powerful, cost-effective, and save millions of lives.

Importantly, the national experiences of Poland and South Africa have not remained confined to the two countries. The leadership created in South Africa about tobacco control was strengthened into global leadership during five years of negotiations, which led to the world's first treaty for public health, the Framework Convention on Tobacco Control. The South African negotiating team played a decisive role in ensuring that the most effective text was accepted first by African countries—and that no watering down could be tolerated—and later by all 192 governments that adopted it in May 2003.

In May 2003, all of WHO's member states unanimously adopted the convention, indicating their commitment to stronger efforts to reduce tobacco use through many of the same interventions that proved successful in Poland and South Africa: health education, tobacco-control

legislation, cigarette taxes, warnings on cigarette packs, restrictions on smoking in public places, and bans on all cigarette advertising and promotion. By the end of 2006, more than 130 countries had ratified the treaty and were beginning to implement it. Although still in its early days, the treaty has played an important role in changing the way that most governments approach tobacco use.

References

1. Peto R, Lopez AD. The future worldwide health effects of current smoking patterns. In: Koop EC, Pearson CE, Schwarz RM, eds. *Global Health in the 21st Century*. New York, NY: Jossey-Bass; 2000.
2. Jha P, Chaloupka F. The economics of global tobacco control. *BMJ*. 2000;321:358–361.
3. Peto R, Lopez A, Boreham J, Thun M, Heath C Jr. Mortality from tobacco in developed countries: indirect estimates from national vital statistics. *Lancet*. 1992;339:1268–1278.
4. Gajalakshmi V, Peto R, Kanaka TS, Jha P. Smoking mortality from tuberculosis and other diseases in India: retrospective study of 43,000 adult male deaths and 35,000 controls. *Lancet*. 2003;363:507–515.

5. Gajalakshmi CK, Jha P, Ranson L, Nguyen S. Global patterns of smoking and smoking-attributable mortality patterns. In: Jha P, Chaloupka FJ, eds. *Tobacco Control in Developing Countries*. Oxford, England: Oxford University Press; 2000.
6. Bonu S, Rani M, Nguyen S, Jha P. Household tobacco and alcohol consumption and child health in India. *Health Policy*. In press.
7. Bobak M, Jha P, Nguyen S. Poverty and smoking. In: Jha P, Chaloupka FJ, eds. *Tobacco Control in Developing Countries*. Oxford, England: Oxford University Press; 2000.
8. Jha P, Chaloupka F. *Curbing the Epidemic: Governments and the Economics of Tobacco Control*. Washington, DC: World Bank; 1999.
9. Federal Trade Commission. *Cigarette Report for 2001*. Washington, DC: Federal Trade Commission; 2003.
10. Jha P, Chaloupka F, eds. *Tobacco Control in Developing Countries*. Oxford, England: Oxford University Press; 2000.
11. Yach D, Hawkes C, Gould L, Hofman K. The global burden of chronic diseases: overcoming impediments to prevention and control. *JAMA*. 2004;291:2616–2622.
12. Zatonski W. *Evolution of Health in Poland Since 1988*. Warsaw, Poland: Marie Skłodowska-Curie Memorial Cancer Center and Institute of Oncology, Department of Epidemiology and Cancer Prevention; 1998.
13. Zatonski W, Harville E. Tobacco control in Poland. *Eurohealth*. 2000;6(2):13–15.
14. Abedian I, van der Merwe R, Wilkins N, Jha P, eds. *The Economics of Tobacco Control: Towards an Optimal Policy Mix*. Cape Town, South Africa: University of Cape Town; 1998.
15. Van Walbeek C. The tobacco epidemic can be reversed: tobacco control in South Africa during the 1990s. Available at: <http://archive.idrc.ca/ritc/SA-finalreport.pdf>. Accessed January 12, 2007.
16. Malan M, Leaver R. Political change in South Africa: new tobacco control and public health policies. In: de Beyer J, Brigden LW, eds. *Tobacco Control Policy: Strategy, Success, and Setbacks*. Washington, DC: World Bank and International Development Research Center; 2003.