

# *Tobacco Policy in the United States*

## LESSONS FOR THE OBESITY EPIDEMIC



KENNETH E. WARNER

On June 16, 2004, cigarette smoking killed some twelve hundred Americans. That shocking death toll warranted no headlines. Neither did the same outcome—some twelve hundred more deaths—the following day, nor the day after. Indeed, it is the rare headline that informs the public that smoking accounts for nearly one of every five deaths in the United States, one in three during middle age. Smoking is simply too commonplace, too mundane. Yet it is far and away the nation's—and increasingly the world's—leading killer. In this chapter I examine the burden smoking has imposed on society and what we have learned in attempting to deal with that burden. I then consider lessons drawn from this experience for addressing the most rapidly growing behavioral cause of chronic disease: the epidemic of obesity, the only behavior that threatens to overtake smoking as a cause of death.

### **The Toll of Smoking**

Cigarette smoking currently kills over four hundred thousand Americans annually. The vast majority are long-time smokers—smoking kills about half of lifelong smokers—but thousands are nonsmokers, victims of exposure to smoke from other people's cigarettes (U.S. Department of Health and Human Services 1989; Samet 2001; Glantz and Parmley 1995).

The lethal danger lies in the chemical stew that is cigarette smoke and the frequency with which it is inhaled. Cigarette smoke consists of more than four thousand chemical compounds, including arsenic, hydrogen cyanide, formaldehyde, benzene, naphthalene, vinyl chloride, lead, polonium-210, cadmium, ammonia, carbon monoxide, and, of course, nicotine. More than forty of the chemical compounds in smoke are known carcinogens. Taking about ten puffs per cigarette, a pack-a-day smoker inhales this potpourri of chemicals 200 times daily, or 73,000 times per year. Over a lifetime of fifty years of smoking, a pack-a-day smoker inhales 3.65 million times, having consumed more than a third of a million cigarettes. There may be no greater testimony to the strength of the human organism than the fact that roughly half of lifelong smokers survive this remarkable chemical assault.

The vast majority of smokers begin smoking as children, when they have no conception of their own mortality and every expectation that they will not continue to smoke as adults. For at least half, this expectation will not be realized, for they quickly become addicted. As smokers grow into adulthood and fail to quit, cognitive dissonance kicks in, allowing them to believe that the dangers of smoking are exaggerated and that, in any case, the dangers are not relevant to them personally. Smokers—especially heavy smokers—systematically underestimate the risks they are incurring (Weinstein 2001).

On surveys, over 70 percent of smokers report that they would like to quit, yet only about 2.5 percent succeed in doing so each year, and these are disproportionately the most educated. Because both quitting and initiation rates reflect educational status, smoking has progressively become concentrated in lower socioeconomic groups that may have less motivation and fewer resources with which to quit. Thus, while only 9 percent of survey respondents with a postgraduate degree smoke today, 29 percent of people lacking a high school degree are smokers (Warner and Burns 2003).

Given the adverse publicity about smoking and social disapproval, remaining smokers may constitute “hard-core” individuals unable or unwilling to quit. The issue is controversial—quit rates have not declined—but evidence is accumulating that future efforts to reduce smoking may require new and more effective methods (Warner and Burns 2003).

### **The Antismoking Campaign**

The modern assault on smoking began in earnest following publication of epidemiological studies linking smoking to lung cancer in the early 1950s, with major health organizations leading efforts to involve the government in a public stance against smoking (U.S. Department of Health and Human Services 1989). Publicity surrounding the publication of the first surgeon general’s report on smoking and health in January 1964 was so intense that per capita cigarette sales plummeted 15 percent by March of that year (U.S. Public Health Service 1964). By year’s end the decline measured 5 percent after sales recovered, but the drop was significant when measured against the nearly annual increases that had occurred since the beginning of the century. The year 1963, it turned out, marked the pinnacle of cigarette consumption in this country.

One indicator of the success of the antismoking campaign is the fact that adult per capita consumption (total cigarettes divided by the population over seventeen years of age) declined from forty-two hundred in 1963 to two thousand in 2001. The U.S. antismoking campaign divides into three phases, the first occurring predominantly through the early 1970s.

#### ***The Campaign’s First Phase: Public Education and Exhortations to Quit***

The naïve expectation of public health campaigners was that, newly informed about the dangers of smoking, smokers would see the error of their ways and quit.

Educated kids would not start. This proved both more difficult and less successful than expected. Through the 1960s, cigarette advertising dominated the airwaves and filled magazine pages. In striking contrast, the public health community, with meager resources, had to rely on news coverage, donated space for antismoking messages, and pleas to school boards to incorporate antismoking education into health curricula.

Two policy developments gave the antismoking message newfound prominence. Shortly after the release of the 1964 surgeon general's report (itself a prime example of public information), and prompted by the Federal Trade Commission, Congress mandated that "one side" of cigarette packs include a health warning label beginning in 1966. Although research later questioned the effectiveness of these warnings, coverage of the debate and the novelty of the warnings themselves undoubtedly had some early impact (U.S. Department of Health and Human Services 1989).

Around the same time, the Federal Communications Commission ruled that its Fairness Doctrine should apply to broadcast advertising of cigarettes. Developed to ensure a diversity of views on political issues, the Fairness Doctrine required broadcasters to donate airtime to the "other side" of controversial issues to produce "balance." The commission concluded that smoking was then a controversial issue and that the heavy presence of cigarette ads demanded a countervailing force. As a result, broadcasters were required to donate airtime to antismoking messages.

The Fairness Doctrine affected broadcasters from mid-1967 through the end of 1970. At their peak, antismoking messages received approximately one minute of airtime for every three minutes of cigarette advertising. Research showed that the novel Fairness Doctrine ads depressed cigarette consumption far more than cigarette ads increased it. Adult per capita cigarette consumption declined during all four years that the antismoking ads aired—the first time in history that per capita consumption had fallen more than two years in a row. And two-year declines had occurred only twice before: during the Great Depression and following the first epidemiological research linking smoking to lung cancer (Warner 1979).

Supported, quietly, by the cigarette industry—which fully appreciated the devastating effect of the Fairness Doctrine ads on sales—Congress banned cigarette ads from radio and TV effective January 2, 1971. This removed the need for broadcasters to donate time to the antismoking message, and the volume of anti-smoking ads plummeted. Per capita consumption rose for the next three years—the first, and last, multiple-year increase since publication of the surgeon general's 1964 report.

The public health community responded in part by adopting a more aggressive—but still publicity-based—approach to reducing smoking, one inaugurated in the Fairness Doctrine ads. From informing smokers about the dangers of smoking in the 1960s, the strategy shifted in the early 1970s toward exhorting smokers to quit, in part by attempting to embarrass or shame them into doing so. Antismoking "marketers" portrayed smoking as antisocial and stupid; they made a mockery

of smoking and often smokers. Such marketers also appealed to smokers' concern for their loved ones by disseminating images of young children, often with tears in their eyes, begging their parents to quit.

The first decade of the antismoking campaign yielded mixed results. Per capita cigarette consumption had leveled off, and research indicated that per capita consumption would have continued to rise without the campaign, reaching 20–30 percent higher by 1975 (Warner 1977). Yet these aggregate figures masked developments that created cause for concern. One of the most striking effects of the campaign was its differential impact on smokers depending on their education. In the mid-1960s, smoking prevalence varied little by educational attainment. Shortly thereafter a gap emerged, with prevalence declining steadily among the nation's most educated population but changing little among the least educated. This gap widened over the years (Warner and Burns 2003).

The message was clear, if not then widely appreciated: education and exhortation were working for the educated populace; the strategy was failing for the less educated. Overall, the campaign had succeeded in stabilizing smoking but not in achieving the major declines its leaders had expected. Some smokers were responding to the antismoking message but many were not. Given the steady rise of smoking among women during the decade preceding the antismoking campaign, mortality was rising (U.S. Department of Health and Human Services 1989). All was not well.

### ***The Campaign's Second Phase: The Nonsmokers' Rights Movement***

In a 1972 report, Surgeon General Jesse Steinfeld observed that cigarette smoke might damage nonsmokers' health (U.S. Department of Health, Education, and Welfare 1972). This was the first official mention of the possibility, and one of the few cases where a surgeon general's report "scooped the field." Significant scientific evidence that environmental tobacco smoke (ETS) harmed the health of nonsmokers did not emerge until a decade later (U.S. Department of Health and Human Services 1989). Since then, a wealth of studies has shown that cigarette smoke causes lung cancer in heavily exposed but otherwise healthy nonsmoking adults, also likely causes a large number of heart disease deaths, and damages the respiratory function and health of children (Glantz and Parmley 1995). Based on the scientific evidence, in 1992 the Environmental Protection Agency declared ETS a Class A carcinogen (U.S. Environmental Protection Agency 1992). If the association with heart disease proves causal, as appears likely, environmental tobacco smoke may induce forty thousand to fifty thousand deaths per year, placing involuntary or passive smoking just behind active smoking, obesity, and alcohol as the leading behavior-related causes of death in our society.

While the scientific evidence on ETS dates from the early 1980s, public concern—first with the "fairness" of nonsmokers being exposed to ETS and then with its health effects—emerged much earlier. In 1973 Arizona adopted the first modern state law restricting smoking in public places for public health reasons. Two years later Minnesota adopted the first comprehensive clean indoor air law. Other states rapidly followed suit, with laws growing more restrictive over time. Today

forty-five states have some restrictions on the books. The latest trend is toward banning smoking completely in restaurants and bars, mandatory, as of this writing, in five states and dozens of cities and counties.

The nonsmokers' rights movement is the most sustained and in many ways most transforming phase of the antismoking campaign. Now spanning three decades, this phase converted smoking from a socially acceptable behavior to one pursued by social pariahs. Clean indoor air laws and associated private policies (smoking prohibitions in businesses, no-smoking policies in private homes) have both followed and contributed to the evolution of a nonsmoking ethos. Clearly, the majority support required to pass a law derives in some fundamental way from the will and support of the public. But the growing presence of such laws itself transforms public attitudes toward smoking.

The proportion of the citizenry stating that they prohibit smoking in their own homes has risen dramatically, following the adoption of public policies on clean indoor air. These private policies serve as a major indicator of the social attitude toward smoking, especially since their growth has considerably exceeded the rate of decline in smoking prevalence (Soliman, Pollack, and Warner 2004). More visible, and equally compelling, is the rash of state laws and city and county ordinances prohibiting smoking in all restaurants and bars.

Prohibitions on indoor smoking, intended to protect the health and rights of nonsmokers, have succeeded (Hopkins et al. 2001). An additional impact—one not publicly anticipated by those urging their adoption—is a rise in the rate of smoking cessation. Studies principally comparing workplaces with and without smoking prohibitions consistently find higher rates of cessation among employees in firms prohibiting smoking (Fichtenberg and Glantz 2002). That impact ranks clean indoor air laws and policies as among the most effective tobacco-control policy measures available.

### ***The Campaign's Third Phase: Comprehensive State Tobacco-Control Programs***

In 1988, California activists successfully passed an initiative raising the state's cigarette excise tax by twenty-five cents per pack, with some \$100 million of the new revenues dedicated annually to tobacco control. Thus was born the first comprehensive state-based tobacco-control program. Through an aggressive antismoking media campaign, support and passage of strong local clean indoor air ordinances, support of telephone stop-smoking hotlines, and other initiatives, the California program led to declines in per capita consumption well above those in the rest of the nation. Declining smoking-related mortality rates were also associated with the program (Farrelly, Pechacek, and Chaloupka 2003; Glantz and Balbach 2000).

In 1992, Massachusetts successfully followed with a similar ballot initiative raising the state's cigarette excise tax by a quarter per pack, with a portion of the revenues used to create the Massachusetts Tobacco Control Program. Like the California experience, the Massachusetts program is credited with producing significant declines in smoking among both children and adults. Several other states have

now developed comprehensive programs of their own, including Arizona, Oregon, Maine, and Alaska. National initiatives launched by the National Cancer Institute, American Cancer Society, and The Robert Wood Johnson Foundation have provided funding to most states to begin tobacco-control programs (Farrelly, Pechacek, and Chaloupka 2003).

The Centers for Disease Control and Prevention (CDC) concluded that comprehensive state-based programs are an effective and cost-effective means of controlling tobacco use and of achieving significant public health gains. CDC developed a guide to comprehensive state programs, identifying nine components and estimating state-specific funding needs (Centers for Disease Control and Prevention 1999). The Institute of Medicine has also endorsed comprehensive programs as a cost-effective investment in public health (National Cancer Policy Board 2000), and a recent econometric analysis reveals a clear association between states' tobacco-control investments and ensuing declines in smoking (Farrelly, Pechacek, and Chaloupka 2003).

For a brief historical moment, the air was filled not with smoke but with optimism that soon all states would mount credible, comprehensive tobacco-control programs. In 1998, the state attorneys general announced a settlement of their Medicaid lawsuits against the tobacco industry (the Master Settlement Agreement, or MSA), which included an unprecedented payout of \$206 billion to forty-six states over a twenty-five-year period. Four other states had settled individually with the industry prior to MSA; the total payout from both efforts came to \$246 billion. The attorneys general most heavily involved in the MSA negotiations envisioned that all states would dedicate a significant proportion of the settlement funds to an aggressive assault on youth smoking.

Such was not to be. Although a few states used settlement funding for tobacco control, only a handful ever achieved CDC's minimum funding level for a comprehensive program. Instead, states devoted the vast majority of the money to other purposes, ranging from education to road repair. More recently, many states have drawn on their future MSA payments to help cover large budget deficits. Massachusetts has cut its model program by 90 percent. California's program, which often struggled with a legislature intent on redirecting excise tax revenues, has found the problem intensifying as the state grapples with the nation's largest state deficit. The national funding initiatives are drying up.

It is far too early to declare the demise of the era of comprehensive state tobacco-control programs; in a rebounding economy the tobacco-control community's numbers, sophistication, and influence could revitalize these efforts. But it is also clear that the promise of the California and Massachusetts experiments cannot come to full realization nationwide under these circumstances. From the heady days of the mid- to late-1990s, the antismoking campaign has entered an uncertain, uncomfortable, and mostly discouraging period, with abundant resources having disappeared as precipitously as they appeared on the scene just a few years ago.

### ***The Tobacco Lawsuits***

The state lawsuits, and the resulting MSA, constituted one highly visible component of lawsuits that have dotted the tobacco-control landscape for years. The lawsuits themselves divide into three distinct “waves” (Rabin 2001). The most recent wave—which includes the state suits and a variety of class-action lawsuits—has clearly changed the face of tobacco control in the United States and abroad.

The suits have exerted a profound impact on multiple aspects of smoking and health. Electronic publication of lawsuit-generated internal documents has created a treasure trove of facts and incriminating statements. The MSA has raised cigarette prices, restricted marketing, and created a national countermarketing campaign. Other suits have occasionally even threatened the manufacturers with the prospect of financial ruin.

These impacts notwithstanding, with the exception of the MSA, much of the lawsuits’ potential to affect smoking still lies in the future. Verdicts favoring plaintiffs will have to survive a lengthy appeals process to impose a truly substantial financial burden on cigarette manufacturers, one that would force prices up dramatically or even cause the manufacturers to seek protection from bankruptcy. It remains to be seen whether, collectively, the lawsuits will fundamentally alter the landscape of tobacco use in the future or merely constitute a fascinating (and temporally important) chapter in tobacco control history.

### ***Other Dimensions of the Antismoking Campaign***

Preeminent among other facets of the campaign has been cigarette taxation. Raising cigarette prices, primarily through taxation, is one of the most effective policy tools to reduce smoking, and a popular one (Chaloupka et al. 2000). Raising the tax rate allows legislators to do good while doing well: while decreasing the health burdens of smoking, a tax increase also boosts government revenues.

Congress has raised the federal cigarette tax infrequently and only modestly, a reflection of the influence of tobacco states. An increase in the federal tax also reduces state revenues: the tax induces quitting, while a state’s take per pack has not changed. Absent some quid pro quo, states thus oppose increases in the federal cigarette tax.

In contrast, tax increases have been frequent in many states and have resulted in high per-pack taxes in some; as of July 1, 2003, New Jersey tops the list, with a tax of \$2.05 per pack. Thirteen other states (and the District of Columbia) have tax rates of \$1.00 or more per pack. (New York City imposes a \$1.50 tax per pack in addition to the state’s \$1.50 tax.) Historically, state tax increases have come (and gone) in waves. From 1964 through 1972, numerous states increased their taxes, causing the real price of cigarettes to rise substantially. Over the next decade, concerns that tax-induced interstate price differences were fostering cigarette smuggling from low- to high-priced states led to a period of few increases; real prices actually fell. Taxes and prices cycled back up and then down again. In very recent years prices have risen substantially, the result of MSA-induced price increases (used to fund the state payments required of the industry) and a new spate of state

tax increases responding to burgeoning state deficits. Cigarette consumption has always varied inversely with real price.

Antismoking efforts also include restrictions on cigarette sales to or purchases by youth, restrictions on advertising, modification of warning labels, and so on. An effective tool, inaugurated during the Fairness Doctrine period in the late 1960s, is the use of media countermarketing. Several states have made media campaigns a centerpiece of their efforts. The MSA included a provision that led to a national media campaign known as “Truth.” Evidence from these experiences supports the proposition that well-designed, well-funded, and sustained counteradvertising campaigns can have a significant impact on smoking among both youth and adults (Farrelly, Niederdeppe, and Yarsevich 2003).

### ***The Anti-antismoking Campaign: The Role of the Tobacco Industry***

No discussion of the antismoking campaign would be complete without recognition of the obstructionist role of the tobacco industry. The industry has worked hard and often successfully to deceive the public about the dangers of smoking, silence critics, and buy the silence of potential critics such as the media. The industry has also used financial largesse to enlist organizational allies to develop the charade of grassroots opposition to tobacco-control measures, and again relied on deep pockets to develop close-knit relationships with legislators who block public health measures designed to reduce smoking (Advocacy Institute 1998).

The campaign of deception dates from a 1954 industry ad entitled “A Frank Statement to Cigarette Smokers” (Tobacco Industry Research Committee 1954). The ad assured the American public that the companies “accept an interest in people’s health as a basic responsibility, paramount to every other consideration in our business. . . . We always have and always will cooperate closely with those whose task it is to safeguard the public health.” Internal industry documents reveal that the “frank statement” represented the first step in a public relations campaign to deny the dangers of smoking and challenge the public health establishment at every turn.

As recently as 1994, the CEOs of all the nation’s major cigarette companies testified before Congress that they did not believe that smoking was addictive and did not know that it caused fatal disease. Their own scientists and lawyers had known both facts for decades and had been consistently telling them so.

Today the cigarette companies are trying to present a “new face” to the public. They acknowledge the dangers and addictiveness of smoking and claim, much as they did in 1954, that they want to cooperate with public health authorities to keep kids off cigarettes and help smokers who wish to quit to do so. The tobacco-control community is justifiably skeptical.

### **Evaluating the Antismoking Campaign and Its Future**

The numerous, disparate, and uncoordinated efforts to combat smoking—public sector and private, institutional and individual—that constitute America’s national antismoking campaign have produced a remarkable record of public health

success. As a result of the campaign, smoking prevalence has fallen by nearly half. Extrapolating from earlier research, one can conclude that, had the antismoking campaign never occurred, well over 100 million U.S. adults would have smoked in 2003—in contrast with fewer than half that number who actually did smoke. In 2001 Americans consumed two thousand cigarettes per adult. Had the campaign never materialized, the figure would be in the vicinity of six thousand cigarettes. Literally millions of Americans have each enjoyed an average of fifteen to twenty additional years of life as a result of their decisions not to smoke or to quit in response to the campaign. No other public health movement in the past half-century has produced comparable health benefits.

At the same time, 45 million Americans continue to smoke, despite a highly unsupportive social environment. Beyond the resulting deaths, additional millions live with smoking-induced emphysema, heart disease, and cancer. The continuing presence of smoking serves as a stark reminder of the tenacity of nicotine addiction, both for individuals and historically. In the late sixteenth century, Turkish Sultan Murad IV decreed tobacco smoking punishable by death. This rather austere tobacco-control policy (the first to prove that smoking was, in fact, hazardous to health) did not stop smoking in Turkey. It is perhaps not surprising, therefore, that our own smoker-unfriendly environment is not sufficient to clear the air.

Indeed, a few tobacco-control leaders are now contemplating a next phase for the antismoking campaign: an era of harm reduction. Harm reduction entails offering inveterate smokers—those who cannot or will not quit—the option of switching from cigarette smoking to a hopefully less hazardous form of ingesting nicotine. The notion of harm reduction is highly controversial (Martin, Warner, and Lantz 2004). But its serious consideration reflects the continuing burden of smoking, the fact that notwithstanding the enormity of its accomplishments, the antismoking campaign remains a long way from victory.

### **Lessons for Public Health**

Tobacco-control successes would multiply if proponents could apply lessons from the experience elsewhere in public health. All too often, the public health “community” functions as a series of isolated silos, each enclosing advocates and professionals dedicated to a single issue, such as unprotected sex, lack of exercise, or tobacco. Those who do make occasional forays outside their silos often produce useful insights.

Tobacco and alcohol abuse—seemingly a natural set of subjects for cross-fertilization—have benefited from such interdigitation on occasion, but far less often than one might expect. And those interactions that have occurred have been only partially productive. Advocates in the alcohol field relied heavily on the tobacco-control experience in securing congressional legislation mandating alcohol warning labels. The tobacco experience indicated, however, that small labels placed in obscure locations were not likely to be effective. Yet the alcohol label is itself small, wordy, and more obscure than any cigarette label. Did advocates of alcohol labels ignore the evidence, or did they believe, as one concluded, that it was not

the labels per se that mattered, but rather the “noise” in Congress and the media surrounding debate over legislation?

On the other side of the exchange, tobacco-control advocates drew on the alcohol-control community’s experience to push for state laws prohibiting minors from buying cigarettes. Such laws are now universal throughout the country. But their effectiveness relies on enforcement, something the experience with alcohol should have taught. Only recently has the tobacco-control community begun to address the enforcement issue aggressively, but with mixed success. As the alcohol example demonstrated long ago, even reasonably well-enforced minimum-age-of-purchase laws cannot stop minors from acquiring a product (Wakefield and Giovino 2003).

Reflecting the many decades of experience with the antismoking campaign, tobacco control likely has more to offer other domains of public health than they have to offer it. Many lessons are direct and self-evident, and many have been applied. Taxation as a successful deterrent to teen smoking has had applications in alcohol taxation, for example. A congressional hearing several years ago focused on taxation of cigarettes and bullets, the latter seen as a (small) deterrent to gun violence. Most recently, the novel and successful experience with state and class-action tobacco lawsuits generated a similarly reasoned legal assault on guns. Today the intellectual leaders of the tobacco lawsuit strategy provide direct guidance to lawyers and nutrition experts exploring the use of lawsuits against the food industry to address America’s burgeoning obesity epidemic.

That epidemic has all the signs of becoming America’s next tobacco crisis. Thus it seems particularly appropriate to explore how the tobacco-control experience might inform the public health assault on the country’s newest epidemic.

### **Lessons from the Antismoking Campaign for Controlling Obesity**

Today’s obesity epidemic bears a striking resemblance to the tobacco epidemic at mid-century in many ways. Driven by both biology and behavior, the product of an environment that seduces and induces abuse (consider junk food and fast-food advertising directed at children), the rising tide of excess weight has created the second-greatest source of preventable, premature mortality in our society. With smoking on the decline and obesity rising rapidly, the latter may soon overtake the former as a cause of death (Centers for Disease Control and Prevention 2003).

Biologically, humans are hard-wired to seek out high-calorie, fatty foods. Whenever our early ancestors captured animal prey, they stuffed themselves to survive the long periods when they would go without. In an era of plentiful, inexpensive, and easily accessible food, much of it laden with fat, we continue to crave the tastes that permitted our ancestors to survive and now threaten our health. Eating occurs in a “toxic environment” that fosters the now-counterproductive behavior of bingeing on fatty, high-calorie foods (Brownell and Horgen 2003).

Economic and social factors create a real challenge for most people to avoid

overeating. Food manufacturers find it especially profitable to advertise sugary cereals and fast-food meals to children. Budget-challenged school systems contract for corporate food sponsorships and vending in exchange for new resources. Low prices make unhealthy manufactured foods far more affordable than fresh produce. The economics of food preparation lead to gigantic portions in restaurants. In their convenience and low cost, attractive and ubiquitous fast-food restaurants easily compete with work-stressed parents intending to prepare meals at home. The information-age work environment has greatly diminished physical activity, which burned off calories. Suburban sprawl makes walking and biking endangered modes of transportation. What's more, like smoking today, obesity disproportionately afflicts the most disenfranchised members of society. The poor care more about food prices, have less access to fresh produce, and find dangerous streets and lack of fitness facilities deterrents to regular exercise.

As an epidemic, obesity has become a national concern only recently. The response has a familiar ring to students of the early phases of the antismoking campaign. Efforts are inaugurated to educate the public about healthy eating habits and the need for regular physical exercise. Calls for parental responsibility dominate responses to children's lust for fast food. Discussions about limiting food advertising on children's TV shows reappear. Leading food manufacturers and purveyors are urged to produce and promote healthy food. The government seeks to collaborate with the industry in finding solutions. Advocates call for more informative labeling of manufactured food products and new labeling of restaurant meals.

Like the first phase of the antismoking campaign, the obesity-prevention information and exhortation effort will win converts. Some people—primarily drawn from the most highly educated segment of society—will take (and indeed have taken) public health messages to heart and will modify their behavior accordingly. In the face of nearly overwhelming social forces, however, the odds of a substantial turnaround are low. As long as it persists in its current form, the “toxic environment” will poison efforts to make “individual responsibility” an important answer to the problem. Consider the challenge confronting well-intentioned parents who wish to guide their children toward a healthy diet. What those children hear from their parents contradicts what they see on TV and billboards, what they are offered in school, and what their friends consume.

A principal implication is that education, exhortation, and the theme of individual responsibility cannot do it all, as they could not with tobacco. In particular, they are likely to have the least impact on those most burdened—people mired in poverty. More assertive public policy interventions will be needed, many possibly of a regulatory nature. The public health community will have to confront the toxic environment directly, in a manner that risks creating an adversarial relationship with the food industry. This will be a source of discomfort for many people on both sides. Furthermore, as the tobacco-control experience recommends, public health forces will need to develop multipronged and comprehensive strategies, and remain for the long haul (Mercer et al. 2003). Indeed, in a public health battle against a behavior-related health problem, be it obesity, smoking, illicit drugs, teen

pregnancy, or gun violence, “victories” are tallied by the reduction in damage wrought, not by the final conquest of the risk factor in question.

The similarities between the early assault on tobacco and the contemporary attack on obesity raise an intriguing question: Must a full-fledged public health campaign begin with the least combative and coercive intervention—information—before launching into an adversarial mode? To persuade disinterested but necessary parties that more assertive methods are essential, proponents may need to try this most “reasonable” of all approaches first. However, the obesity campaign seems to be mixing more assertive, even combative, elements of a public health campaign with multiparty “discussion” of the problem. For example, prominent activists and scientists have called for and, in some instances, achieved “snack taxes.” Their interest in using an excise tax to simultaneously deter unhealthy eating and raise funds to combat it derives directly from the successes of cigarette taxation. Calls for bans on food advertising aimed at children also resemble tobacco-control strategies, as do efforts to remove soft drink sponsorship from schools.

An excise tax on “bad foods” deserves explicit attention, especially if it can be combined with a food subsidy program for the poor that facilitates purchase of “good foods” such as fresh produce. The tax-and-subsidy combination is attractive for both practical and political reasons. Practically, the tax would raise revenues to support a food subsidy program that, in budget-strapped times, likely could not be sold without a new revenue source. The tax would also likely discourage junk-food eating more among the price-sensitive poor than among the rich. Meanwhile, subsidizing the purchase of fresh produce for the poor would allow substitution of now less expensive fruits and vegetables for now more expensive snack foods. The availability of “fresh produce food stamps” could dramatically boost the number of retail outlets selling fresh produce in the nation’s inner cities. The paucity of retail availability of fresh produce constitutes a significant barrier to healthy diets among poor people. Selling a snack tax may be far easier if revenues are designated to help the poor, especially poor children, secure healthier diets. One survey after another has found that Americans are especially supportive of cigarette taxes if revenues are earmarked for programs designed to prevent youth smoking.

Targeting population subgroups with interventions believed to be more effective for them is likely to emerge as an important feature of the national attack on obesity. In the early antismoking movement, campaigners failed to distinguish between high- and low-education smokers, for example, and between African American and white smokers. Over time we learned which interventions had the most impact on which subgroups. Early media campaigns worked best with educated white smokers. Later media campaigns targeted different socioeconomic and ethnic groups. California’s campaign, for example, included messages developed specifically for Hispanics, Koreans, and African Americans.

Success with antismoking countermarketing recommends using the media to sell healthy eating behaviors. A large, sustained, professionally developed media campaign could provide at least a modicum of competition for pervasive enticements to consume soft drinks, cookies, candy bars, potato chips, and fast-food meals. The tobacco-control experience emphasizes that a campaign that is poorly

funded, of short duration, and prepared by well-meaning amateurs is unlikely to have much impact. Reliance on donated airtime will not work. Scores of worthy causes compete for scarce public-service announcement spots. Substantial financing would have to be secured to mount an effective campaign, probably on the order of \$100 million or more annually. Snack taxes could contribute here, too—a modest national tax could generate billions of dollars—as might voluntary “good-will” contributions from food manufacturers, many of whom would have a direct financial interest in moving America’s dietary habits in a salutary direction.

The fact that some food producers might participate in such an endeavor suggests a potentially fundamental difference between the tobacco and obesity cases. Smoking-prevention campaigns often portray tobacco companies as exploiting the young. Through media portrayals, as well as news conferences and congressional hearings, the tobacco-control community strives to reveal companies’ disinterest in the futures of their young victims. Many food manufacturers are inextricably linked to Big Tobacco—Kraft owns Nabisco, and Philip Morris (recently renamed Altria) owns Kraft, for example—and it is easy to see them as driven by similar greed and disdain for the customer.

The situations are not entirely the same, however. Food manufacturers produce low-fat versions of their traditional products and, increasingly, trans-fat-free snacks. Soft drink producers have introduced diet versions of their mainstay products. Fast-food purveyors have reduced their use of unhealthy oils and added salads to their menus. One can ask whether these alternatives have made much of a difference in the U.S. diet, as Americans’ weights have burgeoned, but food manufacturers’ behavior appears less reprehensible on the surface than that of the tobacco companies. Cigarette manufacturers, in contrast, sell only unhealthy products (although their emerging emphasis on harm reduction products bears some resemblance to snack food producers’ introduction of low-fat snacks) (Martin, Warner, and Lantz 2004). Evil tobacco companies thus make for a far more appealing public policy target than mixed-message food manufacturers.

More generally, the obesity issue presents a far more complicated picture than does tobacco control. Cigarettes offer smokers few benefits other than satisfying nicotine cravings; the product is clearly not needed to sustain life. And as addictive as nicotine is, smokers can cease cigarette consumption entirely. Half of all Americans who have ever smoked have done so. Especially today, given smoke-free workplaces and public buildings, and with cigarette billboards now removed from the landscape, former smokers can reside in an environment relatively free of cues to smoke.

In obvious contrast, food is essential. Obese people must eat, and the cues to eat are ubiquitous. At the personal level, this helps explain why the battle of the bulge is so much more difficult than quitting smoking: the agent is ever-present, literally “in your face.” At the public level, the necessity and positive values of food mean that policy cannot create a “food-free” environment. The clean indoor air law that has transformed Americans’ attitudes toward smoking and boosted quitting in environments (notably workplaces) that prohibit smoking has no equivalent in the world of obesity. This means that very few dieters manage to sustain

significant weight loss, far less than the fraction of former smokers who remain abstinent.

Some lessons from the clean indoor air movement do apply to the obesity epidemic, however. While one cannot envision (nor desire) a food-free environment, one can easily imagine a junk-food-free environment. This is the goal of people working to remove the pervasive influence of junk food in schools, some of it sponsored by the manufacturers, much of it in response to student demand. Research has shown that replacing soft drinks with fruit juices and bottled water in vending machines improves students' diets (Brownell and Horgen 2003). Replacing pizza, burgers, and fries with salads and healthy sandwiches in cafeterias could also alter students' diets. Clearly, achieving such changes will be extraordinarily difficult; but think back twenty-five years. Who would have believed it possible that major cities, entire states, would ban smoking in all restaurants and bars?

Much of this discussion focuses on community and other social interventions; much, either implicitly or explicitly, emphasizes prevention rather than attempts to treat obesity. However, the case for treating obesity may be compelling, and lessons from tobacco may be relevant here as well. Broader social interventions probably use scarce resources more cost-effectively than individualized clinical treatment of smoking addiction. Still, clinical treatment for smoking cessation is "the gold standard of health care cost-effectiveness" (Eddy 1992). Only a minority of treated smokers succeeds in quitting, but the low cost of treatment, combined with the high health benefits of success, create an attractive cost-effectiveness outcome. Especially given that individualized treatment may be necessary for certain smokers to quit—namely, those who do not respond to social interventions—health groups should urge providers and insurance companies to cover cessation counseling and treatment. That many providers do not offer such treatment reflects a constellation of problems surrounding the delivery of behavioral counseling in the health care setting (Warner 1997).

Likely, the most important message from the antismoking campaign is that tackling the obesity problem requires a sustained, thoughtful, well-resourced, multidimensioned effort. Such an effort must begin with education and exhortation: with creative use of the media to get the word out. It must include concerted attempts to convince major economic interests—including food producers and fast-food purveyors—to engage in enlightened self-interest by supporting constructive initiatives (a healthy-eating campaign) and dissociating themselves from destructive ones (product placement in schools). It should engage the broader community in encouraging physical activity (such as by creating convenient walking and bike paths). An obesity-control movement must be prepared to fight the prolonged and painful battles to achieve meaningful public policy.

Improved food labeling is one such battle that has been fought with considerable success. Junk food excise taxes constitute another, where forays have achieved mixed success at best, with a limited number of small taxes having been adopted to date, several of which have been eliminated subsequently. Anti-obesity campaigners must remain vigilant for external developments that may profoundly affect their work and figure out how to maximize the benefits from them. The to-

bacco lawsuits are a case in point, one that lawyers viewing obesity as a new target of opportunity have already borrowed. Finally, underpinning both policy and treatment interventions must be a sound base of research. Its contribution to tobacco control has been vital (Warner 2004).

The remarkable achievements of the antismoking campaign notwithstanding, the public health community is a long way from declaring victory over tobacco. The lesson is clear: obesity-control campaigners must set realistic goals, derive satisfaction from partial victories, and commit for the long run.

### References

- Advocacy Institute. 1998. *Smoke and Mirrors: How the Tobacco Industry Buys and Lies Its Way to Power and Profits*. Washington, DC: Advocacy Institute.
- Brownell, K. D., and K. B. Horgen. 2003. *Food Fight: The Inside Story of the Food Industry, America's Obesity Crisis, and What We Can Do About It*. Chicago, IL: Contemporary Books.
- Centers for Disease Control and Prevention. 1999. *Best Practices for Comprehensive Tobacco Control Programs*. Atlanta, GA: National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. Available at [www.cdc.gov/tobacco/research\\_data/stat\\_nat\\_data/bpcitation.htm](http://www.cdc.gov/tobacco/research_data/stat_nat_data/bpcitation.htm) (accessed September 22, 2003).
- . 2003. *U.S. Obesity Trends, 1985–2001*. Atlanta, GA: National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition and Physical Activity. Available at [www.cdc.gov/nccdphp/dnpa/obesity/trend/maps/](http://www.cdc.gov/nccdphp/dnpa/obesity/trend/maps/) (accessed September 22, 2003).
- Chaloupka, F. J., T-W. Hu, K. E. Warner, et al. 2000. The Taxation of Tobacco Products. In *Tobacco Control in Developing Countries*, ed. P. Jha and F. J. Chaloupka. New York, NY: Oxford University Press.
- Eddy, D. M. 1992. David Eddy Ranks the Tests. *Harvard Health Letter* July suppl.: 10–11.
- Farrelly, M. C., J. Niederdeppe, and J. Yarsevich. 2003. Youth Tobacco Prevention Mass Media Campaigns: Past, Present, and Future Directions. *Tobacco Control* 12 (suppl. 1): i35–i47.
- Farrelly, M. C., T. F. Pechacek, and F. J. Chaloupka. 2003. The Impact of Tobacco Control Program Expenditures on Aggregate Cigarette Sales, 1981–2000. *Journal of Health Economics* 22: 843–859.
- Fichtenberg, C. M., and S. A. Glantz. 2002. Effect of Smoke-Free Workplaces on Smoking Behaviour: Systematic Review. *British Medical Journal* 325: 188–194.
- Glantz, S. A., and W. W. Parmley. 1995. Passive Smoking and Heart Disease: Mechanisms and Risk. *Journal of the American Medical Association* 273: 1047–1053.
- Glantz, S. A., and E. D. Balbach. 2000. *The Tobacco War: Inside the California Battle*. Berkeley: University of California Press.
- Hopkins, D. P., P. A. Briss, C. J. Ricard, et al. 2001. Reviews of Evidence Regarding Interventions to Reduce Tobacco Use and Exposure to Environmental Tobacco Smoke. *American Journal of Preventive Medicine* 20 (suppl. 2): 16–66.
- Martin, E. G., K. E. Warner, and P. M. Lantz. 2004. Tobacco Harm Reduction: What Do the Experts Think? *Tobacco Control* 13, no. 2: 123–128.
- Mercer, S. L., L. W. Green, A. C. Rosenthal, et al. 2003. Possible Lessons from the Tobacco Experience for Obesity Control. *American Journal of Clinical Nutrition* 77 (suppl): 1073S–1082S.

- National Cancer Policy Board. 2000. *State Programs Can Reduce Tobacco Use*. Institute of Medicine/National Research Council. Washington, DC: National Academies Press.
- Rabin, R. L. 2001. The Third Wave of Tobacco Tort Litigation. In *Regulating Tobacco*, ed. R. L. Rabin and S. D. Sugarman. New York: Oxford University Press.
- Samet, J. M. 2001. The Risks of Active and Passive Smoking. In *Smoking: Risk, Perception, and Policy*, ed. P. Slovic. Thousand Oaks, CA: Sage.
- Soliman, S., H. A. Pollack, and K. E. Warner. 2004. Decrease in the Prevalence of Environmental Tobacco Smoke Exposure in the Home during the 1990s in Families with Children. *American Journal of Public Health* 94: 314–320.
- Tobacco Industry Research Committee. 1954. A Frank Statement to Cigarette Smokers (ad in over four hundred U.S. newspapers). Available at <http://tobaccodocuments.org/ctr/CTRMN043095-3096.html> (accessed September 22, 2003).
- U.S. Department of Health and Human Services. 1989. *Reducing the Health Consequences of Smoking: 25 Years of Progress. A Report of the Surgeon General*. Public Health Service, Centers for Disease Control, Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. DHHS publication no. (CDC) 89–8411. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health, Education, and Welfare. 1972. *The Health Consequences of Smoking. A Report of the Surgeon General: 1972*. Health Services and Mental Health Administration, Public Health Service. DHEW publication no. (HSM) 72–7516. Washington, DC: U.S. Government Printing Office.
- U.S. Environmental Protection Agency. 1992. *Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders*. EPA/600/6-90/006F. Washington, DC: Office of Air and Radiation, Office of Research and Development.
- U.S. Public Health Service. 1964. *Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service*. U.S. Department of Health, Education, and Welfare, Center for Disease Control. PHS publication no. 1103. Washington, DC: U.S. Government Printing Office.
- Wakefield, M., and G. Giovino. 2003. Teen Penalties for Tobacco Possession, Use, and Purchase: Issues and Evidence. *Tobacco Control* 12 (suppl. 1): i6–i13.
- Warner, K. E. 1977. The Effects of the Anti-Smoking Campaign on Cigarette Consumption. *American Journal of Public Health* 67: 645–650.
- . 1979. Clearing the Airwaves: The Cigarette Ad Ban Revisited. *Policy Analysis* 5: 435–450.
- . 1997. Cost-Effectiveness of Smoking Cessation Therapies: Interpretation of the Evidence and Implications for Coverage. *PharmacoEconomics* 11: 538–549.
- . 2004. Tobacco Policy Research: Insights and Contributions to Public Health Policy. In *To Improve Health and Health Care*, vol. 8, ed. S. L. Isaacs and J. R. Knickman. New York: Jossey-Bass.
- Warner, K. E., and D. M. Burns. 2003. Hardening and the Hard-Core Smoker: Concepts, Evidence, and Implications. *Nicotine and Tobacco Research* 5: 37–48.
- Warner, K. E., and H. A. Murt. 1983. Premature Deaths Avoided by the Antismoking Campaign. *American Journal of Public Health* 73: 672–677.
- Weinstein, N. D. 2001. Smokers' Recognition of Their Vulnerability to Harm. In *Smoking: Risk, Perception, and Policy*, ed. P. Slovic. Thousand Oaks, CA: Sage.