2005

Public Health Advocacy to Change Corporate Practices: Implications for Health Education Practice and Research

Nicholas Freudenberg
CUNY School of Public Health

Public Health Advocacy to Change Corporate Practices: Implications for Health Education Practice and Research

Nicholas Freudenberg, DrPH

Corporate practices, such as advertising, public relations, lobbying, litigation, and sponsoring scientific research, have a significant impact on the health of the people in the United States. Recently, health professionals and advocates have created a new scope of practice that aims to modify corporate practices that harm health. This article describes how corporate policies influence health and reviews recent health campaigns aimed at changing corporate behavior in six industries selected for their central role in the U.S. economy and their influence on major causes of mortality and morbidity. These are the alcohol, automobile, food, gun, pharmaceutical, and tobacco industries. The article defines corporate disease promotion and illustrates the range of public health activities that have emerged to counter such corporate behaviors. It analyzes the role of health professionals, government, and advocacy groups in these campaigns and assesses the implications of this domain for health education practice and research.

Keywords: *health promotion; corporations; public health policy; advocacy*

In recent years, citizens, consumer and health activists, state and local government officials, and health professionals have created a new arena of public health advocacy designed to change corporate policies that damage health. Tobacco control activists have been at the forefront, winning new legislation to restrict advertising, limit public smoking, and raise excise taxes and forcing the tobacco industry to contribute billions of dollars to pay for tobacco-related illnesses and support efforts to reduce smoking (Glantz & Balbach, 2002; Kluger, 1997; Schroeder, 2004). More recently, however, consumer and environmental activists have also targeted the automobile industry for its production and advertising of unsafe and polluting sports utility vehicles (SUVs; Bradsher, 2002; Gladwell, 2004). Health, food, and nutrition groups have challenged the food industry for its contributions to obesity and diabetes (Nestle, 2002, 2003), and antiviolence, public safety, and health organizations have opposed the marketing and production practices of

---

Nicholas Freudenberg, Hunter College, City University of New York.

Address reprint requests to Nicholas Freudenberg, DrPH, 425 East 25th Street, New York, NY 10010; e-mail: nfreuden@hunter.cuny.edu.

Partial support for the research in this report was provided by the American Legacy Foundation through a small innovative grant award to the author. Thanks to Monica Serrano for assistance in preparing the article and to Wendy Chavkin, Sandro Galea, Susan Klitzman, and Marc Zimmerman for their helpful suggestions. All views expressed herein are those of the author and do not necessarily represent the positions of the funder or other institutions.

Health Education & Behavior, Vol. 32 (3): 298-319 (June 2005)
DOI: 10.1177/1090198105275044

the gun industry (P. H. Brown & Abel, 2003; Diaz, 1999). Mothers Against Drunk Driving and its allies have criticized the alcohol industry for its youth-oriented advertising (Hamilton, 2000); health professionals, senior citizens, and health care reformers have taken on the pharmaceutical industry for making windfall profits based on publicly funded research, covering up harmful side effects of their products, and disease mongering, creating, or exaggerating new diagnoses to promote sales of their products (Angell, 2004; Moyniham, Heath, & Henry, 2002; Topol, 2004).

This special section of *Health Education & Behavior* examines this new public health advocacy to change health-damaging corporate behavior and analyzes its implication for health education practice and research. In this article, I define the concept of disease promotion, review the scientific and political rationale for efforts to change corporate behavior, and provide an overview of the scope of this emerging arena of health advocacy. I also explore its implications for health education practice and research.

In the next article, Dorfman, Wallack, and Woodruff (2005) use the concept of framing to assess commonalities among recent public health campaigns to control, for example, the tobacco, food, and gun industries, and to analyze the underlying philosophical and moral frameworks for these debates. They suggest that health educators can use new insights on framing from research in communications, political science, sociology, and media studies to win broader public support for health objectives. In the third article, Nathanson (2005) compares the achievements of tobacco control movements in the United States, Canada, France, and Great Britain. She argues that political systems, historical traditions, and government structures in each nation create unique opportunities and constraints for tobacco control and suggests that this cross-national perspective can help health educators and other health professionals plan more effective strategies. Finally, Kreuter (2005) examines the relevance of this new public health practice and locates it within the context of health promotion both in the United States and around the world.

THE SCIENCE AND POLITICS OF DISEASE PROMOTION

Disease promotion describes organizational practices or policies that encourage unhealthy behaviors, lifestyles, or environments. The concept is based on the social determinants of health literature, which identifies social, political, and structural factors and processes that contribute to patterns of health and disease. Recently, researchers have called for greater attention to these determinants and have advocated increased scientific and professional efforts to develop interventions that address this level of causation (Marmot, 2002; Tarlov & St. Peter, 2000; Wilkinson, 1996). In addition, disease promotion borrows from the concept of health promotion and its emphasis on agency—the ability to act to improve health—but reverses the focus to spotlight actors and actions that harm health.

No level of social organization has a monopoly on disease promotion: cells, organs, individuals, groups, organizations, government, and ecosystems can each act to advance disease. Our focus here, however, is on population health and therefore on organizational agents of disease promotion. The goal of studying the process of disease promotion is to identify opportunities for prevention.

Corporations have long been an essential component of American society. In the late 19th century, they emerged as central agents of the American economy, and today, most observers agree that they dominate the global economy (Bakan, 2004; Berle & Means,

1968; Friedman, 1982; Galbraith, 1952). Their actions shape every aspect of our health and lives, from the food we eat and the air we breathe to our concepts of democracy, sexuality, intimacy, and self-worth. Obviously, corporations play a vital role in our economy: They provide millions of jobs, produce many of the goods and services that distinguish the American lifestyle, pay taxes, and contribute to charity.

But it is equally evident that corporate practices play a central role in America's health problems. According to a recent Centers for Disease Control and Prevention (CDC) report (Mokdad, Marks, Stroup, & Gerberding, 2004, 2005), in 2000, products of the tobacco industry were estimated to kill 435,000 Americans a year; diet and physical inactivity, in part because of food industry advertising and the easy availability of high-fat, high-calorie foods, were implicated in at least 365,000 deaths; alcohol was associated with 85,000 deaths, including homicides, automobile accidents, and alcohol-related diseases, such as cirrhosis and liver cancer; 43,000 Americans died in automobile accidents, and several thousand additional deaths were associated with automobile pollution; and 29,000 Americans died in gun-related homicides, suicides, or accidents, and many more were injured. Finally, by pricing its drugs out of reach of people who need them, opposing policies that would lower prices, covering up life-threatening side effects, and focusing on the most profitable drugs rather than those that best protect public health, the drug industry contributes to many excess deaths (Angell, 2004; Topol, 2004). In addition to the lost lives, the products of these industries cost consumers, taxpayers, and the larger society billions of dollars of costs in health care and lost productivity (CDC, 2002; Finkelstein, Fiebelkorn, & Wang, 2003). Sturm (2002) has estimated that the annual U.S. health care costs associated with obesity are $395 per person, with current or former tobacco use $230 per year and with problem drinking $150 per year, costs that can be seen in part as industry taxes on society and individuals.

Obviously, not every death or illness related to a particular product can be blamed on corporate practices. No complex health problem has a single cause, and undoubtedly, biological, behavioral, cultural, and environmental factors contribute to morbidity and mortality from tobacco, food, automobile, guns, alcohol, and pharmaceuticals. Here, the epidemiological concept of attributable risk is helpful. Attributable risk indicates the absolute incidence of a condition that can be attributed to a causal factor; it is a function of both relative risk (the ratio of incidence in those exposed versus those not exposed) and the prevalence of the causal factor (Susser, 1973). Precisely because corporate practices, such as advertising and political interference with regulation, are so ubiquitous, their influence is significant. To give a hypothetical example, even if exposure to fast food advertising contributed much less to obesity than an obesity gene at the individual level, the fact that so many more people are exposed to advertising than carry the obesity gene would mean that advertising caused more cases of obesity than genetic factors.

Clearly, the number of tobacco and gun deaths would decline precipitously if these industries did not produce, promote, and distribute their products; their efforts to resist public control have contributed substantially to mortality. On the other hand, the food, automobile, and pharmaceutical industries produce goods that can both enhance and damage health. However, the fact that an industry may contribute to health problems should not discourage investigation of policies aimed at limiting its harmful consequences.

Future research is needed to quantify the attributable risk related to specific industry practices. But the pervasive exposure to disease-promoting practices and the very substantial health burden the products of these industries impose require public health professionals to examine whether changing the behavior of corporations is a promising strat-

Table 1. Priorities for Policy Change

Policy	Estimated Lives Saved in 1 Year
Increase the federal tax on tobacco products	100,000 premature deaths averted
Affirm authority of FDA to regulate tobacco products and tobacco advertising	140,000 deaths averted
Ban smoking in enclosed public spaces and work sites	2,200 deaths averted
Establish strict uniform drinking laws throughout the country	1,900 deaths averted
Enact a substantial increase in the federal excise tax on alcoholic beverages	3,300 deaths averted
Enact handgun registration and licensing laws nationwide	775 deaths averted

SOURCE: Partnership for Prevention (2000).
NOTE: FDA = Food and Drug Administration.

egy for improving public health and achieving national health goals, such as those articulated in *Healthy People 2010* (U.S. Department of Health and Human Services, 1999).

Some evidence supports the value of policy change to modify corporate behavior. In 1998, the Congressional Prevention Coalition, a bipartisan group of more than 60 lawmakers dedicated to prevention, asked the Partnership for Prevention (2000), a nonprofit nonpartisan group, to assess opportunities for prevention. Based on interviews with more than 80 public health researchers, the group identified several policies with the greatest potential for reducing mortality and morbidity. Six strategies with potential for saving almost 250,000 lives a year require changing corporate practices or overcoming corporate opposition. Table 1 shows these six policies and the expert panel's estimate of the number of lives each change would save annually.

In this article, I have chosen to focus on six industries (tobacco, food, automobile, gun, alcohol, and pharmaceutical) because of their central role in health and disease, their importance to the U.S. and global economies, and their economic and political influence and because public health advocates have already acted to modify their practices (Advocates for Highway and Auto Safety, 2001; Angell, 2004; Center on Alcohol Marketing and Youth, 2002; Diaz, 1999; Glantz & Balbach, 2002; Nestle, 2002).

A FRAMEWORK FOR THE STUDY OF HEALTH ADVOCACY TO CHANGE CORPORATE PRACTICES

A systematic study of health advocacy to change corporate practices would benefit from a framework that focuses on variables of interest and allows comparisons across industries, cases, and levels of social organization (e.g., local, state, or national).

Figure 1 shows such a conceptual model for the study of campaigns to change corporate behaviors that harm health. I propose it as a heuristic to guide future research, subject to modification based on empirical findings. These campaigns are shaped by the broader social and political context (Box 1 in Figure 1), which includes political structures (Nathanson, 2005), economic conditions, cultural beliefs, and historical influences (Cohen, 2003; Hertz, 2001). The second row shows each of the three principal actors: corporations and their allies (Box 2); the government, including the federal, state,

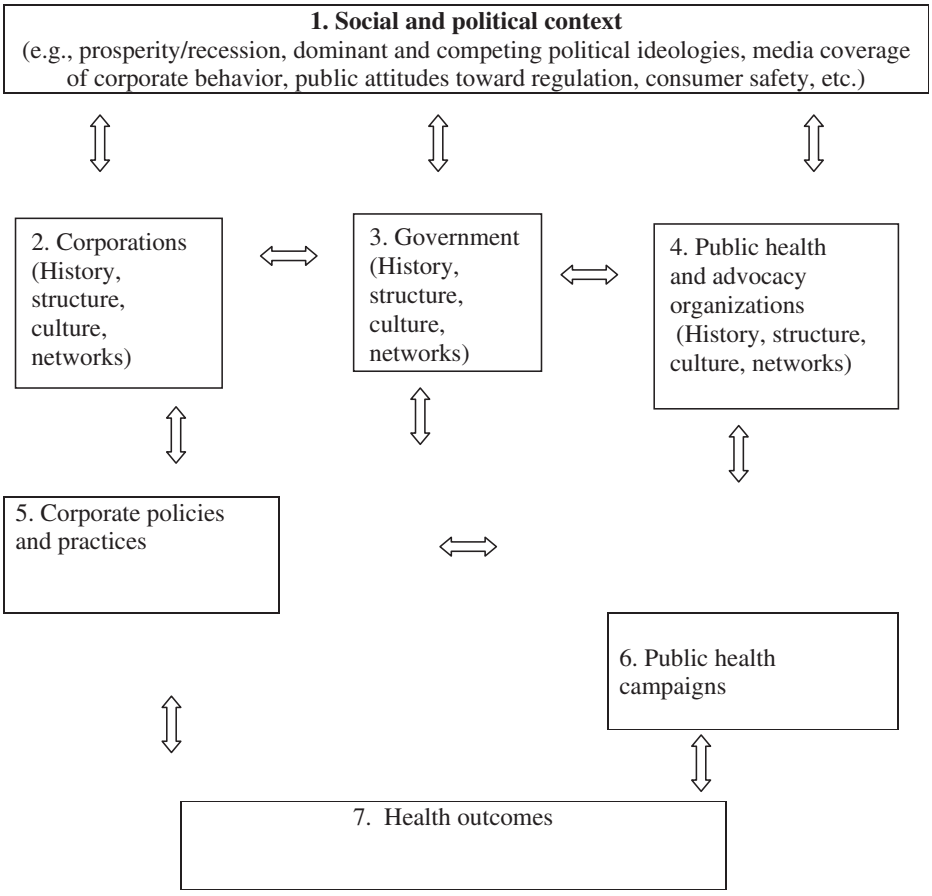

Figure 1. Conceptual model for the study of campaigns to change corporate practices that harm health.

and local levels and the executive, legislative, and judicial branches (Box 3); and public health and advocacy organizations (Box 4), which includes health departments (which thus may appear in both Boxes 3 and 4; see Wolfson, 2001, for a discussion), health care providers, professional organizations, advocacy groups, and others. Each of these actors has organizational structures, histories, cultures, and connections with various networks and faces external pressures that influence their behaviors. In the third row, the focus is on this behavior itself, the actions that corporations (Box 5) and health professionals and advocates (Box 6) take in their efforts to change or defend corporate practices and policies deemed to harm health. As shown in the fourth row, these interactions shape health outcomes (Box 7), which are also influenced by other biological, environmental, behavioral, social, and political factors. The vertical and horizontal arrows in Figure 1 show the dynamic character of these public health campaigns and also the multiple opportunities for intervention.

For public health advocates, the central question is the following: What actions can best ensure that their activities lead to improved health outcomes? For health researchers,

the key questions are the following: What is the relative efficacy of these interventions compared to others, what factors influence the process and outcome of these interactions, and to what extent can findings derived from one campaign or one industry be generalized to another? In the next section, I examine some of the actors and actions engaged in campaigns to change corporate practices.

CORPORATE ACTORS AND ACTIONS

Corporate practices and policies that damage health are carried out by a variety of actors. Although corporations, such as Philip Morris (Kessler, 2001), Colt Industries (P. H. Brown & Abel, 2003), and Merck (Hawthorne, 2003), have played central roles in defending their own practices against public health critics, other players are also important. Advertisers, for example, design and carry out campaigns to increase sales of harmful products. Trade associations, such as the Pharmaceutical Research and Manufacturers Association (Angell, 2004) and the National Shooting Sports Foundation (P. H. Brown & Abel, 2003), often serve as the public voice of industries. Lobbying and law firms, such as Hill and Knowlton (Kluger, 1997) and Verner, Liipfert, Bernard, McPherson, and Hand (Pertschuk, 2001), often act to advance the legislative and legal agendas of several of the industries reviewed here. Retail associations also contribute to lobbying and legislation at the state and local levels. Citizen organizations also act to defend corporations. The National Rifle Association (NRA), for example, is one of the most influential organizations in Washington, D.C., and often acts to defend the gun industry (P. H. Brown & Abel, 2003).

A few analysts have assessed the respective roles of these actors in specific circumstances (Bradsher, 2002; P. H. Brown & Abel, 2003; Nestle, 2002; Pertschuk, 2001), but more research is needed to identify the particular and generalizable contributions of each and the implications for advocacy campaigns.

Corporate Behaviors That Promote Diseases

Corporations and their allies engage in a variety of actions to advance their agendas.

Advertising. Advertising seeks to create new customers and encourage existing ones to purchase more. When the product being advertised is lethal (as in the case of tobacco or guns) or can easily be used in ways that harm health (e.g., alcohol, SUVs, and some pharmaceuticals), advertising falls squarely within the rubric of disease promotion. The six target industries spend vast amounts on advertising, as shown in Table 2. In 2003, the domestic advertising spending for these six industries alone ($38.7 billion) was 7 times greater than the combined total budgets of the U.S. CDC and Prevention ($3.84 billion), the Food and Drug Administration (FDA; $1.45 billion), the Federal Trade Commission ($176.5 million), and the Consumer Safety Product Commission ($57 million; U.S. Department of Health and Human Services, 2003).

As manufacturers saturate their potential customers in one population, advertising seeks new markets, thus creating the potential to spread risks to health. For example, the tobacco industry targets African Americans and smokers in the developing world (Balbach, Gasior, & Barbeau, 2003), the gun industry persuades women to buy handguns to feel safer (Brady, n.d.), and the alcohol industry markets sweet wine coolers to young

Table 2. Annual Spending on Advertising, Political Contributions, and Number of Lobbyists by Industry

Industry	Total Spending on Advertising in 2003 ($)	Political Contributions in 2002 Election Cycle ($)	Lobbyists in Washington, 2000
Automobile	18,393,300,000	15,053,468	547
Pharmaceuticals	6,863,200,000	29,377,351	1,083
Food, beverages, and confections	6,403,000,000	42,271,951	1,367
Restaurants and fast food	4,130,800,000		
Beer, wine, and liquor	1,809,500,000	12,640,565	213
Cigarettes and tobacco	376,800,000	9,150,060	254
Firearms	NA	2,790,045	50

SOURCE: *Advertising Age* (2004); Center for Responsive Politics (n.d., 2005).
NOTE: NA = not available.

drinkers (Garfield, Chung, & Rathouz, 2003). In recent years, drug companies have advertised prescription drugs directly to consumers. "Feeling sad? Anxious? Tired?" asks a Pfizer ad for the antidepressant drug Zoloft (Ives, 2003). Although drug and media companies claim that these ads empower consumers to make informed choices and communicate better with their doctors, consumer advocates claim they downplay side effects or adverse reactions and may lead some patients to pressure doctors to prescribe medicines they do not need (Ives, 2003).

Public Relations. Public relations fosters a positive public image for corporate America and blocks proposals that harm its perceived interests (Marchand, 1998). When critics challenge the safety of a product, corporations and their trade associations often respond forcefully, seeking to influence the debate in such a way as to preclude action to limit profits, restrict advertising, or regulate manufacturing or distribution. For example, when the FDA proposed new regulations for vitamins, industry groups sponsored television ads showing soldiers storming suburban homes to seize vitamin C bottles (Kessler, 2001, p. 335).

To make their public messages more credible, industries may create front groups to act as their public voice. Philip Morris formed the National Smokers Alliance to contest tobacco regulation (Kessler, 2001, p. 170); the tobacco, food, and restaurant industries funded the Center for Consumer Freedom to oppose smoking bans in public places and lower legal limits on blood alcohol levels (Brownell, 2003, p. 269); and the auto industry hired a Washington lobbying firm to create Nevadans for Fair Fuel Economy Standards, a paper organization that opposed higher mileage standards that would reduce pollution (Bradsher, 2002, p. 64). To improve its public image, the food industry has supported the American Dietetic Association (Nestle, 2002), and the tobacco industry has contributed to arts, sports, and African American groups (Kluger, 1997).

As Dorfman et al. (2005) explain, public relations seeks to frame the public dialogue on issues relevant to the industry. Across the six industries reviewed here, corporations articulate strikingly similar messages: Market mechanisms provide the best remedies for dangers to consumers, it is wrong to restrict advertising of legal products, individuals are responsible for their own behavior, and having choices is the American way (Brownell, 2003 pp. 258-268; Diaz, 1999; Menashe & Siegel, 1998). In many cases, corporate public

relations expenses are tax deductible, creating a public subsidy for messages intended to thwart policy changes to protect health.

Industries also use more subtle forms of public relations to quell unfavorable portrayals. In a stark display of the power of the tobacco industry, in the 1980s, no women's magazine that accepted tobacco advertising published a single article, editorial, or column on the harmful effects of tobacco, despite the fact that it was then that lung cancer surpassed breast cancer as the leading cause of cancer deaths among women (Anderson, 1995; Hertz, 2001, p. 137). As U.S. and global media ownership becomes more concentrated among a handful of large multinational corporations (Bagdikian, 2004), often with links to the six industries described here, the willingness of major media outlets to investigate corporate malfeasance or disease promotion may further diminish.

Lobbying and Other Legislative Activities. Lobbying and other legislative activities are a central tool for advancing corporate objectives. In 2000, the *Center for Responsive Politics* (n.d.) estimated that there were more than 20,000 registered lobbyists in Washington, D.C. About 1,000 lobbyists work in the nation's capital for the food industry (Nestle, 2002, p. 99) and 675 for the pharmaceutical industry (S. Brown & Doyle, 2004; see Table 2). More lobbyists work in state capitals. In the mid-1990s, for example, the tobacco industry had 25 lobbyists in Minnesota alone (Wolfson, 2001, p. 153) working to defeat or water down that state's tobacco regulations.

Lobbyists work both to pass legislation that benefits their employers and to defeat laws deemed to be harmful. In 2003, the pharmaceutical industry poured millions of dollars into a concerted, and successful, lobbying effort to convince Congress to pass legislation that would increase coverage of senior citizens for some prescription drugs and defeat provisions that would have allowed the federal government to negotiate lower prices on behalf of Medicare patients or import lower cost medicines from Europe or Canada. Analysts estimated the law would increase drug company profits by $13 billion a year. Pharmaceutical companies acted despite overwhelming public support for the restrictions they opposed and expert opinion that the measure would leave major gaps in coverage and fail to contain costs (Connolly, 2003). In 1994, lobbyists for the dietary supplement industry succeeded in persuading Congress and the president to agree to label dietary supplements as foods rather than drugs, thus escaping FDA requirements for safety and effectiveness. A few years later, after aggressive advertising of the benefits of these products, deaths from supplements, such as ephedra, illustrated the public health costs of this deregulation and led to calls for renewed public oversight (Fontarosa, Drummond, & DeAngelis, 2003).

Corporate success at lobbying is increased by the revolving door between industry and the government. For example, presidential adviser Karl Rove had been chief political strategist for Philip Morris before working for Bush, and the president's chief of staff, Andrew Card, had been General Motors' top lobbyist in Washington, D.C. (Bradsher, 2002). Dan Glickman, secretary of agriculture in the Clinton administration, left office to join a law firm that lobbies for agriculture and food companies (Nestle, 2002, p. 100). In 1994, when Philip Morris needed someone to testify against FDA regulation of tobacco before Congress, it hired former FDA Commissioner Charles Edwards, paying him $120,000 for the consultancy (Kessler, 2001, p. 315). In 1998, 128 former members of Congress were listed as lobbyists, 12% of all senators and representatives who had left office since 1970 (Abramson, 1998; Nestle, 2002, p. 100). Compared to the handful of lobbyists who advocate for public health, these personal and professional associations

between elected and appointed officials and corporate lobbyists provide industry with a competitive advantage in influencing legislation and regulation.

Campaign Contributions and Electoral Activities. Campaign contributions and electoral activities help cement this advantage by increasing the chances that the legislators or executive branch officials that lobbyists meet will be grateful or indebted to them. The six industries reviewed here each make substantial campaign contributions, as shown in Table 2. Many industry political action committees contribute to both parties, ensuring influence no matter what the outcome of an election. In 2002, for example, the drug industry contributed about $22 million to the Republicans and almost $8 million to Democrats (S. Brown & Doyle, 2004). The NRA and its gun industry allies offer not only financial support to sympathetic candidates but also assistance in voter mobilization and campaigning (Diaz, 1999), helping to explain why the gun industry and the NRA consistently win legislative victories even though public opinion polls show high levels of public support for restrictions on assault rifles and opposition to exempting gun manufacturers from liability suits.

Litigation. Litigation allows industry to delay, weaken, or overturn laws and regulations they dislike. The six industries have gone to court to seek action against individuals, organizations, and government agencies that they perceived as threats to their business goals. For example, in 1996, the Texas Cattle Ranchers Association filed a $10 million suit against Oprah Winfrey for violating that state's food disparagement law by saying the threat of mad cow disease made her stop eating hamburgers. Although Winfrey ultimately won, she spent more than $1 million defending herself, a cost that might deter less wealthy critics (Nestle, 2002, pp. 162-165). In 1994, Philip Morris filed a $10 billion libel lawsuit against ABC television for reporting that cigarettes were "artificially spiked" with nicotine (Kessler, 2001, p. 156). A tobacco industry executive later commented that "with one legal action—the filing of the ABC suit—the word 'spiking' has been dropped from the lexicon of the anti-tobacco crowd. Frankly, if that is all the suit ever does, it will have been worth it" (Kessler, 2001, p. 169). In 2000, seven gun makers filed a suit against Housing and Urban Development Secretary Andrew Cuomo, New York State Attorney General (AG) Elliott Spitzer, and other state and local officials, claiming they were violating the gun makers' right to sell legal firearms by seeking to force them to accept a code of conduct on the sale and design of handguns. The manufacturers did not seek monetary damages but instead asked the court to bar the officials from seeking to convince local police departments to buy weapons only from companies that had signed the agreement (P. H. Brown & Abel, 2003).

Scientific Research. Scientific research often influences the public debates about whether specific products harm health. Many industries seek to influence this debate by funding scientific research that will support their case and by hiring scientists to contest damaging information. Until the Tobacco Master Settlement Agreement eliminated it, the Tobacco Institute funded scientists to refute links between smoking and health and to bring this so-called evidence to the public. The food industry supports nutrition researchers who emphasize exercise rather than diet as the cause of obesity, and the New York State AG recently brought the drug maker GlaxoSmithKline to court for failing to publish or disclose studies that showed no benefit from its popular antidepressant Paxil (Harris, 2004). Krimsky (2003), who has studied corporate behavior related to scientific research,

uses the term *manufactured doubt* to describe the practice of sowing confusion to avoid or delay regulatory action.

Illegal Activities. Illegal activities are another strategy some corporations have used to advance their objectives. In the early 1970s, Ford Motor Company fabricated auto safety test data, leading to a $7 million fine (Yates, 1983, p. 261). In 1994, tobacco industry executives lied under oath to Congress about their prior knowledge on nicotine's addictiveness (Kessler, 2001), and in 1999, the U.S. Justice Department reached a $255 million settlement with the vitamin industry for price fixing, a practice that made its products more expensive for consumers (Nestle, 2002, p. 168). Given spotty enforcement of regulations on corporate behavior, data are not available to ascertain whether illegal activities constitute the renegade actions of a few bad apples or a common business practice.

In summary, a variety of corporate behaviors, including advertising, public relations, lobbying, litigation, campaign contributions, and sponsored research, advance industry objectives of increasing profits and defeating stricter regulations. Although in most cases their activities comply with current laws, these actions nevertheless contribute to preventable illnesses and deaths. In most cases, there is no evidence that corporate managers who engage in these behaviors intend to harm health; although, the evidence of the harmful impact is usually widely known. Many of these corporate behaviors also appear to contradict free-market principles. Free markets depend on equal access to information and on competition. When corporate interests suppress information, obfuscate public debate, or stifle competition, they interfere with the market forces that proponents of free markets cite as the best protection for consumers.

Has the adverse impact of corporate influence on health worsened in recent years? Although data are not available to answer this question definitively, several trends provide cause for concern. First, advertising has increased significantly in the past 2 decades, and corporate influence now penetrates every sphere of public and private life, from the classrooms and malls to movies and music (Cohen, 2003). Second, corporate involvement in political life has grown significantly, with increases in the number of lobbyists, the amount of campaign contributions, and the influence of big business interests in Washington, D.C., and state capitals (Drew, 2000). Third, since 1980, many U.S. industries have been deregulated or allowed to monitor themselves, and the remaining regulatory agencies are often underfunded, understaffed, and frequently criticized by corporate and political leaders, making them less able and willing to carry out their missions (Hilts, 2003; Kessler, 2001). Finally, for a variety of reasons, a number of potentially countervailing powers, such as an informed and mobilized electorate, active consumer and environmental movements, forceful local and state officials, and a crusading media, have declined, leaving fewer voices to challenge corporate influence (Bagdikian, 2004; Cohen, 2003; Patterson, 2003). Whether the new public health activism described here can become such a counterweight remains to be seen.

HEALTH AND ADVOCACY RESPONSES TO CORPORATE DISEASE PROMOTION

A variety of constituencies have mobilized to take action to protect public health against these corporate practices. A review of campaigns against the six target industries reveals common actors, strategies, and outcomes.

The Actors

Who are the individuals and organizations involved in advocating for changes in corporate practices? Several key stakeholder groups have played roles in many campaigns to modify corporate practices.

National Organizations. National organizations serve as conveners, clearinghouses, catalysts, and advocates in government arenas. Larger organizations often have full-time staffs of scientists, lawyers, educators, lobbyists, and organizers. Examples of such groups include the Center for Science in the Public Interest, Union of Concerned Scientists, Public Citizen, Brady Campaign to Prevent Gun Violence, Sierra Club, American Legacy Foundation (which also funds advocacy groups), American Lung Association, and Mothers Against Drunk Driving. These organizations often have a detailed understanding of the policy process and the resources to compete with industry groups in legislative and legal bodies. In some cases, the national groups can provide grassroots groups with credibility and clout; although, they may also seek to compromise grassroots militancy to achieve political compromises (Wolfson, 2001).

Coalitions. Coalitions bring together like-minded organizations to amplify their political power, share resources, or coordinate strategies. Coalitions organize political strategies, mobilize their constituencies, and educate the public. Most coalitions confine their attention to a single industry (e.g., tobacco, guns, or food), but some work across local, state, and national levels. Examples include the Coalition for a Healthy California, which led the effort to support tobacco control propositions (Glantz & Balbach, 2002, p. 382); the Coalition on Smoking or Health, which included several large national voluntary health organizations (Wolfson, 2001, p. 84); the Louisiana Alliance to Prevent Underage Drinking; and The Infant Feeding Action Coalition, which coordinated the boycott of Nestle (2002, p. 149). Although coalitions play integral roles in campaigns to modify corporate behavior, maintaining the coalition and keeping it focused on external goals can often be demanding (Pertschuk, 2001; Wolfson, 2001).

Health Professionals and Researchers. Health professionals and researchers provide scientific and technical expertise to efforts to modify health-damaging policies. They conduct original research, summarize available evidence, testify at public hearings or in court cases, and educate advocates and organizers. Organizations, such as the Center on Alcohol Marketing and Youth at Georgetown University in Washington, D.C., and the Center for Gun Policy and Research at Johns Hopkins University, and individuals, such as Marion Nestle, a nutritionist at New York University; Stanton Glantz, a tobacco researcher at the University of California San Francisco; and Garen Wintimute, director of the Violence Prevention Research Program at the University of California Davis, have provided epidemiological and policy evidence that advocates have taken to the political arena. Some researchers are advocates themselves, whereas others prefer to let their work speak for itself. Of course, other scientists also work for the corporations that are the targets of advocacy campaigns; contesting industry-supported research is often a key task for the researchers allied with advocacy efforts.

Public Health Agencies. Public health agencies, such as local and state health departments, have often become key players in campaigns against tobacco, alcohol, guns, and other harmful products. Local health departments are often active members of tobacco

control coalitions, often funding community organizations to carry out education and advocacy (Wolfson, 2001). In Marin County, California, the county Department of Health and Human Services joined a coalition that successfully supplanted Miller Brewing Company as a sponsor for the county fair, using its booth at the fair to educate about alcohol rather than give out beer (Marin Institute, 2004). Some local health departments have also supported efforts to end the sales of high sugar soda in schools (Fried & Nestle, 2002). At the federal level, a few administrators have taken stands against health-damaging industries. As head of the FDA, for example, Kessler (2001) led the fight against the tobacco industry, and Dr. Jeffrey Runge, of the National Highway Traffic Safety Administration, has been an outspoken critic of the automobile industry's failure to make safer cars (Skrzycki, 2003).

Legal Groups. Legal groups are at the front line of the litigation against the tobacco, automobile, food, and gun industries. Using class action lawsuits, they have sought damages, injunctions, and changes in advertising or manufacturing. Players include lawyers at universities and nonprofit groups, such as John Banzaf at George Washington University, the Northeastern University School of Law's Tobacco Products Liability Project, and the Legal Action Project of the Brady Campaign to Prevent Gun Violence, and at law firms, such the Castano Group in New Orleans, a network of lawyers active in tobacco and gun litigation (P. H. Brown & Abel, pp. 301-303).

In the public sector, state AGs have played increasingly prominent roles in using litigation to protect consumers against corporate excesses. The best known example is the Master Tobacco Settlement negotiated by state AGs to end some forms of advertising and to fund antitobacco activities (Schroeder, 2004). New York AG Elliot Spitzer has also challenged the drug company GlaxoSmithKline for its failure to disclose negative information about a popular antidepressant, Paxil (Harris, 2004).

Local Organizations. Local organizations bring debates about corporate practices directly to their communities and often provoke a dialogue that sparks media coverage, popular mobilization, and a response from the government or industry. In many communities, for example, anti-SUV activists ticketed SUVs, charging them with pollution and defective safety designs (Earth on Empty, n.d.). In Philadelphia, a coalition of church and community groups forced Philip Morris to abandon its plan to introduce a new cigarette, *Uptown*, targeted at urban African Americans (Sutton, 1993).

Other Participants. Other participants in campaigns to change corporate practices include reporters and other media representatives, elected officials, and other business groups; for example, the insurance industry has often joined advocacy efforts to improve car safety. Often, these parties have helped mobilize public opinion, represent a group's interest in the political arena, or add political heft to a campaign.

The Actions

The actors involved in campaigns to change corporate practices have used a variety of strategies to realize their objectives. Creating a typology of actions can help provide a framework for comparative assessment of the process and outcome of these strategies.

Getting Information. Getting information is often the first step in acting to change health-damaging corporate behavior. Advocates for tobacco and gun control have used

the discovery process in court cases to uncover damaging information and industry efforts to hide such data (P. H. Brown & Abel, 2003; Kessler, 2001). National advocacy groups, such as Public Citizen and Center for Science in the Public Interest, have used the Freedom of Information Act to extract information about business activities from reluctant regulators (Hilts, 2003, p. 197). In some cases, industry insiders with troubled consciences have turned to the mass media to tell their stories, alleging, for example, that the tobacco industry covered up harmful data and that the gun industry knew its products were going to illegal dealers (Butterfield, 2003; Kessler, 2001).

Legislative Action. Legislative action provides public health advocates with the opportunity to suggest laws and regulations they believe will better protect public health. Health organizations and their allies have worked to persuade lawmakers to raise taxes or end tax breaks on tobacco, alcohol, junk food, and fuel-inefficient cars to discourage their use (Hakim, 2004; Nicholl, 1998; Stivers, 1994); to set standards for production and advertising of health-damaging products (P. H. Brown & Abel, 2003); to modify zoning or land use laws to reduce access to tobacco, alcohol, or fast food (Ashe, Jernigan, Kline, & Galaz, 2003); to restrict use of tobacco, guns, or alcohol by certain populations or in certain places (Hemenway, 2004; Rabin & Sugarman, 2001); to mandate disclosure of product dangers (Kessler, 2001); and to fund health education to alert the public to hazards (Glantz & Balbach, 2002). To achieve these legislative objectives, advocacy groups have educated citizens and policy makers, lobbied, used the media, organized demonstrations and rallies, and formed coalitions.

Electoral Activities. Electoral activities take the action to the voting booth. In several recent local, state, and national elections, supporters and opponents of tobacco and gun control endorsed candidates, contributed money, and campaigned for politicians who supported their cause (DeMarco & Schneider, 2000; Zakocs, Earp, & Runyan, 2001). In some states, ballot initiatives and referenda provide another opportunity to take health issues to the voters. In California, for example, statewide or local tobacco control advocates used ballot initiatives or propositions to bring tobacco policy to the voters throughout the 1980s and 1990s (Glantz & Balbach, 2002).

Litigation. Litigation enables advocates to bring to court corporations alleged to have harmed health. Judges can order an end to dangerous practices, award compensatory or punitive damages, and set a precedent that will apply in other jurisdictions. In recent years, activists have taken each of the six industries reviewed here to court based on the health consequences of their actions. Several recent review articles have summarized the accomplishments and limitations of litigation as a public health strategy (Jacobson & Soliman, 2002; Parmet & Daynard, 2000; Pearson, 1997).

Actions Aimed at Corporations. Actions aimed at corporations provide advocates the opportunity to bring their messages directly to corporate directors or shareholders. In their campaigns to change how the multinational Nestle Corporation marketed infant formula in developing nations, activists organized a worldwide boycott that has been periodically reinstated during the past 3 decades (Nestle, 2002, pp. 145-158). In the state of Washington, some activists have proposed revoking the corporate charters issued by the state for companies that repeatedly violate the law (Parrish, 1999). Investors have also become more active. By 2000, more than a trillion dollars was invested in U.S.-managed portfolios that used some social investment strategy, a thirtyfold increase from 1984

(Hertz, 2001, p. 122). Shareholder activism has, for example, forced 3M, America's third largest billboard company, to end tobacco advertising on its billboards, and Kimberly Clark to sell its holdings in tobacco companies (Hertz, 2001, p. 124).

Education, Information, and Mobilization Campaigns. Education, information, and mobilization campaigns often constitute the foundation for other strategies and also serve to put an issue on the public agenda. Health advocates seeking to change corporate behavior have used counteradvertising campaigns against SUVs, tobacco, and alcohol (Agostinelli & Grube, 2002; Glantz & Balbach, 2002; Hakim, 2003); media advocacy to influence public opinion on alcohol, guns, and food advertising aimed at children (Holder & Treno, 1997; Wallack, Dorfman, Jernigan, & Themba, 1993); and community organizing to mobilize constituencies to support access to lower priced pharmaceutical products in other countries (American Association of Retired Persons, 2004). As Dorfman et al. (2005) note, these strategies play an important role in framing conflicts between public health advocates and corporations and thus influence the outcome of these interactions.

In the past few decades, health professionals, advocates, and their supporters have accumulated an impressive body of experience using these strategies to influence corporate practices and policies. Each strategy has elicited counteractions by the corporate targets, and thus, strategies and tactics on both sides of these conflicts have changed continually. Systematic research is needed to identify the relative benefits and costs of these strategies and the circumstances that contribute to successful efforts to reduce the promotion of diseases.

The Outcomes

Although a comprehensive assessment of the efficacy of these strategies is beyond the scope of this report and perhaps premature, available evidence suggests that public health advocacy to change corporate practices has the potential to contribute to improved health. A few examples illustrate the range of achievements.

In some cases, environmental regulations can be remarkably effective in reducing threats to health. Between 1968 and 1983, for example, primarily as a result of new clean air standards advocated by the environmental movement, American automobile air pollution, which contributes to lung and heart disease, was reduced by 90% (Yates, 1983). Similarly, federal mandates for automobile seatbelts and air bags, long opposed by the auto industry (Doyle, 2000), are now credited with saving thousands of lives because consumer advocates persuaded Congress to require these devices (Martin, Crandall, & Pilkey, 2000).

In California, an aggressive tobacco control program that targeted both industry practices and individuals is estimated to have reduced tobacco consumption by 75% in 10 years, a much larger reduction than in states without such programs (Glantz & Balbach, 2002, p. 5). A recent study found that following a local law banning smoking in public places and in the workplace in Helena, Montana, the number of monthly admissions for acute myocardial infarction from the city but not from areas where the ban was not in effect dropped significantly (Sargent, Shepard, & Glantz, 2004), suggesting that changes in the law may be able to produce even short-term benefits.

In Washington, D.C., a law banning the purchase, sale, transfer, or possession of handguns by civilians was associated with a prompt decline in homicides and suicides in the city but not in adjoining areas without such bans (Loftin, McDowall, Wiersema, & Cottey, 1991). More recently, the threat of ongoing litigation led Colt Industries to decide

to abandon much of its retail gun business and focus instead on producing for the military and police (P. H. Brown & Abel, 2003, p. 141), a clear example of pressure leading to changes in corporate practices.

IMPLICATIONS FOR HEALTH EDUCATION RESEARCH AND PRACTICE

To evaluate the overall health impact of campaigns to change corporate behavior and to develop guidelines for effective practice will require a more systematic approach to this phenomena and a more standardized body of literature. Some of the research questions that emerged from this review include the following:

1. What is the impact of corporate characteristics, such as the position of a company within its industry, the unique corporate culture, current profit levels, competitiveness within the industry, and its influence within the political arena, on a corporation's policies and practices related to health? Under what circumstances do market forces lead to reductions in health-damaging practices?
2. What are the potentials and limitations of health advocacy campaigns at different levels and within different branches of the government? What shapes a particular government agency's responsiveness to corporate versus health advocacy demands? Under what political and economic conditions are governments likely to support or oppose public health campaigns to change corporate behavior? What are the unique opportunities and constraints for change in different phases of economic, budget, and electoral cycles?
3. What frames best enable public health advocates to win public support for their goals? What are the relative advantages, disadvantages, and efficacy of the various strategies for changing corporate behavior? What is the relative efficacy of different types of advocacy coalitions or networks in changing corporate practices?
4. What are the specific social and behavioral processes by which corporate practices and policies damage health? What are the specific social and behavioral processes by which public health advocacy campaigns can mitigate or reverse these adverse health outcomes?
5. To what extent does corporate disease promotion contribute to or exacerbate disparities in health among different socioeconomic, racial, and ethnic groups? Do campaigns to change corporate behavior offer a way to reduce these inequities?

Designing studies to answer these questions constitutes a research agenda on disease promotion and advocacy to change corporate practices that can guide future intervention.

A focus on corporate practices also challenges health educators to reconsider the theoretical paradigms that have guided our work. For many years, the dominant paradigm in health education has been that individual behavior and lifestyle are the primary determinants of population health in the United States (Fuchs, 1998; Knowles, 1977; McGinnis & Foege, 1993). Critics have long challenged this perspective (Freudenberg, 1978; Israel et al., 1995; Minkler, 1989), and a more recent synthesis is that policy also has an important influence on health and that public health interventions should seek to change individuals, organizations, and policies (Caraher & Coveney, 2004; Committee on Assuring the Health of the Public in the 21st Century, 2003; Green & Kreuter, 2005; Melkote,

Muppidi, & Goswami, 2000). Despite this emerging scientific consensus, the vast majority of public health interventions still target only individual behavior, and few organized interventions have made meaningful and sustained efforts to change policy at a level that could influence population health (Bowen & Beresford, 2002; Freudenberg et al., 2000).

This focus on public health advocacy to change corporate practices also offers an opportunity to revise the dominant paradigm. If etiologic research confirms that corporate policies have a substantial impact on morbidity and mortality here in the United States and globally, modifying these behaviors takes on a new imperative. If evaluation research demonstrates that the intervention strategies described here successfully modify corporate behavior enough to reduce adverse health consequences, then public health professionals need to master the competencies needed to develop and sustain such interventions.

What does all this have to with health education? In 1986, the Ottawa Charter for Health Promotion (First International Conference on Health Promotion, 1986) defined *health promotion* as "the process of enabling people to increase control over, and to improve their health" (p. 1). More than any other single profession, health educators have as their central task educating and mobilizing individuals, organizations, and communities to promote health. Public health advocacy to change health-damaging corporate practices has emerged as a promising strategy for health promotion. A review of accounts of these advocacy campaigns shows that many of the core tasks in these efforts closely parallel professional descriptions of health education competencies: framing public health issues, mobilizing community and institutional resources, educating the public, identifying political opportunities for action, building coalitions, and evaluating success. Similarly, the implicit or explicit rationales for these campaigns often rely on the same theoretical literatures that health educators use: theories on social movements, organizational and behavioral change, communications, ecological models, and empowerment (Glanz, Rimer, & Lewis, 2003; Green & Kreuter, 2005). These parallels between health education and health advocacy suggest that health educators already have some of the competencies needed to play leadership and supporting roles in these campaigns.

At the same time, advocacy to change corporate practices will require new competencies and perspectives. First, transferring the focus from changing the behavior of individuals to one that includes modifying corporate or government action will necessitate ideological as well as skills transformation. A starting point is to examine to what extent existing theories, such as the health belief model or social learning theories (Glanz et al., 2003), can also help predict and then change institutional behavior. Second, current health education practice relies heavily on cooperative and consensus-building strategies, based on the liberal assumption that people of goodwill can come together and agree on compromises. Recent advocacy campaigns to change corporate practices, however, have often used adversarial strategies, borrowing more from social movements and contentious politics (Tarrow et al., 1998) than from small group or social marketing theories. As Kreuter (2005) notes, power is the language that corporations speak and understand best. To prepare health educators with the skills to analyze power dynamics and the stomach and backbone for political conflict that advocacy campaigns against multinational corporations may require, training programs will need to modify their curricula.

Some health educators will raise understandable objections to an expansion of our practice to include advocacy to change corporate behavior. Some will contest the epidemiological evidence, asserting that the proximate role of individual behavior in current patterns of morbidity and mortality makes it the logical focus of health education efforts, not the more distant corporate policies. Others may agree that corporate practices play an

important role but argue that changing such behaviors is too difficult or too risky, jeopardizing funding from government or corporate sources. Another point of view is that health educators should remain neutral rather than participate in social conflicts (e.g., debates on the appropriate roles for the government and markets in our society), maintaining an objective, fair, and balanced stance. These concerns get to the heart of our definition of the role of health educators. Any expansion of health education practice to encompass health advocacy to change corporate behavior will require open and honest dialogue on these and related scientific, ethical, and professional questions.

Supporters of an expanded role for health education practice offer philosophical and pragmatic responses to their colleagues' concerns. First, they argue that public health and health education have always taken on special interests that harm health. Founders of modern U.S. public health, such as Alice Hamilton, C. E. Winslow, Margaret Sanger, Jane Adams, Mayhew Derryberry, and others (Rosen, 1993), tackled the employers, producers, landlords, and medical institutions that sometimes acted against the well-being of the public. Recently, the CDC (1999) identified the 10 greatest accomplishments of U.S. public health in the 20th century. Four of these—improving motor vehicle safety, making workplaces safer, producing safer and healthier foods, and recognizing tobacco as a health hazard—involved modifying corporate practices that damaged health. Thus, say the supporters, advocacy to change corporate practice is not a new strategy but a return to our public health roots.

Second, borrowing from critics of the concept of scientific objectivity (Parsons, 2003), advocates argue that neutrality is a chimera and often serves to support the status quo by refusing to challenge those with the most power. Expecting health professionals to view the claims of the tobacco industry, for example, with equal credibility as those of public health researchers or advocates of tobacco control defies common sense and a 50-year historical record of deception (Glantz & Balbach, 2002; Kluger, 1997).

Supporters of advocacy campaigns to change corporate practices also reject the claim that the public opposes such action. They point to public opinion polls that show strong support for gun control, restricting tobacco advertising, strong public oversight of the drug industry, regulating pollution, and holding the food industry accountable for its role in the obesity epidemic (Batra, Patkar, Weibel, Pincock, & Leone, 2002; Nestle, 2003; Vernick, Teret, Howard, Teret, & Wintemute, 1993).

Finally, supporters of confronting disease promoters raise a moral imperative. If the mission of health educators is to promote health and the evidence shows that specific actions by corporations damage health, then there is a professional and moral obligation to act to reduce the harm. Failing to pursue promising strategies, they argue, violates ethical standards.

Recent events suggest that both the corporate quest for greater profits and less regulations and advocacy group efforts to modify corporate practices to better protect public health will continue. Public health professionals, including health educators, will need to decide how best to relate to these conflicts. By focusing attention on this emerging domain and by systematically assessing the potential for advocacy to change corporate practices to promote health, we can make informed choices about our future roles.

References

Abramson, J. (1998, September 29). The business of persuasion thrives in the nation's capital. *The New York Times*, p. A1.

Advertising Age (2004, June 28). *75*(26), S21
Advocates for Highway and Auto Safety. (2001). *Stuck in neutral: Recommendations for shifting the highway and auto safety agenda* (2nd ed.). Washington, DC: Author.
Agostinelli, G., & Grube, J. W. (2002). Alcohol counter-advertising and the media. *Alcohol Research and Health*, *26*, 15-21.
American Association of Retired Persons. (2004). *AARP Minnesota vows to fight for lower prescription drug costs for all Minnesotans, 2004*. Retrieved August 6, 2004, from http://www.aarp.org/states/mn/Articles/a2004-03-09-mn-drugcosts.html
Anderson, R. (1995). *Consumer culture and TV programming*. Boulder, CO: Westview.
Angell, M. (2004). *The truth about the drug companies: How they deceive us and what to do about it*. New York: Random House.
Ashe, M., Jernigan, D., Kline, R., & Galaz, R. (2003). Land use planning and the control of alcohol, tobacco, firearms, and fast food restaurants. *American Journal of Public Health*, *93*, 1404-1408.
Bagdikian, B. (2004). *The new media monopoly*. New York: Beacon.
Bakan, J. (2004). *The corporation: The pathological pursuit of profit and power*. New York: Free Press.
Balbach, E. D., Gasior, R. J., & Barbeau, E. M. (2003). R. J. Reynolds' targeting of African Americans: 1988-2000. *American Journal of Public Health*, *93*, 822-827.
Batra, V., Patkar, A., Weibel, S., Pincock, G., & Leone, F. (2002). Public health implications of voters' attitudes regarding statewide tobacco policy. *Chest*, *122*, 295-298.
Berle, A. A., & Means, G. C. (1968). *The modern corporation and private property*. New York: Harcourt Brace.
Bowen, D. J., & Beresford, S. (2002). Dietary interventions to prevent disease. *Annual Review of Public Health*, *23*, 255-286.
Bradsher, K. (2002). *High and mighty: SUVs—the world's most dangerous vehicles and how they got that way*. New York: Public Affairs.
Brady, S. (n.d.). Marketing handguns to women: Fair advertising or exploitation? *Brady Center to Prevent Handgun Violence*. Retrieved August 6, 2004, from www.gunlawsuits.org/features/articles/markettowomen
Brown, P. H., & Abel, D. G. (2003). *Outgunned: Up against the NRA*. New York: Free Press.
Brown, S., & Doyle, S. (2004, January 28). The Medicare index. *The New York Times*, p. A25.
Brownell, K. D. (2003). *Food fight: The inside story of the food industry, America's obesity crisis and what we can do about it*. New York: McGraw-Hill.
Butterfield, F. (2003, April 7). Ex-insider becomes an outsider on gun issue. *The New York Times*, p. A17.
Caraher, M., & Coveney, J. (2004). Public health nutrition and food policy. *Public Health Nutrition*, *7*, 591-598.
Centers for Disease Control and Prevention. (1999). Ten great public health achievements—United States, 1900-1999. *Morbidity and Mortality Weekly Report*, *48*(12), 241-243.
Centers for Disease Control and Prevention. (2002). Annual smoking-attributable mortality, years of potential life lost, and economic costs—United States, 1995-1999. *Morbidity and Mortality Weekly Report*, *51*(14), 300-303.
Center for Responsive Politics. (n.d.). Retrieved November 12, 2004, from http://www.opensecrets.org
Center for Responsive Politics. (2005). *Influence, Inc*. Washington, DC: Author.
Center on Alcohol Marketing and Youth. (2002). *Television: Alcohol's vast adland*. Retrieved December 1, 2002, from http://camy.org/research/tv1202/
Cohen, L. (2003). *A consumer's republic: The politics of mass consumption in postwar America*. New York: Vintage.
Committee on Assuring the Health of the Public in the 21st Century. (2003). *The future of the public's health in the 21st century*. Washington, DC: National Academy Press.

Connolly, C. (2003, November 21). Drugmakers protect their turf: Medicare bill represents success for pharmaceutical lobby. *The Washington Post*, p. A4.

DeMarco, V., & Schneider, G. E. (2000). Elections and public health. *American Journal of Public Health*, *90*, 1513-1514.

Diaz, T. (1999). *Making a killing: The business of guns in America*. New York: New Press.

Dorfman, L., Wallack, L., & Woodruff, K. (2005). More than a message: Framing public health advocacy to change corporate practices. *Health Education & Behavior*, *32*, 320-336.

Doyle, J. (2000). *Taken for a ride: Detroit's big three and the politics of pollution*. New York: Four Walls, Eight Windows.

Drew, W. (2000). *The corruption of American politics: What went wrong and why.* New York: Overlook.

Earth on Empty. (n.d.). *Why ticket SUVs?* Retrieved August 7, 2004, from http://www .earthonempty.com/aboutus.html

Finkelstein, E. A., Fiebelkorn, I. C., & Wang, G. (2003). National medical spending attributable to overweight and obesity: How much, and who's paying? (Suppl Web Exclusives W3-219-26). *Health Affairs (Millwood)*. Retrieved November 23, 2004, from http://content.healthaffairs .org/cgi/reprint/hlthaff.w3.219v1

First International Conference on Health Promotion. (1986). *Ottawa charter for health promotion*. Ottawa, Ontario, Canada: Author.

Fontarosa, P., Drummond, R., & DeAngelis, C. D. (2003). The need for regulation of dietary supplements: Lessons learned from ephedra. *Journal of the American Medical Association*, *289*, 1568-1570.

Freudenberg, N. (1978). Shaping the future of health education: From behavior change to social change. *Health Education Monographs*, *6*, 372-377.

Freudenberg, N., Silver, D., Carmona, J., Kass, D., Lancaster, B., & Speers, M. (2000). Health promotion in the city: A structured review of the literature on interventions to prevent heart disease, substance abuse, violence and HIV infection. *Journal of Urban Health*, *77*, 443-457.

Fried, E. J., & Nestle, M. (2002). The growing political movement against soft drinks in schools. *Journal of the American Medical Association*, *288*, 2181.

Friedman, M. (1982). *Capitalism and freedom*. Chicago: University of Chicago Press.

Fuchs, V. R. (1998). *Who shall live? (Health, economics, and social choice)* (expanded ed.). Hackensack, NJ: World Scientific.

Galbraith, J. K. (1952). *American capitalism: The concept of countervailing power.* Boston: Houghton Mifflin.

Garfield, C. F., Chung, P. J., & Rathouz, P. J. (2003). Alcohol advertising in magazines and adolescent readership. *Journal of the American Medical Association*, *289*, 2424-2429.

Gladwell, M. (2004, January 12). Big and bad: How the SUV ran over automotive safety. *The New Yorker*, pp. 28-33.

Glantz, S., & Balbach, E. (2002). *Tobacco war: Inside the California battles*. Berkeley: University of California Press.

Glanz, K., Rimer, B., & Lewis F. M. (Eds.). (2003). *Health behavior and health education: Theory, research, and practice* (3rd ed.). San Francisco: Jossey-Bass.

Green, L. W., & Kreuter, M. (2005). *Health promotion planning: An educational and ecological approach* (4th ed.). Boston: McGraw-Hill.

Hakim, D. (2003, July 29). Advertising: A campaign by the Sierra Club chides General Motors about the Hummer's gas mileage. *The New York Times*, p. C5.

Hakim, D. (2004, February 21). Senate moves to restrict incentives for big SUVs. *The New York Times*, p. C2.

Hamilton, W. J. (2000). Mothers against drunk driving—MADD in the USA. *Injury Prevention*, *6*(2), 90-91.

Harris, G. (2004, June 3). Spitzer sues a drug maker, saying it hid negative data. *The New York Times*, p. A1.

Hawthorne, F. (2003). *The Merck druggernaut: The inside story of a pharmaceutical giant*. New York: John Wiley.

Hemenway, D. (2004). *Private guns, public health*. Ann Arbor: University of Michigan Press.

Hertz, N. (2001). *The silent takeover: Global capitalism and the death of democracy*. New York: Free Press.

Hilts, P. J. (2003). *Protecting America's health: The FDA, business, and one hundred years of regulation*. New York: Knopf.

Holder, H. D., & Treno, A. J. (1997). Media advocacy in community prevention: News as a means to advance policy change. *Addiction*, *92*(Suppl. 2), S189-S199.

Israel, B. A., Cummings, K. M., Dignan, M. B., Heaney, C. A., Perales, D. P., Simons-Morton, B. G., et al. (1995). Evaluation of health education programs: Current assessment and future directions. *Health Education Quarterly*, *22*, 364-389.

Ives, N. (2003, September 29). Advertising: FDA ponders pros and cons of the ways consumer drugs are promoted to customers. *The New York Times*, p. C11.

Jacobson, P. D., & Soliman, S. (2002). Litigation as pubic health policy: Theory or reality? *Journal of Law, Medicine & Ethics*, *30*, 224-238.

Kessler, D. (2001). *A question of intent: A great American battle with a deadly industry*. New York: Public Affairs.

Kluger, R. (1997). *Ashes to ashes: America's hundred year cigarette war, the pubic health, and the unabashed triumph of Philip Morris*. New York: Vintage.

Knowles, J. (1977). *Doing better and feeling worse: Health in the United States*. New York: Norton.

Kreuter, M. W. (2005). Commentary on public health advocacy to change corporate practices. *Health Education & Behavior*, *32*, 355-362.

Krimsky, S. (2003). *Science in the private interest: Has the lure of profits corrupted biomedical research?* Lanham, MD: Rowman and Littlefield.

Loftin, C., McDowall, D., Wiersema, B., & Cottey, T. J. (1991). Effects of restrictive licensing of handguns on homicide and suicide in the District of Columbia. *New England Journal of Medicine*, *325*, 1615-1620.

Marchand, R. (1998). *Creating the corporate soul: The rise of public relations and corporate imagery in American big business*. Berkeley: University of California Press.

Marin Institute. (2004, Summer). Miller gets the boot. *The Marin Institute Newsletter*, 5.

Marmot, M. (2002). The influence of income on health: Views of an epidemiologist. Does money really matter? Or is it a marker for something else? *Health Affairs (Millwood)*, *21*(2), 31-46.

Martin, P. G., Crandall, J. R., & Pilkey, W. D. (2000). Injury trends of passenger car drivers in frontal crashes in the USA. *Accident Analysis and Prevention*, *32*, 541-557.

McGinnis, J. M., & Foege, W. H. (1993). Actual causes of death in the United States. *Journal of the American Medical Association*, *270*, 2207-2212.

Melkote, S. R., Muppidi, S. R., & Goswami, D. (2000). Social and economic factors in an integrated behavioral and societal approach to communications in HIV/AIDS. *Journal of Health Communication*, *5*(Suppl.), 17-27.

Menashe, C. L., & Siegel, M. (1998). The power of a frame: An analysis of newspaper coverage of tobacco issues-United States, 1985-1996. *Journal of Health Communication*, *3*, 307–325.

Minkler, M. (1989). Health education, health promotion and the open society: An historical perspective. *Health Education Quarterly*, *16*, 17-30.

Mokdad, A. H., Marks, J. S., Stroup, D. F., & Gerberding, J. L. (2004). Actual causes of death in the United States, 2000. *Journal of the American Medical Association*, *291*, 1238-1245.

Mokdad, A. H., Marks, J. S., Stroup, D. F., & Gerberding, J. L. (2005). Correction letter. *Journal of the American Medical Association*, *293*, 293-294.

Moynihan, R., Heath, I., & Henry, D. (2002). Selling sickness: The pharmaceutical industry and disease mongering. *British Medical Journal*, *324*, 886-891.

Nathanson, C. (2005). Collective actors and corporate targets in tobacco control: A cross-national comparison. *Health Education & Behavior*, *32*, 337-354.

Nestle, M. (2002). *Food politics: How the food industry influences nutrition and health*. Berkeley: University of California Press.

Nestle, M. (2003). Increasing portion sizes in American diets: More calories, more obesity. *Journal of American Dietetic Association*, *103*(1), 39-40.

Nicholl, J. (1998). Tobacco tax initiatives to prevent tobacco use: A study of eight statewide campaigns. *Cancer*, *83*(Suppl. 12), 2666-2679.

Parmet, W. E., & Daynard, R. A. (2000). The new public health litigation. *Annual Review of Public Health*, *21*, 437-454.

Parrish, G. (1999). *Impolitics: Killing corporations*. Retrieved November 22, 2004, from http://www.seattleweekly.com/features/9928/impolitics-parrish.php

Parsons, K. (Ed.). (2003). *The science wars: Debating scientific knowledge and technology*. Amherst, NY: Prometheus.

Partnership for Prevention. (2000). *Final report. Nine high impact actions congress can take to protect and promote the nation's health*. Retrieved September 23, 2004, from www.prevent.org/publications/Nine_High_Impact_Report.pdf

Patterson, T. (2003). *The vanishing voter public involvement in an age of uncertainty*. New York: Vintage.

Pearson, J. P. (1997). Make it market it, and you may have to pay for it: An evaluation of gun manufacturer liability. *Brigham Young University Law Review*, *1*, 131-163.

Pertschuk, M. (2001). *Smoke in their eyes: Lessons in movement leadership from the tobacco wars*. Nashville, TN: Vanderbilt.

Rabin, R. L., & Sugarman, S. D. (Eds.). (2001). *Regulating tobacco*. New York: Oxford University Press.

Rosen, G. (1993). *A history of public health*. Baltimore: Johns Hopkins University Press.

Sargent, R. P., Shepard, R. M., & Glantz, S. A. (2004). Reduced incidence of admissions for myocardial infarction associated with public smoking ban: Before and after study. *British Medical Journal*, *328*, 977-980.

Schroeder, S. A. (2004). Tobacco control in the wake of the 1998 Master Settlement Agreement. *New England Journal of Medicine*, *350*, 293-301.

Skrzycki, C. (2003, January 16). Regulator assails safety of SUVs: Blunt talk is unusual in Runge's position. *The Washington Post*, p. E01.

Stivers, C. (1994). Grassroots efforts pursue alcohol policy reform: Refocusing upstream in New Mexico. *American Journal of Health Promotion*, *9*, 125-136.

Sturm, R. (2002). The effects of obesity, smoking, and drinking on medical problems and costs. Obesity outranks both smoking and drinking in its deleterious effects on health and health costs. *Health Affairs (Millwood)*, *21*(2), 245-253.

Susser, M. (1973). *Causal thinking in the health sciences*. New York: Oxford University Press.

Sutton, C. (1993). *The coalition against uptown cigarettes: Marketing practices and community mobilization*. Retrieved August 4, 2004, from http://www.onyx,-group.com/Uptown1.htm

Tarlov, A., & St. Peter, R (Eds.). (2000). *The society and population health reader: A state and community perspective*. New York: Free Press.

Tarrow, S., Lange, P., Bates, R., Comisso, E., Hall, P., Miqdal, J., et al. (Eds.). (1998). *Power in movements: Social movements and contentious politics* (2nd ed.). New York: Cambridge University Press.

Topol, E. J. (2004). Failing the public health—Rofecoxib, Merck, and the FDA. *New England Journal of Medicine*, *351*, 1707-1709.

U.S. Department of Health and Human Services. (1999). *Healthy people 2010. National health promotion and disease prevention objectives*. Washington, DC: Author.

U.S. Department of Health and Human Services. (2003). *USDHHHS budget overview 2003*. Retrieved August 6, 2004, from http://www.hhs.gov/budget/pdf/hhs2003bib.pdf

Vernick, J. S., Teret, S. P., Howard, K. A., Teret, M. D., & Wintemute, G. J. (1993). Public opinion polling on gun policy. *Health Affairs (Millwood)*, *12*(4), 198-208.

Wallack, L., Dorfman, L., Jernigan, D., & Themba, M. (1993). *Media advocacy and public health: Power for prevention*. Newbury Park, CA: Sage.

Wilkinson, R. G. (1996). *Unhealthy societies: The afflictions of inequality*. New York: Routledge.

Wolfson, M. (2001). *The fight against big tobacco: The movement, the state and the public's health*. New York: Aldine.

Yates, B. (1983). *The decline and fall of the American automobile industry*. New York: Empire Books.

Zakocs, R. C., Earp, J. A., & Runyan, C. W. (2001). State gun control advocacy tactics and resources. *American Journal of Preventive Medicine*, *20*, 251-257.