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Overview and Conclusions

This chapter introduces a monograph examining the relationship between tobacco and mass communications media. It summarizes the role of media as an agent for both tobacco promotion and tobacco control efforts, and the broader societal role that media plays within nested levels of advertising, marketing communications, consumer marketing, and stakeholder marketing.

This chapter introduces the methodological challenges inherent in studying the impact of media on tobacco and describes the organization of this monograph around topic areas including tobacco marketing, tobacco coverage in news and entertainment media, tobacco control media interventions, tobacco industry counter-efforts, and future directions. The closing sections of this chapter present the volume and chapter conclusions that spring from the work presented here.

Media communications play a key role in shaping attitudes toward tobacco, and current evidence shows that tobacco-related media exposure affects both tobacco use and prevention. Tobacco advertising and promotion in the United States totalled more than \$13.5 billion in 2005 (in 2006 dollars), and media communications continue to play an important role in tobacco control efforts and policy interventions. Against this context, the intention of this volume is to stimulate dialogue on what remains an important issue in global public health.

Introduction

Tobacco use is the *single largest cause* of preventable death in the United States. According to the Centers for Disease Control and Prevention, cigarette smoking is responsible for more than 400,000 premature deaths per year and reduces the life expectancy of smokers by an average of 14 years. This total exceeds the death toll of HIV/AIDS, substance abuse, motor-vehicle collisions, suicide, and homicide combined.¹

In 1964, the first Surgeon General's report on smoking and health raised the alarm about the dangers of cigarette smoking.² Four decades later, despite a rapidly growing evidence base on the impact of tobacco use, 1 in 5 American adults continue to smoke³ and more than 4,000 young people smoke their first cigarette each day.⁴ Illnesses caused by smoking cost the nation more than \$160 billion per year in health care expenditures and lost productivity. While tobacco use continues, evidence implicating the number of illnesses caused by tobacco continues to mount. Smoking plays a key role in the causation of lung, oral, laryngeal, and pharyngeal cancers. It has also been implicated in other cancers, such as those of the cervix, pancreas, and kidney, and has a substantial impact on the prevalence of heart disease, emphysema, and pneumonia, among other health problems.^{5,6}

Yet, the proportion of adults who are current smokers has declined from 42% in 1965 to 21% in 2006,³ and the percentage of ever smokers (aged 18–35 years) who have quit was 34% in 2006.⁷ More important for the future, youth smoking prevalence has declined substantially; between 1976 and 2006, the 30-day prevalence of current smoking (smoking on one or more occasions during the past 30 days) among high school students decreased from 39% to 22%.⁸ Given these promising trends, how does one explain the paradox of millions who successfully

quit tobacco use while millions more initiate tobacco use and continue to smoke?

The history of tobacco control efforts to date ranges from educational and community-based efforts directed at smoking prevention and cessation to policy interventions such as tobacco tax increases, clean indoor air laws, and stricter enforcement of laws restricting youth access to tobacco products.⁹ Against this backdrop, this monograph focuses on what remains one of the most important phenomena in both tobacco promotion and tobacco control: mass communications. A uniquely twentieth-century development, mass communications are the product of enterprises that are explicitly organized to produce and distribute information products such as news, entertainment, and advertising to inform, amuse, and/or sell commodities to the public. Analogous to the agent-vector-host-environment model for transmission of infectious diseases, mass media became a powerful vector that carried tobacco—the agent—to a growing number of susceptible hosts throughout the country. Mass media have also changed the fabric of the environment in ways that facilitate the movement of that agent (for example, by influencing social norms surrounding tobacco). At the same time, media play a critical role in tobacco control, helping to counterbalance the protobacco cues in the environment.¹⁰

The influence of the media and their role in product marketing represent one of the key developments of modern society. Effective advertising and promotion through media channels have created entire categories of human product and service needs beyond basic survival, which, in turn, have fueled the economic growth of communication media that include newspapers, magazines, radio, and television. Today, these media have evolved to become part of a global virtual society linked by channels such as the Internet, text messaging, and interactive gaming. As mass communications have

bridged societies around the world, they have also magnified the impact of media on global public health. Over 80% of the more than 1 billion smokers worldwide live in developing countries, and the impact of globalization has led to an increase of more than 250% in cigarette exports from the United States alone in the decade preceding 2002.¹¹ Moreover, smoking prevalence in the developing world is rising as prevalence among developed nations continues to decline, with the United Nations projecting a 1.7% net global annual increase between 1998 and 2010. If current trends continue, more than one-half billion of the world's current inhabitants are predicted to lose their lives to tobacco use,^{12,13} underscoring the urgency of examining the media's role in global tobacco marketing.

At the same time, the media have an equally powerful role in influencing individuals and policymakers and have made critical contributions to the cause of tobacco control. Media channels hold the power to frame conceptual models, influence the evolution of these models in the public's perceptions, and ultimately guide these perceptions toward the implementation of policy.¹⁴ Tobacco control interventions have been inherently intertwined with the media, ranging from the antitobacco public service announcements broadcast on television under the Federal Communications Commission's (FCC's) Fairness Doctrine in the late 1960s^{15,16} to the advertising restrictions of the 1998 Master Settlement Agreement and the advertising restrictions contained in the World Health Organization's (WHO's) Framework Convention on Tobacco Control.¹⁷ Annual adult per capita cigarette consumption in the United States has declined from its peak level of 4,345 cigarettes in 1963 to a preliminary estimate of 1,654 in 2006,^{18,19} a process that started with the media publicity surrounding the 1964 Surgeon General's report and continues through today's media advocacy efforts on behalf of tobacco control.

Despite these successes, tobacco use still accounts for nearly one-third of cancer deaths worldwide. As a result of growing international tobacco use, WHO predicts that deaths caused by tobacco will increase to 6.4 million per year by 2015, representing 10% of all deaths worldwide.^{10,20} These trends, combined with the interrelationships between tobacco and media, mean that it is critical to understand how exposure to media influences tobacco use and to explore ways to effectively leverage the media to improve the overall state of public health.

This introductory chapter provides a framework for understanding the relationship between tobacco and the media, methodological issues in researching media-related issues in tobacco, and an overview and summary of the specific areas addressed in this monograph. Subsequent sections present the conclusions of individual chapters, followed by the major conclusions of the volume, as an executive summary of its overall findings.

Tobacco and the Media: A Multilevel Perspective

A complete and comprehensive understanding of the role of mass communications in tobacco control and tobacco promotion requires a multilevel approach. At the individual level, one must examine how individual-level factors such as knowledge, beliefs, and attitudes influence and are influenced by tobacco-related media messages and the channels in which the messages occur. At the organizational level, attention needs to be focused on (1) how the structure of mass media organizations and the practices of media practitioners lead to the production of media messages in the form of advertising, news, and entertainment; (2) how advocates for both the tobacco industry and tobacco

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control attempt to influence the news and entertainment media; and (3) the role of regulation and public policy in influencing tobacco communications. Finally, at the population level, it is important to consider the larger cultural environment that is shaped by the interplay of the tobacco industry, mass media, tobacco control researchers, advocates, and policymakers.

The media also function at several levels, and the levels at which stakeholders on both sides of tobacco issues interact with media can be seen as a nested relationship, as shown in figure 1.1. Each level from 1 through 4 represents a broader and more indirect level

of marketing effort, and at the same time, a more powerful one. For example, although the ultimate impact of media efforts may be felt most clearly by direct consumer response to advertising or marketing communications, interventions at the stakeholder level often have broad-reaching effects on promotional efforts, social attitudes toward an issue or product, or even policies and regulation. This monograph attempts to examine the dynamics of tobacco-related media interventions at each of these levels, within a systemic framework.

The relationships among these levels and stakeholders on either side of the tobacco

Figure 1.1 The Nested Relationships among Advertising, Marketing Communications, Consumer Marketing, and Stakeholder Marketing in Tobacco Promotion



debate, and their relationships with chapters in this monograph, can be seen as follows:

Advertising. Cigarette advertising and promotion in the United States totaled more than \$13.5 billion in 2005 (in 2006 dollars),²¹ with effects that included recruiting new smokers, especially young smokers, as well as expanding the market for tobacco products by reinforcing smoking, discouraging quitting, and appealing to health concerns. Chapter 4 provides an overview of tobacco advertising and promotional efforts throughout modern history, while chapters 3 and 8 examine the rationales for and legal issues faced in regulating such efforts. Chapter 11 provides a detailed look at the strategies and themes of media efforts used by tobacco control advocates. Finally, chapter 14 explores how the tobacco industry uses media advertising and promotion to defeat state tobacco control referenda and ballot initiatives.

Marketing communications. Tobacco advertising forms part of an integrated marketing communications strategy combining sponsorship, brand merchandising, brand stretching, packaging, point-of-sale promotions, and product placement, across a broad range of channels ranging from event marketing to the Internet.^{22,23} Chapter 3 explores key aspects of the branding process, and (along with chapter 4) defines these terms and strategies as they relate to tobacco. Chapter 6 examines tobacco manufacturers' corporate sponsorship efforts—i.e., those carried out in the name of the company but not connected to a specific tobacco product brand. Chapter 15, the monograph's concluding chapter, examines future issues in tobacco promotion, including point-of-sale displays, discounting, and brand marketing, in the context of the current regulatory and social environment.

Consumer marketing. Consumer-product marketing efforts, including pricing,

distribution, packaging, and product design, are aimed at the development of tobacco product brand identities that often are targeted toward specific demographic, psychographic, or ethnic markets.^{24,25} Chapter 3 examines key principles of targeted marketing and communicating brand image, while chapter 5 looks in detail at common marketing themes used by tobacco companies to reach their target audiences. An even more important issue is the effectiveness of such media efforts on targeted consumers. Chapters 7 and 12 review the impact of media interventions by tobacco industry and tobacco control advocates, respectively, on smoking behavior, while chapters 9 and 10 explore the role of the news and entertainment media in influencing tobacco use among consumers.

Stakeholder marketing. Image- and relationship-building initiatives aimed at stakeholders, such as retailers, the hospitality industry, and policymakers, range from personal outreach to mass media organizations and public relations efforts around broad themes such as corporate social responsibility, youth smoking prevention, and providing information on health risks.^{26–28} Chapters 6 and 9, discussed previously, explore corporate advertising and news media advocacy as tools to create an image among stakeholders, while chapter 13 addresses how the tobacco industry uses stakeholder marketing efforts in an attempt to mitigate the impact of tobacco control media interventions on tobacco product sales.

These integrated levels of marketing and promotion pose a challenge to the goals of tobacco control and public health and underscore the need to further examine appropriate policy interventions to address the role of media efforts by the tobacco industry. Moreover, as direct advertising channels have become increasingly restricted by policy interventions on both the domestic and global levels, promotional expenditures for tobacco continue to

increase in areas such as point-of-purchase displays, promotional allowances, and viral, or “stealth,” marketing.^{21,24,25,29,30}

Given these trends and the realities of a digitally interconnected age, public health stakeholders must continue to monitor the relationship between media and tobacco use as both evolve in the twenty-first century.

Studying the Media and Tobacco

As is the case with most social science research, assessing causality is a significant challenge—in this instance, in determining the relationship between mass communications and tobacco-related outcomes. Establishing causality is even more challenging in the case of mass communications, given their ubiquity, the complex nature of communication effects, and the limitations of research designs.^{31,32}

Major challenges in assessing causality in media studies include the following:

- Media effects are complex and multidimensional.³² (1) media can have short-term effects such as the impact of a short burst of advertising on consumer attitudes and behaviors—for example, on sales of cigarettes—and long-term effects that are stable and sustained, such as on social norms and values; (2) media influence may be at the micro level, such as on individual cognitions, affect, and behavior, or at the macro level, influencing social policies, social movements, and social actors; (3) some effects may alter norms or opinions, such as changing norms regarding tobacco use, while others may stabilize and reinforce existing norms on smoking; (4) the effects of media can accumulate after sustained exposure to messages or be noncumulative; (5) media influence may range from effects on individual cognitions or attitudes to direct behavior; (6) some media effects are direct and others conditional; and (7) media effects can be as diffuse as general exposure to media or can be content specific.
- It is difficult to establish control groups. In epidemiology, some consider the randomized clinical trial as a gold standard that can clearly establish the difference in “exposures” between control and treatment groups. The fundamental assumption behind the idea of a control group is that the members of this group are not exposed to “treatment,” in contrast to an intervention group that is exposed to treatment.⁵ In the case of media, it is often difficult to confine the spread of messages to specified geographic areas, control for prior exposure or “background” exposure to the messages, blunt the impact of competing messages, and achieve sufficient exposure to messages in the treatment group so that it can be distinguished from control-group exposure.
- As noted above, media effects, particularly in the complex domain of health, may take longer to establish, whereas most research designs may not have observations for a sufficiently long duration to document the effects.³¹ A research design with observations over a short duration may not be able to document media effects adequately.
- Media effects can be selective for certain population subgroups; that is, not all groups are equally influenced by the media. For example, evidence shows that information campaigns or diffusion of information could potentially benefit some groups more than others.^{10,33}
- Media effects are not always direct but instead may be diffused through others.³¹ For example, a campaign to promote a tobacco quitline may reach a smoker only through a family member or friend who is exposed to the campaign and shares messages with the smoker. If the observations are limited to those receiving

quitline services, one might underestimate the effectiveness of the campaign.

- Last, the all-pervasive nature of the media environment includes both messages of interest as well as background “noise.”

Given these challenges, no single study method or design is likely to provide the weight of evidence necessary for causal inferences regarding the influence of mass communications on tobacco control or tobacco promotion. What is needed is a combination of methods, designs, interpretive techniques, and judgments that provides a body of evidence to enable an overall assessment of the relationship between media and outcomes pertaining to tobacco use.³⁴ In assessing the impact of media, studies should examine how media messages are generated (e.g., interplay between journalistic practices and tobacco industry efforts to influence news coverage), the nature of the media environment (how news on tobacco use and its effects are covered or the depiction of tobacco use in entertainment media), and the impact of the media environment on a range of tobacco-related outcomes. The phrase “range of tobacco-related outcomes” is worth underscoring here. Unlike epidemiological studies in many other fields of research—in which exposure-outcome relationships are more straightforward—it is not always easy to establish a direct causal link between media messages and behavior. Often, as discussed above, media effects could be on antecedents to behavior such as beliefs, norms, and intentions. Focusing on behavior alone could lead one to falsely conclude that media effects are weak.

This monograph reviews studies based on multiple research designs and methods including surveys, field and laboratory experiments, and analyses of media content and tobacco industry documents. Studies based on surveys of population groups or subgroups have the advantage of observing

people in their natural environment, do not interrupt or disrupt their routines, and are generalizable. What is gained in external validity, however, is traded against internal validity in the form of controlling for extraneous factors. The choice of these control variables is often important. Surveys can be single or repeated cross-sections, or they can be longitudinal (or panel) designs in which the same persons are interviewed at different points in time. The latter method can be quite effective in measuring change over time and can be an important contributor to providing evidence of causality.

Experiments, particularly laboratory-based experiments, provide the advantage of internal validity and are helpful in confirming causal relationships. These experiments, however, are often limited in terms of the rather forced nature of exposure, unnatural viewing situations, and the limitations of the experimental populations, which are often college students. Field experiments have the potential to increase external validity, while maintaining a degree of internal validity, but are subject to a number of sources of error, as discussed by Cook and Campbell in their classic work on quasi-experimental designs.³⁵

Analyses of media content can be both quantitative and qualitative. The analysis of news content on tobacco for example, as reviewed in chapter 9, demonstrates how systematic analysis of news coverage can provide an understanding of the news to which consumers are likely to be exposed. This facilitates the interpretation of the impact of news content on audiences exposed to news. Systematic content analyses require that the criteria for classifying media content be explicit and formal and that the classification, or coding, be done by more than one coder. Documentary analysis (e.g., the analyses of tobacco industry efforts to influence media) may not be “systematic” but may rely more on expert judgment. This analysis can be considered valid as long as

the criteria for interpretation are transparent and the inferences are plausible in light of the evidence from other methods.

In summary, this monograph relies on the totality of evidence from multiple studies using a variety of research designs and methods to understand the effects of media on tobacco promotion and tobacco control. The evidence is based on consistency, strength of associations, and theoretical plausibility.^{5,34}

Preparation of this Monograph

The National Cancer Institute's Tobacco Control Research Branch invited five experts representing the domains of medicine, public health, communications, marketing, epidemiology, and statistics to serve as editors of this monograph. This ambitious effort to synthesize the science included the contributions from 23 authors selected for their individual expertise. The monograph was subjected to a rigorous review process, which began with a review of the monograph outline. As each chapter was drafted, the chapter was reviewed by multiple peer reviewers with expertise on the individual topic. When the entire volume was complete, the full draft was submitted to expert reviewers who evaluated the monograph as a whole, who related one chapter to another, and who ensured that the volume level conclusions were supported by the monograph's content. The National Cancer Institute conducted the final review before the monograph was printed. Comments from 62 expert reviewers formed the basis of revisions the authors and volume editors made to the monograph. All of these efforts have culminated in a monograph that includes nearly 2,000 references, 44 tables, 15 figures, and numerous illustrative examples used in the media to promote and to discourage tobacco use.

This monograph is supported by its Web page, <http://www.cancercontrol.cancer.gov/tcrb/monographs/19/index.htm>, where supplemental materials for this monograph (fact sheets and presentation slides) and links to additional resources on the media and tobacco are located.

Monograph Organization

This monograph reflects a comprehensive examination of how mass media have been used in both tobacco promotion and tobacco control by various stakeholders and the consequences of such use. This examination included reviewing

- different types of media, such as news, television, advertising, movies, and the Internet;
- strategies to influence the content of media products, such as public relations and strategic communications; and
- the effects of media communications on tobacco initiation and use.

Part 1—Introduction, frames the discussion of media and tobacco use. This first chapter provides an overview of the topic of this monograph. It also includes volume-level conclusions and chapter-by-chapter synopses and conclusions. The second chapter summarizes the theoretical underpinnings of media research that support the rationale and methodology for the subsequent examination of specific areas of interest surrounding tobacco and media.

Part 2—Tobacco Marketing, explores issues related to the media interventions used by the tobacco industry to promote its products. Its chapters focus on areas that include several aspects of tobacco advertising and promotion, the use of media by the tobacco industry for corporate

sponsorship and advertising, the influence of tobacco marketing on smoking behavior, and the regulatory and constitutional issues surrounding policy interventions directed at tobacco marketing.

Part 3—Tobacco in News and Entertainment Media, looks at two media channels that go beyond traditional paid advertising and promotion to play a key role in shaping public opinion on smoking. Its chapters explore how news media coverage influences tobacco use and the role that entertainment media play in attitudes toward tobacco use.

Part 4—Tobacco Control Media Interventions, focuses on how media efforts are used in support of tobacco cessation and prevention, including an overview of the strategies and themes in tobacco control media interventions and efforts to assess the effectiveness of mass media campaigns in reducing smoking.

Part 5—Media, Tobacco Control Interventions, and Tobacco Industry Mitigation Efforts, discusses two separate aspects of tobacco industry counterefforts and the media: the industry's efforts to weaken tobacco control media interventions and its use of the media in the political realm to attempt to defeat state tobacco control ballot initiatives and referenda.

Part 6—Future Directions, examines possible future trends in the use of media for both tobacco promotion and tobacco control, as a summary of the issues discussed throughout the previous sections.

Major Conclusions

These conclusions are based on the scientific evidence and evaluation provided in the monograph.

1. Media communications play a key role in shaping tobacco-related knowledge, opinions, attitudes, and behaviors among individuals and within communities. Media communications on tobacco include brand-specific advertising and promotion, news coverage, depictions of tobacco use and tobacco products in entertainment media, public relations, corporate sponsorship, corporate advertising, political advertising for ballot initiatives and referenda, and media campaigns for tobacco control.
2. Cigarettes are one of the most heavily marketed products in the United States. Between 1940 and 2005, U.S. cigarette manufacturers spent about \$250 billion (in 2006 dollars) on cigarette advertising and promotion. In 2005, the industry spent \$13.5 billion (in 2006 dollars) on cigarette advertising and promotion (\$37 million per day on average). Currently, most of the cigarette industry's marketing budget is allocated to promotional activities, especially for price discounts. Price discounts accounted for 75% of total marketing expenditures in 2005 (\$10.1 billion in 2006 dollars). Less than 1% of cigarette marketing expenditures are now used for advertising in traditional print media.
3. Tobacco advertising has been dominated by three themes: providing satisfaction (taste, freshness, mildness, etc.), assuaging anxieties about the dangers of smoking, and creating associations between smoking and desirable outcomes (independence, social success, sexual attraction, thinness, etc.). Targeting various population groups—including men, women, youth and young adults, specific racial and ethnic populations, religious groups, the working class, and gay and lesbian populations—has been strategically important to the tobacco industry.
4. The total weight of evidence—from multiple types of studies, conducted by

investigators from different disciplines, and using data from many countries—demonstrates a causal relationship between tobacco advertising and promotion and increased tobacco use.

5. The depiction of cigarette smoking is pervasive in movies, occurring in three-quarters or more of contemporary box-office hits. Identifiable cigarette brands appear in about one-third of movies. The total weight of evidence from cross-sectional, longitudinal, and experimental studies indicates a causal relationship between exposure to depictions of smoking in movies and youth smoking initiation.
6. Evidence from controlled field experiments and population studies shows that mass media campaigns designed to discourage tobacco use can change youth attitudes about tobacco use, curb smoking initiation, and encourage adult cessation. The initiation effect appears greater in controlled field experiments when mass media campaigns are combined with school- and/or community-based programming. Many population studies document reductions in smoking prevalence when mass media campaigns are combined with other strategies in multicomponent tobacco control programs.

Chapter Summaries and Conclusions

Part 1—Introduction

Chapter 1. Overview and Conclusions

This chapter provides an introduction and framework for the monograph, describes how it is organized, and includes major volume conclusions and individual chapter conclusions.

Chapter 2. Theoretical Underpinnings of Media Research in Tobacco Control and Tobacco Prevention

This chapter examines the history and theory of conceptual models currently used in media research. It looks at three broad levels of theories and analysis for media studies in tobacco—the individual, organizational, and societal levels—and how these levels affect the framing of research efforts and their findings. This chapter lays the groundwork for understanding some of the important theoretical and methodological differences underlying the media studies discussed in this monograph and their impact on tobacco control efforts.

Part 2—Tobacco Marketing

Chapter 3. Key Principles of Tobacco Promotion and Rationales for Regulation

This chapter explores the use of advertising and promotion by the tobacco industry to create demand for its products, including market segmentation to target consumers by demographic, geographic, behavioral, and psychographic factors, as well as branding strategies to create a consistent product identity and message.

Conclusions

1. The promotion of tobacco products involves sophisticated targeting and market segmentation of potential customers. Common market segmentation dimensions include demographics (e.g., age, gender, race/ethnicity), geography (e.g., market density, regional differences within a domestic or international market), behavioral characteristics (e.g., occasions of cigarette use, extent of use, user's smoking status), and psychographics (lifestyle analysis).

2. Internal tobacco company documents reveal that two key typologies of cigarette consumers used by cigarette firms are “starters” (who frequently initiate smoking during adolescence) and “pre-quitters” (i.e., existing smokers who need reassurance).
3. The brand image of most tobacco products represents the end result of a multifaceted marketing effort involving brand identity, logos, taglines and slogans, pictorial elements, and the use of color. The development, enhancement, and reinforcement of this brand imagery are primary objectives of tobacco promotion.
4. Tobacco companies have designed their communications of brand image to use principles relating to message repetition, consistency, and relevance to a contemporary audience. The brand’s image is built slowly and collectively by all of the accumulated associations and images of the communications strategy, such as social status, sophistication and social acceptance, athleticism and healthfulness, glamour and fashion, rewarded risk-taking and adventure, and masculinity or femininity.
5. The key rationales cited for implementing a comprehensive ban on tobacco advertising and promotion include (1) the health consequences of tobacco use (including addiction); (2) the deceptive or misleading nature of several tobacco promotional campaigns; (3) the unavoidable exposure of youth to these campaigns; (4) the role of tobacco advertising and promotion in increasing tobacco use in the population, especially among youth; (5) the targeting of “at-risk” populations, including youth, women, and ethnic and racial minorities, through advertising and promotion; (6) the failure of the tobacco industry to effectively self-regulate its marketing practices; and (7) the ineffectiveness of partial advertising bans.
6. Substantial evidence exists from the United States and several other countries that the tobacco industry does not effectively self-regulate its marketing practices.
7. Substantial evidence exists from the United States and several other countries that tobacco companies typically respond to partial advertising bans in ways that undermine the ban’s effectiveness. These responses include shifting promotional expenditures from “banned” media to “permitted” media (which may include emerging technologies and “new” media), changing the types and targets of advertising in permitted media, using tobacco-product brand names for nontobacco products and services, and availing themselves of imprecise clauses in the legislative text of the bans that allow them to continue to promote their products.

Chapter 4. Types and Extent of Tobacco Advertising and Promotion

This chapter examines the scope of tobacco advertising and promotion in the United States and its evolution over time. Areas discussed include a taxonomy of past and present channels used in advertising and promoting tobacco products; emerging promotional channels such as packaging, viral marketing, and the Internet; and recent trends in tobacco advertising and promotional expenditures, including the shift from traditional print advertising to promotional activities.

Conclusions

1. Cigarettes are one of the most heavily marketed products in the United States. Between 1940 and 2005, U.S. cigarette manufacturers spent about \$250 billion (in 2006 dollars) on cigarette advertising and promotion. In 2005, the industry spent \$13.5 billion (in 2006 dollars) on cigarette advertising and promotion (\$37 million per day on average).

2. Most of the cigarette industry's marketing budget is allocated to promotional activities, especially for price discounts, which accounted for 75% (\$10.1 billion in 2006 dollars) of total marketing expenditures in 2005. From 1970 to 2005, the pattern of marketing expenditures shifted dramatically; the proportion of expenditures allocated for advertising in "measured media" decreased from 82% in 1970 to almost none in 2005. Measured media include television, radio, newspapers, magazines, and billboards. Correspondingly, the proportion of marketing expenditures devoted to promotional activities increased from 18% to almost 100%.
3. During the past three decades, Philip Morris has consistently committed more than \$100 million per year (in 2006 dollars) to advertising for Marlboro, the industry's dominant brand, which currently has 40% of the U.S. market share. In 2006, the Marlboro brand was the 12th most highly valued brand worldwide, with an estimated \$21.4 billion in brand equity.
4. Expenditures for smokeless tobacco advertising and promotion reached \$259 million (in 2006 dollars) in 2005. The five largest categories of expenditure were price discounts (40%), coupons (11%), sampling (11%), point of sale (8%), and magazines (8%).
5. Cigarette advertising and promotion are heavy in volume and high in visibility at the point of sale, particularly in convenience stores. Cigarette marketing at the point of sale increased substantially after the 1998 Master Settlement Agreement, which included a ban on cigarette advertising on billboards. About 60% of all cigarettes sold in the United States are purchased in convenience stores, where cigarettes are the top in-store product category in terms of consumer sales.
6. As cigarette advertising is being curtailed in some traditional media, cigarette companies are exploring the use of new or nontraditional media for distributing protobacco messages and images, including the Internet and cigarette packages. In addition, cigarette firms (like other companies) are experimenting with viral (stealth) marketing to create a "buzz" about a product.

Chapter 5. Themes and Targets of Tobacco Advertising and Promotion

This chapter provides an overview of specific themes and population targets used in tobacco advertising and promotion on the basis of studies of marketing materials and tobacco industry documents. It examines key themes for tobacco marketing efforts such as taste and satisfaction, implied harm reduction, social affinity, brand loyalty, and "smokers' rights." It also discusses efforts to market tobacco products to specific populations—most of which are defined by age, gender, race or ethnicity, and sexual orientation—and the implications of these targets for marketing themes and brand identity.

Conclusions

1. Tobacco advertising has been dominated by three broad themes: providing satisfaction (taste, freshness, mildness, etc.), assuaging anxieties about the dangers of smoking, and creating associations between smoking and desirable outcomes (independence, social success, sexual attraction, thinness, etc.).
2. Targeting various population groups—including men, women, youth and young adults, specific racial and ethnic populations, religious groups, the working class, and gay and lesbian populations—has been strategically important to the tobacco industry.
3. The tobacco industry has become increasingly sophisticated in applying

market research to population segments in order to design products, messages, communication channels, and promotions more aligned with the needs and susceptibilities of particular market segments. This research results in more efficiency, greater reach, and increased effectiveness for marketing activities aimed at targeted populations.

4. Little attention has been paid to understanding tobacco marketing aimed at American Indians and Alaska Natives, despite their high prevalence of tobacco use.
5. Targeted marketing of tobacco products to specific groups such as youth, women, and minorities has become a focus for monitoring and protest by antitobacco advocates and community groups.

Chapter 6. Tobacco Companies' Public Relations Efforts: Corporate Sponsorship and Advertising

This chapter examines corporate public relations activities that can have an important impact on public perceptions of and attitudes toward individual tobacco companies. Such activities include corporate sponsorship activities targeting core customer groups, corporate advocacy advertising in areas such as youth smoking, and corporate image advertising designed to highlight charitable work or create a new corporate brand identity.

Conclusions

1. Corporate sponsorship of events and social causes represents a key public relations strategy for major tobacco companies, which spent more than \$360 million on these efforts in 2003. Key targets included sporting events, antihunger organizations, and arts and minority organizations. These efforts have been used, in certain cases, to influence opinion leaders who benefit from such sponsorship.

2. Corporate image campaigns by tobacco companies have highlighted their charitable work in the community and have promoted their youth smoking prevention programs; at times, corporate spending on these campaigns has vastly exceeded the amount actually given to the charities. These campaigns have reduced perceptions among adolescents and adults that tobacco companies are dishonest and culpable for adolescent smoking, and among adults, have increased perceptions of responsible marketing practices and favorable ratings for the individual companies.
3. Tobacco industry youth smoking prevention campaigns have been generally ineffective in reducing youth smoking. Moreover, they may even have increased smoking in some subgroups of youth.
4. Tobacco industry public relations efforts such as corporate sponsorship and advertising may make audiences more resistant to criticism of the industry, may mitigate jurors' negative views toward the industry, and may weaken public or legislative support for tobacco control policies.
5. Systematic monitoring and descriptions of tobacco companies' activities and expenditures for corporate sponsorship and advertising are needed to better understand the impact of these activities on the public image of tobacco companies, on consumers' smoking intentions and behaviors, and on the image of sponsored events and causes.

Chapter 7. Influence of Tobacco Marketing on Smoking Behavior

This chapter examines the evidence base for how tobacco marketing efforts affect tobacco use by adolescents as well as tobacco consumption across the general population by using results from numerous studies

as well as findings from tobacco industry documents. Areas examined include the relationship between cigarette advertising and adolescent needs and self-image, the effects of marketing exposure on adolescent smoking, and the relationship between tobacco marketing expenditures and overall tobacco consumption.

Conclusions

1. Much tobacco advertising targets the psychological needs of adolescents, such as popularity, peer acceptance, and positive self-image. Advertising creates the perception that smoking will satisfy these needs.
2. Adolescents who believe that smoking can satisfy their psychological needs or whose desired image of themselves is similar to their image of smokers are more likely to smoke cigarettes.
3. Experimental studies show that even brief exposure to tobacco advertising influences adolescents' attitudes and perceptions about smoking and smokers, and adolescents' intentions to smoke.
4. The vast majority of cross-sectional studies find an association between exposure to cigarette advertising, measured in numerous ways, and adolescent smoking behavior, measured in numerous ways, indicating a robust association.
5. Strong and consistent evidence from longitudinal studies indicates that exposure to cigarette advertising influences nonsmoking adolescents to initiate smoking and to move toward regular smoking.
6. Many econometric studies have used national time-series data to examine the association between tobacco advertising expenditures and tobacco consumption. Some of these studies found a small positive effect of advertising on consumption. Other studies failed to find a positive effect, probably because the

data used had little variance and were measured at a high level of advertising expenditure at which changes in the volume of advertising have little or no marginal effect.

7. The evidence from three cross-sectional econometric studies using disaggregated local-level data indicates a positive effect of advertising on tobacco consumption.
8. The studies of tobacco advertising bans in various countries show that comprehensive bans reduce tobacco consumption. Noncomprehensive restrictions generally induce an increase in expenditures for advertising in "nonbanned" media and for other marketing activities, which offset the effect of the partial ban so that any net change in consumption is minimal or undetectable.
9. The total weight of evidence from multiple types of studies, conducted by investigators from different disciplines, using data from many countries, demonstrates a causal relationship between tobacco advertising and promotion and increased tobacco use, as manifested by increased smoking initiation and increased per capita tobacco consumption in the population.

Chapter 8. Legal and Constitutional Perspectives on Tobacco Marketing Restrictions

This chapter explores legal and constitutional issues surrounding regulation of tobacco promotion within the context of legislative efforts in the United States as well as WHO's Framework Convention on Tobacco Control.

Conclusions

1. The First Amendment to the U.S. Constitution, as the Supreme Court has interpreted it in recent years, grants broad protection for commercial

speech, including speech about tobacco products. The Court has precluded regulation of tobacco products by the U.S. Food and Drug Administration (FDA) on the basis of the Court's analysis of existing authorities under the FDA's governing statute and the complex balance that Congress has struck between protecting and promoting trade in tobacco products and informing consumers of their dangers.

2. The Federal Trade Commission has authority to prevent "unfair or deceptive acts or practices in or affecting commerce." However, the agency's efforts to prevent tobacco advertisements that are false or misleading have been limited.
3. Canada and the European Union have imposed limitations on tobacco advertising and promotion, but these policies were weakened as a result of legal challenges. Nevertheless, Canadian and European restrictions on tobacco marketing are stronger than those currently in place in the United States.
4. The Framework Convention on Tobacco Control (FCTC), the first treaty ever negotiated by the World Health Organization, calls on each party to the treaty to "undertake a comprehensive ban of all tobacco advertising, promotion and sponsorship ... in accordance with its constitution or constitutional principles." As of April 2008, 154 countries were parties to the FCTC. The United States signed the treaty in May 2004 but has yet to ratify it.

Part 3—Tobacco in News and Entertainment Media

Chapter 9. How the News Media Influence Tobacco Use

This chapter examines news media coverage of tobacco issues and its ultimate

relationship with both individual tobacco use outcomes and policy interventions. It looks at the nature and volume of tobacco issue coverage and provides a content analysis of news media items referring to tobacco. It also examines common framing issues for tobacco-related news items as well as relationships with outcome measures and tobacco industry efforts to influence media coverage.

Conclusions

1. The news media represent a key source of health information for the general public. More important, they serve as a framing mechanism for issues surrounding tobacco control. As a result, news coverage is a frequent aim of stakeholder activity on both sides of tobacco-related issues. However, only a small proportion of tobacco control research has been devoted to news media issues to date.
2. News coverage that supports tobacco control has been shown to set the agenda for further change at the community, state, and national levels. Despite this, organized media advocacy efforts on behalf of tobacco control issues remain an underutilized area of activity within public health.
3. Key issues covered as news stories include secondhand smoke, tobacco policies, and the health effects of smoking. Studies of tobacco-related news coverage often show that the majority of stories favor tobacco control progress, including opinion pieces. Other studies have shown the tobacco industry to be successful in gaining consistent coverage for selected issues.
4. Content analyses of tobacco-related news articles have revealed some trends that remain favorable to protobacco interests. These trends include the underrepresentation of tobacco farming diversification in the farming press,

a tendency of articles to challenge the science behind secondhand smoke issues, and positive coverage of the growth in cigar smoking.

5. Numerous factors can affect the volume and nature of tobacco news coverage. The American Stop Smoking Intervention Study found more support for tobacco control in letters to the editor in participating states, and editors largely support tobacco control efforts. However, news coverage often focuses on specific areas such as tobacco control policies, the outcomes of tobacco lawsuits, or the disbursement of Master Settlement Agreement funds.
6. Large-scale studies have yet to be undertaken investigating associations between tobacco-related news coverage and attitudes, behaviors, and outcomes related to tobacco use. These studies face challenges in separating the effects of news coverage from those of the interventions or policy changes they describe. Research shows potential evidence for such an impact, including a drop in per capita cigarette consumption after news coverage of the 1964 Surgeon General's report on smoking and health, a relationship between tobacco-related news coverage and cessation, and a link between news coverage of specific tobacco control efforts and lower adolescent smoking prevalence and consumption.
7. Paid tobacco advertising tends to suppress or reduce news coverage of tobacco-related issues, particularly in magazines. However, bans on tobacco advertising that accompany ratification of the World Health Organization's Framework Convention on Tobacco Control may impair the tobacco industry's ability to exert editorial control over published content.

Chapter 10. Role of Entertainment Media in Promoting or Discouraging Tobacco Use

This chapter looks at the impact of media channels for entertainment on attitudes and outcomes related to smoking in an environment in which American youth are exposed to more than five hours per day of media from television and other sources. It describes portrayals of tobacco products and tobacco use in the movies together with a discussion of other channels such as television, music, magazines, and the Internet. It also looks at the influence of such portrayals on social attitudes and behaviors related to smoking, as well as current strategies for reducing media exposure to tobacco products.

Conclusions

1. Children and adolescents in the United States have heavy exposure to entertainment media, with an average of 5.5 person-hours of media use per day. Tobacco use often is integrated into entertainment media programming, especially in movies.
2. Portrayals of tobacco in movies include images of tobacco use and images of tobacco product brand names and logos. Depictions of smoking are pervasive in movies, occurring in three-quarters or more of contemporary box-office hits. Cigar use also is commonly depicted in movies, but use of smokeless tobacco is not. Smoking is more common in movies rated for adults (i.e., R-rated), but depiction of smoking is not related to box-office success. Identifiable cigarette brands appeared in about one-third of movies released during the 1990s. In contrast to its frequent depiction in movies, tobacco use is found in about 20% of television shows and 25% of music videos.
3. Smoking prevalence among contemporary movie characters is approximately 25%,

about twice what it was in the 1970s and 1980s. In contrast, smoking in the general population has declined since the 1970s. Smokers in movies differ from smokers in the general population: the former are more likely to be affluent and white. The health consequences of smoking are rarely depicted in movies.

4. Cross-sectional studies show that, among adolescents, exposure to smoking in movies is associated with initiation of smoking, independent of several other factors such as smoking by friends and family. Cross-sectional studies also indicate that among adolescent never smokers, exposure to smoking in movies is associated with more positive attitudes toward smoking.
5. Two longitudinal studies demonstrate that adolescents with higher exposure to smoking in movies at baseline are 2.0 to 2.7 times more likely to try cigarette smoking in the future. More studies are needed on the role exposure to smoking in movies plays in adolescents' smoking beyond the initiation phase.
6. Experimental studies show that images of cigarette smoking in film can influence adolescent and adult viewers' beliefs about social norms for smoking, beliefs about the function and consequences of smoking, and their personal intentions to smoke. Protobacco movie content (e.g., stars smoking, absence of health consequences portrayed) appears to promote prosmoking beliefs and intentions. The effects observed for experimental studies of smoking in movies on viewers' smoking-related beliefs are of a similar magnitude as those observed in experimental media research on other health topics (e.g., effects of media violence on viewers' aggression).
7. Experimental studies indicate that antitobacco advertisements screened before films can partially counter the impact of tobacco portrayals in movies.
8. The total weight of evidence from cross-sectional, longitudinal, and experimental studies, combined with the high theoretical plausibility from the perspective of social influences, indicates a causal relationship between exposure to movie smoking depictions and youth smoking initiation.
9. One longitudinal study indicates that parental steps to reduce the exposure of never smokers (aged 10–14 years) to R-rated movies, which have higher numbers of smoking events, produced a corresponding reduction in their smoking initiation.
10. Efforts to reduce media exposure to tobacco include restrictions on tobacco advertising and product placements, advocacy targeted to entertainment providers, media literacy interventions aimed at the general public, continued dialogue with key stakeholders in the entertainment industry, and proposed self-regulation by the movie industry (e.g., tobacco-related ratings).

Part 4—Tobacco Control Media Interventions

Chapter 11. An Overview of Media Interventions in Tobacco Control: Strategies and Themes

This chapter examines current and future trends in media interventions for tobacco control, including the evolution of media efforts from their start under the FCC's Fairness Doctrine for television advertising, to recent initiatives funded by state authorities and the 1998 Master Settlement Agreement. It also discusses examples of advertising themes used in tobacco control programs, research on factors in effective tobacco control advertising campaigns,

and the potential for “new-media” channels such as interactive health communications using the Internet.

Conclusions

1. From their beginnings with the successful 1967–70 application of the Fairness Doctrine to cigarette advertising in the broadcast media, media interventions for tobacco control have evolved to become a key component of tobacco control efforts. These interventions have been aided by funding from the 1998 Master Settlement Agreement.
2. Media channels commonly used for tobacco control advertising include television, radio, print, and billboards. Much research on tobacco control media interventions revolves around television, regarded as the most powerful medium.
3. Public-health-sponsored antitobacco advertising has included themes such as the health risks of smoking, exposure to secondhand smoke, questioning the accuracy of tobacco industry communications, and the declining social acceptability of smoking. Other forms of smoking-relevant advertising include advertisements for commercial smoking cessation products as well as the tobacco industry’s youth smoking prevention and adult cessation programs.
4. Numerous studies have shown consistently that advertising carrying strong negative messages about health consequences performs better in affecting target audience appraisals and indicators of message processing (such as recall of the advertisement, thinking more about it, discussing it) compared with other forms of advertising, such as humorous or emotionally neutral advertisements. Some of these negative advertisements also portray deception on the part of the tobacco industry. Advertisements for smoking cessation products and tobacco-industry-sponsored

smoking prevention advertising have been shown to elicit significantly poorer target audience appraisals than do advertisements based on negative health consequences.

5. Studies have shown that particular characteristics of advertisements (such as those eliciting negative emotion) are more important than demographic factors (such as race/ethnicity, nationality, and age group) in driving immediate advertising-related appraisals and indicators of message processing.
6. Because many smokers search the Internet for help to quit, interactive Web-based health communications may have potential for assisting smoking cessation. However, these services need to be informed by smoking cessation theory and research and structured to expose users to appropriate information.

Chapter 12. Assessing the Effectiveness of the Mass Media in Discouraging Smoking Behavior

This chapter studies the use of mass media in tobacco control and health promotion, and examines research results relative to changing smoking behavior in light of their methodological challenges. Specific areas covered include (1) controlled field experiments involving antismoking mass media campaigns aimed at youth and adults, often only one part of multicomponent interventions; and (2) population-level studies, including both longitudinal and cross-sectional evaluation studies of national- and state-level tobacco control mass media campaigns conducted either alone or as one component of a multicomponent tobacco control program.

Conclusions

1. Several evaluations of the antismoking public service announcements required

under the Fairness Doctrine between 1967 and 1970, the first large-scale U.S. national mass media campaign, indicate that there were discernible reductions in tobacco consumption, smoking prevalence, and smoking initiation. This natural experiment spurred research into the use of media to influence health behaviors.

2. Evidence from controlled field experiments suggests that antitobacco mass media campaigns conducted in conjunction with school- or community-based programming can be effective in curbing smoking initiation in youth and promoting smoking cessation in adults. This evidence has provided the impetus for antitobacco mass media campaigns to become important components of tobacco control programs.
3. The few population-based studies of antitobacco mass media campaigns, in which the media campaign was the only antitobacco program, demonstrate that the media campaigns were effective in reducing smoking in the youth and adult target populations.
4. Population-based studies of antitobacco mass media campaigns that were only one component of multicomponent tobacco control programs provide considerable evidence for reduced use of tobacco by youth and adults. The antitobacco mass media campaign and the other program components together may have reduced smoking more than did any single component alone. The relative contributions of various components to program effectiveness are difficult to determine, but some of the controlled field experiments showed a dose-response relationship between reduced smoking and an increased number of program components.
5. Evidence from controlled field experiments and population studies conducted by many investigators in many

countries shows that antitobacco mass media campaigns can reduce tobacco use.

Part 5—Media, Tobacco Control Interventions, and Tobacco Industry Mitigation Efforts

Chapter 13. Tobacco Industry Efforts to Influence Tobacco Control Media Interventions

This chapter examines how tobacco interests and their allies work to impede antitobacco media efforts by using techniques such as diverting funding to other causes, lobbying elected officials, restricting antitobacco media content through negotiated settlements, and filing legal challenges. Examples are given from state-level media campaigns in Minnesota, California, Arizona, and Florida.

Conclusions

1. Tobacco industry efforts to impede tobacco control media campaigns include attempts to prevent or reduce their funding. Examples include opposition to a tobacco tax increase intended to fund media campaigns in California and claims that a “budget crisis” precluded spending on tobacco control media campaigns in Minnesota.
2. Efforts to weaken the messages or reduce the size of the target audience in tobacco control media campaigns include restricting the scope of Arizona’s Proposition 200 initiative to address specific topics such as nicotine addiction and to target only children and pregnant women and, in the American Legacy Foundation’s “truth” campaign, disallowing public policy advocacy and vilification of the tobacco industry.
3. The tobacco industry has cited its own media campaigns—such as “Helping Youth Decide,” “Think. Don’t Smoke,”

and “Tobacco Is Whacko if You’re a Teen”—to argue that government-funded campaigns duplicate these efforts and waste taxpayer dollars. This strategy was seen first in Minnesota and leading up to and following the 1998 signing of the Master Settlement Agreement.

4. Increasing consumer awareness of tobacco industry activities to counteract public-health-sponsored campaigns designed to reduce tobacco use can be an important component of effective media interventions.

Chapter 14. Tobacco Industry Media Efforts to Defeat State Tobacco Control Ballot Initiatives and Referenda

This chapter examines tobacco industry efforts to use media to counter ballot initiatives and referenda for a sample of the 42 state-level tobacco control measures put before voters between 1988 and 2006. This chapter discusses media campaigns in several states, together with primary themes used by the tobacco industry in these efforts, such as unfair taxation, diversion of funds, personal choice, and wasteful government spending.

Conclusions

1. Within those states that allow these processes, ballot initiatives and referenda have served as an effective tool for enacting tobacco control legislation by direct vote. Tobacco industry interests frequently have used media channels (such as radio, television, print media, and direct mail) to defeat these ballot measures.
2. Despite the tobacco industry’s media efforts, it has generally not prevailed,

losing in 32 (76%) of 42 state initiatives and referenda from 1988 to 2006.

Given the industry’s lack of success in defeating tobacco control state initiatives and referenda at the state level, holding tobacco control initiatives or referenda is an important, though expensive, option if a state legislature has blocked tobacco control legislation.

3. The tobacco industry consistently has used several primary themes to defeat state tobacco tax increase initiatives. These include suggestions that the measures would impose unfair taxes and that tax revenues would not be spent on health care or tobacco control programs as intended. Secondary themes used consistently over an 18-year time span include that the measures would increase “big government” and wasteful spending, discriminate against smokers, and increase crime and smuggling. Other, less frequent themes were that the measures would be a tax cut for the rich, impede economic growth, fail to solve state budget problems, restrict personal choice, and violate antitrust laws.

Part 6—Future Directions

Chapter 15. Future Directions

This chapter examines the future of media as they relate to both tobacco promotion and tobacco control. Issues discussed relative to tobacco promotion include point-of-purchase marketing, packaging, the use of entertainment media, and public relations. Tobacco control media issues include news and media advocacy, measurement of news media effectiveness, media interventions, and the potential for newer alternate media channels.

References

- Centers for Disease Control and Prevention. 2006. Smoking and tobacco use fact sheet: Tobacco-related mortality (updated September 2006). http://www.cdc.gov/tobacco/data_statistics/Factsheets/tobacco_related_mortality.htm.
- U.S. Department of Health, Education, and Welfare. 1964. *Smoking and health: Report of the Advisory Committee to the Surgeon General of the Public Health Service* (PHS publication no. 1103). Washington, DC: U.S. Department of Health, Education, and Welfare, Public Health Service, Center for Disease Control.
- Centers for Disease Control and Prevention. 2007. Cigarette smoking among adults—United States, 2006. *Morbidity and Mortality Weekly Report* 56 (44): 1157–61.
- Substance Abuse and Mental Health Services Administration. 2006. *Results from the 2005 National Survey on Drug Use and Health: National findings* (DHHS publication no. SMA 06-4194). NSDUH Series H-30. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies. <http://www.samhsa.gov> or <http://www.oas.samhsa.gov>.
- U.S. Department of Health and Human Services. 2004. *The health consequences of smoking: A report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
- Parkin, D. M., F. Bray, J. Ferlay, and P. Pisani. 2005. Global cancer statistics, 2002. *CA: A Cancer Journal for Clinicians* 55 (2): 74–108.
- Centers for Disease Control and Prevention. 2007. State-specific prevalence of cigarette smoking among adults and quitting among persons aged 18–35 years—United States, 2006. *Morbidity and Mortality Weekly Report* 56 (38): 993–96.
- Johnston, L. D., P. M. O'Malley, J. G. Bachman, and J. E. Schulenberg. 2007. *Monitoring the Future: National results on adolescent drug use—Overview of key findings, 2006*. (NIH publication no. 07-6202). Bethesda, MD: National Institute on Drug Abuse. <http://www.monitoringthefuture.org/pubs/monographs/overview2006.pdf>
- National Cancer Institute. 2006. *Evaluating ASSIST: A blueprint for understanding state-level tobacco control* (Tobacco control monograph no. 17, NIH publication no. 06-6058). Bethesda, MD: National Cancer Institute. <http://cancercontrol.cancer.gov/tcrb/monographs/17/index.html>.
- Viswanath, K. 2005. Science and society: The communications revolution and cancer control. *Nature Reviews Cancer* 5 (10): 828–35.
- World Health Organization. 2007. Q&A: Tobacco. World Health Organization. <http://www.who.int/topics/tobacco/qa/en/index.html> (accessed July 30, 2007).
- Peto, R., A. D. Lopez, J. Boreham, M. Thun, and C. Heath Jr. 1994. *Mortality from smoking in developed countries, 1950–2000: Indirect estimates from national vital statistics*. Oxford: Oxford Univ. Press.
- United Nations. 2005. Tunis agenda for the information society. Tunis, Tunisia: <http://www.itu.int/wsis/docs2/tunis/off/6rev1.html>.
- World Health Organization. 2004. Basic principles of media advocacy. World Health Organization. <http://www.who.int/tobacco/policy/media/en/>.
- Federal Communications Commission. 1967. Applicability of the Fairness Doctrine to cigarette advertising. <http://tobaccodocuments.org/rjr/501881916-1928.html>.
- National Association of Attorneys General. 1998. Master Settlement Agreement and amendments. Washington, DC: National Association of Attorneys General. <http://www.naag.org/backpages/naag/tobacco/msa> (accessed June 1, 2007).
- World Health Organization. 2003. Framework Convention on Tobacco Control: Resolutions. http://www.who.int/gb/ebwha/pdf_files/WHA56/ea56R1.pdf.
- Giovino, G. A., M. W. Schooley, B. P. Zhu, J. H. Chrismon, S. L. Tomar, J. P. Peddicord, R. K. Merritt, C. G. Husten, and M. P. Eriksen. 1994. Surveillance for selected tobacco-use behaviors—United States, 1900–1994. *Morbidity and Mortality Weekly Report Surveillance Summaries* 43 (3): 1–43.
- U.S. Department of Agriculture. 2007. Tobacco: Data tables. <http://www.ers.usda>

- .gov/Briefing/Tobacco/tables.htm (accessed November 25, 2007).
20. Mathers, C. D., and D. Loncar. 2006. Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Medicine* 3 (11): e442.
 21. Federal Trade Commission. 2005. Federal Trade Commission cigarette report for 2003. <http://www.ftc.gov/reports/cigarette05/050809cigrpt.pdf>.
 22. Ling, P. M., and S. A. Glantz. 2002. Why and how the tobacco industry sells cigarettes to young adults: Evidence from industry documents. *American Journal of Public Health* 92 (6): 908–16.
 23. MacFadyen, L., G. Hastings, and A. M. MacKintosh. 2001. Cross-sectional study of young people's awareness of and involvement with tobacco marketing. *British Medical Journal* 322 (7285): 513–17.
 24. Chaloupka, F. J., K. M. Cummings, C. P. Morley, and J. K. Horan. 2002. Tax, price and cigarette smoking: Evidence from the tobacco documents and implications for tobacco company marketing strategies. *Tobacco Control* 11 Suppl. 1: i62–i72.
 25. Hastings, G., and L. MacFadyen. 2000. A day in the life of an advertising man: Review of internal documents from the UK tobacco industry's principal advertising agencies. *British Medical Journal* 321 (7257): 366–71.
 26. Bero, L. 2003. Implications of the tobacco industry documents for public health and policy. *Annual Review of Public Health* 24:267–88.
 27. Bialous, S. A., and S. A. Glantz. 2002. ASHRAE Standard 62: Tobacco industry's influence over national ventilation standards. *Tobacco Control* 11 (4): 315–28.
 28. Hastings, G., and K. Angus. 2004. The influence of the tobacco industry on European tobacco-control policy. In *Tobacco or health in the European Union: Past, present and future*, 195–225. Luxembourg: Office for Official Publications of the European Communities.
 29. Khermouch, G., and J. Green. 2001. Buzz marketing: Suddenly this stealth strategy is hot—but it's still fraught with risk. *Business Week*, July 30. http://www.businessweek.com/magazine/content/01_31/b3743001.htm.
 30. Wakefield, M. A., Y. M. Terry-McElrath, F. J. Chaloupka, D. C. Barker, S. J. Slater, P. I. Clark, and G. A. Giovino. 2002. Tobacco industry marketing at point of purchase after the 1998 MSA billboard advertising ban. *American Journal of Public Health* 92 (6): 937–40.
 31. Hornik, R. C. 2002. Introduction. Public health communication: Making sense of contradictory evidence. In *Public Health Communication: Evidence for Behavior Change*, ed. R. C. Hornik, 1–20. Mahwah, NJ: Lawrence Erlbaum.
 32. McLeod, J., G. Kosicki, and Z. Pan. 1991. On understanding and misunderstanding media effects. In *Mass media and society*, ed. J. Curran and M. Gurevitch, 235–66. London: Edward Arnold.
 33. Biener, L., R. L. Reimer, M. Wakefield, G. Szczypka, N. A. Rigotti, and G. Connolly. 2006. Impact of smoking cessation aids and mass media among recent quitters. *American Journal of Preventive Medicine* 30 (3): 217–24.
 34. Weed, D. L. 2005. Weight of evidence: A review of concept and methods. *Risk Analysis* 25 (6): 1545–557.
 35. Cook, T. D., and D. T. Campbell. 1979. *Quasi-experimentation: Design and analysis issues for field settings*. Boston: Houghton Mifflin.