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### Authors

Apollonio, DE  
Malone, RE

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# Turning negative into positive: public health mass media campaigns and negative advertising

D. E. Apollonio<sup>1\*</sup> and R. E. Malone<sup>2</sup>

## Abstract

Literature suggests that ‘negative advertising’ is an effective way to encourage behavioral changes, but it has enjoyed limited use in public health media campaigns. However, as public health increasingly focuses on non-communicable disease prevention, negative advertising could be more widely applied. This analysis considers an illustrative case from tobacco control. Relying on internal tobacco industry documents, surveys and experimental data and drawing from political advocacy literature, we describe tobacco industry and public health research on the American Legacy Foundation’s “truth” campaign, an example of effective negative advertising in the service of public health. The tobacco industry determined that the most effective advertisements run by Legacy’s “truth” campaign were negative advertisements. Although the tobacco industry’s own research suggested that these negative ads identified and effectively reframed the cigarette as a harmful consumer product rather than focusing solely on tobacco companies, Philip Morris accused Legacy of ‘vilifying’ it. Public health researchers have demonstrated the effectiveness of the “truth” campaign in reducing smoking initiation. Research on political advocacy demonstrating the value of negative adver-

tising has rarely been used in the development of public health media campaigns, but negative advertising can effectively communicate certain public health messages and serve to counter corporate disease promotion.

## Introduction

Media campaigns are widely recognized as useful public health tools [1], particularly given that mass media campaigns can, by themselves, change health behavior without the need for multiple channels of communication [2]. Psychological and political research on advertising and persuasion suggests that certain kinds of messages motivate change, particularly messages about trust [3, 4]. Yet a review of mass media public health campaigns up to 1998 argued that such campaigns have not historically been theory based, and that when theory is considered, it is drawn primarily from social psychological theories not developed for media use [1, 2].

Traditionally, many public health campaigns have focused on increasing individuals’ knowledge about disease risks, expecting that this increased knowledge will lead to changed behavior [1, 2, 5]. However, individuals’ *feelings* about activities with health consequences predict behavior better than their *knowledge* of the risks incurred. Specifically, people perceive that their health is more at risk when they feel reduced trust [3].

Most public health campaigns have underemphasized the importance of trust messages in motivating behavior change [3]. Instead, social marketing, a method of promoting healthy behaviors that relies

<sup>1</sup>Department of Clinical Pharmacy and <sup>2</sup>Department of Social and Behavioral Sciences, University of California, San Francisco, San Francisco, CA 94118, USA

\*Correspondence to: D. E. Apollonio. E-mail: Dorie.Apollonio@ucsf.edu

on methods developed in product advertising, has become popular [6, 7]. Recent research claims that less than one-third of public health campaigns develop messages based on research that identifies the social determinants of attitudes and behavior change [1].

In recent years, public health researchers and advocates have called attention to structural and social causes of illness and premature death [8, 9]. Public health advocacy frequently confronts existing corporate practices [10] which are implicated in health problems such as obesity, tobacco, alcohol and other drug use, as well as in risks posed by automobiles, guns and pharmaceuticals [9]. Corporate behavior is increasingly recognized as a fundamental cause of disease [9, 11], and developing ways to challenge health-damaging corporate behavior is a key emerging issue in public health advocacy. Addressing diseases with social causes requires that public health advocates convince people, in the face of extensive product advertising by

corporations, to reduce or eliminate use of products that increase disease risk. This may involve addressing risk perception through counter marketing; specifically, reducing trust can heighten popular awareness of risk [3].

The marketing of products that increase health risks also creates a 'share of voice' problem for public health media campaigns. Health messages are viewed far less frequently than other media messages urging behavior that increases health risks, particularly consumption [12]. Public health advertisements may be inadvertently packaged with product advertisements that undercut their message (see Fig. 1). Public health campaigns cannot be successful without addressing these competing messages, but they must do so with far fewer resources than are available for corporate product advertising [1, 12]. In addition to advertising disease-promoting products, businesses use positive advocacy advertising in an effort to improve their popular images [7]. Thus, corporations have



Fig. 1. Mixed messages on two billboards in Oakland, California (2005). Source: Jeff Williams, September 2005.

significant financial and structural advantages over public health advocates in conveying both consumption and public relations messages [9]. Positive advertising, including product advertising and corporate image promotion, usually encourages people to rely on their comfort with the status quo [13].

Research that has specifically addressed public health issues related to social and environmental risk factors suggests that media campaigns should be based on political advocacy tactics rather than social psychology [7]. Political campaigns have developed a large repertoire of effective tactics, many based on what is commonly referred to as ‘negative advertising’ [4]. Although the term negative advertising is not always clearly defined, it is generally regarded as consisting of messages intended to attack, criticize or discredit opponents and opponents’ messages, rather than messages designed to promote a preferred alternative [4, 14]. Most research on negative advertising used in political campaigns has focused on its possible depressive effect on voter turnout, but studies also note that it is often more salient than other kinds of advocacy [15]. It reaches people who were previously disinterested and not engaged with an issue [16], is particularly useful for groups that have limited funding and popular exposure [17] and is effective in reducing audience trust in the subject of attack [18].

Negative political advertising, even when it relies on emotional appeals, cues rational decision making by increasing attentiveness to potential problems and encouraging people to reconsider their established opinions [13]. These new attitudes, which are based on reasoning rather than reflexive comfort with the status quo, are far more resistant to change once they have been established than are status quo beliefs [18]. This constellation of features—high salience, broad appeal, effectiveness despite limited exposure, trust reduction and the creation of attitudes that are resistant to change—suggests the immense potential value of negative advertising for public health campaigns that deal with social and environmental risk factors, particularly those involving corporate activity.

Tobacco control advocacy has been at the leading edge of public health efforts to change corporate

practices that affect public health [9], and its successes and failures offer insight for future public health campaigns. Counter marketing against tobacco was originally established as a public health strategy between 1968 and 1970, when the federal Fairness Doctrine required that the airing of cigarette advertisements in the mass media be balanced by advertisements promoting reduced tobacco consumption [7]. The success of these early efforts was largely realized in hindsight. After the requirement for counter marketing was eliminated by the Federal Communications Commission ban on televised tobacco advertising, cigarette consumption increased once more [19].

In this paper, we consider a case study of negative advertising, the “truth” campaign developed by the American Legacy Foundation, to show the effectiveness of this tactic in both reducing consumption of tobacco and forcing the tobacco industry to develop new strategies to combat the campaign, most of which were ineffective. However, the American Legacy Foundation faced unique constraints on its activities and funding. We conclude that advocacy by other public health groups could be far more aggressive and potentially more effective in the long term.

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## Methods

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We relied on a variety of sources, including published and unpublished research on tobacco control advertising campaigns and internal tobacco industry documents detailing communications between tobacco industry representatives and public health advocates. Over 40 million pages of internal industry documents have been released to the public in conjunction with the Master Settlement Agreement (MSA), a legal settlement between 46 state Attorneys General and the major tobacco companies in the United States. These documents are web accessible at the Legacy Tobacco Documents Library [20]. Industry documents used in this paper were retrieved between September 2005 and January 2007. These included internal corporate documents detailing the activities of the tobacco industry in

response to “truth” as well as transcripts and stills of advertisements from tobacco control organizations, including more than 60 “truth” spots the industry identified as having been aired by the American Legacy Foundation. We also reviewed correspondence between the American Legacy Foundation and Philip Morris regarding studies of the “truth” campaign, forwarded by Legacy for the purposes of this research.

Using previously established techniques for systematically searching tobacco documents archives [21], we began with initial search terms such as organizational names (e.g. ‘American Legacy Foundation’) and references to media campaigns (“truth”). Searches were expanded with a snowball strategy using contextual information from initial searches to identify additional search terms and relevant documents, including names of individuals and organizations, date ranges, places and reference (Bates) numbers. Over 1200 internal tobacco industry documents pertaining to post-MSA media campaigns were identified and screened for relevance. Many of the initial documents we found were copies of contemporaneous public information such as press releases; these were frequently duplicative or irrelevant to our analysis. We drew on approximately 150 documents, dated 2000–04, to prepare this paper. Our interpretative data analysis involved reviewing the documents and transcripts to identify recurring themes and corporate positions, which we analyzed through the lens of studies of public health and political advocacy based on both experimental and survey data. We also reviewed secondary data sources for corroborating information about media campaigns including newspaper and journal articles, accessed via LexisNexis and PubMed, and through Internet searches using Google.

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## Results

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### The “truth” campaign, 1998–2002

The “truth” media campaign was first launched in Florida in April 1998 as part of an integrated state tobacco control program aimed at reducing teen smoking. The American Legacy Foundation, cre-

ated in 1999 as part of the MSA, expanded on this campaign as part of its mandate to create a nationwide educational program to reduce youth smoking. Initially, the campaign mirrored the Florida program closely, in part because Chuck Wolfe, the architect of the Florida “truth” campaign, was hired to develop Legacy’s program [22]. Legacy, however, had a much greater budget, initially \$100 million per year [23], and directed its campaign to a national audience beginning in February 2000. The campaign, as Legacy had hoped, led to a decline in youth smoking rates both during and after its 2000–02 broadcasts [23, 24], as well as decreasing receptivity to pro-tobacco industry messages [25]. The goal of “truth” was to counter market against tobacco products to teens at risk of smoking [24]. The core strategy of the campaign was to market its antismoking, anti-industry message as a brand or product [24]. In discussions of the campaign and its effectiveness, this shift in definition from advocacy to a ‘product’ was considered to be a crucial factor in its success [26–28]. The identification of “truth” as a product led to advertising for the campaign in many of the same ways that cigarettes are advertised; the campaign provided paraphernalia such as T-shirts in addition to developing and running advertisements [24].

Negative advertisements created by “truth” were one of the most memorable features of the campaign. One advertisement, titled ‘Body Bags’, became emblematic of engagement of the tobacco industry [29] and was shown to be the most effective of the “truth” ads [26]. In it, a group of teens pulled up outside the Philip Morris (now Altria) corporate headquarters in New York City and stacked 1200 body bags onto the sidewalk in front of the building, yelling into a megaphone that these body bags represented the number of people killed by smoking every day (Transcript, Table I). Another advertisement, ‘Hypnosis’, also addressed tobacco companies directly, showing two young men in a van driving to a neighborhood where tobacco executives supposedly lived and broadcasting a taped message aimed at ‘reprogramming’ them: ‘I am a good person. Selling a product that kills people makes me uncomfortable’ (Transcript,

**Table I.** Transcript of “truth” advertisement: *Body Bags* [29, 112]

[View from outside Philip Morris USA, where several youths are piling up body bags on the sidewalk. There are shots of Philip Morris employees looking out the windows.]

[Man with megaphone] ‘We’ve got a question. Do you know how many people tobacco kills every day? You know what? We are going to leave this here for you so you can see what 1,200 people actually look like.’

Table II) [30]. These ads presented *not smoking* as a statement against industry power, manipulation and authority, appealing to the teen desire to rebel [24]. Although some “truth” ads referred exclusively to the diseases caused by smoking and toxic constituents of smoke [31–36], others pointed out that tobacco companies profited from selling products that killed their customers [37–42], showed posters for cigarettes that were placed at children’s eye level in convenience stores [43–45] and pointed out the implausibility of the claim that cigarette additives like ammonia and urea were included to improve the flavor of cigarettes [46, 47].

### The tobacco industry responds: ‘youth smoking prevention’ and vilification

Although all the major tobacco companies attacked the Legacy campaign (Philip Morris threatened to file suit and Lorillard did; the suit was eventually dropped) [48], Philip Morris developed the most sophisticated response, focus group testing a variety of potential responses to “truth” within a few months of the February 2000 campaign launch (Timeline, Table III) [49]. In 1997, Philip Morris had begun an ‘image makeover’ for the company through its ‘PM21’ public relations campaign, which attempted to establish a new, more positive corporate identity [50–52]. Consistent with this makeover strategy [53], beginning in May 2000, the company conducted focus group testing of the “truth” advertisements it considered most problematic, in order to develop a set of ‘best responses’ that it hoped would limit the damage of the campaign [49, 54]. The strategy it ultimately developed was similar to efforts that have been developed by the staff of political campaigns to ‘inoculate’ candidates for elective office against negative campaigning [55].

**Table II.** Transcript of “truth” advertisement: *Hypnosis* [30]

[Two men are driving through a residential area in a van.]  
[Man 1] ‘I’m feelin’ the vibe. We’re going to find these tobacco guys.’

[Man 2] ‘Hey man, do you know if there are any tobacco executives around here?’

[Man 3] ‘No.’

[Man 1] ‘Do you know if any tobacco executives live around here?’

[Man 4] ‘Go three blocks down. Make a left. You’ll see some big houses.’

[Man 1] ‘Look at the size of this house.’

[Man 2] ‘I guess working for an industry that kills over 1,000 people a day pays pretty well.’

[Man 1] ‘We gotta help these people out. Throw in the tape.’

[Man 2] ‘Yeah, get the tape. Good call.’

[Tape amplified from the van] ‘I am a good person. Selling a product that kills people makes me uncomfortable. I realize cigarettes are addictive.’

[Man 2] ‘Looks like money is addictive too.’

[Tape] ‘... and kill over 430,000 people each year. Tomorrow I will look for a new job. I will be less concerned with covering my butt and more concerned with doing the right thing.’

[Resident yelling] ‘Shut up!’

[Man 1] ‘We’re just trying to help.’

The company attempted to generate positive feelings about Philip Morris through public relations campaigns designed to displace “truth” messages, including emphasizing its own youth smoking prevention (YSP) programs. While the company was developing this campaign, it also strategized ways to eliminate Legacy’s most effective “truth” ads through behind-the-scenes lobbying.

Philip Morris researchers immediately identified the relationship between many of the “truth” spots and negative advertising. Legacy characterized its campaign as selling a brand or product called “truth”, but Philip Morris viewed Legacy’s efforts as comparable to political campaigning, as revealed

**Table III.** *Timeline of “truth” campaign and responses*

1997	Philip Morris launches ‘public image campaign’ titled PM21 to differentiate itself from other tobacco companies.
April 1998	Florida “truth” campaign launches.
1998	MSA signed.
1999	American Legacy Foundation created by MSA.
February–March 2000	Legacy “truth” campaign launches; Philip Morris executives attempt to define vilification, establish Vilification Task Force.
May 2000	Philip Morris strategy document identifies “truth” ads as negative advertising; suggests focus on corporate YSP efforts as response.
June 2000	Philip Morris focus group report reviews opinions of “truth” ads and findings about possible corporate responses.
September–November 2000	Philip Morris runs additional focus groups to test “truth” ads against potential responses, focused on publicizing corporate YSP efforts.
November 2001	Legacy presents findings at conference that “truth” is effective at reducing youth smoking, while Philip Morris YSP programs increase willingness to smoke.
December 2001–January 2002	Philip Morris repeatedly requests meetings with Legacy to obtain its dataset and reanalyze it.
February 2002	Legacy reports it will make data publicly available upon publication of findings.
March–May 2002	Philip Morris continues to demand Legacy data prior to publication, seeking intervention from Attorneys General.
June 2002	Legacy findings published in <i>American Journal of Public Health</i> ; data released.
March 2003	Philip Morris requests that Attorneys General constrain Legacy by eliminating a subset of “truth” ads on grounds they constitute vilification.
July 2003	Philip Morris drafts guidelines for what constitutes appropriate “truth” ads.
2004	Legacy’s guaranteed educational funding terminated, dramatically limiting scope of “truth” campaign.

in an unpublished Philip Morris strategy document from May 2000:

Not only do [Legacy] ads outweigh ours on gross-rating-point terms, but there is also strong evidence that negative advertising is considerably more powerful and effective—spot for spot—than positive advertising. (In typical political campaigns it is not unusual to see a very high-quality positive ad move a candidate up 3-5 points in a week but it is also common to see a high-quality negative ad move an opponent down by 10-15 points in a week) [56].

The fact that these advertisements negatively portrayed the industry as promoting a deadly product also offered tobacco companies a unique avenue to try to eliminate the campaign. In the 1998 MSA that created the American Legacy Foundation [57], tobacco companies had demanded the inclusion of a ‘vilification’ clause intended to preclude Legacy from airing ads similar to those developed in the

original Florida “truth” campaign. The industry claimed those ads were ‘gratuitously vicious’ and ‘infamous’ [58]. The vilification clause stipulated that education funds provided to Legacy ‘shall be used only for public education and advertising regarding the addictiveness, health effects, and social costs related to the use of tobacco products and shall not be used for any personal attack on, or vilification of, any person (whether by name or business affiliation), company or governmental agency, whether individually or collectively’ [57].

Philip Morris initially sought to limit “truth” by asserting that the ads vilified the industry, violating the terms of the MSA. The term vilification, however, is ambiguous [48, 59], and even tobacco industry executives disagreed internally about its meaning. When the Body Bags ad was first aired in February 2000, one executive argued ‘I contend that the [Body Bags ad] could be construed as vilification regardless of how they use it’ [60]. In March 2000, executives at the company continued to argue among themselves about what constituted

vilification, with one saying ‘we may need to think about the difference between ads that depict “industry manipulation” and those that “vilify the industry” ...’ [61] and others disagreeing [62], stating that ‘identifying vilification is in the eye of the beholder’ and the company’s perspective was what was relevant [63].

In March 2000, Philip Morris developed an internal ‘Vilification Task Force’ to create a coherent strategic response to the “truth” ads. Initially, the task force attempted to summarize the evidence about the effectiveness of counter marketing [64], but noted ‘While there is debate on the effectiveness of vilification ads, our opposition is not based on this idea ... we oppose on principal [sic]’ [65]. In May 2000, the task force attempted to ‘settle on a definition of vilification or develop a criteria [sic] against which ads can be measured’ [65, 66]. (We found no evidence that such a definition was ever determined.) By late May 2000, it had developed a list of potential public Philip Morris responses to “truth” for testing in focus groups [67], ranging from claims that “truth” ads violated the MSA to the general idea that ‘It is wrong to teach kids to hate’. These proposed responses were used to develop a “truth and differentiation” campaign in May 2000 intended to reposition Philip Morris relative to other tobacco companies [56]. The most effective of the responses tested related not to vilification but to efforts to publicize YSP efforts [68].

The “truth” and differentiation campaign began by gathering impressions of specific “truth” ads in three US cities in May and June 2000 [68], including Hypnosis and Body Bags. The June report discussing these focus group responses noted that ‘For the Body Bag [sic] ad, most focus group respondents say the main message is that “smoking/tobacco kills”. This ad seems to bring more focus on the product than the manufacturers or their employees’ [68]. These findings are consistent with recent experimental research on Legacy advertisements [69], which show that negative perceptions created by anti-industry advertisements were directed toward the product.

Philip Morris ran additional focus groups from September to November 2000 that presented fake news to test “truth” ads and potential corporate

responses to them [49, 70–73]. One of the key strategies identified by the company in its May 2000 strategy document regarding potential responses to “truth” was to emphasize its own YSP activities, which were identified as ‘an extremely positive influence on attitudes toward the tobacco industry’ [56]. The focus groups it developed from September to November 2000 emphasized this message. Within a year, however, Legacy’s continuing research on “truth” undercut the Philip Morris strategy. In November 2001, the Legacy foundation presented data showing that the “truth” campaign was effective in reducing youth smoking, while the primary Philip Morris YSP program, entitled ‘Think, Don’t Smoke’, increased the likelihood of youth smoking [74].

Immediately after Legacy’s conference presentation, Carolyn Levy, who headed the Philip Morris YSP program, wrote to Legacy to request a meeting, noting: ‘I was disturbed by some of the results you reported ...’ [74–76]. After that meeting, she requested in December 2001 that Legacy send its raw data to Philip Morris immediately to allow the company to ‘best decide on a future course of action’ [77], repeating this request throughout January and February 2002 [78–81]. Legacy responded in February 2002: ‘We are in the process of preparing a dataset for public use that will allow analysis of the results. As I mentioned in our previous correspondence, there is enormous public interest in our dataset, and we are working to develop data use and sharing protocols so we can meet this demand’ [82]. Philip Morris, however, believed it should have the opportunity to review all of Legacy’s data before publication of the study’s findings, sending repeated requests between February and May 2002 to both Legacy and the Attorneys General who regulated Legacy’s activities under the MSA [83–87]. The company complained that Legacy ‘has declined to share its raw data’ [88] despite the foundation’s repeated responses that it would make the data publicly available upon the publication of its study, which occurred in June 2002 [89–91]. We found no evidence that the Attorneys General contacted by the company responded.

By 2003, internal corporate research and Legacy’s peer-reviewed research made the effectiveness of



the “truth” campaign and the ineffectiveness of the Philip Morris YSP program obvious. The company returned to efforts to eliminate “truth” ads on the grounds that they constituted vilification. Philip Morris requested in March 2003 that the Attorneys General apply a new code of conduct to Legacy’s advertising activities that would eliminate what it defined as ‘vilifying’ advertisements [92]. At the request of the Attorneys General supervising Legacy, Philip Morris developed a discussion draft of guidelines designed to control what Philip Morris believed were the most threatening of Legacy’s “truth” advertisements in July 2003 [58]. It claimed that:

The MSA and ALF’s [American Legacy Foundation’s] by laws [sic] recognize a clear distinction between conduct or communications that attack tobacco *products or consumption*—which is permitted—and conduct or communications that attack or disparage tobacco *companies* or their *employees*—which is prohibited’ [emphasis in original] [93].

Philip Morris provided examples of “truth” advertisements that it believed complied with the standard it had created. Advertisements such as ‘400,000 A Year’, which stated ‘Tobacco kills over 400,000 Americans a year. That’s more than suicide, traffic accidents, murder, illicit drugs, and alcohol, combined’ were acceptable. However, Body Bags and Hypnosis were not because they ‘ascribe malevolent motives or indifference to Tobacco Companies or Employees with respect to the health effects of smoking’ [93]. This claim directly contradicted the company’s own earlier research finding that Body Bags drew attention to the health risks of tobacco products rather than to tobacco companies. We found no evidence indicating how the Attorneys General responded to these proposed guidelines.

Ultimately, Legacy’s “truth” campaign was eviscerated by a reduction in its budget in 2004 when the guaranteed education funding supplied by the MSA terminated [59]. Yet before this, the tobacco industry’s repeated efforts to spin positive messages in response to Legacy’s negative adver-

tisements and to paint the “truth” ads as vilification, either through regulatory efforts or through lawsuits, were repeatedly unsuccessful [48]. The “truth” campaign, like state programs using similar tactics, was successful at reducing smoking rates despite share of voice problems faced by all mass media public health campaigns. Recent research on tobacco counter marketing campaigns at the state level has confirmed that ads that use negative emotional appeals are effective in reducing youth smoking rates [94–100], require fewer viewings to achieve this effect than other types of ads [101] and are easily remembered [102].

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## Discussion

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Until recently, many public health advocates and researchers have viewed mass media campaigns as exercises in information provision, when they are best viewed as exercises in information framing [1, 7, 103]. Studies of negative advertising suggest it may offer public health groups a means to increase the effectiveness of mass media campaigns despite enormous funding disadvantages. Although political scientists note potential risks to the use of negative advertising in political campaigns such as decreased voter turnout, dissatisfaction with the political system and polarization [104], systematic reviews of negative advertising show little evidence of such outcomes [105], and almost none of these risks is relevant to its use in public health. Health behaviors are influenced by social norms [106, 107]; moreover, behavior can be changed by information-rich negative advertising [16].

Legacy’s success with “truth” exemplifies the promise of negative advertising in public health media campaigns. Legacy’s emphasis on “truth” as a ‘brand’ implicitly conveyed the message that cigarettes constituted its opposite: lies. The campaign challenged tobacco industry messages by showing they offered incomplete, misleading and inaccurate representations of cigarettes and smoking, a denormalization process shown to reduce tobacco use [106]. Detailed studies of the “truth” campaign revealed as early as 2001 that these

advertisements were effective and consistent with the expectation that attitudes cued by negative advertising are persistent, the effect does not appear to decline over time [107], although some evidence suggests that there are diminishing returns to tobacco counter marketing campaigns [100, 108]. The “truth” ads that the industry claimed constituted vilification were negative advertisements that Philip Morris’s own internal focus groups showed conveyed primarily a negative message about tobacco rather than tobacco companies; consistent with other studies [109], this finding suggests that negative public health advertisements should include both counter marketing and public health claims.

Philip Morris quickly identified the power of negative advertising as the strength behind Legacy’s campaign. Although Philip Morris argued that it supported the “truth” campaign in principle, claiming that many “truth” advertisements were acceptable to both tobacco companies and public health activists, its accusations of vilification against ads that focused viewer attention on the product suggest that its real goal was to eliminate the most effective “truth” advertisements. Philip Morris states it is now comfortable with admissions that tobacco causes disease [53], but it prefers that health information be presented in abstract and ‘neutral’ ways [110]. In contrast, effective negative advertisements, such as Body Bags, provide a powerful interpretive frame for information that makes it meaningful and relevant to viewers and directly challenge the veracity of cigarette advertisements, which suggest smoking is a desirable activity. Such ads also indirectly counter tobacco industry claims of ‘responsibility’ [111].

Increasingly, public health advocates face problems of interpretation as well as problems of behavior. When corporate disease vectors such as the tobacco industry control interpretive voice through advertising and promotion, public health-oriented negative advertising can promote alternative interpretations that disrupt corporate messages. This reframing may be the most effective long-term strategy in controlling complex public health problems that have multiple causes [103]. Negative ad-

vertising is not relevant to every public health problem, but the recognition that many modern public health threats revolve around consumption suggests that negative advertising could be used to address health problems beyond tobacco. Moreover, public health media campaigns directed toward other products would not be constrained by ambiguous legal definitions of vilification. This case study of a highly effective negative advertising campaign suggests that similar campaigns by other public health groups could be more aggressive and effective in addressing the power and resource differentials between disease-promoting industries and public health groups.

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Dr Malone owns one share each of Philip Morris, PM International, and RJ Reynolds stock for research and advocacy purposes. She served as a tobacco industry documents consultant for the US Department of Justice in *USA vs Philip Morris, et al.*

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