

CDC Office on Smoking and Health (OSH), Health Communications Branch
Considerations for Creating and Placing Mass-Reach Tobacco Counter-Marketing Ads
March 31, 2017

Mass-reach health communication interventions target large audiences through television and radio broadcasts, print media (e.g., newspaper), out-of-home placements (e.g., billboards, movie theaters, point-of-sale), and digital media to change knowledge, beliefs, attitudes, and behaviors affecting tobacco use. Intervention messages are typically developed through formative testing and aim to reduce initiation of tobacco use among young people, increase quit efforts by tobacco users of all ages, and inform individual and public attitudes on tobacco use and secondhand smoke. (17)

This document outlines key elements of what we know works, and where to proceed with caution, when developing and/or placing mass-reach tobacco counter-marketing ads and campaigns. We have a strong evidence base to draw from, and the vast majority of the information in this document is from the following key publications:

- [Best Practices for Comprehensive Tobacco Control Programs—2014](#) (Centers for Disease Control and Prevention - CDC)
- [Clear Communication Index](#) (CDC)
- [The Community Guide: Reducing Tobacco Use and Secondhand Smoke Exposure: Mass-Reach Health Communication Interventions](#) (Community Preventive Services Task Force)
- [Designing and Implementing an Effective Tobacco Counter-Marketing Campaign](#) (CDC)
- [Monograph 19: The Role of the Media in Promoting and Reducing Tobacco Use](#) (National Cancer Institute)

The document is divided into the following sections:

- [Considerations before Starting Campaign Development](#)
- [Considerations for All Types of Ads](#)
- [Considerations for Cessation Ads](#)
- [Considerations for Secondhand Smoke Ads](#)
- [Considerations for Youth Prevention Ads](#)
- [Caution Areas](#)
- [Sources](#)

Considerations before Starting Campaign Development

- 1) **Start with a strategic communications plan that sets priorities based on what you want to achieve through your overall tobacco control plan.** A communications plan guides how communications strategies will be implemented to help achieve program goals. It describes intended audiences, campaign messages, communications strategies, and infrastructure to support communications efforts. In order to make a measurable impact, a campaign has to be well planned and executed, requiring adequate staffing and funds; if you have limited resources, consider focusing on one key goal and do the campaign well. Your tobacco control program may not have the funds to simultaneously run separate campaigns to encourage tobacco use cessation, **and** prevent youth initiation, **and** reduce exposure to secondhand smoke. Recognize that a single campaign may support more than one goal; for instance, research shows that messages about secondhand smoke can also promote cessation, and cessation ads can also prevent initiation. There are a variety of materials that can help you develop a

comprehensive tobacco control plan on OSH's website, under the "[Tobacco Control Programs](#)" tab. (11, 65)

- 2) **Use surveillance data to set campaign goals, guide your media buys, and establish a baseline so that you can measure the effects of your media efforts.** Use demographic and epidemiologic data (e.g., census, hospital and mortality data; the Behavioral Risk Factor Surveillance System and Youth Risk Behavior Surveillance System; and the Adult or Youth Tobacco Surveys) to identify key audiences you want to reach (e.g., populations with high rates of tobacco use or chronic diseases caused or made worse by tobacco). Also use this data to assess the knowledge, attitudes and behaviors you intend to change through your media efforts. Programs have complemented demographic and epidemiologic data with information from market research firms about audience media use and psychographic factors (e.g., habits, interests and lifestyle preferences). The Pew Research Center is a source of free information on media consumption, particularly with regards to digital and social media. Data can help you target your media buy to reach key populations and geographic areas. You can also evaluate the effect of your campaign against the baseline measures you collect. Consult the CDC/OSH publication [Surveillance and Evaluation Data Resources for Comprehensive Tobacco Control Programs](#) for more information about data sources. (3, 15, 16, 58, 81)
- 3) **Don't reinvent the wheel — take advantage of what other programs have developed.** Before developing new advertising, do a thorough review of CDC's [Media Campaign Resource Center](#) (MCRC) ads for your chosen goal area, to identify ads that could be used. Many programs have saved time, money and avoided the uncertainties associated with developing new ads by using or adapting existing ads. At a minimum, use those ads in formative testing to determine whether the messages are clear and persuasive to your audience(s). You may be able to use the ads as they are, or re-shoot the ads using people with local accents or other unique characteristics. (11, 15, 40, 52, 75, 90)
- 4) **Always pre-test ads with your target audience(s); do this whether you are using an existing ad or have developed a new ad.** The ad you prefer may not have the same effect on your intended audience(s). The best way to be sure your campaign has a chance of achieving your goals is to pre-test ads with your target audience(s). See OSH's *Sample Questions for Formative Testing of Ads* for more information. (11, 15, 75, 89)
- 5) **Ensure that exposure to advertising is sufficiently high or the campaign may have little chance of producing attitude and behavior changes, regardless of how well-developed the ads are.** Campaigns may fail not because the ads weren't effective but because the ads weren't seen by enough people or with adequate frequency over time. Experience from the U.S. and other countries indicates that new campaigns should reach 75% to 85% of the target audience with a *minimum* of 1200 average Gross Rating Points (GRPs) per quarter at campaign introduction; ongoing campaigns need a minimum of 800 average GRPs per quarter thereafter (GRPs = % of audience reached multiplied by the number of exposures per 4-week period). A campaign should run at least 3 to 6 months to achieve awareness of an issue, 6 to 12 months to influence attitudes, and 12 to 18 months to change behavior. Achieving GRPs above the standard 'minimum dose' can increase the effect of the campaign on recall, knowledge and behavior change, and has been shown to be particularly effective in reaching populations experiencing tobacco-related disparities. *If you don't have sufficient resources to achieve*

minimum GRPs, a paid mass-reach television media campaign may not be your best option. (5, 11, 15, 19, 23, 26, 30, 40, 52, 60, 61, 92)

- 6) **Television is still the most effective mass media channel, but don't forget radio, print, digital, and other channels.** Television is the most heavily consumed mass media channel among adults of all ages. The benefits of using TV include its quality of combining sound and moving pictures and its unique ability to reach the majority of any major population group. Many studies have confirmed that ads on TV are recalled at greater levels than ads on other media and influence more people to change attitudes and behaviors – but TV is more expensive than radio, print and other media channels. If you can't afford TV, consider other channels. At least one study found that an emotionally evocative radio ad was just as powerful as a TV ad. Cross-media campaigns offer important benefits. Repurposing content across a variety of channels is a well-established marketing practice that can expand the reach of and reinforce messages. Cross-media efforts should be unified; creative that includes a common element across all platforms boosts memorability. Including print, radio and digital media platforms in your marketing mix also allows you to reach narrowly targeted audiences through niche media channels. (31, 37, 40, 51, 52, 63, 65, 66, 72)
- 7) **Complementing traditional media with digital media platforms is an effective way to disseminate health messages and augment exposure of a mass media campaign, but evidence on digital media's reach, impact and best practices is still evolving.** Digital formats – such as Web sites, mobile and social media platforms - may be less expensive, allow for narrow audience targeting, and are a promising channel to reach underserved populations, but they don't yet approach the population reach of more traditional mass-reach media. Social media's audience engagement is promising, but it is not known whether engagement leads to behavior changes. There is evidence that message approaches need to be adjusted for social media platforms (e.g., messages that are novel or have a positive frame are more likely to be engaged with and shared). Some researchers note that digital media are a low-cost way to support campaign development; programs can monitor knowledge and attitudes, and experiment with campaign elements to identify promising content and messaging approaches. Marketing on social media platforms requires a significant investment of dedicated staff time to develop, monitor and evaluate efforts. At this time, these platforms can enhance, but should not be substitutes for, traditional mass media and earned media efforts. (12, 15, 16, 21, 39, 41, 47, 50, 51, 54, 62, 67)
- 8) **Include an earned media plan in your overall communications plan.** Whether your media budget is large or limited, and whether your plan includes paid media or not, comprehensive earned media efforts should be part of your strategic plan. Although paid media benefits from the ability to control the message and the placement, news media coverage is important because it can help set the public agenda, add credibility to paid messages and broaden exposure to them. Research has found that earned media can support key tobacco prevention and control goals, including increasing calls to a state quitline, influencing tobacco-related knowledge, attitudes and behavior, and building support for changes in tobacco control policy. Examples of earned media efforts include establishing relationships with journalists to become a trusted, responsive, and knowledgeable resource; issuing press releases; scheduling editorial board briefings; holding events to generate media coverage; writing Op Ed pieces or letters to the editor; and training spokespeople for interviews. Studies show that providing local data and story angles increases the chance of coverage. In some health departments Public Information

Officers (PIOs) may be the gatekeeper to reporters; if you have a PIO, be sure to educate him/her on your key goals and messages. (11, 15, 25, 27, 32, 65, 70, 71, 83, 84, 95)

Considerations for All Types of Ads

- 1) **Messages and images that elicit strong negative emotions (such as anger, resentment, fear, loss, sadness or disgust) are especially effective in changing tobacco-related attitudes and behaviors.** However, make sure to use formative testing, not your own viewpoint, to confirm that the ads affect your target audience(s) in these ways. Emotionally intense ads elicit fewer counter-arguments, achieve higher recall (potentially requiring lower broadcast volume than other approaches) and are effective with audiences experiencing tobacco-related disparities (e.g. low socio-economic status, some racial/ethnic minorities, and youth). Message formats shown to be effective in eliciting negative emotions are graphic portrayals of the health consequences of tobacco-use, and testimonials (real stories). If you produce testimonial ads, carefully vet the persons being featured in the ad. (2, 4, 11, 28, 29, 30, 40, 52, 56, 60, 63, 65, 69, 73, 79, 80, 82, 90)
- 2) **Messages that counter deceptive marketing, used concurrently with a health message, are also effective.** Ads that include a direct link between deceptive marketing practices and the health harms that tobacco causes can prevent smoking initiation, support cessation, and change attitudes about tobacco control efforts. These counter-marketing messages may be especially effective among youth most receptive to cigarette advertising. It is critical that these messages are clear; otherwise, audiences may be confused and not fully understand the issue or how they should react. (15, 33, 43, 55, 59, 65, 68, 78, 82, 96)
- 3) **Ads that stimulate campaign-related conversation (among smokers and non-smokers alike) can increase the effect of a mass media campaign.** Emotionally intense ads are more likely to generate interpersonal communication, which can transmit the message to those who haven't seen the campaign, and reinforce the message for those who have. Studies show that smokers who report conversations generated by antismoking ads are more likely to have recently tried to quit, and nonsmokers are more likely to report support for tobacco control measures. (6, 24, 33, 43, 44, 61)
- 4) **Including a call to action in your ads is important.** Calls to action can include providing a quitline number or website address, suggesting a change in behavior (such as talking to a health professional or making your home smokefree), or making an enticing offer (such as receiving free nicotine-replacement therapy medication). (5, 11, 40, 93)
- 5) **Producing ads that appeal to a broad audience and targeting specific audiences through placement can maximize limited resources.** Research indicates strong ads can be effective across a wide variety of audiences; different ads don't necessarily need to be produced for different audiences (e.g., segmented by race/ethnicity, education or socio-economic status), as long as each audience, *particularly those experiencing tobacco-related disparities*, is sufficiently exposed to the campaign. Featuring a variety of people in your ads from different racial/ethnic backgrounds can make them more accessible to broad audiences. Specific audiences then can be targeted via tailored media placements. (2, 4, 15, 16, 20, 30, 34, 40, 48, 56, 60, 65, 77, 82)

- 6) **Simplified, clear messages and visuals are best.** One main message is ideal—two to three would be the maximum to communicate. In general, out-of-home ads require the fewest words; then TV ads and videos; then radio ads; then print ads. Avoid being too clever, too subtle or too sophisticated with your messages. A recent study found that smokers responded more to strong arguments against smoking than they did to clever tricks like loud sounds or unexpected twists. Consider literacy levels and the desire of all people, not just those who are highly educated, to understand messages quickly and easily. In addition, make sure your visuals match and support your messages. For more information, see the CDC publications [Simply Put](#) and the [Clear Communication Index](#). (8, 65, 74, 75, 91)
- 7) **Key messages need a credible supporting fact or persuasive statement.** This helps the audience better understand what you are telling them and why they should believe it. In commercial advertising, this fact or statement is called the “reason to believe.” An example of this is when you make a statement such as “Everyone has the right to breathe clean air” the message will be more convincing and clear if you back it up with a supporting fact, such as “Secondhand smoke contains about 70 chemicals that cause cancer.” Formative testing is always recommended to ensure that your target audience understands and believes your intended message(s). (1, 8, 13)
- 8) **Potential shelf life and adaptability are important considerations when making decisions about and ad’s execution.** Ensuring that your ads are not tied to a certain location or time period will increase the likelihood that you can use the ads in later years and that your ads can be shared with other states or localities (or even other countries). Ways to help make the ads timeless and location-less include placing localized information in the tagging section only, avoiding showing items that might become outdated quickly (such as cell phone or other technology) and using voice-overs rather than talking heads where appropriate. If you produce a great ad, it will be in everyone’s best interest for the ad to be used over time and more broadly. (9, 10)

Considerations for Cessation Ads

- 1) **Showing people living with the negative consequences of tobacco use is powerful.** The concept of death is abstract and too distant to motivate some tobacco users. Ads that portray living with the consequences of tobacco use help them appreciate tobacco’s short-term effects and how difficult life can be when tobacco-related harms occur. (5, 60, 65)
- 2) **Generally, “why to quit” messages are stronger motivators than “how to quit” messages.** Tagging emotionally evocative “why to quit” ads with a quitline or other cessation resource is generally a sufficient “how to quit” message. Some evidence suggests that including cessation support and/or self-efficacy messages in hard-hitting health consequences advertising can reduce the likelihood that smokers will have avoidance reactions or dismiss the key message(s). However, keep in mind that “how to quit” messages, on their own, are less effective in promoting behavior change as “why to quit” and may not be suitable as a stand-alone campaign strategy. (11, 15, 16, 22, 34, 40, 64, 88, 93)
- 3) **Tone matters.** Confront tobacco users, but do so respectfully--don’t patronize, make fun of, or scold them. Use an empathetic tone that conveys you understand what they are going through, and that quitting is challenging. Educate and motivate tobacco users, and support those ready to quit, but don’t tell them what they “must” or “should” to do. (11, 40)

Considerations for Secondhand Smoke Ads

- 1) **Emotionally evocative ads increase knowledge and beliefs that secondhand smoke is harmful; positive, supportive ads emphasize the benefits of smokefree air to promote compliance with smokefree protections.** Varying the tone is important to first get people's attention and educate them persuasively about the health harms of secondhand smoke, and then later to make the community feel good about new smoke-free protections and how they will improve everyone's lives. (38, 52, 53, 79, 80, 86)
- 2) **Messages about secondhand smoke can support cessation.** The more places smokers can't smoke (e.g., workplaces, public places, homes and cars), the more likely they are to try to quit. This effect may be due to a combination of factors: 1) smoking becomes less convenient and the opportunities less frequent; 2) secondhand smoke messages change social norms about the acceptability of tobacco use; and 3) secondhand smoke messages can elicit concern about the impact smoking has on others, which can avoid smokers' tendencies to counter-argue and deny health messages. (36, 40, 46, 52, 96)

Considerations for Youth Prevention Ads

- 1) **Youth respond to effective general audience advertisements.** Well-executed, emotionally evocative ad campaigns - even those with a primary audience of adults - can be very effective in building knowledge, and changing attitudes and behaviors among youth. Young people respond well to the same key messages as adults about the serious health effects of tobacco use and secondhand smoke, and about deceptive marketing practices. It is not necessary to show young people in advertisements in order to influence this population. (4, 13, 16, 33, 40, 60, 65, 82, 85, 97)
- 2) **Health consequences and countering pro-tobacco messages have more impact than messages about social approval/disapproval and choice/refusal skills.** The negative health consequences of tobacco use and secondhand smoke, and messages that counter deceptive marketing practices have a proven track record of effectively reaching youth, perhaps because they produce strong emotional arousal (a key component of ad effectiveness). Youth-targeted ads with explicit behavioral directives (e.g. "don't smoke") or that portray smoking as an adults-only behavior may actually increase youth smoking prevalence. (2, 14, 35, 42, 65, 68, 82)

Caution Areas

- 1) **Including smoking cues in tobacco counter-marketing ads may undermine their effectiveness; it is best to avoid including smoking images, unless accompanied by strong anti-smoking arguments.** Studies to date have found mixed and even contradictory effects to including smoking cues in ads, and those effects have varied by smoking status (e.g. daily vs. non-daily, former vs. current smoker, motivated to quit vs. pre-contemplation). Cues include portrayals of holding and handling cigarettes (and e-cigarettes); smoking of cigarettes; and showing smoking-related materials (e.g., cigarettes, ashtrays, matches and lighters). If you include smoking cues, test the argument strength of the ad to be sure it is adequate to overcome the potential loss in persuasion created by the smoking cue. See OSH's *Guidance on Smoking Images in Counter-Marketing Ads* for more information. (45, 49, 87, 94)

- 2) **Ensure that messages and images are credible.** Don't go so far in trying to make ads graphic/hard-hitting that it isn't believable to the audience; check to make sure the ad isn't activating counter-argument and/or denial responses that would diminish the ad's effectiveness. (82)
- 3) **Humor is a less effective motivator of desired attitude and behavior changes than seriousness; however, some humor has been used effectively in ads.** Humorous ads are generally less effective in motivating smokers to quit than serious ads, but there may be an appropriate role in a campaign for a humorous ad if the humor is used to convincingly show empathy for smokers (e.g., California's "Quitting Takes Practice" ads). Also "dark humor" can be used to motivate attitude and behavior change when it elicits negative emotion (e.g., the truth @ "Body Bags" and "1200" ads). Humor used simply for the sake of entertaining should be avoided. Because humor is subjective, it carries a risk of being misunderstood or off-putting, and should always be pre-tested with your target audience. (18, 50, 57, 65, 82)
- 4) **Be cautious when using celebrities in ads.** Experience has shown that using celebrities in ads has more downsides than upsides. Downsides include behavior by celebrities over time that compromises their ability to be appropriate role models; interest in controlling the content and production of the ads; and lack of credibility among viewers who assume that the celebrities are being paid to act in the ads. On the upside, celebrities can be effectively involved in earned media efforts, for instance participating in press conferences to attract the news and entertainment media. However, even in these cases, it's recommended that only celebrities with genuine personal experience with the harms of tobacco be involved (e.g., those who lost family members or who struggled with quitting). (11, 82)
- 5) **Repeating misinformation to debunk or clarify an incorrect claim can create "belief echoes" that reinforce the original misinformation.** This "belief echo" persists even when the audience believes, understands and recalls the correction. (7)

Sources

1. Advertising Educational Foundation. *Persuasion*, 2005. Accessed February 2013 at: www.aef.com/on_campus/classroom/speaker_pres/data/4001
2. Allen JA, Duke JC, Davis KC, Kim AE, Nonnemaker JM, Farrelly MC. Using mass media campaigns to reduce youth tobacco use: A review. *American Journal of Health Promotion* 2015;30(2):e71-82.
3. Amerson NL, Arbise BS, Kelly NK, Traore E. Use of market research data by state chronic disease programs, Illinois, 2012–2014. *Preventing Chronic Disease* 2014;11:140268.
4. Australian National Preventive Health Agency (AU). Tobacco Control and Mass Media Campaigns: prepared by Cancer Council Victoria for the Australian National Preventive Health Agency. 2013.
5. Bala MM, Strzeszynski L, Topor-Madry R, Cahill K. Mass media interventions for smoking cessation in adults. *Cochrane Database of Systematic Reviews* 2013;6:CD004704.
6. Brennan E, Durkin SJ, Wakefield M, Kashima Y. Why do smokers talk about antismoking campaigns? Predictors of the occurrence and content of campaign-generated conversations, *Health Communication* 2016:1-18. Published online November 30, 2016.
7. Cappella JN, Maloney E, Ophir Y, Brennan E. Interventions to correct misinformation about tobacco products. *Tobacco Regulatory Science* 2015;1(2):186–197.

8. Centers for Disease Control and Prevention. No date. *The CDC Clear Communication Index*. Accessed March 2017 at: <http://www.cdc.gov/healthcommunication/ClearCommunicationIndex/>.
9. Centers for Disease Control and Prevention, Office on Smoking and Health. 2012. *MCRC Campaign Development and Captioning Tips and Considerations*.
10. Centers for Disease Control and Prevention, Office on Smoking and Health. 2012. *Submitting Your Ads to the Media Campaign Resource Center*.
11. Centers for Disease Control and Prevention. 2003. *Designing and Implementing an Effective Tobacco Counter-Marketing Campaign*. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. Accessed March 2017 at: <https://www.cdc.gov/tobacco/stateandcommunity/counter-marketing/index.htm>
12. Centers for Disease Control and Prevention. 2011. *The Health Communicator's Social Media Toolkit*. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, Office of the Associate Director of Communication, Division of News and Electronic Media, Electronic Media Branch. Accessed March 2017 at: <https://www.cdc.gov/socialmedia/tools/guidelines/socialmediatoolkit.html>
13. Centers for Disease Control and Prevention. Increases in quitline calls and smoking cessation website visitors during a national tobacco education campaign — March 19–June 10, 2012. *Morbidity and Mortality Weekly Report* 2012;61(34);667-670.
14. Centers for Disease Control and Prevention. 2012. *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. Atlanta, GA: 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. Accessed April 2014 at <http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/full-report.pdf>
15. Centers for Disease Control and Prevention. 2014. *Best Practices for Comprehensive Tobacco Control Programs—2014*. 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. Accessed April 2014 at: http://www.cdc.gov/tobacco/stateandcommunity/best_practices/pdfs/2014/comprehensive.pdf
16. Centers for Disease Control and Prevention. 2014. *Surveillance and Evaluation Data Resources for Comprehensive Tobacco Control Programs*. Atlanta, GA: 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. Accessed August 2014 at: http://www.cdc.gov/tobacco/tobacco_control_programs/surveillance_evaluation/pdfs/surveillance_evaluation_508.pdf
17. Community Preventive Services Task Force. 2013. *The Community Guide: Reducing Tobacco Use and Secondhand Smoke Exposure: Mass-Reach Health Communication Interventions*. Last updated: June 2013. Accessed March 2017 at: www.thecommunityguide.org/tobacco/massreach.html
18. Daily E. Is Your Funny Ad Worth the Risk? April 6, 2016. Marketing CPG, MediaPost. Accessed March 2017 at: <http://www.mediapost.com/publications/article/272885/is-your-funny-ad-worth-the-risk.html>

19. Davis KC, Alexander RL Jr., Shafer P, Mann N, Malarcher A, Zhang L. The dose–response relationship between tobacco education advertising and calls to quitlines in the United States, March–June, 2012. *Preventing Chronic Disease* 2015;12:150157.
20. Davis KC, Duke J, Shafer P, Patel D, Rodes R, Beistle D. Perceived effectiveness of antismoking ads and association with quit attempts among smokers: Evidence from the *Tips From Former Smokers* campaign. *Health Communication*. July 19, 2016, Epub ahead of print.
21. Davis KC, Shafer PR, Rodes R, Kim A, Hansen H, Patel M, et al. Does digital video advertising increase population-level reach of multimedia campaigns? Evidence from the 2013 *Tips From Former Smokers* campaign. *Journal of Medical Internet Research* 2016;18(9):e235.
22. Duke JC, Nonnemaker JM, Davis KC, Watson KA, Farrelly MC. The impact of cessation media messages on cessation-related outcomes: Results from a national experiment of smokers. *American Journal of Health Promotion* 2014;28(4):242-50.
23. Duke J, Vallone D, Allen J, Cullen J, Mowery P, Xiao H, et al. Increasing exposure to a youth tobacco prevention media campaign in rural and low population density communities. *American Journal of Public Health* 2009;99:2210-6.
24. Dunlop SM, Cotter T, Perez D. When your smoking is not just about you: Antismoking advertising, interpersonal pressure, and quitting outcomes. *Journal of Health Communication* 2014;19(1):41-56.
25. Dunlop SM, Cotter T, Perez D, Chapman S. Tobacco in the news: Associations between news coverage, news recall and smoking-related outcomes in a sample of Australian smokers and recent quitters. *Health Education Research* 2012;27:160-171.
26. Dunlop S, Cotter T, Perez D, Wakefield M. Televised antismoking advertising: effects of level and duration of exposure. *American Journal of Public Health* 2013;103(8):e66-73.
27. Dunlop SM, Romer D. Relation between newspaper coverage of 'light' cigarette litigation and beliefs about 'lights' among American adolescents and young adults: the impact on risk perceptions and quitting intentions. *Tobacco Control*, 19(4):267-73.
28. Dunlop SM, Wakefield M, Kashima Y. The contribution of antismoking advertising to quitting: intra- and interpersonal processes. *Journal of Health Communication* 2008;13(3): 250-266.
29. Durkin S, Biener L, Wakefield M. Effects of different types of antismoking ads on reducing disparities in smoking cessation among socioeconomic subgroups. *American Journal of Public Health* 2009;99:2217–2223.
30. Durkin S, Brennan E, Wakefield M. Mass media campaigns to promote smoking cessation among adults: an integrative review. *Tobacco Control* 2012;21(2): 127-138.
31. Durkin S, Wakefield M. Comparative responses to radio and television anti-smoking advertisements to encourage smoking cessation. *Health Promotion International* 2010;25(1): 5-13.
32. Eckler P, Rodgers S, Everett K. Characteristics of community newspaper coverage of tobacco control and its relationship to the passage of tobacco ordinances. *Journal of Community Health* 2016;41:953–961.
33. Emory KT, Messer K, Vera L, Ojeda N, Elder JP, Usita P, et al. Receptivity to cigarette and tobacco control messages and adolescent smoking initiation. *Tobacco Control* 2015;24:281–284.
34. Farrelly MC, Duke JC, Davis KC, Nonnemaker JM, Kamyab K, Willett JG, et al. Promotion of smoking cessation with emotional and/or graphic antismoking advertising. *American Journal of Preventive Medicine* 2012;43(5):475-482.

35. Farrelly MC, Duke JC, Nonnemaker J, MacMonegle AJ, Alexander TN, Zhao X, et al. Association between the real cost media campaign and smoking initiation among youths — United States, 2014–2016. *Morbidity and Mortality Weekly Report* 2017;66(2):47-50.
36. Farrelly M, Mann N, Watson K, Pechacek T. The influence of television advertisements on promoting calls to telephone quitlines. *Health Education Research* 2013;28(1):15-22.
37. Farrelly MC, Hussin A, Bauer UE. (2007). Effectiveness and cost effectiveness of television, radio and print advertisements in promoting the New York smokers' quitline. *Tobacco Control* 16(Suppl 1):i21–i23.
38. Fosson GH, McCallum DM, Conaway MB. Antismoking mass media campaigns and support for smoke-free environments, Mobile County, Alabama, 2011–2012. *Preventing Chronic Disease* 2014;11:E150.
39. Freeman B, Potente S, Rock V, McIver J. Social media campaigns that make a difference: what can public health learn from the corporate sector and other social change marketers? *Public Health Research Practice* 2015;25(2):e2521517.
40. Global Dialogue for Effective Stop-Smoking Campaigns. 2006. *Overview of Evidence-Based Recommendations Based on Lessons Learned from International Literature Review and Unpublished Data Synthesis*. Accessed July 2012 at: [http://global.tobaccofreekids.org/files/global_dialogue/Overview of Evidence-Based Recommendations FINAL.doc](http://global.tobaccofreekids.org/files/global_dialogue/Overview_of_Evidence-Based_Recommendations_FINAL.doc)
41. Harrington NG. Introduction to the special issue: Message design in health communication research. *Health Communication* 2015;30(2):103–105.
42. Huang LL, Lazard AJ, Pepper JK, Noar SM, Ranney LM, Goldstein AO. Impact of The Real Cost campaign on adolescents' recall, attitudes, and risk perceptions about tobacco use: A national study. *International Journal of Environmental Research and Public Health* 2017;14(1):42.
43. James SA, Rhoades RR, Mushtaq N, Paulson S, Beebe LA. Longitudinal evaluation of the Tobacco Stops with Me campaign. *American Journal of Preventive Medicine* 2015;48(1Suppl1):S71–S77.
44. Jeong M, Tan A, Brennan E, Gibson L, Hornik RC. Talking about quitting: interpersonal communication as a mediator of campaign effects on smokers' quit behaviors. *Journal of Health Communication* 2015;20(10):1196–1205.
45. Kang Y, Cappella JN, Strasser AA, Lerman C. The effect of smoking cues in antismoking advertisements on smoking urge and psychophysiological reactions. *Nicotine and Tobacco Research* 2009 ;11(3): 254-261.
46. Kegler MC, Bundy L, Haardörfer R, Escoffery C, Berg C, Yembra D, et al. A minimal intervention to promote smoke-free homes among 2-1-1 callers: A randomized controlled trial. *American Journal of Public Health* 2015;105(3):530–537.
47. Kim HS, Lee S, Cappella JN, Vera L, Emery S. Content characteristics driving the diffusion of antismoking messages: Implications for cancer prevention in the emerging public communication environment. *Journal National Cancer Institute Monograph* 2013;47:182-187.
48. Kim M, Shi R, Cappella JN. Effect of character–audience similarity on the perceived effectiveness of antismoking PSAs via engagement. *Health Communication* 2016; 31(10):1193-1204.
49. King AC, Smith LJ, McNamara PJ, Cao D. Second generation electronic nicotine delivery system vape pen exposure generalizes as a smoking cue. *Nicotine & Tobacco Research* 2017;1-7.
50. Kite J, Foley BC, Grunseit AC, Freeman B. Please like me: Facebook and public health communication. *PLoS One* 2016;11(9): e0162765.

51. Korda H, Itani Z. Harnessing social media for health promotion and behavior change. *Health Promotion Practice* 2013;14(1):15-23.
52. Kosir, M.; Gutierrez, K. 2009. *Lessons Learned Globally: Secondhand Smoke Mass Media Campaigns*. Saint Paul, MN: Global Dialogue for Effective Stop Smoking Campaigns. Accessed August 2018 at: https://www.tobaccofreekids.org/assets/global/pdfs/en/Lessons_Learned_Globally.pdf
53. Kostygina G, Hahn EJ, Rayens MK. 'It's about the smoke, not the smoker': Messages that motivate rural communities to support smoke-free policies. *Health Education Research* 2014;29(1):58–71.
54. Krogstad JM. Social media preferences vary by race and ethnicity. Pew Research Center 2015 Feb. Accessed March 2017 at: <http://www.pewresearch.org/fact-tank/2015/02/03/social-media-preferences-vary-by-race-and-ethnicity/>
55. Kushnir V, Selby P, Cunningham JA. Association between tobacco industry denormalization beliefs, tobacco control community discontent and smokers' level of nicotine dependence. *Addictive Behaviors* 2013;38(7):2273-8.
56. Leas EC, Myers MG, Strong DR, Hofstetter CR, Al-Delaimy WK. Recall of anti-tobacco advertisements and effects on quitting behavior: Results from the California smokers cohort. *American Journal of Public Health* 2015;105:e90–e97.
57. Lee JY, Slater MD, Tchernev J. Self-deprecating humor versus other-deprecating humor in health messages *Journal of Health Communication* 2015;20(10):1185–1195.
58. Lisha NE, Jordan JW, Ling PM. Peer crowd affiliation as a segmentation tool for young adult tobacco use. *Tobacco Control* 2016;25:i83–i89.
59. Malone RE, Grundy Q, Bero, LA. Tobacco Industry denormalisation as a tobacco control intervention: A review. *Tobacco Control* 2012;21(2):162-70.
60. McAfee T, Davis KC, Alexander RL, Pechacek TF, Bunnell B. Effect of the first federally funded US antismoking national media campaign. *The Lancet* 2013;382(9909): 2003-11.
61. McAfee T, Davis KC, Shafer P, Patel D, Alexander R, Bunnell R. Increasing the dose of television advertising in a national antismoking media campaign: results from a randomised field trial. *Tobacco Control* 2017;26(1):19-28.
62. Momin B, Neri A, McCausland K, et al. Traditional and innovative promotional strategies of tobacco cessation services: A review of the literature. *Journal of Community Health* 2014;39:800-809.
63. Mosbaek CH, Austin DF, Stark MJ, Lambert LC. The association between advertising and calls to a tobacco quitline. *Tobacco Control* 2007;16(Suppl 1): i24-i29.
64. Nabi RL. Emotional flow in persuasive health messages. *Health Communication* 2015;30(2):114-124.
65. National Cancer Institute. 2008. *Monograph 19: The Role of the Media in Promoting and Reducing Tobacco Use*. NCI Tobacco Control Monograph Series 19. Bethesda, MD: U.S. Department of Health and Human Services, National Cancer Institute. Accessed July 2012 at: <https://cancercontrol.cancer.gov/brp/tcrb/Monographs/19/index.html>
66. Neff J. Brands should be spending \$31 Billion more this year than they are: Biggest study in quarter century finds brands need to diversify media [online]. *Advertising Age* 2016 Mar. Accessed March 2017 at: <http://adage.com/article/cmo-strategy/arf-brands-spend-31-billion/303113/>

67. Neiger BL, Thackeray R, Van Wagenen SA, Hanson CL, West JH, Barnes MD, et al. Use of social media in health promotion: Purposes, key performance indicators, and evaluation metrics. *Health Promotion Practice* 2012;13(2):159-164.
68. Niederdeppe J, Avery R, Byrne S, Siam T. Variations in state use of anti-tobacco message themes predict youth smoking prevalence in the USA, 1999-2005. *Tobacco Control* 2014;0:1-7.
69. Niederdeppe J, Farrelly M, Nonnemaker J, Davis KC, Wagner L. Socioeconomic variation in recall and perceived effectiveness of campaign advertisements to promote smoking cessation. *Social Science & Medicine* 2011;72(5):773-780.
70. Niederdeppe J, Farrelly MC, Thomas KY, Wenter D, Weitzenkamp D. Newspaper coverage as indirect effects of a health communication intervention: the Florida Tobacco Control Program and youth smoking. *Communication Research* 2007;34:382-406.
71. Niederdeppe J, Farrelly MC, Wenter D. Media advocacy, tobacco control policy change and teen smoking in Florida. *Tobacco Control* 2007;16(1):47-52.
72. Nielson. Television is still top brass, but viewing differences vary with age [online]. 2016 July. Accessed March 2017 at: <http://www.nielsen.com/us/en/insights/news/2016/television-is-still-top-brass-but-viewing-differences-vary-with-age.html>
73. Nonnemaker JM, Allen JA, Davis KC, Kamyab KL, Duke JC, Farrelly MC. The influence of antismoking television advertisements on cessation by race/ethnicity, socioeconomic status, and mental health status. *PLoS One* 2014;9(7):e102943.
74. Ogilvy, D. How to make TV commercials that sell. In *Ogilvy on Advertising*. New York: Vintage Books; 1985.
75. Ogilvy, D. Wanted: a renaissance in print advertising. In *Ogilvy on Advertising*. New York: Vintage Books; 1985.
76. Parvanta S, Gibson L, Forquer H et al. Applying quantitative approaches to the formative evaluation of antismoking campaign messages. *Social Marketing Quarterly* 2013;19(4):242-264.
77. Parvanta S, Gibson L, Moldovan-Johnson M, Mallya G, Hornik RC. Race and gender moderation of the relationship between cessation beliefs and intentions: is race or gender message segmentation necessary in anti-smoking campaigns? *Health Education Research* 2013;28(5):857-868.
78. Popova L, Linde BD, Bursac Z, Talcott GW, Modayil MV, Little MA, et al. Testing antismoking messages for Air Force trainees. *Tobacco Control* 2016;25:656-663.
79. Rayens MK, Butler KM, Wiggins AT, Kostygina G, Langley RE, Hahn EJ. Recall and effectiveness of messages promoting smoke-free policies in rural communities. *Nicotine & Tobacco Research* 2016;18(5):1340-1347.
80. Rowa-Dewar N, Amos A. Disadvantaged parents' engagement with a national secondhand smoke in the home mass media campaign: A qualitative study. *Journal of Environmental Research and Public Health* 2016;13:901
81. Samuel, A. Psychographics are just as important for marketers as demographics [online]. *Harvard Business Review* 2016 Mar. Accessed March 2017 at: <https://hbr.org/2016/03/psychographics-are-just-as-important-for-marketers-as-demographics>
82. Schar E, Gutierrez K, Murphy-Hoefer R, Nelson DE. 2006. *Tobacco Use Prevention Media Campaigns: Lessons Learned from Youth in Nine Countries*. Atlanta, GA: 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. Accessed July 2012 at: <http://cdc.gov/tobacco/youth/report/index.htm>

83. Sheffer M, Redmond LA, Kobinsky KH, Keller PA, McAfee T, Fiore MC. Creating a perfect storm to increase consumer demand for Wisconsin's Tobacco Quitline. *American Journal of Preventive Medicine* 2010;38(3 Suppl):S343-6.
84. Smith KC, Wakefield MA, Terry-McElrath Y, Chaloupka FJ, Flay B, Johnston L, Saba A, Siebel C. Relation between newspaper coverage of tobacco issues and smoking attitudes and behaviour among American teens. *Tobacco Control* 2008;17(1):17-24.
85. Terry-McElrath Y, Wakefield M, Ruel M, Balch GI, Emery S, Szczypka G, et al. The effect of antismoking advertisement executional characteristics on youth comprehension, appraisal, recall, and engagement. *Journal of Health Communication* 2005;10(2):127-143.
86. Thrasher JF, Huang L, Pérez-Hernández R, Niederdeppe J, Arillo-Santillán E, Alday J. Evaluation of a social marketing campaign to support Mexico City's comprehensive smoke-free law. *American Journal of Public Health* 2011;101(2):328-35.
87. Versace F, Robinson, JD, Lam CY, Minnix JA, Brown VL, Carter BL, Wetter DW, Cinciripini PM. Cigarette cues capture smokers' attention: evidence from event-related potentials. *Psychophysiology* 2010;47(3); 435-441.
88. Villanti AC, Cullen J, Vallone DM, Stuart EA. Use of propensity score matching to evaluate a national smoking cessation media campaign. *Evaluation Review* 2011;35(6):571-91.
89. Wakefield M, Durkin S, Murphy M, Cotter T. 2007. *Pre-Testing Anti-Smoking Commercials: Process for the Conduct of Market Research*. Cancer Institute NSW and Cancer Council Victoria: Alexandria NSW. Accessed February 2013 at: www.cancervic.org.au/downloads/cbrc_research_papers/mw_PreTestingAntiSmokingCommercials_rept_2007.pdf
90. Wakefield M, Bayly M, Durkin S, Cotter T, Mullin S, Warne C. Smokers' responses to television advertisements about the serious harms of tobacco use: pre-testing results from 10 low- to middle-income countries. *Tobacco Control* 2013;22(1):24-31.
91. Wang A, Ruparel K, Loughhead JW, Strasser AA, Blady SJ, Lynch KG, Romer D, Cappella JN, Lerman C, Langenben DD. Content matters: Neuroimaging investigation of brain and behavioral impact of televised anti-tobacco public service announcements. *The Journal of Neuroscience* 2013;33(17): 7420-7427.
92. White VM, Durkin SJ, Coomber K, Wakefield MA. What is the role of tobacco control advertising intensity and duration in reducing adolescent smoking prevalence? Findings from 16 years of tobacco control mass media advertising in Australia. *Tobacco Control* 2015;24:198-204.
93. Wong NCH, Cappella JN. Antismoking threat and efficacy appeals: Effects on smoking cessation intentions for smokers with low and high readiness to quit. *Journal of Applied Communications Research* 2009;37(1):1-20.
94. Xu J. The impact of smoking cues in antismoking messages among intermittent and light smokers. *Psychology & Health* 2017;32(1):1-18.
95. Young R, Willis E, Stemmler J, Rodgers S. Localized health news releases and community newspapers: A method for rural health promotion. *Health Promotion Practice* 2015;16(4):492-500.
96. Zhang X, Cowling D, Tang H. The impact of social norm change strategies on smokers' quitting behaviours. *Tobacco Control* 2010;19(Suppl 1): i51-i55.
97. Zhao X, Cai X. Exposure to the *Tips from Former Smokers* Campaign among adolescents in the United States. *Nicotine & Tobacco Research* 2016;18(5):971-5.