Reducing Tobacco Use and Secondhand Smoke Exposure: Mass-Reach Health Communication Interventions

Summary Evidence Table

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Author (Year): Bauer et al. (2006) **Study Design:** Before-after **Quality of Execution:** Fair: 2 limitations	**Location:** Western NYS, US **Intervention:** Ads in local newspaper, each ran for 1 day: 1 offering self-help guide; 1 offering self-help guide + cessation aid "Better Quit"; <u>Channel:</u> newspaper <u>Intensity:</u> Buffalo News reaches 300,000 HH <u>Placement:</u> Buffalo news, one ¼ page ad; <u>Tagging:</u> NYS QL **Comparisons:** 1. No ads vs. ad for guide 2. No ads vs. ad for guide + Better Quit 3. Guide vs. guide + Better Quit	**Targeted Population:** Smokers in NYS **Study Population & Characteristics:** Callers to NYS QL from participating area (Erie or Niagara); characteristics not reported	**Call Volume:** calls to NYS Smokers' QL from persons in the counties (Erie & Niagara) where promotions were conducted before, during, and after each promotion	1wk before ad for guide alone: 7 calls/day Between airing of the 2 ads: 7 calls/day 2day period after airing ad for guide alone: 14 calls/day	2day period after airing ad for guide alone: 14 calls/day 2 day after airing ad for guide + cessation aid: 27.5 calls/day 2 day after airing ad for guide + cessation aid: 27.5 calls/day	**Relative change:** 1. No ad vs. ad for guide alone: **+100%** 2. No ad vs. ad for guide + cessation aid: **+292.9%** 3. Ad for guide alone vs. ad for guide + cessation aid: **+96.4%**	Newspaper ads increased calls to QL More cost-effective when a quitting aid was offered together with self-help materials in generating calls to QL

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Author (Year): Biener et al. (2006) **Study Design:** Retrospective cohort **Quality of Execution:** Fair: 3 limitations	**Location:** Massachusetts, US **Intervention:** State wide media campaign starting in 93; Content: state and Legacy sponsored ads featured health consequences of smoking; resources to help smokers quit; dangers of SHS; tobacco industry practices that promote use Channel: TV and website; Intensity: measured in GRPs and categorized under sponsor and theme Tagging: NR **Comparisons:** Recent quitters citing being helped by types of cessation aids, such as media, NRT, QL, etc.	**Targeted Population:** MA residents; **Study Population:** Adult ex-smokers; 785 ex-smokers who quit within 2yrs; **Characteristics of recent quitters:** Gender: 53.1% female Age: 18-30yrs, 40.7% 31-50yrs, 32.2% ≥51yrs, 27.1% Education: ≤High school, 43.7% Race/ethnicity: White, 82.1% Hispanic, 6.3% Other, 11.6%	Cessation: % of recent quitters helped by various forms of cessation aid;	N/A;	24 m after seeing ads, 32% of all respondents reported being helped by media ads;	Narrative results: Media had a higher population level impact than other cessation aids; Younger respondents more likely to be helped by TV ads; Ads depicting serious harm done to health in an emotional or graphic way were most often recalled as helpful;	Most respondents (86.9%) reported having seen an anti-tobacco TV ad, but fewer (36.8%) indicated that ad contributed to their having quit; However, media interventions have high penetration, and their impact at population level is much higher; TV anti-tobacco ads rank higher than other aids with 32.0% of all recent quitters reporting that these ads contributed to their quitting
Author (Year): Borland et al. (2003) **Study Design:** Before-After **Quality of Execution:** Fair: 2 limitations	**Location:** Sydney, Melbourne, Brisbane, Adelaide, AU **Intervention:** 2001National Tobacco Campaign in AU was analyzed;	**Targeted Population:** Smokers in AU; **Study Population:** Current smokers 18-40yrs, randomly selected from	Cessation: not smoking at follow up; Quit attempts: attempted to quit in the previous two weeks	100% smokers at baseline 100% smokers at BL without quit attempts;	# of smokers who quit at f/u: 45 7% of 881 f/u participants made a quit attempt; 62 smokers attempted to quit by f/u	% cessation at f/u (ITT): **4.5%** % quit attempt at f/u (ITT): **6.2%**	Evaluation of AU NTC after a short implementation duration suggested that there is increase in cessation related activities;

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	Content: 2 TV ads depicting negative health consequences of smoking; 1 TV ad depicting a man calling Quitline Channel: TV Intensity: TARPs for each city increased from low to medium levels 1wk after campaign began Tagging: tagged with AU govt. QL **Comparisons:** -Before and after the campaign; -Some comparison between cities	electronic White Pages; BL: 1000; F/U: 881; **Population characteristics:** Sex, male: 50%; Age: 24% 18-24; 18% 25-29; 21% 30-34, 37% 35-40; Education: 70.4% secondary school; 25.5% beyond					City-wide National Tobacco Campaign was effective in increasing quit attempts among Australian smokers
Author (Year): Bui et al. (2010); Erbas et al. (2006) **Study Design:** Interrupted time series **Quality of Execution:** Fair: 4 limitations	**Location**: Victoria, Australia **Intervention:** Used Australia Quitline Victoria data to model what intervention characteristics impact calls to QL: - Placement (day of the week) - Intensity (measured in TARPs) Intervention details not provided **Comparison:** Study is an interrupted time	**Targeted Population:** AU media efforts targets 18-40yr old smokers; **Study Population:** Calls to QL Victoria over the study period; **Population characteristics:** Characteristics not reported;	Call volume: Statistical tests of relationship between media message factors and calls to the quitline Daily total calls to Quitline Victoria Total number of Quit antismoking advertisements on free to air television	N/A	Quitline calls were significantly associated with total number of ads; TARPs; TARPs for Quit campaign associated with increased calls to quitline; TARPs for NRT ads, sponsored by pharmaceutical companies associated with increased calls to quitline	Narrative results: Quitline calls were significantly associated with total number of ads; TARPs; TARPs for Quit Campaign and nicotine replacement therapy ads both associated with increased calls to quitline; TARPs for Quit Campaign ads 2x as effective as ads for NRT ads	In this model, the total number of Quitline calls were associated with total number of ads, TARPS, and day of the week for ad placement

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	series, but with unclear baseline						
Author (Year): Burns et al. (2010) **Study Design:** Before-after **Quality of Execution:** Fair: 3 limitations	**Location:** Colorado, US **Intervention:** Assessed Quitline reach and effectiveness during a Spanish-language media campaign in Colorado Content: developed through focus group with low income Latinos Channel: TV, radio, Latino attended movie theaters Intensity: measured in gross rating points Placement: during key adult viewing times Targeting: Yes Tagging: Ad campaign urged audience members to call the Colorado Quitline (unclear if "tagged") **Comparison:** Before and during the campaign	**Targeted Population:** Latino smokers in CO; **Study Population:** For cessation: random sample of callers responding to survey 7m after their initial call; Camp. Latino F/U(7m) Pre: 286 126 During: 232 117 **Population characteristics:** for sampled individuals only; Significant differences among pre- and campaign Latino responders for age, sex, education, and insurance status; For more details, refer to Table 1 in paper	Cessation: 6m continuous abstinence at 7m f/u; Call volume: number of Latino callers; Call volume: number of Latino callers;	Cessation: Pre-intervention: 9.6% ITT: 4.2% Call volume: Pre-intervention: 390 calls/month Call volume: Pre-intervention: 390 calls/month	Cessation: During intervention: 18.8% ITT: 9.5% Call volume: During intervention: 614 calls/month Call volume: During intervention: 614 calls/month	Absolute percentage point change in cessation (ITT): **+5.3** pct pts; **95% CI: 0.90, 9.70** Relative percentage change in cessation (ITT): **+126.2**%; Relative percentage change in call volume: **+57.4%** Relative percentage change in call volume: **+57.4%**	"A statewide Spanish-language media campaign increased Quitline reach among younger Spanish-speaking Latinos with low SES while maintaining or improving service completion rates and smoking cessation rates at 7m f/u among this population"

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Author (Year): Campbell et al. (2008) **Study Design:** For cessation: before-after; for call volume: interrupted time series **Quality of Execution:** Fair: 4 limitations	**Location:** Montana, US **Intervention:** Montana evaluated promotion of an enhanced quitline service benefit—4wks NRT to 6wks NRT; has both why to quit and how to quit messages; <u>Content:</u> health impact of smoking and quitting; counseling services provided <u>Channel:</u> Baseline: newspaper Promotion: TV, radio, newspaper **Comparison:** Before and after the enhanced benefit promotion	**Targeted Population:** Smokers in Montana; **Study Population:** For call volume: quitline callers; Pre: 911 Enhanced: 1690 **Characteristics from intake calls:** Jan-N06 D-Jun07 Age: ≥ 45 years 45% 48% Gender: Male: 39% 44%	Cessation: 7 day point prevalent abstinence at 6m f/u; Call volume: monthly intake calls between Jan06 to Oct 07 were compared;	Cessation (ITT): Pre-enhanced (Jan to Jul 07): 9% of study participants quit; Call volume: Pre-enhanced: 397 calls/month	Cessation (ITT): Enhanced period: 12% of study participants quit; Call volume: Enhanced: During campaign: 712 calls/month; 3 months after campaign: 412 calls/month	Absolute percentage point change in cessation (ITT): **+3.0 pct pts**; **95% CI: 0.60, 5.40** Relative percentage change in cessation: **+33.3%**; Relative percentage change in call volume: **During campaign: +79.3%** **3 months after campaign: +3.78%**	Paid media promotion of an enhanced benefit for NRT (6wks) was associated with an increase in call volume to the quitline and an increase in cessation; more men and more callers older than 45yrs contacted QL;
Author (Year): Carroll et al. (2003) **Study Design:** Other design with concurrent comparison group **Quality of Execution:** Fair: 3 limitation	**Location:** Sydney, Melbourne, Australia **Intervention:** To study impact of media intensity, type of ads, and program placement on calls to quitline; <u>Content:</u> 2 types of ads; health effect of tar and damage to smokers' vision; ads that model a smoker calling quitline	**Targeted Population:** Smokers in Australia; **Study Population:** Callers to quitline within 1hr of campaign ads and within Sydney and Melbourne metro broadcast areas;	Call volume: calls from geographic areas of Sydney and Melbourne within 1hr of each ad's airing;	N/A	Call volume: Sydney: 1168 calls per 1020 TARPs; Melbourne: 601 calls per 920 TARPs;	Narrative results: Combination ad placement (health effects followed by call for help) was more effective (p=0.01 in Sydney; NS in Melbourne); Light entertainment, cultural/informative, and reality TV programs	Some evidence that ad type, program placement, and combination ad broadcast may be associated with increased calls to the quitline in Australia;

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	Channel: TV Intensity: measured in TARPs Placement: Australia TV programs divided into 12 categories Tagging: Yes **Comparison:** Sydney to Melbourne	**Population characteristics:** not reported				generated high calls per TARP	
Author (Year): CDC (2012) **Study Design:** Time series **Quality of Execution:** Fair: 2 limitations	**Location:** National, US **Intervention:** TIPS campaign from CDC Content: based on formative research and testing; former smokers talking about experiences in living with smoking-related diseases Channel: TV(cable), radio, online media, billboards, movie theaters, transit venues, print Intensity: intended to reach 87% of US adults 18-54 average of 18 times each Tagging: Yes; both phone number and website **Comparison:** campaign period in 2012 compared to same time period in 2011	**Targeted Population:** Adult smokers 18-54yrs old in US; **Study Population:** Callers to quitline or visitors to National Cancer Institute website before, during, and immediately after media campaign; **Population characteristics:** not reported	Call volume: calls to quitline before, during, and after campaign compared with data from corresponding weeks in 2011; not unique calls; Website visits: unique visits to cessation website	N/R	Call volume: 207,519 additional calls; Website visits: 510,571 additional unique visitors	Relative percentage change in call volume: **+132%** Relative percentage change in website visits: **+428%**	An evidence-based national tobacco education media campaign with adequate reach and frequency can lead to substantial increases in calls to a national portal for state quitlines and unique visitors to a cessation website; Results suggest that smokers have not been "saturated" by state media campaigns or other health information to the point that they no longer respond to tobacco education campaigns

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Author (Year): Chang et al. (2011) **Study Design:** Before-after **Quality of Execution:** Fair: 2 limitations	**Location:** Taiwan **Intervention:** Media campaign to promote Taiwan Tobacco Hazards Prevention Amendment Act going into effect; Content: promoting the new law and also calling for smoke-free environments Intensity: TV and radio ads about 4,500 and 4,400 times, respectively Channel: TV, radio, newspapers, magazines, Internet, bus, billboards **Comparison:** before and during the media campaign	**Targeted Population:** General population in Taiwan; **Study Population:** Representative sample of non-institutionalized population ≥15yrs recruited through random-digit dialing; N analyzed: BL Jul08: 1074; During campaign Dec08: 1084; **Population characteristics:** Not reported	Secondhand smoke exposure: self-reported exposure at home and at work during past week; Secondhand smoke exposure: self-reported exposure at home and at work during past week;	Secondhand smoke exposure: Workplace: 28.5%; Home: 36.8%; By education: Elementary + mid Workplace: 57.2% Home: 45.2%; High school Workplace: 31.5% Home: 41.1%; College Workplace: 19.9% Home: 25.8%; By income: NT$<20,000 Workplace: 41.3% Home: 41.0%; NT$20,000-49999 Workplace: 24.8% Home: 34.8% NT$≥50000 Workplace: 30.3% Home: 27.7%	Secondhand smoke exposure: Workplace: 24.9%; Home: 34.3%; By education: Elementary + mid Workplace: 38% Home: 37.2%; High school Workplace: 33.8% Home: 39.6%; College Workplace: 16.6% Home: 27.0%; By income: NT$<20,000 Workplace: 42.6% Home: 34.1%; NT$20,000-49999 Workplace: 22.5% Home: 38.3% NT$≥50000 Workplace: 20.7% Home: 23.6%	Absolute percentage point change in secondhand smoke exposure: Workplace: **-3.6 pct pts**; Home: **-2.5 pct pts**; Absolute percentage point change in secondhand smoke exposure (pct pts): By education: Elementary + mid Workplace: **-19.2** Home: **-8.0**; High school Workplace: **+2.3** Home: **-1.5**; College Workplace: **-3.3** Home: **+1.2**; By income: NT$<20,000 Workplace: **+1.3** Home: **-6.9**; NT$20,000-49999 Workplace: **-2.3** Home: **+4** NT$≥50000 Workplace: **-9.6** Home: **-4.1**	A nationwide reduction in self-reported SHS in workplaces and homes after the media campaigns, the reduction was not significant; People with low income or low education had a higher probability of exposure to SHS in the workplace and home even though in general they experienced higher reduction in exposure

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Author (Year): Cotter et al. (2008) **Study Design:** Interrupted time series **Quality of Execution:** Fair: 4 limitations	**Location:** New South Wales, Australia **Intervention:** Anti-tobacco media campaigns in NSW, AU in 2006, and their impact on calls to QL; Content: why to quit; description and promotion of quitline services Channel: TV, radio, newspaper, outdoor, cinema Intensity: measured in TARP Targeting: yes Tagging: yes **Comparison:** Before and after the promotion	**Targeted Population:** Quitline promotion ads targeting 18-24yr olds; **Study Population:** Callers to quitline over study period; **Population characteristics:** not reported	Call volume: successful calls to quitline /total TARP from all active campaigns at a given time;	N/A	N/A	Narrative results: from April – Dec 06quitline calls highly correlated with TARPs (r=0.88; p<0.001);	A high correlation between weekly QL calls and TARPs from April to Dec 06 during the promotion of QL; Volume of calls in NSW in 2006 influenced by 3 factors: Introduction of graphic warnings featuring the QL number; Public relations activities in May for World No Tobacco Day; TARPs;
Author (Year): Cummins et al. (2007) **Study Design:** Time series **Quality of Execution:** Fair: 3 limitations	**Location:** California, US **Intervention:** CA QL has been in operation since 1990s and promoted through various channels; young adults' utilization of this service has been examined to determine if utilization was prompted by promotion ads;	**Targeted Population:** Smokers in CA; **Study Population:** Young adult (18-24) callers to QL; **Population characteristics:** Young adult callers more likely to be women, with ethnic minorities well represented;	Utilization of services: young adult callers to QL citing media as source of information;	N/A	Utilization of services: 58.1% of young adults cited media as source of information	Narrative results: of 336,097 young adult callers over 14 years, 58.1% cited media as source of information;	The 14-year span of this study confirmed that young adults actively use telephone quitlines; Young adult callers were significantly more likely than older callers to report having heard about the California Smokers' Helpline

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	Content: promotion of CA QL Channel: TV, radio, print Tagging: assuming yes **Comparison:** Young adults calling QL citing media as info source or not; Young adult callers vs. older adults	For more details, refer to Table 2 in the paper					from media sources
Author (Year): Davis et al. (2009) **Study Design:** Time series **Quality of Execution:** Fair: 3 limitations	**Location:** National campaign, US Analyses done on 7 communities in 5 states **Intervention:** American Legacy Foundation "truth" campaign; Content: marketing practices of tobacco industry and their efforts to obscure the health effects of smoking Channel: TV Intensity: GRP 100% to 120% of the national average in two of the study communities Tagging: national quitline number **Comparison:** recall of campaign and its	**Targeted Population:** Adolescents in US; **Study Population:** Students in grades 6 through 12, 7 communities in 5 states, encompassing 10 school districts and 83 schools; Analysis limited to youth that participated in all three waves of American Legacy Longitudinal Tobacco Use Reduction Study (N=34,740) Follow-up rate: 47%	Initiation: non-smokers at baseline who became current or established smokers at 3rd year f/u; Current smoking: smoked at least once in past 30 days; Established smoking: smoked at least 20 days in past 30 days;	N/A	Initiation to: low recall (ref) Current smoking: Med Truth: OR=0.99 (0.80, 1.24) Hi Truth: OR=0.75 (0.63-0.88) Established smokers: Med Truth: OR=0.98 (0.79, 1.22) Hi Truth: OR=0.73 (0.58, 0.93)	Narrative results: Medium and high recall of the campaign were associated with lower smoking initiation when compared to youth with low recall of campaign; A dose response relationship between higher campaign recall and smoking initiation;	"truth" campaign was effective in reducing smoking initiation among youth population;

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	association with smoking intentions and behaviors	**Population characteristics:** not reported					
Author (Year): De Gruchy et al. (2008) **Study Design:** Before-after **Quality of Execution:** Fair: 3 limitations	**Location:** Nottingham, UK **Intervention:** Nottingham's Local Strategic Partnership commissioned a social marketing campaign with a budget of £50,000, to augment Nottingham's comprehensive program of tobacco control and smoking cessation; Content: developed through formative research with local representatives; positive, supportive messages weighting costs and benefits of smoking and quitting; used local people as models in ads Channel: posters; outdoor placements (billboards, banners inside tram and buses); website; extensive earned media Intensity: opportunity to see (OTS), over 8wks, just under 5mil for	**Targeted Population:** Smokers over 40yrs old living in the most deprived areas of the city; **Study Population:** Clients at Nottingham New Leaf Stop Smoking during 8wks of campaign; **Population characteristics:** not reported;	Utilization of services: clients at New Leaf Stop Smoking who sought out service due to encouragement from ads;	N/A	Utilization of services: 12 of 116 clients claimed to have been encouraged by the campaign to use New Leaf service;	Narrative results: 10.3% of new clients at a local cessation service claimed to have been helped by media promotion;	A locally developed and implemented media campaign was carried out in for a short duration with modest results; evaluation limited to the cessation service setting, possibly under-estimating the impact of campaign on local residents;

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	14 billboards 300,000 to 400,000 for banners on 37 buses on 10 different routes; 750,000 for banners in 13 trams Placement: posters at key settings in target areas such as community center; banners on key routes for target areas Targeting: yes Tagging: yes; New Leaf cessation program **Comparison:** Smokers registered with New Leaf program citing poster as source of info or not						
Author (Year): Dietz et al. (2010) **Study Design:** Time series **Quality of Execution:** Fair: 3 limitations	**Location:** Florida, US **Intervention:** "truth" campaign from April 98 to 03; evaluated impact of program to Dec 06; Content: "truth" campaign focused on industry manipulation Channel: TV Intensity: 1st year campaign averaged 1,600 GRP per quarter	**Targeted Population:** Adolescent 12-17 years old in Florida; **Study Population:** Adolescent 12-17 years of age randomly selected from vendor-generated survey lists; Florida Anti-Tobacco Media	Smoking prevalence: smoking in the past 30 days;	Apr98: FL: 13.8% National: 12.6% Sep98: FL: 15%	May 99: FL: 12.6% National: 14.1% May 01, FL: 10.3% May 04, FL: 8.8% Dec 06, FL: 9.4%	Absolute percentage point difference: FL vs. national: **-2.7 pct pts** FL 06 vs. FL Sep98: **-5.6 pct pts**	Three years after termination of the "truth" campaign, smoking among youth continued to decline; significant increase was observed only after youth population became composed entirely of people with limited exposure to "truth"

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	Targeting: yes **Comparison:** before, during and after "truth" campaign was implemented; For 1st year data, also compared 12-17 years old from US (excluding AZ, CA, MA, and OR) to FL	Evaluation (FAME): 1,000 National sample: 1000; **Population characteristics:** not reported;					
Author (Year): Durkin et al. (2009) **Study Design:** Time series **Quality of Execution:** Fair: 2 limitations	**Location:** Massachusetts, US **Intervention:** Adult smokers' responses to a variety of anti-smoking ads were examined to determine which type of ads works best, especially among low SES smokers; ads were from MA state sponsored and American Legacy Foundation ads; Content: emotional content rated by adult raters and researchers; ads have personal testimonials, some are highly emotional Channel: TV Intensity: from 99-02, 134 anti-tobacco TV ads aired; total GRP/month: 853.4 (Table1)	**Targeted Population:** Smokers in MA; **Study Population:** Adult current smokers residing in one of the3 largest media markets in MA; BL: 4991; F/U: 1491; **Population characteristics:** Age: mean of 40.5 Gender: 55.2% female Race/ethnicity: Non-Hispanic white, 83.9% Education: Some college or above, 51.5%	Cessation: abstinence from smoking at least 1 month at f/u interview; Exposure to ads: monthly GRPs for each media market merged with individual residency data according to when and where survey was filled;	Not reported	Cessation: of 1491 smokers followed up, 16.1% quit for 1m or more; Association between exposure to ads (per 1000 GRP) and cessation: OR=1.11; Exposure to ads: Using low SES as Ref: Mid: 1.70 (1.02, 2.83); p<.05 High: 1.70 (0.95, 3.03); p<.10 Undetermined: 2.11 (1.07, 4.14); p<.05	Narrative results: Odds of having quit increased by 11% with each 10 additional potential anti-tobacco ad exposure; **95% CI: 1.00, 1.23; P<0.05;** Increased odds of quitting for each 10 additional potential expo to high emotional content or personal testimonial ads for respondents in low, mid and undetermined-SES groups; opposite effect for high-SES group Significant interaction b/w SES and potential expo to anti-	Potential exposure to all antismoking ads was associated with a greater likelihood of quitting at follow-up; the odds of quitting at follow-up increased by 11% with each 10 additional potential exposures to a tobacco control antismoking ad (or 1000 antismoking ad GRPs); Smokers in low-, mid-, and undermined-SES groups responded favorably to HE or PT ads; not smokers from high-SES group

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	Comparison: association between different intensity of anti-tobacco ads and smoking behavior	Income: ≤$50,000, 41.8%				tobacco ads, with low SES least likely to see ads	
Author (Year): Durkin et al. (2011) **Study Design:** Interrupted time series **Quality of Execution:** Fair: 3 limitations	**Location:** Victoria, Australia **Intervention:** Australia has ongoing quitline services and promotions; study period 2006-08 examined to determine the relationship between message content and calls to quitline by groups with higher tobacco use and tobacco-related diseases; Content: ads rated by focus groups as emotional or narrative with high or low impact Channel: TV Intensity: 14 different messages from 06 to 08 Tagging: yes **Comparison:** Compared within campaign of different TARP, different ad content, and	**Targeted Population:** Smokers in Australia; **Study Population:** Callers to quitline over the study period; callers categorized by postal codes into one of the four SES groups for stratified analysis; **Population characteristics:** not reported	Call volume: Comparisons between SES groups; Comparisons based on ad content; Impact of TARP on call volume;	N/A	Call volume: Total calls to QL over 107 weeks: 33719 Comparisons between SES groups: SES %Total Low 18.61 Mid-low 16.19 Mid-high 28.53 High 36.68	Narrative results: Call volume based on SES: all SES responded to ads (TARPs) by same degree; Call volume based on ad content: higher emotion narrative ad TARPs had strongest relationship with quitline calls; Call volume & TARP: RR=1.07 (95% CI 1.020, 1.122), p=0.005; For every 100 TARPs per week, calls increased by 7%	Over a period of 107 weeks, quitline calls were modestly related to broadcast anti-smoking ad TARPs; Spots with high emotional, narrative were more effective on calls to the quitline; Relationship between overall TARPs and quitline call rates did not differ by SES group; although there is an over-representation of QL calls from high SES smokers, when the ads were on air, QL calls increased by the same degree across each SES group

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	responses from different SES groups						
Author (Year): Emery et al. (2012) **Study Design:** Other design w/ concurrent comparison **Quality of Execution:** Fair: 2 limitations	**Location:** National, US (top-75 media markets) **Intervention:** Impact of ads sponsored by different implementers on smoking behaviors; state tobacco control programs; American Legacy "Truth" campaign; tobacco companies; pharmaceutical companies; Content: counter-industry ads from state tobacco control programs and Legacy foundation; promotion of smoking cessation aids from pharmaceutical companies Channel: TV Intensity: measured in GRPs; aggregated by market, month, year and sponsor **Comparison:** impact of different sponsors and GRPs on odds of smoking	**Targeted Population:** Adult Smokers; **Study Population:** Adult smokers in the Top 75 US media markets **Population characteristics:** Sex: 57% female Age: 41.5±14.5 SD Race/Eth: 71.5% CAU; 0.6% Am Ind/Alaskan; 4.4% ASI/ Pac Islan/Haw; 11.7% HIS; 11.4% AA; 0.5% OTH	Prevalence: Current smokers who smoked more than 100 cigarettes in lifetime; Quit attempts: made attempt to quit in the past year; stopped smoking for one day or longer; in association with ads sponsor type	N/A;	Exposure to state ads: OR= 0.974, p<0.001 Exposure to Legacy ads: OR=0.962, p=0.003 Exposure to pharm ads: OR=0.967, p<0.001 Exposure to tobacco industry ads: OR=1.039, p<0.001 Quit attempts: -Exposure to state sponsored ads OR= 0.998, p=0.39 -Exposure to Legacy ads: OR=1.02, p=0.04 -Exposure to pharma ads: OR= 0.98, p<0.01 -Exposure to tobacco industry ads: OR=0.99, p=0.007	Narrative results: an increase of ~10 exposures to state sponsored anti-tobacco ads over 4m was associated with 2.6% reduction in the odds of being a current smoker, all other variables constant; Narrative results: -Exposure to state sponsored ads unrelated to QA; -Exposure to Legacy ads positively related to QA; - Exposure to pharma or tobacco industry ads negatively related to QA	A significant negative relationship among US adults between exposure to state- and Legacy-sponsored anti-tobacco television advertising and the probability of being a smoker; Interactions between ads sponsored by different sponsors: state- and Legacy-sponsored ads interact to produce more reduction; Legacy-sponsored ads positively associated w/ QA; state-sponsored ads not related to QA; pharmaceutical and tobacco industry negatively associated with QA

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Author (Year): Etter et al. (2005) **Study Design:** Before-after with concurrent comparison **Quality of Execution:** Fair: 2 limitations	**Location:** Geneva, Switzerland; Neuchâtel served as control **Intervention:** Two week poster campaign in Geneva, Switzerland as part of World No Tobacco Day activities; <u>Content:</u> Campaign slogans and posters developed through focus groups; message against secondhand smoke <u>Channel:</u> billboards; poster; TV, radio <u>Placement:</u> poster on 460 large billboards on streets and in 7 tramways throughout Geneva; smaller posters sent to schools, leisure centers, kindergartens, pediatric clinics, obstetrics clinics and pharmacies; **Comparison:** Geneva vs. Neuchatel from same time period	**Targeted Population:** General adult population **Study Population:** Adults aged 18-70 yrs old from Geneva, Switzerland and Neuchatel (control); 2000 from each city surveyed **Population characteristics:** responders: Pre Post Geneva: 860 840 Neuchâtel: 1180 1120 G. N. Male: 48.4% 46.6% Age: 45.3 39.2 Edu, yr: 14.5 13.5	Quit attempts: made a quit attempt in the previous 4wks and succeeded in not smoking for at least 24hrs;	Quit attempts: 1 month before ad: Geneva: 33.3% QA at baseline Neuchatel: 31.5% QA at baseline	Quit attempts: Post campaign: Geneva: 28.6% of baseline smokers Neuchatel: 23.6% of baseline smokers	Plotted results: Absolute percentage change in QA (Geneva): -4.7% (Neuchatel): -7.9% DOD (Geneva vs. Neuchatel): **+3.2 pct pts**	Quit attempts declined in both cities post campaign; however, the decline was less in Geneva, intervention city, compared to Neuchatel;

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Author (Year): Evans et al. (2004) **Study Design:** Time series **Quality of Execution:** Fair: 3 limitations	**Location:** National, US **Intervention:** American Legacy Foundation "truth" campaign launched in 2000; evaluated up to Jun 01; Content: using counter-industry messages to reduce youth smoking initiation; industry manipulation of youth and youth taking control Channel: TV Targeting: yes **Comparison:** Self-reported exposure to truth and appeal of truth ads vs. no self-reported exposure or finding truth ads not appealing;	**Targeted Population:** Young people; **Study Population:** Nationally representative sample of 12-24 years old young people; oversampled African Americans, Asians, and Hispanics/ Latinos N=20,058 records; **Population characteristics:** Adolescents: 61.5%; Young adults: 38.5% Gender: Male: 46.7% Race/ethnicity: White: 66.5% Black: 19.3% Other: 5.6% Hispanic: 8.6%	Smoking prevalence: combined early smokers and established smokers; Early smokers: smoked in last 30 days but not established smokers; Established smokers: smoked 20 of the last 30 days and ≥100 cigarettes in lifetime	N/A	N/A	Narrative results: both social imagery and tobacco independence have strong negative correlation with smoking status; And higher level of exposure to and appeal of "truth" messages correlated with greater sense of tobacco independence and positive social imagery of not smoking	Overall, tobacco independence and social imagery both act as mediators of the relationship between truth campaign exposure and smoking status when controlling for known confounding factors
Author (Year): Evans et al. (2006) **Study Design:**	**Location:** National, USA **Intervention:** Addressed a variety	**Targeted Population:** Adults ≥18 years;	Smoke-free households: Association between anti-	N/A	Smoke-free rules adoption in homes:	Narrative results: Exposure to anti-SHS media messages was	Anti-SHS KAB served as a complete mediator in the association between exposure

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Cross-sectional **Quality of Execution:** Fair: 4 limitations	of second hand smoke exposure - related topics in media advertisements; Content: Ads were run about "The dangers of kids being around cigarette smoke"; "Efforts to ban smoking in public places, such as restaurants, bars, and cocktail lounges"; and "the dangers of a woman smoking during pregnancy." Channel: TV, radio and newspapers **Comparison:** awareness of media messages and likelihood to adopt smoke-free rules at home	**Study Population:** Data obtained from the 2nd American Smoking and Health Survey; random-digit dial survey sponsored by Legacy; a nationally representative sample of adults 18 or older; N interviewed: 2849 N in analysis: 2349 Response rate: 27.8% **Population characteristics:** Sex: 52% female Age: mean 44yrs Race/eth: 71% White, 12% AA, 12% Hispanic, 5% others	second hand smoking (SHS) media and anti-SHS knowledge, attitude and behavior (KAB); Association between anti-SHS KAB and increased home restrictions on smoking;		Structural equation model: Association between anti-SHS media and anti-SHS KAB: (i) β =.104 (R^2=0.01) Association between anti-SHS KAB and smoke free homes: (ii) β =.602 (R^2=0.362)	significantly associated with anti-SHS KAB; and anti-SHS KAB were significantly associated with increased home restrictions on smoking;	to anti-SHS media messages and home restrictions on smoking;
Author (Year): Evans et al. (2007) **Study Design:** Time series **Quality of Execution:** Fair: 3 limitations	**Location:** Ohio, US **Intervention:** Comprehensive tobacco control program with media component "stand"; aimed to make "stand" into a brand that could compete	**Targeted Population:** Smoking and non-smoking young people; **Study Population:** Ohio 11-17yr olds recruited	Initiation: transitioned from "never smoking" to "ever smoking" between baseline (July and Sept 2003) and f/u visit 1 (Feb and March 2004) or	Initiation: Baseline survey administered 2-6wks after campaign ads started; At BL, 279 of respondents had initiated smoking	Initiation: F/U 1: 246 respondents initiated smoking (among entire sample, 1010) ; F/U 2: 124 respondents initiated smoking	Narrative results: Respondents who had greater brand equity at BL were less likely to be ever smokers by F/U1 (OR=0.92, CI=0.86, 0.98) and F/U2	Affiliation with the "stand" brand was a strong negative predictor of future adolescent smoking initiation;

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	with cigarette brands; Content: Counter-marketing media campaign; to develop positive beliefs about not smoking through competition between stand and cigarette brands; establish high levels of brand awareness and brand equity Channel: TV, radio, print, Internet Placement: Internet ads placed on external youth-targeted websites Targeting: yes **Comparison:** levels of brand equity and smoking initiation;	through random digit dialing; Oversampling of AA youth and youth in Appalachian region of state; Overall response rate: 18.8%; N= 1657at baseline; **Population characteristics:** Non-respondents more likely to have friends who smoke; to be white; to be older; For more details, refer to Table 1 in the paper	f/u visit 2 (March and April 2005); Brand equity (Brand equity scale measures the level of brand equity)		(among entire sample, 673)	(OR=0.91, CI=0.86, 0.97)	
Author (Year): Farrelly et al. (2005) **Study Design:** Interrupted time series **Quality of Execution:** Good: 1 limitation	**Location:** Nation, US **Intervention:** American Legacy Foundation "truth" campaign launched in 2000 and evaluated to 02; Content: graphic images of health consequences of smoking and expose marketing practices used by tobacco companies as manipulative,	**Targeted Population:** Young people in US; **Study Population:** Monitor the Future (MTF) survey; 8th, 10th, and 12th grade students from ~420 public and private schools per year; 8th: 18,000 10th: 17,000	Smoking prevalence: smoked in past 30 days; Odds of smoking given an increase of 10,000 GRPs; Overall; 8th graders; 10th graders;	Without "truth" campaign: -5.7 pct pts;	With "truth" campaign: -7.3 pct pts; OR=0.78; 95% CI=0.63, 0.97; P<.05 OR=0.61 (0.39, 0.94); P<.05	Absolute percentage point change: **-1.6 pct pts;** Narrative results: A statistically significant dose–response relationship between "truth" campaign exposure and current youth smoking prevalence	The "truth" campaign was associated with significant declines in youth smoking prevalence; the relationship remains significant after controlling for potential confounders, such as secular trends in smoking prevalence, influence of price, state tobacco

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	predatory, and profit hungry Channel: TV, Internet Intensity: lowest exposure group averaged 3867 GRPs over 2yrs; highest-exposure group averaged 20367 GRPs Placement: networks viewed more by youth; UPN, WB, MTV, Fox **Comparison:** students surveyed in 97-99 as unexposed comparison group	12th: 16,000 **Population characteristics:** not reported;	12th graders; African American; Asian; Others; Hispanics		OR=0.98 (0.73, 1.31); NS OR=0.79 (0.56, 1.13); NS OR=0.28 (0.26, 0.30); P<0.01 OR=0.51 (0.46, 0.56) P<0.01 OR=0.91 (0.86, 0.97) P<0.01 OR=0.69 (0.64, 0.74) P<0.01		control programs, etc.; Campaign may have the largest impact among 8th graders, consistent with evidence from Florida that indicates their program had bigger impact among middle school students
Author (Year): Farrelly et al. (2007) **Study Design:** Other design with concurrent comparison; panel study **Quality of Execution:** Fair: 3 limitations	**Location:** New York, USA **Intervention:** Media promotion in NYS analyzed to evaluate the relative effectiveness and cost effectiveness of television, radio, and print advertisements to generate calls to the New York smokers' quitline; Channel: TV, radio, and newspaper Tagging: TV and print ads, yes; radio ads only had quitline number if message	**Targeted Population:** Smokers in NYS; **Study Population:** Quitline callers in NYS divided by geographic units; **Population characteristics:** not reported;	Call volume: Relative effectiveness of media channels on calls to quitline; Monthly media expenditures matched to monthly total county level calls to NYS QL;	N/A	Call volume: Relative effectiveness of media channels expressed in regression coefficient: TV 1.36 Radio 0.057 Print 0.028 Elasticity of various media channels based on expenditure: TV 0.151 Radio 0.037 Print 0.022 (For every 10% increase in expenditure on TV, there was a corresponding	Narrative results: Call volume: dollar for dollar, TV expenditures generated more calls; TV, radio, and print media all effective in generating calls to NYS quitline;	Television, radio, and print media all effectively increased calls to the New York smokers' quitline; The largest effect was for television advertising; As level of expenditures increases, the positive effect of ads diminishes; by increasing funding for each medium by $1000 based on current funding levels, radio produces the most

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	was quitline/cessation **Comparison:** County x month comparisons across NYS to test relative effectiveness of promotion; 57 counties x 16m = 912 county-month observations				1.51% increase in calls)		increase in number of calls
Author (Year): Farrelly et al. (2009) **Study Design:** Other design with concurrent comparison group (Panel study) **Quality of Execution:** Fair: 2 limitations	**Location:** National campaign, US **Intervention:** American Legacy Foundation "truth" campaign; Content: provocative ads to expose tobacco industry's deceptive practices and stark health effects of smoking Intensity: cumulative GRP (00-04); ranging from 3096-32137 across US Channel: TV Placement: TV channels mostly viewed by youth; moved from basic TV (FOX, UPN, WB) to cable in 2002 (MTV) Targeting: yes **Comparison:** different intensity of intervention (GRP)	**Targeted Population:** Primary target: 12-17; Secondary target: 18-24 **Study Population:** Nationally representative sample of 12-17 years old in January 1997, when survey first started; N in 1997: 8984 N analyzed: 8904 **Population characteristics:** not reported	Initiation: participants reporting "not smoking" in previous survey now tried smoking; "Have you smoked a cigarette since the last interview?"	N/A	Smoking initiation: RR: 0.80 (0.71, 0.91), p=0.001	Narrative results: An increase in cumulative campaign exposure of 10,000 GRPs is associated with a 20% reduction in risk of initiation; p=0.001	Exposure to "truth" campaign has an independent influence on smoking initiation above and beyond multiple individual, media market, and state-level influences; results robust to alternative model specifications.

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	and smoking initiation						
Author (Year): Farrelly et al. (2011) **Study Design:** Other design with concurrent comparison (panel study) **Quality of Execution:** Fair: 2 limitations	**Location:** New York, USA **Intervention:** Media promotion in NYS analyzed to evaluate the relative effectiveness of different ad content in driving calls to NYS QL during study period 2001-2009; Content: different themes on cessation, SHS, health consequences of smoking; categorized into strong negative emotions only; graphic images only; strong negative emotions and graphic images; and neither Channel: TV Intensity: measured in TARP Tagging: yes **Comparison:** Differences in call volume by TARPs for media markets in New York State	**Targeted Population:** Smokers in NYS; **Study Population:** Callers to NYS QL from 2001-09; **Population characteristics:** not reported	Call volume: Per smoker call volume in relation to TARP; Per smoker call in relation to ad themes; Per smoker call in relation to emotion/graphic content	N/A	Call volume: Results imply that a 100% increase in exposure to advertisements would lead to a 7.1% increase in per smoker call volume; Regression coefficient: Cessation theme: 0.067, p=0.000 SHS theme: 0.033, p=0.000 NS	Narrative results: Call volume is positively correlated with total exposure to anti-smoking commercials (p<0.001); Emotional /graphic content produced no statistically significant differences for calls to quitline	Per smoker call volume was positively correlated with total target audience rating points (TARPs); Cessation ads were more effective than SHS ads in promoting quitline call volume

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Author (Year): Fellows et al. (2007) **Study Design:** Before-after **Quality of Execution:** Fair: 4 limitations	**Location:** Oregon, USA **Intervention:** Quitline was promoted through paid media, then changed to offer of free NRT with earned media; relative effectiveness of 2 strategies; For paid media: Content: promotion of quitline Channel: TV, radio Placement: day and evening hours Tagging: yes; most messages For NRT initiative: 2wk free NRT offered to quitline callers Promotion via press release, media kits for counties, and earned media coverage **Comparison:** Provision of NRT to quitline caller combined with earned media vs. paid media	**Targeted Population:** Smokers in Oregon; **Study Population:** Callers to Oregon quitline during Jan-Jun 04 and Jan-Jun 05; **Population characteristics:** (6m f/u survey; Table3): Pre (320) Post (639) Age: 40.9 49.1 Female: 69.1% 67.8% Race/ethnicity: Hispanic: 4.4% 3.8% Non-white 17.8% 10.2% HS or less 53.8% 49.9%	Call volume: projected annual registered calls using average monthly call data from Jan-Jun 04 and 05;	Call volume: Pre-initiative, paid media promotion of quitline: 536 calls/month	Call volume: Post-initiative, 3m after introduction of NRT: 1137 calls/month	Narrative results: call volume increased when offering of free NRT replaced media promotion of quitline (no NRT)	Only considering paid media as a method to promote utilization of quitline, then: -Paid media generated fewer callers than free NRT -The NRT provision/promotion was a good value for obtaining quits

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Author (Year): Flynn et al. (2010) **Study Design:** Group randomized trial **Quality of Execution:** Good: 1 limitation	**Location:** SC, FL, TX, and WI, US **Intervention:** Four year media intervention aimed at 4-12 grade students; Content: ads developed through research and tested; aimed at prevention, change in perception of peer smoking, disapproval of smoking, confidence in refusing Channel: TV, radio Intensity: average 380 GRP per week Placement: placed to access largest number of youth at each grade level **Comparison:** a pair of Designated Media Area (DMA) in each state, one randomized to control, the other to intervention; DMAs chosen on population size, media resources, HH income, adult education, and racial makeup	**Targeted Population:** Young people 4-12 grades; **Study Population:** Students attending 7-12 grades in selected schools at time of survey; schools selected from chosen states and serving low-income and lower-education population; BL F/u Inter. 9544 11860 Cont. 10412 11385 **Population characteristics:** Overall distribution by grade, gender, race/eth similar b/w conditions, BL & f/u; For more details, refer to Table 1 in the paper	Smoking prevalence: smoked in past 30 days;	Smoking prevalence: Intervention: Overall, 18.9%; African American, 12.0%; Hispanic, 26.2%; Control: Overall, 17.8%; African American, 11.5%; Hispanic, 15.9%;	Smoking prevalence: F/U; 4yrs; Intervention: Overall, 16.9%; African American, 12.2%; Hispanic, 18.9%; Control: Overall, 15.5%; African American, 9.8%; Hispanic,18.1%	Absolute percentage point change: **DOD: 0.3 pct pts**; 95%CI: -9.9 to 10.5 pct pts; 30-day smoking rates declined over the 4-yr interval for both conditions, but the trend was not significant; Hispanic: **-5.1 pct pts**;	Intervention provided no evidence of impact on smoking prevalence among youths; Smoking prevalence declined nationally due to various factors; Showed impact on Hispanic youth smoking prevalence; could be due to the fact that Hispanic youths not as exposed to anti-tobacco messages as their counterparts; several messages in campaigns also targeted Hispanic youth
Author (Year): Gagne (2007)	**Location:** British Columbia, Canada (BC)	**Targeted Population:**	Prevalence: Survey responders who	07/04-12/04 BC = 15%	03/05-06/05 – BC = 14.8%	Absolute percentage point change:	BC MRCHI may have contributed to a decrease in

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Study Design: Before-after w/comparison group **Quality of Execution:** Fair: 3 limitations	**Intervention:** The 2005 BC M of Health MRCHI program; aim to inform target population of ministry's smoking cessation support program (available through Internet) and encourage them to quit; Content: Media focused on health benefits of cessation, and costs of smoking Channel: Radio, poster, and TV; radio was primary component Intensity: 4 weeks Tagging: With website – www.quitnow.ca **Comparison:** BC vs. Rest of Canada (ROC)	Blue collar smokers 20-34yrs without a university degree residing in BC; **Study Population:** Used data from 1. Canadian Tobacco Monitoring Use Survey (CTUMS), 2. Columbia Tobacco Behavior and Attitudes Survey (TBAS); Reported weighted data of people ages 15-24 from CTUMS and data of people ages 15 and older from TBAS; **Study Population:** not reported	smoked every day or occasionally	ROC = 19.9%	ROC = 21.6%	BC: -0.2 pct pts ROC: +1.7pct pts **DOD: 1.9 pct pts** (NS)	smoking prevalence; this result is NS; could have been due to short campaign, or national trend towards more smoking. A suggestion of an increase in comprehensive tobacco control efforts and spending is stressed
Author (Year): Haviland et al. (2004) **Study Design:** Before-after **Quality of Execution:** Fair: 4 limitations	**Location:** National, USA **Intervention:** ALF's Great Start, public education and smoking cessation service program, focused on providing smoking cessation counseling to pregnant women;	**Targeted Population:** Pregnant smokers of low SES aged 18-35 years; **Study Population:** Callers to Great Start quitline;	Call volume: calls during TV campaign period vs. calls during non-TV campaign period; Reach: estimated percentage of pregnant smokers reached annually;	Call volume: Non-TV campaign period: 130 calls/month	Call volume: TV campaign period: 622 calls /month	Relative percentage change in call volume: **+378%** Reach: 6442 out of 420,000 (1.5%) pregnant smokers called GS quitline;	Calls to the Great Start Quitline were substantially higher during the broadcast media promotion period than in the subsequent study period; Media and services targeted pregnant

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	Content: developed through focus group; positive messages Channel: TV, radio media tour, internet, earned media, video Intensity: Dec01-Feb02, 14-15 months with est. 900 GRP per week Targeting: yes Tagging: yes; initial launch all ads tagged **Comparison:** Paid broadcast period vs. non-paid broadcast period (no or earned media)	**Study Population:** not reported					women; targeted content could elicit calls from intended population
Author (Year): Hersey et al. (2003) **Study Design:** Cross-sectional with concurrent comparison group **Quality of Execution:** Fair: 2 limitations	**Location:** National, US Analysis focused on CA, FL and MA **Intervention:** Counter-industry campaigns alert teens and young adults to tobacco industry marketing practices that target youth and deny addictive and harmful nature of tobacco; CA, FL, MA used this approach; Content: Counter-industry campaign informing young	**Targeted Population:** Youth and young adults ages 12 to 24; **Study Population:** National random dialing survey (Legacy Media Tracking Survey (LMTS)) of youth and young adults ages 12 to 24; Study population: 6875 3198 teens (50.3%) and 3154 young adults;	Prevalence: **Young adults (18-24):** early (smoked in last 30 days) or established (smoked 20 of last 30 days; ≥100 cigarettes in life) smoker **Adolescents (12-17):** early (smoked in last 30 days) or established (smoked 20 of last 30 days; ≥100 cigarettes in life) smoker	In states without campaign: Young adults: 38.7%; In states without campaign: Adolescent: 12.3%;	In states with campaign: Young adults (18-24): 33.4% In states with campaign: Adolescent (12-17): 14.3%;	Absolute percentage point difference: **-5.3 pct pts;** Absolute percentage point difference: **2 pct pts;** Counter-industry state residents less progression	Counter-industry state residence, mediated by negative industry beliefs and attitudes, exhibited a significant association with smoking status over and above the influence of cigarette price and other program components

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	adults on well-funded industry efforts targeting teens and minority groups; campaign messages focused on morbidity associated with tobacco use. Channel: TV **Comparison:** States with counter-industry campaigns (CA, FL and MA) vs. the rest of the country	**Population characteristics:** Male = 47.4% White = 51.1% African Ameri.=16.0% Hispanics = 17.3%				along smoking status continuum than national counterparts (P<0.01);	
Author (Year): Hersey et al. (2005a) **Study Design:** Time series with concurrent comparison group **Quality of Execution:** Good: 1 limitation	**Location:** National campaign, US **Intervention:** American Legacy Foundation "truth" Content: alerting youth to deceptive tobacco industry marketing practices; building a positive, tobacco-free identity Channel: TV Intensity: measured in GRPs Targeting: yes **Comparison:** different levels of exposure to campaign;	**Targeted Population:** Young people, especially adolescents; **Study Population:** Adolescents 12-17yrs old; oversampled African American, Asian, Hispanics, and teens from states with active anti-tobacco media; **Population characteristics:** Sex: 50.9% male; Age: 51.9% 12 to 14; Race/eth: 46.4% white; 14/9%	Initiation: Smoking status continuum: youth progression along 5 stages of smoking: closed to smoking, open to smoking, prior experimenter, early smoking, and established smokers;	N/A	Initiation: Higher levels of cumulative GRP associated with lower values on smoking status continuum	Narrative results: Direct relationship between campaign exposure (GRPs) and smoking behavior, controlling for price, and months since launch of campaign: higher levels of cumulative GRP associated with lower values on smoking status continuum	Campaign exposure as measured in cumulative GRP is positively associated with less progression along smoking continuum for youth; Results suggest that impact of media campaign partially mediated by social inoculation effect

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
		African American; 19.6% Hispanics; 11.6% other					
Author (Year): Hersey et al. (2005b) **Study Design:** Time series with concurrent comparison group **Quality of Execution:** Fair: 2 limitations	**Location:** National analysis, US **Intervention:** Counter-industry campaigns alert teens and young adults to tobacco industry marketing practices that target youth and deny addictive and harmful nature of tobacco; Content: revealing deceptive practices of tobacco industry; draws attention to number of tobacco-related deaths Channel: TV **Comparison:** states with-- Established: CA, FL, MA New: IN, MN, MS, NJ No campaign: rest of the states	**Targeted Population:** Young people in US; **Study Population:** 12-17 years olds randomly selected and surveyed at 3 time points; 11/99 to 01/00: 3424 Fall00 to Spring01: 12967 Spring02 to Fall02: 10855; **Population characteristics:** not reported; waves contained similar proportions in terms of sex, age, race/eth, and weekly income	Prevalence: smoked in past 30 days	Prevalence: 1999 Established: 12.3% New: 15.0% Other: 12.5%	Prevalence: 2002 Established: 5.5% New: 7.9% Other: 9.4%	Absolute percentage point change: Established vs. other: **-3.7 pct pts**; New vs. other: **-4 pct pts**; Rate of decrease: Campaign states: 52.6%; Other states: 24.9%; Significant ($p<0.05$) after controlling for age, sex, race/eth, and state cigarette excise tax	Well-funded counter-industry campaigns can be an effective strategy to reduce youth smoking; Multivariate logistic regression models controlling for taxes, school programs, community activities, and clean indoor air laws suggest that the campaigns exerted independent effects on reductions in smoking
Author (Year): Hurd et al. (2007) **Study Design:** Before-after Fair: 2 limitations	**Location:** National, US **Intervention:** ABC's World News Tonight month-long news series "Quit to Living: Fighting Lung	**Targeted Population:** Smokers in US; **Study Population:** Callers to	Call volume: monthly attempted calls to 800 number and directed to state QL, pre-, during, and post-promotion;	Call volume: Pre-promotion, Oct 05: 9723	Call volume: During promotion, Nov 05: 29942	Relative percentage change in call volume: **+208%**	Promotion can have a huge impact on call volume, but result is short lived if not sustained;

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	Cancer" in Nov 05; promoting national quitline number; Content: news program focused on effect of smoking on youth; tobacco company practices; and cessation and prevention efforts Channel: TV Intensity: entire month of Nov 05 Placement: ABC World News Tonight Tagging: yes Before, during and after the program	national QUIT-NOW number; **Population characteristics:** not reported					Impact of the intervention was not consistent across states. Advanced warning to stakeholders, coordinated efforts between federal and state services to increase capacity with call volume increase
Author (Year): Hyland et al. (2006) **Study Design:** Before-after **Quality of Execution:** Fair: 3 limitations	**Location:** Multiple states (CA, IA, MA, NM, NJ), US **Intervention:** GRP data from all state tobacco control TV ads appearing across 75 largest media markets in the US and cessation rates were used to assess the relationship between exposure to state –sponsored anti-tobacco ads and smoking cessation; Channel: TV Intensity: Combined GRPs for 1999 and	**Targeted Population:** Current adult smokers; **Study Population:** Current smokers in 1999; lived in one of the top 75 media markets and resided in the same community in 1988 and 2001, were included in analysis (n=2061)	Cessation: Smoker during 1999 survey; reported having smoked 100 cigarettes in lifetime; had stopped smoking for 6mon by the 2001 survey; Media exposure: GRPs summed over 2yr; 1999-2000	N/A	Cessation: 12% of smokers (1999-2000) reported stop smoking at f/u in 2001; For every increase of 5000 GRPs of state sponsored ads, smoking cessation: RR=1.10 95% CI: 0.98, 12.4	Plotted results: Of 2061 smokers at baseline, **12%** quit by follow up at 24m; **95% CI: 10.60, 13.40;** Narrative results: Relative risk for quitting was estimated to be 10% higher for every 5000 GRPs of exposure to state anti-tobacco ads b/w 99 and 00	States above the median for advertising GRPs had a higher quit rate; there was a positive relationship between the level of advertising and cessation rates which while not statistically significant at the .05 level, is in the predicted direction

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	2000 (range from 41 to 17,481) **Comparison:** impact of different levels of GRPs on smoking behavior	**Population characteristics:** not reported;					
Author (Year): Kandra et al. (2012) **Study Design:** Time series **Quality of Execution:** Fair :3 limitations	**Location:** NC, USA **Intervention:** Media campaign aimed at youth to prevent the initiation of tobacco use, especially cigarette smoking, "TRU" Content: ads featured youth telling personal stories of loved ones who had suffered serious health consequences from tobacco use; ads developed based on best practices in youth tobacco prevention ads compiled by UNC Tobacco Prevention and Evaluation Program Channel: TV Targeting: yes **Comparison:** awareness of campaign and smoking initiation	**Targeted Population:** Adolescents 11-17 years old; **Study Population:** 11-17yrs old, English speaking, recruited through landline random-digit dialing; Baseline: 624 (response rate: 54.1%) N at time 2: = 604 N at time 3: = 1154. Time 2 survey f/u of time 1; time 3 survey cross-sectional; **Population characteristics:** Male, BL:49.3% Male, Time 3: 52.8% Age, BL:14.0 Age, Time 3:14.1 Race/eth (minority)	**I**nitiation: Nonsmokers becoming current or lifetime smokers; Current smoker: smoked in past 30 days; Lifetime smokers: ever tried smoking	N/A	Initiation: OR (95% CI) For youth aware of campaign: Low-sensation seeking youth: 0.61(0.17-2.23) High-sensation seeking youth: 0.50 (.26-.98) ($p<0.05$) Ref = no confirmed Awareness	Narrative results: High-sensation seeking youth with confirmed awareness of campaign were 50% less like to initiate smoking than high-sensation- seeking youth who did not have confirmed awareness	The TRU campaign succeeded in reaching an important at-risk group of youth, as high sensation seeking is associated with increased risk for smoking cigarettes; No gender and race differences were found in smoking experimentation in both low-sensation and high-sensation seeking youth groups .

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
		BL: 15.7% Time 3: 15%					
Author (Year): Klein et al. (2005) **Study Design:** Before-after **Quality of Execution:** Fair: 3 limitations	**Location:** Monroe Co., NY **Intervention:** Gottaquit.com designed to promote adolescent smoking cessation, complement adult cessation and youth tobacco prevention messages sponsored by NYS advocacy groups; <u>Content:</u> information content, quit tips, an e-mail "quit calendar" providing motivational encouragement, and instant message contact with trained quit coach, with all ads emphasizing the Gottaquit.com website <u>Channel:</u> interactive website, TV, radio, billboards, and city busses <u>Tagging:</u> Gottaquit.com **Comparison:** Before and after Gottaquit.com campaign	**Targeted Population:** Adolescents and young adult smokers **Study Population:** Monroe County, NY adolescents and young adults 14-19yrs old; 2 independent samples; BL: 418 F/U: 259; Supplemental data from Monroe County Youth Risk Behavior Survey (YRBS) **Population characteristics:** Sex, male: 51.2% Age:16.2 ± 1.3 SD Race/eth: 86.6% CAU, 6.9% AA, 6.5% OTH SES: 68.6% high, 19.9% middle, 11.5% low	Prevalence: smoked in past 30 days; Quit attempts: made one or more quit attempts in the past 30 days; Utilization of service: adolescent smokers accessing Gottaquit.com	Pre-campaign: 15.1%; Quit attempts: Baseline data collected in 2000 before implementation of gottaquit.com 68.3% made ≥ 1 quit attempt at baseline N/A	Post-campaign; 13.5%; Quit attempts: Post campaign: 88.2% of f/u participants Utilization of services: 25.7%	Absolute percentage point change: **-1.6 pct pts;** Plotted results: Absolute Percent change in QA: **+ 19.9 pct pts** Narrative results: Of 35 adolescent smokers interviewed at f/u, 25.7% accessed Gottaquitt.com	Adolescent smokers were receptive to GottaQuit.com and related campaign messages; Gottaquit.com campaign increased QA; Largest percent difference was observed pre-to-post campaign in individuals that made ≥3 quit attempts; 11% of Monroe County YRBS respondents reported that they had visited GottaQuit.com or another Internet site for help in quitting

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Author (Year): Levy et al. (2006) **Study Design:** Time Series with concurrent comparison group **Quality of Execution:** Good: 1 limitation	**Location:** National, US **Intervention:** Cigarette prices, clean air laws, and media comprehensive tobacco control programs were modeled to see the effect on smoking prevalence in selected demographic groups (low education/medium education/high education females, and low education males); Content: Not described; targeted at a population level **Comparison:** Varying levels of campaign intensity ; women with low SES were compared to other women with greater educational attainment	**Targeted Population:** Target population varies; Florida, Mississippi and Utah targeted youth, but other states targeted full population. **Study Population:** Women, ages 18 and over who did not complete high school were compared with other women with greater educational attainment and men 18+ with less than a high school degree; data aggregated from 1992 to 2002; **Population characteristics:** Total sample: 777713 Race/ethnicity: 100% female; White: 56.4% Black: 17.3% Asian or Pacific Islander: 2.5% Hispanic: 22.8% Other: 1.2%	Prevalence: Odds of being a current smoker in a state with a tobacco control media campaign;	Not Applicable	Odds of being a current smoker in a state with a tobacco control media campaign for low education women: OR=0.86; CI: 0.82-0.96	Narrative results: Odds of being a current smoker in a state with a tobacco control media campaign for low education women is 14% lower;	Smoking among low educated women declined at a greater rate over the study period than among more highly educated women, in contrast with trends of earlier periods. Low educated women were found to be particularly responsive to media messages as well as price, in comparison with high educated women

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
		Age: 18-24: 16.9% 25+: 83.1%					
Author (Year): Liu et al. (2009) **Study Design:** Time series with concurrent comparison group **Quality of Execution:** Fair: 2 limitations	**Location:** California, US **Intervention:** CA Tobacco Education and Media Campaign started in 1990s; evaluation of its impact on smoking behaviors; Content: Anti-tobacco campaign aimed at changing tobacco-related attitudes and behaviors of four targeted groups, including adult smokers, pregnant women, ethnic minorities and children Channel: TV, radio, billboards Intensity: used media expenditure as proxy for intensity in analysis **Comparison:** Self-reported exposure to anti-tobacco ads;	**Targeted Population:** Adult smokers, pregnant women, ethnic minorities, children; current smoking or potential smoking adults and teenagers **Study Population:** CA residents who participated in California Tobacco Survey; Included adults ages 18 and over; teenagers ages 12-17; **Population characteristics:** Adults: Mean age: 43.1 Male: 49% Hispanic: 27.7% Black: 6.1% Asian: 10.7% Income > 75K: 22.2% Adolescents: Mean age: 14.4 Male: 51.9% Hispanic: 35.4% Black: 7.3% Asian: 12.4%	Prevalence for adults: smoked ≥100 cigarettes in life; now smoke every day or some days	Not Applicable	Not Applicable	Narrative results: 1% increase in community anti-smoking media exposure may significantly reduce smoking prevalence by 0.653%; (p <0 .01)	California anti-smoking media campaign has achieved a high level of public awareness of anti-smoking advertising, and significantly reduced smoking prevalence among adults and adolescents

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Author (Year): McAlister et al. (2004) **Study Design:** Before-after w/comparison group, panel study **Quality of Execution:** Fair: 3 limitations	**Location:** East Texas, US **Intervention:** Short term pilot using media (no, low, or high-level)and community campaigns to promote smoking cessation among adults; Content: developed through focus groups; TV ads on negative health consequences of smoking and motivation to quit; radio spots Channel: TV, radio, newspapers, billboards, posters Intensity: various intensity mixed with various community programs Placement: radio PSA promoting QL broadcasted during morning drive times; Targeting: yes Tagging: Yes **Comparison:** impact of combinations of media levels with and without community	**Targeted Population:** Adult smokers; 1/3 of ads targeted minority audiences **Study Population:** For smoking prevalence, 2 random samples across TX, including people residing outside treatment areas; Baseline (Apr-May00): 9407 F/U (Nov-Dec00): 8974 **Population characteristics:** BL F/U Female:64.3 56.8 White: 70.2 71.4 AA: 12.6 13.4 Hispanic: 13.1 11.1 Asian: 1.8 1.6	Prevalence: Responders who currently smoke every day Cessation: Self-reported complete abstinence at 7m f/u; Quit attempt: made a quit attempt;	Most intense media and community program: 18%; Rest of TX and areas without interventions: 13%; Cessation: 100% smokers; N/A	Most intense media and community program: 17%; Rest of TX and areas without interventions: 17%; Cessation: 2% of baseline smokers reported complete cessation by 7m f/u; Quit attempt: Among smokers at f/u, 162 (27.3%) made a quit attempt;	Absolute percentage point change: Intervention: -1 pct pts Control: +4 pct pts **DOD**: **-5 pct pts**; Plotted results: of all smokers at baseline, **2%** had quit by follow up at 7m; **95% CI: 0.90, 3.10** Absolute percentage point change in quit attempt: **+27.3 pct pts**;	Reductions in cigarette smoking can be achieved through community-level campaigns that combine high level media campaigns with cessation programs or comprehensive programs including cessation and community activities;

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Author (Year): McVey et al. (2000) **Study Design:** Before-after with concurrent comparison groups **Quality of Execution:** Fair (2 limitations)	**Location:** Central and northern regions in England **Intervention:** England Health Education Authority's campaign aimed at current adult smokers and recent quitters; media campaign with or without local programs; Content: messages developed thru focus groups and in depth interviews; humorous ads with negative health consequences of smoking, call to quit, relapse prevention Channel: TV Intensity: heavy rotation areas, 20 exposures per viewer; light rotation areas, 15 exposures per viewer Placement: Wide range of programs to ensure maximum exposure Tagging: Yes **Comparison:** No media; media + local activities (comm)	**Targeted Population:** Current and ex-smokers in regions with highest smoking prevalence; **Study Population:** Current and ex-smokers living in randomly selected districts of targeted regions; Total Sm Ex BL 5468 2997 2471 F/U 2381 1159 1222 **Population Characteristics:** of those followed at 18m: Sm Ex Female: 63.1 52.1% Mean age: 46.1 56.0% SES: % manual work: 67.5 53.3%	Cessation: Self-reported abstinence at f/u	Cessation: Only calculated among smokers at baseline; 100%smokers; no quitting	Cessation: 18m f/u (ITT): Quit rate in control group: 3.5%; Quit rate in media only group: 3.7% Quit rate in media + community intervention group: 4.5% Remaining abstinent (both smokers quit and ex-smokers not relapsing): Media vs. control: OR=1.53, (CI:1.02, 2.29; p=0.04)	Absolute percentage point change in cessation (ITT): Media vs. control: **+0.2 pct pts** **95% CI: -1.20, 1.60** Relative percentage change in cessation: Media vs. control: **+5.71%** Narrative results: Smokers and ex-smokers in media group increased odds by 53% of remaining abstinent when compared to the control group; adding community program did not show additional impact	The HEA TV campaign was associated with increased percentage of smokers quitting and of ex-smokers remaining abstinent after the second phase of the campaign

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Author (Year): Meshack et al. (2004) **Study Design:** Before-after with concurrent comparison group **Quality of Execution:** Fair: 3 limitations	**Location:** Texas, US **Intervention:** Texas Tobacco Prevention Initiative (TTPI) implementing media campaign in spring & fall of 00; with or without enforcement of minors' access laws and enhanced school programs; Content: age-appropriated messages targeting 6th graders; smoking is socially undesirable and additive Channel: TV, radio, print, billboards Intensity: low or intense based on per capita expenditure Targeting: yes **Comparison**: 1 site chosen as control; 11 schools assigned 8 experimental conditions with different combinations of media, law enforcement, and school programs	**Targeted Population:** Smoking and non-smoking young people; **Study Population:** Middle school students from chosen sites in East Texas and city of Houston; BL, Spring00: 3618 F/U, Fall00: 3374; **Population characteristics:** Table 1; African American and Asians were over-represented while Hispanics were under-represented in the study samples compared to TX 2000 census	Prevalence: cigarette use in past 30 days	BL Spring 00: 9.4%	F/U Fall 00: 6.0%	Absolute percentage point change : All intervention conditions combined: **-3.4 pct pts**	Short-term reductions in teen tobacco use, smoking intentions and positive beliefs about tobacco use can be achieved by combining media campaigns with community-based programs. Overall, the intensive media campaign appeared to magnify the effects of the varying program conditions when compared to the low-level media campaign
Author (Year): Miller et al. (2003) **Study Design:**	**Location:** National, AU **Intervention:** Beginning June 97,	**Targeted Population:** Smokers in AU;	Call volume: week to week comparison in relation with TARPs;	Call volume: N/A	Call volume: quitline calls strongly correlated with TARPs; 4=0.93, p<0.001;	Narrative results for call volume: quitline calls strongly correlated with TARPs;	First year of combined operations (media campaign and quitline), quitline

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Call volume: interrupted time series Cessation: before-after **Quality of Execution:** Fair: 3 limitations	AU national coordinated anti-smoking campaign connecting media and quitline services; Content: "Every cigarette is doing you damage"; from Apr98, added how to quit ad Channel: TV Intensity: intense first 4wk in Jun97; then alternate b/w high and low intensity Tagging: yes **Comparison**: intervention intensity (TARPs); Cessation outcomes based on subset study population responses at different f/u points	**Study Population:** For call volume, callers to AU quitline; Study population at 3wk f/u: Sex: 53% female Age: 79% 18-40yrs Edu: 58% HS grad					calls increased with increasing TARPs; addition of ads that specifically promoted the QL increased calls over and above that predicted
Author (Year): Miller et al. (2009) **Study Design:** Interrupted time series **Quality of Execution:** Fair: 1 limitation	**Location:** National, AU **Intervention:** Graphic warning labels on cigarette packs in March 06 with media promotion; AU gov't awareness campaign in Feb 06; state & non-gov't health agencies ran another campaign during May and July 06;	**Targeted Population:** Smokers in AU: **Study Population:** Callers to quitline during study period; **Population Characteristics:** not reported	Call volume: annual number of callers to AU quitline	Call volume: 2005, 84442 calls /year	Call volume: 2006, 164850 calls/ year 2007, 117544 calls/year	Relative percentage change in call volume: 2006, **+95.2%** 2007, **+39.2%**	In the "mature" tobacco control market that is AU, introduction of GWS with QL number accompanied by media promotions substantially increased calls to QL in a sustained manner

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	Content: warning labels occupy 30% of front and 90% of back of cigarette packs; messages urging smokers to quit; 14 warning labels in 2 sets, rotating semi-annually; Media: ads linked to warning labels, amputation and mouth cancer Channel: warning labels, TV Intensity: warning labels on every cigarette pack Placement: cigarette packs Tagging: yes **Comparison:** Call volume before and after warning labels						
Author (Year): Mosbaek et al. (2007) **Study Design:** Interrupted time series **Quality of Execution:** Fair: 2 limitations	**Location:** Oregon, US **Intervention:** Broadcast media messages on television and radio in the period Nov 1998-March 2002 promoting Oregon quitline; Content: 5 types of messages (i27) Channel: TV, radio	**Targeted Population:** Smokers in Oregon; **Study Population:** Oregon residents calling state quitline; categorized by ad buy (TV or radio) and compared to adult respondents to	Call volume: callers to quitline in response to each ad	N/A	Call volume: relative comparison between ad buys in Table 1	Narrative results: Daytime television ads were seven times more cost-effective than evening television ads, and also more cost effective than radio; Most effective advertisements at generating quitline calls were real life	Placement of TV ads during the day versus the evening can increase ads' effectiveness in generating calls to a quitline; Among ads that mention the quitline, secondhand smoke ads were the least effective

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	Intensity: media buys usually 1-2wks Placement: either exclusively daytime or in evening Tagging: most ads yes; short description of Oregon quitline and phone number **Comparison:** different ad buys	2000 Oregon BRFSS; **Population characteristics:** only for subgroup that plan to quit				testimonials by people who lost family members to tobacco	at generating calls; Ads do not mention quitline generated few, if any, calls
Author (Year): Niederdeppe et al. (2004) **Study Design:** Cross-sectional with concurrent comparison group **Quality of Execution:** Fair: 2 limitations	**Location:** FL, US **Intervention:** "truth" campaign analyzed 2 years into implementation Content: revealing tobacco industry's manipulative practices Channel: TV, print, Internet Intensity: averaged 1,600 GRP quarterly; National: lowest exposure 3867 GRPs over the 2yrs; highest exposure group rec'd an average of 20367 Placement: Fox, UPN, WB, and MTV Targeting: yes **Comparison:** FL vs. national sample of 12-17 years from states without	**Targeted Population:** Adolescents and young adults in FL; **Study Population:** Adolescents 12-17 years old randomly survey from FL and states other than AZ, CA, MA, MI, OR; FL: 1097 Others: 6381 **Population Characteristics:** not reported; FL and national samples comparable in distribution of age, gender; FL sample higher proportion of AA and Hispanics	Prevalence: smoked in past 30 days	National: 14.0%	FL: 6.6%	Absolute percentage point change: FL vs. national: **-7.4 pct pts**	Florida teens were less likely than their national counterparts to have smoked in the past 30 days, to have ever tried smoking, or to indicate that they could not rule out the possibility of smoking in the future (among never smokers)

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	established comprehensive tobacco control programs						
Author (Year): Niederdeppe et al. (2008b) **Study Design:** Time Series **Quality of Execution:** Fair: 3 limitations	**Location:** Wisconsin, US **Intervention:** WI tobacco control program; 2 ads aimed to increase calls to quitline, raise awareness of SHS, convincing people to quit, and make quit attempts; Content: 1 ad emphasized difficulty of quitting but practice and assistance from QL makes it easier; 1 ad on harmful effects of SHS Channel: TV Intensity: KTQ: 40 to 60 GRP/wk; SHS: 100-150 GRP/wk Placement: A subset of KTQ and SHS ads place during programing with high proportion of low-SES and minority viewers Tagging: QL tagged in all KTC ads and some SHS ads	**Targeted Population:** Wisconsin adult smokers, with a subset of SHS ads targeted at low SES adult smokers; **Study Population:** WI adult smokers; BL: 1544 smokers; F/u: 452/1544; **Population Characteristics:** Sex: Female: 60% Mean age (SD): 44.8 (13.1) Race/eth: CAU: 87% Education levels: ≤HS diploma (47%); some college (33%); college degree (20%); Income levels: not reported (4%); <25,000 (31%); 25000-50000 (36%); >50000 (29%);	Cessation: Self-reported 12m abstinence at f/u; Recall: Aided recall by offering leading questions describing ads Quit attempts: stopped smoking for ≥1 day because trying to quit smoking in the past 12 months; Recall: aided recall by offering leading questions describing ads;	Cessation: At baseline, 100% smokers; Not reported	Cessation: 14m f/u (ITT): 3.8% Recall: - KTQ: 38% of respondents; - SHS: 68% of respondents; Quit attempts: 42% (measured at follow-up); Recall: - KTQ: 38% of respondents; - SHS: 68% of respondents;	Plotted results: ITT: at f/u, 3.8% of baseline smokers quit smoking; **95% CI: 2.80, 4.80** Narrative results: Neither KTQ nor SHS add recall were associated with smoking cessation at 12m; Plotted results (ITT): **12.3%** of baseline smokers made a quit attempt by f/u; Narrative results: Neither KTQ nor SHS ad recall were associated with making ≥ 1 QA;	No association between KTQ or SHS ad recall and 1-year smoking abstinence by SES; no differences in effects by income or education; KTQ ad recall was more strongly associated with subsequent quit attempts among more-highly educated populations compared with less-educated populations; not observed for SHS ad recall or with income.

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	Comparison: quit attempts among people who recall campaign vs. those who don't						
Author (Year): Owen et al. (2000) **Study Design:** Before-after **Quality of Execution:** Fair: 3 limitations	**Location:** National, UK **Intervention:** Quitline ran by HEA since 1994; media promotion of quitline services 1997-98; impact of this promotion on effective of quitline services; Content: TV spots adopted a hard-hitting testimonial approach; radio and adverts targeted broader audiences with support/ encourage; encouraged use of the national quitline Channel: TV, radio, advertorials in women's magazines Targeting: yes Tagging: yes **Comparison:** Call volume before and after media promotion	**Targeted Population:** Young adults (16-24) in UK; **Study Population:** Callers to UK quitline from Dec97 to Mar98; **Population Characteristics:** randomly selected QL callers who provided phone number, 730; Sex: Male: 28% Age: 16-24: 7% 25-34: 32% 35-44: 29% 45+: 31% SES: Non-manual: 34% Manual/unemployed: 63%	Call volume: calls to UK quitline during and outside media promotion period; Reach: percentage of UK smokers called quitline Cessation: post-only measure	Call volume: No media promotion, 8536 calls/month	Call volume: Media promotion, 63933 calls/month	Relative percentage change in call volume: **+649.0%** Reach: estimated 4.2% of total adult smokers in UK called quitline	The annual HEA media campaign (3m) promoting tobacco use cessation and the quitline is associated with a substantial increase in calls to the helpline; Tobacco users who call during the media promotion campaign period appear to have success in quitting; 60% of quitline callers identified advertising as source of quitline awareness

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Author (Year): Perusco et al. (2012) **Study Design:** Before-After **Quality of Execution:** Good: 1 limitation	**Location:** South West Sydney, New South Wales, Australia **Intervention:** Comprehensive social marketing campaign specifically targeting Arabic-speakers residing in south west Sydney, Australia; <u>Content:</u> tobacco control project targeting Arabic speakers <u>Channel:</u> Pamphlets, billboards, radio ads, radio competition, various community activities <u>Placement:</u> Arabic-language newspapers, magazines and radio stations; billboards at railway stations; <u>Tagging:</u> Billboards, bus advertisements, newspaper articles, and project pamphlets tagged with QL number **Comparison:** Pre-intervention period	**Targeted Population:** Arabic speakers residing in south west Sydney, Australia; **Study Population:** 18 years and older, of Arabic-speaking background and fluent in either Arabic or English; **Population characteristics:** 100% Arabic speakers; BL F/U Male: 47.2% 41.5% Age, 18-39: 45.8% 45.3% Age, 40-59: 41.3% 41.8% Age, 60+: 12.9% 13% Edu, college: 39.3% 39.8% Employed: 37.4% 36.2% SES, lowest: 36.4% 38.3% SES, middle: 33.3% 35.1% SES, highest: 30.3% 26.6%	Prevalence: Current smoking status ascertained through telephone survey; smoking cigarettes, cigars, and water pipe; Smoke-free households;	4m before intervention: N=1102 Prevalence = 30.5%; 95% CI: 26.8–34.2 Smoke-free households: 67.1%;	Immediately post: N=1104 Prevalence = 22.4%; 95% CI: 19.0–25.7 Smoke-free households: F/U: 74.9%;	Absolute percentage point change: **-5 pct pts** 95% CI: -8.5, -1.5 Absolute percentage point change in prevalence of smoke free households: **7.8 pct pts** (p=<0.05)	Statistically significant and relatively greater decline in tobacco smoking in targeted Arabic-speaking population compared with community smoking rates in intervention region and in NSW strengthens the argument that this project contributed to a decrease in smoking prevalence in Arabic population; The intervention project contributed to an increase in smoke free households

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Author (Year): Ronda et al. (2004) **Study Design:** Time series with concurrent comparison group **Quality of Execution:** Fair: 3 limitations	**Location:** Maastricht, the Netherlands **Intervention:** CVD intervention "Hartslag Limburg" (Heartbeat Limburg); media campaign "Proficiat" (Congratulations) aimed at smoking cessation; <u>Channel</u>: radio, newspaper, billboards, posters <u>Other interventions:</u> smaller local activities organized by working groups consisting of local organization representatives; a national mass media tobacco cessation campaign ongoing **Comparison:** Maastricht compared to a control region	**Targeted Population:** Smokers in Maastricht region; Intervention: Jan, Feb 00, 01 Evaluation: Apr 00, 01 **Study Population:** Smokers 18 or older in Maastricht and control regions; BL: 2425; F/u: 1508 (62.2%); **Population characteristics:** respondents from Maastricht significantly older, female, highly educated; for more details, please refer to Table 1 in paper;	Cessation: Whether respondents smoked in past 30 days; Quit attempt: making a quit attempt in past year;	Cessation: At baseline: 100% smokers; N/A	Cessation: 2m f/u 1st round of intervention (ITT): Intervention: 7.8% Control: 8.6% 2m f/u 2nd round of intervention (ITT): Intervention: 11.9% Control: 11.3% N/A	Absolute percentage point change in cessation: Time 1: -0.8 percentage points Time 2: **+0.6 percentage points;** **95% CI: -1.9, 3.1** Narrative results: No significant differences between intervention and control region on quit attempts;	No significant differences between Maastricht region and a control region on smoking behavior and its determinants; National campaign was going on at the same time, and there may not have been enough additional exposure in the Maastricht region to exceed secular trend;
Author (Year): Schillo et al. (2011) **Study Design:** Interrupted time series	**Location:** Minnesota, US **Intervention:** Assessing the relation between mass media campaigns and service volume for a statewide tobacco	**Targeted Population:** Smokers in MN; **Study Population:** Smokers who called MNQL or registered with quitplan.com	Call volume: weekly calls to quitline; weekly registrations to a web-based cessation program	N/A	N/A	Narrative results on call volume: For weekly quitline calls, positive relationship between weekly TRPs and quitline calls	**S**ignificant, positive relationship between overall ads levels and QL call volumes and web cessation program registration; broadcast ads had

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Quality of Execution: Fair: 3 limitations	cessation quitline and stand-alone web-based cessation program, after controlling for other external and earned media events; Content: combining how to quit and why to quit messages Channel: TV, radio, print, internet, out of home ads, other Intensity: measured in TRPs Placement: for out of home placements, bus sides, billboards, mall ads Tagging: yes **Comparison:** Weekly call volume and registration to web-based cessation program in relation to TRPs	from Jul05 to Mar08; **Population characteristics:** not reported				Online ads related to cessation campaign and print ads associated with SHS campaign were positively related to weekly calls to QL	a greater impact on registrations for the web program than calls to quitline; An increase in web registration also associated with an increase in QL calls the following week
Author (Year): Siahpush et al. (2007) **Study Design:** Simple time series **Quality of Execution:** Fair: 3 limitations	**Location:** Victoria, AU **Intervention:** QL Victoria established in 1980s, mass media campaigns since early 1980s; call volume from low SES groups in relation to TARPs examined from Jan 2001 to March 2004;	**Targeted Population:** Smokers in Victoria, AU, with a focus on lower SES smokers; **Study Population:** Callers to Victoria QL who requested self-help materials,	Call volume: Weekly call volume in relation to weekly TARPs; TARPs divided into: no; medium (1-161), and high (162-748)	N/A	N/A	Narrative results on call volume: Call volume in relation to TARPs: Higher TARPs correspond closely with higher call volume; Trend in calls similar across SES; no interaction	Call volume lower in lower SES; however, amount of increase in the number of QL calls as a response to a given increase in ads volume was the same across SES

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	Content: mainly why to quit, with 1 ad focusing on tobacco company behavior Channel: TV Placement: around TV programs more likely to be watched by lower SES groups Targeting: yes Tagging: yes **Comparison:** Comparisons of calls based on SES	provided identifiable postcodes, and >=18yr; **Population characteristics:** not reported				between TARPs, SES on their effect on call volume increase	
Author (Year): Sly et al. (2002) **Study Design:** Time series **Quality of Execution:** Fair: 4 limitations	**Location:** FL, US **Intervention:** "truth" media campaign; Content: prevention oriented; exposing industry targeting and manipulating youth Intensity: 11 ads run since launch in 1998 Channel: TV **Comparison:** Smoking initiation and 3 levels of self-reported exposure to TV ads: Youths who could not confirm any ads (16.1%) vs. who would confirm 1-3 (46.2%) ads vs. who	**Targeted Population:** Florida youth; **Study Population:** Non-smokers from FAME survey of youth 12-17 years old (time 1); then f/u of FAME survey sample at time 2 (FFS); Total sample used in analysis: 1805; **Population characteristics:** Sex: ≥49% female; Race/eth: 15% AA; 14% Hispanic, 69%	Initiation: Non-smokers at time 1 but started smoking at time 2; Any use: smoked in past 30 days; Established use: smoking on 6 or more days and six or more cigarettes on days smoked	N/A	Initiation: odds of remaining non-smokers (95% CI**)** **Any use:** # Ads confirmed 0 Ref 1–3 1.27 (1.01-1.65) ≥4 1.68 (1.03-2.70) **Established use:** # Ads confirmed 0 Ref 1–3 1.63 (1.22-2.21) ≥4 2.39 (1.81-3.32)	Narrative results: Nonsmokers with confirmed awareness of campaign were more likely to remain non-smokers at follow-up;	The likelihood of nonsmokers remaining nonsmokers increased with the increasing number of ads confirmed suggesting a dose effect of a campaign; More impact on whether respondent becomes an established smoker than any use for smoking initiation

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	could confirm ≥ 4 ads (37.7%)	white non-Hispanic SES: About 21% from single parent/guardian HH & 17% attended private schools					
Author (Year): Smith et al. (2009) **Study Design:** Before-after with concurrent comparison group **Quality of Execution:** Fair: 4 limitations	**Location:** Prince Edwards island, Canada **Intervention:** 8-wk comprehensive community social marketing campaign; "Let's Take It Outside" Content: Pledge to make or keep home smoke free Intensity: 30 sec ads on private radio 896 times, local cable TV 672 times, public TV 208 times, daily newspapers 42 times and other newspapers 19 times Channel: radio, local cable & public TV, newspapers **Comparison:** Cape Breton Island; however, Health Canada tobacco messages in control area with more	**Targeted Population:** Households on Prince Edwards island **Study Population:** Household member ≥18yrs and living in a dwelling in which both a smoker and a child under 18 resided, no intention for smoke free home within 6m; random sample of household telephone numbers excluding unlisted numbers; 2002 2003 intervention 515 592 control 618 450 **Population characteristics:**	Smoke-free households: households in action stage or maintenance stage of change with respect to smoke-free status	Smoke-free households: Intervention: 35.4%; Control: 27.5%	Smoke-free households: Intervention: 49.6%; Control: 37.1%	Absolute percentage point change in smoke-free households: **+ 4.6% pct pts**	There were improvements in both sites with respect to stages of change and the transition to smoke free house, but the magnitude of change was same in both sites; Intervention site showed no greater improvement than control site in stages of changes for smoke-free home status

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	tobacco related newspaper coverage	baseline samples similar but no comparison at f/u; for more details, please refer to table 1 in paper					
Author (Year): Solomon et al. (2009) **Study Design:** Group randomized trial **Quality of Execution:** Fair: 2 limitations	**Location:** 2 designated market areas (DMA) each within FL, SC, TX, WI, US **Intervention:** 3-yr media cessation intervention aimed at adolescents in chosen media markets; <u>Content:</u> used social cognitive theory; better self-perception; dramas, testimonials, music videos, cartoons; adolescent protagonists <u>Channel:</u> TV, radio, PSA matched to 10% overall <u>Intensity:</u> 10 TV and 15 radio ads per year; yearly average of 660 ad on TV, average 380 GRP; 1060 ads on radio <u>Placement:</u> on programs popular with high school age youth in after-school, weekend, and prime-time periods	**Targeted Population:** Adolescent smokers; **Study Population:** Adolescents attending selected schools in experimental or control DMAs; attending grades 7-10 during academic year 00-01and reported smoking in past 30 days; Total: 2030 Exp: 987 Cont: 1043 36m f/u: 75% **Population Characteristics:** Int. Cont. Male: 46.4% 44.1% Black: 10.7% 10.9% Hispanic: 17.5% 12.6% Non-Hispanic white:	Prevalence among young people: smoked in past 30 days; Cessation: adolescent who smoked in the past 30 days at the baseline interview who are no longer smoking at f/u times; Initiation: study participants who reported not smoking at BL interview but reported smoking at subsequent f/u	Intervention: 53.8%; Control: 57.6%; Not reported; N/A	3yr f/u: Intervention: 72.6%; Control: 78.2%; 36m f/u: Quit rate in intervention group: 16.0%; Quite rate in comparison group: 12.8%; Initiation: 3yr f/u Intervention: 59.4%; Control: 66.1%	Absolute percentage point change: **DOD: -1.8 pct pts**; Absolute percentage point change in cessation: **+3.2 pct pts**; **95% CI: -0.90, 27.30** Relative percentage change: **+25%**; Absolute percentage point difference in iniation: **-6.7 pct pts; 95% CI(-13.0-0.4)**	30-day smoking rates increased significantly for both exp. and cont. in a similar fashion; When controlling for possible differential effects from exp. and cont. markets, significantly less youth smoked in past 30 days in exp. than in cont. conditions; Adolescents from exp. conditions compared to counterparts from control markets: More likely to quit; Less likely to initiate

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	Comparison: intervention DMA vs. control DMA in each state	65.4% 72% Other: 6.4% 4.4%					
Author (Year): Spurlock et al. (2005) **Study Design:** Panel study **Quality of Execution:** Fair: 2 limitations	**Location:** Kentucky, US **Intervention:** Kentucky, a tobacco producing state, assessing impact of its tobacco control policies on number of participants in cessation programs; Content: not described in detail, only noted as counter-advertising Channel: TV, radio, billboards, pamphlets and similar cessation literature materials, website Intensity: expenditure on anti-tobacco ads used as proxy **Comparison:** Compared participation in cessation programs and media expenditure across 55 local health service areas	**Targeted Population:** Smokers in KY; **Study Population:** Number of participants of cessation programs reported by local health department, tobacco coordinators, health educators, and clinic managers who voluntarily participated in a 15-minute telephone interview; **Population Characteristics:** not reported	Utilization of cessation services: number of smokers reported participating in cessation programs per 10,000 smokers regressed onto per capita counter-advertising expenditure	N/A	Utilization of cessation services: regression coefficient: 26.283, $p<0.01$	Narrative results: Utilization of cessation services: For every $1.00 per capita spent on counter-advertising, an increase in participation of 26 adults per 10,000 smokers	Expenditure on counter-advertising contributed the most toward participation in tobacco cessation programs; Mean counter-marketing expenditure was $0.056 per capita between 99-01, $0 to $1.26; Participation tobacco cessation programs remain low: 18 per 10,000 adult smokers

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Author (Year): Tamir et al. (2001) **Study Design:** Cross-sectional **Quality of Execution:** Fair: 3 limitations	**Location:** Israel **Intervention:** Three anti-smoking ads were directed at Israeli adolescents; Content: messages aimed at youth; tagline: "Cigarettes – no way" Channel: TV, radio Placement: on Children's TV Channel, MTV, movie theaters, reinforced by a youth magazine and five organized no-smoking events, large (500-600 youths) disco parties **Comparison**: NA	**Targeted Population:** Israeli adolescents age 12-18 yrs; **Study Population:** Israeli adolescents age 12-18 yrs who were exposed to MRCHI; 1m post campaign: 403 9m post campaign: 1005 **Population Characteristics:** not reported	Cessation: Self-reported smoking abstinence as a result of the campaign at 9m f/u	NR	Cessation: Self-reported smoking abstinence at 9m f/u:2%	Narrative results: 2% of respondents (not all smokers) reported quitting at 9m f/u	Findings suggest that MRCHI had a marginal effect on smoking cessation among Israeli adolescents
Author (Year): Terry-Mcelrath et al. (2007) **Study Design:** Other design with concurrent comparison **Quality of Execution:** Good: 0 limitations	**Location:** National, US (top 74 media markets) **Intervention:** Examined levels of exposure to state-sponsored anti-tobacco ads and impact on smoking beliefs and behaviors in adolescents; Content: state media campaign heterogeneous; health consequences; SHS risks; tobacco	**Targeted Population:** General population; **Study Population:** National random sample of middle and high school students (12-17) during Feb-Jun 99-03; drawn to be representative of all students in each grade; N analyzed = 122340;	Youth smoking prevalence: respondents% smoked in past 30 days; Youth smoking prevalence: Races: AA: African American; AS: Asian Hisp: Hispanics WH: White		OR: Multi-variate analyses examined relationship b/w state ad exposure and current smoking, controlling for self-reported TV viewing, other TV anti-tobacco ads, and demographics	Youth smoking prevalence: OR with exposure to state-ran anti-tobacco ads: Overall: 0.91 (0.86-0.96) By race: AA: 0.76 (0.66-0.89) AS: 0.76 (0.55-1.03) Hisp: 0.85 (0.74-0.97) WH: 0.93 (0.87-0.99)	After controlling for other types of anti-tobacco ads, demographics, price of cigarettes, strong associations found between levels of mean exposure to state-sponsored anti-tobacco ads and intention to not smoke and actual smoking behaviors

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	industry practices; quit tips; youth specific messages Channel: TV Intensity: measured in TRPs; aggregated into 4 month blocks **Comparison:** different levels of TRPs and impact on adolescent smoking beliefs and behavior	**Population characteristics:** Male: 47% Black: 13.1% Asian: 4.3% Hispanic: 11.5% White: 71%	Youth intention to not smoke (definitely not smoke for next 5 years);			Intention to not smoke: Overall: 1.06 (1.01-1.11) By race: AA: 1.16 (1.04-1.30) Asian: 1.10 (0.90-1.34) Hispanic: 1.06 (0.95-1.19) White: 1.05 (0.99-1.11)	
Author (Year): Terry-McElrath et al. (2011) **Study Design:** Interrupted time sires with concurrent comparison group **Quality of Execution:** Fair: 2 limitations	**Location:** National, USA **Intervention:** Ads sponsored by state tobacco control programs; American Legacy Foundation; pharmaceutical companies; tobacco companies were compared to examine their impact on smoking behaviors; included top 75 media markets in the US; Content: state and Legacy anti-tobacco ads; pharm ads promoting NRT; tobacco company ads trying to booster company image and youth smoking prevention	**Targeted Population:** Smokers in US; **Study Population:** HS seniors from 91-06 randomly selected and surveyed at 2yr intervals; only data from participants who did not move away from baseline residence included in analysis, to allow merging with media exposure data; **Population characteristics:** Included vs. not-included	Cessation: Self-reported; all smokers of any level at baseline to abstinence for 30 days at f/u survey	NR	Cessation: Predicted odds of 2-yr quitting: Table 3 Study also provided numerical value for cessation; however, data come from observations instead of individuals, meaning multiple observations could be from same individual; did not use	Narrative results: Compared with potential exposure to <52 ads over the past 24m, potential exposure to 104-155 anti-tobacco ads was associated with a significantly increased odds of 2-year quitting among all smokers **(OR [95%CI] = 1.40 [1.07, 1.83])**	Higher potential exposure to anti-tobacco ads was associated with higher odds of quitting among a geographically stable sample of young adult smokers; specifically, potential exposure to 104 - 155 anti-tobacco ads over the past 24 months appeared to relate to quitting when compared with potential exposure to <52 ads

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	Channel: TV Intensity: measured in GRPs; provided detailed division according to type of sponsor **Comparison:** between different sponsors for ads and between different intensities of ads	responders significantly different in race, education, etc.; for more details, please see table 2 in paper					
Author (Year): Vallone et al. (2010) **Study Design:** Before-After **Quality of Execution:** Good: 1 limitation	**Location:** Grand Rapids, MI, US **Intervention:** Pilot campaign for American Legacy Foundation's EX campaign; Grand Rapids was primary evaluation cite; Content: ads focus on smokers who are open to quitting but may not know how to quit; empathetic, smoker-to-smoker voice that encourages smokers to "relearn their life without cigarettes" Channel: TV Intensity: ≥ 1300 average quarterly TRPs Placement: media delivery plan to specifically reach 25-40yrs smokers	**Targeted Population:** Smokers 25-49 yo who are open to quitting; **Study Population:** Randomly selected smokers who agreed to f/u; BL: 488 F/U: 212/488; **Population characteristics:** Sex, male: 40.1% Age: 9.0% 18-24; 46.5% 25-49; 44.6% ≥50 Race/Eth: 80.5% CAU; 11.0% AA; 2.4% HIS; 6.2% OTH Edu: 41.5% ≤ high school;	Cessation: 30 day abstinence at f/u survey; Quit attempts: made 1 or more quit attempts of >= 1day between baseline and f/u surveys	Cessation: 100% smokers at baseline; Quit attempts (ITT): 3mon before baseline survey, 1mon before launch of campaign: 14.7% of 488 smokers	Cessation: ITT: 4.0% quit at 6m f/u; Quit attempts (ITT): 20.8% of 488 smokers (including people who successfully quit)	Plotted results: ITT: **+4.0 pct pts 95% CI: 2.20, 5.80** Plotted results: Absolute percentage change in QA: ITT: **6.1 pct pts increase**	Pilot test of EX campaign resulted in increased smoking abstinence at follow-up; Pilot test of EX campaign EX resulted in higher rates of ≥ 1 quit attempt at follow-up

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	Targeting: low to moderate annual income smokers **Comparison:** Before and after implementation of EX pilot	31.1% some college 27.4% ≥ college degree					
Author (Year): Vallone et al. (2011) **Study Design:** Before-After **Quality of Execution:** Fair: 3 limitations	**Location:** National, US **Intervention:** American Legacy Foundation EX campaign aimed at promoting cessation among lower income and blue collar smokers; Content: campaign grounded in behavior change theory; empathetic, smoker-to-smoker voice encouraging smokers to relearn life without cigarettes Channel: TV, radio, Internet , and other channels Intensity: 549 TRP per quarter during 6 mos evaluation period; 68% of TRP aired in 1st 3 mos of campaign Placement: During programming popular with smokers; different time slots to	**Targeted Population:** Smokers wanting to quit but may not know how to successfully quit **Study Population:** 18-49 yo smokers sampled from 8 US Designated Media Markets; BL: 5616; F/U: 4067; **Population characteristics:** Sex, Male: 46.9% Mean age (SE): 16.2% 18-24; 41.4% 25-39; 42.5% 40-49 Race/eth: 71.9% CAU; 12.2% AA; 8.5% HIS; Edu: 63.6% ≤ high school; 26.1% some college	Cessation: Self-reported 30 day smoking abstinence at f/u survey; Ad Exposure: recall of how often items from ad were seen; Quit attempts: made 1 attempt of 24hr or longer in past 6 mos since baseline	Cessation: 100% smokers at baseline; Not reported	Cessation: ITT: 3.9% quit at 6m f/u; Quit attempts: 46% of smokers (N=4067) at F/U made a quit attempt Exposure to Campaign: 41% at follow up Quit attempt By race/ethnicity: Confirmed awareness only associated with quit attempts among non-	Plotted results: ITT: **+3.9 pct pts 95% CI: 3.40, 4.40** Narrative Results: results showed a trend toward greater abstinence among those with confirmed awareness of EX; (OR=1.51; P=.16); Plotted results: ITT: 37.2 pct pts of baseline smokers made a quit attempt; Narrative Results: confirmed awareness of EX associated with making at least 1 quit attempt between baseline and f/u: OR=1.24; P=.048 Narrative Results:	Quit rates increased following the Ex campaign; Study population showed a trend toward greater abstinence among those w/confirmed awareness of EX; however, this finding was not significant; Smokers had an increase in quit attempts from baseline to f/u; Confirmed awareness of the EX campaign was associated with quit attempts; Results suggest that EX campaign can serve populations that experience a disproportionate burden from smoking as a

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	increase exposure among low SES smokers **Comparison:** Before and after implementation of EX				Hispanic black respondents OR=3.3,p=0.001; By education: Confirmed EX awareness associated with quit attempt for those with less than HS education OR = 2.1,p=.016	Confirmed awareness of campaign advertising increased favorable cessation-related cognitions among Hispanics and quit attempts among non-Hispanic blacks, and increased favorable cessation-related cognitions and quit attempts among smokers with less than a high school education	result of higher smoking rates and/or higher rates of tobacco-related disease
Author (Year): van den Putte et al. (2011) **Study Design:** Time series **Quality of Execution:** Fair: 3 limitations	**Location:** National, the Netherlands **Intervention:** Dutch national antismoking campaign (Nov03 to Apr04) aimed to encourage smokers to quit in the first few months of campaign, then shifted to support quitters; Content: Encouraging smokers to quit and supported those who quit Channel: TV, radio, print ads, outdoor ads, website	**Targeted Population:** Adult smokers in Netherlands; **Study Population:** Adult smokers recruited through Internet; 1st wave, Nov03: 2740 2nd wave, Jan & Feb04: 1671/2740 3rd wave, Apr & May04: 1520/2740	Quit attempts: smokers who quit smoking and smokers who made a quit attempt but relapsed in the last 12 mos	Not Reported	Quit attempts (ITT): Wave 1: 0% Wave 1 to 2: 9.8% Wave 2 to 3: 3.6%	Plotted results: ITT; at 4m f/u, 3.6% of baseline smokers made quit attempts; Narrative Results: Association b/w campaign exposure and quit attempt non-significant	Quit attempts increased b/w Wave 1-2 of the study and decreased b/w Wave 2-3; Attempts to quit were unrelated to campaign exposure

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	Comparison: quit attempts among people who recall campaign vs. those who don't	**Population characteristics:** Sex, male: 36% Age: Mean 39 (range 16-70) Race/Eth: NR SES: NR					
Author (Year): Wakefield et al. (2003) **Study Design:** Time series **Quality of Execution:** Good: 1 limitation	**Location:** National, AU **Intervention:** Australian Nation Tobacco Control campaign to encourage awareness of the illnesses associated with smoking, along with the health benefits of cessation; <u>Content:</u> graphic images of negative health consequences of smoking <u>Channel:</u> TV <u>Intensity:</u> measured in TARPs/wk <u>Tagging:</u> yes **Comparison**: Between different follow up years	**Targeted Population:** Adult smokers and recent quitters in AU; **Study Population:** Smokers and recent quitters age 18-40yrs; 1st (97): 1192 2nd (Nov97): 1997 3rd (Nov98): 1646 4th (Nov99): 1611 5th (Nov00): 1675 **Population characteristics:** Only reporting baseline and 36m follow-up here; for more details please refer to table 2 in paper; BL F/U Male: 47% 46% Age, 18-29:	Cessation: Quitters self-reported if they are helped by ads; Recall: Unprompted recall of media ads; understanding of campaign content	Not reported	Cessation: AT 36m f/u, 44% of recent quitters cited anti-tobacco ads as their help in quitting;	Narrative results: At 36m f/u, 44% of quitters claimed the campaign helped them stay smoke-free; % reporting helpfulness of ads tapered off after first f/u (6m f/u)	A high percentage of quitters cited the campaign in helping them stay smoke-free. This number tapered off after 6m f/u

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
		50% 48% Age, 30-40: 50% 52% Edu, some secondary: 63% 61% Unemployed: 6% 6%					
Author (Year): Wakefield et al. (2008) **Study Design:** Other design concurrent comparison group **Quality of Execution:** Fair: 2 limitations	**Location:** National, Australia **Intervention:** Tobacco control TV ads in Australia from state and national governments and NRT ads by pharmaceutical companies; evaluated along with other tobacco control policies to determine impact on smoking prevalence of Australian adults; <u>Content:</u> Anti-tobacco ads had graphic health warnings, personal stories, or health effects of smoking; tip to call QL <u>Channel:</u> TV <u>Intensity:</u> Evaluated data from June 1995 – December 2006; GRPs per month during this period were used to determine intensity	**Targeted Population:** National Tobacco Campaign targeted 18-40 year olds **Study Population:** Data from weekly omnibus survey from Roy Morgan Research in Australia; respondents were ages 14 and older; Study examined data for adults ages 18 and older; **Population characteristics:** not reported	Prevalence: Proportion of people who responded affirmatively to smoking; info collected on month and year of interview and geographic location of respondent so that survey data could be matched to records of changes in policy and advertising	June 1995, 24.6% (See Figure 1)	June 2006: 20% (See Figure 1); This figure reflects impact of all tobacco control policies, thus not used	Narrative results: An increase of 390 GRPs was associated with a 0.3 pct pts reduction in smoking prevalence	Findings indicate that anti-tobacco MRCHI along with increases in retail price, and smoke free laws reduce overall population smoking prevalence. This study linked reduced adult population smoking prevalence with increasing exposure (increased GRPs) to ongoing televised tobacco control campaign activity

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	Tagging: With National QL **Comparison:** Varying levels of campaign intensity (GRPs)						
Author (Year): Wakefield et al. (2011) **Study Design:** Interrupted time series w/ concurrent comparison **Quality of Execution:** Fair: 2 Limitations	**Location:** National, Australia **Intervention:** National Tobacco Campaign aimed at adult smokers featuring serious health effects of smoking; Content: Graphic images of serious smoking-related disease and the message that "every cigarette is doing you damage" were used (97-02); Intensity: measured in GRPs Channel: TV **Comparison:** association between different levels of GRPs and quit attempts;	**Targeted Population:** Adult smokers in Australia; **Study Population:** Adult smokers sampled by random digit dialing; Wave Year BL F/U W1 02-03 2213 1802 W2 03-04 2046 1495 W3 04-05 2010 1572 W4 05-06 1927 1397 W5 06-07 2052 1528 - 3037 participants in analysis **Population characteristics:** Age groups broadly distributed and over half of smokers were of	Quit attempts: made quit attempt within 90 days of yearly f/u survey; Exposure: GRPs measured three-monthly summed aggregations of ads intensity in the media market in which participant resided for 3 m, 4-6m, 7-9m, and 10-12m prior to f/u survey	Not Reported	Quit attempts: Of 3037 smokers, 37.3% made one or more quit attempts; Association between exposure and quit attempts: OR = 1.11; 95% CI: 1.03-1.19; P<0.01	Narrative Results: Quit attempts: Of 3037 participants interviewed over 4 years, 37.3% made one or more quit attempts; For every 1000 GRP increase, there is an 11% increase in quit attempts;	Tobacco media campaigns are associated with a significant increase in the proportion of quit attempts in the months during advertising exposure but not for advertising exposure that is more than 3 months old

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
		low SES; for more details, please refer to table 1 in paper					
Author (Year): Wetter et al. (2007) **Study Design:** Before-after **Quality of Execution:** Good: 1 limitation	**Location:** Texas, USA **Intervention:** Using paid media to advertise the existing Spanish-language smoking cessation services offered by CIS; Content: to increase awareness of the Spanish-language cessation services offered by CIS; Channel: radio (Spanish stations only), newspapers (both English and Spanish), TV (Spanish stations only), direct mailing to HH with Spanish last names Placement: mostly on Spanish stations only Targeting: yes Tagging: yes **Comparison:** Pre- and post-intervention Spanish smokers who call the CIS line	**Targeted Population:** Spanish speaking smokers; **Study Population:** Current smokers >= 18yrs who live in TX, and called NCI's South Central office to request cessation help in Spanish; **Population characteristics:** (subset callers consenting for f/u study): Sex: 55.2% male; Age: 41.1 % MX origin: 66.7% HH income <20000: 55.5% Employed: 50.0% Insurance None: 76.8% Edu: average 10.9yrs	**Call volume**: Spanish speaking smokers who called NCI CIS South Central office	Call volume: 7 calls in 18mon, 0.39calls/month	Call volume: 355 calls in 20mon, 17.8 calls/month	Relative percentage change in call volume: **+4464%**	Successful in increasing the reach of the NCI's CIS Spanish-language; increasing awareness of available resources can increase the reach of such programs into vulnerable and underserved groups and thereby increase public health impact

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Author (Year): White et al. (2003) **Study Design:** Cross-sectional **Quality of Execution:** Fair: 4 limitations	**Location:** National, Australia **Intervention:** Australia's National Tobacco Campaign (NTC) targeted smokers aged 18-40 and promoted a cessation message; campaign started in 1990s; examined adolescents' response to NTC though campaign aimed at adults; <u>Content:</u> Based on Health Belief Model (HBM) and Protection Motivation Theory (PMT), using graphic TV ads to evoke negative response re health consequences of smoking, and aiming to get quitting on smokers' agendas <u>Channel:</u> predominantly TV <u>Tagging:</u> assume tagged with QL number **Comparison:** Participants made smoking-behavior changes or not as result of campaign;	**Targeted Population:** Adult smokers 18-40; **Study Population:** Adolescents nationwide from Australia (dataset 1) or from Victoria (dataset 2); National dataset: 400; Victoria dataset: 3710 **Population characteristics:** Dataset 1: 51% female, 49% male; 50% of the sample was aged 14-15; more smokers (60%) than NS (44%) were aged 16 or 17. Dataset 2: 49% female; 69% =<15	Cessation: Gave up smoking as a result of seeing campaign ads; Quit attempts: tried to give up smoking as a result of seeing campaign ads; Utilization of cessation services: adolescent participants who called QL as a result of seeing ads from NTC	Cessation: 59% of 3714 (2191) adolescents who completed the survey were smokers; Quit attempts: 59% of 3714 (2191) adolescents who completed the survey were smokers; Utilization of cessation services: 59% of 3714 (2191) adolescents who completed the survey were smokers	Cessation: Of 2191 adolescents who were smokers or tried smoking, 184 quit because of campaign Quit attempts: Of 2191 adolescents who are current smokers or tried smoking, 167 made a quit attempt; Utilization of cessation services: Among 2191 current or ex-smokers, 35 called QL as a result of NTC	Plotted results: ITT; **8.4%** of adolescent smokers reported quitting because of campaign; **95% CI: 7.70, 10.10** Plotted results: ITT; **7.6%** adolescent smokers reported making a quit attempt because of campaign; Narrative results: **1.6%** of adolescent smokers or ex-smokers reported calling QL as result of campaign	The adult-focused NTC MRCHI increased awareness of anti-smoking among adolescents, indicating that adolescents were aware of this adult focused anti-smoking campaign and thought it relevant to them; Graphic health effects focused cessation campaign may have been successful in promoting anti-smoking attitudes among adolescents

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Author (Year): Willemsen et al. (2002) **Study Design:** Before-after **Quality of Execution:** Fair: 3 limitations	**Location:** The Netherlands **Intervention:** on May 1st 2002, health warning labels on cigarette packaging came into effect in the Netherlands, with number for the Dutch quitline; Content: 1 of 2 health warnings front of pack, 30% of surface; 1 of 14 messages "Ask for help with smoking cessation" on back of pack with Dutch quitline number, website Channel: health warning labels Intensity: 1 of 14 packs Placement: cigarette packs Tagging: 1 of 14 health warning labels **Comparison:** Call volume before and after introduction of warning labels	**Targeted Population:** Smokers in the Netherlands; **Study Population:** Callers to quitline; Prior to warning signs, typical caller from middle SES groups prepared to quit; after warning signs, callers have broader background, from lower SES who are uncertain whether they are ready to quit	Call volume: calls to the Netherlands quitline per week	N/A	Call volume: 3.5 times increase	Relative percentage change in call volume: **+350%**	By attaching QL number to cigarette packages, the Netherland QL received more callers from broader backgrounds; number of callers stabilized to 3.5x the rate prior to the implementation of the warning signs
Author (Year): Wilson et al. (2005) **Study Design:**	**Location:** National, NZ **Intervention:** Media campaign aimed to	**Targeted Population:** 25-44yrsold Maori, in the 3 most deprived of 6 SES groups;	Call volume: # of calls by Maori to QL within 1hr of each TVC being shown;	N/A	Call volume: Relatively intense 6 campaign months (over 480 TARPs/month):	Narrative results on call volume: more intense campaign months generated more calls to quitline;	TV ad campaigns successful in generating calls to national QL from indigenous New Zealanders;

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
Interrupted time series **Quality of Execution:** Fair: 4 limitations	encourage Māori smokers to call QL Content: personal testimonials, adopted from AU ads; some adopted for Maori audience Channel: TV Intensity: measured in TARP; 6 campaign months most intense, with >480 TARPs/ month Placement: both during and outside QL operating hours Targeting: yes Tagging: some were tagged **Comparison:** Comparison of different intervention characteristics impact on call volume	**Study Population:** Callers to QL within one hour of each ad, with ethnicity data reported; **Population characteristics:** not reported	Reach: percentage of Maori smokers registered with QL over a 2-year period		866 per month registered callers; Other 18 months: 735 per month registered callers; 15.2% increase; Reach: Over 2-year time period: 15,486 Maori smokers registered, 21.3% of all new registrations	Reach: estimated 8.2% of all Maori adult smokers	campaigns tagged with QL number more effective in generating calls; ads with "why to quit" and "how to quit" component most effective
Author (Year): Wilson et al. (2010) **Study Design:** Time series **Quality of Execution:** Fair: 3 limitations	**Location:** National, NZ **Intervention:** Graphic warning labels on cigarette packs were introduced in NZ on 2/28/08 and retailers were given 6m to comply; Content: graphic warning labels cover 30% of front of the	**Targeted Population:** Smokers in NZ; **Study Population:** Callers to quitline for new registration during study period: Li 2009: 6m before and 6m after introduction	Call volume: new registration with quitline during the study period; Info source: percentage of new registrants citing tobacco packaging as source of information;	Call volume: Li 09: 6m before introduction of GWS,1517 calls/ month Wilson 10: Mar07 to Feb08, 19558 calls/year Info source: Wilson 10: 7.5% of 19558 callers = 1467;	Call volume: Li 09: 6m after introduction of GWS, 1729 calls/ month Wilson 10: Mar08-Feb09, 20152 calls/year; Mar09-Feb10, 18309 calls /year; Info source: Wilson 10:	Relative percentage change in call volume: Li 09: 6m f/u, **+14.0%** Wilson 10: 1yr f/u, **+3.0%** 2yr f/u, **-6.4%** Info source: Wilson 10: 1yr f/u, 262.4% 2yr f/u, 185.8%	Introduction of graphic warning labels promoted calls to quitline in the short run; effect diminished with longer follow up; Percentage of new QL registrants citing tobacco packaging as source of

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	package; warning messages in both English and Maori on the back cover 90%, with supportive cessation messages Channel: warning labels Intensity: all cigarette packs in NZ should use graphic warning labels 6m after introduction Placement: cigarette packs Tagging: yes **Comparison:** Before and after introduction comparison of call volume	of graphic warning labels; Wilson 2010a,b: March 07 to Feb 10; **Population characteristics:** not reported			Mar08-Feb09, 26.4% of 20152 callers = 5320 Mar09-Feb10, 22.9% of 18309 callers = 4193		information increased
Author (Year): Zucker et al. (2000) **Study Design:** Time series **Quality of Execution:** Fair: 4 limitations	**Location:** FL, US **Intervention:** "truth" campaign evaluated up to May 99 Content: depicts tobacco use as an addictive habit marketed by an adult establishment; edgy humor; exposes lies by tobacco industry marketing Channel: TV, billboards, posters Intensity: 33 TV ads, 7 outdoor billboards, 8 print ads, 4	**Targeted Population:** Florida adolescents 12-17 years old; **Study Population:** For Florida Youth Tobacco Survey: 23,000 middle and high school students; For Florida Anti-Tobacco Media Evaluation: FL adolescents 12-17;	Prevalence: current smokers at time of survey	Prevalence: April 98: Middle school: 18.5%; High school: 27.4%	Prevalence: May 99: Middle school: 15.0%; High school: 25.2%;	Absolute percentage point change in prevalence: Middle school: **-3.5 pct pts**; High school: **-2.2 pct pts**	Youth who were smokers during first interview and later adopted campaign's industry manipulation attitudes were more likely to have become nonsmokers by second interview; Less than a year after campaign began, significantly fewer Florida teens were smoking

Study	Study Characteristics	Population Characteristics	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Summary
	posters; 433 mil impressions in local and national print and electronic media Targeting: yes **Comparison:** before and during "truth" campaign;	**Population characteristics:** not reported					