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

## Summary Evidence Table – Economic Evidence

| **Lead Author, Year**<br>**Study Design**<br>**Economic Method** | **Study Location**<br>**Sample Size**<br>**Population Characteristics**<br>**Time Horizon** | **Intervention Description** | **Effect Size** | **Program Costs** | **Health Care Cost Averted/ Productivity Losses Averted** | **Full Economic Summary Measure($2011)** |
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| Boyd et al. 1998<br><br>Group Randomized Trial<br><br>Average Cost | Location: Durham, NC; Philadelphia, PA; Houston, TX; Birmingham, AL; community wide<br><br>Dates of implementation: CIS established in 1975 by NCI; 10wks of ads split into 2 waves; Autumn campaign (6wks, Aug, Sep 94); spring 4wk mid-April and May;<br><br>Target | evaluate targeted radio and TV ad campaign for African American smokers to call CIS QL;<br><br>14 communities put into 7 pairs, and exposure randomly assigned;<br><br>Intensity (Frequency & Duration):<br>2-yr campaign, with 10 weeks of ads split into 2 waves:<br>- Autumn campaign 6wks in Aug and Sep 94; 3wk with 1wk off during 1st week of Sep (followed by 3wk)<br>- Spring campaign 4wks from mid-April | Call volume:<br>Int. Cont. Relative%<br>Total<br>682 27 2425.9%<br>AACall<br>558 7 7871%<br><br>81.8% of callers AA among experimental markets; 25.9% of callers AA among control markets;<br>Additional 217 AA smokers and 139 smokers of other ethnicities from counties immediately adjacent to experimental counties called CIS due to spill-over effect of the campaign; | Assume $1994; CPI=1.5<br><br>Total Cost: 106,821 for radio; 67,444 for TV (14 communities)<br><br>Per community range for radio + TV: 2640 to 75,975<br><br>-also used ads as PSAs during the other weeks of the year when no advertising time was purchased<br><br>-cost of outreach packet not included | N/A | Total cost:<br>Radio: $106,821 (160,232)<br>TV: $67,444 (101,166);<br>increased callers by 7,871% (AA) and 2,426% (all ethnic groups)<br><br>$174,265/655= $266 (399)/ additional caller |

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| | population: African American smokers | to mid-May 95; 2wk with 2wk off (followed by 2 wk)<br>3,364 radio ads and 208 TV spots;<br>Radio and TV ads were used as PSAs outside media buy;<br><br><u>Outreach:</u> outreach packet consisted of videotape and associated print materials mailed to identified leader; distributed 1 video per 1,000 AA residents; total of 1,449 packets distributed<br><br><u>Comparison</u>: Control markets matched to experimental markets with various population traits without intervention | TARP: target audience hearing or seeing an ad an average of 7.7 times;<br>Estimated #AA smokers in exp. markets: 310,471<br># called CIS: 558<br>558/310,471 = 0.18%<br><br>Summary: Combination of paid media and PSA campaign and community outreach resulted in substantially increase smoking-related calls from African Americans in experimental communities | | | |
| Fishman et al. 2005<br><br>Modeled | Age 18; US; year 2000 from a societal perspective | Media program and cigarette tax increase to reduce smoking attributable mortality<br><br>- assumed to run for 4 years; composed of a series of local programs tailored to reflect regional and demographic differences | N/A—measure in LYG | $2000; CPI=1.31<br>-Assumed message must be redesigned each yr.; 4-year campaign requires costs equal to four 1-year campaigns, even though some start-up costs will be shared cross the yrs of the | Tobacco-attributed healthcare costs:<br><br>1. Tobacco-related disease<br>2. Neonate complications<br>3. Childhood environmental tobacco smoke | Cost per LYS: $528 (692) to $19,957 (26,144) |

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| | | -Sensitivity of results tested by varying the discount factor for each value between 3% and 7% | | campaign.<br><br>-Used 3 different per capita costs that represent the lowest ($0.31), median ($0.97), and highest ($2.35) values reported in the literature.<br><br>-Cost per year of potential LYS ranges from $528 for the low-cost media campaign using 3% discount rate to $19,957 for the highest-cost media campaign using a 7% discount rate. | exposure | |
| Holtgrave et al. 2009<br><br>Retrospective<br><br>Modeling<br><br>Cost-Benefit | Nationwide—targeted to youth 18-24<br><br>2 yrs: 2000-2002 | To evaluate the cost-utility of the Truth campaign | 22% of overall decline in youth smoking btw 1999 and 2002 directly attributable to the truth campaign launched in 2000. By 2002, smoking rates among youth were 1.6% lower than they would have been in the absence of the campaign: equates to ~300,000 fewer youth smokers in 2002<br><br>For base and pessimistic cases, the estimate of 300,000 youth was multiplied by .566 to | Assume $2002; CPI=1.25 2000–2002, expenditure data reveal that just over $324 (405) million was spent to develop, deliver, evaluate, and litigate the truth campaign. | Base case: $13,072 ($2000) is the value used for T in the base case; T, is the net present value (discounted at 3%) of the lifetime medical costs related to smoking.<br><br>169,800 (cases averted) * 13,072= 2,219,625,600 (2.8 billion)<br><br>Optimistic case: 300,000 cases | Campaign cost saving under base case : $1.9 (2.4) billion and optimistic scenario: $5.4 (6.75) billion;<br><br>$4,302/QALY ($5,378) for pessimistic scenario |

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| | | | obtain a conservative estimate of 169,800 youth who were prevented from initiating smoking | | averted *19,078= 5,723,400,000 (7.1 billion)<br><br>Pessimistic case analysis includes costs of living longer: additional lifetime medical cost for nonsmokers is $2609 (net present value discounted at 3%) | |
| Hurley & Matthews 2008<br><br>Retrospective Modeling<br><br>Cost-Benefit | Australia<br><br>Five-year age group from 15–19 years for the remainder of their lifetime, censored at age 85 years.<br><br>6 month-phase 1 period (June-Nov 1997) | To assess the cost-effectiveness of phase one of the Australian National Tobacco Campaign NTC, | Reduced smoking prevalence by 1.4% →190,000 quitters | Assume $2001; CPI=1.27; PPI=1.32<br>Future costs, life-years and QALYS were discounted at 3% per year.<br><br>Carter and Scollo estimated the NTC cost $A8.95 million (1997 Australian dollars) or $A10.1million ($9.7) (2001) → $A7.1 million of federal expenditure, and $1.85 million of additional expenditure by state and territory organizations | The quits benefit model (QBM), a Markov-cycle simulation model was used to predict the benefits of smoking cessation for the estimated 190,000 quitters from the time of quitting until death, censored at age 85 years.<br><br>The QBM predicted NTC avoided over 32,000 cases of COPD, 11,000 cases of AMI, 10,000 cases of lung cancer, and 2500 cases of stroke (see Table 2 below)<br><br>Prevention of | Net predicted savings of $A730.5 ($703) million. |

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| | | | | | ~55,000 deaths, gains of 323,000 life-years and 407,000 QALYs, and healthcare cost savings of $A740.6 ($713) million were predicted. | |
| Kotz et al. 2011<br><br>Time-Series<br><br>Cost-Effectiveness | England;<br><br>N= 1309 adults who had smoked in the past year who responded to the surveys in the month following NSD (April 2007-2009) and a comparison group of 2672 adults who smoked in the past year who responded to the survey in the two adjacent months (March and May 2007-2009) | To obtain a more rigorous estimate of the cost- eff of No Smoking Day (NSD), an annual UK-wide campaign to encourage smokers to quit | Use surveys which use a random location sampling design; measured quit attempts in March, April, and May 2007, 2008, and 2009—campaign occurs mid-March; estimated 2.5% of quit attempts would result in success<br><br>Comparison of reported quit attempts in the month following NSD for 3 consecutive yrs w/ adjacent months using repeated national surveys of quit attempts.<br><br>Quit attempt rate was 9.2% (120/1309) for April 2007-2009 compared with 6.4% (170/2672) for March/May 2007-2009 (difference=2.8%)<br>Based on the additional attempt rate that we attribute to NSD, we estimate that 2.8%X2.5% (permanent cessation rate) = 0.07%<br><br>leading to an estimated additional | Assume 2009; CPI=1.08; PPI=.64<br><br>With 8.5 million smokers in England and a total direct NSD cost of £750 000 ($1,265,625), the cost of NSD for each smoker is £750 000/8.5 million=£0.088.<br><br>The cost of NSD per smoker was £0.088<br><br>national social marketing campaign; provides materials such as posters and leaflets to local organizations to use in events and promotional activities | -Made an adjustment for the 'natural' background cessation rate expected over the course of a smoker's life; used a 2.5% annual cessation rate until the expected age of death to estimate this effect<br><br>Discounted LYG: ages <35 years, 35-44 years, 45-54 years and 55-64 years are 1.10, 1.53, 1.65 and 1.29, respectively<br><br>The discounted life years gained per smoker in the modal age group 35 to 44 years was 0.00107 (.0007X1.53), resulting in an ICER of £82.24 | NSD for smokers from different age groups varied btw £76 ($128) to £114 ($192) per discounted life year gained |

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| | | | 0.07% of the 8.5 million smokers in England quitting permanently in response to NSD. | | ICER is £0.088/0.00107=£82.24<br><br>Similar calculations give point-estimate ICERs of £114.29, £76.19 and £97.45 for age groups <35 years, 45-54 years and 55-64 years, respectively. | |
| CDC 2012<br><br>Before-After<br><br>Cost-Effectivness | Age 18-54 yrs old<br><br>Compared campaign launch (March 19–June 10, 2012) w/ corresponding weeks (March 21–June 12, 2011) in previous year. | March 19–June 10, 2012, CDC aired Tips from Former Smokers (TIPS), the first federally funded, nationwide, paid-media tobacco education campaign<br><br>Campaign included advertising on national and local cable television, local radio, online media, and billboards, and in movie theaters, transit venues, and print media.<br><br>CDC analyzed call and visitor data immediately before, during, and immediately after the campaign period and compared them with data from the | Call volume increased 132% (207,519 additional calls) during the TIPS campaign, and the number of unique visitors to the cessation website increased 428% (510,571 additional unique visitors).<br><br>Call volume represented total attempted calls, not unique callers. | Distribution of the TIPS campaign advertising purchases included 80% for national advertising and 20% for additional advertising in media markets with higher-than-average adult smoking prevalence;<br><br>$54 million spent on the TIPS campaign<br><br>54 million/207,519= $260 per addt'l caller | N/A | $260 addt'l caller |

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| | | corresponding weeks in 2011. | | | | |
| Pechmann & Reibling 2000<br><br>Descriptive<br><br>Cost-Effectiveness (ranking) | Determine which advertising campaigns have been more cost effective than others to reduce adolescent smoking prevalence;<br><br>3 variables pertaining to the advertising message (content, consistency, and clarity) and 2 variables related to the advertising execution or style (age of spokesperson and depiction of smoking behavior) are studied.<br><br>1,128 seventh grade (age 12–13 years) and 10th grade (age 15–16 years) students participated in the supplemental data collection effort. | Observe 5 US state campaigns, 1 US research study, and a Canadian initiative to explain why certain advertising campaigns have been more cost effective than others in terms of reducing adolescent smoking prevalence.<br><br>-3 variables pertaining to the advertising message (content, consistency, and clarity) and 2 variables related to the advertising execution or style (age of spokesperson and depiction of smoking behavior) are studied. | Identified 4 factors associated with increased cost-effectiveness in campaigns targeted to youth<br><br>Use of efficacious messaging<br><br>Concentrated use of a single message<br><br>Avoidance of unclear messages<br><br>Increased use of youthful spokespeople that adolescents could more readily identify | $1996; CPI= 1.43<br>Per capita estimate provided in paper | N/A | Cost-effectiveness ranking provided along with factors associated with increased C/E; no final outcome measure |

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| Perusco et al. 2010<br><br>Before/after<br><br>(cross-sectional)<br><br>Average Costs<br><br>CG calculated Cost-Effectiveness | Location: South west Sydney, Australia.<br>Setting(s): City-wide; Sydney South West Area Health Service<br><br>Study Population:<br>Eligibility:<br>HH selection: a random sample of 1000 Arabic surnames generated from electronic white pages;<br>Survey participant selection: HH phoned and one eligible HH resident selected through bi-lingual interview;<br>- 18 years or older<br>- From Arabic-speaking background<br>- Fluent in either Arabic or English<br>Separate surveys conducted for pre- and post-intervention; | To evaluate a comprehensive social marketing campaign (SMC) specifically targeting Arabic-speakers residing in south west Sydney, New South Wales, Australia.<br><br>Implementer(s): Arabic-speaking workers and health promotion personnel assisted in the development, implementation and evaluation of the campaign<br>Intensity (frequency & duration):<br>Phase I: 14 ads in 2 newspapers, 6 paid editorials in 1 paper; 5 radio ads aired 250 times on 2 stations;<br>Phase II: 12 ads in 2 newspapers; 15 new radio ads aired 630 times on 2 radio stations; billboards at 1 station for 4m; 7 posters on buses;<br>Phase III: 13 posters on buses; 60 ads aired on 2 radio stations | % smoke cigarettes<br>Before After Diff<br># % # %<br>285 25.9 233 21 -4.8pp<br><br>→ 52 addt'l quits/1000*<br><br>Smoke-free housing:<br>Before # After # Diff<br>67.1% 739 74.9% 826 +7.8 pct pts, Sig<br><br>*Calculated # of Arabic-speaking people in Sydney based on Australian Bureau of Statistics 2006 data (males &females)<br><br>Lebanese: 127,913<br>Syrian: 6,030<br>Palestinian: 4,681<br>Jordanian: 2,256<br>Egyptian: 16,157<br>Iraqi: 9,336<br>Moroccoan: 556<br>Total Arabic-popul (Sydney): 166,929<br><br>Assume 56% are adults<br>166,929 * .56= 93,480 Arab adults<br><br>Arab adult smokers= 93,480*base case 93,480 *(285/1000)= 26,642<br><br># of quits<br>26,642 * .048= 1,279 | Assume $2007; PPI=1.41; CPI= 1.16<br><br>-Staff FTE: $760,857 ($625,953)<br><br>-Advertising including development: $167,647 ($137,922)<br><br>-Community engagement including events, community grants and community education sessions: $43,158 ($35,506)<br><br>Excluded:<br>-Pre-survey, tracking and post-survey:<br>$174, 468 | N/A | Total cost: $799,381<br><br>CG calculated: $799,381/1,279= $625/addt'l quit<br><br>625/1.16*= $539/QALY<br><br>*Based on Solberg 2006 |

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| | same methods; BL: 1102; 70% response rate; F/U: 1742 eligible; 1104 completed; 63% response rate;<br><br>Time Horizon: Planning started in Dec02; campaign from Apr05 to Oct 07 | | Assume 1,279 additional quits | | | |
| Raikou & McGuire 2008<br><br>Modeling<br><br>Cost-Effectiveness | UK<br><br>Popul- 13 to 17 y.o.<br><br>Time- 5 yrs | Assess C/E of mass media campaign intervention (5 yrs) aiming at the prevention of the uptake of smoking among young people; study also includes a point of sale intervention- effects of these campaigns are not mutually exclusive; potential confounding<br><br>Comparison- no intervention | Assume 5% reduction in smoking prevalence at end of 5 yr mass media campaign (resulted in 196 male smokers & 186 male smokers out of 1000 in the no intervention and intervention groups respectively at age 18);based on effect sizes of mass media campaigns reported in the literature ranging from approximately 2% to 7% | $2001; PPI= .64; CPI= 1.27<br><br>Period of 5 years at an annual cost of £15 per person discounted at 3.5% per year for the 5 years of the campaign. | Discount rate: 3.5%,<br>Perspective- public sector in UK (perspective of organization developing campaign intervention and the NHS (paying for the cost of treating smoking related diseases))<br><br>Utility values associated with each disease state were obtained from the literature and were multiplied by the length of each cycle to estimate quality adjusted life expectancy. | £49 ($97) per QALY gained or £362 ($718) per LY gained |
| Stevens, Thorogood & | UK Turkish popul; Hackney and 2 inner | Interv included:<br>-10 min play<br>-poster campaign<br>-media campaign | 1 yr self-reported quit rate reduction in smoking prevalence of 3% (among entire sample-ITT) to 7% | Assume $1997; PPI=.63; CPI=1.4<br><br>Cost of | Sensitivity range (assumptions)<br>Turkish population (aged 15+ years): | £105 ($233) /LYG<br><br>£825 ($1,833) /quit |

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| Kayikki 2002<br><br>Before-After<br><br>Cost-Effectiveness | London boroughs<br><br>See gender chart in table 2<br><br>Baseline survey May/August 1996; Follow up survey May/August 1997 | -purpose-design leaflets<br><br>-Play written in conjunction w/local Turkish writer, performed by local Turkish drama group (in 20 local Turkish venues—cafes, advice and community centers) w/audience of ~1500 people; play broadcast 3X during No Smoking Week on local Turkish radio; poster campaign featured central character from play; during Turkish-targeted campaign there was media interest—31 articles in Turkish press | (responded to follow-up survey) | intervention: £56,987($126,638); Mean C/E per LYG~ £105/LYG; modal value= £90/LYG<br><br>Probability distribution from simulation for cost/1-year quitter→ mean of £825 | 2000-3000-4000<br><br>Smokers (57%) 51-57-63<br><br>1-year quit rate 2.9-6.4<br><br>Smoking Trend (2)-0-2<br><br>1-yr quitters who remain smokers 25-33-45<br><br>LYS 6-8-10 yrs | |
| Villanti 2010<br><br>Modeling<br><br>Cost-Benefit | Cohort of 5,616 smokers; aged 18-49; 8 designated market areas (DMAs) or "media markets" applied to hypothetical cohort of 2,011,528 smokers<br><br>-adults and | Evaluate impact (C/E) of EX campaign (nat'l campaign)—encouraged adult smokers to "relearn life w/o cig: using an empathetic smoker-to-smoker voice; ads focus on disassociating smoking from common activities that function as social cues, such as driving or drinking coffee. | Probability of successful quit at 1 yr (EX; no EX)<br>Base-case: 8%; 8%<br>Pessimistic case: 6.4%; 10.7%<br>Optimistic case: 10.7%; 6.4%<br><br>Odds of making a quit attempt increased by 24% (OR=1.24) among those who reported confirmed awareness of EX<br><br>Interv compared to "No | $2009; CPI=1.05<br>2004 to 2009: ~$42 (44) million spent to develop, pilot, implement—include costs of media, public relations, evaluation, Legacy staff salary, NATC* income, and NATC recruitment expenses.<br><br>Exposure to EX expected to occur during regular TV- | lifetime medical costs saved per quit (T) discounted at 3%;<br><br>Base & optimistic case: T=$18,967(19,915); reflects average experience of a smoker, including # yrs of smoking, quitting, and relapse;<br><br>Pessimistic case: | 2 arms cost saving; base-case of quit attempts: saved $41 million dollars; optimistic case saved ~$1 billion<br><br>Cost-saving for base case and optimistic case for 7-day and 30-day point prevalence abstinence; range from $272 million to ~$2 billion in medical costs |

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| | young adults | Pilot campaign ran for 6mo; March 31-Sept 28, 2008 on cable TV | EX" which used data parameters from nationally representative surveillance studies opposed to 8 media markets for interv; better comparison for status quo would've been population-based estimates of quit behavior at the city or state-level for the 8 media mkts under study | viewing, thus participant costs not included.<br><br>Time period covers costs for formative research and pilot-testing of campaign in addition to nat'l phase of campaign<br><br>NATC- Nat'l Alliance for Tobacco Cessation | smokers who quit incur addt'l medical treatment costs compared to continuing smokers due to a longer lifespan; quitting results in a negative value (-$3,758)<br><br>Optimistic scenario assume 1.77 QALYs saved per quit | averted |

## Campaigns Tagged with Quitline Messages

| Lead Author, Year<br><br>Study Design<br><br>Economic Method | Study Location<br><br>Sample Size<br><br>Population Characteristics<br><br>Time Horizon | Intervention Description | Effect Size | Program Costs | Full Economic Summary Measure ($2011) |
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| Burns & Levinson 2010<br><br>Before-After<br><br>Cost-Eff | Sept – Nov 2007<br><br>Latino population (n=243)<br><br>Non-Latino (n=527) callers responded to follow up survey | Analyzed data from Colorado QuitLine callers before (April–August 2007) and during (September–November 2007) the media campaign.<br><br>An ad campaign was developed that delivered positive, supportive, and encouraging messages about quitting through actors portraying key family members. Spots for this study aired in | Self-reported 6m continuous smoking cessation among 7m f/u survey respondents<br><br>Latino caller respondents (not ITT)<br><br>N / N quit / Quit rate<br>Pre 126 12 9.6%<br>Campaign 117 22 18.8% | Assumed $2007; CPI=1.08<br><br>Spanish-language component of the Latino media campaign cost $145,900 for production and $91,287 for airtime, a total of | The cost per additional Latino caller during the campaign was $352 ($380)<br><br>Cost/additional quit range: $1,036 |

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| | 7 month follow up | Spanish language only on predominantly Spanish-language television and radio and in Latino-attended movie theaters.<br><br>(September–November). Urban Colorado counties received the majority of campaign spots, but local health departments statewide were encouraged to supplement the campaign with local earned or paid media of their own.<br><br>-A professional company with expertise in linguistic and cultural adaptation of Latino television and radio scripts was directly involved in the filming of the campaign material to ensure cultural relevance and appropriateness of the advertisements. | N N quit Quit rate<br>(ITT)<br>Pre 286 12 4.2%<br>Campaign 232 22 9.5%<br><br>Absolute percent diff (ITT): +5.3 pct pts<br><br>Call volume<br>Latino callers<br>N 3m N per month<br>Pre 1169 390<br>Campaign 1842 614 | $237,187 (256,162).<br><br>The cost per additional quit among Latinos during the campaign period ranged from $1036 (based on 7-day abstinence) to $1882 (based on 6-month abstinence). | ($1,119) to $1,882 ($2,033)<br><br>$965 to $1,622 per QALYS*<br><br>Based on Solberg |
| Farrelly, Hussin & Bauer 2007<br><br>Regression Analysis | New York smokers' quitline behavior<br><br>NY; Jan 2005-Apr 2006 | Monthly media expenditures were matched to monthly call volume based on the counties in each broadcast/circulation area. Expenditures on all television and newspaper advertisements were included regardless of focus (for example, smoking cessation and the dangers of secondhand smoke) because all advertisements included the quitline telephone number. Radio expenditures were limited to advertisements for which promoting the quitline was the main objective. | Assume $2006; CPI=1.12<br><br>Elasticities suggest that dollar for dollar television expenditures generated more call volume than radio and newspaper expenditures (0.151 vs 0.037 and 0.022). However, effectiveness of television expenditures diminished as the expenditures increased<br><br>-Study compared the effect of a hypothetical increase of $1000 per medium. This comparison shows that a $1000 increase for television would lead to a 0.87% increase in mean expenditures. Multiplying this increase by the corresponding elasticities leads to a 0.1% | N/A | Mean monthly expenditure:<br><br>TV expenditures: $114,917 ($128,707)<br><br>Radio expenditures: $652 ($730)<br><br>Newspaper expenditures $777 ($870) |

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| | | | increase in call volume (0.1% = 0.87% 60.151). A $1000 increase for radio (153% increase) and print (129% increase) would lead to 5.7% (0.037 X 153%) and 2.8% (0.022 X 129%) increases in call volume, respectively. The $1000 increase in average monthly television, radio and print expenditures is expected to increase the average monthly number of calls from its current level by 3, 11 and 5 calls, respectively. | | |
| Fellows et al. 2007<br><br>Pre-Post | Oregon, Maine<br><br>-age 18 or older, have no health related contraindications and have a valid telephone number.<br><br>-Control n=1018<br><br>People who registered for quitline service during March–May 2004 | Oregon tobacco cessation quitline<br><br>In October 2004, TPEP initiated a strategy to increase the utilization and effectiveness of the Oregon tobacco cessation quitline, while reducing television and radio advertising to promote the quitline.<br><br>This review focuses on cost of pre-intervention (with media) | Self reported 30-day abstinence at 6 months<br><br>-assumed all eligible non-participants (excluding callers with invalid phone numbers) were treatment failures (intent to treat).<br><br>Pre-initiative period: 8.2% | -Program level perspective; $2004; CPI= 1.19<br><br>November 99 to March 2002: $2.7 million (2004 dollars) for TV and radio airtime (about $800 000 annually)<br><br>Quarterly talent fees: $1500 to $11 000 for TV ads and $1000 to $5000 for radio ads.<br><br>Most TV ads were tagged with the TPEP logo and the quitline toll-free phone number at $95 for each ad; estimated an annual cost of $1.4 million | $256/call |

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| | -Free patch initiative group<br><br>N=1574<br><br>Recruited a random sample of 1574 of the 6881 smokers who registered Oct–Dec 2004. | | | (2004 dollars) for annual airtime and production fees for quitline promotions during the preinitiative period.<br><br>-Annual cost of pre-initiative (media): 1,385,137 (1,648,313); intervention costs for counseling excluded: 584,948 (696,088)<br><br>1,648,313X 3.416= 5,631,736<br><br>1,648,313/6428= $256/call | |
| Mosbaek et al. 2007<br><br>Before-After<br><br>Average Cost | Oregon<br><br>Nov 98-March 2002 | Assessed the cost effectiveness of different advertising strategies in prompting tobacco users to call the Oregon tobacco quitline (OTQL).<br><br>Data collected on advertising buys and calls to the OTQL from November 1998, when the OTQL became operational, to March 2002.<br><br>For this study, the advertising costs included only the cost of the air time and not the costs of producing the advertisement or obtaining the rights to an advertisement; the costs for obtaining rights to these advertisements were small compared to media placement costs.<br><br>Ad buys were usually one or two weeks in | Assume $2002; CPI=1.25<br><br>27 daytime television buys; media placement costs ranged from $7000–$15 000 per week.<br><br>22 evening television buys; media placement costs ranged from $25 000–$35 000 per week.<br><br>31 radio buys: costs ranged from $20 000–$35 000 per week.<br><br>An accurate cost effectiveness comparison cannot be made between television and radio because identical ads cannot be | N/A | Cost/call ranges from $70- 1629 (TV ads) ($88-2,036);<br><br>$332-1053 (radio) (415-1,316) |

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| | | duration, starting on a Monday and ending on a Sunday. For any given television buy, advertisements were placed throughout the week, either exclusively in the daytime (5 am–4 pm) or in the evening (6:30 pm–1 am).<br><br>In assigning delayed callers to ad buys, it was assumed that 10% or 14% (for television and radio, respectively) of callers called the week after the ad stopped airing. | aired on radio and television. But, the most effective television advertisement had a cost per call of $70, while the cost per call for the most effective radio advertisement was $332. | | |
| Wilson et al. 2005<br><br>Interrupted time Series<br><br>Cost-Eff | New Zealand<br><br>Maori (indigenous population)<br><br>N = 2319 TVC (television campaign) placements<br><br>2002 and 2003 | Study examined the impact of 4 television advertising campaigns on calls to a national Quitline service by Maori (New Zealand's indigenous population).<br><br>The ''It's about whanau*'' (IAW) campaign was designed by Maori specifically for a Maori audience. It uses personal testimonials with themes that include the promotion of quitting and being smoke-free for health and to protect whanau (family).<br><br>''Every cigarette is doing you damage'' (EC) campaign uses ''threat appeal'' themes on the adverse health consequences of smoking and also themes on the promotion of quitting.<br><br>The ''World Smokefree Day'' (run in May 2003) and the ''Lets Clear the Air'' campaign (run for six months in 2003 both covered secondhand smoke (SHS) themes).<br><br>Two campaigns consistently used the Quitline number in all TVCs while the two SHS campaigns did not include the number and did not have Quitline calls as an | Intense 6 campaign months compared with previous 18 months.<br><br>Maori callers registered with the Quitline at a 15.2% greater rate (866 per month average versus 735 for total registrations).<br><br>Over 2 year time period, 15, 486 new Maori callers registered with the Quitline (21.3% of all new registrations, and an estimated 8.2% of all Maori adult smokers). | Assumed $2003, PPP=1.53 CPI= 1.22<br><br>Television advertising expenditure directed at Maori was estimated to be $NZ 304,560 (242,852)<br><br>The advertising cost per new registration by a Maori caller was estimated to be $30 to $48.<br><br>**C/E measure only evaluated 2 TV ad campaigns, ''It's about whanau*'' (IAW) campaign and ''Every cigarette is doing you damage'' (EC). | $30 to 48 ($24 to 38)/additional caller |

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| | | objective.<br><br>Some calls to the Quitline may be motivated by factors additional to the content of the TVCs—for example, access to the vouchers for heavily subsidized nicotine replacement therapy that are provided by the Quitline.*whanau means family | | | |

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