

Health Communication & Social Marketing: Health Communication Campaigns That Include Mass Media and Health-Related Product Distribution

Summary Evidence Tables

Child Safety Seat Use

Author & year (study period) Design suitability (design) Quality of execution (# of Limitations)	Intervention and comparison elements	Study population description Sample size	Outcome measure	Baseline value	Outcome value	Value used in summary	Follow-up time
Ebel, 2003 (2000-2001) Greatest (Group Non-Randomized Trial) Fair (2)	Campaign name: Slogan- "Is Your Child Ready for a Seat Belt? Think Again!" Campaign Yr: 2000- 2001 [15 mos] Location: 4 communities in greater Seattle , WA (intervention), 8 communities in Portland, OR and Spokane, WA (Comparison) Setting: Community Goal: To increase awareness and use of booster seats. Campaign Channels: [5] <ul style="list-style-type: none"> •Mass media (billboards, radio, TV ads, newspapers, magazines) •Small media (brochures, posters, handouts, newsletters, comic books/fotonovellas, direct mail, point-of-purchase materials, tip sheet, flyers) •Interpersonal (group education: provider education, education workshops at childcare facilities and schools; one-on-one education: hotline) •Social Media (booster seat fit test via website) •Community events (community health fairs) Distribution (discount coupons) Comparison Group: No Treatment	Target population: Parents with young children, ages 3 to 5 years. N = NR Intervention: n: 1318 Comparison: n: 2291 Combined demographic characteristics: Mean Age: 5.3 % Female: 48% Race/ethnicity and SES: NR	Booster seat use Measurement: Observation Observed use of booster seat <i>(adjusted for child age, driver seat belt use, and driver sex with model-based direct adjustment, using all observed children as the standard population)</i>	13.3% 13.3% (adjusted) (n=79/595)	25.7% 26.1% (adjusted) (n=181/705)	12.4 pct pts	15 mos
				17.3% 17.3% (adjusted) (n=207/1194)	20.1% 20.2% (adjusted) (n=214/1065)	2.8 pct pts	

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St Louis, 2008 (June 2005-Oct 2006) Greatest (Group Non-Randomized Trial) Fair (2)	Campaign name: NR Campaign Yr: 2005-2006 [15 mos] Location: Michigan Setting: Community Goal: To increase booster seat use among Hispanic parents and the low-income population. Study arm 1: Hispanic Campaign Channels: [4] <ul style="list-style-type: none"> •Mass media (newspaper articles in local Hispanic and general papers, two radio ad campaigns) •Small media (booster seat flyers in Spanish and English, video and banners) •Interpersonal (group education: booster seat workshops and fitting stations, and educational events at local churches with general community) •Community events (county fair) Distribution (free booster seats at a fitting station, vouchers) Comparison Group: No Treatment Study arm 2: Low Income Campaign Channels: [3] <ul style="list-style-type: none"> •Mass media (three radio PSAs, radio interviews, TV news broadcasts and newspaper coverage) •Small media (posters) •Interpersonal (group education: booster seat workshops and fitting stations, cook off) Distribution (free booster seats, vouchers) Comparison Group: No Treatment	Target population: Low income inner city residents N = NR Intervention: n: 352 Comparison: n: 365 Combined demographic characteristics: Race/Ethnicity: White: 67% Black: 20% Hispanic: 13% Other: 13% Age, % Female, SES: NR N = NR Intervention: n: 380 Comparison: n: 281 Combined demographic characteristics: Race/Ethnicity: White: 90% Black: 2% Hispanic: 13% Other: 9% Age, % Female, SES: NR	Booster seat use Measurement: Observation Study arm 1 Intervention Comparison Study arm 2 Intervention Comparison	9.7% (12.2,7.2) (n=16/165) 18.2% (20.9,15.5) (n=21/132) 19.0% (24.3,13.7) (n=33/174) 9.7% (15.4,4) (n=17/175)	14.9% (17,12.8) (n=32/215) 14.8% (16.5, 13.1) (n=22/149) 16.9% (20.5, 13.3) (n=30/178) 16.8% (18.9,14.7) (n=32/190)	Difference 5.2 pct pts -3.4 pct pts 8.6 pct pt increase in booster seat use 95% CI = 1.2 to 16.0 -2.1 pct pts 7.1 pct pts -9.2 pct pts 95% CI = -16.9 to -1.5 9.2 pct pt decrease in booster seat use	15 mos

Condom Use

Author & year (study period) Design suitability (design) Quality of execution (# of Limitations)	Intervention and comparison elements	Study population description Sample size	Outcome measure	Baseline value	Outcome value	Value used in summary	Follow-up time
<p>Alstead, 1999 (Mar 1995-Oct 1995) Least (Cross-Sectional) Fair (4)</p>	<p>Campaign name: The Condom Campaign Campaign Yr: Apr–May 1995 & Sept-Oct1995 [7mos] Location: King County, Washington: Reston, southeast Seattle, and West Seattle, United States Setting: Community and school Goal: To increase condom use among sexually active teenagers.</p> <p>Campaign Channels: [3]</p> <ul style="list-style-type: none"> •Mass media (billboards, bus signs, mural, radio spots) •Small media (posters) •Interpersonal communication (small group education) <p>Distribution (distributed free or low-cost condoms from bins and vending machines)</p>	<p>Target population: Sexually active teenagers.</p> <p>N = NR n: 1425 Age: 15: 34% 16: 35% 17: 31% % Female: 51% Race/Ethnicity: White (40%) Black (26%) Asian/Pacific Islander (18%) Other (16%) SES: NR</p>	<p>Condom use</p> <p>Measurement: Questionnaire (condoms at last intercourse)</p>	75.0% (n=743/1084)	<p>Exposed: 69% Unexposed: 68%</p> <p>Combined exposed/unexposed groups 68.5% (n=256/341)</p>	<p>Difference</p> <p>-6.5 pct pts 95% CI= -11.9 to -1.1 6.5 pct pt decrease in condom use</p>	7 mos
<p>Kegeles, 1999 (Dec 1996-Oct 1998) Greatest (Other design with concurrent comparison group) Fair (2)</p>	<p>Campaign name: The Mpowerment Project Campaign Yr: 1996 & 1998 [8 mos in each community] Location: Santa Barbara, CA and Eugene, OR Setting: Community Goal: To increase condom use among young, gay men.</p> <p>Campaign Channels: [4]</p> <ul style="list-style-type: none"> •Mass media (articles in the gay newspaper) •Small media (brochures, posters, handouts, safer sex materials, video) 	<p>Target population: Sexually active youth in Sacramento.</p> <p>N = NR</p> <p>Eugene, OR n: 137 Santa Barbara, CA n: 110 Mean Age: 23.2 % Female: 0% Race/Ethnicity: NR SES: NR Education: Students: 54% Median education: some</p>	<p>Condom use</p> <p>Measurement: Mail-back survey</p> <p>Any unprotected anal intercourse in the past 2 months (Eugene+SB)</p> <p>[Note: reverse for comparison purposes]</p>	<p>Combined cohorts Pre:38.8% (n=131/337)</p>	<p>Post: 30.9% n=191</p>	<p>Difference</p> <p>-7.4pct pts 95% CI = 15.8 to 1.0 7.4 pct pt decrease in unprotected anal intercourse in past 2</p>	8 mos

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Kegeles, 1999 cont'd	<ul style="list-style-type: none"> Interpersonal (group education: classroom-based lessons and workshops, discussion groups, role playing at group meetings; one-on-one: peer outreach at bars and other community locations) Community events (dance parties, open-house at young men's center; picnics, hikes, bicycle rides, performances) <p>Distribution (gift packages filled with an assortment of condoms and lubricants)</p>	<p>college</p> <p>Sexual Orientation: Gay (Self-identified): 86% Bisexual: 14%</p> <p>*The two communities were similar with respect to age, education and condom-use.</p>				<p>months</p> <p>OR a 7.4pct pt increase in condom use</p> <p>1 year follow-up: 35.2% (n=58/165)</p> <p>-3.6 pct pts 95% CI = -5.4 to 12.6 3.6 pct pt decrease in unprotected anal intercourse in the past 2 months OR a 3.6 pct pt increase in condom use</p>	
Kennedy, 2000 (Dec 1996-Oct 1998) Least (Cross-Sectional) Fair (2)	<p>Campaign name: Teens Stopping AIDS</p> <p>Campaign Yr: 1997-1998 [22 mos]</p> <p>Location: Sacramento, California, United States</p> <p>Setting: Community, School, Clinics</p> <p>Campaign Channels: [3]</p> <ul style="list-style-type: none"> Mass media (radio PSAs) Small media (posters) Interpersonal (group education: skill-building workshop, peer outreach; one-on-one: info hotline) <p>Distribution (Directed to a hotline to get free condoms)</p>	<p>Target population: Sexually active youth in Sacramento.</p> <p>N = NR n: 1,402</p> <p>Age range: 15-18</p> <p>% Female: 56%</p> <p>Race/Ethnicity: White (47%); Black (17%); Hispanic (23%); Other (13%)</p> <p>SES: NR</p>	<p>Condom use</p> <p>Measurement: Questionnaire (Condom use with main partner at last intercourse)</p>	68.6% (n=207/303)	72.9% (n=218/299)	<p>Difference</p> <p>4.3 pct pt increase in condom use 95% CI = -3.0 to 11.6</p>	22 mos

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<p>Martinez-Donate, 2009 (June 2006-April 2007) Least (Cross-Sectional) Fair (4)</p>	<p>Campaign name: Hombres Sanos Campaign Yr: 2006-2006 [6 mos] Location: North San Diego County, CA Setting: Community, Clinic Goal: To increase condom use among Heterosexually identified Latino men, but specifically men who have sex with men and women.</p> <p>Campaign Channels: [3]</p> <ul style="list-style-type: none"> • Mass media (mobile ads placed on local buses and clinic vans; radio-based ads) • Small media (posters, brochures, comic books) • Interpersonal (one-on-one: comprehensive male health exam offered on a sliding-fee scale, group education: promotional activities at local clubs) <p>Distribution (free condoms)</p>	<p>Target population: Heterosexual Latino men who have sex with men and women.</p> <p>N = NR n: 1,137 Median age: 28.1 % Female: 0% Race/Ethnicity: Hispanic: 100% Education: < HS 71.7% HS Completion 28.3% SES: NR</p>	<p>Condom use</p> <p>Measurement Questionnaire</p> <p><i>(Unprotected vaginal or anal sex with female during the last 60 days)</i></p> <p>Exposed</p> <p>Unexposed</p>		<p>51.7%</p> <p>38.8%</p> <p>(combined data from 4 collection periods)</p>	<p>Difference</p> <p>12.9 pct pt increase in condom use 95% CI = 4.7 to 21.0</p>	6 mos
<p>O'Leary, 1996 (NR) Greatest (Group Non-Randomized Trial) Fair (3)</p>	<p>Campaign name: NR Campaign Yr: NR Location: New Jersey, United States Setting: School Goal: To increase condom-use for both vaginal and anal sex among first-year undergraduate students.</p> <p>Campaign Channels: [4]</p> <ul style="list-style-type: none"> • Mass media (campus radio talk on HIV/STDs, campus newspaper with risk reduction messages) • Small media (Video, cards with messages in the residence hall cafeteria; posters with photos of 	<p>Target population: First year college students</p> <p>N = NR</p> <p>Intervention: n: 205 % Female: 69.3% Race/Ethnicity: Asian/PI: 18.5% Black/AA: 17.6 % His/Lat: 16.1% White: 42.0% Other: 4.9% Age, SES, education, employment: NR</p>	<p>Condom Use</p> <p>Measurement: Questionnaire <i>(Number of days in the past 60 days had vaginal or anal sex without a condom (or both). Square root transformation)</i> Intervention: Males Comparison: Males</p> <p>Intervention: Females Comparison:</p>		<p>M SD</p> <p>0.78 0.16 1.36 0.20</p> <p>1.15 0.11</p>	<p>Difference</p>	NR

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O'Leary, 1996 cont'd	<p>prominent campus figures with safer sex messages; info brochures & seasonal items at Christmas, Valentine's Day and spring break.)</p> <ul style="list-style-type: none"> Interpersonal (group education: 9 presentations in undergrad dorms; formal presentations "Hot, Sexy and Safer") Community events (35 exhibits at student center and at the on-campus Pub, Project AIDS Memorial quilt panels in student center and "women with AIDS" photography show) <p>Distribution (1st years given safer sex kits with condoms; 6,000 condoms distributed)</p> <p>Comparison Group:</p> <ul style="list-style-type: none"> Single classroom lecture Condoms available on campus 	<p>Comparison: n: 97 % Female: 59.8% Race/Ethnicity: Asian/PI: 6.2% Black/AA: 34.0% His/Lat: 7.2% White: 48.5% Other: 3.1% Age, SES, education, employment: NR</p>	Females		0.91 0.17	<p>Treatment group (F(5,254)=1.01, p >0.41). Gender was significant (F(5,254)=3.59, p<0.004). Treatment by gender interaction (F(1,295)=6.45, p <0.02). (not included in overall analysis because results are not calculated as median percentage point changes)</p>	
Ross, 2004 (1988-2000) Greatest (Group Non-Randomized Trial) Fair (3)	<p>Campaign name: NR Campaign Yr: 2002-2003 [24 mos] Location: Houston, Texas, United States Setting: Community Goal: To increase knowledge about syphilis, screening, treatment and condom use.</p> <p>Campaign Channels: [3]</p> <ul style="list-style-type: none"> Mass media (Billboards) Small media (posters, videos and brochures) Interpersonal (one-on-one education: Syphilis and HIV testing) <p>Distribution (condoms and lubricant packages)</p>	<p>Target population: African Americans adults N = NR</p> <p>Intervention: n: 808 Pre-Campaign % Female: 43% Race/Ethnicity: White: 8% Black: 85% No Response: 7% Post-Campaign % Female: 32% Race/Ethnicity: White: 0% Black : 97% No Response: 3% SES: Targeted low income zip codes</p>	<p>Condom use</p> <p>Measurement: Questionnaire (Proportion of times used condoms in the last four weeks among those reporting sexual activity)</p>	<p>Intervention (n=419/422) .36</p> <p>Comparison (n=389/400) .37</p>		<p>Difference</p> <p>.11 pct pt increase in condom use 95% CI = 0.048</p>	24 mos

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Ross, 2004 cont'd	<p>Comparison Group:</p> <p>Condoms distributed at 10 business using a different project name and logo.</p>	<p>Age: NR</p> <p>Comparison: n: 822</p> <p>Pre-Campaign % Female: 44%</p> <p>Race/Ethnicity: White 4% Black 91% No Response 5%</p> <p>Post-Campaign % Female 40%</p> <p>Race/Ethnicity: White 0% Black 89% No Response 6%</p> <p>SES: Targeted low income zip codes</p> <p>Age: NR</p>				to 0.176	

Over-the-Counter Nicotine Replacement Therapy

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<p>Bauer, 2006 (July-August 2003) Least (Before-After) Fair (3)</p>	<p>Campaign name: NR, New York State Smoker's QuitLine Campaign Campaign Yr: July-August 2003 [1 mon] Location: Erie and Niagara counties, NY Setting: Community Goal: To increase smoking cessation rates.</p> <p>Campaign Channels: [2] <ul style="list-style-type: none"> •Mass media (<i>Art Voice</i> magazine) •Interpersonal (group education: press announcement; one-on-one: Quitline) </p> <p>Distribution (voucher for a free 2 week supply of nicotine patches or gum [NRT])</p> <p>Comparison Group: No Treatment</p>	<p>Target population: Smokers 18 and over who were daily smokers of 10 or more cigarettes per day</p> <p>N= NR n: NR Age: 18 and over % Female: NR Race/Ethnicity: NR SES: NR</p>	<p>Smoking Cessation</p> <p>Call volume Measurement: NR</p> <p>Quit rates Measurement: Questionnaire</p>	<p>NR</p> <p>12% (n=62/515)</p>	<p>NR</p> <p>22% (n=160/732)</p>	<p>25-fold increase in median number of quitline calls (not included in analysis because did not measure product use; used as additional support)</p> <p>10 pct pt increase in quit rates 95% CI = 5.9 to 14.1</p>	4-6 ms

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<p>Burns, 2007 (September-December 2007) Greatest (Other designs with concurrent comparison group) Fair (3)</p>	<p>Campaign name: NR Campaign Yr: September-December 2007 [4 mos] Location: Colorado; Metropolitan Denver; Colorado Springs–Pueblo; and Fort Collins–Greeley Setting: Community Goal: To increase smoking cessation rates.</p> <p>Campaign Channels: [2] •Mass media (Radio and Television) •Interpersonal (QuitLine: one-on-one hotline counseling.)</p> <p>Distribution (free 4 and 8 week supply of nicotine patches)</p>	<p>Target population: Latino smokers, 18 years of age and older.</p> <p>N= NR</p> <p>Intervention (Latino):</p> <p>(Pre-campaign) n: Age: 18-44: 53.2% ≥45: 46.8% % Female: 59.5% Race/Ethnicity: White: n/a African American: n/a Latino: 100% Other: n/a SES: Less than high school: 22.2% High school or GED: 35.7% More than high school: 42.1% Uninsured: 40.5%</p> <p>(Campaign) n: Age: 18-44: 65.8% ≥45: 34.2% % Female: 50.4% Race/Ethnicity: White: n/a African American: n/a Latino: 100% Other: n/a SES: Less than high school: 42.2% High school or GED: 38.1%</p>	<p>Smoking Cessation</p> <p>Measurement</p> <p>Quit Rates</p> <p>6 month Cessation</p>	<p><i>Latino</i> Pre-campaign 9.6% n= 12/126 quit</p> <p><i>Non-Latino</i> 16.5% n= 55/334 quit</p>	<p><i>Campaign</i> 18.8% n= 22/117 quit</p> <p>8.8% n= 17/193 quit</p>	<p>Difference</p> <p>9.2 pct pts</p> <p>-7.7 pct pts</p> <p>16.9 pct pt increase in smoking cessation 95% CI = 8.8 to 25.0</p>	6 mos
			<p>QuitLine Call Volume</p> <p><i>Latino</i> 390 calls per month (1169 total calls)</p> <p><i>Non-Latino</i> NR</p>	<p><i>PreCampaign</i></p> <p><i>Campaign</i> 614 calls per month (1842 total calls)</p> <p>NR</p>	<p>57.6 pct pt increase in quitline call volume (not included in analysis because did not measure product use; used as additional support)</p>		

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Burns, 2007cont'd		<p>More than high school: 19.5% Uninsured: 56%</p> <p>Comparison (Non-Latino): (Pre-campaign) n: Age: 18-44: 53.9% ≥45: 46.1% % Female: 50% Race/Ethnicity: White: 82.3% African American: 9.9% Latino: n/a Other: 7.8% SES: Less than high school: 10.9% High school or GED: 33.8% More than high school: 55.3% Uninsured: 32.2%</p> <p>(Campaign) n: Age: 18-44: 64.8% ≥45: 35.2% % Female: 58.6 Race/Ethnicity: White: 90.2% African American: 6.2% Latino: n/a Other: 3.6% SES: Less than high school: 10.1% High school or GED: 30.7% More than high school: 59.3% Uninsured: 32.2%</p>					

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<p>Tinkelman, 2007 (September 2005- April 2006) Greatest (Other designs with concurrent comparison group) Fair (4)</p>	<p>Campaign name: NR, Ohio QuitLine Campaign Campaign Yr: September 2005- April 2006 [8 mos] Location: Ohio Setting: Community Goal: To increase smoking cessation rates.</p> <p>Campaign Channels: [2] <ul style="list-style-type: none"> •Mass media (a \$3 million statewide marketing and public relations campaign) •Interpersonal (QuitLine: one-on-one hotline counseling.) </p> <p>Distribution (free 4 week supply of nicotine patches offered, with an additional 4 week supply if participant remained in the program)</p> <p>Comparison Group: No Treatment</p>	<p>Target population: Smokers 18 and over who were daily smokers of 10 or more cigarettes per day</p> <p>N= NR</p> <p>Pre sample Intervention: n: 18,070 Median Age: 35 % Female: 59.7% Race/Ethnicity: White: 73.4% African American: 23.1% Latino: .9% Other: 2.5% SES: NR</p> <p>Post sample Intervention: n: 27,944 Median Age: 35 % Female: 57.9 Race/Ethnicity: White: 84.8% African American: 12.1% Latino: .4% Other: 2.7% SES: NR</p>	<p>Smoking Cessation</p> <p>Quitline Call volume</p> <p>Smoking Quit Rates</p> <p>Measurement: telephone questionnaire</p> <p><i>Counseling participants receiving and not receiving NRT</i></p>	<p>2351 call intake (monthly)</p> <p>13.5% (n=795/5890 quit)</p>	<p>3606 call intake (monthly)</p> <p>16.6% (n=1848/11,136)</p>	<p>Difference</p> <p>1.5 - fold increase in quitLine call volume (not included in analysis because did not measure product use; used as additional support)</p> <p>3.1 pct pt increase in smoking quit rates 95% CI = 2.0 to 4.2</p>	8 ms

Pedometer Use

Author & year (study period) Design suitability (design) Quality of execution (# of Limitations)	Intervention and comparison elements	Study population description Sample size	Outcome measure	Baseline value	Outcome value	Value used in summary	Follow- up time		
<p>Brown, 2006 (Aug 2001 – Sept 2003) Greatest (Group Non-Randomized Trial) Good (1)</p>	<p>Campaign name: 10,000 Steps Rockhampton Campaign Yr: 2002- 2003 [23 mos] Location: Rockhampton and Mackay, Queensland, Australia Setting: Community, Clinic Goal: To increase physical activity.</p> <p>Campaign Channels: [4]</p> <ul style="list-style-type: none"> •Mass media (TV, radio) •Small media (newsletters, posters, brochures) •Interpersonal (general practitioners were provided a brief training in PA counseling) •Social media (website) <p>Other (Worked "with the city council to improve the local environment, by creating or repairing key footpaths, erecting "10,000 Steps" signs, and distributing maps to encourage walking in local communities; worked with the local council to promote responsible dog walking using local newspaper and direct mail to registered dog owners)</p> <p>Distribution (free pedometers)</p> <p>Comparison Group: No Treatment</p>	<p>Target population: Adults living in Rockhampton and Mackay.</p> <p>N = NR</p> <p>Intervention: n: 2522</p> <p style="text-align: center;">Pre- Post-</p> <p>Age:</p> <p>18-29: 23.4% 22.7% 30-44: 30.5% 33.2% 45-59: 20.3% 26% ≥ 60: 25.8% 18.1%</p> <p>% Female: 53.9% 52%</p> <p>Race/ethnicity and SES: NR</p> <p>Comparison: n: 2295</p> <p style="text-align: center;">Pre Post-</p> <p>Age:</p> <p>18-29: 19.5% 16.7% 30-44: 36.4% 36.9% 45-59: 21.0% 26.1% ≥ 60: 23.1% 20.3%</p> <p>% Female: 53% 50.2%</p> <p>Race/ethnicity and SES: NR</p>	<p>Time spent walking</p> <p>Measurement: Questionnaire (<i>Time spent walking, moderate and vigorous activity during the last week</i>).</p> <p style="text-align: center;">Intervention</p> <p style="text-align: center;">Comparison</p>	41.9%	42.8%	48.3%	41.9%	Difference	23 ms
						7.3 pct pt increase in time spent walking (not included in analysis because did not measure product use; used as additional support)			

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<p>De Cocker, 2007 (Mar 2005-May 2006) Greatest (Group Non-Randomized Trial) Good (1)</p>	<p>Campaign name: 10,000 Steps Ghent, Every Step Counts Campaign Yr: Mar 2005-May 2006 [14 mos] Location: Ghent, Belgium Setting: Community, school, Workplace, and Clinic Goal: To increase physical activity in Belgium to 10,000 steps per day. Campaign Channels: [6] •Mass media (6 conferences, local newspapers, full page advert in community magazine, 20 billboards) •Small media (booklet, step count log, flyers and posters) •Interpersonal (group education: clubs and services for older people instructed on PA promotion) •Community events (walk event in local town park)</p> <p>Other (walking circuits with street signs indicating # of steps for ea circuit)</p> <p>Distribution (sports services coordinated a pedometer loan system of 15 kits through schools, companies, and community groups; pedometer and booklet were sold for \$26 by local government info store, by Ghent sport services dept, pharmacies, and local divisions of health insurance companies)</p> <p>Comparison Group: No Treatment</p>	<p>Target population: Adult residents living in Ghent</p> <p>N = NR</p> <p>Intervention: n: 1088</p> <p>Pre- Post-</p> <p>Age: 25-35: 21.6% 16.1% 36-45: 20.5% 22.0% 46-55: 22.8% 25.2% 56-65: 19.8% 22.5% 66-75: 15.3% 14.1%</p> <p>% Female: 52.8% 52.5%</p> <p>Race/Ethnicity and SES: NR</p> <p>Comparison: n: 1018</p> <p>Pre- Post-</p> <p>Age: 25-35: 18.9% 14.8% 36-45: 23.0% 21.1% 46-55: 23.5% 26.8% 56-65: 20.3% 21.6% 66-75: 14.4% 15.7%</p> <p>% Female 49.5% 47.4%</p> <p>Race/Ethnicity and SES: NR</p>	<p>Steps per day</p> <p>Measurement: Data from pedometer</p> <p>Intervention</p> <p>Comparison</p>	<p>9596 (CI: 5,340 to 13,852)</p> <p>9,669 (CI: 5588 to 13,750)</p>	<p>10,491 (CI: 6,185 to 14,797)</p> <p>9,534 (CI: 5556 to 13,515)</p>	<p>Difference</p> <p>1030 steps (not included in analysis because did not measure product use; used as additional support)</p>	<p>14 mos</p>

Recreational Safety Helmet Use

Author & year (study period) Design suitability (design) Quality of execution (# of Limitations)	Intervention and comparison elements	Study population description Sample size	Outcome measure	Baseline value	Outcome value	Value used in summary	Follow-up time
<p>DiGuseppi, 1989 (1986 – 1988) Greatest (Group Non-Randomized Trial) Good (1)</p>	<p>Campaign name: No name Campaign Yr: 1987-1988 [16 mos] Location: Seattle, Washington (intervention); Portland, Oregon (comparison), United States Setting: Community and school Goal: To increase parental awareness, <u>use of helmets by children</u> and to reduce financial barriers.</p> <p>Campaign Channels: [3] •Mass media (19 T.V. PSAs on 3 local TV channels shown 50 times per quarter and during Mariners games,30 articles, radio) •Small media (50,000 info pamphlets for providers, 6,500 mailings, posters with freestyle cyclists at schools) •Interpersonal (group education: bicycle safety program in Seattle public elementary schools, presentation to PTA; one-on-one: youth group leaders, 2 press conferences)</p> <p>Other (incentives provided to children wearing helmets at bike events: 2000 free McDonald's coupons, 564 free Mariners tickets)</p> <p>Distribution (free and discount coupons lowering cost to \$25 (100,000))</p> <p>Comparison Components: No Treatment</p>	<p>Target population: School children ages 5 to 15 years</p> <p>N = NR</p> <p>Intervention: n: 4940</p> <p>Race/Ethnicity: White: 76% Black: 14% Other: 10%</p> <p>SES: Low: 28.1% Middle: 40.0% High: 31.9%</p> <p>Age and % female: NR</p> <p>Comparison: n: 4887 Age, % female, race/ethnicity: NR</p>	<p>Observed helmet use</p> <p>Measurement: Observation by trained researchers</p>	Adj %		Difference	16 mos
				Intervention	May 1987 4.6 (n=42/905)	Sept 1987 6.5 (n=1213)	9.4 pct pts
				Comparison	1.0 (n=11/1052)	1.7 (n=1331)	
				Intervention		May 1988 10.8 (n=1259)	2.6 pct pts
				Comparison		2.3 (n=1188)	
				Intervention		Sept 1988 14.0 (n=219/1563)	6.8 pct pt increase in helmet use 95% CI= 4.8 to 8.8
Comparison		3.6 (n=47/1316)					
Note: not reported by condition.							

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<p>Levy, 2007 (1998-2002) Least (Cross-Sectional) Fair (3)</p>	<p>Campaign name: It Ain't Brain Surgery Campaign Yr: 1998-2002 [36 mos] Location: Colorado, United States Setting: Community (ski resort) Goal: To increase helmet use among skiers, snowboarders and snow patrollers.</p> <p>Campaign Channels: [3] •Mass media (T.V., newspaper, magazine) •Small media (posters, brochures) •Interpersonal (group-education: ski patrol refresher course)</p> <p>Distribution (free helmet loaner program; free helmets for ski patrollers)</p>	<p>Target population: Skiers and snow boarders</p> <p>N: NR n: NR Age, % Female, race/ethnicity and SES: NR</p>	<p>Helmet use</p> <p>Measurement: Observation</p>	<p>Skiers/ Snowboarders</p> <p>1998-1999</p> <p>15.95 (n=247/1547)</p>	<p>Skiers/ Snowboarders</p> <p>1999-2000 23.85</p> <p>Skiers/ Snowboarders</p> <p>2000-2001 29.1</p> <p>Skiers/ Snowboarders</p> <p>2001-2002 33.25 (n=1449/4358)</p>	<p>Difference</p> <p>17.3 pct pt increase in helmet use 95% CI= 15.0 to 19.6</p>	<p>36ms</p>

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<p>Morris, 1994 (1990-1991) Least (Cross-Sectional) Fair (3)</p>	<p>Campaign name: NR Campaign Yr: 1990-1991 [18 mos] Location: Barrie, Ontario Setting: Community, school and clinics Goal: To increase helmet use.</p> <p>Campaign Channels: [4]</p> <ul style="list-style-type: none"> • Mass media (T.V, radio, newspaper ads and columns, transit ads) • Small media (posters, pamphlets, newsletter) • Interpersonal (group education: police officers taught bicycle safety module; drama troupe, theater production) • Community events (bicycle rodeos) <p>Other (peer modeling, legislative action)</p> <p>Distribution (coupons for discounted helmets)</p>	<p>Target population: Residents of Barrie, Ontario.</p> <p>Number eligible to participate: 26 schools and colleges</p> <p>N = 20 elementary schools 4 secondary schools 2 community colleges</p> <p>n: 5 elementary schools, 3 secondary schools, 2 community colleges, 851 individuals</p> <p>% Female: NR</p> <table> <tr> <td>Observed</td> <td>Boys</td> <td>Girls</td> </tr> <tr> <td>May 1990:</td> <td>190</td> <td>70</td> </tr> <tr> <td>Oct 199:</td> <td>164</td> <td>43</td> </tr> <tr> <td>May 1991:</td> <td>172</td> <td>63</td> </tr> <tr> <td>Oct 1991:</td> <td>128</td> <td>21</td> </tr> <tr> <td>Total:</td> <td>654</td> <td>197</td> </tr> </table> <p>Age, race/ethnicity and SES: NR</p>	Observed	Boys	Girls	May 1990:	190	70	Oct 199:	164	43	May 1991:	172	63	Oct 1991:	128	21	Total:	654	197	<p>Helmet use</p> <p>Measurement: Observation</p>	<p>May 1990 4.6% (n = 260)</p>	<p>October 1990 6.3% (n = 207)</p> <p>May 1991 17.0% (n = 235)</p> <p>October 1991 12.8% (n = 148)</p>	<p>Difference</p> <p>8.2 pct pt increase in helmet use CI 95% = 2.2 to 14.1</p>	<p>18 mos</p>
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Pendergrast, 1992 (1990-1991) Least (Cross-Sectional) Fair (3)	<p>Campaign name: NR Campaign Yr: 1990-1991 [10 mos] Location: August, GA, United States Setting: School Goal: To increase helmet use among students in grades 2, 3 and 4 and their parents.</p> <p>Study Arm 1: Intensive Intervention Campaign Channels: [3]</p> <ul style="list-style-type: none"> •Mass media (magazine for children and parents) •Small media (mailings to parents, pamphlets, posters) •Interpersonal (group education: demonstration by stunt rider, school bicycle events, meetings with PTA/ PTA presentation, school bike club, safety clinics) <p>Distribution (\$10 discount coupon for purchase of a Bell helmet)</p> <p>Study Arm 2: Low intensity Campaign Channels: [2] Channels:</p> <ul style="list-style-type: none"> •Mass media (magazine for children and parents) •Small media (mailings, brochures) <p>Distribution (\$10 discount coupon for helmets)</p>	<p>Target population: Elementary school students</p> <p>Study Arm 1 N: NR n: 650 Age: Children: 51% Adults: 40% % Female: 60% Race/ethnicity and SES: NR</p> <p>Study Arm 2 N= NR n:1561 Age: Children: 55% Adults: 45% % Female: 64% Race/ethnicity and SES: NR</p>	<p>Helmet Use</p> <p>Measurement: Questionnaire (Wore helmet at last ride)</p>	<p>Study arm 1 7.4% (n=15/209)</p> <p>Study arm 2 6.5% (n=31/470)</p>	<p>Study arm 1 4.4% (n=8/184)</p> <p>Study arm 2 7.2% (n=28/391)</p>	<p>Difference</p> <p>-3.0 pct pts CI 95% = -7.6 to 1.6 CI 95% = -7.6 to 1.6 3.0 pct pt decrease in helmet use</p> <p>0.7 pct pt increase in helmet use CI 95% = -2.7 to 4.1</p>	10 mos

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<p>Ressler, 1998 (1993-1994) Least (Cross-Sectional) Fair (4)</p>	<p>Campaign name: Kasdah B'Rosh Tov Campaign Yr: 1993-1994 [18 mos] Location: Israel Setting: Community Goal: To increase awareness about helmets and to increase use among parents and children.</p> <p>Campaign Channels: [4]</p> <ul style="list-style-type: none"> • Mass media (magazine for children and parents, new video clip taped for TV and cinema advertising, TV watermelon spots, radio, billboards, bus stop advertisement) • Small media (brochures, reminder letters to purchase helmet, posters featuring the words of the campaign song were distributed to schools and helmet retail outlets) • Interpersonal (group education: helmet clinics and demonstrations, press conference) • Community events (stage fashion shows, family bicycle trips, bicycle rodeos,) <p>Distribution (\$10 discount coupon for helmets; helmets as prizes)</p>	<p>Target population: Children 10 years and younger</p> <p>N= NR n: 4,321 n: 226 Age, % Female, race/ethnicity and SES: NR</p>	<p>Helmet use</p> <p>Measurement: Observation</p> <p>Subsample</p>	<p>1993 7.0% (n=16/226)</p>	<p>1994 22.0% (n=20/90)</p>	<p>Difference</p> <p>15.0 pct pt increase in helmet use CI 95% = 5.8 to 24.2</p>	<p>18 mos</p>

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<p>Rouzier 1995 (1992-1993) Least (Cross-Sectional) Fair (2)</p>	<p>Campaign name: NR Campaign Yr: 1992-1993 [24 mos] Location: Grand Junction, Colorado, United States Setting: Community, school and clinic Goal: To promote helmet use and bicycle safety. Campaign Channels: [4] <ul style="list-style-type: none"> • Mass media (T.V. and newspaper) • Small media (posters in physician's offices and police department) • Interpersonal (group education: bike helmet curriculum, "egg head smash" demonstration) • Community events (Bike rodeos) Other ("citations" redeemable for goodie, given to riders with helmets as incentive for positive behavior—redeemable for a milkshake at a local fast food restaurant) Distribution (Discount coupons)</p>	<p>Target population: 8,600 elementary school students N: NR n: 508 Age: 5 -13: 193 14- 21: 139 > 22: 176 % Female, race/ethnicity and SES: NR</p>	<p>Helmet use Measurement: Observation</p>	<p>1992 8.9% (n=17/191)</p>	<p>1993 20.9% (n=37/177) 1994 37.1% (n=52/140)</p>	<p>Difference 12 pct pts 28.2 pct pt increase in helmet use 95% CI = 19.2 to 37.2</p>	<p>24 mos</p>

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<p>Smith, 1991 (1990) Least (Cross-Sectional) Fair (3)</p>	<p>Campaign name: Michigan Bicycle Helmet campaign Campaign Yr: 1990 [1 mo] Location: Oakland County, Michigan, United States Setting: Community and school Goal: To increase bicycle use among junior high and middle school students.</p> <p>Study Arm 1 High Intensity Intervention</p> <p>Campaign Channels: [3]</p> <ul style="list-style-type: none"> • Mass media (T.V. PSAs) • Small Media (brochures for students and parents, poster of a sports figure) • Interpersonal (group education: assembly featuring professional sports star; one-on-one education: hotline, curriculum guide) <p>Distribution (free helmet giveaway and discount coupons)</p> <p>Study Arm 2 Low Intensity Intervention</p> <p>Campaign Channels: [3]</p> <ul style="list-style-type: none"> • Mass media (T.V. PSAs) • Small Media (brochures for students and parents) • Interpersonal (one-on-one: hotline, curriculum guide) <p>Distribution (discount coupon giveaway)</p>	<p>Target population: Junior high and high school children 10 to 14 years of age</p> <p>N = 3,100 n: 1228 Age, % Female, race/ethnicity and SES: NR</p> <p>N: NR n: NR Age, % Female, race/ethnicity and SES: NR</p>	<p>Helmet use</p> <p>Measurement: Questionnaire (parent report of child wearing a bicycle helmet at least 50% of the time)</p> <p>Study arm 1</p> <p>Study arm 2</p>	<p>2.5%</p> <p>2.0%</p>	<p>11.0%</p> <p>4.5%</p>	<p>Difference</p> <p>8.5 pct pt increase in helmet use</p> <p>2.5 pct pt increase in helmet use</p>	<p>1 mos</p>

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<p>Wood, 1988 (1983-1987) Least (Cross-Sectional) Fair (4)</p>	<p>Campaign name: NR Campaign Yr: 1984-1985 [24 mos] Location: Victoria, Australia Setting: Community, school and clinic Goal: To increase helmet use among elementary school age children.</p> <p>Campaign Channels: [3]</p> <ul style="list-style-type: none"> • Mass media (T.V., radio, series of newspaper articles and radio commercials were rescheduled in pre Xmas period; TV commercial featuring Aust Olympic Games Cycling Gold Medalist Dean Woods) • Small media (group education: point-of-purchase sale materials to retailers, pamphlets, 7,000 posters to doctors, display at Royal Melbourne show, informational hand-out) • Community (Royal Melbourne Show featured bicycle helmet safety) <p>Other (compulsory helmet wearing to and from school)</p> <p>Distribution (helmet rebate scheme in schools: reduce cost helmets, vouchers)</p>	<p>Target population: Mothers of elementary school age children in Victoria</p> <p>N= NR n: 4,024 Age: NR % Female: NR Race/Ethnicity: NR SES: NR</p>	<p>Helmet use</p> <p>Measurement: Questionnaire</p>	<p>1983 2.4% (n=60/2455)</p>	<p>1984 9.2% (n=126/1368)</p> <p>1985 24.4% (n=311/1277)</p>	<p>Difference</p> <p>22 pct pt increase in helmet use 95% CI = 19.6 to 22.4</p>	<p>24 mos</p>

Sun Protection Products

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<p>Roberts, 2009 (NR) Greatest (Group Non-Randomized Trial) Fair (3)</p>	<p>Campaign name: Definitely a 15! Campaign Yr: NR Location: Illinois, United States Setting: School (college campus) Goal: To increase sun protective behaviors among college students.</p> <p>Campaign Channels: [3]</p> <ul style="list-style-type: none"> •Mass media (student newspaper: brief educational messages about sun exposure and skin cancer advertised around campus.) •Small media (ACS-produced info video, free posters, and educational brochures/tip sheets) •Interpersonal (group education: Informational booths in the student union and outside large lecture halls were present for 5 days) <p>Distribution (free sunscreen samples)</p> <p>Comparison Groups: No treatment</p>	<p>Target population: College students traveling to sunny environs <35 degrees latitude</p> <p>N= NR</p> <p>Intervention: n: 61 Age: 21.2% % Female: 77.4% Race/Ethnicity: White: 100% SES: NR</p> <p>Comparison: n: 51 Age Mean: 20.4 % Female: 70.4% Race/Ethnicity: White: 100% SES: NR</p>	<p>Sunscreen use Sun protective behavior</p> <p>Measurement: Diary</p> <p><i>Sunscreen (SP 15) use (days)</i> Intervention Comparison</p>		<p>Mean days 1.8 1.4</p>	<p>Difference</p> <p>0.4 days (not included in analysis because did not measure product use; used as additional support)</p>	<p>NR</p>