

Reducing Alcohol-impaired Driving: Designated Driver Promotion Programs

Summary Evidence Table

Author, Year Study design: Quality Evaluation setting	Intervention details: Incentive/publicity used Evaluation method Time/duration of intervention	Outcomes & Results	Change in mean number of designated drivers/night (p value)
Simons-Morton, 1997 Before-and-after: Least Houston drinking establishment	Promotion and/or incentive levels increased over time: <ul style="list-style-type: none"> • Weeks 1–2: Servers wore buttons publicizing availability of free soft drinks for designated driver • Weeks 3–4: servers also announced the promotion at each table • Weeks 5–6: free appetizers added to the incentives and promotional napkins added Intervention lasted 6 weeks with 3 observations during the baseline and each of the 3 phases	Percentage of patrons drinking non-alcoholic beverages (presumed to be designated drivers) decreased from 10.8% (5.7 designated drivers per night) at baseline to an average of 8.4% (4.7 designated drivers per night) across the 3 intervention conditions (not significant) Results for specific intervention conditions were not provided	–1.0 driver (ns)

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Brigham et al., 1995 Interrupted time series with multiple baselines: Moderate College bar in unspecified location	Existing designated driver program was modified to improve the quality of non-alcoholic drinks provided free to designated drivers. Program promoted using posters & table placards Observation of self-identified designated drivers to ensure that they abstained from alcohol and drove their parties from the establishment Duration and time of intervention periods not specified. Intervention withdrawn for 6 weeks to establish a second baseline prior to renewing program	The median number of observed designated drivers was 3 for each baseline period; increased to 7.5 for 1st and 7.0 for 2nd intervention periods Number and demographics of patrons did not change across intervention and baseline conditions All self-identified designated drivers remained abstinent from alcohol, and 173 of the 175 (98.9%) were observed to drive their parties from the establishment	4.3 drivers (not reported)
Meier et al., 1998 (Experiment 1) Before-and-after: Least Bars in 2 university communities in the western United States	Designated driver program offered improved free incentives—non-alcoholic drinks, food, & discount beer coupons—to self-identified designated drivers presenting a newspaper ad to their server. Program promoted with large ads in college newspapers Observation of self-identified designated drivers to ensure that they abstained from alcohol and drove their parties from the establishment Baseline and intervention sessions each conducted for 3 weeks over 9 evenings on Wednesdays, Fridays, & Saturdays from 9PM–12AM	The mean number of observed designated drivers increased significantly for Bar 2: (baseline mean = 1.0; intervention mean = 4.22; $p < .001$), but not for Bar 1: (baseline mean = 2.22; intervention mean = 3.0; $p = .35$) All but five self-identified designated drivers (5.1%) were observed to drive their parties from the establishment	<u>Bar 1:</u> 0.8 drivers ($p = .35$) <u>Bar 2:</u> 3.2 drivers ($p < .001$)

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Meier et al., 1998 (Experiment 2) Before-and-after: Least 2 drinking establishments in a western US city (pop. ~400,000)	Established same program as Experiment 1. Promoted with large ads in the sports section of the city's major newspaper Observation of self-identified designated drivers to ensure that they abstained from alcohol and drove their parties from the establishment Baseline and intervention sessions each conducted for 12 sessions over 4 weeks	The mean number of observed designated drivers increased significantly for Bar 1: (baseline mean = .667; intervention mean = 1.583; $p < .01$), but not for Bar 2: (baseline mean = 6.33; intervention mean = 6.583; $p = .68$) A spot check of Bar 2 revealed that few individuals had seen the advertisement	<u>Bar 1:</u> 0.9 drivers ($p < .01$) <u>Bar 2:</u> 0.3 drivers ($p = .68$)
Meier et al., 1998 (Experiment 3) Interrupted time series with multiple baselines: Moderate Bar 1 from Meier '98 Experiment 2	Established same program as Experiment 1. Promoted with cable TV ads on youth-oriented channels Observation of self-identified designated drivers by wait staff. Reliability checks performed by research staff Baseline, intervention, and 2nd baseline sessions each conducted for 3 weeks	The mean number of observed designated drivers was .333, $n = 3.0$ for both baseline periods and 4.11, $n = 37$ for the intervention period ($p < .001$) During the intervention period the sales of non-alcoholic beers rose by 350%	3.8 drivers ($p < .001$)

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Boots, 1994 Before-and-after: Least 3 large nightclubs in 2 Melbourne, Australia suburbs	Free entry and soft drinks provided to all drivers with 2 or more passengers (regardless of alcohol consumption). Program promoted in newspapers, posters, flyers, and by door staff Survey of entering patrons (20% refusal rate) Post-tests were conducted after 10 weeks of intervention at each club. Conducted from 10/92–3/93	Percentage of patrons reporting driving or riding with a driver with a BAC over .05g/dL in the prior 4 weeks decreased from 23.7% to 17.2% ($p < .05$) Percentage of drivers reporting an intent to drink “the same amount as usual” the night of the survey decreased from 10.5% to 5.2% ($p < .05$), with a corresponding increase in those indicating they intended to “not drink at all” Percentage of patrons who report either “always” or “never” choosing their designated drivers increased during the intervention ($p < .05$). These changes were seen only among patrons attending the club at least once a month ($p < .05$) Patrons of the club with the strongest program promotion and participation (41.9% of patrons) exhibited larger pre- to postintervention changes than those of the club with the weakest promotion and participation (12.3% of patrons)	NA

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Boots & Midford, 1999 Before-and-after: Least Geraldton, West Australia (pop. ~25,000)	210 television ads promoting use of a designated driver over a 3 month period; 72 displayed primarily during evening hours and on youth-oriented shows; 140 aired at other times as PSAs. Television ads also promoted a local nightclub's designated driver program Random dialing telephone survey of 18–35 year olds 10/1/94–12/31/94	<p>Percentage of respondents reporting driving a car or riding with a driver with a BAC over .05g/dL in the 4 weeks prior to the survey did not significantly change from pretest to post-test</p> <p>Percentage of respondents reporting that they “always” select a driver before drinking commences increased from 46% to 59% following the campaign ($p < .05$). Designated driver selection highest among subjects reporting not riding with .05 driver in last month ($p = .0025$), and among females ($p = .0375$)</p> <p>93% of respondents recalled publicity about designated drivers at the posttest, versus 76% at the pretest ($p = 0001$)</p> <p>The youngest age group (18–23) was most likely to report that they increased their drinking as passengers of a designated driver followed by 24–29 year olds and then 30–35 year olds ($p < .05$)</p> <p>On the pretest, the frequency of selecting a designated driver was positively correlated with having heard of the concept ($p = .0047$) and negatively correlated with having been in a car with a driver with a .05g/dl BAC in the last month ($p = .0308$)</p>	NA

BAC blood alcohol concentration; g/dL grams per deciliter; n sample size; NA not available; ns not significant; PSAs public service announcements