



The Center on Alcohol Marketing and Youth

January 22, 2004

Youth Exposure to Radio Advertising for Alcohol— United States, Summer 2003

Introduction.

Underage drinking is a significant public health problem in the United States and accounted for approximately 3,500 deaths and \$53 billion in health and social costs in 1996 (1). Youth exposure to alcohol marketing predicts awareness of alcohol advertising (2), which in turn influences youth intentions to drink as well as drinking behavior (3). Teens ages 12-17 listen to radio more than any other age group and more than they watch television, surf the Internet or read magazines for pleasure (4,5). To assess youth exposure to alcohol advertising on radio relative to young adults and all adults over 21, researchers from the Center on Alcohol Marketing and Youth analyzed a sample of more than 50,000 radio ad placements for 25 leading brands of alcohol in 104 U.S. radio markets in the summer of 2003. Based on an advertising industry standard measure of gross rating points, youth ages 12-20 in 92 of these 104 markets heard more radio advertising per capita for alcohol brands than adults 21 and above; in 29 markets youth also heard more per capita than young adults ages 21-34. The alcohol industry recently reformed its advertising codes to provide that underage youth be no more than 30% of the audience. Before the codes were reformed and when these ads aired, the industry abided by a 50% threshold for underage youth. In this analysis 28% of the ads would have exceeded the 30% threshold. These findings suggest that the industry will have to change its radio advertising practices significantly and that ongoing independent monitoring will be critical to ensure compliance.

Methods.

Working with Virtual Media Resources (VMR), an independent media planning and research firm, the Center on Alcohol Marketing and Youth analyzed a sample of spot radio advertising for alcohol in these markets. Because of the expense involved in this tracking, a sample of 25 alcohol brands was drawn, comprising the most advertised brands* for which new radio commercial occurrences were captured in the first five months of 2003. The sample included 17 beer brands, two distilled spirits brands, one wine brand and five “low-alcohol refresher” or “flavored malt beverage” brands. All examples of radio advertising for the 25 brands from January 1 to June 1, 2003 were captured from Video Monitoring Service (VMS), the leading advertising industry resource monitoring the “first occurrence” for each advertisement. This process yielded 297 individual radio ads for the 25 brands. Broadcast Verification Systems (BVS) provides 24-hour, seven-days-per-week

commercial detection for 927 stations in 104 markets. The 297 ads were provided to BVS for encoding and monitoring during June and July of 2003, historically the months of greatest advertising expenditure for alcoholic beverages on radio (7). BVS detected 52,737 occurrences of 111 of these ads and then provided to VMR date, time, station and ad information for these occurrences during the period of June 15 to July 31, 2003. Actual audio for each ad was reviewed to distinguish “responsibility” ads from product ads, leaving 106 unique product advertisements and a total of 51,883 product advertisement occurrences in the sample.

Advertising occurrence data were then merged with radio audience data from Arbitron Ratings, which measures radio audiences age 12 and above in approximately 300 markets. The most recent comparable ratings period, summer 2002, was used to estimate audiences by average quarter-hour ratings for the standard dayparts in which advertising occurred.† These data are representative of the kind of demographic data available to advertisers when the monitored advertising was planned and purchased. The outcome of merging occurrence and audience data was two advertising industry standard measures of media exposure: gross advertising impressions (the total number of times a given audience was exposed to advertising) and gross rating points (the level of exposure per capita for a given audience).

Results.

Adults will almost always receive a larger number of gross advertising impressions than youth because there are more than five times more adults 21 and over in the general population than there are youth 12-20. Use of a population-weighted measure such as gross rating points permits comparison of the media exposure received by different audiences. Of the 104 markets monitored by BVS, youth 12-20 heard more advertising per capita than young adults 21-34 in 29 markets and more than adults 21 and over in 92 markets. As Table 1 shows, alcohol advertising in five of the 15 largest radio markets exposed youth 12-20 more heavily than young adults 21-34, while alcohol advertising in 14 of the 15 exposed youth more than adults 21 and over.

* “Most advertised” was determined by calculating total audience exposure for 2001 and 2002 in 19 markets as reported in (6).

† Because Arbitron standard daypart data do not include data for audiences between midnight and 6 a.m., 1828 late-night occurrences between 12 a.m. and 6 a.m. were excluded from the sample.

Table 1: Youth vs. young adult and adult exposure to alcohol advertising on radio in the 15 largest radio markets by population, United States, summer 2003

Rank	Radio Market	pop age 12+	Ads	GRPs			GRP Ratio	
				12-20	21-34	21+	12-20: 21-34	12-20: 21+
1	New York	15,054,454	2,819	1,321	1,819	1,166	0.73	1.13
2	Los Angeles	10,191,738	1,314	853	871	575	0.98	1.48
3	Chicago	7,466,887	1,362	1,049	875	535	1.20	1.96
4	San Francisco	5,831,776	1,285	1,268	969	412	1.31	3.08
5	Dallas-Ft. Worth	4,312,747	757	483	543	325	0.89	1.49
6	Philadelphia	4,226,784	1,254	1,156	1,364	649	0.85	1.78
7	Houston-Galveston	3,971,041	1,078	1,007	925	568	1.09	1.77
8	Washington, DC	3,859,737	1,217	1,007	928	525	1.09	1.92
9	Boston	3,843,769	1,180	514	748	482	0.69	1.07
10	Detroit	3,823,591	883	856	1,027	508	0.83	1.68
11	Atlanta	3,524,847	783	712	924	553	0.77	1.29
12	Miami-Ft. Lauderdale-Hollywood	3,357,995	1,507	1,707	1,670	928	1.02	1.84
13	Seattle-Tacoma	3,065,135	617	457	669	296	0.68	1.55
14	Phoenix	2,646,026	848	516	825	498	0.62	1.04
15	Minneapolis-St. Paul	2,492,547	893	373	826	514	0.45	0.72

Sources: Arbitron Ratings, Broadcast Verification Systems

Table 2 shows that of the eight brands in those 15 markets with substantial marketing activity,[‡] four—Heineken, Amstel Light, Corona Extra and Miller Lite—exposed youth 12-20 more heavily per capita than either young adults 21-34 or adults 21 and above, while all eight exposed youth more heavily than adults.

Table 2: Alcohol brands with substantial youth advertising exposure in the top 15 markets by population, United States, summer 2003

Brand	GRPs			GRP Ratio	
	12-20	21-34	21+	12-20: 21-34	12-20: 21+
Budweiser Beer	259	333	195	0.78	1.33
Heineken Beer	186	134	69	1.39	2.70
Bud Light Beer	125	138	81	0.91	1.55
Corona Extra Light Beer	95	96	50	0.99	1.87
Coors Light Beer	53	75	40	0.71	1.32
Amstel Light Beer	44	35	19	1.27	2.29
Corona Extra Beer	41	36	19	1.15	2.22
Miller Lite Beer	38	34	19	1.11	2.02

Four radio formats—Urban Contemporary, Alternative, Rhythmic Contemporary Hit, and Pop Contemporary Hit—accounted for 73% of all youth exposure to alcohol advertising in the 104 markets. As Table 3 shows, youth exposure to alcohol advertising on radio was most concentrated between the hours of 3 p.m. and 7 p.m. on weekdays and during weekend hours, while adult exposure peaked between 10 a.m. and 3 p.m. on weekdays. However, it should be noted that radio listening habits are often different for youth during the summer than during the rest of the year.

Table 3: Youth and adult exposure to alcohol advertising on radio by daypart, 104 markets, United States, summer 2003[§]

Daypart	Distribution of Alcohol Advertising Impressions		
	Ages 12-20	Ages 21-34	Age 21+
M-F 6 a.m.–10 a.m.	13%	20%	19%
M-F 10 a.m.–3 p.m.	24%	28%	28%
M-F 3 p.m.–7 p.m.	26%	24%	24%
M-F 7 p.m.–12 a.m.	12%	8%	8%
Sa-Su 6 a.m.–12 a.m.	26%	19%	21%
	100%	100%	100%

In September 2003, both the Distilled Spirits Council of the United States (DISCUS) and the Beer Institute announced revisions of their voluntary codes of good marketing practice, lowering the maximum youth audience composition for their advertising from 50% to match the 30% standard mandated by the Wine Institute's voluntary code. The DISCUS code applies to all beverages produced by its member companies, including flavored malt beverages. In the current sample, 3% of the advertising occurrences exceeded the 50% standard, although in individual markets the percentage of occurrences in excess of the standard reached as high as 45% in Monterey-Salinas-Santa Cruz and 20% in Baltimore. Heineken and its sister brand Amstel Light had the highest percentage of ads above the 50% standard: 12% and 11% respectively. The 30% standard would have been exceeded by 28% of the ad occurrences in the sample, accounting for 53% of all youth impressions. Following Heineken and Amstel Light, brands most likely to exceed the 30% threshold were Corona Extra, Miller Lite and Becks. The final column in Table 4 shows that ads placed above the 30% standard accounted for a substantial portion—and in several cases the majority—of total youth impressions of radio advertising for these brands.

[‡] Defined as more than 35 gross rating points (meaning approximately one-third of the audience exposed) during the study period.

[§] Columns may not add up to 100% due to rounding.

Table 4: Alcohol advertising that exceeded voluntary industry thresholds for youth audience composition, 104 markets, United States, summer 2003**

	Ads with > 50% Youth 12-20 Composition			Ads with > 30% Youth 12-20 Composition		
	# of Ads	% of Ads	% Brand Youth 12-20 Impressions	# of Ads	% of Ads	% Brand Youth 12-20 Impressions
Amstel Light Beer	344	11%	25%	1,268	42%	74%
Heineken Beer	473	12%	21%	2,017	52%	80%
Captain Morgan Parrot Bay Rum	31	3%	14%	75	7%	26%
Corona Extra Beer	134	7%	11%	782	42%	72%
Corona Extra Light Beer	174	3%	8%	1,518	29%	56%
Molson Canadian Beer	69	4%	7%	421	27%	32%
Miller Lite Beer	93	3%	7%	1,108	35%	63%
Sam Adams Light Beer	10	8%	6%	21	16%	35%
Samuel Adams Beer	8	6%	5%	25	17%	35%
Becks Beer	23	3%	5%	224	32%	43%
Coors Light Beer	28	1%	1%	614	20%	36%
Smirnoff Ice Malt Beverage	3	2%	1%	25	13%	29%
Budweiser Beer	218	1%	1%	4,193	24%	44%
Bud Light Beer	75	1%	1%	1,942	27%	50%
Bacardi Silver Malt Beverage	--	--	--	190	16%	28%
Miller Genuine Draft Beer	--	--	--	20	17%	14%
Harp Lager	--	--	--	13	10%	11%
Santa Margherita Wines	--	--	--	37	2%	7%

Reported by: DH Jernigan, PhD, JA O'Hara III, MA, Georgetown University, Washington, DC; J Ostroff, BA, CS Ross, MBA, Virtual Media Resources, Natick, MA.

Editorial Note:

This report is based on the most heavily advertised brands and only applies to media markets for which occurrence data were available. As such, it does not claim to be a comprehensive assessment of youth exposure to alcohol advertising on radio in the United States. Also, relying on summer 2002 audience data to assess audiences for summer 2003 occurrences is imprecise but uses the best data available and reflects best practice in the media buying field. Findings in this report suggest that youth exposure to alcohol advertising on radio is widespread and, in most instances, greater than the exposure of adults above the legal drinking age. Alcohol companies sometimes say that their target audience is not the entire adult audience, but rather young adults. In a third of the 15 largest markets and for four of the brands in those markets, youth exposure exceeded that of young adults. In contrast, in the Minneapolis radio market youth exposure to alcohol advertising was lower than both young adult and adult exposure. Youth exposure to advertising for seven of the 21 brands in the 15 largest markets was also lower than that of young adults or adults. These cases suggest that it is possible to market these beverages to the legal-age audience without overexposing underage youth.

The alcohol industry's recent adoption of a 30% threshold for youth audience composition for its advertising still permits disproportionate exposure of underage youth, since youth 12-20 comprise only 15.6% of the total 12+ population (8) and between 12% and 22% of the populations (age 12 and above) of the 104 radio markets in this analysis. The Institute of Medicine recently recommended immediate adoption of a 25% threshold and movement toward a more proportional 15% threshold over time (1). Of the alcohol advertising placements in this sample, 59.5% exceeded a 15% threshold.

The findings of this report indicate that advertising placement practices of alcohol companies are going to have to change, at a minimum to comply with the new 30% voluntary thresholds. Ongoing independent public health surveillance of the industry's advertising practices will be necessary to ensure industry compliance with its new voluntary codes to reduce the exposure of underage youth to alcohol advertising.

Funding/support: This research was supported by grants from The Pew Charitable Trusts and the Robert Wood Johnson Foundation.

Acknowledgment: We thank Anna Fountas, former president of Simmons Market Research Bureau and the Traffic Audit Bureau and former vice president of Arbitron Ratings, and Joni Sims, media researcher and consultant and former partner at Ogilvy & Mather/Mindshare and former senior client executive at Nielsen Media Research, for their review and comments. The opinions expressed in this report are those of the authors and do not necessarily reflect those of the foundations or the reviewers.

References

1. Bonnie RJ and O'Connell ME, eds. Reducing underage drinking: a collective responsibility. Washington, DC: The National Academies Press, 2003.
2. Collins RL, Schell T, Ellickson PL, McCaffrey D. Predictors of beer advertising awareness among eighth graders. *Addiction* 2003;98:1297-1306.
3. Martin SE, Snyder LB, Hamilton M, Fleming-Milici F, Slater MD, Stacy A, Chen M-J, Grube JW. Alcohol advertising and youth. *Alcoholism: Clinical and Experimental Research* 2002;26:900-906.
4. Arbitron. Arbitron radio ratings. New York: Arbitron, fall 2001 cited in Radio Advertising Bureau. Radio marketing guide & fact book for advertisers. New York: Radio Advertising Bureau, 2002.
5. Teenage Research Unlimited. The TRU study, wave 41. Northbrook, IL: Teenage Research Unlimited, spring 2003.
6. Center on Alcohol Marketing and Youth. Radio daze: alcohol ads tune in underage youth. Washington, DC: Center on Alcohol Marketing and Youth, 2003. Available at <http://camy.org/research/radio0303>.
7. Miller Kaplan & Associates. Radio expenditure data, 2001-2002.
8. U.S. Census Bureau. PCT3. Sex by age [209]—Universe: total population. Census 2000 summary file 2 (SF 2) 100-percent data.

** Brands with fewer than 10 advertising occurrences during the study period were excluded from this analysis.