
CAMY MONITORING REPORT: **Youth Exposure to Alcohol Advertising on Radio 2006**

The Center on
Alcohol Marketing and *Youth*

Center on Alcohol Marketing and Youth
Georgetown University
Box 571444
3300 Whitehaven St. NW, Suite 5000
Washington, D.C. 20057
(202) 687-1019
www.camy.org

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The Center on Alcohol Marketing and Youth (CAMY) commissioned Virtual Media Resources to analyze the 337,602 alcohol product advertisements placed on stations in 28 of the largest radio markets in the United States in 2006.

Key Findings

- In 2006, more than a third of advertising placements for alcohol products in 28 of the largest radio markets (120,299 or 35.6%) were on programming that youth¹ ages 12 to 20 were more likely to hear² on a per capita basis than adults.
- Advertisements on programming that youth were more likely to hear than adults accounted for more than half (58%) of youth exposure to alcohol advertising on the radio.
- Approximately one in twelve alcohol advertisements (27,682 or 8%) were on programming with youth audience compositions greater than the alcohol industry's voluntary maximum of 30%, and 18 out of 143 brands placed 20% or more of their advertisements above that threshold.
- Twenty-six brands placed more than half of their advertisements on programming that youth were more likely to hear on a per capita basis than adults.
- Independent monitoring and reporting of performance by individual alcohol brands will encourage alcohol marketers to increase their ability to shield youth from unnecessary exposure to their advertising.

Radio and Youth

Despite competition from iPods, instant messaging and the Internet, radio remains a popular medium among youth.

- In 2005, radio was second only to television as the medium of choice for 8- to 18-year-olds.³
- Radio is the media appliance 8- to 18-year-olds are most likely to have in their bedrooms.⁴
- Although radio listening has declined some among teenagers, 12- to 17-year-olds are still the most likely group to be listening during the 7 P.M. to midnight daypart.⁵
- Ninety-one percent of teens listen to the radio weekly, while 65.5% listen to it every day. Comparing genders, 87.9% of males ages 12 to 17 are radio listeners, listening an average of 11 hours and five minutes per week while 94% of females in this age group are tuned in, listening on average 14 hours per week.⁶

Youth and Alcohol

Although communities across the country have made significant efforts to reduce youth access to alcohol, underage drinking remains a widespread and tragic public health problem.

- In 2006, 17% of eighth graders, 34% of tenth graders and 45% of twelfth graders reported drinking in the past 30 days, and 11% of eighth graders, 22% of tenth graders and 25% of twelfth graders reported binge drinking (five or more drinks in a row) within the past two weeks.⁷

- Every day, approximately 5,200 young people under the age of 16 have their first full drink of alcohol.⁸
- Underage alcohol use is responsible for 5,000 deaths per year among persons under age 21.⁹
- The most common age when people first become fully dependent on alcohol is 18.¹⁰
- Young people who begin drinking prior to age 15 are five times more likely to suffer from alcohol-related problems later in life than those who wait until they are 21.¹¹

Alcohol Marketing and Youth

- Long-term studies have found that youth exposure to alcohol advertising on television, in magazines, on the radio, on billboards or other outdoor signage, or via in-store beer displays, beer concessions and ownership of beer promotional items or branded merchandise predicted likelihood of subsequent drinking.¹²
- Econometric analysis based on data from youth drinking surveys has estimated that a 28% reduction in alcohol advertising would reduce the percentage of adolescents who drink monthly from 25% to between 24% and 21%. The percent who engage in binge drinking monthly from would fall from 12% to between 11% and 8%.¹³

The CAMY Radio Sample

- Audience and alcohol advertising placement data were available for 28 of the largest U.S. media markets in 2006, covering approximately 42% of the U.S. population.
- Spending data were available for 25 markets continuously from 2001 to 2006, and for a total of 35 markets in 2006, covering approximately 43% of the U.S. population.
- Both audience and spending data were available for 22 markets. See Appendix C for lists of markets covered.

Overview: Alcohol Advertising on the Radio, 2006

Alcohol advertisers have spent less money on radio advertising every year since 2001, but still place substantial numbers of advertisements in that medium. Spending data are available from 2001 to 2006; occurrence data for this report are based on 2006, while audience data are based primarily on 2005.

- Alcohol industry spending on radio advertising in the 25 markets for which continuous data are available fell from \$138.2 million in 2001 to \$86.2 million in 2006.
- Examining the 25 markets for which data were available consistently from 2001 to 2006, the drop is most dramatic among distilled spirits advertisers, who decreased their spending on radio in these markets by 84% over the six-year period.

Table 1: Total Spending on Alcohol Advertising on Radio, 25 Markets Consistently Measured 2001–2006

Beverage Type	2001		2002		2003		2004		2005		2006		% Change, 2001–2006
	\$(000)	% Total	\$(000)	% Total	\$(000)	% Total	\$(000)	% Total	\$(000)	% Total	\$(000)	% Total	
Beer and Ale	\$56,087	40.6%	\$64,351	47.5%	\$50,755	44.1%	\$56,443	54.1%	\$80,445	83.5%	\$66,066	76.6%	18%
Distilled Spirits	\$70,202	50.8%	\$58,802	43.4%	\$46,354	40.3%	\$36,327	34.9%	\$11,638	12.1%	\$11,557	13.4%	-84%
Alcopops	\$2,526	1.8%	\$3,164	2.3%	\$954	0.8%	\$338	0.3%	\$3	0.0%	\$2,011	2.3%	-20%
Wine	\$9,346	6.8%	\$9,054	6.7%	\$16,925	14.7%	\$11,129	10.7%	\$4,271	4.4%	\$6,581	7.6%	-30%
Total	\$138,159	100.0%	\$135,371	100.0%	\$114,989	100.0%	\$104,237	100.0%	\$96,357	100.0%	\$86,214	100.0%	-38%

Sources: TNS Media Intelligence; Miller Kaplan Associates. Columns may not add up due to rounding.

- In 2006, alcohol advertisers placed 337,602 alcohol product advertisements and 3,226 advertisements promoting alcohol-branded events on the radio in the 28 markets for which data were available.
- Nearly three-quarters of the product advertisements—a total of 241,725 advertisements—were for beer and ale.¹⁴

Table 2: Alcohol Advertising Placements and Average Youth Audience Composition on Radio, 2006

Beverage Type	Total Ads	Impressions		Average Youth Audience Composition
		Ages 12-20	Age 12+	
Beer and Ale	241,725	582,147,500	4,559,345,900	12.8%
Distilled Spirits	35,730	94,542,400	708,821,000	13.3%
Alcopops	24,185	40,891,900	424,135,300	9.6%
Wine	35,962	56,276,600	689,114,700	8.2%
Total	337,602	773,858,400	6,381,416,900	12.1%

Sources: Mediaguide, 2006; Arbitron Ratings, 2004–2005.

Youth Overexposure to Alcohol Advertising on the Radio

The majority of youth exposure to alcohol advertising on the radio came from advertisements placed on “youth-oriented” programming, defined by the Centers for Disease Control and Prevention as “composed disproportionately of persons aged 12–20 years.”¹⁵ Youth overexposure occurs when advertisements are placed on programming with youth audiences out of proportion to the youth population in a particular media market.

- More than a third (35.6%) of advertising placements were on programming that youth were more likely to hear on a per capita basis than adults.
- These advertisements were responsible for 58% of all youth exposure to alcohol advertising on the radio in 2006.
- Although boys have greater exposure to alcohol advertising, girls were more likely to be overexposed than boys: girls heard more alcohol advertising than women in 11 markets, while boys heard more than men in only 3 markets.

Table 3: Youth Exposure and Overexposure to Alcohol Advertising on Radio, 2006

Beverage Type	Advertising Placements			Ages 12-20 Impressions (000)		
	Total	Overexposing		Total	Overexposing	
		Ads	% Total		Ages 12-20 Impressions	% Total Ages 12-20 Impressions
Beer and Ale	241,725	91,784	38.0%	582,148	345,369	59.3%
Distilled Spirits	35,730	14,278	40.0%	94,542	55,094	58.3%
Alcopops	24,185	7,444	30.8%	40,892	18,833	46.1%
Wine	35,962	6,793	18.9%	56,277	29,223	51.9%
Total	337,602	120,299	35.6%	773,858	448,519	58.0%

Sources: Mediaguide, 2006; Arbitron Ratings, 2004–2005. Columns may not add up due to rounding.

Overexposure by Brand

- Twenty-six brands placed more than half of their advertisements on programming more likely to be heard by youth on a per capita basis than by adults.
- These 26 brands accounted for only 6% of all alcohol advertisements in the 28 media markets in 2006. However, they were responsible for 14% of youth overexposure.
- Some of these brands placed very few advertisements; however, three brands—Yuengling Traditional Lager, Corona Extra Light Beer, and Jose Cuervo Especial Tequila—placed 1,000 or more of their advertisements on youth-oriented programming.

Table 4: Alcohol Brands With a Majority of Advertising Placements on Radio Overexposing Youth, 2006

Brand	Parent	Advertising Placements			Ages 12–20 Impressions (000)		
		Total	Overexposing		Total	Overexposing	
			Ads	% Total		Ages 12–20 Impressions	% Total Impressions
Buchanan's Scotch Whiskeys	Diageo plc	2	2	100.0%	10.4	10.4	100.0%
Goji Beer	Parent Unknown	24	24	100.0%	16.0	16.0	100.0%
Icehouse Beer	SABMiller plc	33	33	100.0%	63.3	63.3	100.0%
Sauza Hornitos Tequila	Beam Global Spirits & Wine, Inc.	8	8	100.0%	127.2	127.2	100.0%
Smirnoff Twisted Five Malt Beverage	Diageo plc	7	7	100.0%	18.9	18.9	100.0%
Remy Martin V.S.O.P. Cognac	Rémy Cointreau	752	725	96.4%	11,125.0	10,922.5	98.2%
Liquid Charge Malt Beverage	Charge Beverages	165	158	95.8%	268.2	260.5	97.1%
Heineken Premium Lite Lager	Heineken N.V.	56	53	94.6%	466.0	453.9	97.4%
Bootie Beer	Bootie Beer Corp.	55	52	94.5%	124.3	120.2	96.7%
Kokanee Beer	InBev	282	245	86.9%	622.8	570.2	91.6%
Jagermeister	Sidney Frank Importing Co., Inc.	70	59	84.3%	372.6	363.0	97.4%
Yuengling Traditional Lager	D.G. Yuengling & Son, Inc.	5,521	4,488	81.3%	27,002.4	25,010.5	92.6%
Florida Beer Company Beers	Florida Beer Company	134	107	79.9%	142.9	102.4	71.7%
Straub Beer	Straub Brewery	145	115	79.3%	210.8	173.1	82.1%
Chateau St. Jean Wines	Chateau St. Jean	131	102	77.9%	262.5	252.8	96.3%
Jose Cuervo Especial Tequila	Diageo plc	1,629	1,217	74.7%	4,897.3	3,667.3	74.9%
Milwaukee's Best Light Beer	SABMiller plc	228	169	74.1%	323.1	254.7	78.8%
Guinness Beers	Diageo plc	1,277	946	74.1%	3,210.0	2,731.8	85.1%
Widmer Brothers Drop Top Amber Ale	Widmer Brothers Brewing Company	108	75	69.4%	212.7	143.4	67.4%
Michelob Amberbock Beer	Anheuser-Busch Companies, Inc.	126	74	58.7%	188.4	118.9	63.1%
Bacardi Rums	Bacardi & Co. Ltd.	1,524	869	57.0%	5,830.4	4,663.8	80.0%
Southern Comfort	Brown-Forman Corp.	539	286	53.1%	984.9	728.7	74.0%
Alize Cognacs	Kobrand Corp.	91	48	52.7%	843.9	555.8	65.9%
Smirnoff Ice Malt Beverage	Diageo plc	1,897	978	51.6%	3,957.7	2,311.0	58.4%
Corona Extra Light Beer	Constellation Brands, Inc.	3,696	1,903	51.5%	10,019.5	7,209.0	71.9%
Windsor Imported Canadian Supreme Blended Whisky	Beam Global Spirits & Wine, Inc.	466	239	51.3%	657.7	409.3	62.2%

Sources: Mediaguide, 2006; Arbitron Ratings, 2004–2005.

Overexposure by Market

Arbitron measures radio audiences by surveying persons age 12 and over. The percentage of persons between ages of 12 and 20 varies in each market, and overexposure is defined for each market accordingly.

- Although overexposure is easiest to avoid in the largest markets, three of the ten largest markets were also among the ten markets with the highest percentage of alcohol advertising placements on youth-oriented programming.
- In five markets—Washington, D.C., Seattle, Philadelphia, Portland, Ore., and Salt Lake City—more than half of alcohol product advertisements were placed when youth were more likely to hear them, on a per capita basis, than adults.

Table 5: Youth Overexposure to Alcohol Advertising on Radio by Market, 2006

Rank by Size of Market	Market	Local Ages 12-20 Audience Composition	Advertising Placements			Ages 12-20 Impressions (000)		
			Total	Overexposing		Total	Overexposing	
				Ads	% Market		Impressions	% Market
8	Washington, D.C.	14.6%	5,282	3,492	66.1%	26,144	23,266	89.0%
13	Seattle	14.9%	6,980	3,875	55.5%	11,096	8,116	73.1%
6	Philadelphia	15.4%	16,338	8,459	51.8%	60,094	43,745	72.8%
22	Portland, Ore.	15.3%	7,055	3,634	51.5%	10,412	6,933	66.6%
25	Salt Lake City	19.1%	3,008	1,522	50.6%	4,683	3,431	73.3%
20	Denver	15.2%	12,866	6,233	48.4%	17,789	11,583	65.1%
16	San Diego	15.6%	14,531	6,827	47.0%	17,452	10,666	61.1%
9	Boston	14.2%	14,759	6,800	46.1%	23,173	14,041	60.6%
21	Pittsburgh	13.7%	12,340	5,616	45.5%	16,109	11,351	70.5%
24	Cincinnati	16.1%	6,196	2,800	45.2%	9,582	5,999	62.6%
4	San Francisco	13.8%	8,811	3,758	42.7%	17,599	9,776	55.5%
28	Memphis	16.8%	5,679	2,287	40.3%	5,207	3,231	62.1%
23	Cleveland	15.2%	9,504	3,803	40.0%	13,062	7,161	54.8%
15	Minneapolis	15.8%	9,376	3,671	39.2%	21,177	13,057	61.7%
17	Baltimore	15.3%	9,809	3,810	38.8%	17,706	12,466	70.4%
14	Phoenix	15.8%	17,800	6,559	36.8%	28,493	15,444	54.2%
19	Tampa-St. Petersburg	13.3%	17,470	6,269	35.9%	20,472	14,604	71.3%
27	Orlando	15.6%	9,761	3,258	33.4%	9,543	5,754	60.3%
18	St. Louis	16.0%	10,452	3,216	30.8%	12,594	7,125	56.6%
10	Detroit	15.8%	9,558	2,912	30.5%	18,970	10,067	53.1%
11	Atlanta	15.6%	5,562	1,604	28.8%	11,262	6,433	57.1%
12	Miami	14.7%	18,173	5,238	28.8%	31,132	16,195	52.0%
26	Providence	14.7%	8,375	2,319	27.7%	5,325	3,390	63.7%
2	Los Angeles	16.3%	17,392	4,438	25.5%	85,130	43,065	50.6%
1	New York	14.4%	22,178	5,542	25.0%	134,644	66,509	49.4%
7	Houston	17.2%	9,684	2,409	24.9%	28,195	12,638	44.8%
3	Chicago	15.9%	31,934	6,543	20.5%	81,223	44,114	54.3%
5	Dallas-Ft. Worth	16.5%	16,729	3,405	20.4%	35,592	18,357	51.6%
Total of all markets			337,602	120,299	35.6%	773,858	448,519	58.0%

Sources: Mediaguide, 2006; Arbitron Ratings, 2004-2005. Columns may not add up due to rounding.

Meeting the Industry's Voluntary 30% Youth Audience Threshold

Trade associations for the beer, wine and distilled spirits industries have adopted voluntary 30% maximums for youth audience composition for media where their member companies place their advertising. Because radio audiences are measured only for age 12 and above, this 30% threshold is not proportional to the percentage of youth ages 12 to 20 in the population in each market, and in some markets may be more than twice the percentage of youth in the population (i.e., the youth audience composition).

- One out of twelve alcohol advertisements (8.2%) was placed on programming with youth audiences greater than 30%.
- These placements accounted for 18.1% of youth exposure to alcohol advertising in the 28 markets in 2006.
- While the average percentage of placements above the 30% threshold for all brands was 8.2%, 39 out of 143 brands placed a higher proportion of their advertising above the threshold, and 18 brands had 20% or more of their advertisements on programming with youth audiences greater than 30%.

Table 6: Youth Exposure From Alcohol Advertising Placements on Radio Programming With Greater Than 30% Youth Audience Composition, 2006

Beverage Type	Advertising Placements			Ages 12-20 Impressions (000)		
	Total	>30% Youth Audience Composition		Ages 12-20 Impressions	>30% Youth Audience Composition	
		Ads	% Total		Ages 12-20 Impressions	% Total Ages 12-20 Impressions
Beer and Ale	241,725	20,042	8.3%	582,148	99,181	17.0%
Distilled Spirits	35,730	3,432	9.6%	94,542	18,328	19.4%
Alcopops	24,185	1,408	5.8%	40,892	3,845	9.4%
Wine	35,962	2,800	7.8%	56,277	18,621	33.1%
Total	337,602	27,682	8.2%	773,858	139,975	18.1%

Sources: Mediaguide, 2006; Arbitron Ratings, 2004-2005. Columns may not add up due to rounding.

Meeting the 30% Threshold by Brand

Examining the highest-advertising brands—those with at least one million youth advertising impressions in 2006—shows the brands with the largest youth audiences for their advertising.

- Among these high-advertising brands, youth exposure on programming above the 30% threshold accounted for 30% or more of the total youth exposure for ten brands.
- Four brands—Licor 43, Yuengling Traditional Lager, Remy Martin V.S.O.P. Cognac and Bud Ice Beer—gained more than half of their youth exposure from advertising placed on programming with youth audiences greater than 30%.

Table 7: High-Advertising Brands With Substantial Youth Exposure From Advertising Placements on Radio Programming With Greater Than 30% Youth Audience Composition, 2006

Brand	Advertising Placements			Ages 12-20 Impressions (000)		
	Total	>30% Youth Audience Composition		Total	>30% Youth Audience Composition	
		Ads	% Total		Ages 12-20 Impressions	% Total Ages 12-20 Impressions
Licor 43	480	206	42.9%	2,088.3	1,781.3	85.3%
Yuengling Traditional Lager	5,521	2,860	51.8%	27,002.4	20,713.9	76.7%
Remy Martin V.S.O.P. Cognac	752	340	45.2%	11,125.0	6,496.8	58.4%
Bud Ice Beer	291	65	22.3%	1,365.7	759.5	55.6%
San Giuseppe Wines	661	110	16.6%	1,201.8	592.2	49.3%
Mirassou Wines	3,174	470	14.8%	6,946.0	3,088.0	44.5%
Bella Sera Wines	7,644	858	11.2%	13,717.1	5,858.8	42.7%
Yellow Tail Wines	7,561	650	8.6%	12,456.1	4,768.5	38.3%
Presidente Beer	2,175	243	11.2%	3,582.5	1,263.0	35.3%
Guinness Beers	1,277	378	29.6%	3,210.0	1,105.5	34.4%

Sources: Mediaguide, 2006; Arbitron Ratings, 2004-2005.

Meeting the 30% Youth Audience Threshold by Market

Although youth audience composition varies from market to market, the markets with the highest percentages of youth in their population were not necessarily the places where more alcohol advertisements were placed on programming with youth audiences above 30%.

- Salt Lake City has the highest percentage of youth ages 12 to 20 in its population, and it had the highest percentage of alcohol advertising placed above the 30% threshold.
- Houston has the second highest percentage of youth ages 12 to 20 in its population, but ranked 23rd out of the 28 markets in terms of the percent of alcohol advertisements placed above the 30% threshold.

Table 8: Youth Exposure by Market From Alcohol Advertising Placements on Radio Programming With Greater Than 30% Youth Audience Composition, 2006

Rank by Size of Market	Market	Local Ages 12-20 Audience Composition	Advertising Placements			Ages 12-20 Impressions (000)		
			Total	>30% Youth Audience Composition		Total	>30% Youth Audience Composition	
				Ads	% Market		Impressions	% Market
25	Salt Lake City	19.1%	3,008	834	27.7%	4,683	2,330	49.7%
6	Philadelphia	15.4%	16,338	3,789	23.2%	60,094	25,795	42.9%
8	Washington, D.C.	14.6%	5,282	1,139	21.6%	26,144	9,177	35.1%
28	Memphis	16.8%	5,679	953	16.8%	5,207	1,641	31.5%
13	Seattle	14.9%	6,980	1,108	15.9%	11,096	2,408	21.7%
24	Cincinnati	16.1%	6,196	882	14.2%	9,582	1,449	15.1%
17	Baltimore	15.3%	9,809	1,140	11.6%	17,706	3,988	22.5%
22	Portland, Ore.	15.3%	7,055	765	10.8%	10,412	2,063	19.8%
27	Orlando	15.6%	9,761	1,025	10.5%	9,543	2,810	29.4%
11	Atlanta	15.6%	5,562	563	10.1%	11,262	2,634	23.4%
20	Denver	15.2%	12,866	1,250	9.7%	17,789	2,759	15.5%
16	San Diego	15.6%	14,531	1,360	9.4%	17,452	1,991	11.4%
19	Tampa-St. Petersburg	13.3%	17,470	1,621	9.3%	20,472	5,435	26.5%
14	Phoenix	15.8%	17,800	1,446	8.1%	28,493	4,403	15.5%
21	Pittsburgh	13.7%	12,340	852	6.9%	16,109	2,567	15.9%
12	Miami	14.7%	18,173	1,167	6.4%	31,132	6,285	20.2%
4	San Francisco	13.8%	8,811	517	5.9%	17,599	2,414	13.7%
1	New York	14.4%	22,178	1,238	5.6%	134,644	16,813	12.5%
10	Detroit	15.8%	9,558	526	5.5%	18,970	2,574	13.6%
15	Minneapolis	15.8%	9,376	511	5.5%	21,177	1,904	9.0%
18	St. Louis	16.0%	10,452	555	5.3%	12,594	2,081	16.5%
3	Chicago	15.9%	31,934	1,563	4.9%	81,223	15,688	19.3%
7	Houston	17.2%	9,684	457	4.7%	28,195	4,570	16.2%
26	Providence	14.7%	8,375	367	4.4%	5,325	801	15.0%
2	Los Angeles	16.3%	17,392	677	3.9%	85,130	8,839	10.4%
9	Boston	14.2%	14,759	553	3.7%	23,173	1,896	8.2%
5	Dallas-Ft. Worth	16.5%	16,729	578	3.5%	35,592	3,705	10.4%
23	Cleveland	15.2%	9,504	246	2.6%	13,062	955	7.3%
Total of all markets			337,602	27,682	8.2%	773,858	139,975	18.1%

Sources: Mediaguide, 2006; Arbitron Ratings, 2004-2005. Columns may not add up due to rounding.

Policy Implications and Conclusions

- In 2006, radio advertising for alcohol products often occurred on programming that youth were more likely to hear on a per capita basis than adults.
- While only 8% of industry-wide alcohol advertising placements violated the industry's 30% voluntary standard, 26 out of 143 alcohol brands advertising on the radio in 2006 had 20% or more of their advertising on programming with youth audiences greater than 30%.
- The U.S. Surgeon General has stated that alcohol companies have a public responsibility to ensure that the placement of their advertising does not disproportionately expose youth to messages about alcohol.¹⁶
- In 2003, the National Research Council and the Institute of Medicine recommended that alcohol companies immediately adopt a 25% threshold and move towards a 15% proportional threshold.¹⁷
- Prior CAMY research has determined that on the radio, the 15% standard comes very close to eliminating youth overexposure to alcohol advertising.¹⁸
- More than half of youth exposure to alcohol advertising on the radio currently comes from advertising on programming with disproportionate youth audiences.
- There is substantial room for improvement in the placement of alcohol advertising on the radio, especially by particular brands.
- The Sober Truth On Preventing Underage Drinking Act of 2006, passed unanimously by Congress and signed into law by President Bush, requires the Department of Health and Human Services to report annually on rates of exposure of youth to messages encouraging and discouraging alcohol use in the mass media.¹⁹
- Ongoing, independent monitoring of youth exposure to alcohol advertising with performance reported by brand is necessary to encourage the industry to continue to improve its practices.

THE CENTER ON ALCOHOL MARKETING AND YOUTH

The Center on Alcohol Marketing and Youth at Georgetown University (www.camy.org) monitors the marketing practices of the alcohol industry to focus attention and action on industry practices that jeopardize the health and safety of America's youth. Reducing high rates of underage alcohol consumption and the suffering caused by them requires using the public health strategies of limiting the access to and the appeal of alcohol to underage persons. The Center is supported by grants from The Pew Charitable Trusts and the Robert Wood Johnson Foundation to Georgetown University.

VIRTUAL MEDIA RESOURCES

Virtual Media Resources (VMR) is a media research, planning, market analysis and consulting firm based in Natick, Massachusetts, serving communications organizations and marketers in a wide variety of market segments and media. VMR was established in 1992 to provide an independent research firm serving advertising agencies and has grown to service over 100 clients across the United States and Canada in retail, publishing, financial, automotive, public health and other fields.

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Katherine Clegg Smith, Ph.D., Assistant Professor, Department of Health, Behavior and Society, Bloomberg School of Public Health, Johns Hopkins University.

Richard Zackon, Principal, Media Edge, Inc., media consultancy; Adjunct Professor, New York University; former Research Director for the Cabletelevision Advertising Bureau and Court TV.

APPENDIX A: Methodology

Research Process

This research methodology followed a multi-step process. First, advertising occurrences for all brands in each alcoholic beverage category were tracked. Next, audience research data were merged with occurrence data used to quantify the demographic composition of the audience for each advertising placement. Finally, the audience data were summed up by brand, beverage type or market to determine youth exposure.

In addition, this report used alcohol advertising expenditure data provided by a separate source.

Counting Advertisements-Using Mediaguide

Advertising occurrence data from Mediaguide, provided by TNS Media Intelligence (formerly CMR or Competitive Media Reporting), was used to identify brand advertising by station and market within markets monitored by Mediaguide. Using a compact representation of audio content ("audio fingerprint"), Mediaguide provides monitoring services for radio advertising and programming in approximately 150 markets; the service provided through TNS provided advertising occurrences in 28 of the largest U.S. markets during 2006. Previously unidentified advertisements are identified using a technology that searches for pre-determined criteria such as segment length of 28 to 62 seconds and repeating content. Audio content is reviewed and classified into brand and category. Mediaguide monitors activity 24 hours a day, seven days a week. Broadcasts are logged, indexed and available for reference.

VMR accessed Mediaguide data through the TNS/Media Intelligence Strategy application software. Appendix C lists the markets for which advertising occurrences were tracked for this report.

For this report, only alcoholic beverage product advertising as defined by TNS and Mediaguide was included. Non-product or event advertising was not included.

Tracking Expenditures-Using Miller Kaplan Associates

Radio advertising occurrence and expenditure data are not currently available from a common source. In addition to tracking occurrences, advertising expenditures were provided by brand and market by Miller Kaplan Associates (MKA) and TNS Media Intelligence. MKA compiles expenditure data provided at the station level in approximately 35 markets, but reports this data only at the market level. MKA expenditure data for brands were classified by beverage type.

Appendix C lists the markets for which advertising expenditures were tracked for this report.

Measuring Radio Audiences

Arbitron Ratings provides audience estimates on almost every radio station in approximately 300 radio markets across the United States. Arbitron reports both "average quarter hour" and "cumulative" ratings. (Cumulative ratings, which represent the net number of listeners tuning to a particular station, may be calculated for a standard period of time, such as a daypart or week, or for a custom period of time such as one hour.) For this analysis, VMR used average quarter-hour ratings for standard dayparts in order to best provide the audience ratings associated with particular commercials. Audience data were generated using the Arbitron Media Professional application software.

Alcohol Category and Brand Classifications

Category and brand classifications were drawn from the *IMPACT Databank Review and Forecast*, industry references for the beer, wine and spirits markets published by M. Shanken Communications Inc., so that the categories and brands represented in this report would be consistent with the classifications used by the industry. The industry itself is experiencing significant change, primarily in the relatively new alcopop or “malternative” beverages, which are derived from a complex production process involving a malt base that is stripped of its malt characteristics, including much of its alcohol, and then augmented with flavorings and sweeteners, including flavorings that contain distilled alcohol. These are frequently marketed through joint agreements between distillers and brewers and have been grouped by *Impact* in recent years either as “low-alcohol refreshers” (2002) or as “ready-to-drink flavored alcoholic beverages” (2003, 2004 and 2005).²⁰

Merging Occurrence and Audience Data

Daypart coding

Using the database of alcohol radio advertising occurrence data for 2006, VMR coded each occurrence to its corresponding daypart:

- M–F 6 A.M. to 10 A.M.: weekday morning drive
- M–F 10 A.M. to 3 P.M.: weekday mid-day
- M–F 3 P.M. to 7 P.M.: weekday afternoon drive
- M–F 7 P.M. to midnight: weekday evening
- S/S 6 A.M. to midnight: weekend

Ratings append and audience calculation

For each daypart, market and station, VMR applied the average quarter-hour audience as reported by Arbitron for the corresponding survey period from the previous year. This provided a so-called “planning perspective” in that it represents the Arbitron audience data available to advertisers when media plans and buys are made. In cases where the audience data were not available (e.g., new or unreported station, or the market was not surveyed for a particular calendar quarter), VMR attempted to use the previous quarter's audience data for that market, up to four previous surveys.

Summing exposure data

Using the occurrence-specific exposure data, VMR calculated:

- Audience composition for youth ages 12 to 20 as a percentage of all persons age 12 and over.
- The number of occurrences in which composition exceeded 30%, and in which ages 12 to 20 ratings exceeded those for age 21 and over.
- Gross impressions and audience composition for brands, markets and formats for the following demographics:
 - Ages 12 to 20
 - Ages 21 to 34
 - Ages 35 to 49
 - Age 50 and over

At the market level, gross rating points were also calculated for these demographics.

APPENDIX B: Glossary of Advertising Terms

Impressions

An advertising impression occurs when one person sees or hears an advertisement. If this advertisement is heard by five different people, that counts as five impressions. If a particular advertising medium, such as a radio or television program, has an audience of 100,000 people, an advertisement placed during that program generates a number of impressions equal to the audience size—in this case 100,000 impressions.

Gross Impressions

The sum of impressions for a given advertising campaign, or for any other combination of ads, is called gross impressions—so-called because they include multiple exposures for some or all of the people who are exposed to the advertising. If five people hear the same advertisement five times, this counts as 25 gross impressions. For a national advertising campaign, it is common for an advertising schedule to generate 500 million or more gross impressions.

Gross Rating Points (GRPs)

GRPs are a standard measure of advertising exposure. GRPs measure advertising exposure for a particular population, relative to the size of that population, and may be calculated by dividing gross impressions within that population by the number of people in the population. GRPs are also the mathematical product of reach and frequency, which are defined below.

Reach and Frequency

Reach enables advertisers to know what percentage of a population is exposed to advertising. Frequency measures how many times each individual is exposed to a series of ads. Reach, frequency and GRPs are standard measures of media planning.

Audience Composition

Research companies collect demographic information about audiences for different media such as magazines, television programs or radio stations. Demographics usually include age, gender and race, among other factors. Using the example of a medium with an audience of 100,000 people, research may report that 20,000 are ages 2 to 20, and 80,000 are age 21 and over. In that case, the composition of the audience is calculated by looking at the percentage of the audience that meets different demographic criteria. In this example, the audience composition is 20% ages 2 to 20 and 80% age 21 and over.

APPENDIX C: Comparison of Markets Covered in 2006

<u>Mediaguide</u>	<u>Miller Kaplan Associates</u>	<u>Overlapping Markets</u>
Atlanta	Albuquerque	Atlanta
Baltimore	Atlanta	Baltimore
Boston	Austin	Boston
Chicago	Baltimore	Chicago
Cincinnati	Boston	Cleveland
Cleveland	Charlotte	Dallas-Ft. Worth
Dallas-Ft. Worth	Chicago	Denver
Denver	Cleveland	Detroit
Detroit	Dallas-Ft. Worth	Houston
Houston	Denver	Los Angeles
Los Angeles	Detroit	Minneapolis
Memphis	Greenville,S.C.	New York
Miami	Houston	Orlando
Minneapolis	Indianapolis	Philadelphia
New York	Kansas City	Phoenix
Orlando	Las Vegas	Pittsburgh
Philadelphia	Los Angeles	Portland, Ore.
Phoenix	Louisville	San Diego
Pittsburgh	Minneapolis	San Francisco
Portland, Ore.	Nashville	Seattle
Providence	New York	St. Louis
Salt Lake City	Norfolk	Washington, D.C.
San Diego	Omaha	
San Francisco	Orlando	
Seattle	Philadelphia	
St. Louis	Phoenix	
Tampa-St. Petersburg	Pittsburgh	
Washington, D.C.	Portland, Ore.	
	Sacramento	
	San Antonio	
	San Diego	
	San Francisco	
	Seattle	
	St. Louis	
	Washington, D.C.	

BOLD = Markets that occur in both Mediaguide and MKA Lists

ENDNOTES

- ¹ For the purposes of this report, “youth” are persons ages 12 to 20 and “adults” are persons age 21 and above. Radio audiences are not measured below age 12.
- ² Youth are more likely to hear on a per capita basis, or be “overexposed” to, a radio advertisement for alcohol when it is placed on a program where the percentage of underage youth in the audience is greater than the percentage of underage youth in the general population in that radio market. “More likely to hear” or “more popular among” (as well as percentage measures of youth overexposure and other comparisons of adult and youth exposure to alcohol advertising in this report) are based on “gross rating points,” an industry-standard measure of how much an audience segment is exposed to advertising per capita. Another way of measuring advertising exposure is “gross impressions” (the total number of times all members of a given audience are exposed to advertising). The adult population will almost always receive far more gross impressions than youth because there are far more adults in the population than youth. Gross rating points are calculated by dividing gross impressions by the relevant population (e.g., persons age 21 and over) and multiplying by 100, thereby leveling the measurement playing field for differently-sized population segments. See Appendix B for a glossary of terms used in this report.
- ³ V. Rideout, D.F. Roberts, U.G. Foehr, *Generation M: Media in the Lives of 8-18 Year-olds* (Menlo Park, Calif.: Kaiser Family Foundation, 2005).
- ⁴ Ibid.
- ⁵ Radio Advertising Bureau, *Radio Marketing Guide & Fact Book* (New York: Radio Advertising Bureau, 2007).
- ⁶ Arbitron, *Radio Today: How America Listens to Radio*, 2007 Edition (New York: Arbitron, 2007).
- ⁷ L.D. Johnston, P.M. O’Malley, J.G. Bachman, J. E. Schulenberg, *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2006* (NIH Publication No. 07-6202) (Bethesda, Md.: National Institute on Drug Abuse, 2007).
- ⁸ Calculated using the *2005 National Survey on Drug Use and Health*. J. Gfroerer of the Substance Abuse and Mental Health Services Administration, e-mail to David H. Jernigan, PhD, December 22, 2006.
- ⁹ U.S. Department of Health and Human Services, Office of the Surgeon General, *Surgeon General’s Call to Action To Prevent and Reduce Underage Drinking* (Washington, D.C.: U.S. Department of Health and Human Services, 2007).
- ¹⁰ T.K. Li, B.G. Hewitt, B. Grant, “Alcohol Use Disorders and Mood Disorders: a National Institute on Alcohol Abuse and Alcoholism Perspective,” *Biological Psychiatry* 56, no. 10 (2006):718–720.
- ¹¹ U.S. Surgeon General, Press Release: Acting Surgeon General Issues National Call to Action on Underage Drinking, 6 March 2007. Available at: <http://www.hhs.gov/news/press/2007pres/20070306.html>. Accessed 20 June 2007.
- ¹² L. Snyder, F. Milici, M. Slater, H. Sun, Y. Strizhakova, “Effects of Alcohol Advertising Exposure on Drinking Among Youth,” *Archives of Pediatrics and Adolescent Medicine* 160, no. 1 (2006): 18–24; A.W. Stacy, J.B. Zogg, J.B. Unger, C.W. Dent, “Exposure to Televised Alcohol Ads and Subsequent Adolescent Alcohol Use,” *American Journal of Health Behavior* 28, no. 6 (2004): 498–509; R.L. Collins, P.L. Ellickson, D. McCaffrey, K. Hambarsoomians, “Early Adolescent Exposure to Alcohol Advertising and its Relationship to Underage Drinking” *Journal of Adolescent Health* 40, no. 6 (2007): 527–534; K.E. Pasch, K.A. Komro, C.L. Perry, M.O. Hearst, K. Farbaksh, “Outdoor Alcohol Advertising Near Schools: What Does It Advertise and How Is It Related to Intentions and Use of Alcohol Among Young Adolescents?” *Journal of Studies on Alcohol and Drugs* 68, no.4 (2007): 587–596; and A.C. McClure, S. Dal Cin, J. Gibson, J.D. Sargent, “Ownership of Alcohol-Branded Merchandise and Initiation of Teen Drinking,” *American Journal of Preventive Medicine* 30, no. 4 (2006): 277–283.
- ¹³ H. Saffer, D. Dave, “Alcohol advertising and alcohol consumption by adolescents,” *Health Economics* 15, no. 6 (2006): 617–637.
- ¹⁴ This report follows industry convention in categorizing alcoholic beverages. “Alcopops” are also referred to as “low-alcohol refreshers,” “malternatives,” “flavored malt beverages” or “ready-to-drink flavored alcoholic beverages.” Many of the brands in this category, which includes brands such as Mike’s Hard Lemonade and Smirnoff Ice, have alcohol contents of between 4% and 6%, similar to most traditional malt beverages. (Alcohol and Tobacco Tax and Trade Bureau [TTB], “Notice No. 4—Flavored Malt Beverages and Related Proposals,” Federal Register [24 March 2003]: 14293.)
- ¹⁵ D. Jernigan, J. Ostroff, C. Ross, T. Naimi, R.D. Brewer, “Youth Exposure to Alcohol Advertising on Radio—United States, June–August 2004,” *Morbidity and Mortality Weekly Report*, no. 34 (2006): 937–940.
- ¹⁶ U.S. Department of Health and Human Services, Office of the Surgeon General, *Surgeon General’s Call to Action To Prevent and Reduce Underage Drinking* (Washington, D.C.: U.S. Department of Health and Human Services, 2007).
- ¹⁷ National Research Council and Institute of Medicine, *Reducing Underage Drinking: A Collective Responsibility*, R.J. Bonnie, M.E. O’Connell, eds. (Washington, D.C.: National Academies Press, 2004).
- ¹⁸ D. Jernigan, J. Ostroff, C. Ross, T. Naimi, R.D. Brewer, “Youth Exposure to Alcohol Advertising on Radio—United States, June–August 2004,” *Morbidity and Mortality Weekly Report*, no. 34 (2006): 937–940.
- ¹⁹ *Sober Truth on Preventing Underage Drinking Act (STOP Act)*, Public Law 109-422, 109th Cong., 2d sess., 20 December 2006.
- ²⁰ Each book covers the market for the previous year. For 2003–2005, the category is defined as “lowproof refreshers (not over 7% alcohol), primarily single-serve items.” M. Shanken Communications, *The U.S. Beer Market: Impact Databank Review and Forecast, 2002 Edition* (New York: M. Shanken Communications, 2002); M. Shanken Communications, *The U.S. Beer Market: Impact Databank Review and Forecast, 2003 Edition* (New York: M. Shanken Communications, 2003); M. Shanken Communications, *The U.S. Beer Market: Impact Databank Review and Forecast, 2004 Edition* (New York: M. Shanken Communications, 2004).